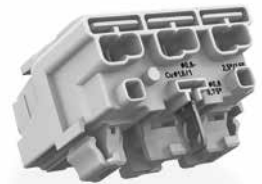
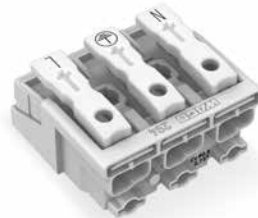


# Connection Technology for

## Lighting and Electrical Equipment



**WAGO**®

# WAGO Registered Trademarks



CAGE CLAMP®

CAGE CLAMP® 

POWER CAGE CLAMP

FIT CLAMP®

PUSH WIRE®

TOPJOB®

TOPJOB® 

WINSTA®

WAGO®

X-COM®

X-COM® 

JUMPFLEX®

TO-PASS®

ProServe®

EPSITRON®

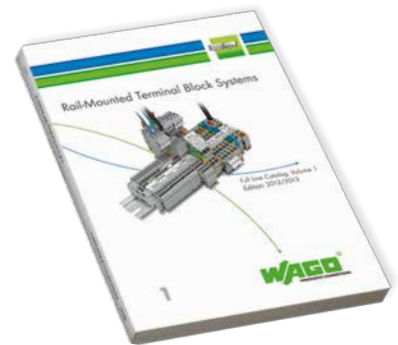
picoMAX®



# WAGO Full Line Catalogs

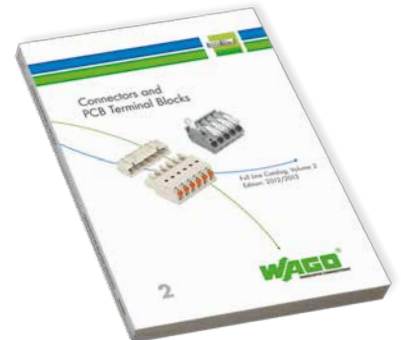
## Volume 1, Rail-Mounted Terminal Block Systems

- Rail-Mounted Terminal Blocks
- Modular Connectors (X-COM®-SYSTEM and X-COM®S-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System



## Volume 2, Connectors and PCB Terminal Blocks

- PCB Terminal Blocks
- Feedthrough Terminal Blocks
- MULTI CONNECTION SYSTEM (MCS)
- Pluggable PCB Terminal Blocks
- Specialty Connectors



## Volume 3, AUTOMATION

- IP20 Modular I/O-SYSTEM
- Radio Technology, TO-PASS® Telecontrol Technology
- Industrial Switches, PERSPECTO®
- IP67 Modular I/O-SYSTEM, IP67 Block I/O-SYSTEM
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors
- Power Supplies



## Volume 4, INTERFACE ELECTRONIC

- Relays - Optocouplers - Specialty Functions
- Interface Modules
- Transducers
- Power Supplies
- Overvoltage Protection
- Wireless Technology
- Empty Housings and DIN-Rail Mount Carriers



## Volume 5, WINSTA® - The Pluggable Connection System

- WINSTA® MINI - Pluggable Connectors
- WINSTA® MINI special - Pluggable Connectors
- WINSTA® MIDI - Pluggable Connectors
- WINSTA® MIDI special - Pluggable Connectors
- WINSTA® MAXI - Pluggable Connectors
- WINSTA® RD - Cable Assemblies
- WINSTA® KNX - Pluggable Connectors
- WINSTA® IDC - Flat Cables



# Operation of WAGO Connection Technologies\*

## CAGE CLAMP® S



### The universal connection with "SPECIAL"

- Handling:
- Open clamping unit
  - Insert the conductor
  - Release clamp - done!
  - Terminate both solid and ferruled conductors by simply pushing them in - no operating tool needed.

## CAGE CLAMP®



### The universal connection for solid, stranded and fine-stranded conductors

- Handling:
- Open clamping unit
  - Insert the conductor
  - Release clamp - done!

## POWER CAGE CLAMP®



### The universal connection for conductors larger than 6 AWG (16 mm<sup>2</sup>)

- Handling:
- Open clamping unit by turning appropriate hex wrench, or operating tool, counter-clockwise.
  - Press integrated latch to open clamping unit for hands-free wiring.
  - Insert conductor until it hits backstop.
  - A small, counter-clockwise rotation closes the clamp, securing conductor.

## FIT CLAMP®



### Insulation Displacement Connection (IDC)

- Handling:
- Push stripped conductor into the IDC contact using an operating tool.

## PUSH WIRE®



### PUSH WIRE® connection for solid and stranded conductors (depending on model used)

- Handling:
- Tool-free, twist-free terminations for solid and rigid stranded conductors - simply push into unit.

# CONTENTS

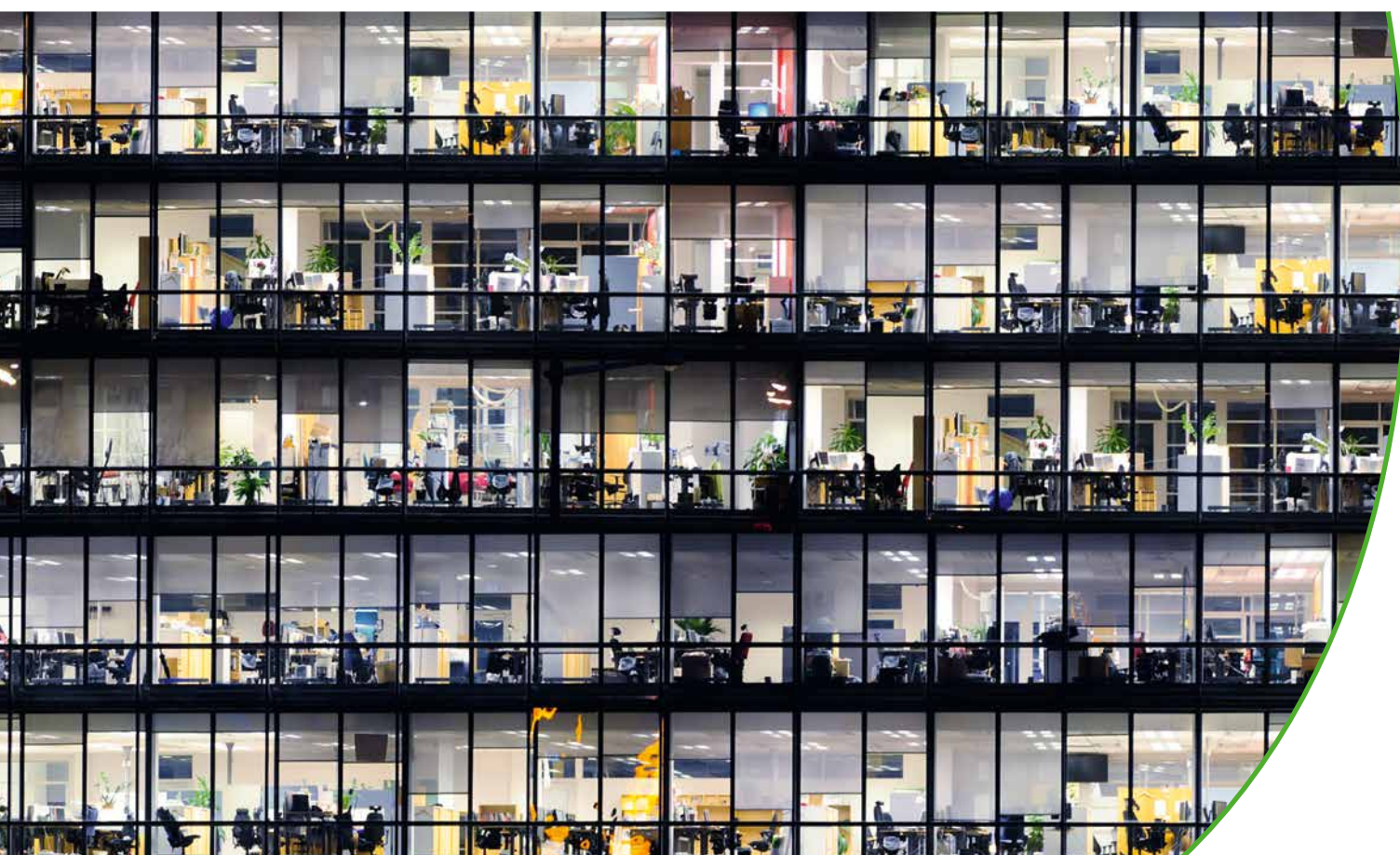
Connection Technology for  
Lighting and Electrical Equipment

|   |   |           |           |
|---|---|-----------|-----------|
|    | <b>Power Supply Connectors for Lighting and Equipment</b><br>272, 293, 294, 862 Series  | 10 - 37   | <b>1</b>  |
|    | <b>Lighting Connectors – Linect®</b><br>294 Series Linect®<br><b>Pluggable Connectors – Linect®</b><br>770 Series                                     | 38 - 57   | <b>2</b>  |
|    | <b>WINSTA® - The Pluggable Connection System</b><br>MINI, MIDI, KNX   | 58 - 241  | <b>3</b>  |
|    | <b>Pluggable Lighting Connectors</b><br>267, 272, 277, 873 Series   | 242 - 265 | <b>4</b>  |
|  | <b>MCS – MULTI CONNECTION SYSTEM</b><br>MICRO, MINI, MIDI   | 266 - 367 | <b>5</b>  |
|  | <b>PCB Terminal Blocks</b><br>235, 236, 250, 251, 253, 256, 735, 744,<br>804, 805, 2059, 2060, 2061, 2080, 2081 Series                                | 368 - 449 | <b>6</b>  |
|  | <b>Installation Connectors</b><br>221, 222, 224, 243, 273, 773, 2273 Series   | 450 - 469 | <b>7</b>  |
|  | <b>Terminal Strips for Panel Mounting</b><br>260, 261, 264, 869 Series<br><b>Rail-Mounted Terminal Blocks</b><br>2002, 2003 Series                    | 470 - 489 | <b>8</b>  |
|  | <b>Accessories</b><br>Tools, Testing Accessories, "Alu-Plus" Contact Paste<br>Marking, Mounting Accessories   | 490 - 515 | <b>9</b>  |
|  | <b>Technical Section</b><br>Electrical Engineering Laboratory,<br>Technical Information, Approvals - User Guide,<br>Item Number Index, WAGO Addresses | 516 - 545 | <b>10</b> |

# WAGO Lighting Technology

Today, modern lighting technology bridges the gap between well-being and economical operation, without excluding aesthetics. Thereby, advanced connection technologies are an important part of every light. Ingeniously designed, they guarantee fast and reliable electrical connection, as well as trouble-free operation over the entire lifetime of the lights.

With innovative products, WAGO creates new connection technologies for artificial lighting – via industry-proven, tool-free and maintenance-free CAGE CLAMP® technology. They also provide added value through cost-effectiveness and high quality standard, achieved by WAGO via certified manufacturing processes according to DIN ISO 9001.



Skillfully set up lighting scenes with WAGO: e.g., when installing technical lights, electronic control gears, LED modules (which will become increasingly significant in the future), or custom solutions for luminaire trunking systems. You, too, can benefit from well-established connection systems, that are not only preferred as standard by leading manufacturers, but also by planners, electrical installers, system engineers and operators.



# Highlights in Connection Technology



## WAGO provides you with the right connection technology for every lighting application

### Luminaire trunking systems

Luminaire trunking systems provide maximum adaptability and numerous combination possibilities.



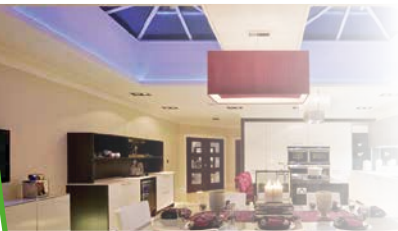
### Technical lights

Due to highly diverse mounting and lighting types, these lights provide optimum illumination of entrance areas and walkways.



### Residential luminaires

Residential luminaires offer a wide range of decorative interior lights – suitable for every housing situation and style.



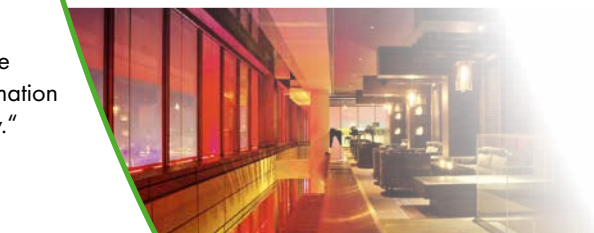
### Electronic ballasts (ECGs)

WAGO provides the right connection technology for integrated or independent electronic ballasts (ECGs).



### Light management

Residential and commercial buildings account for more than 40% of total energy consumption. Building automation contributes to considerable gains in "energy-efficiency."



### LED

LED technology opens up new possibilities for designing LED lights.



### Linect®

The universal lighting connection system features the standardized Linect® interface that can be used by any lighting manufacturer worldwide.



# Over 50 Years of Innovations

Since its establishment in 1951, WAGO has been pioneering innovative connection systems in electrical engineering and electronics. The idea for a screwless termination system was born in 1951; the first terminal blocks with spring clamp termination technology were presented at the Hanover Fair the same year.

Precisely designed and manufactured, spring-loaded connections not only guarantee a faster and easier connection, but also offer a higher safety level since the contact quality is largely independent of operator skill.

Now, WAGO is the leading specialist of Spring Pressure Termination Technology and is providing components for automation technology. In 1977, the success story of the CAGE CLAMP® began – “vibration-proof, fast and maintenance-free connections.” Safe operation for countless devices, systems and installation depends on the unconditional reliability of our products.

1951

The first WAGO spring clamp



1974

WAGO PUSH WIRE® Connector for Junction Boxes



1977

Rail-mounted terminal blocks with CAGE CLAMP®



1998

POWER CAGE CLAMP®



2001

WINSTA® – The Connection System



**ELECTRICAL INTERCONNECTIONS**

**AUTOMATION**

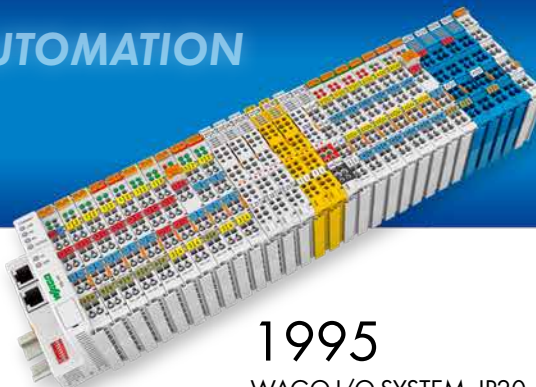
1985

Pluggable electronic functions on rail-mounted terminal blocks



1995

WAGO-I/O-SYSTEM, IP20



2005

WAGO SPEEDWAY 767, modular I/O-SYSTEM, IP67

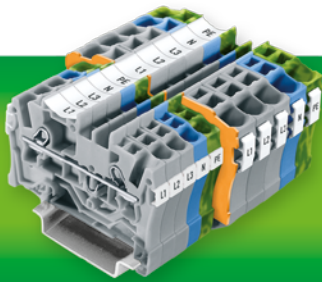


# Recognized and Approved Worldwide



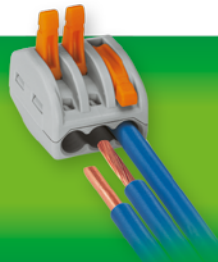
2003

TOPJOB®S Rail-Mounted Terminal Blocks



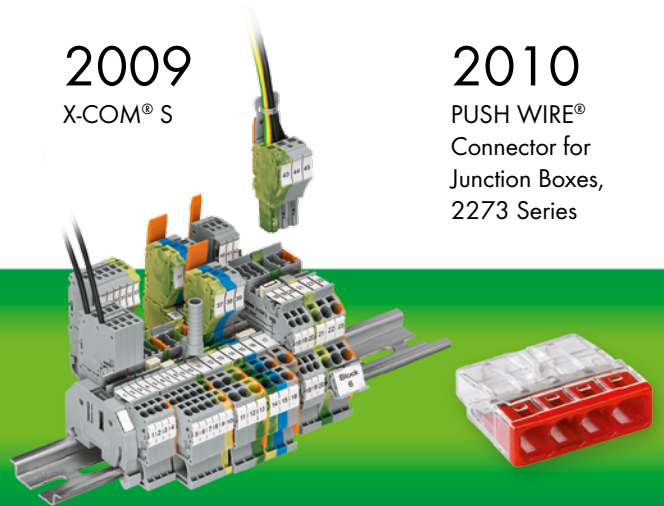
2004

Compact splicing connectors for all conductor types



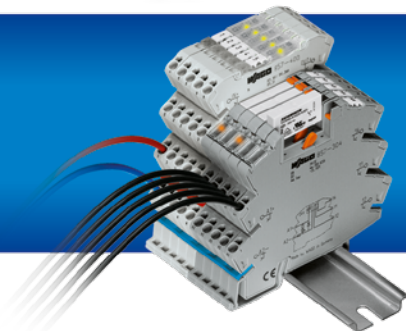
2009

X-COM® S



2010

PUSH WIRE® Connector for Junction Boxes, 2273 Series



2006

WAGO JUMPFLEX® Transducers and Pluggable Relay Modules



2008

TO-PASS® - Scalable Tele-control Technology



2010

PERSPECTO® Touch and Control Panels





# From Pioneer to Leader

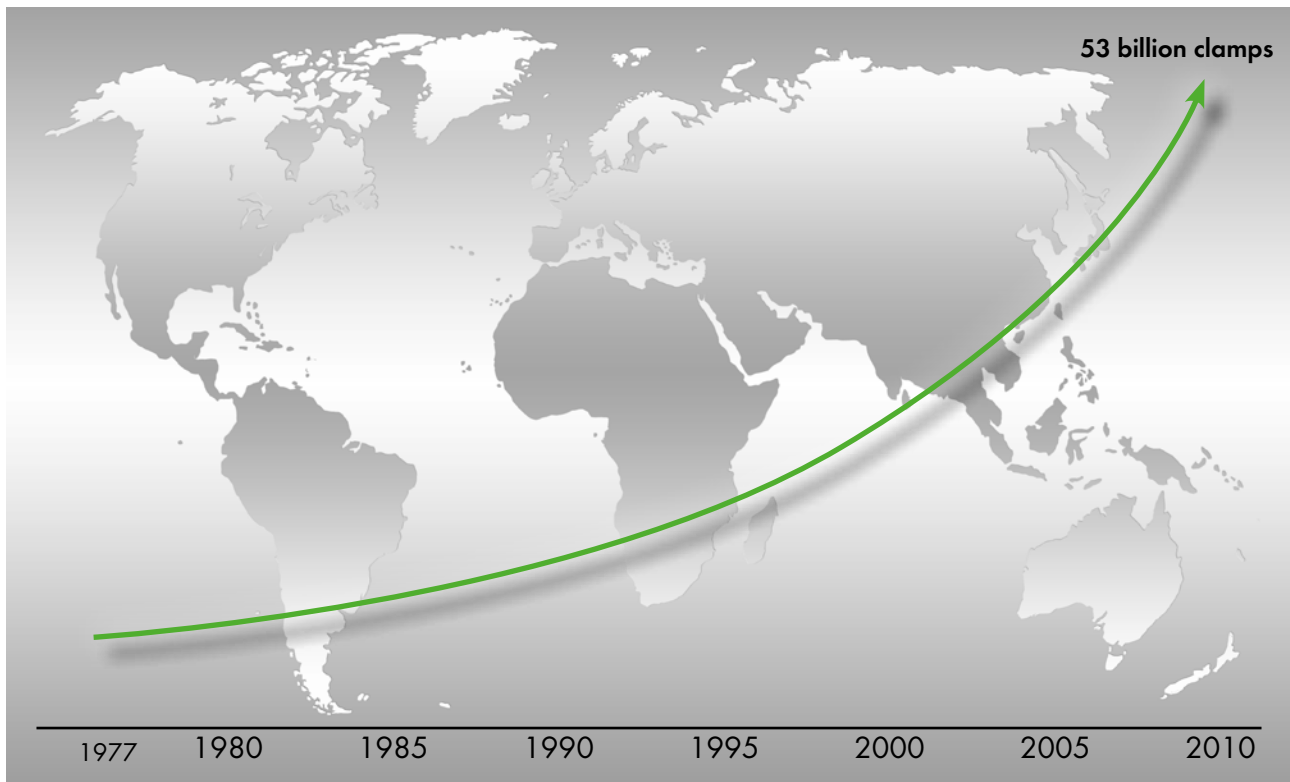


When the first terminal blocks with spring clamp termination technology debuted at the Hanover Fair in 1951, it represented a significant advancement in manufacturing. At the time, manufacturing terminal blocks was not possible because the carbon steel of the time did not meet the high quality requirements

However, WAGO was quite active in the years leading up to the 1977 debut of the first series of CAGE CLAMP®-equipped rail-mount terminal

blocks from 28 to 6 AWG (0.08–6mm<sup>2</sup>). With numerous developments – from the Suprafix banana plug product family up to the first range of rail-mounted terminal blocks for conductors up to 6 AWG (16mm<sup>2</sup>) – WAGO has firmly established itself as an innovator.

With this reputation and WAGO's slogan "vibration-proof, fast and maintenance-free," CAGE CLAMP®, which was superior to all previous connection technologies, has become a worldwide industrial standard.



Number of spring clamps for terminal blocks and connectors produced to date

Today, CAGE CLAMP® technology has several imitators, yet it remains unmatched. Again WAGO is setting new standards with further developments, such as CAGE CLAMP® Compact (1996) for ultra-compact applications or WAGO POWER

CAGE CLAMP (1998) for a rated cross section up to 4/0 AWG (95mm<sup>2</sup>). Furthermore, figures speak for themselves: More than 53 billion spring clamps have been sold worldwide and, every day, millions of clamps are added to that number.



# WAGO Worldwide

WAGO was founded 1951 in Minden, Germany. Now, the WAGO Group consists of 32 companies with more than 6,000 employees, worldwide operations and global sales greater than 500 million euros (2010).

The first factory was located in Minden, Germany, which is also our headquarters. As part of WAGO's global expansion, additional factories have been built: 1977 in Domdidier/Switzerland, 1979 in Milwaukee/USA, 1995 in Sondershausen/Germany and Dehli/India, 1997 in Tianjin/China and Wroclaw/Poland.

Products manufactured locally for domestic and foreign markets create the starting point for a local distribution network with strong coverage of the complete product range. Such organization enables WAGO subsidiaries and sales offices to develop and deliver custom-designed products that comply with local regulations and meet local demand. Approximately half of WAGO's global staff of 6,000 is employed outside of Germany.



WAGO Minden, Headquarters



WAGO Sondershausen



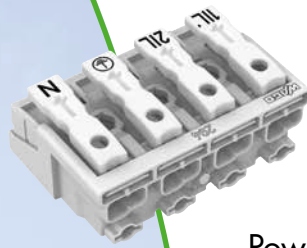
WAGO Switzerland



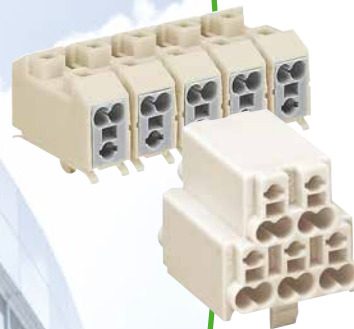
WAGO USA



WAGO China



Power Supply Connectors  
for Lighting and Equipment

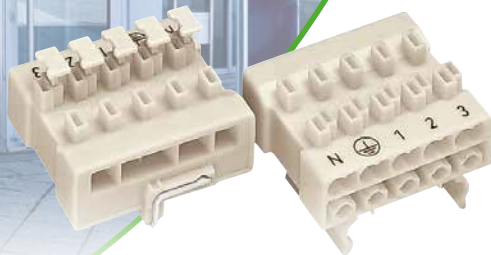


Dividable Terminal Strips

Compact Terminal Blocks



4-Conductor,  
Chassis-Mount Terminal Strips



Power Supply Connectors

## 1



## Power Supply Connectors for Lighting and Equipment

294 Series

12 - 27



## Dividable Terminal Strips and Compact Terminal Blocks

272 Series

28 - 31



## 4-Conductor, Chassis-Mount Terminal Strips

862 Series

32 - 37



## Power Supply Connectors

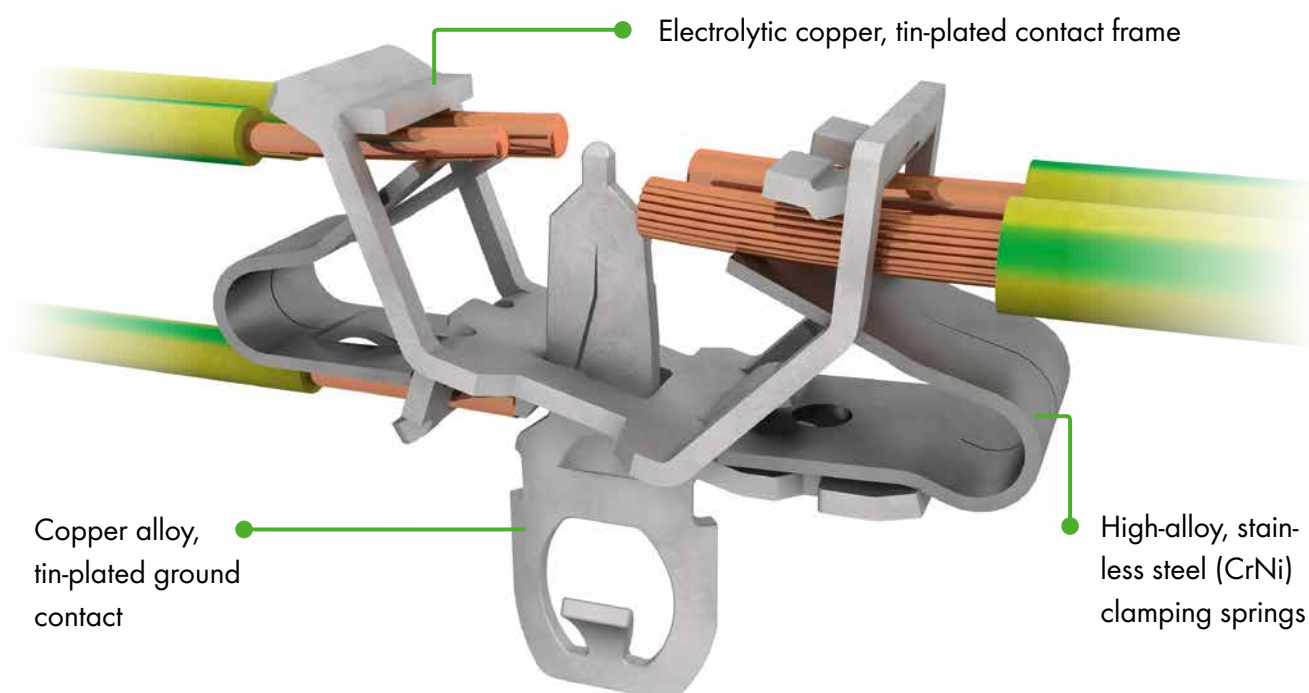
293 Series

36 - 37



## For Connecting Lighting and Equipment Worldwide

### Contact Technology:



#### Internal connection:

PUSH WIRE® for internal wiring with solid conductors.

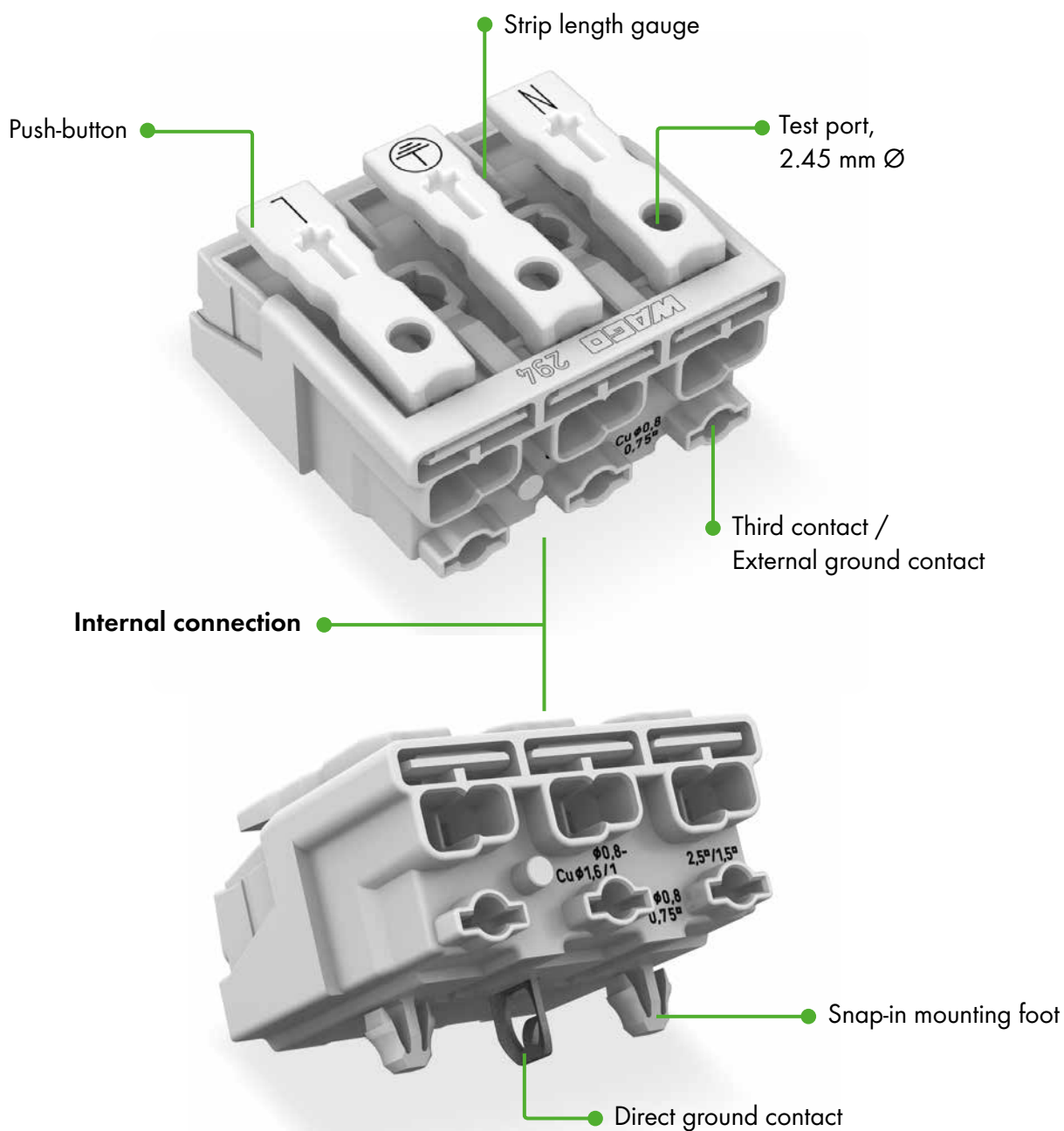
| EUROPE                                |
|---------------------------------------|
| 1 x 0.5 - 2.5 mm <sup>2</sup> "sol."  |
| 1 x 0.5 - 1.5 mm <sup>2</sup> "sol."  |
| 1 x 0.5 - 0.75 mm <sup>2</sup> "sol." |
| AMERICA                               |
| 1 x AWG 18 - 14 "sol."                |
| 1 x AWG 18 - 16 "sol."                |
| 1 x AWG 18 "sol."                     |
| JAPAN                                 |
| 1 x 0.8 - 1.6 mm $\varnothing$ "sol." |
| 1 x 0.8 - 1.0 mm $\varnothing$ "sol." |
| 1 x 0.8 mm $\varnothing$ "sol."       |

#### External connection:

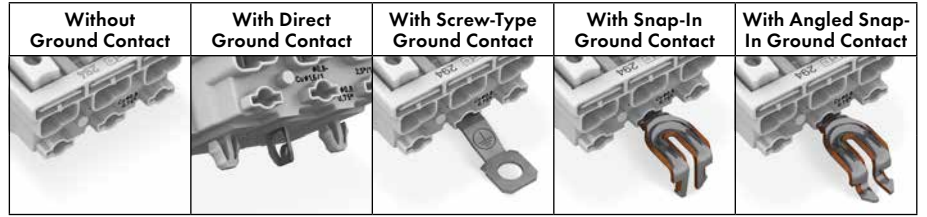
CAGE CLAMP®S for power supply connections for all conductor types.


| EUROPE   |
|--|
| 2 x 0.5 - 2.5 mm <sup>2</sup> "sol., str., f-str." |
|  |
| AMERICA  |
| 2 x AWG 18 - 12 "sol."                             |
| 2 x AWG 18 - 14 "str., f-str."                     |
|  |
| JAPAN  |
| 2 x 0.8 - 2.0 mm $\varnothing$ "sol."              |
| 2 x 0.5 - 2.0 mm <sup>2</sup> "str., f-str."       |
|  |








# 294 Series With Two Snap-In Mounting Feet



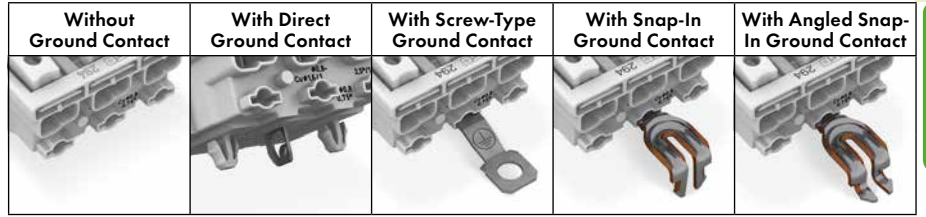
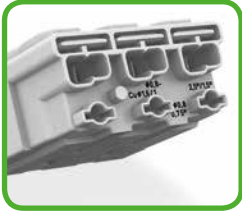
| Pole No.   | Marking | Item No. | Item No. | Item No. | Item No. | Item No. |
|--|---------|----------|----------|----------|----------|----------|
| <br>2 | without | 294-5002 | - - -    | - - -    | - - -    | - - -    |
|  | N L     | 294-5012 | - - -    | - - -    | - - -    | - - -    |
|  | N' L'   | 294-5022 | - - -    | - - -    | - - -    | - - -    |
|  | DA- DA+ | 294-5032 | - - -    | - - -    | - - -    | - - -    |
|  | - +     | 294-5072 | - - -    | - - -    | - - -    | - - -    |
|  | 1 N     | 294-5052 | - - -    | - - -    | - - -    | - - -    |
|  | 2 1     | 294-5042 | - - -    | - - -    | - - -    | - - -    |


|  |         |          |          |          |          |          |
|--|---------|----------|----------|----------|----------|----------|
| <br>3 | without | 294-5003 | - - -    | - - -    | - - -    | - - -    |
|  | N ⊕ L   | 294-5013 | 294-5113 | 294-5413 | 294-5213 | 294-5313 |
|  | N' ⊕ L' | 294-5023 | 294-5123 | 294-5423 | 294-5223 | 294-5323 |
|  | 1 ⊕ N   | 294-5053 | 294-5153 | 294-5453 | 294-5253 | 294-5353 |
|  | 3 2 1   | 294-5043 | - - -    | - - -    | - - -    | - - -    |


|  |              |          |          |          |          |          |
|--|--------------|----------|----------|----------|----------|----------|
| <br>4 | without      | 294-5004 | - - -    | - - -    | - - -    | - - -    |
|  | 1/L' 2/L ⊕ N | 294-5024 | 294-5124 | 294-5424 | 294-5224 | 294-5324 |
|  | 1 2 ⊕ N      | 294-5014 | 294-5114 | 294-5414 | 294-5214 | 294-5314 |
|  | 4 3 2 1      | 294-5044 | - - -    | - - -    | - - -    | - - -    |


|  |               |          |          |          |          |          |
|--|---------------|----------|----------|----------|----------|----------|
| <br>5 | without       | 294-5005 | - - -    | - - -    | - - -    | - - -    |
|  | L3 L2 L1 ⊕ N  | 294-5015 | - - -    | 294-5415 | 294-5215 | 294-5315 |
|  | L' N' L ⊕ N   | 294-5025 | - - -    | 294-5425 | 294-5225 | 294-5325 |
|  | DA+ DA- L ⊕ N | 294-5035 | - - -    | 294-5435 | 294-5235 | 294-5335 |
|  | DA- N ⊕ L DA+ | 294-5075 | 294-5175 | 294-5475 | 294-5275 | 294-5375 |
|  | 3 N ⊕ 1 2     | 294-5055 | 294-5155 | 294-5455 | 294-5255 | 294-5355 |
|  | 5 4 3 2 1     | 294-5045 | - - -    | - - -    | - - -    | - - -    |


# 294 Series Without Snap-In Mounting Feet





| Pole No.   | Marking | Item No. | Item No. | Item No. | Item No. | Item No. |
|--|---------|----------|----------|----------|----------|----------|
| 2<br> | without | 294-4002 | - - -    | - - -    | - - -    | - - -    |
|  | N L     | 294-4012 | - - -    | - - -    | - - -    | - - -    |
|  | N' L'   | 294-4022 | - - -    | - - -    | - - -    | - - -    |
|  | DA- DA+ | 294-4032 | - - -    | - - -    | - - -    | - - -    |
|  | - +     | 294-4072 | - - -    | - - -    | - - -    | - - -    |
|  | 1 N     | 294-4052 | - - -    | - - -    | - - -    | - - -    |
|  | 2 1     | 294-4042 | - - -    | - - -    | - - -    | - - -    |

|  |         |          |       |          |          |          |
|--|---------|----------|-------|----------|----------|----------|
| 3<br> | without | 294-4003 | - - - | - - -    | - - -    | - - -    |
|  | N ⊕ L   | 294-4013 | - - - | 294-4413 | 294-4213 | 294-4313 |
|  | N' ⊕ L' | 294-4023 | - - - | 294-4423 | 294-4223 | 294-4323 |
|  | 1 ⊕ N   | 294-4053 | - - - | 294-4453 | 294-4253 | 294-4353 |
|  | 3 2 1   | 294-4043 | - - - | - - -    | - - -    | - - -    |

|  |              |          |       |          |          |          |
|--|--------------|----------|-------|----------|----------|----------|
| 4<br> | without      | 294-4004 | - - - | - - -    | - - -    | - - -    |
|  | 1/L' 2/L ⊕ N | 294-4024 | - - - | 294-4424 | 294-4224 | 294-4324 |
|  | 1 2 ⊕ N      | 294-4014 | - - - | 294-4414 | 294-4214 | 294-4314 |
|  | 4 3 2 1      | 294-4044 | - - - | - - -    | - - -    | - - -    |

|  |               |          |       |          |          |          |
|--|---------------|----------|-------|----------|----------|----------|
| 5<br> | without       | 294-4005 | - - - | - - -    | - - -    | - - -    |
|  | L3 L2 L1 ⊕ N  | 294-4015 | - - - | 294-4415 | 294-4215 | 294-4315 |
|  | L' N' L ⊕ N   | 294-4025 | - - - | 294-4425 | 294-4225 | 294-4325 |
|  | DA+ DA- L ⊕ N | 294-4035 | - - - | 294-4435 | 294-4235 | 294-4335 |
|  | DA- N ⊕ L DA+ | 294-4075 | - - - | 294-4475 | 294-4275 | 294-4375 |
|  | 3 N ⊕ 1 2     | 294-4055 | - - - | 294-4455 | 294-4255 | 294-4355 |
|  | 5 4 3 2 1     | 294-4045 | - - - | - - -    | - - -    | - - -    |

|  |         |          |       |       |       |       |
|--|---------|----------|-------|-------|-------|-------|
| 6<br> | without | 294-4006 | - - - | - - - | - - - | - - - |
|  |         |          |       |       |       |       |
|  |         |          |       |       |       |       |

|  |         |          |       |       |       |       |
|--|---------|----------|-------|-------|-------|-------|
| 7<br> | without | 294-4007 | - - - | - - - | - - - | - - - |
|  |         |          |       |       |       |       |
|  |         |          |       |       |       |       |

# Power Supply Connectors for Lighting and Equipment 294 Series



- External connection of solid, stranded and fine-stranded connectors
- Universal conductor termination (AWG, metric)
- Third contact located at the bottom of internal connector end
- Strain relief plate can be retrofitted

**Technical data:**

|                      | IEC/EN 60998-1 | IEC/EN 60998-2-2 |  |
|----------------------|----------------|------------------|--|
| Rating per           | IEC/EN 60998-1 | IEC/EN 60998-2-2 |  |
| Overvoltage category | II             | II               |  |
| Pollution degree     | 2              | 2                |  |
| Rated voltage        | 500 V          | 500 V            |  |
| Rated surge voltage  | 4 kV           | 4 kV             |  |
| Nominal current      | 24 A           | 24 A             |  |
| Temperature rating   | T 85           | T 85             |  |

**Conductor data (external connection):**

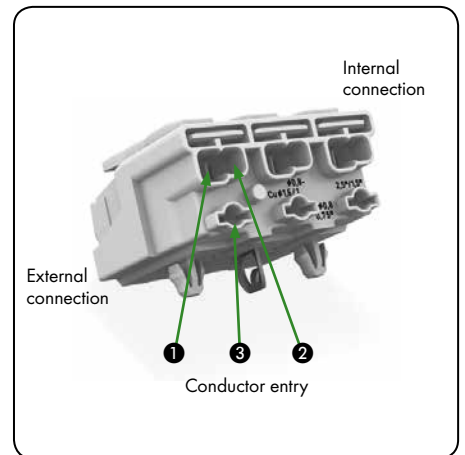
|  |                               |
|--|-------------------------------|
| Connection technology                            | <b>CAGE CLAMP®S</b>           |
| Conductor size: solid, stranded or fine-stranded | 2 x 0.5 - 2.5 mm <sup>2</sup> |
| Conductor size: with ferrule                     | 2 x 0.5 - 1.5 mm <sup>2</sup> |
| AWG: solid                                       | 2 x 18 - 12                   |
| AWG: fine-stranded and stranded                  | 2 x 18 - 14                   |
| Strip length                                     | 8 - 9 mm / 0.31 - 0.35 in     |

**Conductor data (internal connection):**

|                               |  |
|-------------------------------|--|
| Connection technology         | <b>PUSH WIRE®</b>                                    |
| <b>Conductor entry ①</b>      |  |
| Conductor size: solid         | 0.5 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.5 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| Conductor size: fine-stranded | 0.5 - 1.0 mm <sup>2</sup> (with insulated ferrule)   |
| AWG: solid                    | 18 - 14  |
| Strip length                  | 8 - 9 mm / 0.31 - 0.35 in                            |
| <b>Conductor entry ②</b>      |  |
| Conductor size: solid         | 0.5 - 1.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.5 - 1.0 mm <sup>2</sup> (with uninsulated ferrule) |
| Conductor size: fine-stranded | 0.5 - 0.75 mm <sup>2</sup> (with insulated ferrule)  |
| AWG: solid                    | 18 - 16  |
| Strip length                  | 8 - 9 mm / 0.31 - 0.35 in                            |
| <b>Conductor entry ③</b>      |  |
| Conductor size: solid         | 0.5 - 0.75 mm <sup>2</sup>                           |
| AWG: solid                    | 18   |
| Strip length                  | 8 - 9 mm / 0.31 - 0.35 in                            |

**Material data:**

|   |  |
|---|--|
| Material group                                  | IIIa                                       |
| Insulating material                             | Polycarbonate (PC)                         |
| Temperature stability                           | Relative temperature index (RTI) of 125 °C |
| Flammability rating per UL 94                   | V0   |
| Clamping spring material                        | Chrome nickel spring steel (CrNi)          |
| Contact material                                | Electrolytic copper (E <sub>C</sub> )      |
| Contact plating                                 | tin-plated                                 |
| 16 mm-high versions are available upon request. |  |



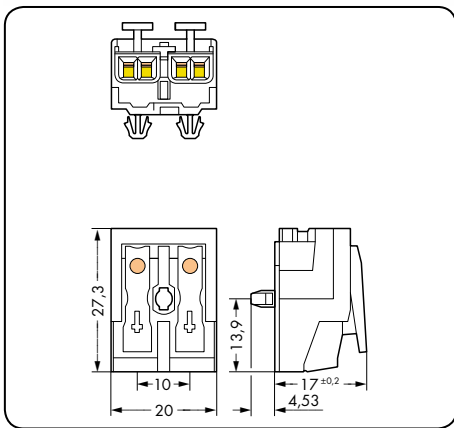
**Accessories:**

**Page:**

|                                    |     |
|------------------------------------|-----|
| Operating tools                    | 492 |
| Disconnection tool                 | 25  |
| Assembly tool                      | 25  |
| Strain relief for multicore cables | 25  |
| Strain relief for single strands   | 25  |
| Pin terminals                      | 515 |



Without ground contact



### Versions with snap-in mounting feet:

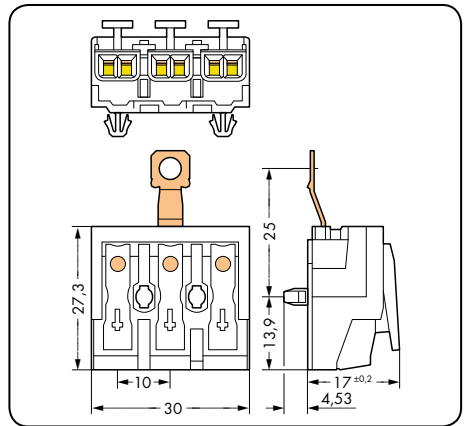
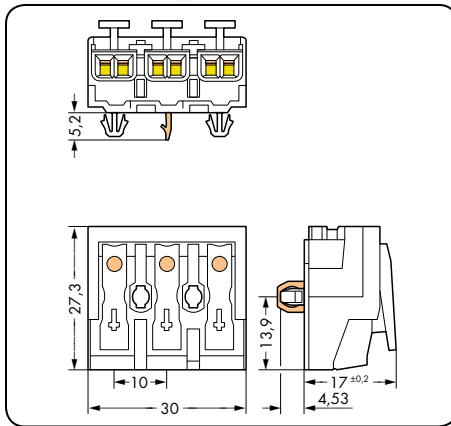
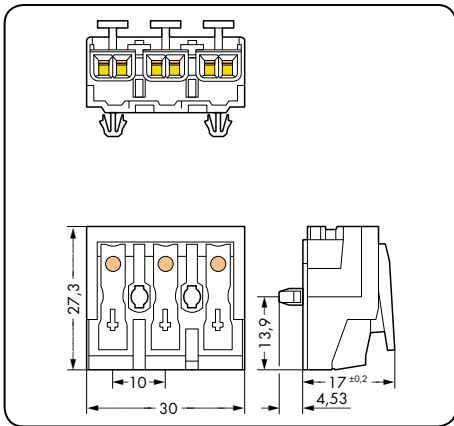
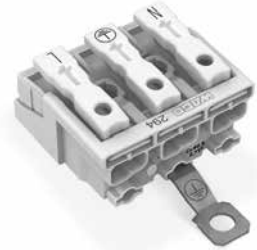
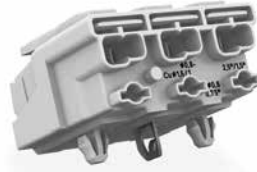
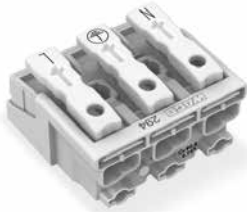
| Marking   | Item No. | Pack. Unit |
|---|----------|------------|
| <b>Power supply connector for lighting and equipment without ground contact, 2-pole</b> |          |            |
| without   | 294-5002 | 1000       |
| N L   | 294-5012 | 1000       |
| N' L'   | 294-5022 | 1000       |
| DA- DA+   | 294-5032 | 1000       |
| - +   | 294-5072 | 1000       |
| 2 1   | 294-5042 | 1000       |
| 1 N   | 294-5052 | 1000       |

### Versions without snap-in mounting feet:

| Marking   | Item No. | Pack. Unit |
|---|----------|------------|
| <b>Power supply connector for lighting and equipment without ground contact, 2-pole</b> |          |            |
| without   | 294-4002 | 1000       |
| N L   | 294-4012 | 1000       |
| N' L'   | 294-4022 | 1000       |
| DA- DA+   | 294-4032 | 1000       |
| - +   | 294-4072 | 1000       |
| 2 1   | 294-4042 | 1000       |
| 1 N   | 294-4052 | 1000       |

# Power Supply Connectors for Lighting and Equipment, 3-Pole 294 Series

|                        |                            |                                |
|------------------------|----------------------------|--------------------------------|
| Without ground contact | With direct ground contact | With screw-type ground contact |
|------------------------|----------------------------|--------------------------------|



### Versions with snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 3-pole |          |            | Power supply connector for lighting and equipment with direct ground contact, 3-pole |          |            | Power supply connector for lighting and equipment with screw-type ground contact, 3-pole |          |            |
| without  | 294-5003 | 500        |  |          |            |  |          |            |
| N ⊕ L  | 294-5013 | 500        | N ⊕ L  | 294-5113 | 500        | N ⊕ L  | 294-5413 | 500        |
| N' ⊕ L'  | 294-5023 | 500        | N' ⊕ L'  | 294-5123 | 500        | N' ⊕ L'  | 294-5423 | 500        |
| 1 ⊕ N  | 294-5053 | 500        | 1 ⊕ N  | 294-5153 | 500        | 1 ⊕ N  | 294-5453 | 500        |
| 3 2 1  | 294-5043 | 500        |  |          |            |  |          |            |

### Versions without snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|---------|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 3-pole |          |            |         |          |            | Power supply connector for lighting and equipment with screw-type ground contact, 3-pole |          |            |
| without  | 294-4003 | 500        |         |          |            |  |          |            |
| N ⊕ L  | 294-4013 | 500        |         |          |            | N ⊕ L  | 294-4413 | 500        |
| N' ⊕ L'  | 294-4023 | 500        |         |          |            | N' ⊕ L'  | 294-4423 | 500        |
| 1 ⊕ N  | 294-4053 | 500        |         |          |            | 1 ⊕ N  | 294-4453 | 500        |
| 3 2 1  | 294-4043 | 500        |         |          |            |  |          |            |

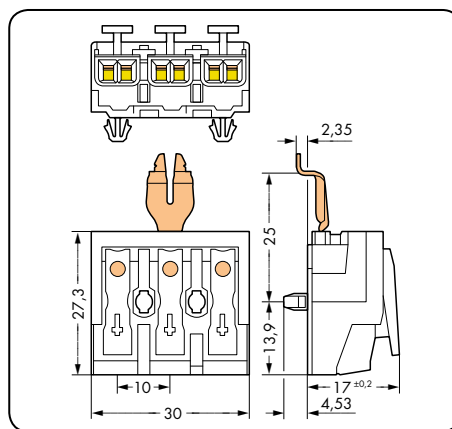
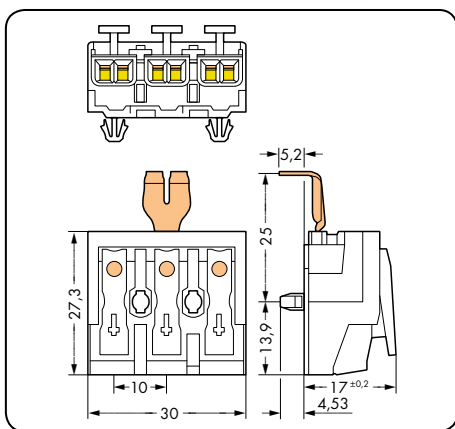
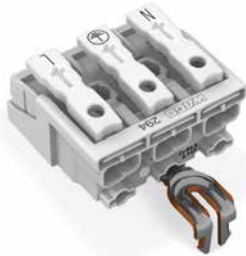
Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.

# Power Supply Connectors for Lighting and Equipment, 3-Pole 294 Series

CAGE CLAMP® S

With snap-in ground contact

With angled snap-in ground contact



## Versions with snap-in mounting feet:

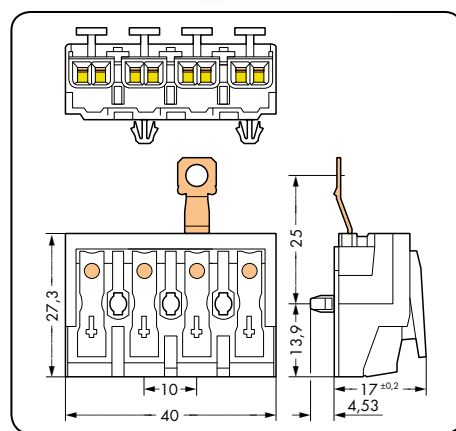
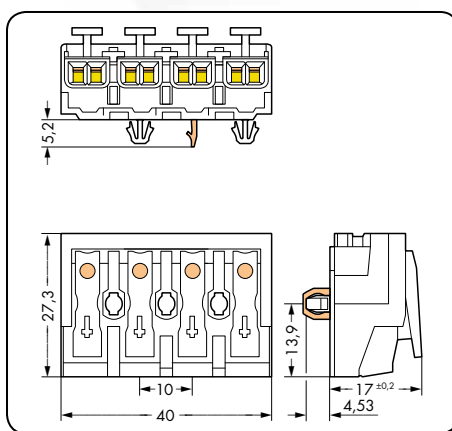
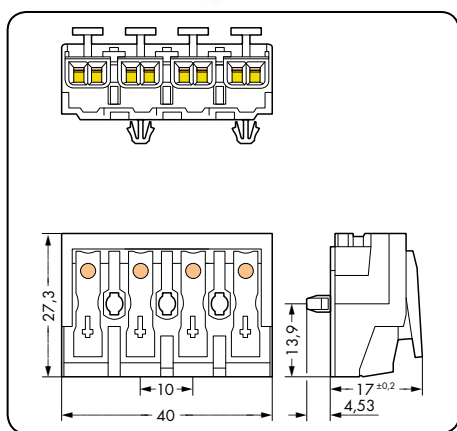
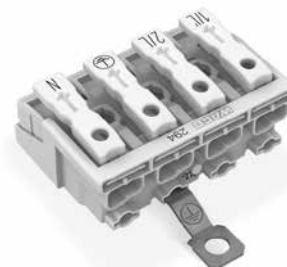
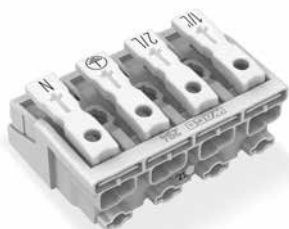
| Marking   | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment with snap-in ground contact, 3-pole |          |            | Power supply connector for lighting and equipment with angled snap-in ground contact, 3-pole |          |            |
| N ⊕ L   | 294-5213 | 500        | N ⊕ L  | 294-5313 | 500        |
| N' ⊕ L'   | 294-5223 | 500        | N' ⊕ L'  | 294-5323 | 500        |
| 1 ⊕ N   | 294-5253 | 500        | 1 ⊕ N  | 294-5353 | 500        |

## Versions without snap-in mounting feet:

| Marking   | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment with snap-in ground contact, 3-pole |          |            | Power supply connector for lighting and equipment with angled snap-in ground contact, 3-pole |          |            |
| N ⊕ L   | 294-4213 | 500        | N ⊕ L  | 294-4313 | 500        |
| N' ⊕ L'   | 294-4223 | 500        | N' ⊕ L'  | 294-4323 | 500        |
| 1 ⊕ N   | 294-4253 | 500        | 1 ⊕ N  | 294-4353 | 500        |

# Power Supply Connectors for Lighting and Equipment, 4-Pole 294 Series

|                        |                            |                                |
|------------------------|----------------------------|--------------------------------|
| Without ground contact | With direct ground contact | With screw-type ground contact |
|------------------------|----------------------------|--------------------------------|



### Versions with snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 4-pole |          |            | Power supply connector for lighting and equipment with direct ground contact, 4-pole |          |            | Power supply connector for lighting and equipment with screw-type ground contact, 4-pole |          |            |
| without  | 294-5004 | 500        |  |          |            |  |          |            |
| 1/L' 2/L' ⊕ N  | 294-5024 | 500        | 1/L' 2/L' ⊕ N  | 294-5124 | 500        | 1/L' 2/L' ⊕ N  | 294-5424 | 500        |
| 1 2 ⊕ N  | 294-5014 | 500        | 1 2 ⊕ N  | 294-5114 | 500        | 1 2 ⊕ N  | 294-5414 | 500        |
| 4 3 2 1  | 294-5044 | 500        |  |          |            |  |          |            |

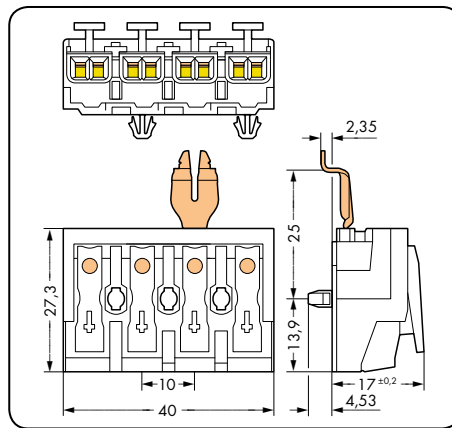
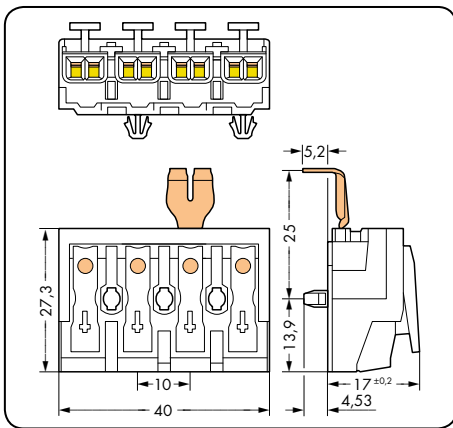
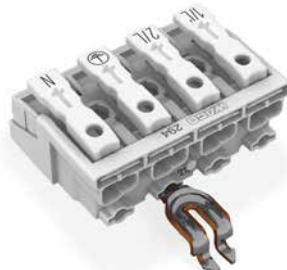
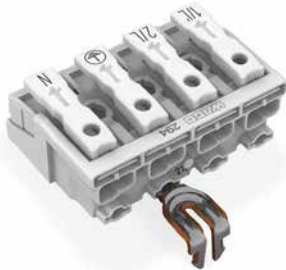
### Versions without snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|---------|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 4-pole |          |            |         |          |            | Power supply connector for lighting and equipment with screw-type ground contact, 4-pole |          |            |
| without  | 294-4004 | 500        |         |          |            |  |          |            |
| 1/L' 2/L' ⊕ N  | 294-4024 | 500        |         |          |            | 1/L' 2/L' ⊕ N  | 294-4424 | 500        |
| 1 2 ⊕ N  | 294-4014 | 500        |         |          |            | 1 2 ⊕ N  | 294-4414 | 500        |
| 4 3 2 1  | 294-4044 | 500        |         |          |            |  |          |            |

Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.

With snap-in ground contact

With angled snap-in ground contact



### Versions with snap-in mounting feet:

| Marking   | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment with snap-in ground contact, 4-pole |          |            | Power supply connector for lighting and equipment with angled snap-in ground contact, 4-pole |          |            |
| 1/L' 2/L ⊕ N  | 294-5224 | 500        | 1/L' 2/L ⊕ N   | 294-5324 | 500        |
| 1 2 ⊕ N   | 294-5214 | 500        | 1 2 ⊕ N  | 294-5314 | 500        |

### Versions without snap-in mounting feet:

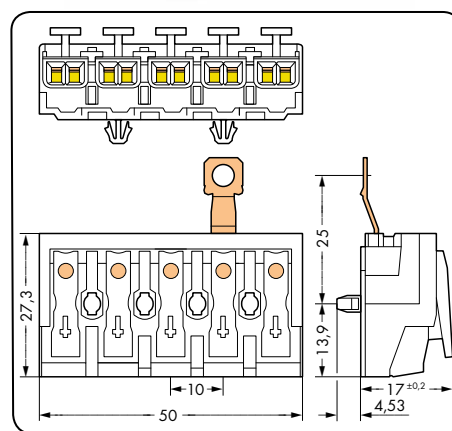
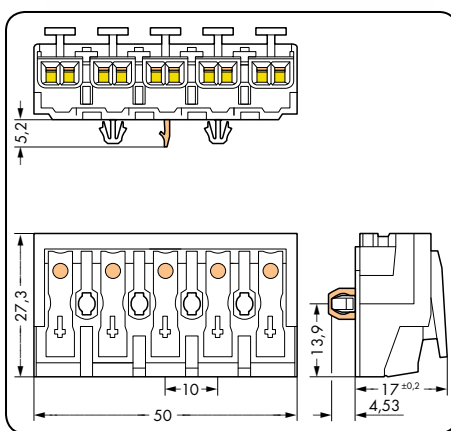
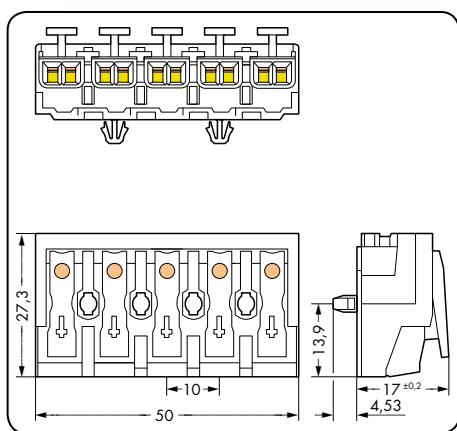
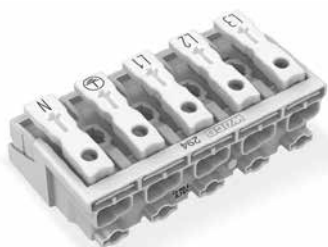
| Marking   | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment with snap-in ground contact, 4-pole |          |            | Power supply connector for lighting and equipment with angled snap-in ground contact, 4-pole |          |            |
| 1/L' 2/L ⊕ N  | 294-4224 | 500        | 1/L' 2/L ⊕ N   | 294-4324 | 500        |
| 1 2 ⊕ N   | 294-4214 | 500        | 1 2 ⊕ N  | 294-4314 | 500        |

# Power Supply Connectors for Lighting and Equipment, 5-Pole 294 Series

Without ground contact

With direct ground contact

With screw-type ground contact



## Versions with snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 5-pole |          |            | Power supply connector for lighting and equipment with direct ground contact, 5-pole |          |            | Power supply connector for lighting and equipment with screw-type ground contact, 5-pole |          |            |
| without  | 294-5005 | 250        |  |          |            |  |          |            |
| L3 L2 L1 ⊕ N   | 294-5015 | 250        |  |          |            | L3 L2 L1 ⊕ N   | 294-5415 | 250        |
| L' N' L ⊕ N  | 294-5025 | 250        |  |          |            | L' N' L ⊕ N  | 294-5425 | 250        |
| DA+ DA- L ⊕ N  | 294-5035 | 250        |  |          |            | DA+ DA- L ⊕ N  | 294-5435 | 250        |
| DA- N ⊕ L DA+  | 294-5075 | 250        | DA- N ⊕ L DA+  | 294-5175 | 250        | DA- N ⊕ L DA+  | 294-5475 | 250        |
| 3 N ⊕ 1 2  | 294-5055 | 250        | 3 N ⊕ 1 2  | 294-5155 | 250        | 3 N ⊕ 1 2  | 294-5455 | 250        |
| 5 4 3 2 1  | 294-5045 | 250        |  |          |            |  |          |            |

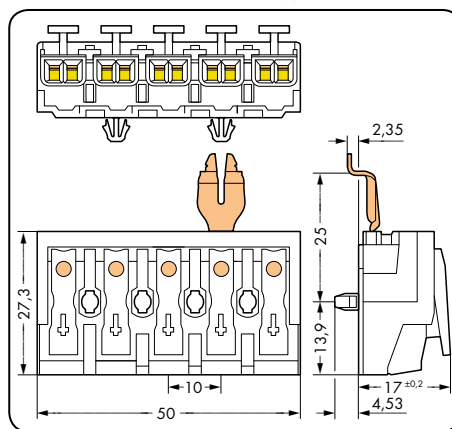
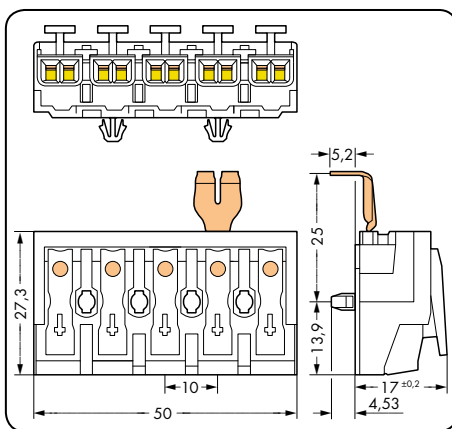
## Versions without snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|---------|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 5-pole |          |            |         |          |            | Power supply connector for lighting and equipment with screw-type ground contact, 5-pole |          |            |
| without  | 294-4005 | 250        |         |          |            |  |          |            |
| L3 L2 L1 ⊕ N   | 294-4015 | 250        |         |          |            | L3 L2 L1 ⊕ N   | 294-4415 | 250        |
| L' N' L ⊕ N  | 294-4025 | 250        |         |          |            | L' N' L ⊕ N  | 294-4425 | 250        |
| DA+ DA- L ⊕ N  | 294-4035 | 250        |         |          |            | DA+ DA- L ⊕ N  | 294-4435 | 250        |
| DA- N ⊕ L DA+  | 294-4075 | 250        |         |          |            | DA- N ⊕ L DA+  | 294-4475 | 250        |
| 3 N ⊕ 1 2  | 294-4055 | 250        |         |          |            | 3 N ⊕ 1 2  | 294-4455 | 250        |
| 5 4 3 2 1  | 294-4045 | 250        |         |          |            |  |          |            |



With snap-in ground contact

With angled snap-in ground contact



### Versions with snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Lighting connector with snap-in ground contact, 5-pole |          |            | Lighting connector with angled snap-in ground contact, 5-pole |          |            |
| L3 L2 L1 ⊕ N   | 294-5215 | 250        | L3 L2 L1 ⊕ N  | 294-5315 | 250        |
| L' N' L ⊕ N  | 294-5225 | 250        | L' N' L ⊕ N   | 294-5325 | 250        |
| DA+ DA- L ⊕ N  | 294-5235 | 250        | DA+ DA- L ⊕ N   | 294-5335 | 250        |
| DA- N ⊕ L DA+  | 294-5275 | 250        | DA- N ⊕ L DA+   | 294-5375 | 250        |
| 3 N ⊕ 1 2  | 294-5255 | 250        | 3 N ⊕ 1 2   | 294-5355 | 250        |

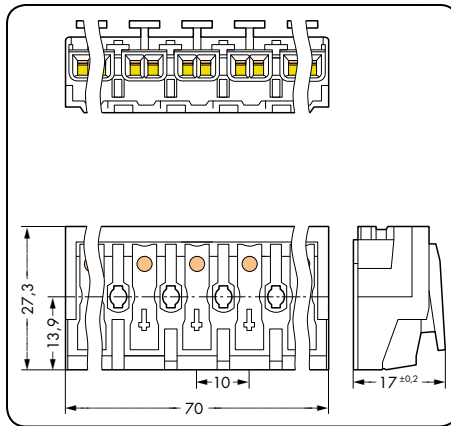
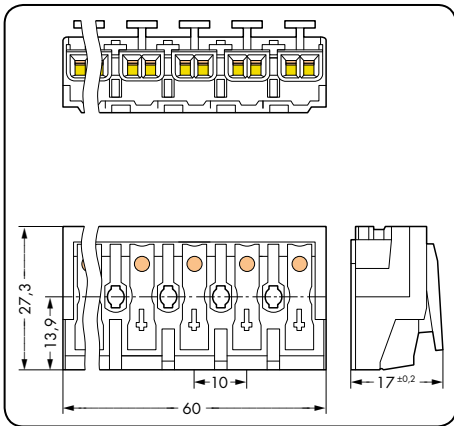
### Versions without snap-in mounting feet:

| Marking  | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Lighting connector with snap-in ground contact, 5-pole |          |            | Lighting connector with angled snap-in ground contact, 5-pole |          |            |
| L3 L2 L1 ⊕ N   | 294-4215 | 250        | L3 L2 L1 ⊕ N  | 294-4315 | 250        |
| L' N' L ⊕ N  | 294-4225 | 250        | L' N' L ⊕ N   | 294-4325 | 250        |
| DA+ DA- L ⊕ N  | 294-4235 | 250        | DA+ DA- L ⊕ N   | 294-4335 | 250        |
| DA- N ⊕ L DA+  | 294-4275 | 250        | DA- N ⊕ L DA+   | 294-4375 | 250        |
| 3 N ⊕ 1 2  | 294-4255 | 250        | 3 N ⊕ 1 2   | 294-4355 | 250        |

# Power Supply Connectors for Lighting and Equipment, 6- and 7-Pole 294 Series

6-pole, without ground contact

7-pole, without ground contact



### Versions without snap-in mounting feet:

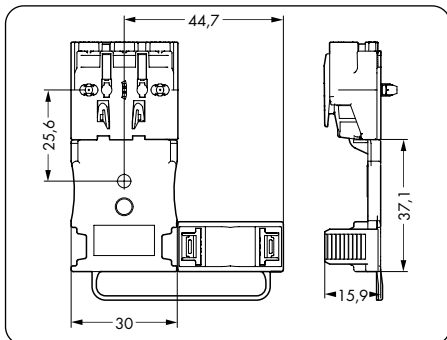
| Marking  | Item No. | Pack. Unit | Marking  | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|
| Power supply connector for lighting and equipment without ground contact, 6-pole |          |            | Power supply connector for lighting and equipment without ground contact, 7-pole |          |            |
| without  | 294-4006 | 250        | without  | 294-4007 | 200        |

# Accessories 294 Series

|                     |   |               |
|---------------------|---|---------------|
| Strain relief plate | Disconnection tool,<br>for removing conductors<br>from PUSH WIRE® connections | Assembly tool |
|---------------------|---|---------------|



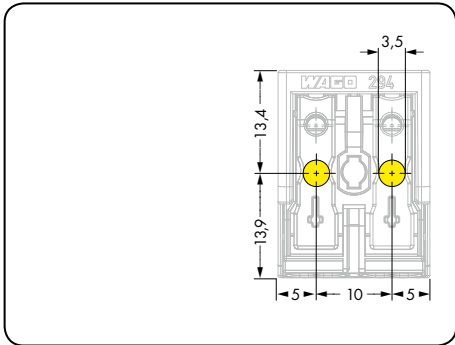
| Item No.   | Pack. Unit     | Item No.   | Pack. Unit | Item No.   | Pack. Unit |
|--|----------------|--|------------|--|------------|
| <b>Strain relief plate, with locking clip</b>  |                | <b>Disconnection tool, suitable for 294 Series</b> |            | <b>Assembly tool, suitable for 294 Series, with two functions:</b><br>- For pressing the snap-in mounting feet into the mounting plate<br>- For safe and easy fitting of ground contacts |            |
| for multicore cable:<br>1 x outer diameter 5.2 - 12 mm   |                | <b>206-294</b>                                     |            | <b>294-199</b>   |            |
| ○ white  | <b>294-364</b> |  | 50         |  | 1          |
| for flat cables and individual conductors:<br>min. 3 x 0.5 mm <sup>2</sup> , max. 5 x 2.5 mm <sup>2</sup> or 7 x 1.5 mm <sup>2</sup> |                |  |            |  |            |
| ○ white  | <b>294-384</b> |  |            |  |            |
|  | 50             |  |            |  |            |
|  |                |  |            |  |            |
|  |                |  |            |  |            |
|  |                |  |            |  |            |



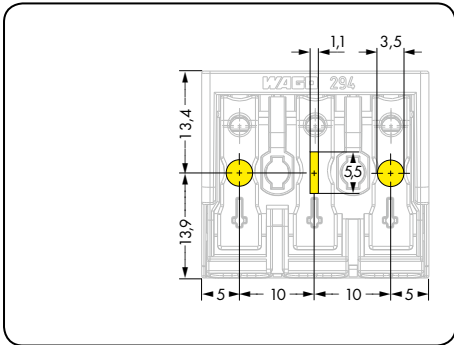
Conductor removal: Slide disconnection tool beneath the conductor and pull conductor out.

# Drilled-Hole Patterns for Snap-In Mounting Feet 294 Series

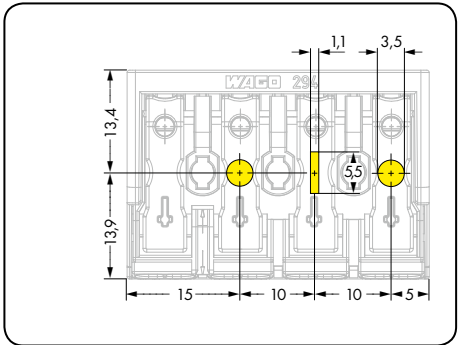
|               |               |               |
|---------------|---------------|---------------|
| <b>2-pole</b> | <b>3-pole</b> | <b>4-pole</b> |
|---------------|---------------|---------------|



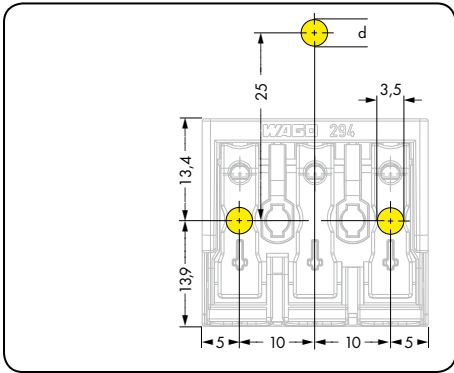
Without ground contact



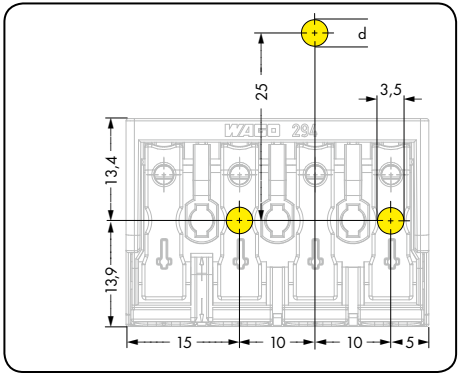
With direct ground contact



With direct ground contact

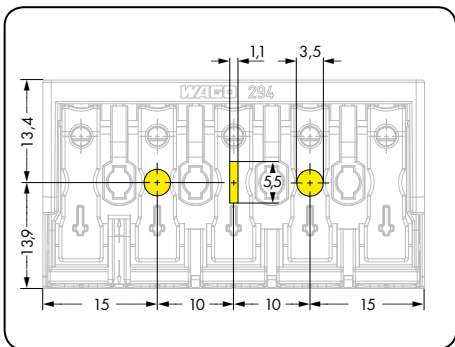


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

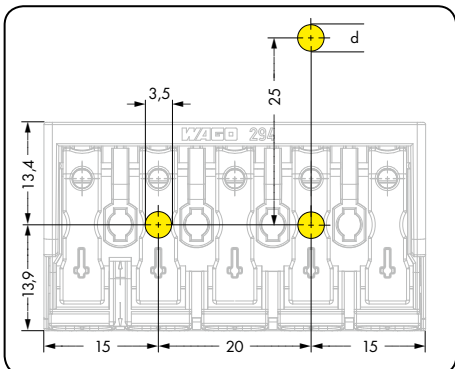
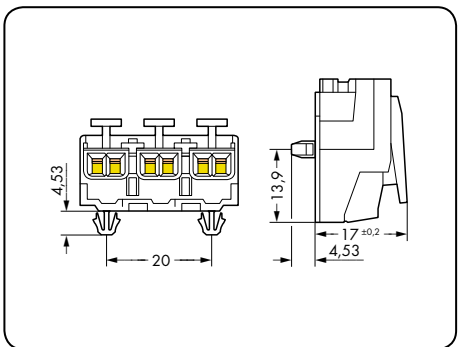
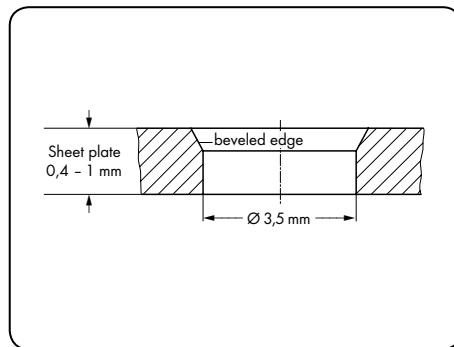


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

|               |   |                              |
|---------------|---|------------------------------|
| <b>5-pole</b> | <b>Drilled hole for snap-in mounting foot</b> | <b>Snap-in mounting foot</b> |
|---------------|---|------------------------------|



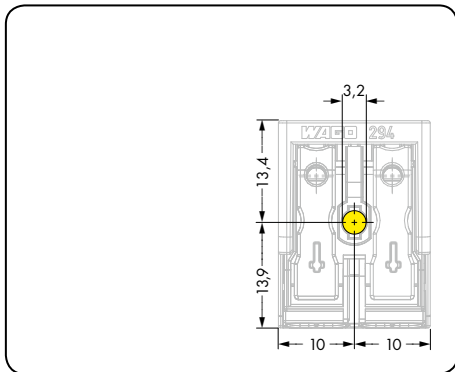
With direct ground contact



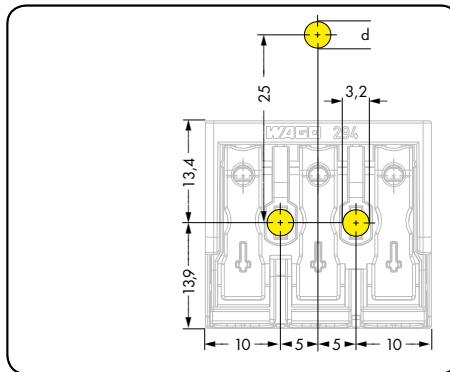
With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

# Drilled-Hole Patterns for Screw Mounting 294 Series

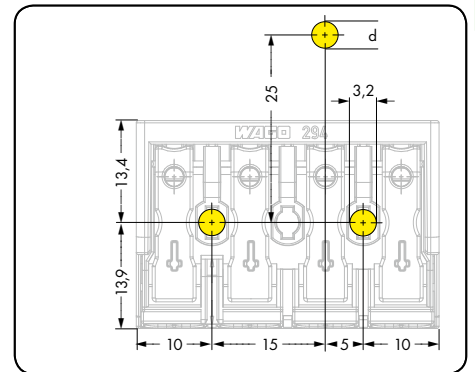
|        |        |        |
|--------|--------|--------|
| 2-pole | 3-pole | 4-pole |
|--------|--------|--------|



Without ground contact

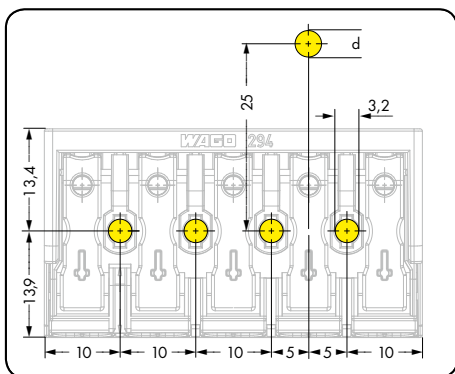


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

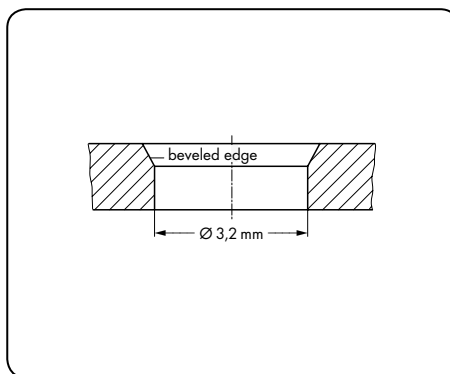


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

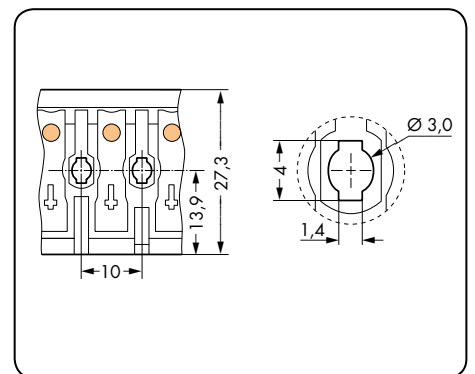
|        |                        |                      |
|--------|------------------------|----------------------|
| 5-pole | Drilled hole for screw | Hole for screw mount |
|--------|------------------------|----------------------|



With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm




**Notice:** The maximum thread diameter for self-tapping screws is 3.0 mm.





# 1 Dividable Terminal Strips







|  |  |  |   |
|--|--|--|---|
| <p>* gray terminal block side<br/>** white terminal block side</p> | <p>2 x 0.5 – 1.5 mm<sup>2</sup> "s"<br/>2 x 0.5 – 2.5 mm<sup>2</sup> "s"<br/>380 V~, size B<br/>I<sub>N</sub> 18 A</p> | <p>2 x AWG 20 – 16 "s"<br/>2 x AWG 20 – 14 "s"<br/>300 V, 10 A<br/>300 V</p> | <p> 8 – 9 mm / 0.33 in</p> |
|--|--|--|---|



- ① For tool-free installation
- ② For wiring on white terminal block side only
- ③ Factory-assembled ground contacts (please indicate position when ordering)

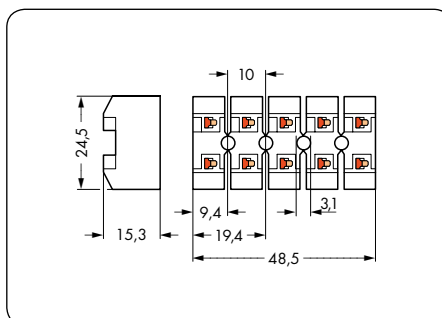
| Description  | Pole No. | Item No.   | Pack. Unit |
|--|----------|--|------------|
| <b>Dividable terminal strips,</b>                  |          | <b>Terminal strips without push-buttons, white</b> |            |
| with additional push-wire connection for           | 1        | <b>272-101</b>                                     | 1000       |
| 0.5/0.75 mm <sup>2</sup> H07V-U (NYA) per pole,    | 2        | <b>272-102</b>                                     | 1000       |
| for screw or screwless mounting (WAGO pins).       | 3        | <b>272-103</b>                                     | 500        |
| Ground contact, for screw/rivet or snap-in contact | 4        | <b>272-104</b>                                     | 500        |
| (pluggable)  | 5        | <b>272-105</b>                                     | 500        |
|  | 12       | <b>272-112</b>                                     | 40         |
|  |          | With screw-type ground contact ③                   |            |
|  | 3        | <b>272-103/1 .-.000</b>                            | 500        |
|  | 4        | <b>272-104/1 .-.000</b>                            | 500        |
|  | 5        | <b>272-105/1 .-.000</b>                            | 500        |
|  |          | With snap-in ground contact ③                      |            |
|  | 3        | <b>272-103/2 .-.000</b>                            | 500        |
|  | 4        | <b>272-104/2 .-.000</b>                            | 500        |
|  | 5        | <b>272-105/2 .-.000</b>                            | 500        |

## Accessories (For marking accessories, see Section 3)

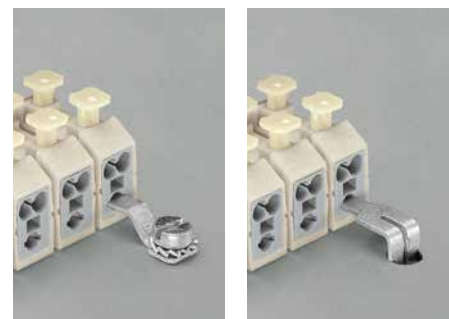
|   |  |                  |      |
|---|--|------------------|------|
|  | <b>Pins,</b> 1 mm  | <b>271-702</b>   | 1000 |
|   | for plate thickness 1 mm ①                                 | <b>271-711 ①</b> | 1000 |
|   | 1.5 mm ①   | <b>271-712 ①</b> | 1000 |
|  | <b>Operating lever, loose,</b>                             |                  |      |
|   | for retrofitting   | <b>271-120</b>   | 1000 |
|  | <b>Pin</b> green, (0.5/0.75) mm <sup>2</sup>               |                  |      |
|   | <b>terminals, white,</b> (1/1.5) mm <sup>2</sup>           |                  |      |
|   | <b>insulated blue,</b> (1.5/2.5) mm <sup>2</sup>           |                  |      |
|  | <b>Crimping tool, for</b>                                  |                  |      |
|   | pin terminals, crimping range of 0.5 – 2.5 mm <sup>2</sup> |                  |      |
|  | <b>Operating tool,</b>                                     | <b>249-100</b>   | 1    |
|   | for terminal blocks with snap-in ground contact            |                  |      |
|  | <b>Felt-tip pen,</b>                                       | <b>210-110</b>   | 1    |
|   | for direct, permanent manual marking                       |                  |      |

## Dimensions

| Pole No. | Length (mm) |
|----------|-------------|
| 1        | 8.5         |
| 2        | 18.5        |
| 3        | 28.5        |
| 4        | 38.5        |
| 5        | 48.5        |
| 12       | 118.5       |

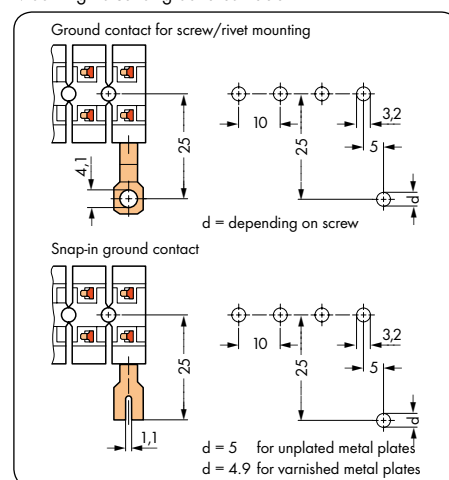


|   |  |   |  |
|---|--|---|--|
| 2 x 0.5 - 1.5 mm <sup>2</sup> "s"<br>2 x 0.5 - 2.5 mm <sup>2</sup> "s"<br>380 V~, size B<br>I <sub>N</sub> 18 A | 2 x AWG 20 - 16 "s"<br>2 x AWG 20 - 14 "s"<br>300 V, 10 A<br>300 V Ⓢ | 2 x 0.5 - 1.5 mm <sup>2</sup> "s"<br>2 x 0.5 - 2.5 mm <sup>2</sup> "s"<br>380 V~, size B<br>I <sub>N</sub> 18 A | 2 x AWG 20 - 16 "s"<br>2 x AWG 20 - 14 "s"<br>300 V, 10 A<br>300 V Ⓢ |
| 8 - 9 mm / 0.33 in  |  | 8 - 9 mm / 0.33 in  |  |

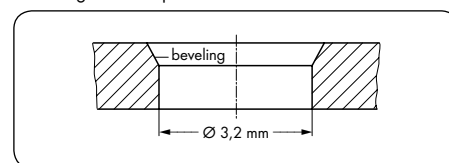


| Pole No.  | Item No.        | Pack. Unit | Pole No.  | Item No.              | Pack. Unit |
|---|-----------------|------------|---|-----------------------|------------|
| <b>Terminal strips with push-buttons on both sides, white</b> |                 |            | <b>Terminal strips with standard marking, without push-buttons, white</b> |                       |            |
| 1   | 272-301         | 500        |   | Marking: L1, N        |            |
| 2   | 272-302         | 500        | 2   | 272-102/001-000       | 1000       |
| 3   | 272-303         | 500        |   | Marking: ⊕, N, L1     |            |
| 4   | 272-304         | 500        | 3   | 272-103/001-000       | 500        |
| 5   | 272-305         | 500        |   | Marking: ⊕, N, L1, L2 |            |
| 12  | 272-312         | 40         | 4   | 272-104/001-000       | 500        |
| With screw-type ground contact                                |                 |            | Marking: ⊕, N, L1, L2, L3   |                       |            |
| 3   | 272-303/1...000 | 500        | 5   | 272-105/001-000       | 500        |
| 4   | 272-304/1...000 | 500        | Ordering examples for terminal strips with ground contacts, see below.    |                       |            |
| 5   | 272-305/1...000 | 500        |   |                       |            |
| With snap-in ground contact                                   |                 |            |   |                       |            |
| 3   | 272-303/2...000 | 500        |   |                       |            |
| 4   | 272-304/2...000 | 500        |   |                       |            |
| 5   | 272-305/2...000 | 500        |   |                       |            |
|   | 271-702         | 1000       |   | 271-702               | 1000       |
|   | 271-711         | 1000       |   | 271-711               | 1000       |
|   | 271-712         | 1000       |   | 271-712               | 1000       |
|   | 271-120         | 1000       |   | 271-120               | 1000       |
| I <sub>N</sub> 6/8 A  | 209-151         | 100        | <b>Ordering examples for 3-pole terminal strip without push-buttons:</b>  |                       |            |
| I <sub>N</sub> 10/16 A  | 209-164         | 100        | <b>a) Without printing:</b>   |                       |            |
| I <sub>N</sub> 16/20 A  | 209-157         | 100        | without ground contact 272-103  |                       |            |
|   | 210-176         | 1          | <b>b) With printing ⊕; N; L1:</b>   |                       |            |
|   | 249-100         | 1          | without ground contact 272-103/001-000                                    |                       |            |
|   |                 |            | with snap-in ground contact 272-103/201-000                               |                       |            |
|   |                 |            | with screw-type ground contact 272-103/101-000                            |                       |            |
|   | 210-110         | 1          |   |                       |            |

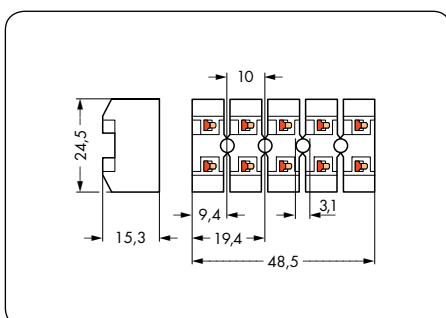
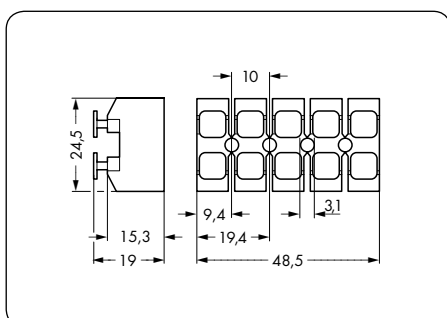
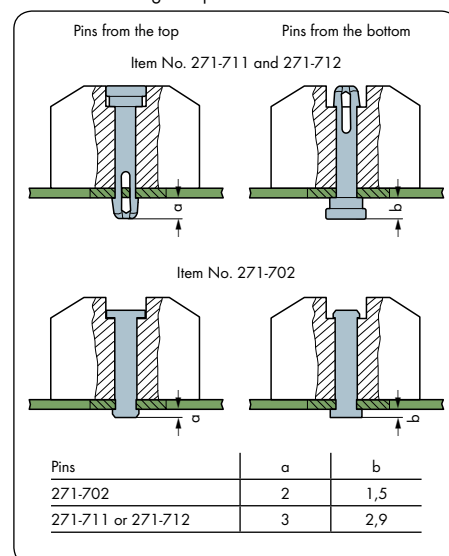
Mounting holes for ground contacts



Mounting holes for pins



Screwless mounting with pins



# Dividable Terminal Strips, Compact Terminal Blocks

|  |   |   |   |   |
|--|---|---|---|---|
| * gray terminal block side<br>** white terminal block side | 1 x 0.5 – 0.75 mm <sup>2</sup> "s"<br>1 x 0,5 – 2,5 mm <sup>2</sup> "s"<br>2 x 0.5 – 2.5 mm <sup>2</sup> "s"<br>380 V~, size B; I <sub>N</sub> 26 A | 1 x AWG 20 – 18 "s"<br>1 x AWG 20 – 14 "s"<br>2 x AWG 20 – 14 "s"<br>300 V  300 V | 1 x 0.5 – 0.75 mm <sup>2</sup> "s"<br>1 x 0,5 – 2,5 mm <sup>2</sup> "s"<br>2 x 0.5 – 2.5 mm <sup>2</sup> "s"<br>380 V~, size B; I <sub>N</sub> 26 A | 1 x AWG 20 – 18 "s"<br>1 x AWG 20 – 14 "s"<br>2 x AWG 20 – 14 "s"<br>300 V  300 V |
|  | 8 – 9 mm / 0.33 in  |   | 8 – 9 mm / 0.33 in  |   |

- ❶ Item no. suffix for standard printings: 001-000
- ❷ For tool-free mounting
- ❸ Factory-assembled ground contacts (please indicate position when ordering)



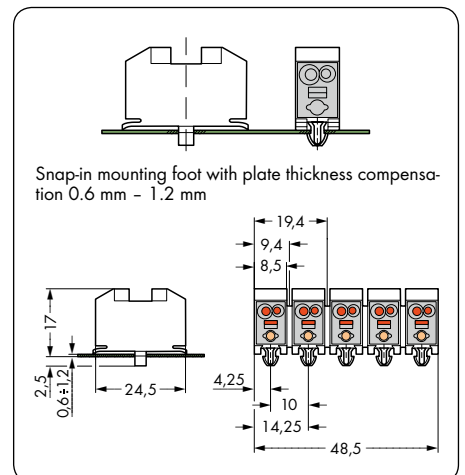
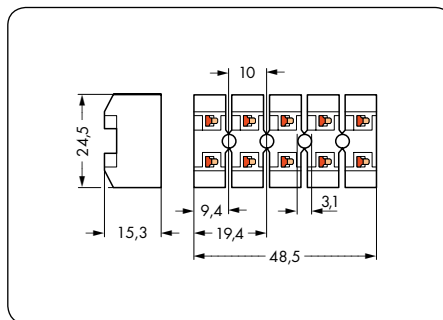
| Description  | Pole No.   | Item No.          | Pack. Unit | Pole No.   | Item No.          | Pack. Unit |
|--|--|-------------------|------------|--|-------------------|------------|
| <b>Dividable terminal strips,</b>  | <b>Terminal strips without push-buttons, white</b> |                   |            | <b>Terminal strips with snap-in mounting feet, white</b> |                   |            |
| with additional push-wire connection for 0.5/0.75 mm <sup>2</sup> H07V-U (NYA) per pole,   | 1  | 272-581           | 1000       | 1  | 272-681           | 1000       |
| for screw or screwless mounting (WAGO pins);   | 2  | 272-582 ❶         | 1000       | 2  | 272-682 ❶         | 1000       |
| with snap-in mounting foot for mounting holes 3.5 mm Ø, mounting plate 0.6 – 1.2 mm thick. | 3  | 272-583 ❶         | 500        | 3  | 272-683 ❶         | 500        |
| Ground contact, for screw/rievet or snap-in contact (pluggable)                            | 4  | 272-584 ❶         | 500        | 4  | 272-684 ❶         | 500        |
|  | 5  | 272-585 ❶         | 500        | 5  | 272-685 ❶         | 500        |
|  | 12   | 272-592           | 40         | 12   | 272-692           | 40         |
|  | With screw-type ground contact ❸                   |                   |            | With screw-type ground contact ❸                         |                   |            |
|  | 3  | 272-583/1 . .-000 | 500        | 3  | 272-683/1 . .-000 | 500        |
|  | 4  | 272-584/1 . .-000 | 500        | 4  | 272-684/1 . .-000 | 500        |
|  | 5  | 272-585/1 . .-000 | 500        | 5  | 272-685/1 . .-000 | 500        |
|  | With snap-in ground contact ❸                      |                   |            | With snap-in ground contact ❸                            |                   |            |
|  | 3  | 272-583/2 . .-000 | 500        | 3  | 272-683/2 . .-000 | 500        |
|  | 4  | 272-584/2 . .-000 | 500        | 4  | 272-684/2 . .-000 | 500        |
|  | 5  | 272-585/2 . .-000 | 500        | 5  | 272-685/2 . .-000 | 500        |

## Accessories (For marking accessories, see Section 3)

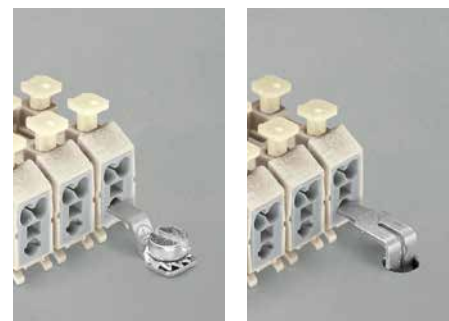
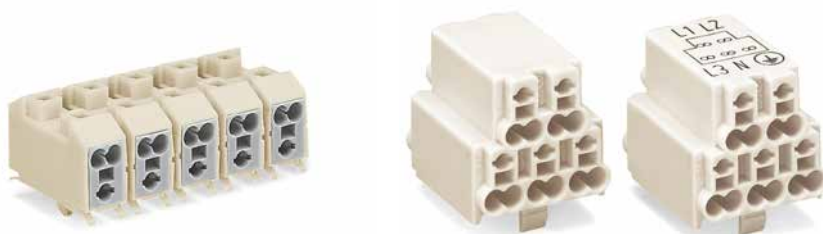
|  |   |          |           |      |         |      |
|--|---|----------|-----------|------|---------|------|
|  | <b>Pins,</b>                                    | 1 mm     | 271-702   | 1000 |         |      |
|  | for plate thickness                             | 1 mm ❷   | 271-711 ❷ | 1000 |         |      |
|  |   | 1.5 mm ❷ | 271-712 ❷ | 1000 |         |      |
|  | <b>Operating lever, loose,</b>                  |          |           |      |         |      |
|  | for retrofitting                                |          | 271-120   | 1000 | 271-120 | 1000 |
|  | <b>Operating tool,</b>                          |          |           |      |         |      |
|  | for terminal blocks with snap-in ground contact |          | 249-100   | 1    | 249-100 | 1    |
|  | <b>Felt-tip pen,</b>                            |          |           |      |         |      |
|  | for direct, permanent manual marking            |          | 210-110   | 1    | 210-110 | 1    |

## Dimensions

| Pole No. | Length (mm) |
|----------|-------------|
| 1        | 8.5         |
| 2        | 18.5        |
| 3        | 28.5        |
| 4        | 38.5        |
| 5        | 48.5        |
| 12       | 118.5       |

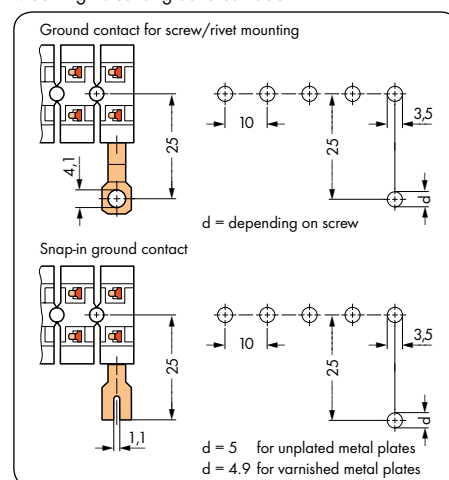


|   |  |  |   |
|---|--|--|---|
| 2 x 0.5 - 1.5 mm <sup>2</sup> "s"<br>2 x 0.5 - 2.5 mm <sup>2</sup> "s"<br>380 V~, size B<br>I <sub>N</sub> 18 A | 2 x AWG 20 - 16 "s"<br>2 x AWG 20 - 14 "s"<br>300 V, 10 A<br>300 V | 2 x 0.5 - 2.5 mm <sup>2</sup> "s"<br>380 V~, size B<br>I <sub>N</sub> 26 A | 2 x AWG 20 - 14 "s"<br>300 V, 10 A<br>300 V |
| 8 - 9 mm / 0.33 in  |  | 8 - 9 mm / 0.33 in   |   |

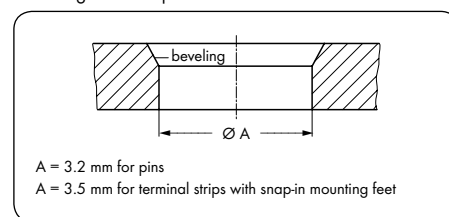


| Pole No.   | Item No.         | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|--|------------------|------------|---|-----------------|------------|
| <b>Terminal strips with snap-in mounting feet, white</b> |                  |            | <b>Compact terminal blocks with snap-in mounting feet, white,</b> |                 |            |
| 1  | 272-131          | 1000       | for cutouts, plate thickness up to 1 mm,                          |                 |            |
| 2  | 272-132 ①        | 1000       | with additional push-wire connection for                          |                 |            |
| 3  | 272-133 ①        | 500        | 0.5/0.75 mm <sup>2</sup> H07 V-U (NYA) per pole                   |                 |            |
| 4  | 272-134 ①        | 500        |   |                 |            |
| 5  | 272-135 ①        | 500        |   |                 |            |
| 12   | 272-142          | 40         | 5   | 272-122         | 500        |
| With screw-type ground contact ③                         |                  |            | With printing: L1, L2 (upper level)                               |                 |            |
| 3  | 272-133/1 .-.000 | 500        | L3, N, ⊕ (lower level)  |                 |            |
| 4  | 272-134/1 .-.000 | 500        | 5   | 272-122/001-000 | 500        |
| 5  | 272-135/1 .-.000 | 500        |   |                 |            |
| With snap-in ground contact ③                            |                  |            |   |                 |            |
| 3  | 272-133/2 .-.000 | 500        |   |                 |            |
| 4  | 272-134/2 .-.000 | 500        |   |                 |            |
| 5  | 272-135/2 .-.000 | 500        |   |                 |            |
|  | 271-120          | 1000       |   |                 |            |
|  | 249-100          | 1          |   |                 |            |
|  | 210-110          | 1          |   |                 |            |

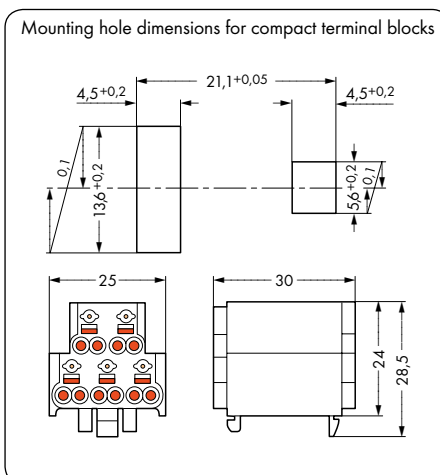
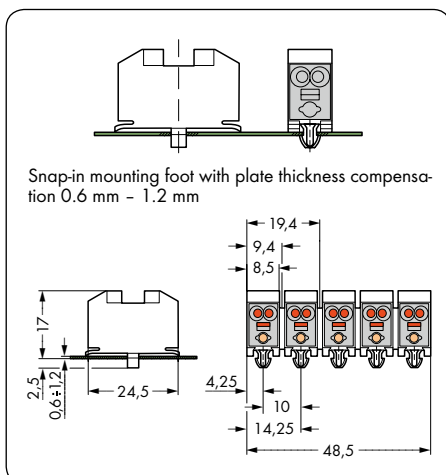
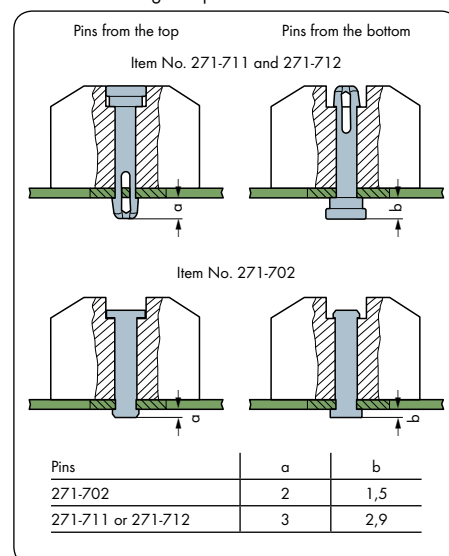
Mounting holes for ground contacts



Mounting holes for pins



Screwless mounting with pins

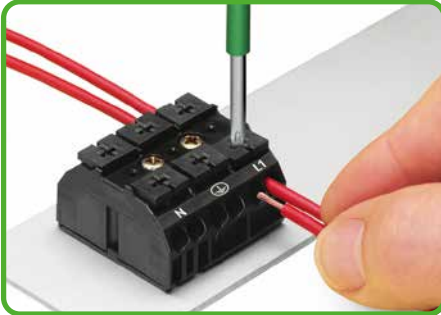




# 4-Conductor, Chassis-Mount Terminal Strips, 862 Series – Description and Handling –

**CAGE CLAMP®S**

## Conductor termination



Four conductors per pole for solid and fine-stranded conductors

## Marking



Marking by direct, one-side printing and/or marker strips

## Testing



Testing with test plug 2 mm Ø.

## Ground contact (PE contact)



Makes an automatic contact to the mounting plate. The varnish coating is penetrated automatically.

## Commoning



Commoning with comb-style jumper bar



## Cost-effective features:

The 862 Series chassis-mount terminal strips were developed specifically to minimize wiring costs, while accommodating requirements for easy mounting, multiple connection points, marking and handling:

- The 862 Series equipped with CAGE CLAMP®S connects up to four conductors sized 0.5 mm<sup>2</sup> to 4 mm<sup>2</sup> (AWG 20 - 12). Due to multiple connection points per pole, different conductor sizes can be used within the same terminal block position.
- CAGE CLAMP®S termination technology allows solid conductors, fine-stranded conductors with ferrules or ultrasonically bonded conductors from 0.5 mm<sup>2</sup> to 4 mm<sup>2</sup> (AWG 20 - 12) to be connected by simply pushing the conductor into contact. (Length of bonded wire end min. 10 mm/0.39 in).
- Convenient automatic grounding contact available as an option.
- Snap-in mounting feet for fast assembly.
- Push-buttons for easy handling with an operating tool or by hand.
- Built-in test points simplify testing with test plug 2 mm Ø.
- Flexible marking options with standard marking (pre-marked), marker strip or custom marked for large quantity orders.

## CAGE CLAMP®S clamps the following copper conductors:\*

solid

stranded

fine-stranded,  
also with tinned  
single strands

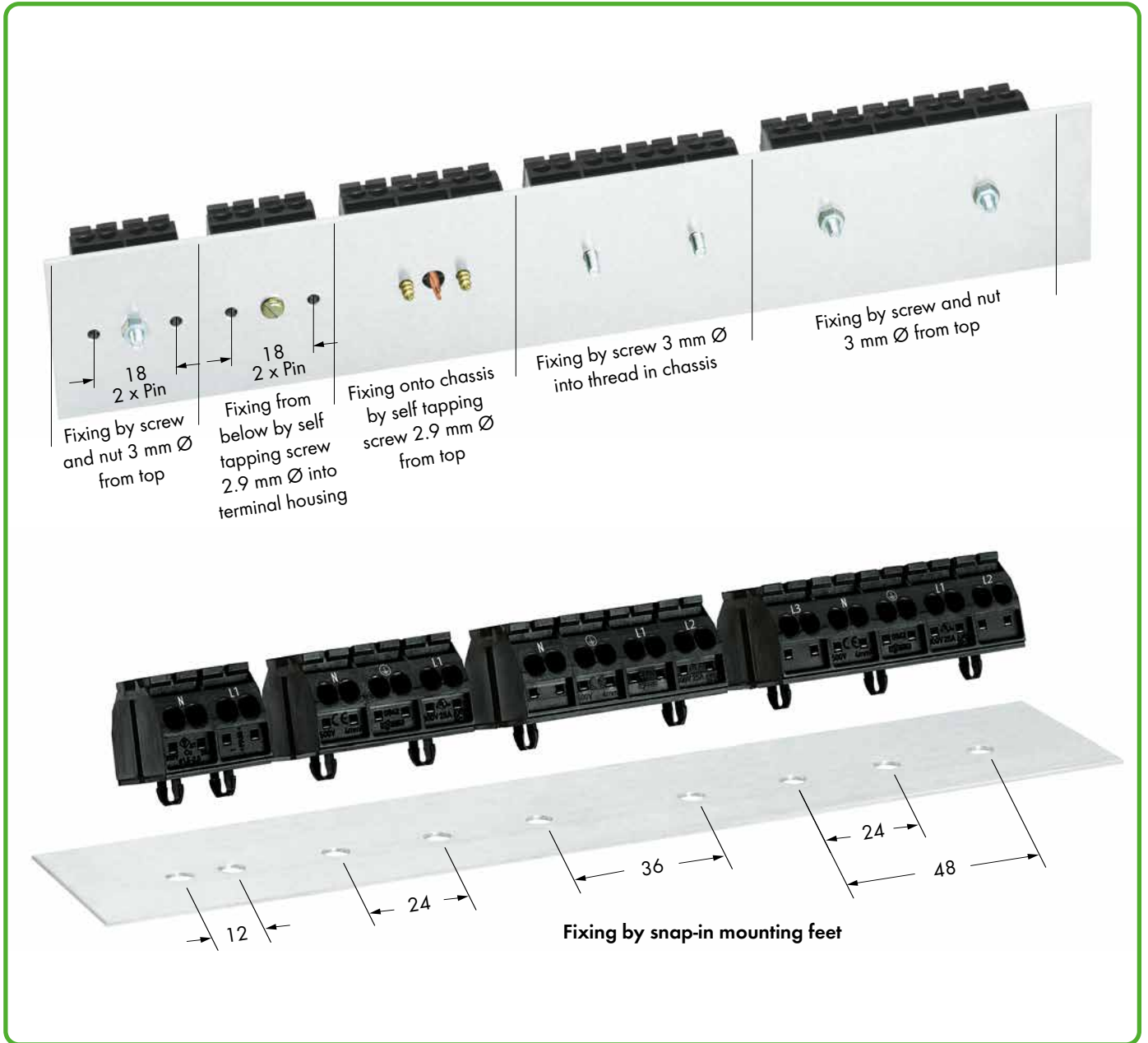
fine-stranded,  
tip-bonded

fine-stranded,  
with ferrule ①  
(gastight crimped)

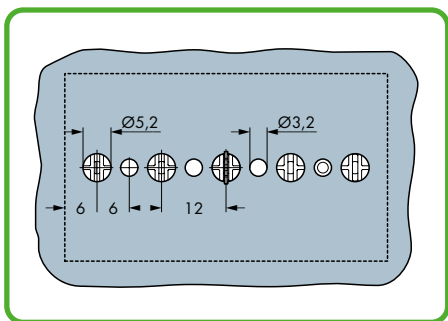
fine-stranded,  
with pin terminal  
(gastight crimped)

\* For aluminum conductors, see page 507.

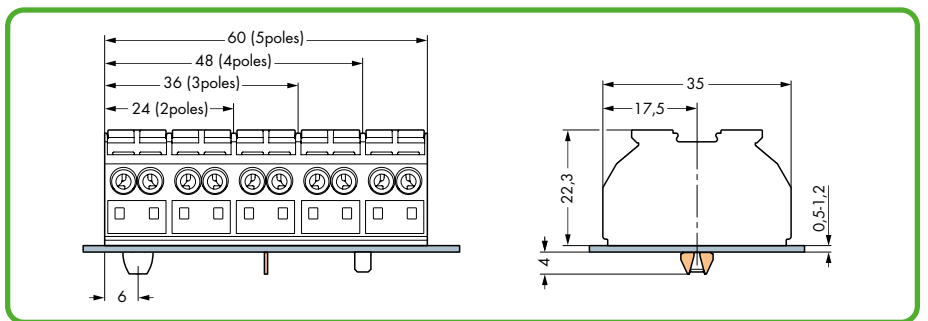
① When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.



Dimensions in mm



Dimensions in mm for ground contact and snap-in mounting foot 5.2 mm Ø.









Dimensions in mm for chassis-mount terminal strips

## 4-Conductor, Chassis-Mount Terminal Strips

2- and 3-Pole, 4 mm<sup>2</sup>

## 862 Series

|  |  |   |  |   |
|--|--|---|--|---|
|  | <b>0.5 - 4 mm<sup>2</sup> ①</b><br>500 V/6 kV/3<br>I <sub>N</sub> 32 A                                 | AWG 20 - 12<br>300 V, 20 A <br>300 V, 20 A  | <b>0.5 - 4 mm<sup>2</sup> ①</b><br>500 V/6 kV/3<br>I <sub>N</sub> 32 A                                   | AWG 20 - 12<br>300 V, 20 A <br>300 V, 20 A  |
|  |  10 - 11 mm / 0.41 in |   |  10 - 11 mm / 0.41 in |   |
|  | ② Approvals  |   | ② Approvals  |   |

① Conductor sizes: 0.25 - 4 mm<sup>2</sup> "s + fst";  
 Push-in conductor sizes: 0.75 - 4 mm<sup>2</sup> "s" and  
 0.75 - 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



Available in black and white.








2-pole



3-pole

|   | without<br>Ground contact (PE contact) | with<br>Ground contact (PE contact) | Item No.<br>black | Item No.<br>white | Pack. Unit | Item No.<br>black | Item No.<br>white | Pack. Unit |
|---|--|-------------------------------------|-------------------|-------------------|------------|-------------------|-------------------|------------|
| <b>For screw and nut 3 mm Ø or<br/>for self-tapping screw 2.9 mm Ø from top</b> |  |                                     |                   |                   |            |                   |                   |            |
|   | plain                                  |                                     | ● 862-0552        | ○ 862-0652        | 500        |                   |                   |            |
|   | L1-N                                   |                                     | ● 862-1552        | ○ 862-1652        | 500        |                   |                   |            |
|   | N-L1                                   |                                     | ● 862-2552        | ○ 862-2652        | 500        |                   |                   |            |
| <b>For self-tapping screw 2.9 mm Ø from below</b>                               |  |                                     |                   |                   |            |                   |                   |            |
|   | plain                                  |                                     | ● 862-0562        | ○ 862-0662        | 500        |                   |                   |            |
|   | L1-N                                   |                                     | ● 862-1562        | ○ 862-1662        | 500        |                   |                   |            |
|   | N-L1                                   |                                     | ● 862-2562        | ○ 862-2662        | 500        |                   |                   |            |
| <b>1 snap-in foot per pole</b>  |  |                                     |                   |                   |            |                   |                   |            |
|   | plain                                  |                                     | ● 862-0532        | ○ 862-0632        | 500        |                   |                   |            |
|   | L1-N                                   |                                     | ● 862-1532        | ○ 862-1632        | 500        |                   |                   |            |
|   | N-L1                                   |                                     | ● 862-2532        | ○ 862-2632        | 500        |                   |                   |            |
| <b>For screw and nut 3 mm Ø or<br/>for self-tapping screw 2.9 mm Ø from top</b> |  |                                     |                   |                   |            |                   |                   |            |
|   | plain                                  |                                     |                   |                   |            | ● 862-0503        | ○ 862-0603        | 250        |
|   | ⊕-N-L1                                 |                                     |                   |                   |            | ● 862-1503        | ○ 862-1603        | 250        |
|   | N-⊕-L1                                 |                                     |                   |                   |            | ● 862-2503        | ○ 862-2603        | 250        |
|   |  | N-⊕-L1                              |                   |                   |            | ● 862-8503        | ○ 862-8603        | 250        |
|   |  | ⊕-N-L1                              |                   |                   |            | ● 862-9503        | ○ 862-9603        | 250        |
| <b>1 snap-in foot per pole</b>  |  |                                     |                   |                   |            |                   |                   |            |
|   | plain                                  |                                     |                   |                   |            | ● 862-0533        | ○ 862-0633        | 250        |
|   | ⊕-N-L1                                 |                                     |                   |                   |            | ● 862-1533        | ○ 862-1633        | 250        |
|   | N-⊕-L1                                 |                                     |                   |                   |            | ● 862-2533        | ○ 862-2633        | 250        |
|   |  | N-⊕-L1                              |                   |                   |            | ● 862-8533        | ○ 862-8633        | 250        |
|   |  | ⊕-N-L1                              |                   |                   |            | ● 862-9533        | ○ 862-9633        | 250        |
| <b>Snap-in foot at pos. 1+3</b>   |  |                                     |                   |                   |            |                   |                   |            |
|   | plain                                  |                                     |                   |                   |            | ● 862-0593        | ○ 862-0693        | 250        |
|   | ⊕-N-L1                                 |                                     |                   |                   |            | ● 862-1593        | ○ 862-1693        | 250        |
|   | N-⊕-L1                                 |                                     |                   |                   |            | ● 862-2593        | ○ 862-2693        | 250        |
|   |  | N-⊕-L1                              |                   |                   |            | ● 862-8593        | ○ 862-8693        | 250        |
|   |  | ⊕-N-L1                              |                   |                   |            | ● 862-9593        | ○ 862-9693        | 250        |

## 862 Series Accessories



|   |  |  |
|---|--|--|
| <b>Comb-style jumper bar</b> , simply push<br>into conductor entry hole<br> I <sub>N</sub> 32 A <b>862-482</b> 5 | <b>Test plug</b> , with 500 mm cable,<br>2 mm Ø<br> red <b>210-136</b> 50 | <b>Test plug</b> , with 500 mm cable,<br>2.3 mm Ø<br> yellow <b>210-137</b> 50    |
| <b>Operating tool with partially insulated shaft</b> ,<br>type 2, (3.5 x 0.5) mm blade<br> <b>210-720</b> 1      | Suitable for Ex e II applications<br>440 V, 28 A   | <b>Marking strip</b> , plain, 7.5 mm wide,<br>50m roll<br> white <b>709-178</b> 1 |

② Approvals are available online at: [www.wago.com](http://www.wago.com).

# 4-Conductor, Chassis-Mount Terminal Strips

## 4- and 5-Pole, 4 mm<sup>2</sup>

### 862 Series

|  |   |   |
|--|---|---|
|  | <b>0.5 - 4 mm<sup>2</sup> ①</b><br>500 V/6 kV/3<br>I <sub>N</sub> 32 A<br><br> 10 - 11 mm / 0.41 in<br>② Approvals | <b>0.5 - 4 mm<sup>2</sup> ①</b><br>500 V/6 kV/3<br>I <sub>N</sub> 32 A<br><br> 10 - 11 mm / 0.41 in<br>② Approvals |
|--|---|---|

① Conductor sizes: 0.25 - 4 mm<sup>2</sup> "s + fst";  
 Push-in conductor sizes: 0.75 - 4 mm<sup>2</sup> "s" and 0.75 - 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



Available in black and white.

4-pole

5-pole

|   | without Ground contact (PE contact) | with Ground contact (PE contact) | Item No. black | Item No. white | Pack. Unit | Item No. black | Item No. white | Pack. Unit |
|---|-------------------------------------|----------------------------------|----------------|----------------|------------|----------------|----------------|------------|
| <b>For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top</b> |                                     |                                  |                |                |            |                |                |            |
|   | plain                               |                                  | ● 862-0504     | ○ 862-0604     | 200        |                |                |            |
|   | ⊕-N-L1-L2                           |                                  | ● 862-1504     | ○ 862-1604     | 200        |                |                |            |
|   | N-⊕-L1-L2                           |                                  | ● 862-2504     | ○ 862-2604     | 200        |                |                |            |
|   |                                     | N-⊕-L1-L2                        | ● 862-8504     | ○ 862-8604     | 200        |                |                |            |
|   |                                     | ⊕-N-L1-L2                        | ● 862-9504     | ○ 862-9604     | 200        |                |                |            |
| <b>1 snap-in foot per pole</b>  |                                     |                                  |                |                |            |                |                |            |
|   | plain                               |                                  | ● 862-0534     | ○ 862-0634     | 200        |                |                |            |
|   | ⊕-N-L1-L2                           |                                  | ● 862-1534     | ○ 862-1634     | 200        |                |                |            |
|   | N-⊕-L1-L2                           |                                  | ● 862-2534     | ○ 862-2634     | 200        |                |                |            |
|   |                                     | N-⊕-L1-L2                        | ● 862-8534     | ○ 862-8634     | 200        |                |                |            |
|   |                                     | ⊕-N-L1-L2                        | ● 862-9534     | ○ 862-9634     | 200        |                |                |            |
| <b>Snap-in foot at pos. 1+4</b>   |                                     |                                  |                |                |            |                |                |            |
|   | plain                               |                                  | ● 862-0594     | ○ 862-0694     | 200        |                |                |            |
|   | ⊕-N-L1-L2                           |                                  | ● 862-1594     | ○ 862-1694     | 200        |                |                |            |
|   | N-⊕-L1-L2                           |                                  | ● 862-2594     | ○ 862-2694     | 200        |                |                |            |
|   |                                     | N-⊕-L1-L2                        | ● 862-8594     | ○ 862-8694     | 200        |                |                |            |
|   |                                     | ⊕-N-L1-L2                        | ● 862-9594     | ○ 862-9694     | 200        |                |                |            |
| <b>For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top</b> |                                     |                                  |                |                |            |                |                |            |
|   | plain                               |                                  |                |                |            | ● 862-0505     | ○ 862-0605     | 200        |
|   | ⊕-N-L1-L2-L3                        |                                  |                |                |            | ● 862-1505     | ○ 862-1605     | 200        |
|   | L3-N-⊕-L1-L2                        |                                  |                |                |            | ● 862-2505     | ○ 862-2605     | 200        |
|   |                                     | L3-N-⊕-L1-L2                     |                |                |            | ● 862-8505     | ○ 862-8605     | 200        |
|   |                                     | ⊕-N-L1-L2-L3                     |                |                |            | ● 862-9505     | ○ 862-9605     | 200        |
| <b>1 snap-in foot per pole</b>  |                                     |                                  |                |                |            |                |                |            |
|   | plain                               |                                  |                |                |            | ● 862-0525     | ○ 862-0625     | 200        |
|   | ⊕-N-L1-L2-L3                        |                                  |                |                |            | ● 862-1525     | ○ 862-1625     | 200        |
|   | L3-N-⊕-L1-L2                        |                                  |                |                |            | ● 862-2525     | ○ 862-2625     | 200        |
|   |                                     | L3-N-⊕-L1-L2                     |                |                |            | ● 862-8525     | ○ 862-8625     | 200        |
|   |                                     | ⊕-N-L1-L2-L3                     |                |                |            | ● 862-9525     | ○ 862-9625     | 200        |
| <b>Snap-in foot at pos. 1+3+5</b>   |                                     |                                  |                |                |            |                |                |            |
|   | plain                               |                                  |                |                |            | ● 862-0515     | ○ 862-0615     | 200        |
|   | ⊕-N-L1-L2-L3                        |                                  |                |                |            | ● 862-1515     | ○ 862-1615     | 200        |
|   | L3-N-⊕-L1-L2                        |                                  |                |                |            | ● 862-2515     | ○ 862-2615     | 200        |
|   |                                     | L3-N-⊕-L1-L2                     |                |                |            | ● 862-8515     | ○ 862-8615     | 200        |
|   |                                     | ⊕-N-L1-L2-L3                     |                |                |            | ● 862-9515     | ○ 862-9615     | 200        |

#### 862 Series Accessories


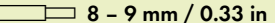

|  |   |   |
|--|---|---|
| <b>Comb-style jumper bar</b> , simply push into conductor entry hole<br>I <sub>N</sub> 32 A <b>862-482</b> 5 | <b>Test plug</b> , with 500 mm cable, 2 mm Ø<br>red <b>210-136</b> 50 | <b>Test plug</b> , with 500 mm cable, 2.3 mm Ø<br>yellow <b>210-137</b> 50    |
| <b>Operating tool with partially insulated shaft</b> , type 2, (3.5 x 0.5) mm blade<br><b>210-720</b> 1      | Suitable for Ex e II applications<br>440 V, 28 A                      | <b>Marking strip</b> , plain, 7.5 mm wide, 50m roll<br>white <b>709-178</b> 1 |

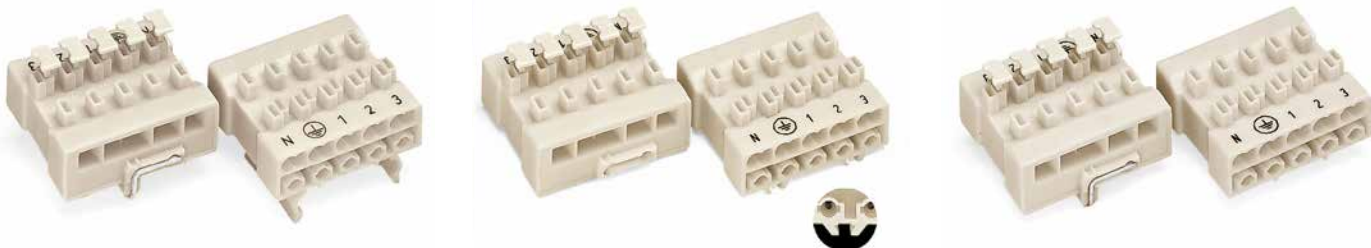
For technical explanations and abbreviations, see technical section.



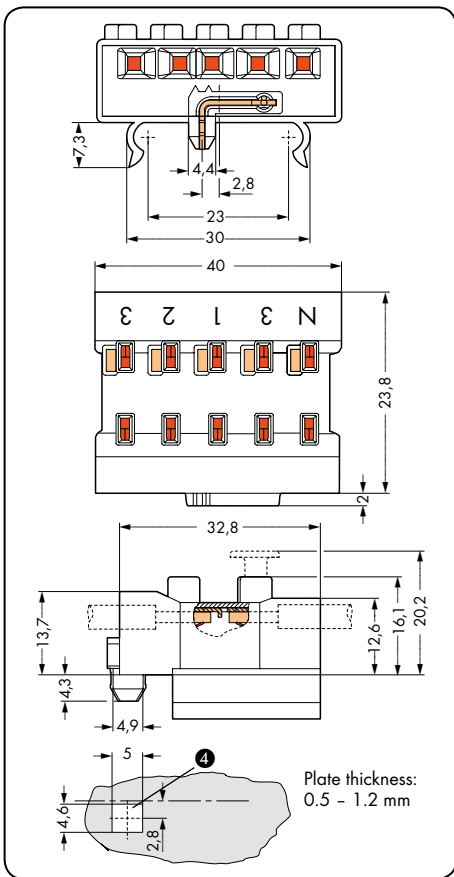
# Power Supply Connectors 293 Series

PUSH WIRE®

|   |   |  |   |  |   |
|---|---|--|---|--|---|
| 5 x 2/0.5 - 2.5 mm <sup>2</sup> "sol."<br>5 x 1/0.5 - 0.75 mm <sup>2</sup> "sol."<br>5 x 1/2.5 mm <sup>2</sup> "sol."<br>500 V/4 kV/2<br>20 A<br> | 5 x 2 AWG 20-14 "sol." ❶<br>5 x 1 AWG 20-18 "sol." ❶<br>5 x 1 AWG 14 "sol." ❷ | 5 x 2/0.5 - 2.5 mm <sup>2</sup> "sol."<br>5 x 1/0.5 - 0.75 mm <sup>2</sup> "sol."<br>5 x 1/2.5 mm <sup>2</sup> "sol."<br>500 V/4 kV/2<br>20 A<br> | 5 x 2 AWG 20-14 "sol." ❶<br>5 x 1 AWG 20-18 "sol." ❶<br>5 x 1 AWG 14 "sol." ❷ | 5 x 2/0.5 - 2.5 mm <sup>2</sup> "sol."<br>5 x 1/0.5 - 0.75 mm <sup>2</sup> "sol."<br>5 x 1/2.5 mm <sup>2</sup> "sol."<br>500 V/4 kV/2<br>20 A<br> | 5 x 2 AWG 20-14 "sol." ❶<br>5 x 1 AWG 20-18 "sol." ❶<br>5 x 1 AWG 14 "sol." ❷ |
|---|---|--|---|--|---|

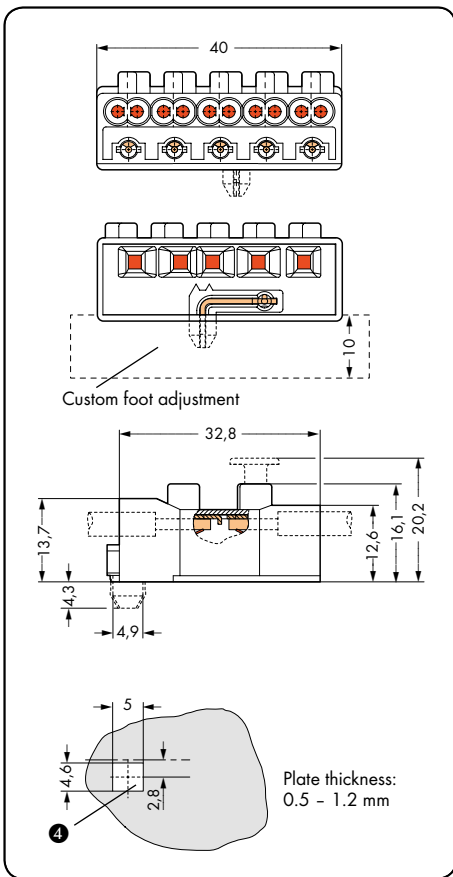
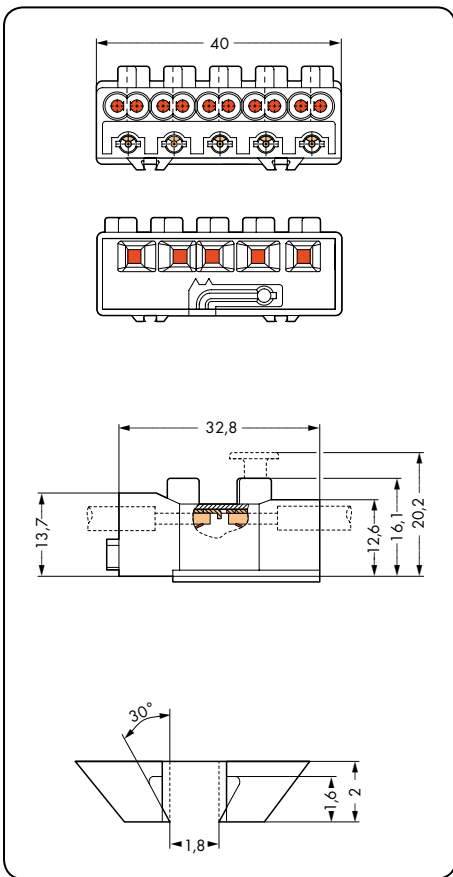


| Pole No.   | Item No.       | Pack. Unit | Pole No.  | Item No.       | Pack. Unit | Pole No.  | Item No.         | Pack. Unit |
|--|----------------|------------|---|----------------|------------|---|------------------|------------|
| <b>Power supply connector with snap-in foot and direct ground contact, white</b> |                |            | <b>Power supply connector with dovetail, without direct ground contact, white</b> |                |            | <b>Power supply connector with custom foot, with direct ground contact, white</b> |                  |            |
| with push-buttons on the power supply side                                       |                |            | with push-buttons on the power supply side  |                |            | with push-buttons on the power supply side  |                  |            |
| 5  | <b>293-325</b> | 250        | 5   | <b>293-220</b> | 250        | 5   | <b>293-... ❸</b> |            |
| without push-buttons   |                |            | without push-buttons  |                |            | without push-buttons  |                  |            |
| 5  | <b>293-225</b> | 250        | 5   | <b>293-219</b> | 250        | 5   | <b>293-... ❸</b> |            |
|  |                |            |   |                |            | <b>without direct ground contact, with push-buttons on the power supply side</b>  |                  |            |
|  |                |            |   |                |            | 5 <b>293-... ❸</b>  |                  |            |
|  |                |            |   |                |            | without push-buttons  |                  |            |
|  |                |            |   |                |            | 5 <b>293-... ❸</b>  |                  |            |
|  |                |            |   |                |            | <b>❶ Power supply side</b>  |                  |            |
|  |                |            |   |                |            | <b>❷ Lighting side</b>  |                  |            |
|  |                |            |   |                |            | <b>❸ defined individually</b>   |                  |            |



❶ Power supply side  
❷ Lighting side  
❸ defined individually

❹ Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.



❶ Power supply side  
❷ Lighting side  
❸ defined individually

❹ Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.

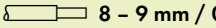
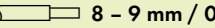
# Power Supply Connectors 293 Series

PUSH WIRE®

1

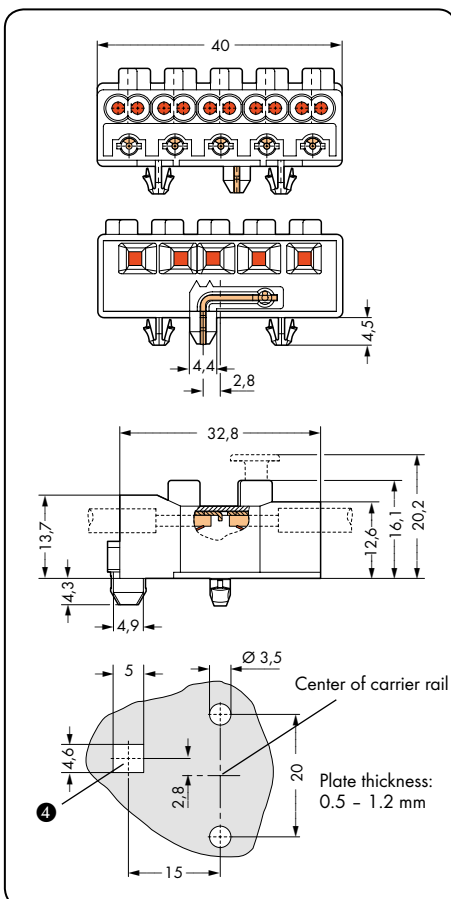
37

1

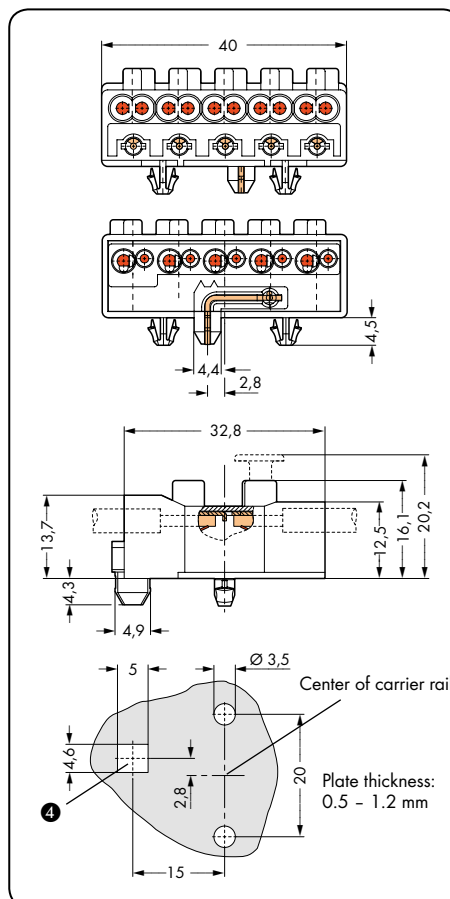
|   |   |   |   |
|---|---|---|---|
| 5 x 2/0.5 - 2.5 mm <sup>2</sup> "sol."<br>5 x 1/0.5 - 0.75 mm <sup>2</sup> "sol."<br>5 x 1/2.5 mm <sup>2</sup> "sol."<br>500 V/4 kV/2<br>20 A<br> 8 - 9 mm / 0.33 in | 5 x 2 AWG 20 - 14 "sol." ❶<br>5 x 1 AWG 20 - 18 "sol." ❶<br>5 x 1 AWG 14 "sol." ❷ | 5 x 2/0.5 - 2.5 mm <sup>2</sup> "sol."<br>5 x 1/0.5 - 0.75 mm <sup>2</sup> "sol."<br>5 x 1/2.5 mm <sup>2</sup> "sol."<br>500 V/4 kV/2<br>20 A<br> 8 - 9 mm / 0.33 in | 5 x 2 AWG 20 - 14 "sol." ❶<br>5 x 1 AWG 20 - 18 "sol." ❶<br>5 x 1 AWG 14 "sol." ❷ |
|---|---|---|---|



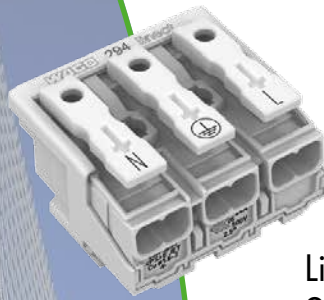
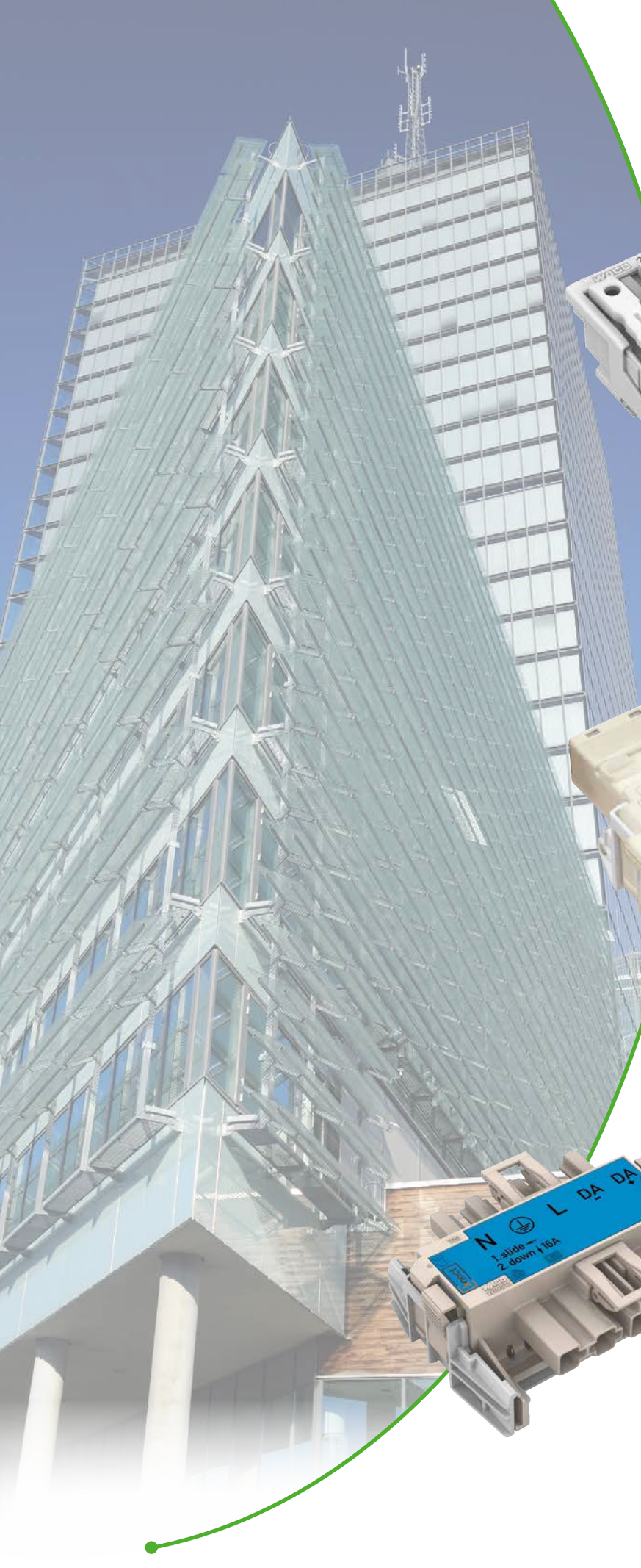
| Pole No.  | Item No.       | Pack. Unit | Pole No.  | Item No.       | Pack. Unit |
|---|----------------|------------|---|----------------|------------|
| <b>Power supply connector with snap-in mounting feet and direct ground contact, white</b> |                |            | <b>Power supply connector (round conductor entry) with snap-in mounting feet and direct ground contact, white</b> |                |            |
| with push-buttons on the power supply side  |                |            | with push-buttons on the power supply side  |                |            |
| 5   | <b>293-222</b> | 250        | 5   | <b>293-230</b> | 250        |
| without push-buttons  |                |            | without push-buttons  |                |            |
| 5   | <b>293-221</b> | 250        | 5   | <b>293-228</b> | 250        |
| ❶ Power supply side   |                |            | ❶ Power supply side   |                |            |
| ❷ Lighting side   |                |            | ❷ Lighting side   |                |            |



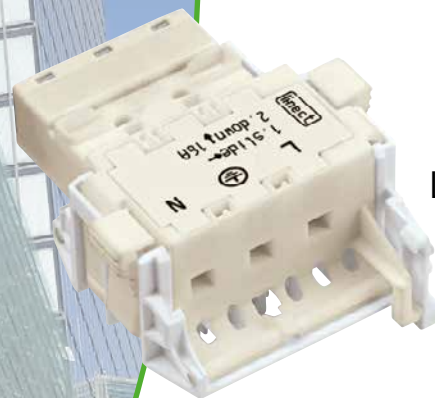
❷ Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.



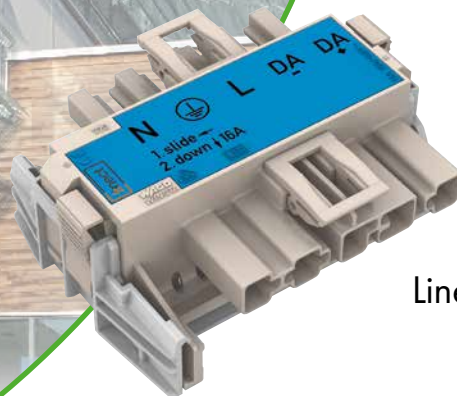
❷ Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.



Lighting Connectors,  
294 Series Linect®



Linect® Connectors



Linect® T-Connectors

# 2



**Lighting Connectors, 2- to 5-Pole**  
294 Series Linect®

40 - 51



**Linect® Connectors, 3-Pole**  
770 Series

52 - 53



**Strain Relief Housings, 3-Pole**  
770 Series

54 - 54



**Linect® T-Connectors, 2- and 3-Pole**  
770 Series

56 - 57

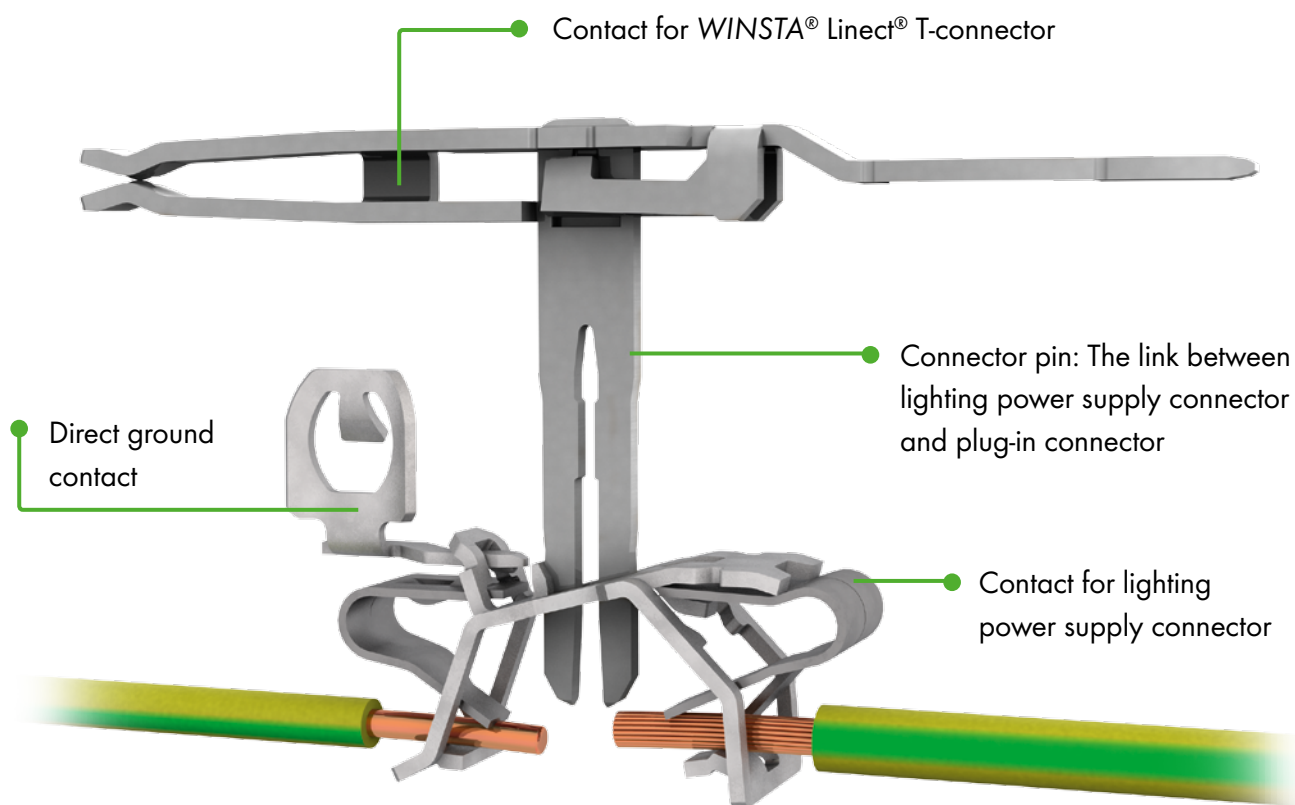
# 294 Linect®



## For Universal Lighting Connections

Lights offered under the Linect® name allow both conventional power supply connection and connection via plug-in connectors. Linect®-branded interfaces can be used by all lighting manufacturers worldwide. This enables lights carrying the Linect® logo to be connected to any Linect®-marked connectors – regardless of manufacturer!

### Contact Technology Using the Linect® Interface:



PUSH WIRE® for internal lighting wiring with solid conductors

CAGE CLAMP®S for standard lighting wiring with all conductor types



## A Perfect Combination

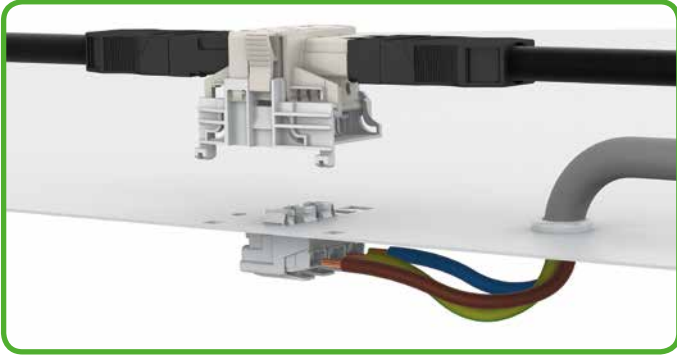
2

**On the Linect® Light:**

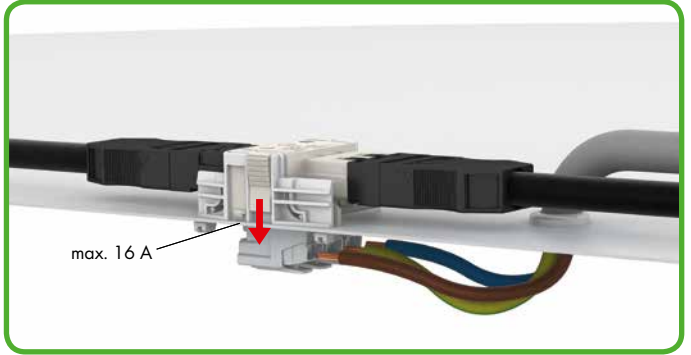
770 Series WINSTA® Linect® T-Connector with connected WINSTA® cable assembly. Touch-proof during each stage of install.

**In the Linect® Light:**

Linect® 294 Series lighting connector. Standard power supply connection with CAGE CLAMP®S for all conductor types. Simple, push-in termination of solid and ferruled conductors.



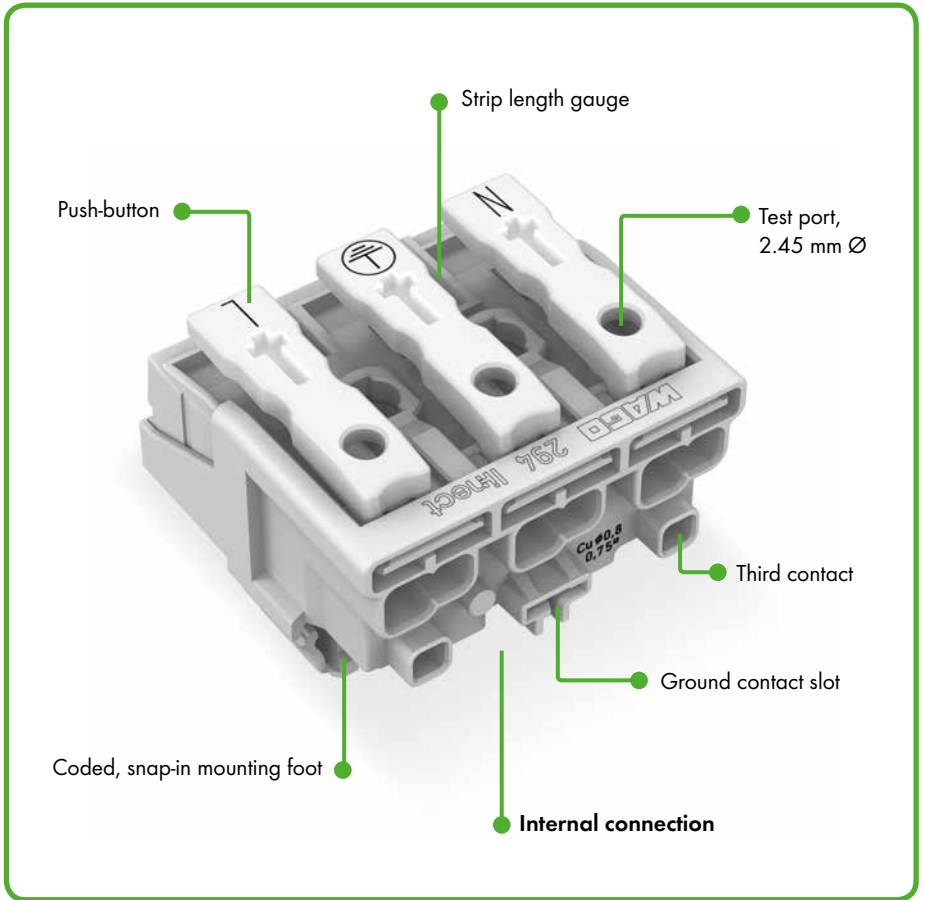
The WAGO 294 Series Lighting Connectors allow worldwide connection of luminaires via WINSTA® pluggable connectors or conventional wiring.



WAGO Linect® lighting connectors are ideal for connecting additional loads that were not originally planned, e.g., spots. The maximum current between WINSTA® Linect® T-connector and lighting connector is 16 A.



Integrated strip length gauge



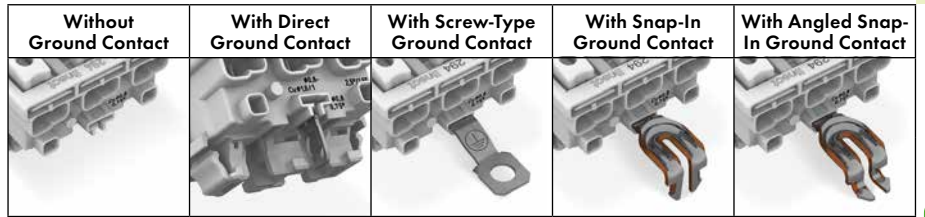
1 Position the T-connector within the two square recesses.







2 Slide the connector toward the square recesses until it stops.

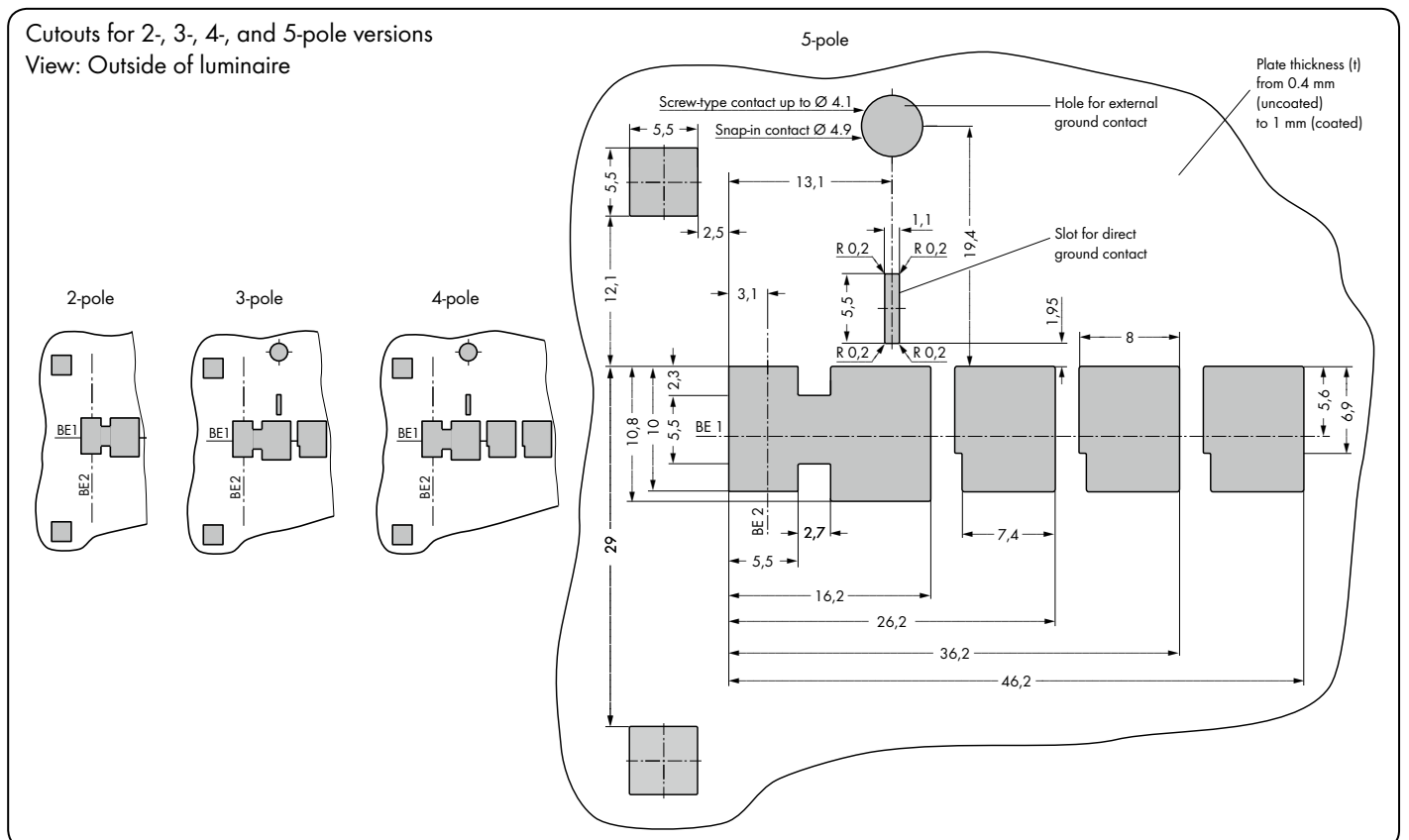


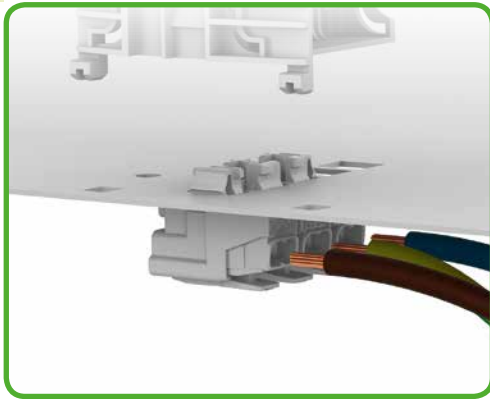
3 Push down until fully engaged – done!



| Pole No.  | Marking       | Item No. | Item No. | Item No. | Item No. | Item No. |
|---|---------------|----------|----------|----------|----------|----------|
| 2    | N' L'         | 294-8022 | - - -    | - - -    | - - -    | - - -    |
|   |               |          |          |          |          |          |
| 3    | N ⊕ L (mains) | 294-8013 | 294-8113 | 294-8413 | 294-8213 | 294-8313 |
|   |               |          |          |          |          |          |
| 4   | 1/L' 2/L ⊕ N  | 294-8024 | 294-8124 | 294-8424 | 294-8224 | 294-8324 |
|   |               |          |          |          |          |          |
| 5  | DA+ DA- L ⊕ N | 294-8035 | 294-8135 | 294-8435 | 294-8235 | 294-8335 |
|   | L' N' L ⊕ N   | 294-8025 | 294-8125 | 294-8425 | 294-8225 | 294-8325 |
|   | L3 L2 L1 ⊕ N  | 294-8015 | 294-8115 | 294-8415 | 294-8215 | 294-8315 |

Linect® lighting connectors see page 47 - 51





- External connection of solid, stranded and fine-stranded conductors
- Universal conductor termination (AWG, metric)
- Third contact located at the bottom of internal connector end
- Strain relief plate can be retrofitted

#### Technical data:

| Type of Connection     | Conductor Connection |                  | Linect® Plug-In Connection |
|------------------------|----------------------|------------------|----------------------------|
|                        | IEC/EN 60998-1       | IEC/EN 60998-2-2 | IEC/EN 61984               |
| Rating per             | II                   | II               | II                         |
| Overtoltage category   | 2                    | 2                | 2                          |
| Pollution degree       | 2                    | 2                | 2                          |
| Rated voltage          | 500 V                | 500 V            | 500 V                      |
| Rated surge voltage    | 4 kV                 | 4 kV             | 4 kV                       |
| Nominal current        | 24 A                 | 24 A             | 16 A                       |
| Temperature marking    | T 85                 | T 85             |                            |
| Degree of protection   |                      |                  | IP 2 XC                    |
| Storage temperature    |                      |                  | -35° to +85°               |
| Processing temperature |                      |                  | -5° to +40°                |

#### Conductor data (external connection):

| Connection technology                            | CAGE CLAMP®S                  |
|--|-------------------------------|
| Conductor size: solid, stranded or fine-stranded | 2 x 0.5 – 2.5 mm <sup>2</sup> |
| Conductor size: with ferrule                     | 2 x 0.5 – 1.5 mm <sup>2</sup> |
| AWG: solid                                       | 2 x 18 – 12                   |
| AWG: stranded and fine-stranded                  | 2 x 18 – 14                   |
| Strip length                                     | 8 – 9 mm / 0.31 – 0.35 in     |

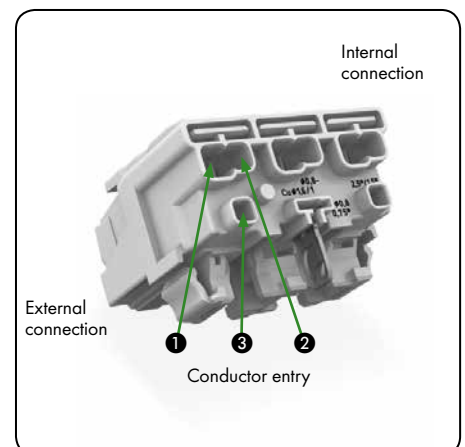
#### Conductor data (internal connection):

| Connection technology         | PUSH WIRE®   |
|-------------------------------|--|
| <b>Conductor entry ①</b>      |  |
| Conductor size: solid         | 0.5 – 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.5 – 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| Conductor size: fine-stranded | 0.5 – 1.0 mm <sup>2</sup> (with insulated ferrule)   |
| AWG: solid                    | 18 – 14  |
| Strip length                  | 8 – 9 mm / 0.31 – 0.35 in                            |
| <b>Conductor entry ②</b>      |  |
| Conductor size: solid         | 0.5 – 1.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.5 – 1.0 mm <sup>2</sup> (with uninsulated ferrule) |
| Conductor size: fine-stranded | 0.5 – 0.75 mm <sup>2</sup> (with insulated ferrule)  |
| AWG: solid                    | 18 – 16  |
| Strip length                  | 8 – 9 mm / 0.31 – 0.35 in                            |
| <b>Conductor entry ③</b>      |  |
| Conductor size: solid         | 0.5 – 0.75 mm <sup>2</sup>                           |
| AWG: solid                    | 18   |
| Strip length                  | 8 – 9 mm / 0.31 – 0.35 in                            |

#### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | IIIa                                       |
| Insulating material           | Polycarbonate (PC)                         |
| Temperature stability         | Relative temperature index (RTI) of 125 °C |
| Flammability rating per UL 94 | V0   |
| Clamping spring material      | Chrome nickel spring steel (CrNi)          |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> )     |
| Contact plating               | tin-plated                                 |

16 mm-high versions are available upon request.

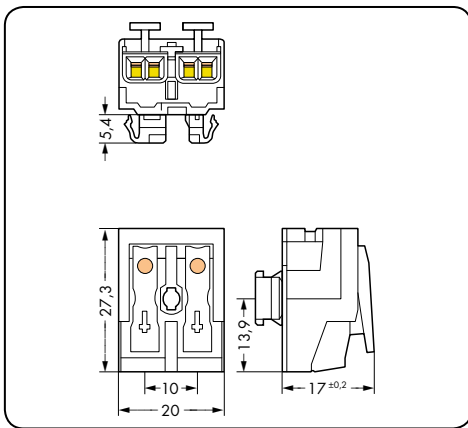


#### Accessories:

#### Page:

|                                    |       |
|------------------------------------|-------|
| Assembly tool                      | 25    |
| Disconnection tool                 | 25    |
| Operating tools                    | 492   |
| Strain relief for multicore cables | 25    |
| Strain relief for single strands   | 25    |
| Linect®-Connectors                 | 52–57 |
| Pin terminals                      | 515   |

Without ground contact



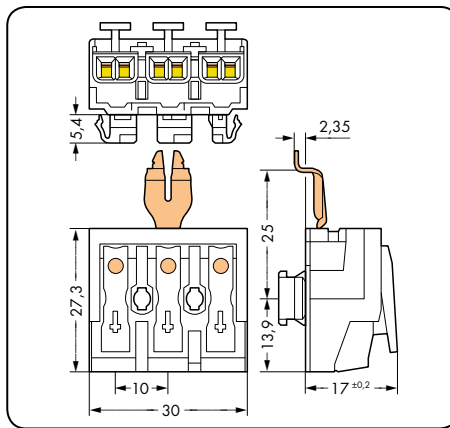
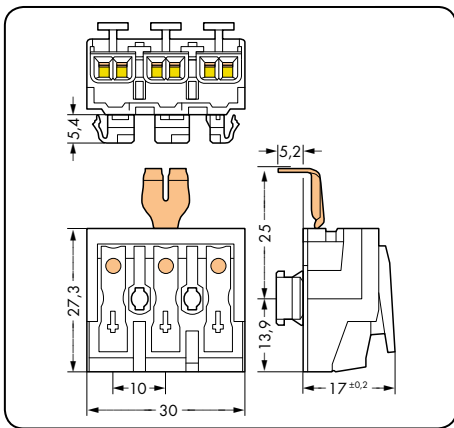
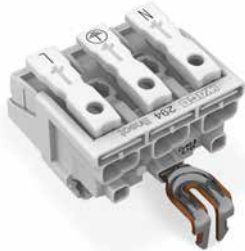
| Marking   | Item No. | Pack. Unit |
|---|----------|------------|
| Lighting connector without ground contact, 2-pole |          |            |
| N' L'   | 294-8022 | 1000       |
|   |          |            |
|   |          |            |





With snap-in ground contact

With angled snap-in ground contact

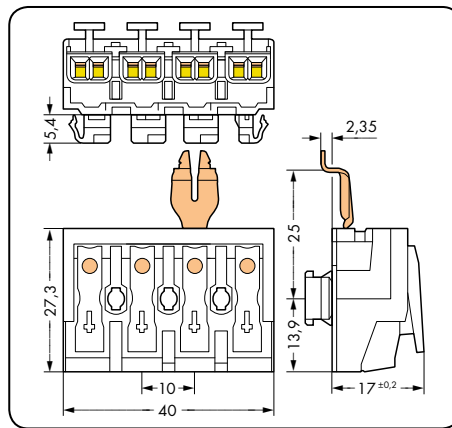
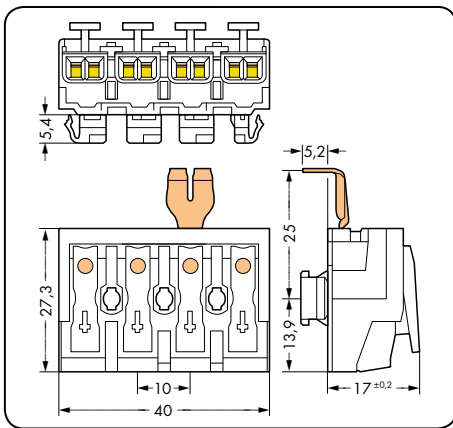
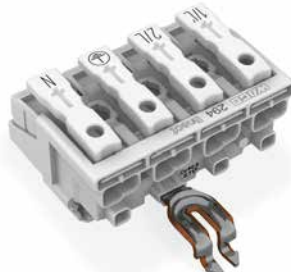
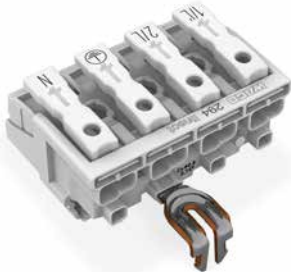


| Marking  | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Lighting connector with snap-in ground contact, 3-pole |          |            | Lighting connector with angled snap-in ground contact, 3-pole |          |            |
| N ⊕ L (mains)  | 294-8213 | 500        | N ⊕ L (mains)   | 294-8313 | 500        |
|  |          |            |   |          |            |
|  |          |            |   |          |            |
|  |          |            |   |          |            |



With snap-in ground contact

With angled snap-in ground contact

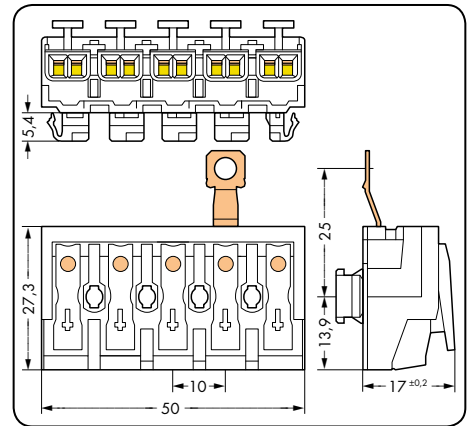
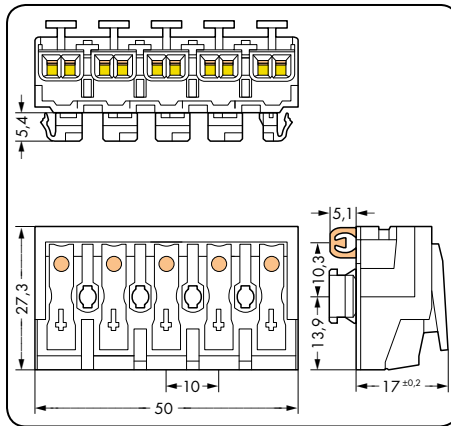
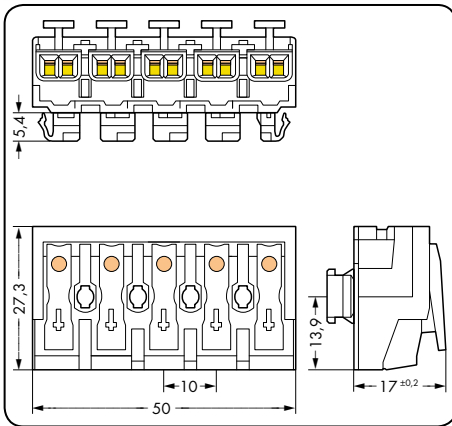
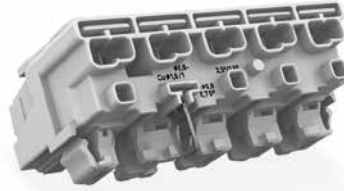
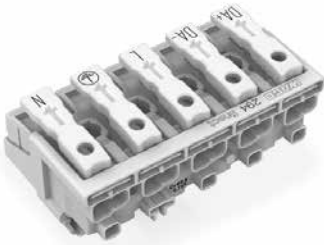


| Marking  | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Lighting connector with snap-in ground contact, 4-pole |          |            | Lighting connector with angled snap-in ground contact, 4-pole |          |            |
| 1/L' 2/L ⊕ N   | 294-8224 | 500        | 1/L' 2/L ⊕ N  | 294-8324 | 500        |
|  |          |            |   |          |            |
|  |          |            |   |          |            |
|  |          |            |   |          |            |

Without ground contact

With direct ground contact

With screw-type ground contact



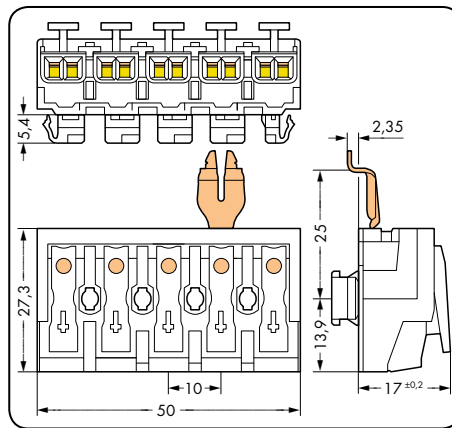
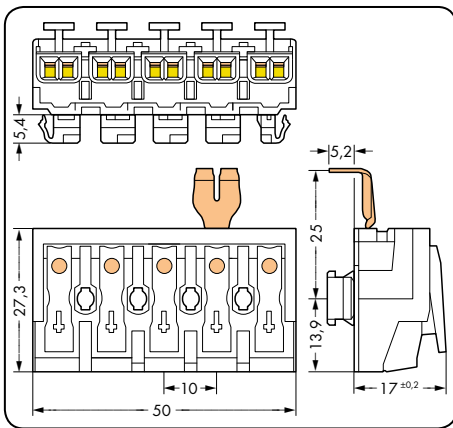
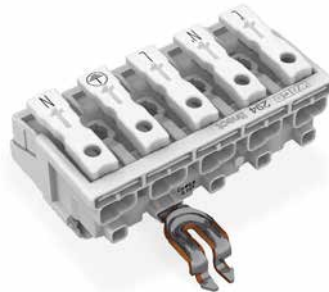
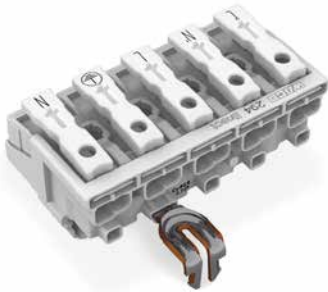
| Marking   | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|---|----------|------------|
| Lighting connector without ground contact, 5-pole |          |            | Lighting connector with direct ground contact, 5-pole |          |            | Lighting connector with screw-type ground contact, 5-pole |          |            |
| DA+ DA- L ⊕ N                                     | 294-8035 | 250        | DA+ DA- L ⊕ N   | 294-8135 | 250        | DA+ DA- L ⊕ N   | 294-8435 | 250        |
| L' N' L ⊕ N                                       | 294-8025 | 250        | L' N' L ⊕ N   | 294-8125 | 250        | L' N' L ⊕ N   | 294-8425 | 250        |
| L3 L2 L1 ⊕ N                                      | 294-8015 | 250        | L3 L2 L1 ⊕ N  | 294-8115 | 250        | L3 L2 L1 ⊕ N  | 294-8415 | 250        |



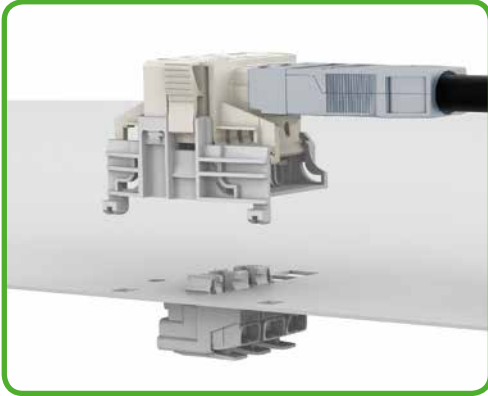
# Lighting Connectors, 5-Pole 294 Series Linect®

With snap-in ground contact

With angled snap-in ground contact



| Marking  | Item No. | Pack. Unit | Marking   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Lighting connector with snap-in ground contact, 5-pole |          |            | Lighting connector with angled snap-in ground contact, 5-pole |          |            |
| DA+ DA- L ⊕ N  | 294-8235 | 250        | DA+ DA- L ⊕ N   | 294-8335 | 250        |
| L' N' L ⊕ N  | 294-8225 | 250        | L' N' L ⊕ N   | 294-8325 | 250        |
| L3 L2 L1 ⊕ N   | 294-8215 | 250        | L3 L2 L1 ⊕ N  | 294-8315 | 250        |



- Linect® connectors for conventional, external wiring
- CAGE CLAMP®S for all conductor types up to 2.5 mm<sup>2</sup> /AWG 12
- Quick and easy replacement of lights for maintenance or retrofits
- Opening the light is not necessary

#### Technical data:

| Type of Connection     | CAGE CLAMP®S Connection | Linect® Connection  |  |
|------------------------|-------------------------|---------------------|--|
| Rating per             | <b>IEC/EN 61984</b>     | <b>IEC/EN 61984</b> |  |
| Overvoltage category   | II                      | II                  |  |
| Pollution degree       | 2                       | 2                   |  |
| Rated voltage          | 250 V                   | 250 V               |  |
| Rated surge voltage    | 4 kV                    | 4 kV                |  |
| Nominal current        | 24 A                    | 16 A                |  |
| Temperature marking    |                         |                     |  |
| Degree of protection   | IP 2 XC                 | IP 2 XC             |  |
| Storage temperature    | -35° - +85°             | -35° - +85°         |  |
| Processing temperature | -5° - +40°              | -5° - +40°          |  |

#### Conductor data:

|  |                               |
|--|-------------------------------|
| Connection technology                            | <b>CAGE CLAMP® S</b>          |
| Conductor size: solid, stranded or fine-stranded | 2 x 0.5 - 2.5 mm <sup>2</sup> |
| Conductor size: with ferrule                     | 2 x 0.5 - 2.5 mm <sup>2</sup> |
| AWG: solid                                       | 2 x 20 - 12                   |
| AWG: stranded and fine-stranded                  | 2 x 20 - 12                   |
| Strip length                                     | 8 - 9 mm / 0.31 - 0.35 in     |

#### Material data:

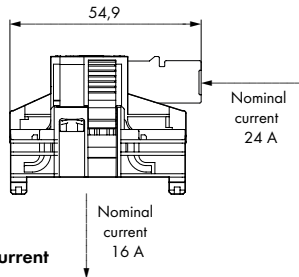
|                               |  |
|-------------------------------|--|
| Material group                | IIIa                                       |
| Insulating material           | Polycarbonate (PC)                         |
| Temperature stability         | Relative temperature index (RTI) of 125 °C |
| Flammability rating per UL 94 | V0   |
| Clamping spring material      | Chrome nickel spring steel (CrNi)          |
| Contact material              | Electrolytic copper (E <sub>cu</sub> )     |
| Contact plating               | tin-plated                                 |

#### Accessories:

#### Page:

|                       |         |
|-----------------------|---------|
| Strain relief housing | 54 - 55 |
|                       |         |
|                       |         |
|                       |         |
|                       |         |

|  |   |  |
|--|---|--|
|  | <b>250 V/4 kV/3</b><br><b>I<sub>N</sub> 24 A (16 A) ①</b> |  |
|--|---|--|



| Description       | Color                                    | Item No.        | Pack. Unit |
|-------------------|--|-----------------|------------|
| Linect® connector | Linect® connector, 3-pole, socket - plug |                 |            |
|                   | ○ white                                  | <b>770-6229</b> | 25         |

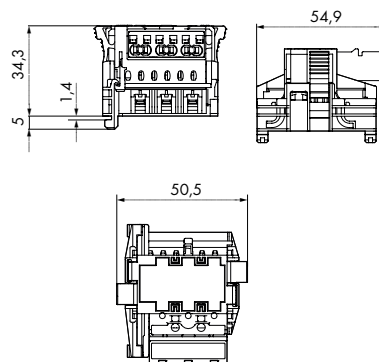
### Item-Specific Accessories

|  |   |
|--|---|
|  | <b>Strain relief housing, for 2 cables, ②</b><br><br>4.5 - 8 mm diameter<br>black <b>770-503/023-000</b> 50<br>white <b>770-513/023-000</b> 50                     |
|  | <b>Strain relief housing, for 2 cables, ②</b><br><br>8 - 11.5 mm diameter<br>black <b>770-503</b> 50<br>white <b>770-513</b> 50                                    |
|  | <b>Strain relief housing, angled, for 2 cables, ②</b><br><br>8 - 11.5 mm diameter<br>black <b>770-503/032-000</b> 50<br>white <b>770-513/032-000</b> 50            |
|  | <b>Strain relief housing for 4 mm² conductors, for 1 cable, ②</b><br><br>9 - 13 mm diameter<br>black <b>770-503/021-000</b> 50<br>white <b>770-513/021-000</b> 50  |
|  | <b>Strain relief housing, for quick assembly, for 1 cable, ②</b><br><br>7 - 11.5 mm diameter<br>black <b>770-503/035-000</b> 50<br>white <b>770-513/035-000</b> 50 |

|             |                           |
|-------------|---------------------------|
| <b>Info</b> | <b>Dimensions (in mm)</b> |
|-------------|---------------------------|

② For more information, see pages 54 and 55

3-pole  
 ○ white      Coding A      (L ⊕ N)



## Strain Relief Housings, 3-Pole, for Different Cable Diameters

|  |  |
|--|--|
| <p>Snap-on type strain relief housing for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p>① Approvals</p> | <p>Snap-on type strain relief housing for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p>① Approvals</p> |
|--|--|



| Description                    | Color  | Item No.        | Pack. Unit | Color   | Item No. | Pack. Unit |
|--------------------------------|--|-----------------|------------|---|----------|------------|
| Strain relief housings, 3-pole | Strain relief housing, for 2 cables, 4.5 - 8 mm diameter ② |                 |            | Strain relief housing, for 2 cables, 8 - 11.5 mm diameter ② |          |            |
|                                | black  | 770-503/023-000 | 50         | black   | 770-503  | 50         |
|                                | white  | 770-513/023-000 | 50         | white   | 770-513  | 50         |
|                                |  |                 |            |   |          |            |

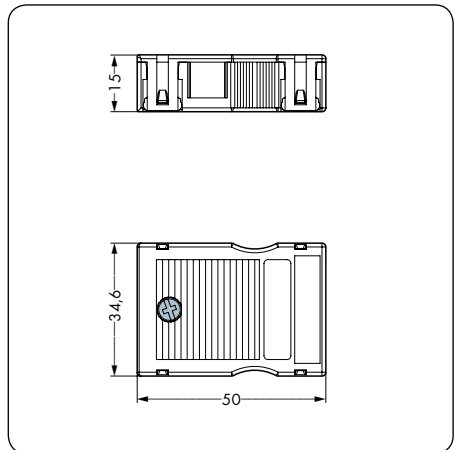
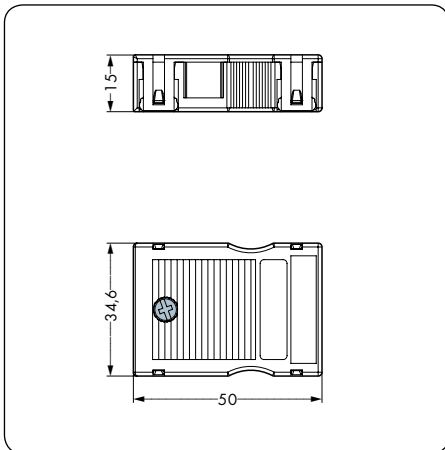
| Item-Specific Accessories |  |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|--|
|                           |  | <p>Marking strip, self-adhesive, on DIN A4 card, 182 mm long, 6 mm wide</p> <p><b>210-333</b> 100</p> <p>Marking area: 48 x 6.5 mm</p> |  |  |  | <p>Marking strip, self-adhesive, on DIN A4 card, 182 mm long, 6 mm wide</p> <p><b>210-333</b> 100</p> <p>Marking area: 48 x 6.5 mm</p> |  |
|                           |  | <p>Shield connecting plate, for plugs and sockets, for 2 cables, 4 - 7.5 mm diameter</p> <p><b>770-523</b> 25</p>                      |  |  |  |  |  |

| Info | Dimensions (in mm) |
|------|--------------------|
|------|--------------------|

① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

② For H05VV and NYM cables  
Other cables upon request!

**Fire load upon request!**





|   |   |   |
|---|---|---|
| <p><b>Snap-on type strain relief housings for:</b></p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1 Approvals</b></p> | <p><b>Snap-on type strain relief housings for:</b></p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1 Approvals</b></p> | <p><b>Snap-on type strain relief housings for:</b></p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1 Approvals</b></p> |
|---|---|---|

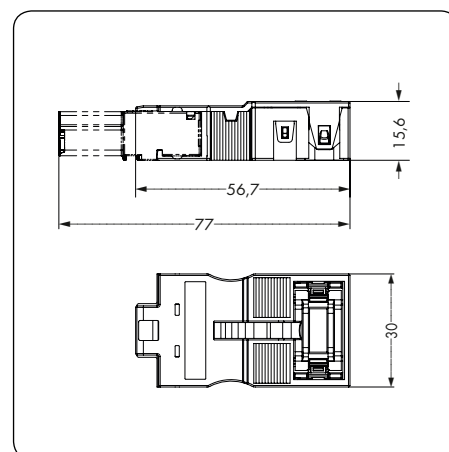
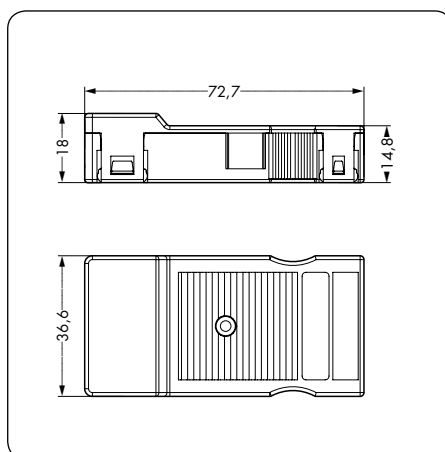
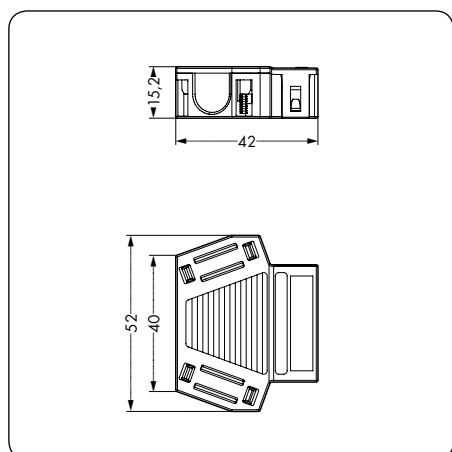


| Color   | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|---|-----------------|------------|
| <p><b>Strain relief housing, angled</b><br/>for 2 cables, 8 - 11.5 mm diameter <b>2</b></p> |                 |            | <p><b>Strain relief housing for 4 mm<sup>2</sup> conductors,</b><br/>for 1 cable, 9 - 13 mm diameter <b>2</b><br/>Strip length, outer insulation: 71 mm</p> |                 |            | <p><b>Strain relief housing, for quick assembly,</b><br/>for 1 cable, 7 - 11.5 mm diameter <b>2</b></p> |                 |            |
| black   | 770-503/032-000 | 25         | black   | 770-503/021-000 | 50         | black   | 770-503/035-000 | 50         |
| white   | 770-513/032-000 | 25         | white   | 770-513/021-000 | 50         | white   | 770-513/035-000 | 50         |
|   |                 |            |   |                 |            |   |                 |            |
|   |                 |            |   |                 |            |   |                 |            |
|   |                 |            |   |                 |            |   |                 |            |
|   |                 |            |   |                 |            |   |                 |            |
|   |                 |            |   |                 |            |   |                 |            |

**Item-Specific Accessories**

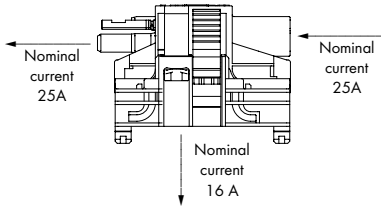
|   |  |  |
|---|--|--|
| <p><b>Marking strip, self-adhesive, on DIN A4 carrier card,</b><br/>182 mm long,<br/>Strip height: 6 mm <b>210-333100</b><br/>Marking area: 48 x 6.5 mm</p>  | <p><b>Marking strip, self-adhesive, on DIN A4 carrier card,</b><br/>182 mm long,<br/>Strip height: 6 mm <b>210-333 100</b><br/>Marking area: 48 x 6.5 mm</p>  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

**Dimensions**





|  |  |  |
|--|--|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ❶</p> <p>❷ Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ❶</p> <p>❷ Approvals</p> |
|--|--|--|



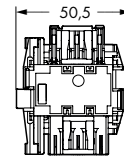
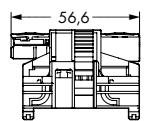
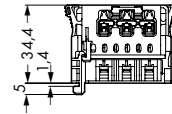
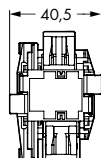
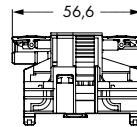
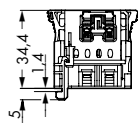
❶ Nominal current

| Description                              | Color  | Item No. | Pack. Unit   | Color  | Item No.   | Pack. Unit |         |     |
|--|--|----------|--|--|--|------------|---------|-----|
| <b>Linect® T-connector</b>               | Linect® T-connector, 2-pole, socket - plug, white housing, dark gray cover |          |  | linect® T-connector, 3-pole, socket - plug, white housing, white cover |  |            |         |     |
|  | for DALI applications  |          |  |  |  |            |         |     |
|  | ● blue   | 770-7102 | 25   | ○ white  | 770-6223   | 25         |         |     |
|  | Suitable for 294-8032 lighting connector                                   |          |  |  |  |            |         |     |
| for emergency power                      |  |          | Suitable for 294-8013 and 294-8113 lighting connectors |  |  |            |         |     |
| ● dark gray                              |  |          | 770-7502   | 25   |  |            |         |     |
| Suitable for 294-8022 lighting connector |  |          |  |  |  |            |         |     |
| <b>Item-Specific Accessories</b>         |  |          |  |  |  |            |         |     |
|  |  |          | <b>Lockout cap, for socket, separable, 12-pole</b>     |  | <b>Lockout cap, for socket, separable, 12-pole</b> |            |         |     |
|  |  |          |  |  |  |            |         |     |
|  |  |          | black  | 770-201  | 100  | black      | 770-201 | 100 |
|  |  |          | white  | 770-221  | 100  | white      | 770-221 | 100 |
|  |  |          | <b>Lockout cap, for plug, separable, 5-pole</b>        |  | <b>Lockout cap, for plug, separable, 5-pole</b>    |            |         |     |
|  |  |          |  |  |  |            |         |     |
|  |  |          | yellow   | 770-360  | 100  | yellow     | 770-360 | 100 |
|  |  |          | <b>Coding pin, for plug (A and B coding)</b>           |  |  |            |         |     |
|  |  |          |  |  |  |            |         |     |
|  |  |          | gray   |  | 770-401  | 100        |         |     |
| <b>Info</b>                              |  |          |  |  |  |            |         |     |
| <b>Dimensions</b>                        |  |          |  |  |  |            |         |     |

❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

- 2-pole
- blue Coding I (DA- DA+)
- dark gray Coding L (L' N')
- 3-pole
- white Coding A (L ⊕ N)
- 4-pole
- white Coding A (N 3 2/L 1/L')
- 5-pole
- white Coding A (N 3 L1 L2 L3)
- blue Coding I (N ⊕ L DA- DA+)
- dark gray Coding L (N 3 L N' L')

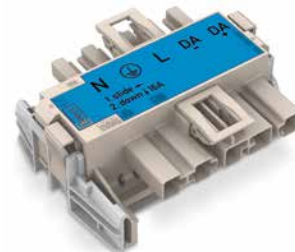
For coding information, see pages 238 to 240.  
Fire load data available upon request.



# Linect® T-Connectors, 4- and 5-Pole




|  |  |  |
|--|--|--|
| 400 V/6 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals |
|--|--|--|

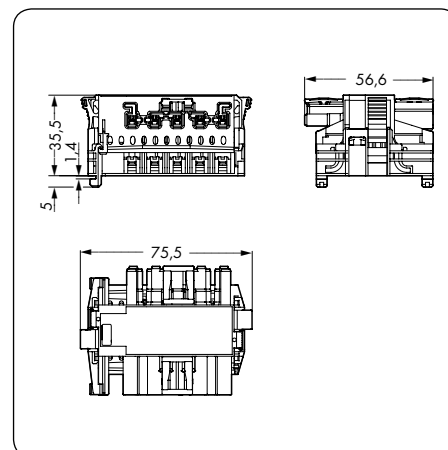
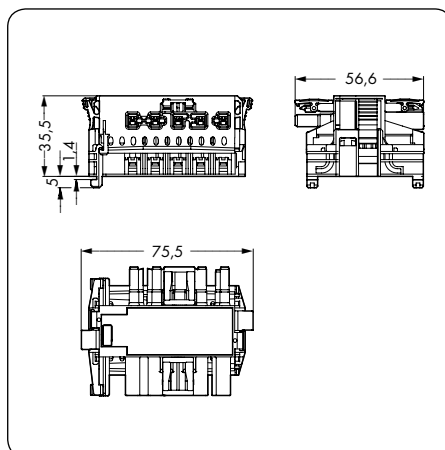
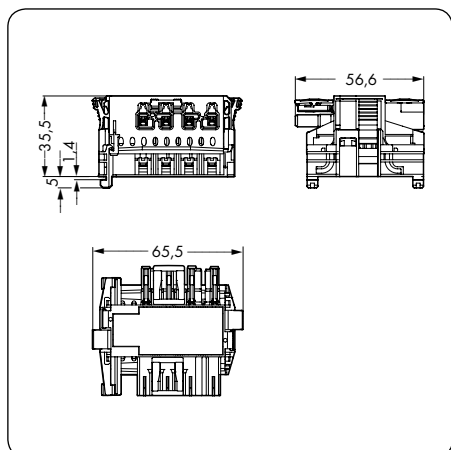


| Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|--|----------|------------|
| Linect® T-connector, 4-pole, socket - plug, white housing, white cover |          |            | Linect® T-connector, 5-pole, socket - plug, white housing |          |            | Linect® T-connector, 5-pole, socket - plug, white housing  |          |            |
| ○ white  | 770-6224 | 25         | ○ white   | 770-6225 | 25         | ● blue   | 770-7105 | 20         |
| Suitable for 294-8024 and 294-8124 lighting connectors                 |          |            | Suitable for 294-8015 and 294-8115 lighting connectors    |          |            | for DALI applications<br>Suitable for 294-8035 and 294-8135 lighting connectors                          |          |            |
|  |          |            |   |          |            | for emergency power<br>● dark gray 770-7505 20<br>Suitable for 294-8025 and 294-8125 lighting connectors |          |            |

## Item-Specific Accessories

|   |   |   |
|---|---|---|
| <b>Lockout cap, for socket, separable, 12-pole</b><br><br>black 770-201 100<br>white 770-221 100 | <b>Lockout cap, for socket, separable, 12-pole</b><br><br>black 770-201 100<br>white 770-221 100 | <b>Lockout cap, for socket, separable, 12-pole</b><br><br>black 770-201 100<br>white 770-221 100 |
| <b>Lockout cap, for plug, separable, 5-pole</b><br><br>yellow 770-360 100                        | <b>Lockout cap, for plug, separable, 5-pole</b><br><br>yellow 770-360 100                        | <b>Lockout cap, for plug, separable, 5-pole</b><br><br>yellow 770-360 100                        |
| <b>Coding pin, for plug (A and B coding)</b><br><br>gray 770-401 100                             |   |   |

## Dimensions





**WINSTA® MINI/  
WINSTA® MINI special**



**WINSTA® MIDI/  
WINSTA® MIDI special**



**WINSTA® MIDI & Linect®**



**WINSTA® KNX**

## 3

**WINSTA® MINI** 890/891 Series; 2-, 3-, 4- and 5-Pole

Pluggable Connectors, Snap-In Device Connectors, Distribution Connectors,  
Cable Assemblies

60 - 91

**WINSTA® MINI special** 890/891 Series; 2-, 3- and 4-Pole

Pluggable Connectors, Snap-In Device Connectors, Distribution Connectors,  
Cable Assemblies

92 - 111

**WINSTA® MIDI** 770/771 Series; 2-, 3-, 4-, 5-, 6- and 7-Pole

Linect® T-Connectors, Pluggable Connectors, Snap-In Device Connectors,  
PCB Connectors, Distribution Connectors, Cable Assemblies,  
IP 2XD Strain Relief Housings and Cable Assemblies



112 - 197

**WINSTA® MIDI special** 770/771 Series; 2-, 3-, 4- and 5-Pole

Pluggable Connectors, Snap-In Device Connectors, Distribution Connectors,  
Cable Assemblies

198 - 229

**WINSTA® KNX** 893/894 Series; 2-Pole

Pluggable Connectors, Snap-In Device Connectors, Distribution Connectors,  
Cable Assemblies

230 - 237



- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards (IEC 61535) does not guarantee hazard-avoiding, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.
  - WINSTA® MINI connectors are not intended for installation in open or easily accessible areas.



### 890 Series

- Pluggable Connectors, 2-Pole
- Pluggable Connectors, 3-Pole
- Pluggable Connectors, 4-Pole
- Pluggable Connectors, 5-Pole

64 - 65  
72 - 73  
78 - 79  
84 - 85



### 890 Series

- Snap-In Device Connectors, 2-Pole
- Snap-In Device Connectors, 3-Pole
- Snap-In Device Connectors, 4-Pole
- Snap-In Device Connectors, 5-Pole

66  
174  
80  
86



### 890 Series

- Distribution Connectors, 2-Pole
- Distribution Connectors, 3-Pole
- Distribution Connectors, 4-Pole
- Distribution Connectors, 5-Pole

67  
75  
81  
87



### 891 Series

- Cable Assemblies, 2-Pole
- Cable Assemblies, 3-Pole
- Cable Assemblies, 4-Pole
- Cable Assemblies, 5-Pole

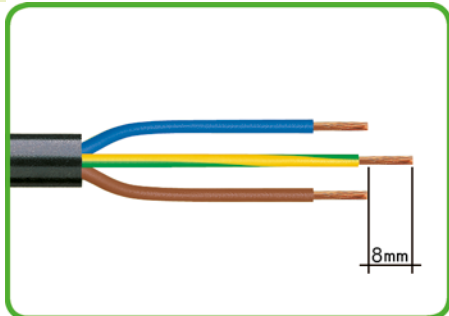
68 - 71  
76 - 77  
82 - 83  
88 - 91



# 3 Handling WINSTA® MINI, 890 Series

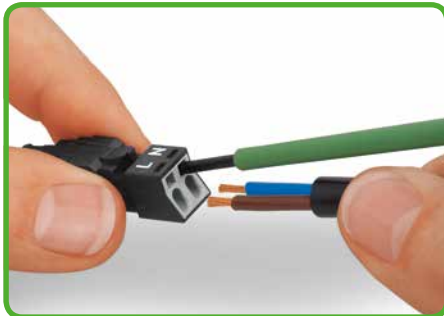
62

## Preparation



1. Strip length, outer insulation = x mm <sup>1</sup>
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

## Termination via CAGE CLAMP® S



To terminate fine-stranded conductors, open clamping unit via 2.5mm screwdriver and insert stripped conductor until it hits backstop. Solid conductors can be terminated by simply pushing them in.

## Strain relief installation



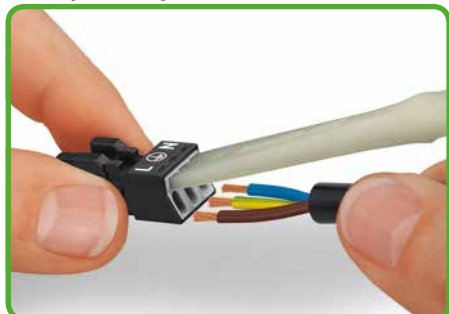
Latch wired connector onto the base of the strain relief housing.

## Conductor termination with . . .



To terminate fine-stranded conductors, open clamping units via 890-392 operating tool and insert stripped conductors until they hit backstop. Solid conductors can be terminated by simply pushing them in.

## . . . Operating tool



To terminate fine-stranded conductors, open clamping units via 890-393 operating tool and insert stripped conductors until they hit backstop. Solid conductors can be terminated by simply pushing them in.



## Shield termination



Connector with shield termination



Apply the shield to the rubber cable.  
Strip length, outer insulation = 30 mm  
Shield length = 8 mm



Push the shield connecting plate into the connector until fully inserted.

<sup>1</sup> Strip length, outer insulation: 2-pole = 30mm, 3-pole = 37mm, 4- and 5-pole = 45mm



Push down strain relief clamp by hand.



Push down strain relief clamp via 2.5mm screwdriver alternately on both sides.



Latch the top of the strain relief housing.

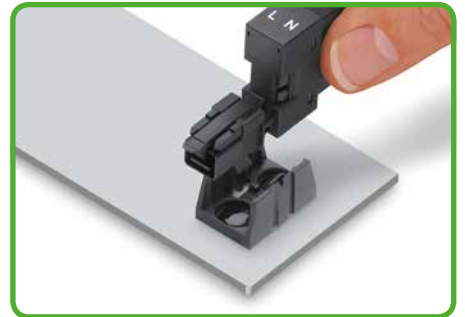


### Mounting plate installation



Securing the mounting plate via fixing pins.

### Snapping on distribution connector



The distribution connectors snap together when attached to the mounting plate.

### Locking lever assembly



First insert wired connector into strain relief housing, then snap clamp and cover.





All connectors (snap-in versions, distribution connectors) for fixed installations are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

### Marking



The printed marking of the connector is clearly visible in the openings of the strain relief housing.



|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|





**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/ socket).



| Description  | Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|--|----------|------------|--|----------|------------|
| Pluggable connectors, 2-pole, with CAGE CLAMP®S connection | Socket with strain relief housing, for 3.8 – 8.2 mm cable diameter |          |            | Plug with strain relief housing, for 3.8 – 8.2 mm cable diameter |          |            |
|  | ● black  | 890-102  | 50         | ● black  | 890-112  | 50         |
|  | ○ white  | 890-122  | 50         | ○ white  | 890-132  | 50         |

| Item-Specific Accessories |   |         |   |   |         |   |
|---------------------------|---|---------|---|---|---------|---|
|                           | Operating tool, insulated 2-pole  |         |   | Operating tool, insulated 2-pole  |         |   |
|                           |  | 890-392 | 1 |  | 890-392 | 1 |

| Accessories, 890 Series |   |               |            |   |               |            |
|-------------------------|---|---------------|------------|---|---------------|------------|
|                         | Locking lever, for “flying leads,” tool operated                                    |               |            | Locking lever, for “flying leads,” tool operated                                      |               |            |
|                         |  | black 890-111 | 100 (2x50) |  | black 890-111 | 100 (2x50) |
|                         |   | white 890-131 | 100 (2x50) |   | white 890-131 | 100 (2x50) |
|                         | Mounting carrier, for 2- to 5-pole “flying leads”                                   |               |            | Mounting carrier, for 2- to 5-pole “flying leads”                                     |               |            |
|                         |  | black 890-310 | 100        |  | black 890-310 | 100        |
|                         |   | white 890-311 | 100        |   | white 890-311 | 100        |

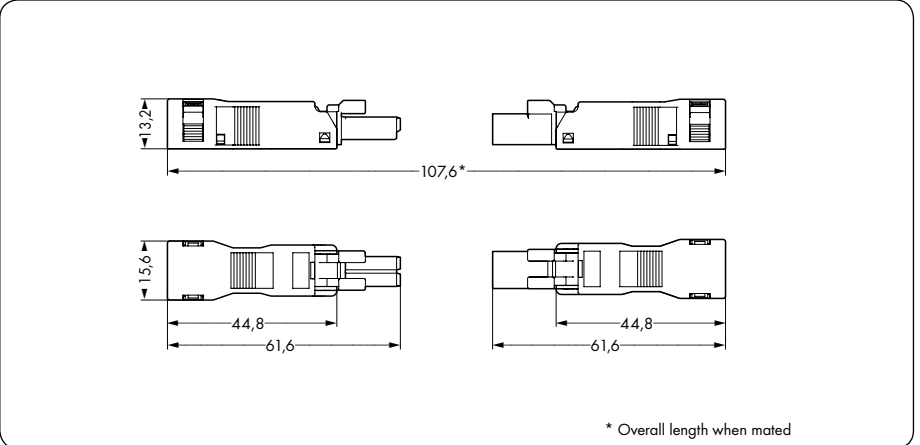
| Info | Dimensions |
|------|------------|
|------|------------|



① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> “s + f-st”  
0.25 – 1 mm<sup>2</sup> “stranded”

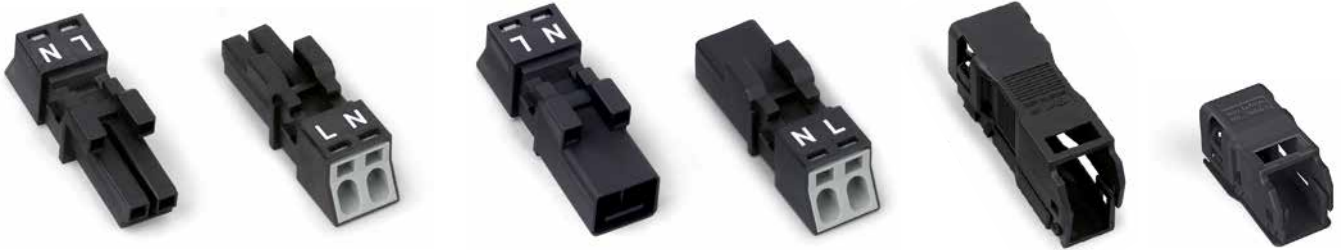
② For “International Certification Organizations” and “Approvals - User Guide,” see pages 528 to 531.

● black Coding A (L N)  
○ white Coding A (L N)  
● blue Coding I (+ -)



For coding information, see pages 238 to 240.  
Fire load data available upon request.



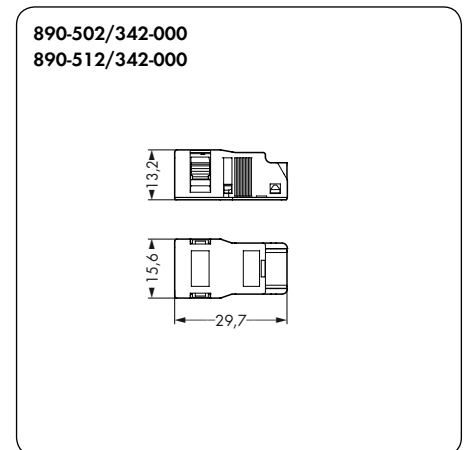
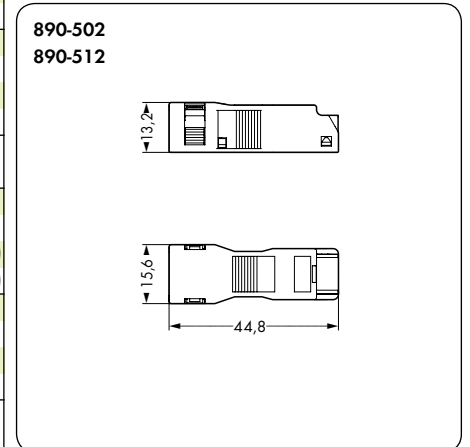
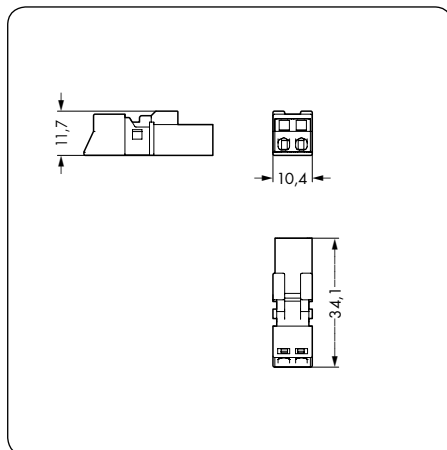
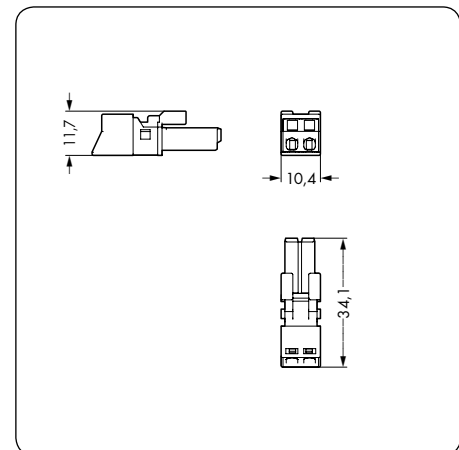
|   |                    |   |                    |  |
|---|--------------------|---|--------------------|--|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 2-pole sockets</li> <li>- 2-pole plugs</li> </ul> |
|---|--------------------|---|--------------------|--|



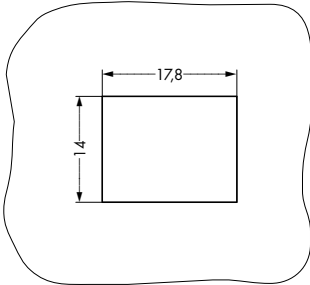
| Color                                       | Item No. | Pack. Unit | Color                                     | Item No. | Pack. Unit | Color                           | Item No.        | Pack. Unit |
|---|----------|------------|---|----------|------------|---------------------------------|-----------------|------------|
| <b>Socket without strain relief housing</b> |          |            | <b>Plug without strain relief housing</b> |          |            | <b>Strain relief housing,</b>   |                 |            |
|   |          |            |   |          |            | for 3.8 – 8.2 mm cable diameter |                 |            |
| ● black                                     | 890-202  | 50         | ● black                                   | 890-212  | 50         | black                           | 890-502         | 50         |
| ○ white                                     | 890-222  | 50         | ○ white                                   | 890-232  | 50         | white                           | 890-512         | 50         |
| ● blue                                      | 890-1102 | 50         | ● blue                                    | 890-1112 | 50         |                                 |                 |            |
|   |          |            |   |          |            | for 3.8 – 8.2 mm cable diameter |                 |            |
|   |          |            |   |          |            | black                           | 890-502/342-000 | 50         |
|   |          |            |   |          |            | white                           | 890-512/342-000 | 50         |

| Item-Specific Accessories  |  |
|--|--|
| <p><b>Operating tool, insulated</b></p> <p>2-pole</p> <p> 890-392 1</p> | <p><b>Operating tool, insulated</b></p> <p>2-pole</p> <p> 890-392 1</p> |
| <p><b>Accessories, 890 Series</b></p>  |  |
| <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p>                      | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p>                      |
| <p><b>Mounting carrier, for 2- to 5-pole</b></p> <p>"flying leads"</p> <p>black 890-310 100</p> <p>white 890-311 100</p>                                   | <p><b>Mounting carrier, for 2- to 5-pole</b></p> <p>"flying leads"</p> <p>black 890-310 100</p> <p>white 890-311 100</p>                                   |

**Dimensions**



|   |   |             |   |             |
|---|---|-------------|---|-------------|
| <b>Cutout dimensions</b><br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A | AWG 22 – 16 | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A | AWG 22 – 16 |
|   | 9 mm / 0.35 in<br>② Approvals                                       |             | 9 mm / 0.35 in<br>② Approvals                                       |             |



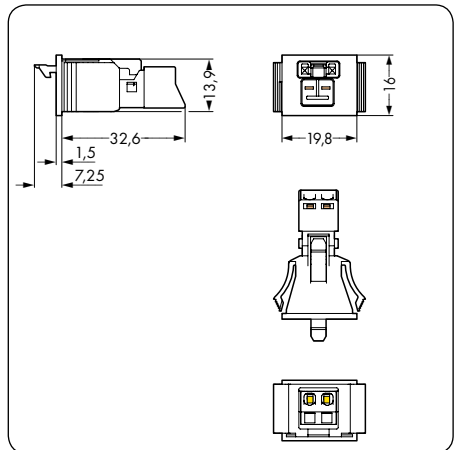
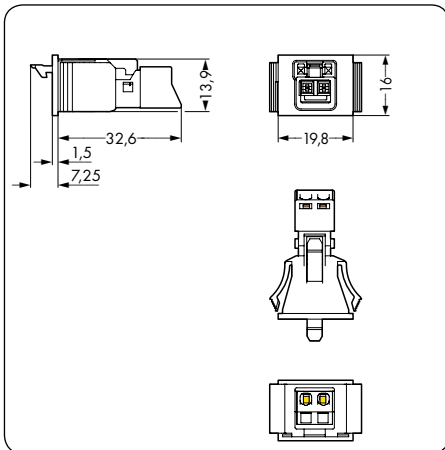
| Description   | Color         | Item No. | Pack. Unit | Color       | Item No. | Pack. Unit |
|---|---------------|----------|------------|-------------|----------|------------|
| <b>Pluggable connectors, snap-in device connection, 2-pole, with CAGE CLAMP® S connection</b> | <b>Socket</b> |          |            | <b>Plug</b> |          |            |
|   | ● black       | 890-702  | 50         | ● black     | 890-712  | 50         |
|   | ○ white       | 890-722  | 50         | ○ white     | 890-732  | 50         |
|   | ● blue        | 890-2102 | 50         | ● blue      | 890-2112 | 50         |

| Item-Specific Accessories |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|
|                           |  |  | <b>Operating tool, insulated</b><br>2-pole<br> | <b>Operating tool, insulated</b><br>2-pole<br> |  |  |
|                           |  |  | 890-392 1                                      | 890-392 1                                      |  |  |

| Accessories, 890 Series |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|
|                         |  |  | <b>Lockout cap, for cutout, 2-pole</b><br> | <b>Lockout cap, for cutout, 2-pole</b><br> |  |  |
|                         |  |  | black 890-642 100<br>white 890-692 100     | black 890-642 100<br>white 890-692 100     |  |  |

| Info | Dimensions |
|------|------------|
|------|------------|

- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- black Coding A (L N)  
 ○ white Coding A (L N)  
 ● blue Coding I (+ -)
- For coding information, see pages 238 to 240.  
Fire load data available upon request.







# Distribution Connectors, 2-Pole

|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p>② Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p>② Approvals</p> |
|--|---|---|

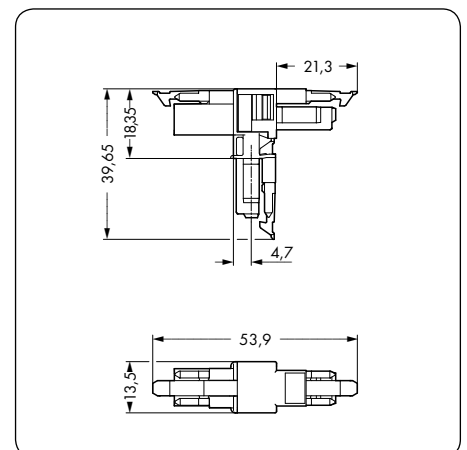
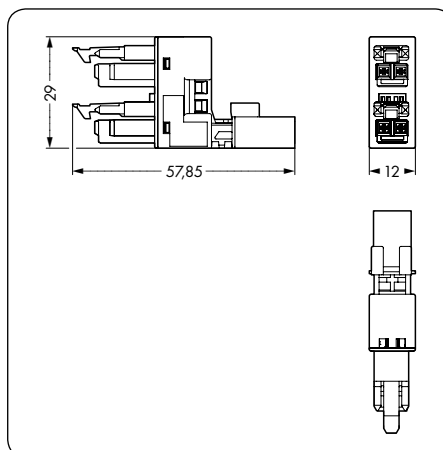


| Description                      | Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|----------------------------------|--|----------|------------|---|----------|------------|
| h-distribution connector, 2-pole | h-distribution connector, unidirectional, plug / socket - socket |          |            | T-distribution connector, 1 x plug / 2 x socket |          |            |
| T-distribution connector, 2-pole | ● black  | 890-1634 | 50         | ● black   | 890-1606 | 25         |
|                                  | ○ white  | 890-1684 | 50         | ○ white   | 890-1656 | 25         |
|                                  |  |          |            | ● blue  | 890-1617 | 25         |
|                                  | for "flying leads," with 3rd locking lever                       |          |            | for "flying leads," with 3rd locking lever      |          |            |
|                                  | ● black  | 890-1636 | 50         | ● black   | 890-1615 | 25         |
|                                  | ○ white  | 890-1686 | 50         | ○ white   | 890-1665 | 25         |
|                                  |  |          |            | ● blue  | 890-1620 | 25         |

| Item-Specific Accessories   |  |         |          |     |  |  |
|---|--|---------|----------|-----|--|--|
| <b>Mounting plate</b> , for distribution connectors                                 |  |         |          |     |  |  |
|  |  | black   | 890-1622 | 100 |  |  |
|   |  | white   | 890-1672 | 100 |  |  |
| <b>Fixing pin</b> , for mounting plates   |  |         |          |     |  |  |
|  |  | ● black | 890-601  | 250 |  |  |

| Accessories, 890 Series   |  |       |  |            |   |  |
|---|--|-------|--|------------|---|--|
| <b>Locking lever</b> , for "flying leads," tool operated                            |  |       | <b>Locking lever</b> , for "flying leads," tool operated |            |   |  |
|  |  | black | 890-111  | 100 (2x50) |  |  |
|   |  | white | 890-131  | 100 (2x50) | black 890-111 100 (2x50)  |  |
|   |  |       |  |            | white 890-131 100 (2x50)  |  |


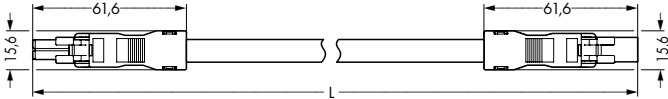

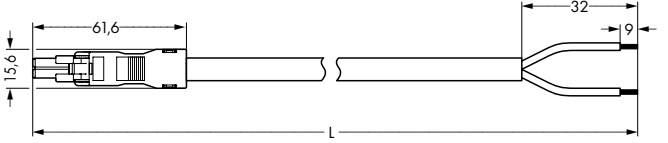

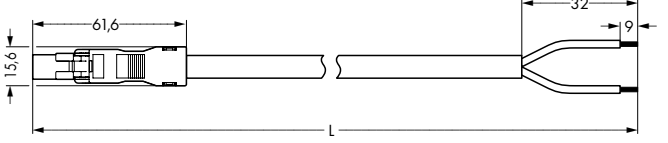


## Dimensions


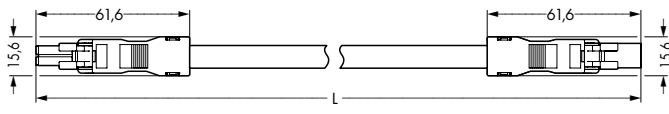

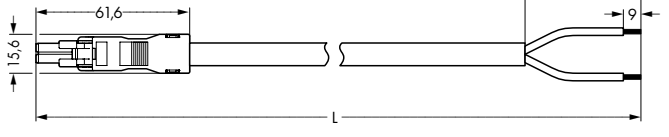

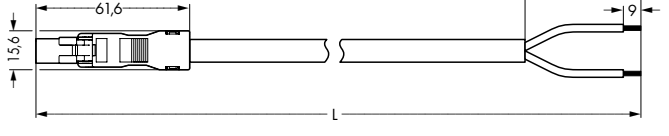






|  |         | PVC   | H05VV-F 2x1      |                |                  |                |       |         |            |       |         |            |
|--|---------|---|------------------|----------------|------------------|----------------|-------|---------|------------|-------|---------|------------|
|  |         | halogen-free  | H05Z1 Z1-F 2x1   |                |                  |                |       |         |            |       |         |            |
|  |         | 250 V/4 kV/3 I <sub>N</sub> 10 A  |                  |                |                  |                |       |         |            |       |         |            |
|  |         | Conductor ends, bonded: 9 mm  |                  |                |                  |                |       |         |            |       |         |            |
|  |         | ① Approvals   |                  |                |                  |                |       |         |            |       |         |            |
| <b>Interconnecting cable, socket – plug</b>  |         | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |       |         |            |       |         |            |
|  |         | ● ○ Coding A  |                  |                |                  |                |       |         |            |       |         |            |
|  |         | PVC   |                  | halogen-free   |                  |                |       |         |            |       |         |            |
|  |         | 1 m   | 891-8992/005-101 | .../005-102    | 891-8992/015-101 | .../015-102    |       |         |            |       |         |            |
|  |         | 2 m   | 891-8992/005-201 | .../005-202    | 891-8992/015-201 | .../015-202    |       |         |            |       |         |            |
|  |         | 3 m   | 891-8992/005-301 | .../005-302    | 891-8992/015-301 | .../015-302    |       |         |            |       |         |            |
|  |         | 5 m   | 891-8992/005-501 | .../005-502    | 891-8992/015-501 | .../015-502    |       |         |            |       |         |            |
|  |         | 7 m   | 891-8992/005-701 | .../005-702    | 891-8992/015-701 | .../015-702    |       |         |            |       |         |            |
| <b>Connecting cable, socket – free end</b>   |         | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |       |         |            |       |         |            |
|  |         | ● ○ Coding A  |                  |                |                  |                |       |         |            |       |         |            |
|  |         | PVC   |                  | halogen-free   |                  |                |       |         |            |       |         |            |
|  |         | 1 m   | 891-8992/105-101 | .../105-102    | 891-8992/115-101 | .../115-102    |       |         |            |       |         |            |
|  |         | 2 m   | 891-8992/105-201 | .../105-202    | 891-8992/115-201 | .../115-202    |       |         |            |       |         |            |
|  |         | 3 m   | 891-8992/105-301 | .../105-302    | 891-8992/115-301 | .../115-302    |       |         |            |       |         |            |
|  |         | 5 m   | 891-8992/105-501 | .../105-502    | 891-8992/115-501 | .../115-502    |       |         |            |       |         |            |
|  |         | 7 m   | 891-8992/105-701 | .../105-702    | 891-8992/115-701 | .../115-702    |       |         |            |       |         |            |
| <b>Connecting cable, plug – free end</b>   |         | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |       |         |            |       |         |            |
|  |         | ● ○ Coding A  |                  |                |                  |                |       |         |            |       |         |            |
|  |         | PVC   |                  | halogen-free   |                  |                |       |         |            |       |         |            |
|  |         | 1 m   | 891-8992/205-101 | .../205-102    | 891-8992/215-101 | .../215-102    |       |         |            |       |         |            |
|  |         | 2 m   | 891-8992/205-201 | .../205-202    | 891-8992/215-201 | .../215-202    |       |         |            |       |         |            |
|  |         | 3 m   | 891-8992/205-301 | .../205-302    | 891-8992/215-301 | .../215-302    |       |         |            |       |         |            |
|  |         | 5 m   | 891-8992/205-501 | .../205-502    | 891-8992/215-501 | .../215-502    |       |         |            |       |         |            |
|  |         | 7 m   | 891-8992/205-701 | .../205-702    | 891-8992/215-701 | .../215-702    |       |         |            |       |         |            |
| <b>Info</b>  |         | <b>Accessories</b>  |                  |                |                  |                |       |         |            |       |         |            |
| <p>① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.</p> <p>For other cables, please contact factory.</p> <p>● black Coding A (L N)<br/>○ white Coding A (L N)<br/>● blue Coding I (+ -)</p> <p>For coding information, see pages 238 to 240.<br/>Fire load data available upon request.</p> |         | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <table border="1"> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> |                  |                |                  |                | black | 890-111 | 100 (2x50) | white | 890-131 | 100 (2x50) |
|  |         | black   | 890-111          | 100 (2x50)     |                  |                |       |         |            |       |         |            |
| white  | 890-131 | 100 (2x50)  |                  |                |                  |                |       |         |            |       |         |            |
| <p><b>Mounting carrier, for 2- to 5-pole "flying leads"</b></p> <table border="1"> <tr> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table>  |         |   |                  |                | black            | 890-310        | 100   | white   | 890-311    | 100   |         |            |
| black  | 890-310 | 100   |                  |                |                  |                |       |         |            |       |         |            |
| white  | 890-311 | 100   |                  |                |                  |                |       |         |            |       |         |            |

|  | <p>PVC H05VV-F 2x1<br/>halogen-free H05Z1Z1-F 2x1</p> <p>250 V/4 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|--|--|----------------|------------------|----------------|----------------|----------------|--|-------|---------|-----|--------|-----|-------|--------------|-----|--------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b>      | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8982/005-101</td> <td>.../005-102</td> <td>891-8982/015-101</td> <td>.../015-102</td> </tr> <tr> <td>2 m</td> <td>891-8982/005-201</td> <td>.../005-202</td> <td>891-8982/015-201</td> <td>.../015-202</td> </tr> <tr> <td>3 m</td> <td>891-8982/005-301</td> <td>.../005-302</td> <td>891-8982/015-301</td> <td>.../015-302</td> </tr> <tr> <td>5 m</td> <td>891-8982/005-501</td> <td>.../005-502</td> <td>891-8982/015-501</td> <td>.../015-502</td> </tr> <tr> <td>7 m</td> <td>891-8982/005-701</td> <td>.../005-702</td> <td>891-8982/015-701</td> <td>.../015-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |       |         |     |        | PVC |       | halogen-free |     |        | 1 m | 891-8982/005-101 | .../005-102 | 891-8982/015-101 | .../015-102 | 2 m | 891-8982/005-201 | .../005-202 | 891-8982/015-201 | .../015-202 | 3 m | 891-8982/005-301 | .../005-302 | 891-8982/015-301 | .../015-302 | 5 m | 891-8982/005-501 | .../005-502 | 891-8982/015-501 | .../015-502 | 7 m | 891-8982/005-701 | .../005-702 | 891-8982/015-701 | .../015-702 |
| Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI) |  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC  |  | halogen-free   |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m  | 891-8982/005-101   | .../005-102    | 891-8982/015-101 | .../015-102    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 891-8982/005-201   | .../005-202    | 891-8982/015-201 | .../015-202    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 891-8982/005-301   | .../005-302    | 891-8982/015-301 | .../015-302    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 891-8982/005-501   | .../005-502    | 891-8982/015-501 | .../015-502    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 891-8982/005-701   | .../005-702    | 891-8982/015-701 | .../015-702    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>       | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8982/105-101</td> <td>.../105-102</td> <td>891-8982/115-101</td> <td>.../115-102</td> </tr> <tr> <td>2 m</td> <td>891-8982/105-201</td> <td>.../105-202</td> <td>891-8982/115-201</td> <td>.../115-202</td> </tr> <tr> <td>3 m</td> <td>891-8982/105-301</td> <td>.../105-302</td> <td>891-8982/115-301</td> <td>.../115-302</td> </tr> <tr> <td>5 m</td> <td>891-8982/105-501</td> <td>.../105-502</td> <td>891-8982/115-501</td> <td>.../115-502</td> </tr> <tr> <td>7 m</td> <td>891-8982/105-701</td> <td>.../105-702</td> <td>891-8982/115-701</td> <td>.../115-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |       |         |     |        | PVC |       | halogen-free |     |        | 1 m | 891-8982/105-101 | .../105-102 | 891-8982/115-101 | .../115-102 | 2 m | 891-8982/105-201 | .../105-202 | 891-8982/115-201 | .../115-202 | 3 m | 891-8982/105-301 | .../105-302 | 891-8982/115-301 | .../115-302 | 5 m | 891-8982/105-501 | .../105-502 | 891-8982/115-501 | .../115-502 | 7 m | 891-8982/105-701 | .../105-702 | 891-8982/115-701 | .../115-702 |
| Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI) |  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC  |  | halogen-free   |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m  | 891-8982/105-101   | .../105-102    | 891-8982/115-101 | .../115-102    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 891-8982/105-201   | .../105-202    | 891-8982/115-201 | .../115-202    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 891-8982/105-301   | .../105-302    | 891-8982/115-301 | .../115-302    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 891-8982/105-501   | .../105-502    | 891-8982/115-501 | .../115-502    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 891-8982/105-701   | .../105-702    | 891-8982/115-701 | .../115-702    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug – free end</b>         | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8982/205-101</td> <td>.../205-102</td> <td>891-8982/215-101</td> <td>.../215-102</td> </tr> <tr> <td>2 m</td> <td>891-8982/205-201</td> <td>.../205-202</td> <td>891-8982/215-201</td> <td>.../215-202</td> </tr> <tr> <td>3 m</td> <td>891-8982/205-301</td> <td>.../205-302</td> <td>891-8982/215-301</td> <td>.../215-302</td> </tr> <tr> <td>5 m</td> <td>891-8982/205-501</td> <td>.../205-502</td> <td>891-8982/215-501</td> <td>.../215-502</td> </tr> <tr> <td>7 m</td> <td>891-8982/205-701</td> <td>.../205-702</td> <td>891-8982/215-701</td> <td>.../215-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |       |         |     |        | PVC |       | halogen-free |     |        | 1 m | 891-8982/205-101 | .../205-102 | 891-8982/215-101 | .../215-102 | 2 m | 891-8982/205-201 | .../205-202 | 891-8982/215-201 | .../215-202 | 3 m | 891-8982/205-301 | .../205-302 | 891-8982/215-301 | .../215-302 | 5 m | 891-8982/205-501 | .../205-502 | 891-8982/215-501 | .../215-502 | 7 m | 891-8982/205-701 | .../205-702 | 891-8982/215-701 | .../215-702 |
| Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI) |  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC  |  | halogen-free   |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m  | 891-8982/205-101   | .../205-102    | 891-8982/215-101 | .../215-102    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 891-8982/205-201   | .../205-202    | 891-8982/215-201 | .../215-202    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 891-8982/205-301   | .../205-302    | 891-8982/215-301 | .../215-302    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 891-8982/205-501   | .../205-502    | 891-8982/215-501 | .../215-502    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 891-8982/205-701   | .../205-702    | 891-8982/215-701 | .../215-702    |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p><b>Accessories</b></p> <p><b>Locking lever, for "flying leads,"</b></p> <table border="1"> <tbody> <tr> <td></td> <td>tool operated</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>black</td> <td>890-111</td> <td>100</td> <td>(2x50)</td> </tr> <tr> <td></td> <td>white</td> <td>890-131</td> <td>100</td> <td>(2x50)</td> </tr> </tbody> </table> <p><b>Mounting carrier, for 2- to 5-pole "flying leads"</b></p> <table border="1"> <tbody> <tr> <td></td> <td>black</td> <td>890-310</td> <td>100</td> <td></td> </tr> <tr> <td></td> <td>white</td> <td>890-311</td> <td>100</td> <td></td> </tr> </tbody> </table>   |                | tool operated    |                |                |                |  | black | 890-111 | 100 | (2x50) |     | white | 890-131      | 100 | (2x50) |     | black            | 890-310     | 100              |             |     | white            | 890-311     | 100              |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | tool operated  |                |                  |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | black  | 890-111        | 100              | (2x50)         |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | white  | 890-131        | 100              | (2x50)         |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | black  | 890-310        | 100              |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | white  | 890-311        | 100              |                |                |                |  |       |         |     |        |     |       |              |     |        |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |



|  |  |   |                  |                |                  |                |
|--|--|---|------------------|----------------|------------------|----------------|
|  |  | PVC H05VV-F 2x1.5<br>halogen-free H05Z1Z1-F 2x1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals  |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC   |                  | halogen-free   |                  |                |
|  |  | 1 m   | 891-8992/006-101 | .../006-102    | 891-8992/016-101 | .../016-102    |
|  |  | 2 m   | 891-8992/006-201 | .../006-202    | 891-8992/016-201 | .../016-202    |
|  |  | 3 m   | 891-8992/006-301 | .../006-302    | 891-8992/016-301 | .../016-302    |
|  |  | 5 m   | 891-8992/006-501 | .../006-502    | 891-8992/016-501 | .../016-502    |
|  |  | 7 m   | 891-8992/006-701 | .../006-702    | 891-8992/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC   |                  | halogen-free   |                  |                |
|  |  | 1 m   | 891-8992/106-101 | .../106-102    | 891-8992/116-101 | .../116-102    |
|  |  | 2 m   | 891-8992/106-201 | .../106-202    | 891-8992/116-201 | .../116-202    |
|  |  | 3 m   | 891-8992/106-301 | .../106-302    | 891-8992/116-301 | .../116-302    |
|  |  | 5 m   | 891-8992/106-501 | .../106-502    | 891-8992/116-501 | .../116-502    |
|  |  | 7 m   | 891-8992/106-701 | .../106-702    | 891-8992/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC   |                  | halogen-free   |                  |                |
|  |  | 1 m   | 891-8992/206-101 | .../206-102    | 891-8992/216-101 | .../216-102    |
|  |  | 2 m   | 891-8992/206-201 | .../206-202    | 891-8992/216-201 | .../216-202    |
|  |  | 3 m   | 891-8992/206-301 | .../206-302    | 891-8992/216-301 | .../216-302    |
|  |  | 5 m   | 891-8992/206-501 | .../206-502    | 891-8992/216-501 | .../216-502    |
|  |  | 7 m   | 891-8992/206-701 | .../206-702    | 891-8992/216-701 | .../216-702    |
| <b>Info</b>  |  | <b>Accessories</b>  |                  |                |                  |                |
| ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.<br><br>For other cables, please contact factory.<br><br>● black Coding A (L N)<br>○ white Coding A (L N)<br>● blue Coding I (+ -)<br><br>For coding information, see pages 238 to 240.<br>Fire load data available upon request. |  | Locking lever, for "flying leads,"<br> tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50) |                  |                |                  |                |
|  |  | Mounting carrier, for 2- to 5-pole "flying leads"<br> black 890-310 100<br>white 890-311 100                 |                  |                |                  |                |

|  |                  |   |                       |                       |                       |                       |
|--|------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|
|  |                  | PVC H05VV-F 2x1.5<br>halogen-free H05Z1Z1-F 2x1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals                            |                       |                       |                       |                       |
| <b>Interconnecting cable, socket – plug</b>  |                  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>     |                  | ● Coding I,<br>e.g., for dimming function (DALI)  |                       |                       |                       |                       |
|  |                  | PVC   |                       | halogen-free          |                       |                       |
| 1 m  | 891-8982/006-101 | .../006-102   | 891-8982/016-101      | .../016-102           |                       |                       |
| 2 m  | 891-8982/006-201 | .../006-202   | 891-8982/016-201      | .../016-202           |                       |                       |
| 3 m  | 891-8982/006-301 | .../006-302   | 891-8982/016-301      | .../016-302           |                       |                       |
| 5 m  | 891-8982/006-501 | .../006-502   | 891-8982/016-501      | .../016-502           |                       |                       |
| 7 m  | 891-8982/006-701 | .../006-702   | 891-8982/016-701      | .../016-702           |                       |                       |
| <b>Connecting cable, socket – free end</b>   |                  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>   |                  | ● Coding I,<br>e.g., for dimming function (DALI)  |                       |                       |                       |                       |
|  |                  | PVC   |                       | halogen-free          |                       |                       |
| 1 m  | 891-8982/106-101 | .../106-102   | 891-8982/116-101      | .../116-102           |                       |                       |
| 2 m  | 891-8982/106-201 | .../106-202   | 891-8982/116-201      | .../116-202           |                       |                       |
| 3 m  | 891-8982/106-301 | .../106-302   | 891-8982/116-301      | .../116-302           |                       |                       |
| 5 m  | 891-8982/106-501 | .../106-502   | 891-8982/116-501      | .../116-502           |                       |                       |
| 7 m  | 891-8982/106-701 | .../106-702   | 891-8982/116-701      | .../116-702           |                       |                       |
| <b>Connecting cable, plug – free end</b>   |                  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br> |                  | ● Coding I,<br>e.g., for dimming function (DALI)  |                       |                       |                       |                       |
|  |                  | PVC   |                       | halogen-free          |                       |                       |
| 1 m  | 891-8982/206-101 | .../206-102   | 891-8982/216-101      | .../216-102           |                       |                       |
| 2 m  | 891-8982/206-201 | .../206-202   | 891-8982/216-201      | .../216-202           |                       |                       |
| 3 m  | 891-8982/206-301 | .../206-302   | 891-8982/216-301      | .../216-302           |                       |                       |
| 5 m  | 891-8982/206-501 | .../206-502   | 891-8982/216-501      | .../216-502           |                       |                       |
| 7 m  | 891-8982/206-701 | .../206-702   | 891-8982/216-701      | .../216-702           |                       |                       |
|  |                  | <b>Accessories</b>  |                       |                       |                       |                       |
|  |                  | <b>Locking lever, for "flying leads,"</b>   |                       |                       |                       |                       |
|  |                  |  tool operated<br>black <b>890-111</b> 100 (2x50)<br>white <b>890-131</b> 100 (2x50) |                       |                       |                       |                       |
|  |                  | <b>Mounting carrier, for 2- to 5-pole "flying leads"</b>  |                       |                       |                       |                       |
|  |                  |  black <b>890-310</b> 100<br>white <b>890-311</b> 100                                |                       |                       |                       |                       |

# 3 WINSTA® MINI

## Sockets and Plugs, 3-Pole

72

|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|




**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).







| Description   | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|---|----------|------------|---|----------|------------|
| Pluggable connectors, 3-pole, with CAGE CLAMP® S connection | Socket with strain relief housing, for 4.5 – 10 mm cable diameter |          |            | Plug with strain relief housing, for 4.5 – 10 mm cable diameter |          |            |
|   | ● black   | 890-103  | 50         | ● black   | 890-113  | 50         |
|   | ○ white   | 890-123  | 50         | ○ white   | 890-133  | 50         |

**Item-Specific Accessories**

|  |  |  |
|--|--|--|
|  | <p><b>Operating tool, insulated</b><br/>3-pole</p> <p> <b>890-393</b> 1</p> | <p><b>Operating tool, insulated</b><br/>3-pole</p> <p> <b>890-393</b> 1</p>                     |
|  |  | <p><b>Shield connecting plate, for plugs and sockets</b><br/>3-way</p> <p> <b>890-523</b> 1</p> |

**Accessories, 890 Series**

|  |   |   |
|--|---|---|
|  | <p><b>Locking lever, for “flying leads,”</b><br/>tool operated</p> <p> black <b>890-111</b> 100 (2x50)<br/>white <b>890-131</b> 100 (2x50)</p> | <p><b>Locking lever, for “flying leads,”</b><br/>tool operated</p> <p> black <b>890-111</b> 100 (2x50)<br/>white <b>890-131</b> 100 (2x50)</p> |
|  | <p><b>Mounting carrier, for 2- to 5-pole</b><br/>“flying leads”</p> <p> black <b>890-310</b> 100<br/>white <b>890-311</b> 100</p>              | <p><b>Mounting carrier, for 2- to 5-pole</b><br/>“flying leads”</p> <p> black <b>890-310</b> 100<br/>white <b>890-311</b> 100</p>              |

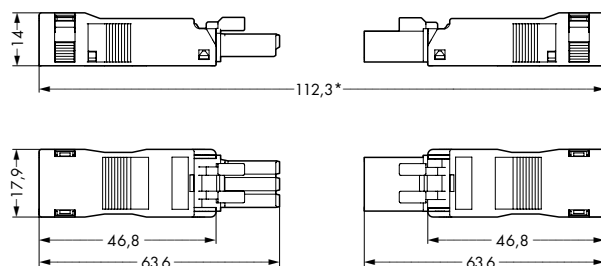
**Info**

**Dimensions**



- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> “s + f-st”  
0.25 – 1 mm<sup>2</sup> “stranded”
- ② For “International Certification Organizations” and “Approvals – User Guide,” see pages 528 to 531.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)

For coding information, see pages 238 to 240.  
Fire load data available upon request.










\* Overall length when mated

|   |                    |   |                    |  |
|---|--------------------|---|--------------------|--|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> |
|---|--------------------|---|--------------------|--|

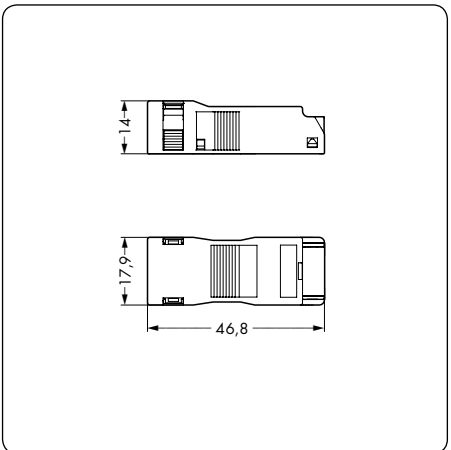
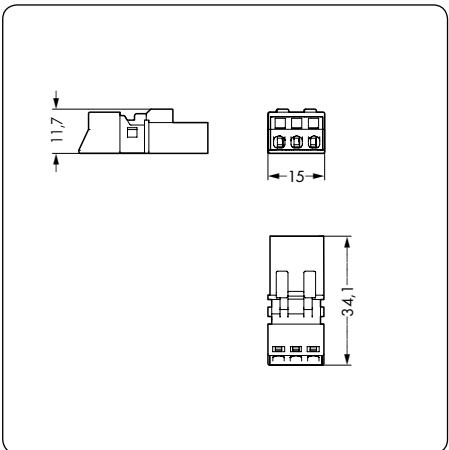
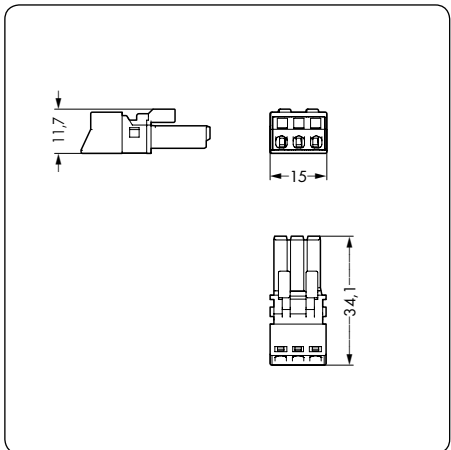


| Color                                       | Item No. | Pack. Unit | Color                                     | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|--|----------|------------|
| <b>Socket without strain relief housing</b> |          |            | <b>Plug without strain relief housing</b> |          |            | <b>Strain relief housing, for 4.5 – 10 mm cable diameter</b> |          |            |
| ● black                                     | 890-203  | 50         | ● black                                   | 890-213  | 50         | black  | 890-503  | 50         |
| ○ white                                     | 890-223  | 50         | ○ white                                   | 890-233  | 50         | white  | 890-513  | 50         |

| Item-Specific Accessories   |         |   |   |         |   |   |         |    |
|---|---------|---|---|---------|---|---|---------|----|
| <b>Operating tool, insulated 3-pole</b>   |         |   | <b>Operating tool, insulated 3-pole</b>   |         |   | <b>Shield connecting plate, for plugs and sockets</b>                                 |         |    |
|  | 890-393 | 1 |  | 890-393 | 1 |  | 890-523 | 50 |

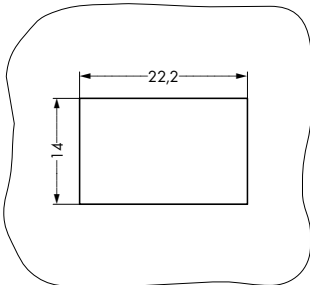
| Accessories, 890 Series   |               |            |   |               |            |  |  |  |
|---|---------------|------------|---|---------------|------------|--|--|--|
| <b>Locking lever, for "flying leads," tool operated</b>                             |               |            | <b>Locking lever, for "flying leads," tool operated</b>                             |               |            |  |  |  |
|  | black 890-111 | 100 (2x50) |  | black 890-111 | 100 (2x50) |  |  |  |
|   | white 890-131 | 100 (2x50) |   | white 890-131 | 100 (2x50) |  |  |  |
| <b>Mounting carrier, for 2- to 5-pole "flying leads"</b>                            |               |            | <b>Mounting carrier, for 2- to 5-pole "flying leads"</b>                            |               |            |  |  |  |
|  | black 890-310 | 100        |  | black 890-310 | 100        |  |  |  |
|   | white 890-311 | 100        |   | white 890-311 | 100        |  |  |  |

**Dimensions**





|   |   |             |   |             |
|---|---|-------------|---|-------------|
| <b>Cutout dimensions</b><br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A | AWG 22 – 16 | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A | AWG 22 – 16 |
|   | 9 mm / 0.35 in<br>② Approvals                                       |             | 9 mm / 0.35 in<br>② Approvals                                       |             |



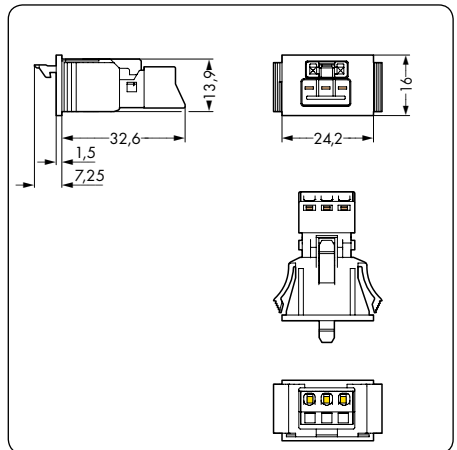
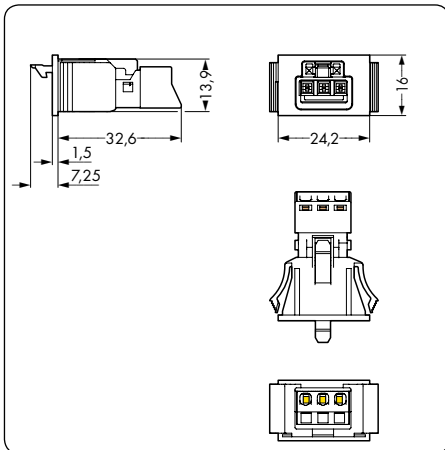
| Description   | Color  | Item No.               | Pack. Unit | Color  | Item No.               | Pack. Unit |
|---|--|------------------------|------------|--|------------------------|------------|
| <b>Pluggable connectors, snap-in device connection, 3-pole, with CAGE CLAMP® S connection</b> | <b>Socket</b>  |                        |            | <b>Plug</b>  |                        |            |
|   | ● black  | <b>890-703</b>         | 50         | ● black  | <b>890-713</b>         | 50         |
|   | ○ white  | <b>890-723</b>         | 50         | ○ white  | <b>890-733</b>         | 50         |
|   | without locking lever, for lighting installation with intermediate coupler |                        |            | without locking lever, for lighting installation with intermediate coupler |                        |            |
|   | ● black  | <b>890-703/006-000</b> | 50         | ● black  | <b>890-713/006-000</b> | 50         |
|   | ○ white  | <b>890-723/006-000</b> | 50         | ○ white  | <b>890-733/006-000</b> | 50         |

| Item-Specific Accessories |  |  |   |  |   |  |
|---------------------------|--|--|---|--|---|--|
|                           |  | <b>Operating tool, insulated</b><br>3-pole<br> |   | <b>Operating tool, insulated</b><br>3-pole<br> |   |  |
|                           |  | <b>890-393</b>                                 | 1 | <b>890-393</b>                                 | 1 |  |

| Accessories, 890 Series |  |  |                |  |       |                |
|-------------------------|--|--|----------------|--|-------|----------------|
|                         |  | <b>Lockout cap, for cutout, 3-pole</b><br> |                | <b>Lockout cap, for cutout, 3-pole</b><br> |       |                |
|                         |  | black                                      | <b>890-643</b> | 100  | black | <b>890-643</b> |
|                         |  | white                                      | <b>890-693</b> | 100  | white | <b>890-693</b> |

| Info | Dimensions |
|------|------------|
|------|------------|

- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- black    Coding A    (L ⊕ N)  
○ white    Coding A    (L ⊕ N)
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





# Intermediate Couplers and T-Distribution Connectors, 3-Pole

|  |  |  |
|--|--|--|
| 250 V/4 kV/3<br>I <sub>N</sub> 16 A<br><br>② Approvals | 250 V/4 kV/3<br>I <sub>N</sub> 16 A<br><br>② Approvals | 250 V/4 kV/3<br>I <sub>N</sub> 16 A<br><br>② Approvals |
|--|--|--|





| Color   | Item No.       | Pack. Unit | Color  | Item No.       | Pack. Unit | Color   | Item No.       | Pack. Unit |
|---|----------------|------------|--|----------------|------------|---|----------------|------------|
| <b>Intermediate coupler,</b><br>1 x plug / 1 x socket   |                |            | <b>h-distribution connector, unidirectional,</b><br>plug / socket - socket |                |            | <b>T-distribution connector,</b><br>1 x plug / 2 x socket |                |            |
| ● black   | <b>890-603</b> | 50         | ● black  | <b>890-634</b> | 50         | ● black   | <b>890-606</b> | 25         |
| ○ white   | <b>890-653</b> | 50         | ○ white  | <b>890-684</b> | 50         | ○ white   | <b>890-656</b> | 25         |
| At least one snap-in connector <b>WITHOUT</b> locking lever is required on one side when connecting two lights directly via intermediate coupler (see page 74). |                |            | for "flying leads," with 3rd locking lever                                 |                |            | for "flying leads," with 3rd locking lever                |                |            |
| ● black   | <b>890-636</b> | 50         | ● black  | <b>890-636</b> | 50         | ● black   | <b>890-615</b> | 25         |
| ○ white   | <b>890-686</b> | 50         | ○ white  | <b>890-686</b> | 50         | ○ white   | <b>890-665</b> | 25         |

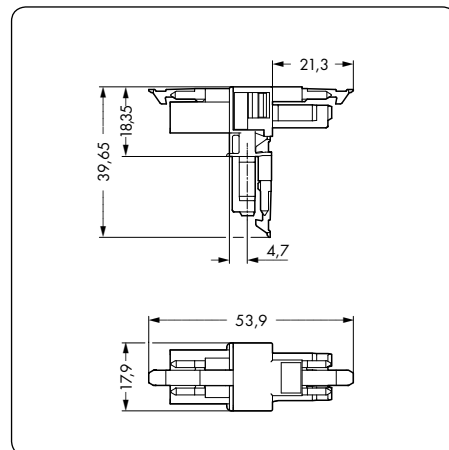
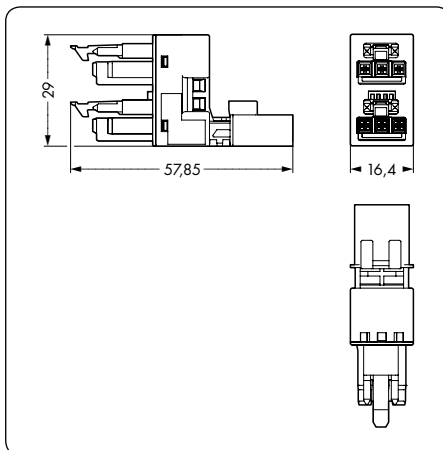
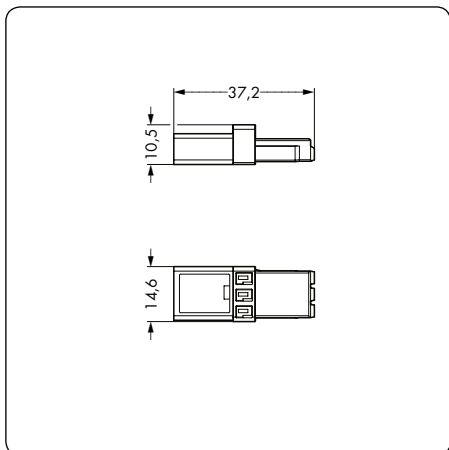
## Item-Specific Accessories

|   |         |                    |
|---|---------|--------------------|
| <b>Mounting plate, for distribution connectors</b>                                  |         |                    |
|  | black   | <b>890-623</b> 100 |
|   | white   | <b>890-673</b> 100 |
| <b>Fixing pin, for mounting plates</b>  |         |                    |
|  | ● black | <b>890-601</b> 250 |

## Accessories, 890 Series


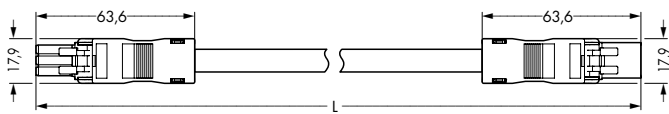

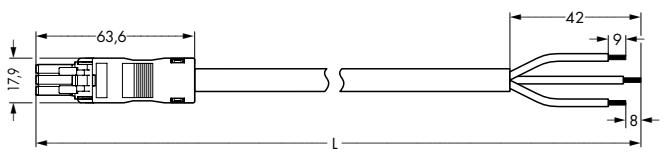

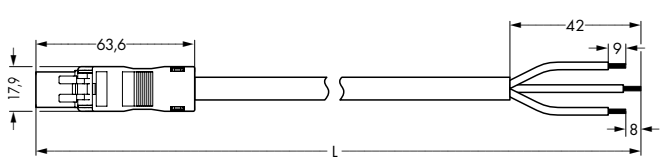


|   |       |                           |   |       |                           |
|---|-------|---------------------------|---|-------|---------------------------|
| <b>Locking lever, for "flying leads,"</b><br>tool operated                          |       |                           | <b>Locking lever, for "flying leads,"</b><br>tool operated                            |       |                           |
|  | black | <b>890-111</b> 100 (2x50) |  | black | <b>890-111</b> 100 (2x50) |
|   | white | <b>890-131</b> 100 (2x50) |   | white | <b>890-131</b> 100 (2x50) |

## Dimensions



|   |  |  |                  |                |                  |                |
|---|--|--|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 3G1<br>halogen-free H05Z1Z1-F 3G1<br><br>250 V/4 kV/3 I <sub>N</sub> 10 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals |                  |                |                  |                |
| Interconnecting cable, socket – plug  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 891-8993/005-101 | .../005-102    | 891-8993/015-101 | .../015-102    |
|   |  | 2 m  | 891-8993/005-201 | .../005-202    | 891-8993/015-201 | .../015-202    |
|   |  | 3 m  | 891-8993/005-301 | .../005-302    | 891-8993/015-301 | .../015-302    |
|   |  | 5 m  | 891-8993/005-501 | .../005-502    | 891-8993/015-501 | .../015-502    |
|   |  | 7 m  | 891-8993/005-701 | .../005-702    | 891-8993/015-701 | .../015-702    |
| Connecting cable, socket – free end   |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 891-8993/105-101 | .../105-102    | 891-8993/115-101 | .../115-102    |
|   |  | 2 m  | 891-8993/105-201 | .../105-202    | 891-8993/115-201 | .../115-202    |
|   |  | 3 m  | 891-8993/105-301 | .../105-302    | 891-8993/115-301 | .../115-302    |
|   |  | 5 m  | 891-8993/105-501 | .../105-502    | 891-8993/115-501 | .../115-502    |
|   |  | 7 m  | 891-8993/105-701 | .../105-702    | 891-8993/115-701 | .../115-702    |
| Connecting cable, plug – free end   |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 891-8993/205-101 | .../205-102    | 891-8993/215-101 | .../215-102    |
|   |  | 2 m  | 891-8993/205-201 | .../205-202    | 891-8993/215-201 | .../215-202    |
|   |  | 3 m  | 891-8993/205-301 | .../205-302    | 891-8993/215-301 | .../215-302    |
|   |  | 5 m  | 891-8993/205-501 | .../205-502    | 891-8993/215-501 | .../215-502    |
|   |  | 7 m  | 891-8993/205-701 | .../205-702    | 891-8993/215-701 | .../215-702    |
| Info  |  | Accessories  |                  |                |                  |                |
| ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.<br><br>For other cables, please contact factory.<br><br>● black Coding A (L ⊕ N)<br>○ white Coding A (L ⊕ N)<br><br>For coding information, see pages 238 to 240.<br>Fire load data available upon request. |  | Locking lever, for "flying leads,"<br>tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50)                              |                  |                |                  |                |
|   |  | Mounting carrier, for 2- to 5-pole<br>"flying leads"<br>black 890-310 100<br>white 890-311 100   |                  |                |                  |                |
|   |  |  |                  |                |                  |                |
|   |  |  |                  |                |                  |                |
|   |  |  |                  |                |                  |                |

# Cable Assemblies 3 x 1.5 mm<sup>2</sup>

|   |  |  |                  |                |                  |                |
|---|--|--|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 3G1.5<br>halogen-free H05Z1Z1-F 3G1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|    |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|    |  | 1 m  | 891-8993/006-101 | .../006-102    | 891-8993/016-101 | .../016-102    |
|   |  | 2 m  | 891-8993/006-201 | .../006-202    | 891-8993/016-201 | .../016-202    |
|   |  | 3 m  | 891-8993/006-301 | .../006-302    | 891-8993/016-301 | .../016-302    |
|   |  | 5 m  | 891-8993/006-501 | .../006-502    | 891-8993/016-501 | .../016-502    |
|   |  | 7 m  | 891-8993/006-701 | .../006-702    | 891-8993/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|  |  | 1 m  | 891-8993/106-101 | .../106-102    | 891-8993/116-101 | .../116-102    |
|   |  | 2 m  | 891-8993/106-201 | .../106-202    | 891-8993/116-201 | .../116-202    |
|   |  | 3 m  | 891-8993/106-301 | .../106-302    | 891-8993/116-301 | .../116-302    |
|   |  | 5 m  | 891-8993/106-501 | .../106-502    | 891-8993/116-501 | .../116-502    |
|   |  | 7 m  | 891-8993/106-701 | .../106-702    | 891-8993/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|  |  | 1 m  | 891-8993/206-101 | .../206-102    | 891-8993/216-101 | .../216-102    |
|   |  | 2 m  | 891-8993/206-201 | .../206-202    | 891-8993/216-201 | .../216-202    |
|   |  | 3 m  | 891-8993/206-301 | .../206-302    | 891-8993/216-301 | .../216-302    |
|   |  | 5 m  | 891-8993/206-501 | .../206-502    | 891-8993/216-501 | .../216-502    |
|   |  | 7 m  | 891-8993/206-701 | .../206-702    | 891-8993/216-701 | .../216-702    |
|   |  | <b>Accessories</b>   |                  |                |                  |                |
|   |  | <b>Locking lever, for "flying leads,"</b>  |                  |                |                  |                |
|   |  |  tool operated<br>black                                   |                  | <b>890-111</b> | 100 (2x50)       |                |
|   |  | white  |                  | <b>890-131</b> | 100 (2x50)       |                |
|   |  | <b>Mounting carrier, for 2- to 5-pole "flying leads"</b>   |                  |                |                  |                |
|   |  |  black  |                  | <b>890-310</b> | 100              |                |
|   |  | white  |                  | <b>890-311</b> | 100              |                |

## Sockets and Plugs, 4-Pole

|  |  |
|--|--|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A</p> <p>AWG 22 – 16</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A</p> <p>AWG 22 – 16</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> |
|--|--|

**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

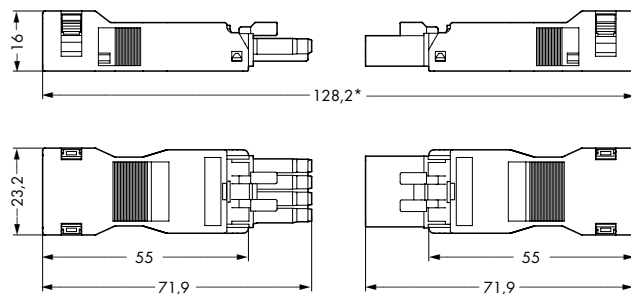


| Description  | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|--|---|----------|------------|---|----------|------------|
| Pluggable connectors, 4-pole, with CAGE CLAMP®S connection | Socket with strain relief housing, for 6.5 – 10.5 mm cable diameter |          |            | Plug with strain relief housing, for 6.5 – 10.5 mm cable diameter |          |            |
|  | ● black   | 890-104  | 50         | ● black   | 890-114  | 50         |
|  | ○ white   | 890-124  | 50         | ○ white   | 890-134  | 50         |
| <b>Accessories, 890 Series</b>                             |   |          |            |   |          |            |
|  | Locking lever, for "flying leads," tool operated                    |          |            | Locking lever, for "flying leads," tool operated                  |          |            |
|  | ● black   | 890-111  | 100 (2x50) | ● black   | 890-111  | 100 (2x50) |
|  | ○ white   | 890-131  | 100 (2x50) | ○ white   | 890-131  | 100 (2x50) |
|  | Mounting carrier, for 2- to 5-pole "flying leads"                   |          |            | Mounting carrier, for 2- to 5-pole "flying leads"                 |          |            |
|  | ● black   | 890-310  | 100        | ● black   | 890-310  | 100        |
|  | ○ white   | 890-311  | 100        | ○ white   | 890-311  | 100        |
| <b>Info</b>  | <b>Dimensions</b>   |          |            |   |          |            |



- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

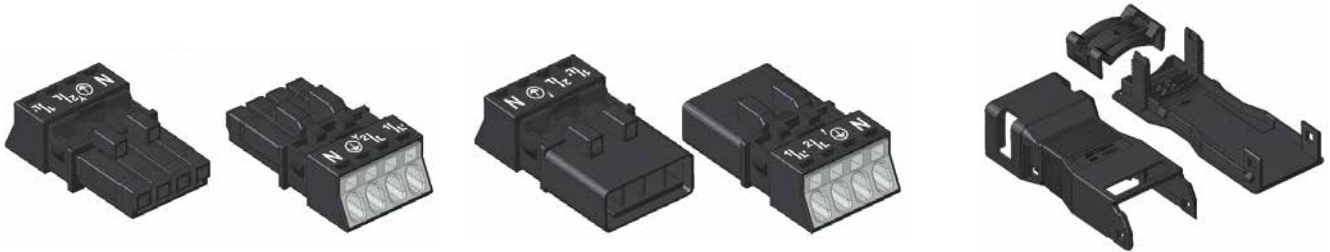
- black Coding A (N ⊕ 2IL 1IL')
- white Coding A (N ⊕ 2IL 1IL')

For coding information, see pages 238 to 240.  
Fire load data available upon request.

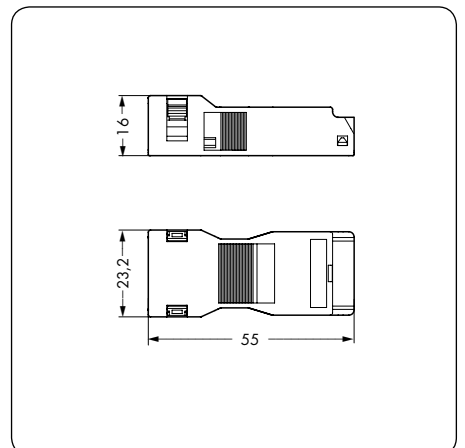
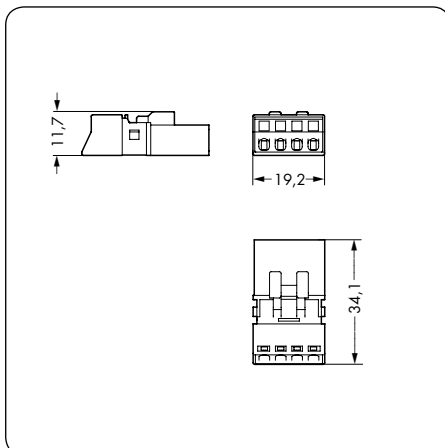
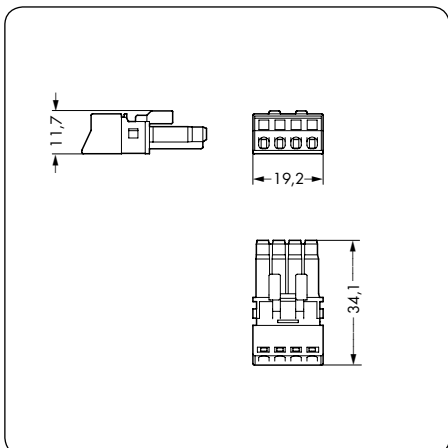


\* Overall length when mated

|   |                    |   |                    |  |
|---|--------------------|---|--------------------|--|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 4-pole sockets</li> <li>- 4-pole plugs</li> </ul> |
|---|--------------------|---|--------------------|--|

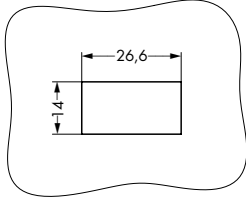


| Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|--|----------|------------|
| <b>Socket without strain relief housing</b>  |          |            | <b>Plug without strain relief housing</b>  |          |            | <b>Strain relief housing, for 6.5 – 10.5 mm cable diameter</b> |          |            |
| ● black  | 890-204  | 50         | ● black  | 890-214  | 50         | black  | 890-504  | 50         |
| ○ white  | 890-224  | 50         | ○ white  | 890-234  | 50         | white  | 890-514  | 50         |
| <b>Accessories, 890 Series</b>   |          |            |  |          |            |  |          |            |
| <b>Locking lever, for "flying leads,"</b><br>tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50) |          |            | <b>Locking lever, for "flying leads,"</b><br>tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50) |          |            |  |          |            |
| <b>Mounting carrier, for 2- to 5-pole</b><br>"flying leads"<br>black 890-310 100<br>white 890-311 100              |          |            | <b>Mounting carrier, for 2- to 5-pole</b><br>"flying leads"<br>black 890-310 100<br>white 890-311 100              |          |            |  |          |            |
| <b>Dimensions</b>  |          |            |  |          |            |  |          |            |



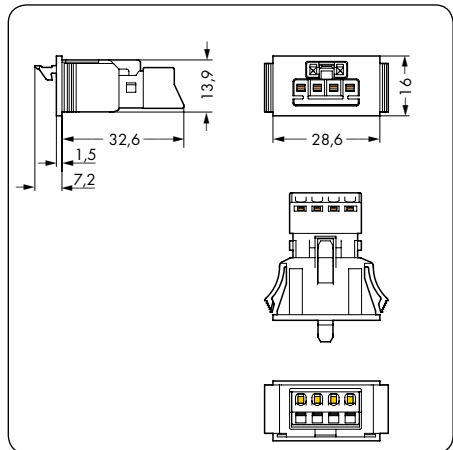
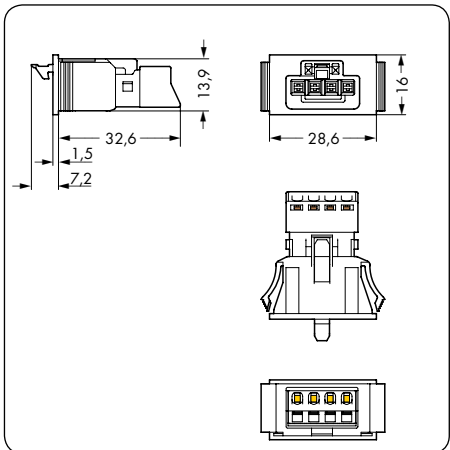


|   |   |   |
|---|---|---|
| <b>Cutout dimensions</b><br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①   AWG 22 – 16<br>400 V/6 kV/3<br>I <sub>N</sub> 16 A 3 | 0.25 – 1.5 mm <sup>2</sup> ①   AWG 22 – 16<br>400 V/6 kV/3<br>I <sub>N</sub> 16 A 3 |
|   | 9 mm / 0.35 in<br>② Approvals   | 9 mm / 0.35 in<br>② Approvals   |



| Description   | Color             | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|-------------------|----------|------------|---------|----------|------------|
| Pluggable connectors, snap-in device connection, 4-pole, with CAGE CLAMP®S connection | Socket            |          |            | Plug    |          |            |
|   | ● black           | 890-704  | 50         | ● black | 890-714  | 50         |
|   | ○ white           | 890-724  | 50         | ○ white | 890-734  | 50         |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
|   |                   |          |            |         |          |            |
| <b>Info</b>   | <b>Dimensions</b> |          |            |         |          |            |

- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- black    Coding A    (N ⊕ 2IL 1IL')
- white    Coding A    (N ⊕ 2IL 1IL')
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





# Distribution Connectors, 4-Pole

|   |   |
|---|---|
| 400 V/6 kV/3<br>$I_N$ 16 A<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 16 A<br><br>② Approvals |
|---|---|





| Color   | Item No.       | Pack. Unit | Color  | Item No.       | Pack. Unit |
|---|----------------|------------|--|----------------|------------|
| <b>h-distribution connector, unidirectional, plug / socket - socket</b> |                |            | <b>T-distribution connector, 1 x plug / 2 x socket</b> |                |            |
| ● black   | <b>890-944</b> | 50         | ● black  | <b>890-626</b> | 50         |
| ○ white   | <b>890-994</b> | 50         | ○ white  | <b>890-676</b> | 50         |
| for "flying leads," with 3rd locking lever                              |                |            | for "flying leads," with 3rd locking lever             |                |            |
| ● black   | <b>890-945</b> | 50         | ● black  | <b>890-627</b> | 50         |
| ○ white   | <b>890-995</b> | 50         | ○ white  | <b>890-677</b> | 50         |

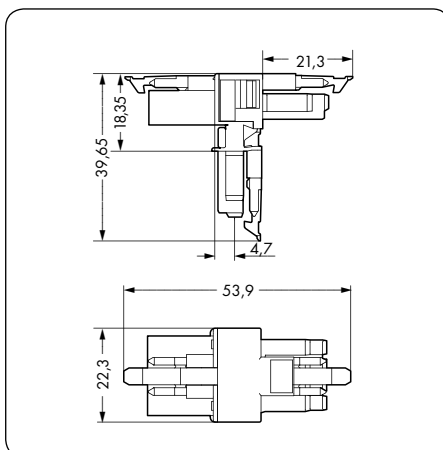
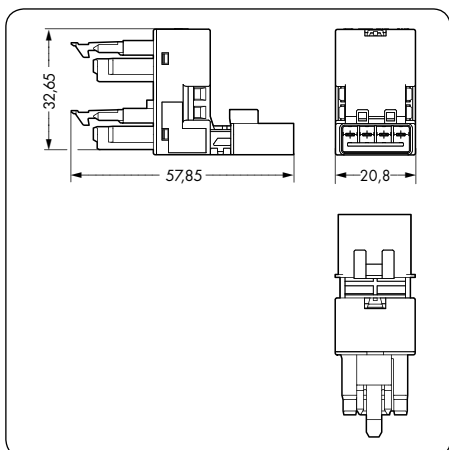
## Item-Specific Accessories


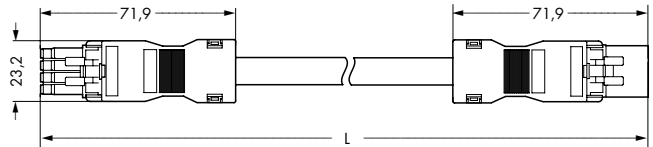

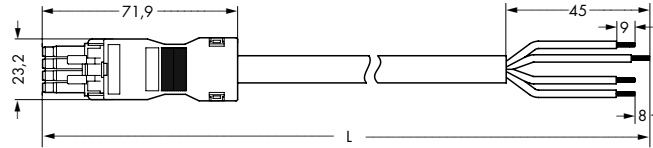

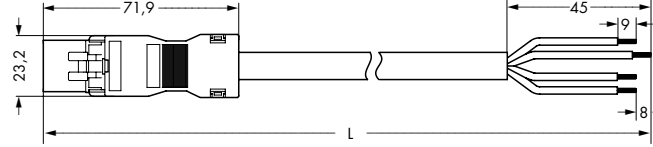


|   |         |                |     |  |  |
|---|---------|----------------|-----|--|--|
| <b>Mounting plate, for distribution connectors</b>                                  |         |                |     |  |  |
|  | black   | <b>890-624</b> | 50  |  |  |
|   | white   | <b>890-674</b> | 50  |  |  |
| <b>Fixing pin, for mounting plates</b>  |         |                |     |  |  |
|  | ③ black | <b>890-601</b> | 250 |  |  |

## Accessories, 890 Series


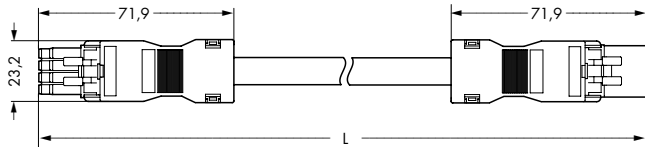

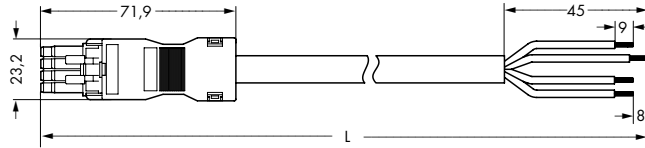

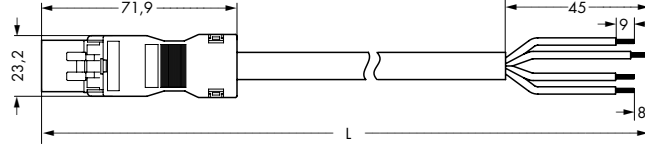


|   |       |                |   |   |                                 |
|---|-------|----------------|---|---|---------------------------------|
| <b>Locking lever, for "flying leads," tool operated</b>                             |       |                | <b>Locking lever, for "flying leads," tool operated</b> |   |                                 |
|  | black | <b>890-111</b> | 100 (2x50)  |  | black <b>890-111</b> 100 (2x50) |
|   | white | <b>890-131</b> | 100 (2x50)  |   | white <b>890-131</b> 100 (2x50) |

## Dimensions



|  |  |   |                  |                |                  |                |
|--|--|---|------------------|----------------|------------------|----------------|
|  |  | PVC H05VV-F 4G1<br>halogen-free H05Z1 Z1-F 4G1<br><br>400 V/6 kV/3 I <sub>N</sub> 10 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals   |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|  |  | 1 m   | 891-8994/005-101 | .../005-102    | 891-8994/015-101 | .../015-102    |
|  |  | 2 m   | 891-8994/005-201 | .../005-202    | 891-8994/015-201 | .../015-202    |
|  |  | 3 m   | 891-8994/005-301 | .../005-302    | 891-8994/015-301 | .../015-302    |
|  |  | 5 m   | 891-8994/005-501 | .../005-502    | 891-8994/015-501 | .../015-502    |
|  |  | 7 m   | 891-8994/005-701 | .../005-702    | 891-8994/015-701 | .../015-702    |
| <b>Connecting cable, socket – free end</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|  |  | 1 m   | 891-8994/105-101 | .../105-102    | 891-8994/115-101 | .../115-102    |
|  |  | 2 m   | 891-8994/105-201 | .../105-202    | 891-8994/115-201 | .../115-202    |
|  |  | 3 m   | 891-8994/105-301 | .../105-302    | 891-8994/115-301 | .../115-302    |
|  |  | 5 m   | 891-8994/105-501 | .../105-502    | 891-8994/115-501 | .../115-502    |
|  |  | 7 m   | 891-8994/105-701 | .../105-702    | 891-8994/115-701 | .../115-702    |
| <b>Connecting cable, plug – free end</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|  |  | 1 m   | 891-8994/205-101 | .../205-102    | 891-8994/215-101 | .../215-102    |
|  |  | 2 m   | 891-8994/205-201 | .../205-202    | 891-8994/215-201 | .../215-202    |
|  |  | 3 m   | 891-8994/205-301 | .../205-302    | 891-8994/215-301 | .../215-302    |
|  |  | 5 m   | 891-8994/205-501 | .../205-502    | 891-8994/215-501 | .../215-502    |
|  |  | 7 m   | 891-8994/205-701 | .../205-702    | 891-8994/215-701 | .../215-702    |
| <b>Info</b>  |  | <b>Accessories</b>  |                  |                |                  |                |
| ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.<br><br>For other cables, please contact factory.<br><br>● black Coding A (N ⊕ 2IL 1L')<br>○ white Coding A (N ⊕ 2IL 1L')<br><br>For coding information, see pages 238 to 240.<br>Fire load data available upon request. |  | Locking lever, for "flying leads,"<br> tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50) |                  |                |                  |                |
|  |  | Mounting carrier, for 2- to 5-pole<br>"flying leads"<br> black 890-310 100<br>white 890-311 100              |                  |                |                  |                |
|  |  |   |                  |                |                  |                |
|  |  |   |                  |                |                  |                |
|  |  |   |                  |                |                  |                |

# Cable Assemblies 4 x 1.5 mm<sup>2</sup>

|   |  |  |                  |                |                  |                |
|---|--|--|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 4G1.5<br>halogen-free H05Z1Z1-F 4G1.5<br><br>400 V/6 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|    |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|    |  | 1 m  | 891-8994/006-101 | .../006-102    | 891-8994/016-101 | .../016-102    |
|   |  | 2 m  | 891-8994/006-201 | .../006-202    | 891-8994/016-201 | .../016-202    |
|   |  | 3 m  | 891-8994/006-301 | .../006-302    | 891-8994/016-301 | .../016-302    |
|   |  | 5 m  | 891-8994/006-501 | .../006-502    | 891-8994/016-501 | .../016-502    |
|   |  | 7 m  | 891-8994/006-701 | .../006-702    | 891-8994/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|  |  | 1 m  | 891-8994/106-101 | .../106-102    | 891-8994/116-101 | .../116-102    |
|   |  | 2 m  | 891-8994/106-201 | .../106-202    | 891-8994/116-201 | .../116-202    |
|   |  | 3 m  | 891-8994/106-301 | .../106-302    | 891-8994/116-301 | .../116-302    |
|   |  | 5 m  | 891-8994/106-501 | .../106-502    | 891-8994/116-501 | .../116-502    |
|   |  | 7 m  | 891-8994/106-701 | .../106-702    | 891-8994/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|  |  | 1 m  | 891-8994/206-101 | .../206-102    | 891-8994/216-101 | .../216-102    |
|   |  | 2 m  | 891-8994/206-201 | .../206-202    | 891-8994/216-201 | .../216-202    |
|   |  | 3 m  | 891-8994/206-301 | .../206-302    | 891-8994/216-301 | .../216-302    |
|   |  | 5 m  | 891-8994/206-501 | .../206-502    | 891-8994/216-501 | .../216-502    |
|   |  | 7 m  | 891-8994/206-701 | .../206-702    | 891-8994/216-701 | .../216-702    |
| <b>Accessories</b>  |  |  |                  |                |                  |                |
|   |  | <b>Locking lever, for "flying leads,"</b>  |                  |                |                  |                |
|   |  |  tool operated<br>black <b>890-111</b> 100 (2x50)         |                  |                |                  |                |
|   |  | white <b>890-131</b> 100 (2x50)  |                  |                |                  |                |
|   |  | <b>Mounting carrier, for 2- to 5-pole "flying leads"</b>   |                  |                |                  |                |
|   |  |  black <b>890-310</b> 100                                 |                  |                |                  |                |
|   |  | white <b>890-311</b> 100   |                  |                |                  |                |

|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 13 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 13 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|

**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

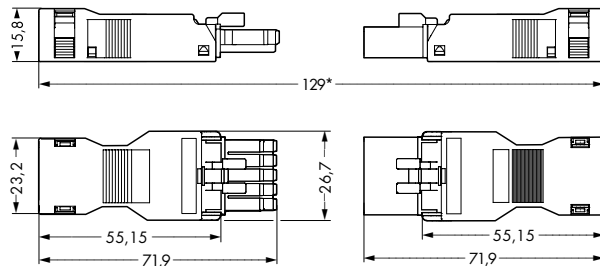


| Description  | Color   | Item No. | Pack. Unit         | Color   | Item No. | Pack. Unit         |
|--|---|----------|--------------------|---|----------|--------------------|
| Pluggable connectors, 5-pole, with CAGE CLAMP®S connection | Socket with strain relief housing, for 6.5 – 10.5 mm cable diameter |          |                    | Plug with strain relief housing, for 6.5 – 10.5 mm cable diameter |          |                    |
|  | ● black   | 890-105  | 50                 | ● black   | 890-115  | 50                 |
|  | ○ white   | 890-125  | 50                 | ○ white   | 890-135  | 50                 |
| <b>Accessories, 890 Series</b>                             |   |          |                    |   |          |                    |
|  | Locking lever, for "flying leads," tool operated                    |          |                    | Locking lever, for "flying leads," tool operated                  |          |                    |
|  |   | black    | 890-111 100 (2x50) |   | black    | 890-111 100 (2x50) |
|  |   | white    | 890-131 100 (2x50) |   | white    | 890-131 100 (2x50) |
|  | Mounting carrier, for 2- to 5-pole "flying leads"                   |          |                    | Mounting carrier, for 2- to 5-pole "flying leads"                 |          |                    |
|  |   | black    | 890-310 100        |   | black    | 890-310 100        |
|  |   | white    | 890-311 100        |   | white    | 890-311 100        |
| <b>Info</b>  | <b>Dimensions</b>   |          |                    |   |          |                    |



- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
- ③ Blue plugs and sockets are suitable for 16A DALI applications.

- black Coding A (N ⊕ 1 2 3)
- white Coding A (N ⊕ 1 2 3)
- blue Coding I (N ⊕ L - +)

For coding information, see pages 238 to 240.  
Fire load data available upon request.







\* Overall length when mated

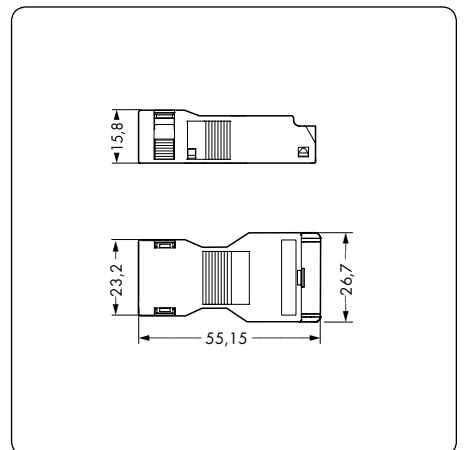
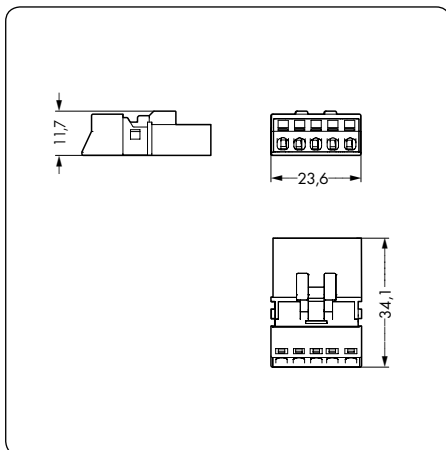
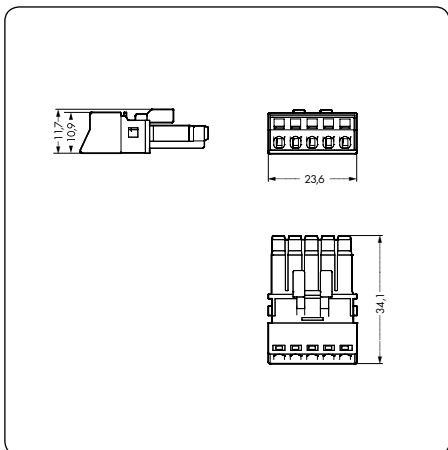
|  |  |   |
|--|--|---|
| <p>0.25 – 1.5 mm<sup>2</sup> ①   AWG 22 – 16<br/>                 400 V/6 kV/3<br/>                 I<sub>N</sub> 13 A / 16 A ③</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①   AWG 22 – 16<br/>                 400 V/6 kV/3<br/>                 I<sub>N</sub> 13 A / 16 A ③</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>Snap-on type strain relief housings for:<br/>                 - 3-pole sockets<br/>                 - 3-pole plugs</p> |
|--|--|---|



| Color                                       | Item No.   | Pack. Unit | Color                                     | Item No.   | Pack. Unit | Color  | Item No. | Pack. Unit |
|---|------------|------------|---|------------|------------|--|----------|------------|
| <b>Socket without strain relief housing</b> |            |            | <b>Plug without strain relief housing</b> |            |            | <b>Strain relief housing, for 6.5 – 10.5 mm cable diameter</b> |          |            |
| ● black                                     | 890-205    | 50         | ● black                                   | 890-215    | 50         | black  | 890-505  | 50         |
| ○ white                                     | 890-225    | 50         | ○ white                                   | 890-235    | 50         | white  | 890-515  | 50         |
| ● blue                                      | 890-1105 ③ | 50         | ● blue                                    | 890-1115 ③ | 50         |  |          |            |
|   |            |            |   |            |            |  |          |            |
|   |            |            |   |            |            |  |          |            |
|   |            |            |   |            |            |  |          |            |
|   |            |            |   |            |            |  |          |            |
|   |            |            |   |            |            |  |          |            |
|   |            |            |   |            |            |  |          |            |

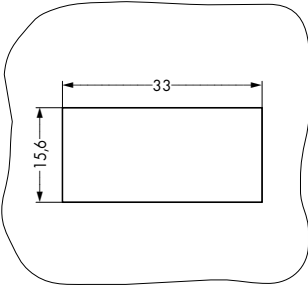
| <b>Accessories, 890 Series</b>  |  |  |   |  |  |  |  |  |
|---|--|--|---|--|--|--|--|--|
| <p><b>Locking lever, for "flying leads,"</b><br/>                     tool operated</p> <p> black <b>890-111</b> 100 (2x50)<br/>                     white <b>890-131</b> 100 (2x50)</p> |  |  | <p><b>Locking lever, for "flying leads,"</b><br/>                     tool operated</p> <p> black <b>890-111</b> 100 (2x50)<br/>                     white <b>890-131</b> 100 (2x50)</p> |  |  |  |  |  |
| <p><b>Mounting carrier, for 2- to 5-pole</b><br/>                     "flying leads"</p> <p> black <b>890-310</b> 100<br/>                     white <b>890-311</b> 100</p>              |  |  | <p><b>Mounting carrier, for 2- to 5-pole</b><br/>                     "flying leads"</p> <p> black <b>890-310</b> 100<br/>                     white <b>890-311</b> 100</p>              |  |  |  |  |  |

**Dimensions**



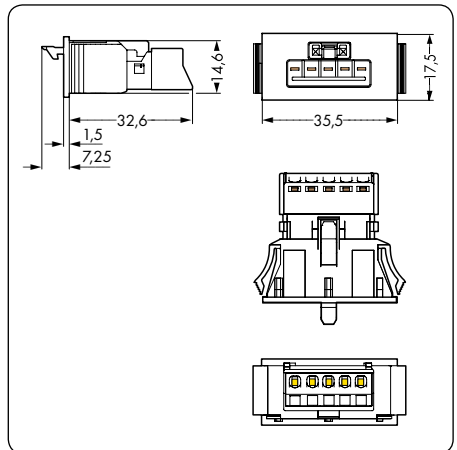
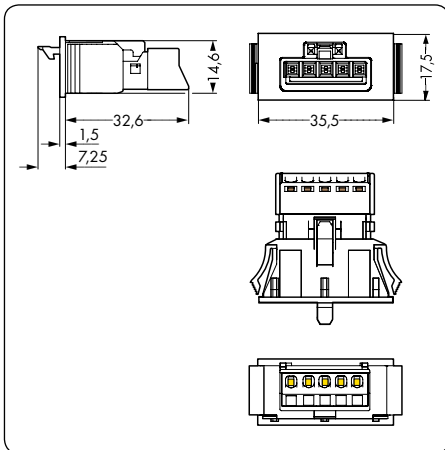


|  |  |  |
|--|--|--|
| Cutout dimensions<br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①   AWG 22 – 16<br>400 V/6 kV/3<br>I <sub>N</sub> 13 A / 16 A ③ | 0.25 – 1.5 mm <sup>2</sup> ①   AWG 22 – 16<br>400 V/6 kV/3<br>I <sub>N</sub> 13 A / 16 A ③ |
|  | 9 mm / 0.35 in<br>② Approvals  | 9 mm / 0.35 in<br>② Approvals  |



| Description   | Color  | Item No.           | Pack. Unit | Color  | Item No.           | Pack. Unit |
|---|--|--------------------|------------|--|--------------------|------------|
| <b>Pluggable connectors, snap-in device connection, 5-pole, with CAGE CLAMP® S connection</b> | <b>Socket</b>  |                    |            | <b>Plug</b>  |                    |            |
|   | ● black  | 890-705            | 50         | ● black  | 890-715            | 50         |
|   | ○ white  | 890-725            | 50         | ○ white  | 890-735            | 50         |
|   | ● blue   | 890-2105 ④         | 50         | ● blue   | 890-2115 ③         | 50         |
|   | without locking lever, for lighting installation with intermediate coupler |                    |            | without locking lever, for lighting installation with intermediate coupler |                    |            |
|   | ● black  | 890-705/006-000    | 50         | ● black  | 890-715/006-000    | 50         |
|   | ○ white  | 890-725/006-000    | 50         | ○ white  | 890-735/006-000    | 50         |
|   | ● blue   | 890-2105/006-000 ④ | 50         | ● blue   | 890-2115/006-000 ③ | 50         |
| <b>Accessories, 890 Series</b>  |  |                    |            |  |                    |            |
|   | <b>Lockout cap, for cutout, 5-pole</b>                                     |                    |            | <b>Lockout cap, for cutout, 5-pole</b>                                     |                    |            |
|   |  | black 770-643      | 100        |  | black 770-643      | 100        |
|   |  | white 770-693      | 100        |  | white 770-693      | 100        |
| <b>Info</b>   | <b>Dimensions</b>  |                    |            |  |                    |            |

- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ Blue plugs and sockets are suitable for 16A DALI applications.
  - ④ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- For other cables, please contact factory.
- black Coding A (N ⊕ 1 2 3)
  - white Coding A (N ⊕ 1 2 3)
  - blue Coding I (N ⊕ L - +)
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





# Intermediate Coupler and Distribution Connectors, 5-Pole

|  |  |  |
|--|--|--|
| 400 V/6 kV/3<br>$I_N$ 13 A / 16 A <b>③</b><br><br><b>②</b> Approvals | 400 V/6 kV/3<br>$I_N$ 13 A / 16 A <b>③</b><br><br><b>②</b> Approvals | 400 V/6 kV/3<br>$I_N$ 13 A / 16 A <b>③</b><br><br><b>②</b> Approvals |
|--|--|--|





| Color   | Item No.       | Pack. Unit | Color  | Item No.       | Pack. Unit | Color   | Item No.       | Pack. Unit |
|---|----------------|------------|--|----------------|------------|---|----------------|------------|
| <b>Intermediate coupler ,</b><br>1 x plug / 1 x socket  |                |            | <b>h-distribution connector,</b><br>plug/socket - socket |                |            | <b>T-distribution connector,</b><br>1 x plug / 2 x socket |                |            |
| ● black   | <b>890-605</b> | 50         | ● black  | <b>890-929</b> | 50         | ● black   | <b>890-621</b> | 50         |
| ○ white   | <b>890-655</b> | 50         | ○ white  | <b>890-979</b> | 50         | ○ white   | <b>890-671</b> | 50         |
| ● blue  | <b>890-619</b> | 50         | ● blue   | <b>890-982</b> | 50         | ● blue  | <b>890-617</b> | 50         |
| At least one snap-in connector <b>WITHOUT</b> locking lever is required on one side when connecting two lights directly via intermediate coupler (see page 86). |                |            | for "flying leads," with 3rd locking lever               |                |            | for "flying leads," with 3rd locking lever                |                |            |
| ● black   | <b>890-930</b> | 50         | ● black  | <b>890-930</b> | 50         | ● black   | <b>890-622</b> | 50         |
| ○ white   | <b>890-980</b> | 50         | ○ white  | <b>890-980</b> | 50         | ○ white   | <b>890-672</b> | 50         |
| ● blue  | <b>890-983</b> | 50         | ● blue   | <b>890-983</b> | 50         | ● blue  | <b>890-620</b> | 50         |

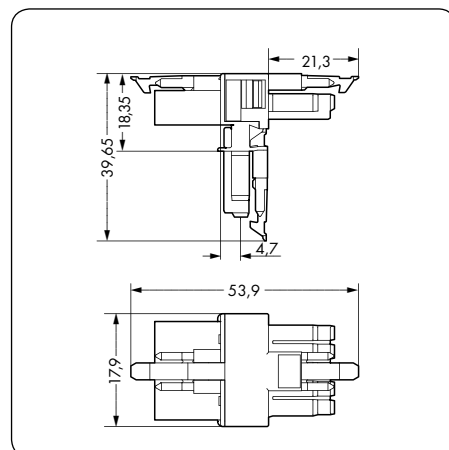
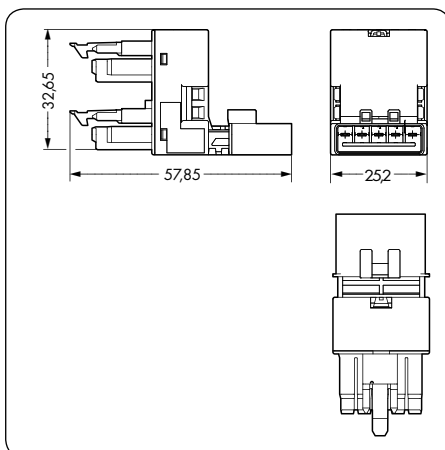
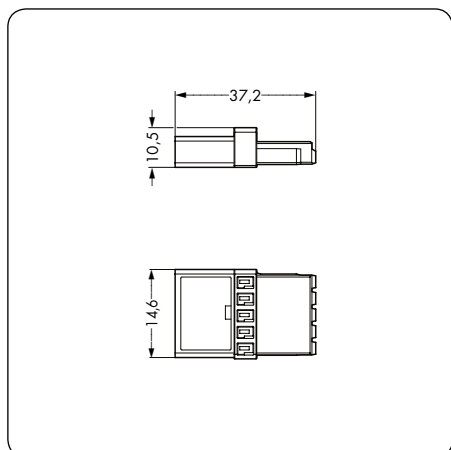
## Item-Specific Accessories


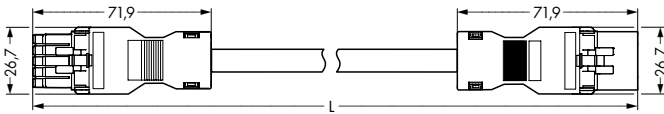

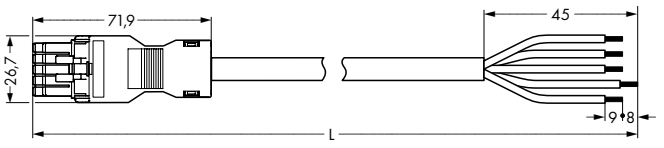

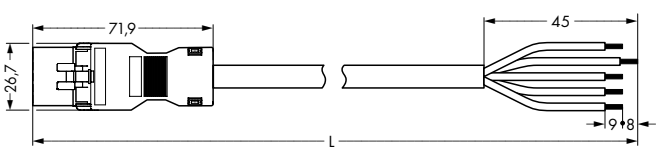


|  |  |  |   |                               |     |  |  |  |
|--|--|--|---|-------------------------------|-----|--|--|--|
|  |  |  | <b>Mounting plate,</b> for distribution connectors                                  |                               |     |  |  |  |
|  |  |  |  | black <b>890-625</b>          | 50  |  |  |  |
|  |  |  |   | white <b>890-675</b>          | 50  |  |  |  |
|  |  |  | <b>Fixing pin,</b> for mounting plates  |                               |     |  |  |  |
|  |  |  |  | <b>④</b> black <b>890-601</b> | 250 |  |  |  |

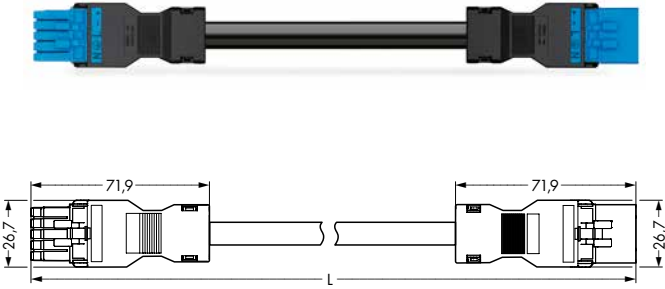
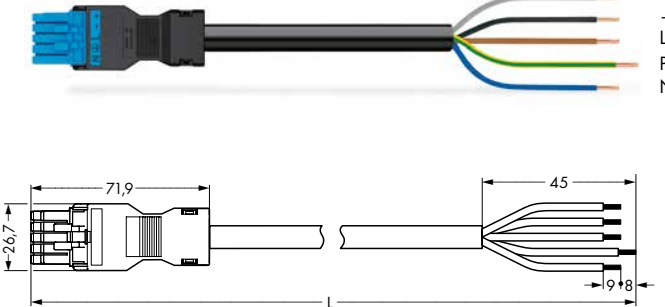
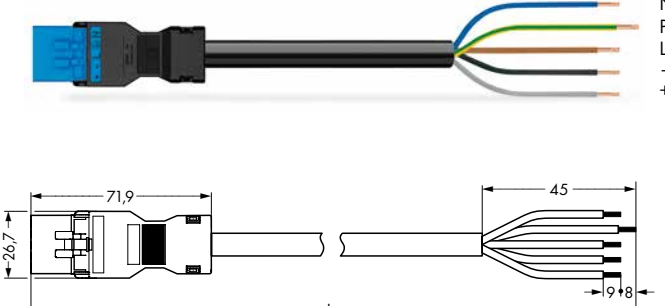


## Accessories, 890 Series


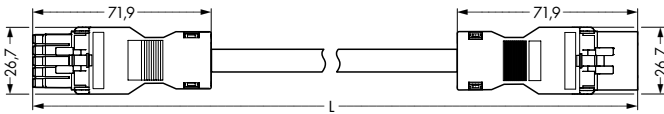

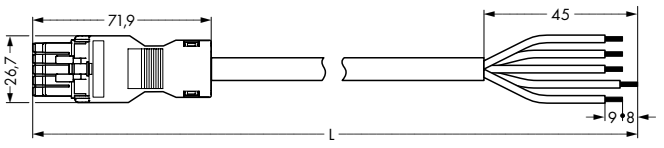

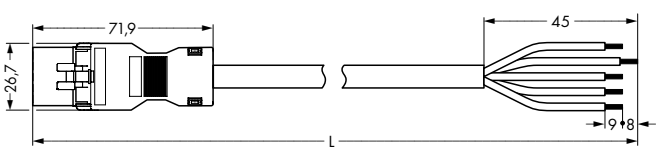


|  |  |  |   |                      |            |   |                      |            |
|--|--|--|---|----------------------|------------|---|----------------------|------------|
|  |  |  | <b>Locking lever,</b> for "flying leads,"<br>tool operated                          |                      |            | <b>Locking lever,</b> for "flying leads,"<br>tool operated                            |                      |            |
|  |  |  |  | black <b>890-111</b> | 100 (2x50) |  | black <b>890-111</b> | 100 (2x50) |
|  |  |  |   | white <b>890-131</b> | 100 (2x50) |   | white <b>890-131</b> | 100 (2x50) |


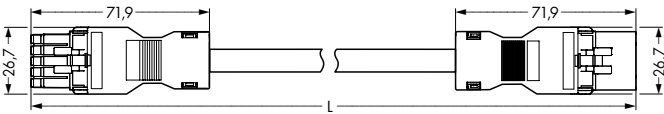

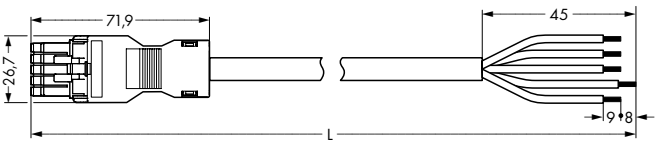

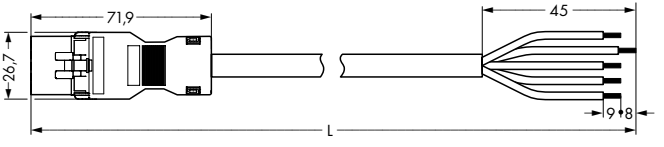
## Dimensions



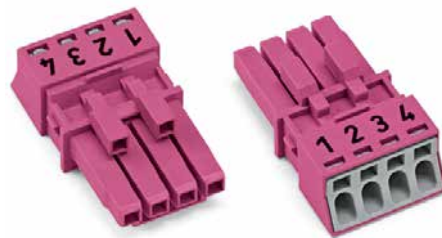
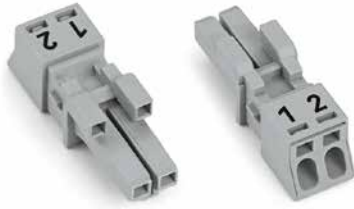
|   |  |   |                  |                |                  |                |
|---|--|---|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 5G1<br>halogen-free H05Z1Z1-F 5G1<br><br>400 V/6 kV/3 I <sub>N</sub> 10 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals  |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 891-8995/005-101 | .../005-102    | 891-8995/015-101 | .../015-102    |
|   |  | 2 m   | 891-8995/005-201 | .../005-202    | 891-8995/015-201 | .../015-202    |
|   |  | 3 m   | 891-8995/005-301 | .../005-302    | 891-8995/015-301 | .../015-302    |
|   |  | 5 m   | 891-8995/005-501 | .../005-502    | 891-8995/015-501 | .../015-502    |
|   |  | 7 m   | 891-8995/005-701 | .../005-702    | 891-8995/015-701 | .../015-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 891-8995/105-101 | .../105-102    | 891-8995/115-101 | .../115-102    |
|   |  | 2 m   | 891-8995/105-201 | .../105-202    | 891-8995/115-201 | .../115-202    |
|   |  | 3 m   | 891-8995/105-301 | .../105-302    | 891-8995/115-301 | .../115-302    |
|   |  | 5 m   | 891-8995/105-501 | .../105-502    | 891-8995/115-501 | .../115-502    |
|   |  | 7 m   | 891-8995/105-701 | .../105-702    | 891-8995/115-701 | .../115-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 891-8995/205-101 | .../205-102    | 891-8995/215-101 | .../215-102    |
|   |  | 2 m   | 891-8995/205-201 | .../205-202    | 891-8995/215-201 | .../215-202    |
|   |  | 3 m   | 891-8995/205-301 | .../205-302    | 891-8995/215-301 | .../215-302    |
|   |  | 5 m   | 891-8995/205-501 | .../205-502    | 891-8995/215-501 | .../215-502    |
|   |  | 7 m   | 891-8995/205-701 | .../205-702    | 891-8995/215-701 | .../215-702    |
| <b>Info</b>   |  | <b>Accessories</b>  |                  |                |                  |                |
| ① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.<br><br>For other cables, please contact factory.<br><br>● black Coding A (N ⊕ 1 2 3)<br>○ white Coding A (N ⊕ 1 2 3)<br>● blue Coding I (N ⊕ L – +)<br><br>For coding information, see pages 238 to 240.<br>Fire load data available upon request. |  | Locking lever, for "flying leads,"<br> tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50) |                  |                |                  |                |
|   |  | Mounting carrier, for 2- to 5-pole<br>"flying leads"<br> black 890-310 100<br>white 890-311 100              |                  |                |                  |                |
|   |  |   |                  |                |                  |                |
|   |  |   |                  |                |                  |                |
|   |  |   |                  |                |                  |                |

|   | <p>PVC H05VV-F 5G1<br/>halogen-free H05Z1Z1-F 5G1</p> <p>400 V/6 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|--|----------------|------------------|----------------|----------------|----------------|--|--|--|--|--|-----|--|--------------|--|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <p><b>Interconnecting cable, socket – plug</b></p>                                  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8985/005-101</td> <td>.../005-102</td> <td>891-8985/015-101</td> <td>.../015-102</td> </tr> <tr> <td>2 m</td> <td>891-8985/005-201</td> <td>.../005-202</td> <td>891-8985/015-201</td> <td>.../015-202</td> </tr> <tr> <td>3 m</td> <td>891-8985/005-301</td> <td>.../005-302</td> <td>891-8985/015-301</td> <td>.../015-302</td> </tr> <tr> <td>5 m</td> <td>891-8985/005-501</td> <td>.../005-502</td> <td>891-8985/015-501</td> <td>.../015-502</td> </tr> <tr> <td>7 m</td> <td>891-8985/005-701</td> <td>.../005-702</td> <td>891-8985/015-701</td> <td>.../015-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 891-8985/005-101 | .../005-102 | 891-8985/015-101 | .../015-102 | 2 m | 891-8985/005-201 | .../005-202 | 891-8985/015-201 | .../015-202 | 3 m | 891-8985/005-301 | .../005-302 | 891-8985/015-301 | .../015-302 | 5 m | 891-8985/005-501 | .../005-502 | 891-8985/015-501 | .../015-502 | 7 m | 891-8985/005-701 | .../005-702 | 891-8985/015-701 | .../015-702 |
| Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI)                                    |  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |  | halogen-free   |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 891-8985/005-101   | .../005-102    | 891-8985/015-101 | .../015-102    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 891-8985/005-201   | .../005-202    | 891-8985/015-201 | .../015-202    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 891-8985/005-301   | .../005-302    | 891-8985/015-301 | .../015-302    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 891-8985/005-501   | .../005-502    | 891-8985/015-501 | .../015-502    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 891-8985/005-701   | .../005-702    | 891-8985/015-701 | .../015-702    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|    |  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <p><b>Connecting cable, socket – free end</b></p>                                   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8985/105-101</td> <td>.../105-102</td> <td>891-8985/115-101</td> <td>.../115-102</td> </tr> <tr> <td>2 m</td> <td>891-8985/105-201</td> <td>.../105-202</td> <td>891-8985/115-201</td> <td>.../115-202</td> </tr> <tr> <td>3 m</td> <td>891-8985/105-301</td> <td>.../105-302</td> <td>891-8985/115-301</td> <td>.../115-302</td> </tr> <tr> <td>5 m</td> <td>891-8985/105-501</td> <td>.../105-502</td> <td>891-8985/115-501</td> <td>.../115-502</td> </tr> <tr> <td>7 m</td> <td>891-8985/105-701</td> <td>.../105-702</td> <td>891-8985/115-701</td> <td>.../115-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 891-8985/105-101 | .../105-102 | 891-8985/115-101 | .../115-102 | 2 m | 891-8985/105-201 | .../105-202 | 891-8985/115-201 | .../115-202 | 3 m | 891-8985/105-301 | .../105-302 | 891-8985/115-301 | .../115-302 | 5 m | 891-8985/105-501 | .../105-502 | 891-8985/115-501 | .../115-502 | 7 m | 891-8985/105-701 | .../105-702 | 891-8985/115-701 | .../115-702 |
| Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI)                                    |  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |  | halogen-free   |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 891-8985/105-101   | .../105-102    | 891-8985/115-101 | .../115-102    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 891-8985/105-201   | .../105-202    | 891-8985/115-201 | .../115-202    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 891-8985/105-301   | .../105-302    | 891-8985/115-301 | .../115-302    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 891-8985/105-501   | .../105-502    | 891-8985/115-501 | .../115-502    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 891-8985/105-701   | .../105-702    | 891-8985/115-701 | .../115-702    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <p><b>Connecting cable, plug – free end</b></p>                                     | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8985/205-101</td> <td>.../205-102</td> <td>891-8985/215-101</td> <td>.../215-102</td> </tr> <tr> <td>2 m</td> <td>891-8985/205-201</td> <td>.../205-202</td> <td>891-8985/215-201</td> <td>.../215-202</td> </tr> <tr> <td>3 m</td> <td>891-8985/205-301</td> <td>.../205-302</td> <td>891-8985/215-301</td> <td>.../215-302</td> </tr> <tr> <td>5 m</td> <td>891-8985/205-501</td> <td>.../205-502</td> <td>891-8985/215-501</td> <td>.../215-502</td> </tr> <tr> <td>7 m</td> <td>891-8985/205-701</td> <td>.../205-702</td> <td>891-8985/215-701</td> <td>.../215-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 891-8985/205-101 | .../205-102 | 891-8985/215-101 | .../215-102 | 2 m | 891-8985/205-201 | .../205-202 | 891-8985/215-201 | .../215-202 | 3 m | 891-8985/205-301 | .../205-302 | 891-8985/215-301 | .../215-302 | 5 m | 891-8985/205-501 | .../205-502 | 891-8985/215-501 | .../215-502 | 7 m | 891-8985/205-701 | .../205-702 | 891-8985/215-701 | .../215-702 |
| Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI)                                    |  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |  | halogen-free   |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 891-8985/205-101   | .../205-102    | 891-8985/215-101 | .../215-102    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 891-8985/205-201   | .../205-202    | 891-8985/215-201 | .../215-202    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 891-8985/205-301   | .../205-302    | 891-8985/215-301 | .../215-302    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 891-8985/205-501   | .../205-502    | 891-8985/215-501 | .../215-502    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 891-8985/205-701   | .../205-702    | 891-8985/215-701 | .../215-702    |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |  |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <p><b>Accessories</b></p>   | <p><b>Locking lever, for "flying leads,"</b></p>   |                |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p>tool operated</p> <table border="1"> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table>   | black          | 890-111          | 100 (2x50)     | white          | 890-131        | 100 (2x50)                                       |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 890-111  | 100 (2x50)     |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 890-131  | 100 (2x50)     |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p><b>Mounting carrier, for 2- to 5-pole "flying leads"</b></p> <table border="1"> <tr> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table>  | black          | 890-310          | 100            | white          | 890-311        | 100  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 890-310  | 100            |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 890-311  | 100            |                  |                |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |

|   |  |   |                  |                |                  |                |
|---|--|---|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 5G1.5<br>halogen-free H05Z1Z1-F 5G1.5<br><br>400 V/6 kV/3 I <sub>N</sub> 13 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals  |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>   |  | ● ○ Coding A<br>PVC   | halogen-free     |                |                  |                |
|   |  | 1 m   | 891-8995/006-101 | .../006-102    | 891-8995/016-101 | .../016-102    |
|   |  | 2 m   | 891-8995/006-201 | .../006-202    | 891-8995/016-201 | .../016-202    |
|   |  | 3 m   | 891-8995/006-301 | .../006-302    | 891-8995/016-301 | .../016-302    |
|   |  | 5 m   | 891-8995/006-501 | .../006-502    | 891-8995/016-501 | .../016-502    |
|   |  | 7 m   | 891-8995/006-701 | .../006-702    | 891-8995/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>  |  | ● ○ Coding A<br>PVC   | halogen-free     |                |                  |                |
|   |  | 1 m   | 891-8995/106-101 | .../106-102    | 891-8995/116-101 | .../116-102    |
|   |  | 2 m   | 891-8995/106-201 | .../106-202    | 891-8995/116-201 | .../116-202    |
|   |  | 3 m   | 891-8995/106-301 | .../106-302    | 891-8995/116-301 | .../116-302    |
|   |  | 5 m   | 891-8995/106-501 | .../106-502    | 891-8995/116-501 | .../116-502    |
|   |  | 7 m   | 891-8995/106-701 | .../106-702    | 891-8995/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
| <br>   |  | ● ○ Coding A<br>PVC   | halogen-free     |                |                  |                |
|   |  | 1 m   | 891-8995/206-101 | .../206-102    | 891-8995/216-101 | .../216-102    |
|   |  | 2 m   | 891-8995/206-201 | .../206-202    | 891-8995/216-201 | .../216-202    |
|   |  | 3 m   | 891-8995/206-301 | .../206-302    | 891-8995/216-301 | .../216-302    |
|   |  | 5 m   | 891-8995/206-501 | .../206-502    | 891-8995/216-501 | .../216-502    |
|   |  | 7 m   | 891-8995/206-701 | .../206-702    | 891-8995/216-701 | .../216-702    |
| <b>Info</b>   |  | <b>Accessories</b>  |                  |                |                  |                |
| ① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.<br>② Blue plugs and sockets are suitable for 16A DALI applications.<br>For other cables, please contact factory.<br><br>● black Coding A (N ⊕ 1 2 3)<br>○ white Coding A (N ⊕ 1 2 3)<br>● blue Coding I (N ⊕ L – +)<br><br>For coding information, see pages 238 to 240.<br>Fire load data available upon request. |  | Locking lever, for "flying leads,"<br> tool operated<br>black 890-111 100 (2x50)<br>white 890-131 100 (2x50) |                  |                |                  |                |
|   |  | Mounting carrier, for 2- to 5-pole "flying leads"<br> black 890-310 100<br>white 890-311 100                 |                  |                |                  |                |
|   |  |   |                  |                |                  |                |
|   |  |   |                  |                |                  |                |
|   |  |   |                  |                |                  |                |

|  |                  |  |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|--|------------------|--|------------------|----------------|----------------|----------------|-------|------------------|-------------|------------------|-------------|------------|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
|  |                  | <p>PVC H05VV-F 5G1.5<br/>halogen-free H05Z1Z1-F 5G1.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 16 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Interconnecting cable, socket – plug</b>  |                  | Length   | Item No. black   | Item No. white | Item No. black | Item No. white |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <br>     |                  | <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> <table border="1"> <tr> <td>1 m</td> <td>891-8985/006-101</td> <td>.../006-102</td> <td>891-8985/016-101</td> <td>.../016-102</td> </tr> <tr> <td>2 m</td> <td>891-8985/006-201</td> <td>.../006-202</td> <td>891-8985/016-201</td> <td>.../016-202</td> </tr> <tr> <td>3 m</td> <td>891-8985/006-301</td> <td>.../006-302</td> <td>891-8985/016-301</td> <td>.../016-302</td> </tr> <tr> <td>5 m</td> <td>891-8985/006-501</td> <td>.../006-502</td> <td>891-8985/016-501</td> <td>.../016-502</td> </tr> <tr> <td>7 m</td> <td>891-8985/006-701</td> <td>.../006-702</td> <td>891-8985/016-701</td> <td>.../016-702</td> </tr> </table> |                  |                |                |                | 1 m   | 891-8985/006-101 | .../006-102 | 891-8985/016-101 | .../016-102 | 2 m        | 891-8985/006-201 | .../006-202 | 891-8985/016-201 | .../016-202 | 3 m | 891-8985/006-301 | .../006-302 | 891-8985/016-301 | .../016-302 | 5 m | 891-8985/006-501 | .../006-502 | 891-8985/016-501 | .../016-502 | 7 m | 891-8985/006-701 | .../006-702 | 891-8985/016-701 | .../016-702 |
| 1 m  | 891-8985/006-101 | .../006-102  | 891-8985/016-101 | .../016-102    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 891-8985/006-201 | .../006-202  | 891-8985/016-201 | .../016-202    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 891-8985/006-301 | .../006-302  | 891-8985/016-301 | .../016-302    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 891-8985/006-501 | .../006-502  | 891-8985/016-501 | .../016-502    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 891-8985/006-701 | .../006-702  | 891-8985/016-701 | .../016-702    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>   |                  | Length   | Item No. black   | Item No. white | Item No. black | Item No. white |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <br>  |                  | <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> <table border="1"> <tr> <td>1 m</td> <td>891-8985/106-101</td> <td>.../106-102</td> <td>891-8985/116-101</td> <td>.../116-102</td> </tr> <tr> <td>2 m</td> <td>891-8985/106-201</td> <td>.../106-202</td> <td>891-8985/116-201</td> <td>.../116-202</td> </tr> <tr> <td>3 m</td> <td>891-8985/106-301</td> <td>.../106-302</td> <td>891-8985/116-301</td> <td>.../116-302</td> </tr> <tr> <td>5 m</td> <td>891-8985/106-501</td> <td>.../106-502</td> <td>891-8985/116-501</td> <td>.../116-502</td> </tr> <tr> <td>7 m</td> <td>891-8985/106-701</td> <td>.../106-702</td> <td>891-8985/116-701</td> <td>.../116-702</td> </tr> </table> |                  |                |                |                | 1 m   | 891-8985/106-101 | .../106-102 | 891-8985/116-101 | .../116-102 | 2 m        | 891-8985/106-201 | .../106-202 | 891-8985/116-201 | .../116-202 | 3 m | 891-8985/106-301 | .../106-302 | 891-8985/116-301 | .../116-302 | 5 m | 891-8985/106-501 | .../106-502 | 891-8985/116-501 | .../116-502 | 7 m | 891-8985/106-701 | .../106-702 | 891-8985/116-701 | .../116-702 |
| 1 m  | 891-8985/106-101 | .../106-102  | 891-8985/116-101 | .../116-102    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 891-8985/106-201 | .../106-202  | 891-8985/116-201 | .../116-202    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 891-8985/106-301 | .../106-302  | 891-8985/116-301 | .../116-302    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 891-8985/106-501 | .../106-502  | 891-8985/116-501 | .../116-502    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 891-8985/106-701 | .../106-702  | 891-8985/116-701 | .../116-702    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug – free end</b>   |                  | Length   | Item No. black   | Item No. white | Item No. black | Item No. white |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <br> |                  | <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> <table border="1"> <tr> <td>1 m</td> <td>891-8985/206-101</td> <td>.../206-102</td> <td>891-8985/216-101</td> <td>.../216-102</td> </tr> <tr> <td>2 m</td> <td>891-8985/206-201</td> <td>.../206-202</td> <td>891-8985/216-201</td> <td>.../216-202</td> </tr> <tr> <td>3 m</td> <td>891-8985/206-301</td> <td>.../206-302</td> <td>891-8985/216-301</td> <td>.../216-302</td> </tr> <tr> <td>5 m</td> <td>891-8985/206-501</td> <td>.../206-502</td> <td>891-8985/216-501</td> <td>.../216-502</td> </tr> <tr> <td>7 m</td> <td>891-8985/206-701</td> <td>.../206-702</td> <td>891-8985/216-701</td> <td>.../216-702</td> </tr> </table> |                  |                |                |                | 1 m   | 891-8985/206-101 | .../206-102 | 891-8985/216-101 | .../216-102 | 2 m        | 891-8985/206-201 | .../206-202 | 891-8985/216-201 | .../216-202 | 3 m | 891-8985/206-301 | .../206-302 | 891-8985/216-301 | .../216-302 | 5 m | 891-8985/206-501 | .../206-502 | 891-8985/216-501 | .../216-502 | 7 m | 891-8985/206-701 | .../206-702 | 891-8985/216-701 | .../216-702 |
| 1 m  | 891-8985/206-101 | .../206-102  | 891-8985/216-101 | .../216-102    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 891-8985/206-201 | .../206-202  | 891-8985/216-201 | .../216-202    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 891-8985/206-301 | .../206-302  | 891-8985/216-301 | .../216-302    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 891-8985/206-501 | .../206-502  | 891-8985/216-501 | .../216-502    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 891-8985/206-701 | .../206-702  | 891-8985/216-701 | .../216-702    |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |                  | <b>Accessories</b>   |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |                  | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <table border="1"> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table>  |                  |                |                |                | black | 890-111          | 100 (2x50)  | white            | 890-131     | 100 (2x50) |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black  | 890-111          | 100 (2x50)   |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white  | 890-131          | 100 (2x50)   |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  |                  | <p><b>Mounting carrier, for 2- to 5-pole "flying leads"</b></p> <table border="1"> <tr> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table>  |                  |                |                |                | black | 890-310          | 100         | white            | 890-311     | 100        |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black  | 890-310          | 100  |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white  | 890-311          | 100  |                  |                |                |                |       |                  |             |                  |             |            |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |



**Important note:**

B-Coded components of the *WINSTA*<sup>®</sup> MINI special series are designed for specialty applications (e.g., measurement, control and regulation technology) and certified according to DIN EN 61984. In addition to the gray models for 110–400V voltages, there is now also a variant in light green for low voltages up to 48V, as well as a pink one for bus applications.

Each of the three versions is available in 2-, 3- or 4- and 5-pole configurations. Pole marking can be printed at the factory to suit customer requirements. According to IEC 61535, B-Coded products are protected against mismatching with all other coding types found in the *WINSTA*<sup>®</sup> system. Within B Coding, all special variants can mate with each other. The variable coding system provides clear circuit identification. Special variants can be clearly differentiated according to color and pole marking. They can be coded on-site or delivered with factory-installed custom coding.

# WINSTA® MINI special 890/891 Series, up to 1.5 mm<sup>2</sup> / 16 A

- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with other systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.



|                              |     |
|------------------------------|-----|
| <b>890 Series</b>            |     |
| Pluggable Connectors, 2-Pole | 95  |
| Pluggable Connectors, 3-Pole | 100 |
| Pluggable Connectors, 4-Pole | 106 |
| Pluggable Connectors, 5-Pole | 110 |



|                                   |     |
|-----------------------------------|-----|
| <b>890 Series</b>                 |     |
| Snap-In Device Connectors, 2-Pole | 96  |
| Snap-In Device Connectors, 3-Pole | 101 |
| Snap-In Device Connectors, 4-Pole | 107 |
| Snap-In Device Connectors, 5-Pole | 111 |



|                                 |     |
|---------------------------------|-----|
| <b>890 Series</b>               |     |
| Distribution Connectors, 2-Pole | 97  |
| Distribution Connectors, 3-Pole | 102 |



|                          |           |
|--------------------------|-----------|
| <b>891 Series</b>        |           |
| Cable Assemblies, 2-Pole | 98 - 99   |
| Cable Assemblies, 3-Pole | 104 - 105 |
| Cable Assemblies, 4-Pole | 108 - 109 |

# 3 Handling WINSTA® MINI special, 890 Series

## Pole marking



Gray, B-coded connector with "2 1" marking; e.g., control signal (A circuit).

## Circuit identification



Easy circuit identification via different marking and colors.

## Protection against mismatching



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

## Pole marking

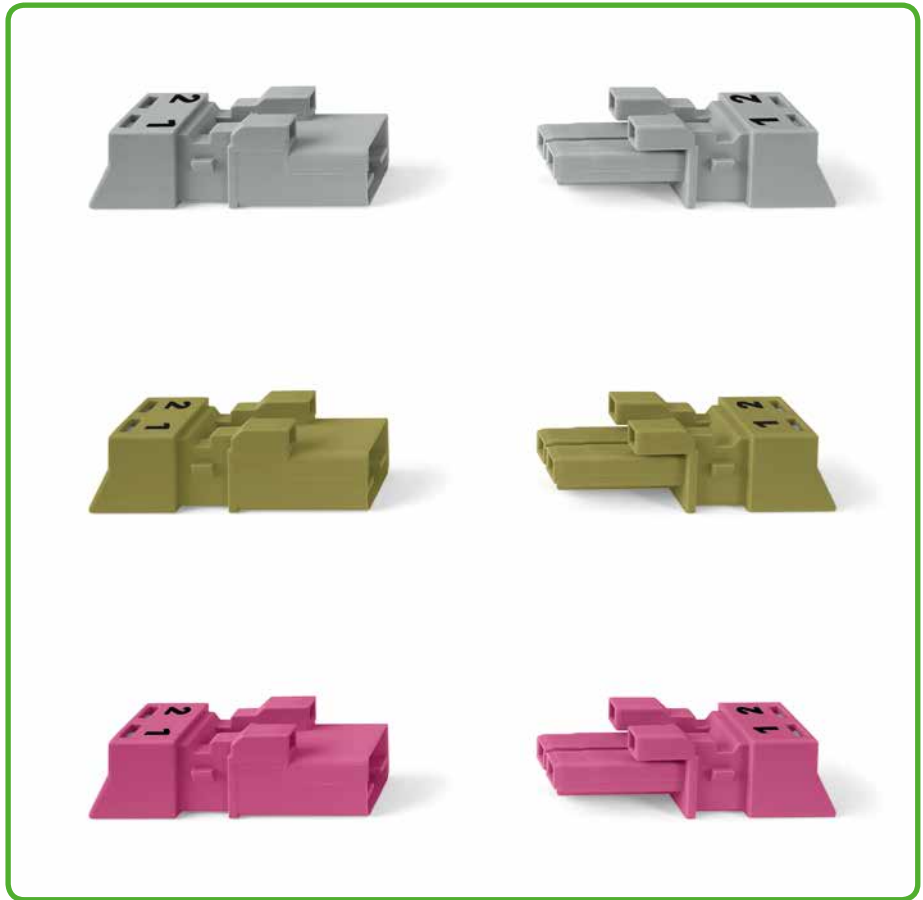


Light green, B-coded connector with "- +" marking; e.g., DC power supply (24V circuit).

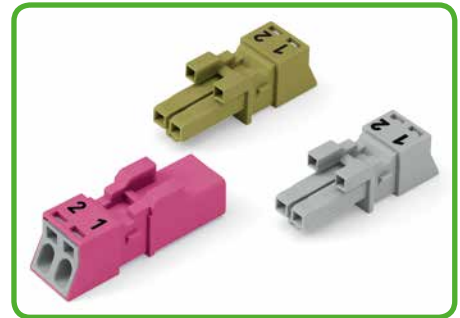
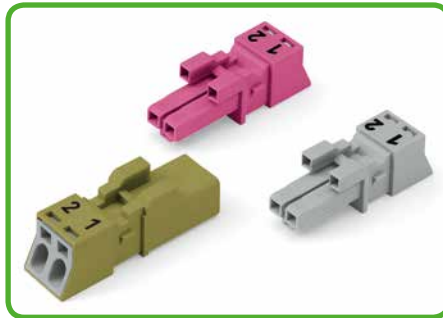
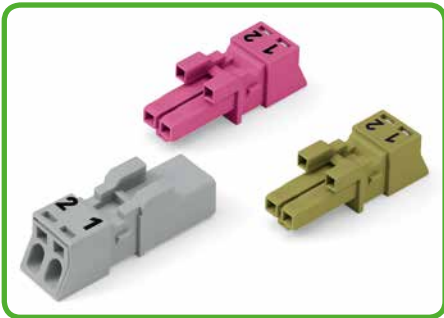
## Pole marking



Pink, B-coded connector with "2 1" marking; e.g., control signal (B circuit).



## Plug compatibility



B-coded connectors with different colors can be plugged together.



**Important note:**

Different colors and/or pole marking are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.

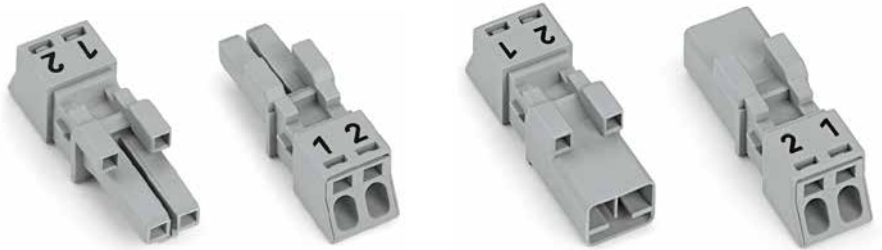
# WINSTA® MINI special Sockets and Plugs, 2-Pole

CAGE CLAMP® S

|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|



**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).







| Description   | Color                                | Item No.         | Pack. Unit | Color                              | Item No.         | Pack. Unit |
|---|--------------------------------------|------------------|------------|------------------------------------|------------------|------------|
| Pluggable connectors, 2-pole, with CAGE CLAMP® S connection | Socket without strain relief housing |                  |            | Plug without strain relief housing |                  |            |
|   | gray                                 | 890-242          | 50         | gray                               | 890-252          | 50         |
|   | gray                                 | 890-242/060-000* | 50         | gray                               | 890-252/060-000* | 50         |
|   | light green                          | 890-262          | 50         | light green                        | 890-272          | 50         |
|   | pink                                 | 890-282          | 50         | pink                               | 890-292          | 50         |
|   | pink                                 | 890-282/080-000* | 50         | pink                               | 890-292/080-000* | 50         |
|   | pink                                 | 890-282/082-000* | 50         | pink                               | 890-292/082-000* | 50         |
|   | * Pole marking, see page 241.        |                  |            | * Pole marking, see page 241.      |                  |            |

**Item-Specific Accessories**

|  |   |   |
|--|---|---|
|  | <p><b>Strain relief housing,</b></p> <p> for 3.8 – 8.2 mm cable diameter</p> <p>black 890-502 50</p> <p>white 890-512 50</p> | <p><b>Strain relief housing,</b></p> <p> for 3.8 – 8.2 mm cable diameter</p> <p>black 890-502 50</p> <p>white 890-512 50</p> |
|--|---|---|

**Accessories, 890 Series**

|  |   |   |
|--|---|---|
|  | <p><b>Locking lever, for "flying leads,"</b></p> <p> tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p> | <p><b>Locking lever, for "flying leads,"</b></p> <p> tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p> |
|  | <p><b>Mounting carrier, for 2- to 5-pole</b></p> <p> "flying leads"</p> <p>black 890-310 100</p> <p>white 890-311 100</p>              | <p><b>Mounting carrier, for 2- to 5-pole</b></p> <p> "flying leads"</p> <p>black 890-310 100</p> <p>white 890-311 100</p>              |

**Dimensions**

① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"

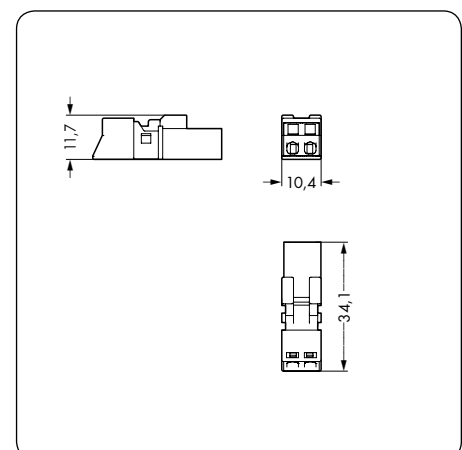
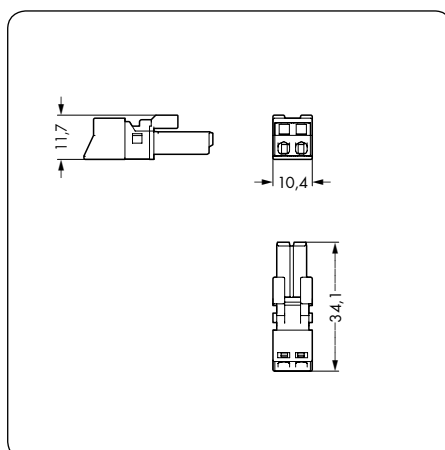
② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.



**Standard printing (without suffix number)**

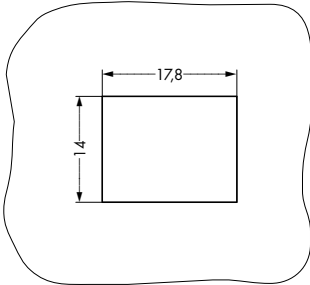
- gray Coding B (1 2)
- light green Coding B (1 2)
- pink Coding B (1 2)





For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.

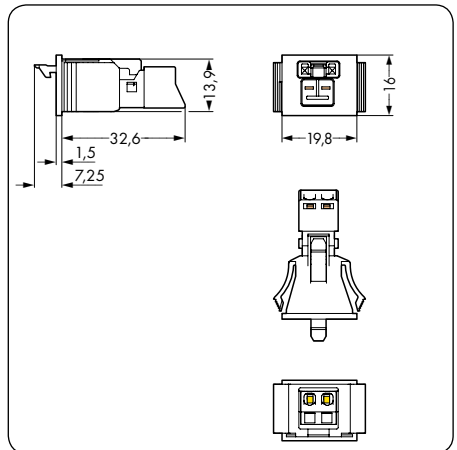
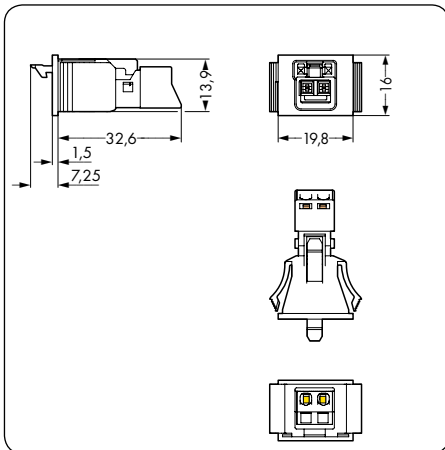


|   |   |             |   |             |
|---|---|-------------|---|-------------|
| <b>Cutout dimensions</b><br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A   | AWG 22 – 16 | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A   | AWG 22 – 16 |
|   |  9 mm / 0.35 in<br>② Approvals |             |  9 mm / 0.35 in<br>② Approvals |             |




| Description  | Color  | Item No.         | Pack. Unit | Color  | Item No.         | Pack. Unit |
|--|--|------------------|------------|--|------------------|------------|
| <b>Pluggable connectors, snap-in device connection, 2-pole, with CAGE CLAMP®S connection</b> | <b>Socket</b>  |                  |            | <b>Plug</b>  |                  |            |
|  | ● gray   | 890-742          | 50         | ● gray   | 890-752          | 50         |
|  | ● gray   | 890-742/060-000* | 50         | ● gray   | 890-752/060-000* | 50         |
|  | ● light green  | 890-762          | 50         | ● light green  | 890-772          | 50         |
|  | ● pink   | 890-782          | 50         | ● pink   | 890-792          | 50         |
|  | ● pink   | 890-782/080-000* | 50         | ● pink   | 890-792/080-000* | 50         |
|  | ● pink   | 890-782/082-000* | 50         | ● pink   | 890-792/082-000* | 50         |
|  | * Pole marking, see page 241.  |                  |            | * Pole marking, see page 241.  |                  |            |
| <b>Item-Specific Accessories</b>   |  |                  |            |  |                  |            |
|  | <b>Operating tool, insulated 2-pole</b><br> 890-392 1                             |                  |            | <b>Operating tool, insulated 2-pole</b><br> 890-392 1                             |                  |            |
| <b>Accessories, 890 Series</b>   |  |                  |            |  |                  |            |
|  | <b>Lockout cap, for cutout, 2-pole</b><br> black 890-642 100<br>white 890-692 100 |                  |            | <b>Lockout cap, for cutout, 2-pole</b><br> black 890-642 100<br>white 890-692 100 |                  |            |
| <b>Info</b>  | <b>Dimensions</b>  |                  |            |  |                  |            |

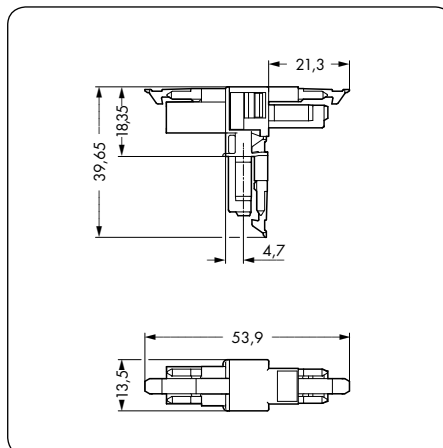
- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> "s + f-st"  
0.25 – 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- Standard printing (without suffix number)
- gray Coding B (1 2)
  - light green Coding B (1 2)
  - pink Coding B (1 2)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.



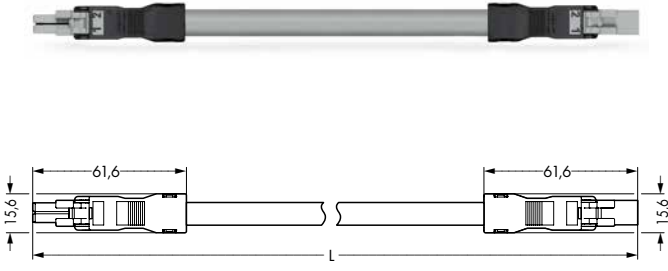
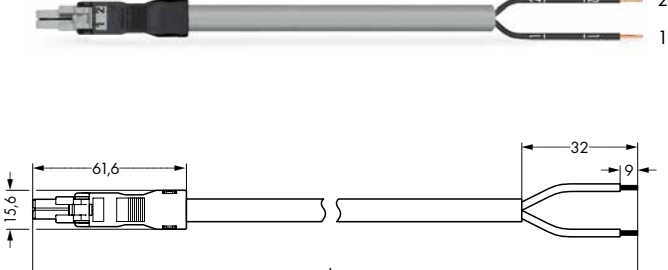
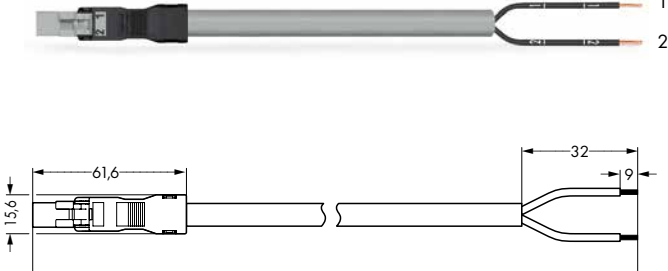






|  |   |  |
|--|---|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 16 A</p> <p>② Approvals</p> |  |
|--|---|--|



| Description                                  | Color  | Item No.  | Pack. Unit |
|--|--|---|------------|
| T-distribution connectors, 2-pole, pluggable | T-distribution connector,<br>1 x plug / 2 x socket   |   |            |
|  | ● gray   | 890-1601  | 25         |
|  | ● light green  | 890-1602  | 25         |
|  | ● pink   | 890-1603  | 25         |
|  | for "flying leads," with 3rd locking lever   |   |            |
|  | ● gray   | 890-1701  | 25         |
|  | ● light green  | 890-1702  | 25         |
|  | ● pink   | 890-1703  | 25         |
|  | For additional pole marking, see page 241.   |   |            |
| <b>Accessories, 890 Series</b>               |  |   |            |
|  | <b>Locking lever, for "flying leads,"</b><br> |   |            |
|  |  | tool operated<br>black <b>890-111</b> 100 (2x50)<br>white <b>890-131</b> 100 (2x50) |            |
| <b>Dimensions</b>                            |  |   |            |





|  |   |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|--|---|------------------|------------|------------------|---|-------------|------------------|-------|-----|------------------|----------|-------|---|---|---------------|--|--|--|-------|---------|------------|--|-------|---------|------------|---|--|--|--|--|-------|---------|-----|--|-------|---------|-----|
|  | <p>PVC Control line: 2 x 1, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| <p>Interconnecting cable, socket – plug</p>  | <p>Color Length Item No.<br/>black</p>  |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|    | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8992/005-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8992/005-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8992/005-107</td> </tr> </table> | ●                | 1 m        | 891-8992/005-103 | ● | 1 m         | 891-8992/005-105 | ●     | 1 m | 891-8992/005-107 |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/005-103 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/005-105 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/005-107 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| <p>Connecting cable, socket – free end</p>   | <p>Color Length Item No.<br/>black</p>  |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|   | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8992/105-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8992/105-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8992/105-107</td> </tr> </table> | ●                | 1 m        | 891-8992/105-103 | ● | 1 m         | 891-8992/105-105 | ●     | 1 m | 891-8992/105-107 |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/105-103 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/105-105 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/105-107 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| <p>Connecting cable, plug – free end</p>   | <p>Color Length Item No.<br/>black</p>  |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|    | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8992/205-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8992/205-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8992/205-107</td> </tr> </table> | ●                | 1 m        | 891-8992/205-103 | ● | 1 m         | 891-8992/205-105 | ●     | 1 m | 891-8992/205-107 |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/205-103 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/205-105 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | 1 m   | 891-8992/205-107 |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| <p>Info</p>  | <p>Accessories</p>  |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| <p>① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>For other cables, please contact factory.</p> <table border="1"> <tr> <td>●</td> <td>gray</td> <td>Coding B</td> <td>(1 2)</td> </tr> <tr> <td>●</td> <td>light green</td> <td>Coding B</td> <td>(1 2)</td> </tr> <tr> <td>●</td> <td>pink</td> <td>Coding B</td> <td>(1 2)</td> </tr> </table> <p>For additional pole marking, see page 241.</p> <p>For coding information, see pages 238 to 240.<br/>Fire load data available upon request.</p> | ●   | gray             | Coding B   | (1 2)            | ● | light green | Coding B         | (1 2) | ●   | pink             | Coding B | (1 2) | <p>Locking lever, for "flying leads,"</p> <table border="1"> <tr> <td></td> <td>tool operated</td> <td></td> <td></td> </tr> <tr> <td></td> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td></td> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> <p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td></td> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table> |  | tool operated |  |  |  | black | 890-111 | 100 (2x50) |  | white | 890-131 | 100 (2x50) |  |  |  |  |  | black | 890-310 | 100 |  | white | 890-311 | 100 |
| ●  | gray  | Coding B         | (1 2)      |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | light green   | Coding B         | (1 2)      |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
| ●  | pink  | Coding B         | (1 2)      |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|   | tool operated   |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|  | black   | 890-111          | 100 (2x50) |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|  | white   | 890-131          | 100 (2x50) |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|   |   |                  |            |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|  | black   | 890-310          | 100        |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |
|  | white   | 890-311          | 100        |                  |   |             |                  |       |     |                  |          |       |   |   |               |  |  |  |       |         |            |  |       |         |            |   |  |  |  |  |       |         |     |  |       |         |     |

# Cable Assemblies, 2 x 1.5 mm<sup>2</sup>

|   |  |                  |     |                  |   |     |                  |   |     |                  |
|---|--|------------------|-----|------------------|---|-----|------------------|---|-----|------------------|
|   | <p>PVC Control line: 2 x 1.5, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                  |     |                  |   |     |                  |   |     |                  |
| <b>Interconnecting cable, socket – plug</b> | <p>Color Length Item No.<br/>black black</p> <p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>●</td><td>1 m</td><td>891-8992/006-103</td></tr> <tr><td>●</td><td>1 m</td><td>891-8992/006-105</td></tr> <tr><td>●</td><td>1 m</td><td>891-8992/006-107</td></tr> </table> | ●                | 1 m | 891-8992/006-103 | ● | 1 m | 891-8992/006-105 | ● | 1 m | 891-8992/006-107 |
| ●   | 1 m  | 891-8992/006-103 |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m  | 891-8992/006-105 |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m  | 891-8992/006-107 |     |                  |   |     |                  |   |     |                  |
|   |  |                  |     |                  |   |     |                  |   |     |                  |
| <b>Connecting cable, socket – free end</b>  | <p>Color Length Item No.<br/>black black</p> <p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>●</td><td>1 m</td><td>891-8992/106-103</td></tr> <tr><td>●</td><td>1 m</td><td>891-8992/106-105</td></tr> <tr><td>●</td><td>1 m</td><td>891-8992/106-107</td></tr> </table> | ●                | 1 m | 891-8992/106-103 | ● | 1 m | 891-8992/106-105 | ● | 1 m | 891-8992/106-107 |
| ●   | 1 m  | 891-8992/106-103 |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m  | 891-8992/106-105 |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m  | 891-8992/106-107 |     |                  |   |     |                  |   |     |                  |
|   |  |                  |     |                  |   |     |                  |   |     |                  |
| <b>Connecting cable, plug – free end</b>    | <p>Color Length Item No.<br/>black black</p> <p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>●</td><td>1 m</td><td>891-8992/206-103</td></tr> <tr><td>●</td><td>1 m</td><td>891-8992/206-105</td></tr> <tr><td>●</td><td>1 m</td><td>891-8992/206-107</td></tr> </table> | ●                | 1 m | 891-8992/206-103 | ● | 1 m | 891-8992/206-105 | ● | 1 m | 891-8992/206-107 |
| ●   | 1 m  | 891-8992/206-103 |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m  | 891-8992/206-105 |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m  | 891-8992/206-107 |     |                  |   |     |                  |   |     |                  |
|   |  |                  |     |                  |   |     |                  |   |     |                  |

### Item numbers overview for other cable lengths

| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| gray        | 891   | - | 8 | 9 | 9 | 2 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 891   | - | 8 | 9 | 9 | 2 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 891   | - | 8 | 9 | 9 | 2 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 2-pole, socket – plug, PVC control line, 2 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8992/016-107  
The 10th position defines the cable cross-section. For example, a 2 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8992/005-105  
The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 891-8992/006-503

# 3 WINSTA® MINI special Sockets and Plugs, 3-Pole

|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A 3</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 16 A 3</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|

**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).



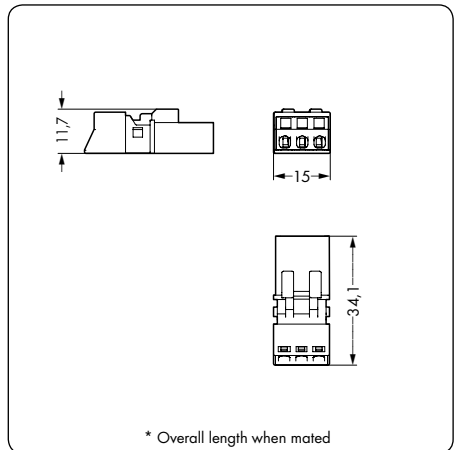
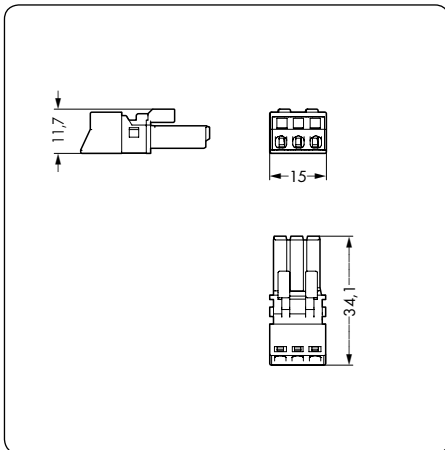
| Description   | Color                                | Item No.         | Pack. Unit | Color                              | Item No.         | Pack. Unit |
|---|--------------------------------------|------------------|------------|------------------------------------|------------------|------------|
| Pluggable connectors, 3-pole, with CAGE CLAMP® S connection | Socket without strain relief housing |                  |            | Plug without strain relief housing |                  |            |
|   | gray                                 | 890-243          | 50         | gray                               | 890-253          | 50         |
|   | gray                                 | 890-243/060-000* | 50         | gray                               | 890-253/060-000* | 50         |
|   | gray                                 | 890-243/062-000* | 50         | gray                               | 890-253/062-000* | 50         |
|   | light green                          | 890-263          | 50         | light green                        | 890-273          | 50         |
|   | light green                          | 890-263/071-000* | 50         | light green                        | 890-273/071-000* | 50         |
|   | light green                          | 890-263/073-000* | 50         | light green                        | 890-273/073 000* | 50         |
|   | pink                                 | 890-283          | 50         | pink                               | 890-293          | 50         |
|   | pink                                 | 890-283/081-000* | 50         | pink                               | 890-293/081-000* | 50         |
|   | pink                                 | 890-283/082-000* | 50         | pink                               | 890-293/082-000* | 50         |
|   | * Pole marking, see page 241.        |                  |            | * Pole marking, see page 241.      |                  |            |

| Item-Specific Accessories  |  |
|--|--|
| <p>Strain relief housing, for 4.5 - 10 mm cable diameter</p> <p>black 890-503 50</p> <p>white 890-513 50</p> | <p>Strain relief housing, for 4.5 - 10 mm cable diameter</p> <p>black 890-503 50</p> <p>white 890-513 50</p> |



| Accessories, 890 Series   |   |
|---|---|
| <p>Locking lever, for “flying leads,” tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p> | <p>Locking lever, for “flying leads,” tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p> |
| <p>Mounting carrier, for 2- to 5-pole “flying leads”</p> <p>black 890-310 100</p> <p>white 890-311 100</p>              | <p>Mounting carrier, for 2- to 5-pole “flying leads”</p> <p>black 890-310 100</p> <p>white 890-311 100</p>              |

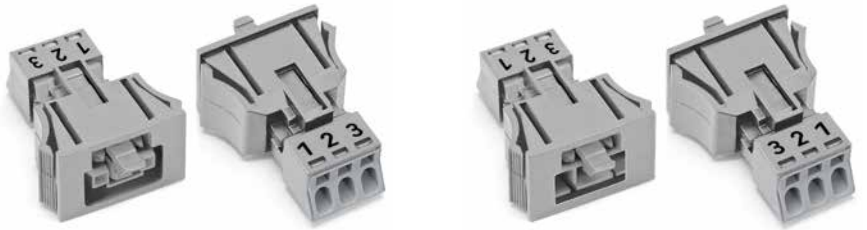
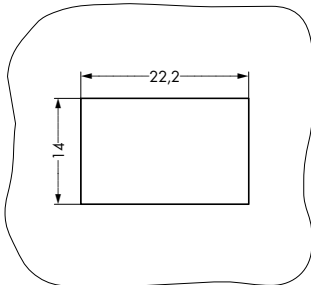
| Info | Dimensions |
|------|------------|
|------|------------|





- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> “s + f-st”  
0.25 – 1 mm<sup>2</sup> “stranded”
  - ② For “International Certification Organizations” and “Approvals - User Guide,” see pages 528 to 531.
  - ③ Full rated current can only be applied to a maximum of 2 poles!  
For 3-pole load I<sub>N</sub> = 13 A!
- Standard printing (without suffix number)
- gray Coding B (1 2 3)
  - light green Coding B (1 2 3)
  - pink Coding B (1 2 3)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.

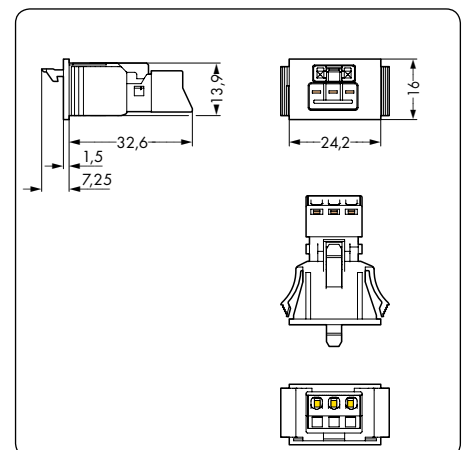
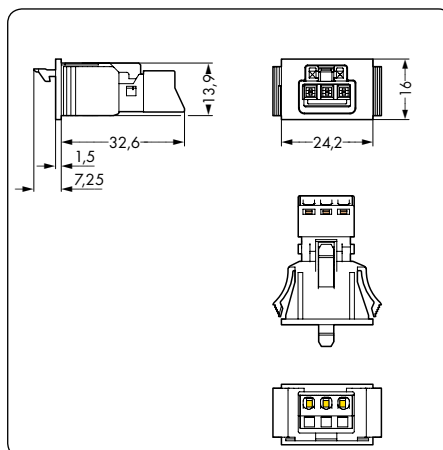


# Snap-In Sockets and Plugs, 3-Pole

|  |   |             |   |             |
|--|---|-------------|---|-------------|
| Cutout dimensions<br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A 3   | AWG 22 – 16 | 0.25 – 1.5 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 16 A 3   | AWG 22 – 16 |
|  |  9 mm / 0.35 in<br>② Approvals |             |  9 mm / 0.35 in<br>② Approvals |             |



| Description  | Color   | Item No.         | Pack. Unit | Color   | Item No.         | Pack. Unit |
|--|---|------------------|------------|---|------------------|------------|
| Pluggable connectors, snap-in device connection, 3-pole, with CAGE CLAMP® S connection | Socket  |                  |            | Plug  |                  |            |
|  | gray  | 890-743          | 50         | gray  | 890-753          | 50         |
|  | gray  | 890-743/060-000* | 50         | gray  | 890-753/060-000* | 50         |
|  | gray  | 890-743/062-000* | 50         | gray  | 890-753/062-000* | 50         |
|  | light green   | 890-763          | 50         | light green   | 890-773          | 50         |
|  | light green   | 890-763/071-000* | 50         | light green   | 890-773/071-000* | 50         |
|  | light green   | 890-763/073-000* | 50         | light green   | 890-773/073 000* | 50         |
|  | pink  | 890-783          | 50         | pink  | 890-793          | 50         |
|  | pink  | 890-783/081-000* | 50         | pink  | 890-793/081-000* | 50         |
|  | pink  | 890-783/082-000* | 50         | pink  | 890-793/082-000* | 50         |
|  | * Pole marking, see page 241.   |                  |            | * Pole marking, see page 241.   |                  |            |
| <b>Item-Specific Accessories</b>   |   |                  |            |   |                  |            |
|  | Operating tool, insulated<br>3-pole<br> 890-393 1                          |                  |            | Operating tool, insulated<br>3-pole<br> 890-393 1                          |                  |            |
| <b>Accessories, 890 Series</b>   |   |                  |            |   |                  |            |
|  | Lockout cap, for cutout, 3-pole<br> black 890-643 100<br>white 890-693 100 |                  |            | Lockout cap, for cutout, 3-pole<br> black 890-643 100<br>white 890-693 100 |                  |            |
| <b>Dimensions</b>  |   |                  |            |   |                  |            |






# 3 WINSTA® MINI special Distribution Connectors, 3-Pole

|  |   |  |
|--|---|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 16 A ②</p> <p>① Approvals</p> |  |
|--|---|--|



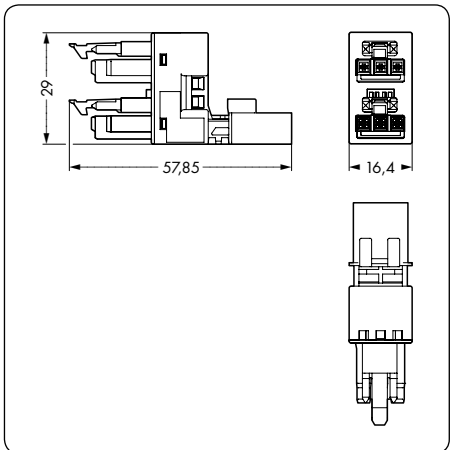
| Description                                | Color  | Item No. | Pack. Unit |
|--|--|----------|------------|
| h-distribution connectors, 3-pole          | h-distribution connector, unidirectional, plug / socket - socket |          |            |
|  | ● gray   | 890-1661 | 50         |
|  | ● light green  | 890-1662 | 50         |
|  | ● pink   | 890-1663 | 50         |
|  | for "flying leads," with 3rd locking lever                       |          |            |
|  | ● gray   | 890-1761 | 50         |
| ● light green                              | 890-1762   | 50       |            |
| ● pink                                     | 890-1763   | 50       |            |
| For additional pole marking, see page 241. |  |          |            |

| Item-Specific Accessories   |         |         |     |
|---|---------|---------|-----|
| Mounting plate, for distribution connectors   |         |         |     |
|  | black   | 890-623 | 100 |
|   | white   | 890-673 | 100 |
| Fixing pin, for mounting plates   |         |         |     |
|  | ③ black | 890-601 | 250 |

| Accessories, 890 Series   |       |         |            |
|---|-------|---------|------------|
| Locking lever, for "flying leads," tool operated                                    |       |         |            |
|  | black | 890-111 | 100 (2x50) |
|   | white | 890-131 | 100 (2x50) |

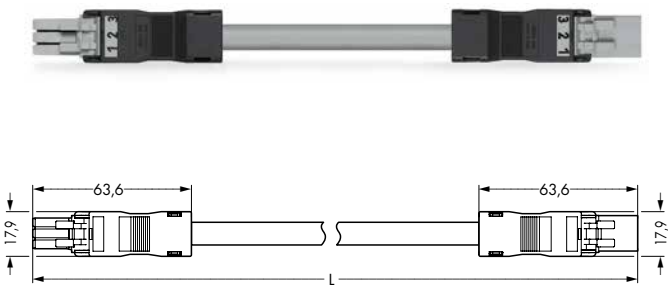
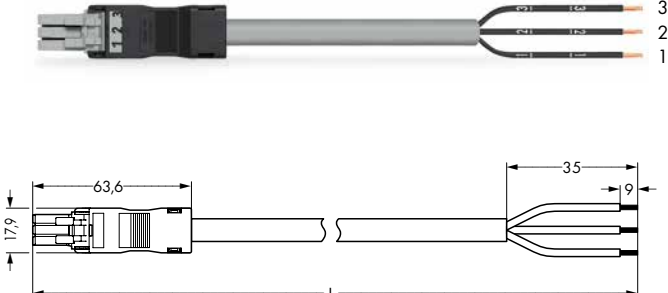
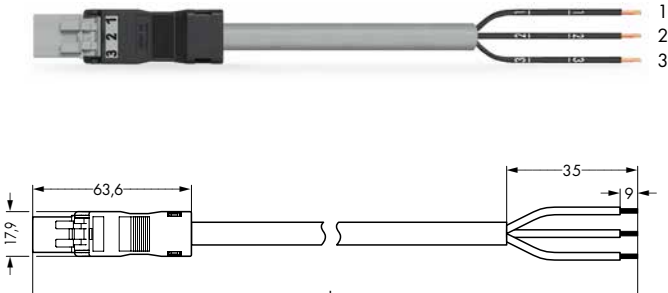






| Info | Dimensions |
|------|------------|
|------|------------|

- ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ② Full rated current can only be applied to a maximum of 2 poles!  
For 3-pole load I<sub>N</sub> = 13 A!
  - ③ 5.0 mm Ø, 0.2 - 1.2 mm plate thickness
- gray Coding B (1 2 3)  
● light green Coding B (1 2 3)  
● pink Coding B (1 2 3)  
For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.







|  |   |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|--|---|------------------|------------|------------------|---|-------------|------------------|---------|-----|------------------|----------|---------|--|---|---------------|--|--|-------|---------|------------|--|-------|---------|------------|---|-------|---------|-----|-------|---------|-----|
|  | <p>PVC Control line: 3 x 1, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| <p>Interconnecting cable, socket – plug</p>  | <p>Color Length Item No.<br/>black</p>  |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|    | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8993/005-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/005-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/005-107</td> </tr> </table> | ●                | 1 m        | 891-8993/005-103 | ● | 1 m         | 891-8993/005-105 | ●       | 1 m | 891-8993/005-107 |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/005-103 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/005-105 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/005-107 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| <p>Connecting cable, socket – free end</p>   | <p>Color Length Item No.<br/>black</p>  |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|   | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8993/105-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/105-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/105-107</td> </tr> </table> | ●                | 1 m        | 891-8993/105-103 | ● | 1 m         | 891-8993/105-105 | ●       | 1 m | 891-8993/105-107 |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/105-103 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/105-105 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/105-107 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| <p>Connecting cable, plug – free end</p>   | <p>Color Length Item No.<br/>black</p>  |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|    | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8993/205-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/205-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/205-107</td> </tr> </table> | ●                | 1 m        | 891-8993/205-103 | ● | 1 m         | 891-8993/205-105 | ●       | 1 m | 891-8993/205-107 |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/205-103 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/205-105 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | 1 m   | 891-8993/205-107 |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| <p>Info</p>  | <p>Accessories</p>  |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| <p>① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② Full rated current can only be applied to a maximum of 2 poles!<br/>For 3-pole load I<sub>N</sub> = 13 A!<br/>For other cables, please contact factory.</p> <table border="1"> <tr> <td>●</td> <td>gray</td> <td>Coding B</td> <td>(1 2 3)</td> </tr> <tr> <td>●</td> <td>light green</td> <td>Coding B</td> <td>(1 2 3)</td> </tr> <tr> <td>●</td> <td>pink</td> <td>Coding B</td> <td>(1 2 3)</td> </tr> </table> <p>For additional pole marking, see page 241.</p> <p>For coding information, see pages 238 to 240.<br/>Fire load data available upon request.</p> | ●   | gray             | Coding B   | (1 2 3)          | ● | light green | Coding B         | (1 2 3) | ●   | pink             | Coding B | (1 2 3) | <p>Locking lever, for "flying leads,"</p> <table border="1"> <tr> <td rowspan="2"></td> <td>tool operated</td> <td></td> <td></td> </tr> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td></td> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> <p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <table border="1"> <tr> <td rowspan="2"></td> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table> |  | tool operated |  |  | black | 890-111 | 100 (2x50) |  | white | 890-131 | 100 (2x50) |  | black | 890-310 | 100 | white | 890-311 | 100 |
| ●  | gray  | Coding B         | (1 2 3)    |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | light green   | Coding B         | (1 2 3)    |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
| ●  | pink  | Coding B         | (1 2 3)    |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|   | tool operated   |                  |            |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|  | black   | 890-111          | 100 (2x50) |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|  | white   | 890-131          | 100 (2x50) |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|   | black   | 890-310          | 100        |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |
|  | white   | 890-311          | 100        |                  |   |             |                  |         |     |                  |          |         |  |   |               |  |  |       |         |            |  |       |         |            |   |       |         |     |       |         |     |

# Cable Assemblies, 3 x 1.5 mm<sup>2</sup>

|   |     |  |   |     |                  |   |     |                  |   |     |                  |
|---|-----|--|---|-----|------------------|---|-----|------------------|---|-----|------------------|
|   |     | <p>PVC Control line: 3 x 1.5, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |   |     |                  |   |     |                  |   |     |                  |
| <b>Interconnecting cable, socket – plug</b> |     | <p>Color Length Item No.<br/>black black</p> <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8993/006-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/006-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/006-107</td> </tr> </table> | ● | 1 m | 891-8993/006-103 | ● | 1 m | 891-8993/006-105 | ● | 1 m | 891-8993/006-107 |
| ●   | 1 m | 891-8993/006-103   |   |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m | 891-8993/006-105   |   |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m | 891-8993/006-107   |   |     |                  |   |     |                  |   |     |                  |
|   |     |  |   |     |                  |   |     |                  |   |     |                  |
| <b>Connecting cable, socket – free end</b>  |     | <p>Color Length Item No.<br/>black black</p> <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8993/106-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/106-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/106-107</td> </tr> </table> | ● | 1 m | 891-8993/106-103 | ● | 1 m | 891-8993/106-105 | ● | 1 m | 891-8993/106-107 |
| ●   | 1 m | 891-8993/106-103   |   |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m | 891-8993/106-105   |   |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m | 891-8993/106-107   |   |     |                  |   |     |                  |   |     |                  |
|   |     |  |   |     |                  |   |     |                  |   |     |                  |
| <b>Connecting cable, plug – free end</b>    |     | <p>Color Length Item No.<br/>black black</p> <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td>●</td> <td>1 m</td> <td>891-8993/206-103</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/206-105</td> </tr> <tr> <td>●</td> <td>1 m</td> <td>891-8993/206-107</td> </tr> </table> | ● | 1 m | 891-8993/206-103 | ● | 1 m | 891-8993/206-105 | ● | 1 m | 891-8993/206-107 |
| ●   | 1 m | 891-8993/206-103   |   |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m | 891-8993/206-105   |   |     |                  |   |     |                  |   |     |                  |
| ●   | 1 m | 891-8993/206-107   |   |     |                  |   |     |                  |   |     |                  |
|   |     |  |   |     |                  |   |     |                  |   |     |                  |

### Item numbers overview for other cable lengths

| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| gray        | 891   | - | 8 | 9 | 9 | 3 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 891   | - | 8 | 9 | 9 | 3 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 891   | - | 8 | 9 | 9 | 3 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 3-pole, socket – plug, PVC control line, 3 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8993/016-107

The 10th position defines the cable cross-section. For example, a 3 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8993/005-105

The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 891-8993/006-503

# 3 WINSTA® MINI special Sockets and Plugs, 4-Pole

|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A 3</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A 3</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|

**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).



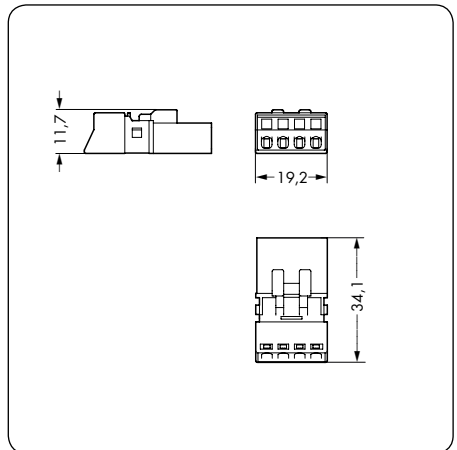
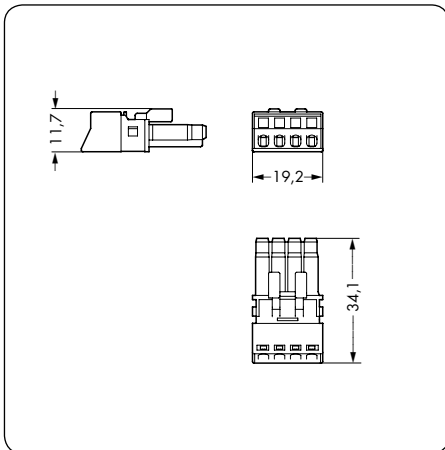
| Description  | Color                                | Item No.         | Pack. Unit | Color                              | Item No.         | Pack. Unit |
|--|--------------------------------------|------------------|------------|------------------------------------|------------------|------------|
| Pluggable connectors, 4-pole, with CAGE CLAMP®S connection | Socket without strain relief housing |                  |            | Plug without strain relief housing |                  |            |
|  | gray                                 | 890-244          | 50         | gray                               | 890-254          | 50         |
|  | gray                                 | 890-244/060-000* | 50         | gray                               | 890-254/060-000* | 50         |
|  | gray                                 | 890-244/062-000* | 50         | gray                               | 890-254/062-000* | 50         |
|  | gray                                 | 890-244/064-000* | 50         | gray                               | 890-254/064-000* | 50         |
|  | light green                          | 890-264          | 50         | light green                        | 890-274          | 50         |
|  | light green                          | 890-264/071-000* | 50         | light green                        | 890-274/071-000* | 50         |
|  | light green                          | 890-264/072-000* | 50         | light green                        | 890-274/072-000* | 50         |
|  | light green                          | 890-264/073-000* | 50         | light green                        | 890-274/073-000* | 50         |
|  | pink                                 | 890-284          | 50         | pink                               | 890-294          | 50         |
|  | pink                                 | 890-284/081-000* | 50         | pink                               | 890-294/081-000* | 50         |
|  | * Pole marking, see page 241.        |                  |            | * Pole marking, see page 241.      |                  |            |

| Item-Specific Accessories |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|
|                           |  |  | <p>Strain relief housing, for 6.5 – 10.5 mm cable diameter</p> <p>black 890-504 50</p> <p>white 890-514 50</p> |  |  |  |
|                           |  |  | <p>Strain relief housing, for 6.5 – 10.5 mm cable diameter</p> <p>black 890-504 50</p> <p>white 890-514 50</p> |  |  |  |

| Accessories, 890 Series |  |  |   |  |  |  |
|-------------------------|--|--|---|--|--|--|
|                         |  |  | <p>Locking lever, for “flying leads,” tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p> |  |  |  |
|                         |  |  | <p>Locking lever, for “flying leads,” tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p> |  |  |  |
|                         |  |  | <p>Mounting carrier, for 2- to 5-pole “flying leads”</p> <p>black 890-310 100</p> <p>white 890-311 100</p>              |  |  |  |
|                         |  |  | <p>Mounting carrier, for 2- to 5-pole “flying leads”</p> <p>black 890-310 100</p> <p>white 890-311 100</p>              |  |  |  |

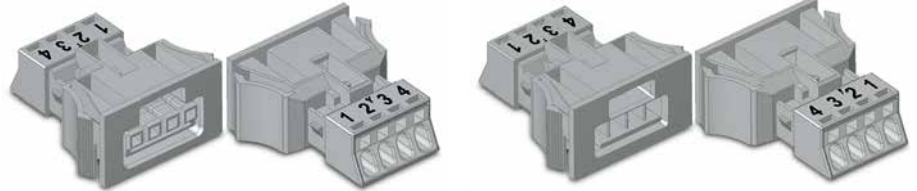
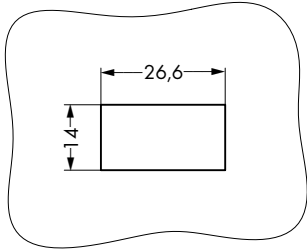
| Info | Dimensions |
|------|------------|
|------|------------|

- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> “s + f-st”  
0.25 – 1 mm<sup>2</sup> “stranded”
  - ② For “International Certification Organizations” and “Approvals – User Guide,” see pages 528 to 531.
  - ③ Full rated current can only be applied to a maximum of 2 poles!  
I<sub>N</sub> = 10 A for 3- and 4-pole load!
- Standard printing (without suffix number)
- gray Coding B (1 2 3 4)
  - light green Coding B (1 2 3 4)
  - pink Coding B (1 2 3 4)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.



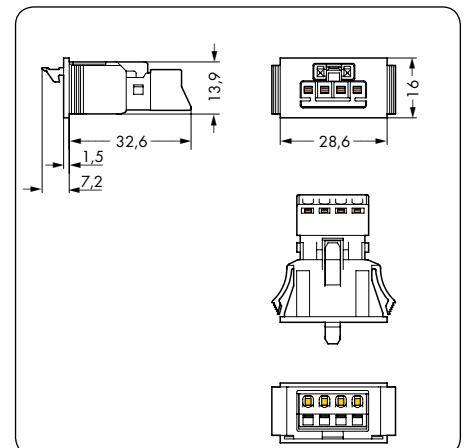
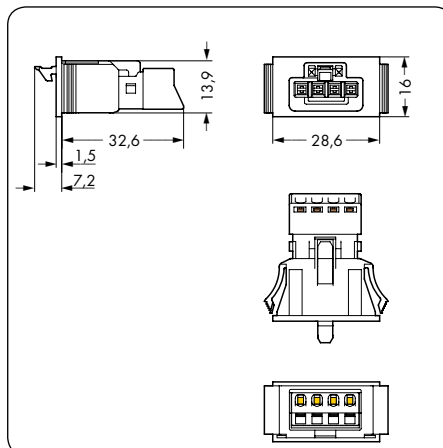
# Snap-In Sockets and Plugs, 4-Pole

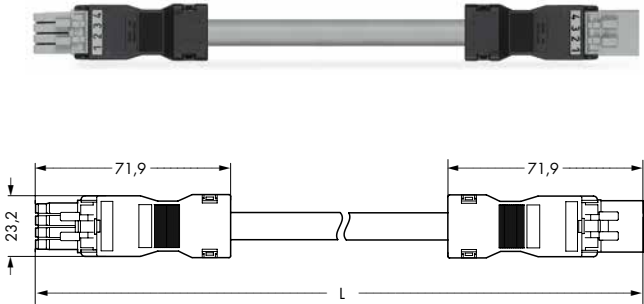
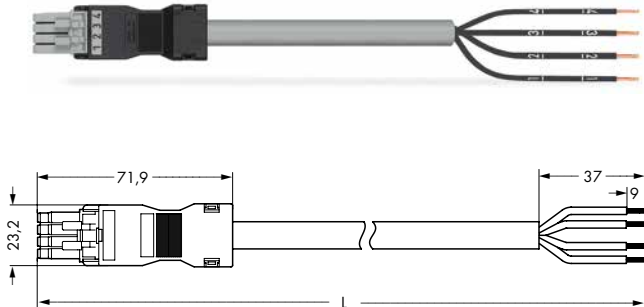
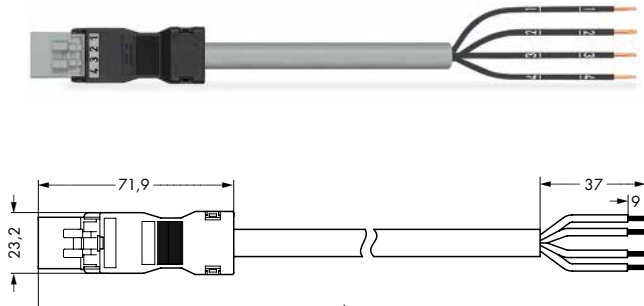
|                             |                              |             |                              |             |
|-----------------------------|------------------------------|-------------|------------------------------|-------------|
| Cutout dimensions           | 0.25 – 1.5 mm <sup>2</sup> ① | AWG 22 – 16 | 0.25 – 1.5 mm <sup>2</sup> ① | AWG 22 – 16 |
|                             | 400 V/6 kV/3                 |             | 400 V/6 kV/3                 |             |
|                             | I <sub>N</sub> 16 A 3        |             | I <sub>N</sub> 16 A 3        |             |
| Plate thickness: 0.5 – 2 mm | 9 mm / 0.35 in               |             | 9 mm / 0.35 in               |             |
| Cutout tolerance: + 0.1 mm  | ② Approvals                  |             | ② Approvals                  |             |




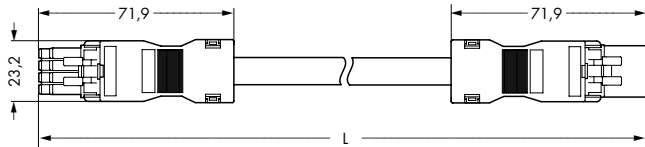

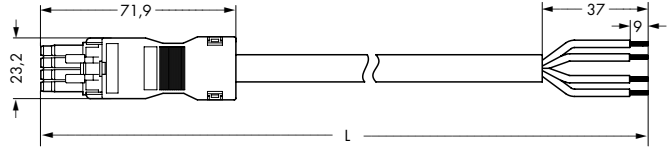

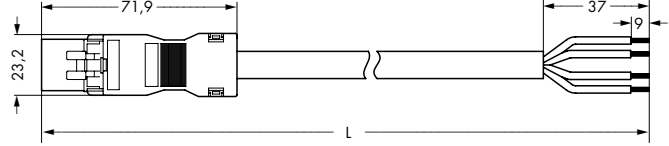
| Description  | Color       | Item No.                      | Pack. Unit | Color       | Item No.                      | Pack. Unit |
|--|-------------|-------------------------------|------------|-------------|-------------------------------|------------|
| Pluggable connectors, snap-in device connection, 4-pole, with CAGE CLAMP® S connection | Socket      |                               |            | Plug        |                               |            |
|  | gray        | 890-744                       | 50         | gray        | 890-754                       | 50         |
|  | gray        | 890-744/060-000*              | 50         | gray        | 890-754/060-000*              | 50         |
|  | gray        | 890-744/062-000*              | 50         | gray        | 890-754/062-000*              | 50         |
|  | gray        | 890-744/064-000*              | 50         | gray        | 890-754/064-000*              | 50         |
|  | light green | 890-764                       | 50         | light green | 890-774                       | 50         |
|  | light green | 890-764/071-000*              | 50         | light green | 890-774/071-000*              | 50         |
|  | light green | 890-764/072-000*              | 50         | light green | 890-774/072-000*              | 50         |
|  | light green | 890-764/073-000*              | 50         | light green | 890-774/073-000*              | 50         |
|  | pink        | 890-784                       | 50         | pink        | 890-794                       | 50         |
|  | pink        | 890-784/081-000*              | 50         | pink        | 890-794/081-000*              | 50         |
|  |             | * Pole marking, see page 241. |            |             | * Pole marking, see page 241. |            |

## Dimensions



|  |  |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|--|--|------------------|------------|------------------|--|-------------|------------------|-----------|-----|------------------|----------|-----------|---|--|---------------|--|--|--|-------|---------|------------|--|-------|---------|------------|--|--|--|--|--|-------|---------|-----|--|-------|---------|-----|
|  | <p>PVC Control line: 4 x 1, gray</p> <p>400 V/6 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
| <p>Interconnecting cable, socket – plug</p>  | <p>Color Length Item No.<br/>black</p>   |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|    | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td></td> <td>1 m</td> <td>891-8994/005-103</td> </tr> <tr> <td></td> <td>1 m</td> <td>891-8994/005-105</td> </tr> <tr> <td></td> <td>1 m</td> <td>891-8994/005-107</td> </tr> </table> |                  | 1 m        | 891-8994/005-103 |  | 1 m         | 891-8994/005-105 |           | 1 m | 891-8994/005-107 |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/005-103 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/005-105 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/005-107 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
| <p>Connecting cable, socket – free end</p>   | <p>Color Length Item No.<br/>black</p>   |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|   | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td></td> <td>1 m</td> <td>891-8994/105-103</td> </tr> <tr> <td></td> <td>1 m</td> <td>891-8994/105-105</td> </tr> <tr> <td></td> <td>1 m</td> <td>891-8994/105-107</td> </tr> </table> |                  | 1 m        | 891-8994/105-103 |  | 1 m         | 891-8994/105-105 |           | 1 m | 891-8994/105-107 |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/105-103 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/105-105 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/105-107 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
| <p>Connecting cable, plug – free end</p>   | <p>Color Length Item No.<br/>black</p>   |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|    | <p>Coding B</p> <p>PVC</p> <table border="1"> <tr> <td></td> <td>1 m</td> <td>891-8994/205-103</td> </tr> <tr> <td></td> <td>1 m</td> <td>891-8994/205-105</td> </tr> <tr> <td></td> <td>1 m</td> <td>891-8994/205-107</td> </tr> </table> |                  | 1 m        | 891-8994/205-103 |  | 1 m         | 891-8994/205-105 |           | 1 m | 891-8994/205-107 |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/205-103 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/205-105 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | 1 m  | 891-8994/205-107 |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
| <p>Info</p>  | <p>Accessories</p>   |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
| <p>① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② Full rated current can only be applied to a maximum of 2 poles!<br/>I<sub>N</sub> = 10 A for 3- and 4-pole load!<br/>For other cables, please contact factory.</p> <table border="1"> <tr> <td></td> <td>gray</td> <td>Coding B</td> <td>(1 2 3 4)</td> </tr> <tr> <td></td> <td>light green</td> <td>Coding B</td> <td>(1 2 3 4)</td> </tr> <tr> <td></td> <td>pink</td> <td>Coding B</td> <td>(1 2 3 4)</td> </tr> </table> <p>For additional pole marking, see page 241.</p> <p>For coding information, see pages 238 to 240.<br/>Fire load data available upon request.</p> |  | gray             | Coding B   | (1 2 3 4)        |  | light green | Coding B         | (1 2 3 4) |     | pink             | Coding B | (1 2 3 4) | <p>Locking lever, for "flying leads,"</p> <table border="1"> <tr> <td></td> <td>tool operated</td> <td></td> <td></td> </tr> <tr> <td></td> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td></td> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> <p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td></td> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table> |  | tool operated |  |  |  | black | 890-111 | 100 (2x50) |  | white | 890-131 | 100 (2x50) |  |  |  |  |  | black | 890-310 | 100 |  | white | 890-311 | 100 |
|  | gray   | Coding B         | (1 2 3 4)  |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | light green  | Coding B         | (1 2 3 4)  |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | pink   | Coding B         | (1 2 3 4)  |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | tool operated  |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | black  | 890-111          | 100 (2x50) |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | white  | 890-131          | 100 (2x50) |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  |  |                  |            |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | black  | 890-310          | 100        |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |
|  | white  | 890-311          | 100        |                  |  |             |                  |           |     |                  |          |           |   |  |               |  |  |  |       |         |            |  |       |         |            |  |  |  |  |  |       |         |     |  |       |         |     |

# Cable Assemblies, 4 x 1.5 mm<sup>2</sup>

|   |  |                                    |                             |                   |
|---|--|------------------------------------|-----------------------------|-------------------|
|   |  | PVC                                | Control line: 4 x 1.5, gray |                   |
|   |  | 400 V/6 kV/3 I <sub>N</sub> 16 A ② |                             |                   |
|   |  | Conductor ends, bonded: 9 mm       |                             |                   |
|   |  | ① Approvals                        |                             |                   |
| <b>Interconnecting cable, socket – plug</b>   |  | Color                              | Length                      | Item No.<br>black |
|    |  | <b>Coding B</b>                    |                             |                   |
|    |  | PVC                                |                             |                   |
|   |  | ●                                  | 1 m                         | 891-8994/006-103  |
|   |  | ●                                  | 1 m                         | 891-8994/006-105  |
|   |  | ●                                  | 1 m                         | 891-8994/006-107  |
| <b>Connecting cable, socket – free end</b>  |  | Color                              | Length                      | Item No.<br>black |
|   |  | <b>Coding B</b>                    |                             |                   |
|  |  | PVC                                |                             |                   |
|   |  | ●                                  | 1 m                         | 891-8994/106-103  |
|   |  | ●                                  | 1 m                         | 891-8994/106-105  |
|   |  | ●                                  | 1 m                         | 891-8994/106-107  |
| <b>Connecting cable, plug – free end</b>  |  | Color                              | Length                      | Item No.<br>black |
|  |  | <b>Coding B</b>                    |                             |                   |
|  |  | PVC                                |                             |                   |
|   |  | ●                                  | 1 m                         | 891-8994/206-103  |
|   |  | ●                                  | 1 m                         | 891-8994/206-105  |
|   |  | ●                                  | 1 m                         | 891-8994/206-107  |

### Item numbers overview for other cable lengths



|             |       |   |   |   |   |   |   |   |   |    |   |    |    |    |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
| gray        | 891   | - | 8 | 9 | 9 | 4 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 891   | - | 8 | 9 | 9 | 4 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 891   | - | 8 | 9 | 9 | 4 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 4-pole, socket – plug, PVC control line, 4 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8994/016-107

The 10th position defines the cable cross-section. For example, a 2 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8994/005-105





















The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 891-8994/006-503




|   |                    |   |                    |
|---|--------------------|---|--------------------|
| <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A ③</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> | <p>0.25 – 1.5 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 16 A ③</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 22 – 16</p> |
|---|--------------------|---|--------------------|

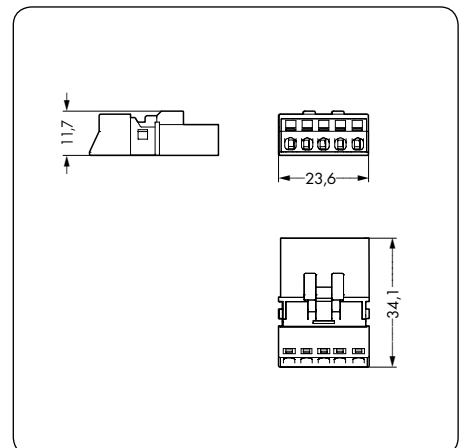
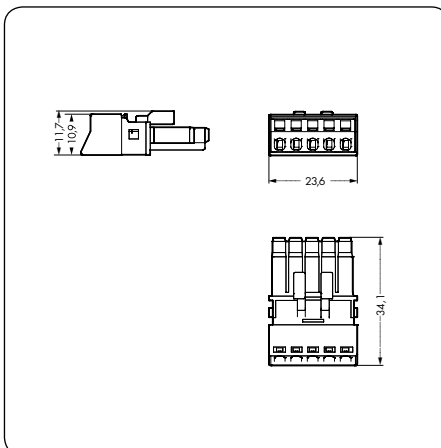
**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).





| Description   | Color   | Item No.                     | Pack. Unit       | Color   | Item No.  | Pack. Unit       |              |
|---|---|------------------------------|------------------|---|---|------------------|--------------|
| <b>Connectors, 5-pole, with CAGE CLAMP® S connection</b>                            | <b>Socket</b>   |                              |                  | <b>Plug</b>   |   |                  |              |
|   |    | gray                         | 890-245          | 50  |    | 890-255          | 50           |
|   |    | gray                         | 890-245/060-000* | 50  |    | 890-255/060-000* | 50           |
|   |    | gray                         | 890-245/062-000* | 50  |    | 890-255/062-000* | 50           |
|   |    | light green                  | 890-265          | 50  |    | 890-275          | 50           |
|   |    | light green                  | 890-265/073-000* | 50  |    | 890-275/073-000* | 50           |
|   |   | pink                         | 890-285          | 50  |   | 890-295          | 50           |
|   |  | pink                         | 890-285/080-000* | 50  |  | 890-295/080-000* | 50           |
|   |  | pink                         | 890-285/082-000* | 50  |  | 890-295/082-000* | 50           |
|   |   | *Pole marking, see page 241. |                  |   | *Pole marking, see page 241.  |                  |              |
| <b>Accessories, 890 Series</b>  |   |                              |                  |   |   |                  |              |
|   | <b>Locking lever, for “flying leads,”</b><br>tool operated                          |                              |                  | <b>Locking lever, for “flying leads,”</b><br>tool operated                            |   |                  |              |
|  | black   | 890-111                      | 100 (2 x 50)     |  | black   | 890-111          | 100 (2 x 50) |
|   | white   | 890-131                      | 100 (2 x 50)     |   | white   | 890-131          | 100 (2 x 50) |
|   | <b>Mounting carrier, for 2- to 5-pole “flying leads”</b>                            |                              |                  | <b>Mounting carrier, for 2- to 5-pole “flying leads”</b>                              |   |                  |              |
|  | black   | 890-310                      | 100              |  | black   | 890-310          | 100          |
|   | white   | 890-311                      | 100              |   | white   | 890-311          | 100          |
| <b>Info</b>   | <b>Dimensions</b>   |                              |                  |   |   |                  |              |

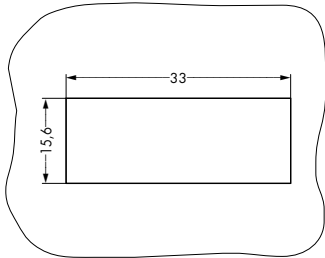
- ① Conductor sizes: 0.25 – 1.5 mm<sup>2</sup> “s + f-st”  
0.25 – 1 mm<sup>2</sup> “stranded”
  - ② For “International Certification Organizations” and “Approvals – User Guide,” see pages 528 to 531.
  - ③ Full rated current can only be applied to a maximum of 3 poles!  
For 4- and 5-pole load I<sub>N</sub> = 13 A!
- Standard printing (without suffix number)
-  gray Coding B (1 2 3 4 5)
  -  light green Coding B (1 2 3 4 5)
  -  pink Coding B (1 2 3 4 5)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





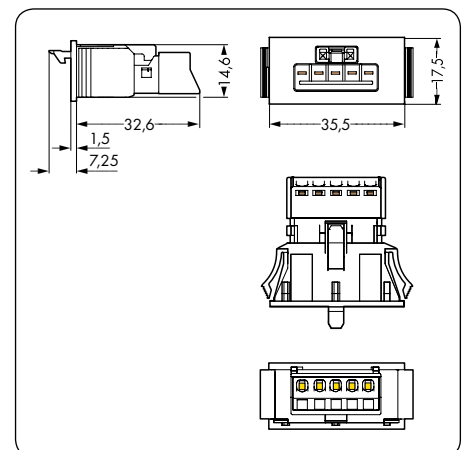
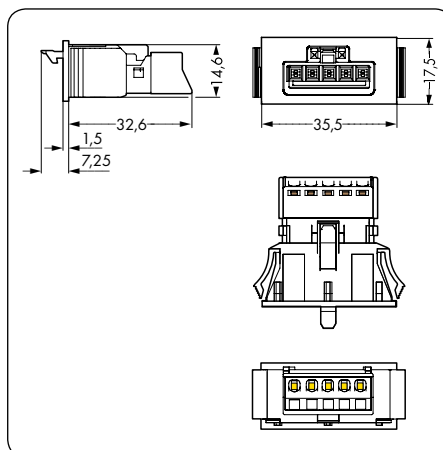


# Snap-In Sockets and Plugs, 5-Pole

|   |   |             |   |             |
|---|---|-------------|---|-------------|
| Cutout dimensions<br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: +0.1 mm | 0.25 – 1.5 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 16 A ③   | AWG 22 – 16 | 0.25 – 1.5 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 16 A ③   | AWG 22 – 16 |
|   |  9 mm / 0.35 in<br>② Approvals |             |  9 mm / 0.35 in<br>② Approvals |             |



| Description   | Color  | Item No.                      | Pack. Unit | Color  | Item No.                      | Pack. Unit |
|---|--|-------------------------------|------------|--|-------------------------------|------------|
| <b>Snap-in device connectors, 5-pole, with CAGE CLAMP® S connection</b> | <b>Socket</b>  |                               |            | <b>Plug</b>  |                               |            |
|   | gray   | 890-745                       | 50         | gray   | 890-755                       | 50         |
|   | gray   | 890-745/060-000*              | 50         | gray   | 890-755/060-000*              | 50         |
|   | gray   | 890-745/062-000*              | 50         | gray   | 890-755/062-000*              | 50         |
|   | light green  | 890-765                       | 50         | light green  | 890-775                       | 50         |
|   | light green  | 890-765/073-000*              | 50         | light green  | 890-775/073-000*              | 50         |
|   | pink   | 890-785                       | 50         | pink   | 890-795                       | 50         |
|   | pink   | 890-785/080-000*              | 50         | pink   | 890-795/080-000*              | 50         |
|   | pink   | 890-785/082-000*              | 50         | pink   | 890-795/082-000*              | 50         |
|   |  | * Pole marking, see page 241. |            |  | * Pole marking, see page 241. |            |
| <b>Accessories, 890 Series</b>  |  |                               |            |  |                               |            |
|   | <b>Lockout cap, for cutout, 5-pole</b><br> black 770-643 100<br>white 770-693 100 |                               |            | <b>Lockout cap, for cutout, 5-pole</b><br> black 770-643 100<br>white 770-693 100 |                               |            |
| <b>Dimensions</b>   |  |                               |            |  |                               |            |





linect

- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with other systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards (IEC 61535) does not guarantee hazard-avoiding, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.
- WINSTA® MIDI connectors are not suitable for easy-to-reach areas, except IP 2XD compliant specialty products (see pages 155 to 157).



#### 770 Series

|                             |          |
|-----------------------------|----------|
| Linect® T-Connector, 2-Pole | 116, 122 |
| Linect® T-Connector, 3-Pole | 116, 140 |
| Linect® T-Connector, 4-Pole | 117, 166 |
| Linect® T-Connector, 5-Pole | 117, 180 |



#### 770 Series

|                              |                      |
|------------------------------|----------------------|
| Pluggable Connectors, 2-Pole | 118 - 119            |
| Pluggable Connectors, 3-Pole | 130 - 131, 136 - 137 |
| Pluggable Connectors, 4-Pole | 158 - 159            |
| Pluggable Connectors, 5-Pole | 170 - 173            |



#### 770 Series

|                                |           |
|--------------------------------|-----------|
| Strain Relief Housings, 2-Pole | 120       |
| Strain Relief Housings, 3-pole | 132 - 133 |
| Strain Relief Housings, 4-Pole | 160       |
| Strain Relief Housings, 5-pole | 174 - 175 |
| Strain Relief Housings, 6-Pole | 194       |
| Strain Relief Housings, 7-Pole | 195       |



#### 770 Series

|                                   |           |
|-----------------------------------|-----------|
| Snap-In Device Connectors, 2-Pole | 121       |
| Snap-In Device Connectors, 3-Pole | 134 - 135 |
| Snap-In Device Connectors, 4-Pole | 162 - 163 |
| Snap-In Device Connectors, 5-Pole | 176 - 177 |



#### 770 Series

|                        |           |
|------------------------|-----------|
| PCB Connectors, 3-Pole | 138 - 139 |
| PCB Connectors, 4-Pole | 164 - 165 |
| PCB Connectors, 5-Pole | 178 - 179 |



#### 770 Series

|   |           |
|---|-----------|
| Distribution Connectors, 2-Pole                             | 123       |
| Intermediate Couplers and T-Distribution Connectors, 3-Pole | 140 - 144 |
| Distribution Connectors, 4-Pole                             | 166 - 167 |
| Intermediate Couplers and T-Distribution Connectors, 5-Pole | 180 - 184 |
| Distribution Box  | 194 - 195 |



#### 771 Series

|                          |           |
|--------------------------|-----------|
| Cable Assemblies, 2-Pole | 124 - 129 |
| Cable Assemblies, 3-Pole | 146 - 153 |
| Cable Assemblies, 4-Pole | 168       |
| Cable Assemblies, 5-Pole | 185 - 193 |



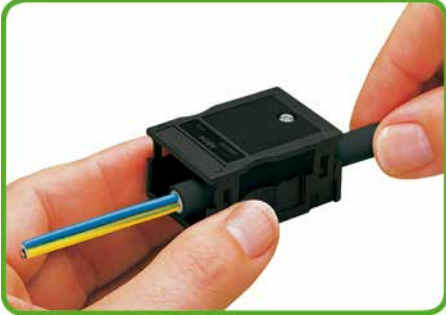
#### 770/771 Series

|  |           |
|--|-----------|
| Strain Relief Housings, IP 2XD, 3-Pole | 155       |
| Cable Assemblies, IP 2XD, 3-Pole       | 156 - 157 |

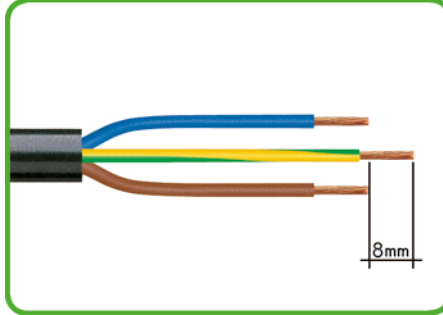
# 3 Handling WINSTA® MIDI, 770 Series

114

## Preparation

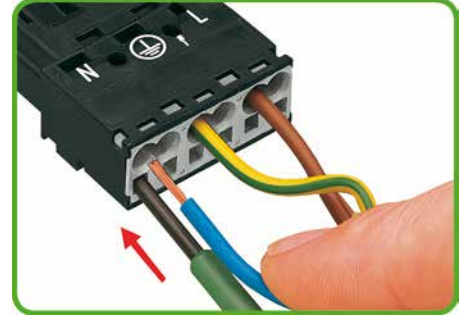


We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



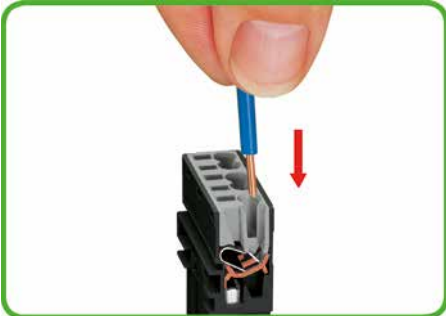
1. Strip length, outer insulation = x mm ❶
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

## Conductor termination with CAGE CLAMP® S

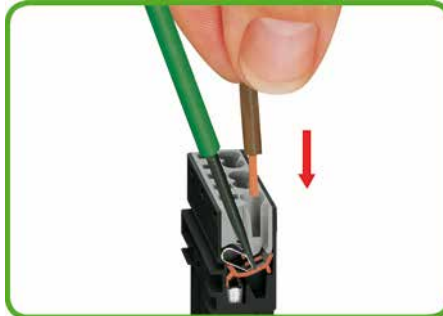


To terminate fine-stranded conductors, open clamping unit via 2.5mm screwdriver and insert stripped conductor until it hits backstop.

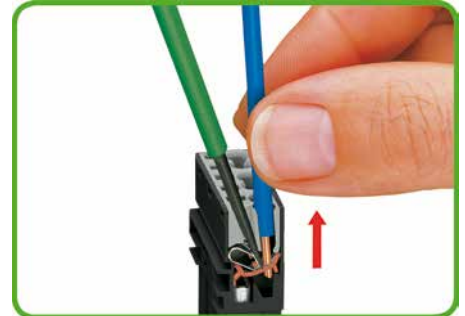
## Conductor termination with CAGE CLAMP® S



Insert stripped solid conductor until it hits backstop.



To terminate fine-stranded conductors, open clamping unit via 2.5mm screwdriver and insert stripped conductor until it hits backstop.



To remove the conductor, actuate the clamp via 2.5mm screwdriver and pull out the conductor.

## Strain relief installation



Latch the strain relief housing on the plug/socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw using a 2.5 mm screwdriver.

## Variable coding



Cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

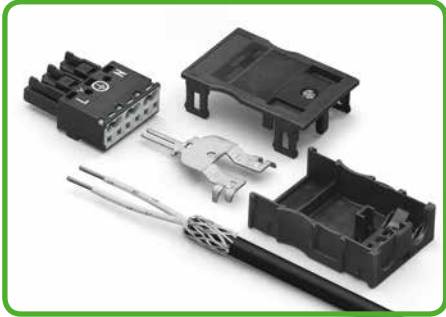
## Marking



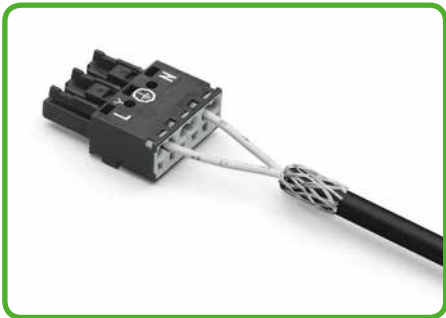
Marking strain relief housing via WSB quick marking system.

❶ Strip length, outer insulation: 2-pole = 35mm, 3- to 5-pole = 55mm

**Shield termination**



Connector with shield termination



Apply the shield to the rubber cable.  
Strip length, outer insulation = 55 mm  
Shield length = 10 mm



Push the shield connecting plate into the connector until fully inserted.

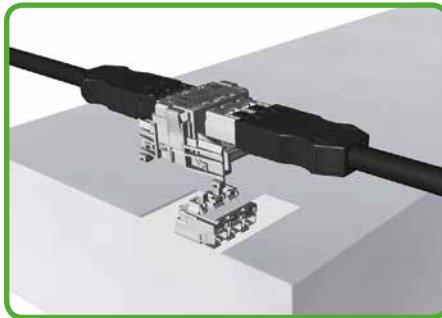


First insert the wired connector into the strain relief housing, then snap the cover and tighten the screw.

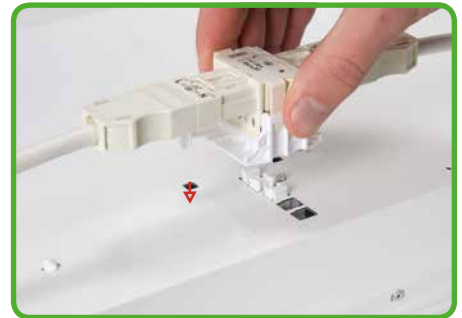


**the light connection system**

**Three easy steps to error-free connections:**

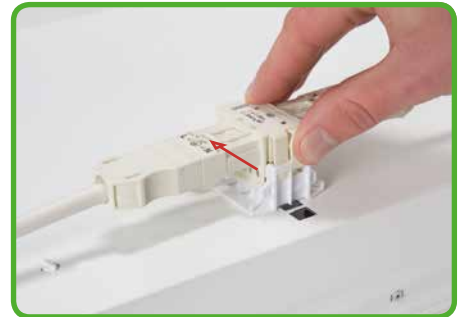
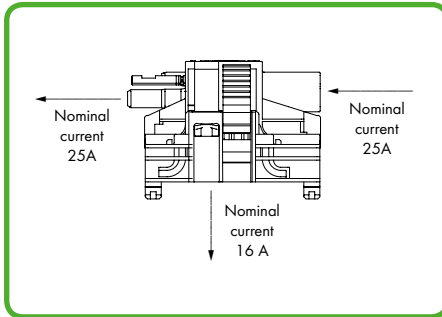


Connecting a T-connector to a 294 Series lighting connector.

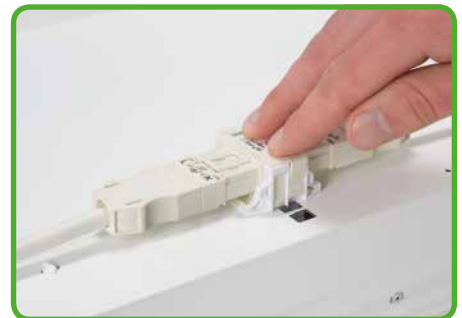


Align the T-connector with the square cutouts.

**Nominal current**

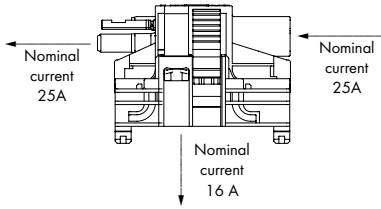


Move the T-connector towards the square cutouts until it is locked in position.








Push down until fully engaged - done!

|  |  |  |
|--|--|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p> |
|--|--|--|

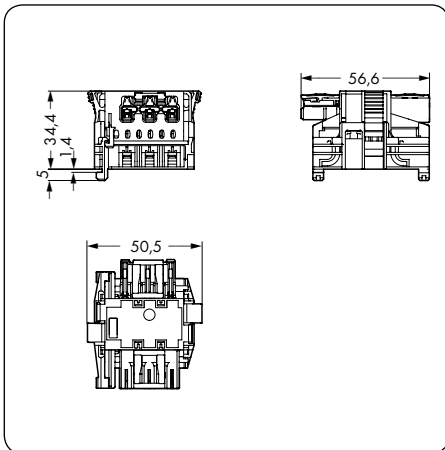
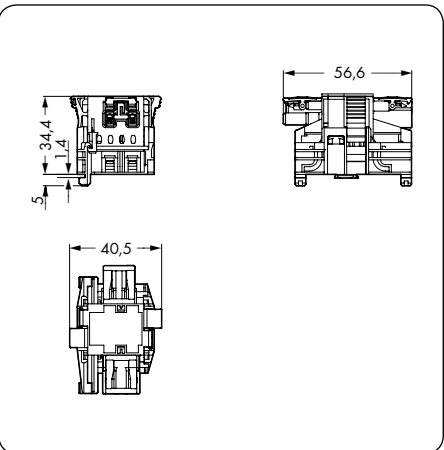


① Nominal current

| Description                              | Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|--|----------|------------|--|----------|------------|
| <b>Linect® T-connector</b>               | Linect® T-connector, 2-pole, socket - plug, white housing, dark gray cover |          |            | linect® T-connector, 3-pole, socket - plug, white housing, white cover |          |            |
|  | for DALI applications  |          |            |  |          |            |
|  | ● blue   | 770-7102 | 25         | ○ white  | 770-6223 | 25         |
|  | Suitable for 294-8032 lighting connector                                   |          |            | Suitable for 294-8013 and 294-8113 lighting connectors                 |          |            |
| for emergency power                      |  |          |            |  |          |            |
| ● dark gray                              | 770-7502   | 25       |            |  |          |            |
| Suitable for 294-8022 lighting connector |  |          |            |  |          |            |

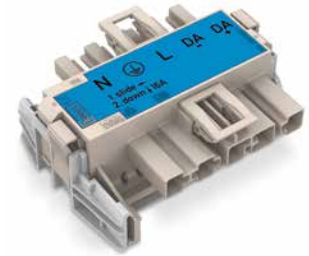
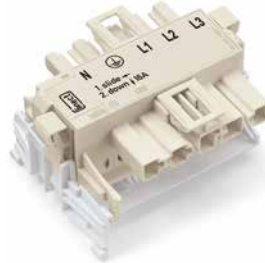
| Item-Specific Accessories |  |  |   |                    |   |                    |
|---------------------------|--|--|---|--------------------|---|--------------------|
|                           |  |  | <b>Lockout cap</b> , for socket, separable, 12-pole                                 |                    | <b>Lockout cap</b> , for socket, separable, 12-pole                                   |                    |
|                           |  |  |  | black 770-201 100  |  | black 770-201 100  |
|                           |  |  |   | white 770-221 100  |   | white 770-221 100  |
|                           |  |  | <b>Lockout cap</b> , for plug, separable, 5-pole                                    |                    | <b>Lockout cap</b> , for plug, separable, 5-pole                                      |                    |
|                           |  |  |  | yellow 770-360 100 |  | yellow 770-360 100 |
|                           |  |  |   |                    | <b>Coding pin</b> , for plug (A and B coding)   |                    |
|                           |  |  |   |                    |  | gray 770-401 100   |
| <b>Info</b>               |  |  |   |                    |   |                    |
| <b>Dimensions</b>         |  |  |   |                    |   |                    |

- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
- 2-pole
    - blue Coding I (DA- DA+)
    - dark gray Coding L (L' N')
  - 3-pole
    - white Coding A (L ⊕ N)
  - 4-pole
    - white Coding A (N 3 2/L 1/L')
  - 5-pole
    - white Coding A (N 3 L1 L2 L3)
    - blue Coding I (N ⊕ L DA- DA+)
    - dark gray Coding L (N 3 L N' L')
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





|  |  |  |
|--|--|--|
| 400 V/6 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals |
|--|--|--|

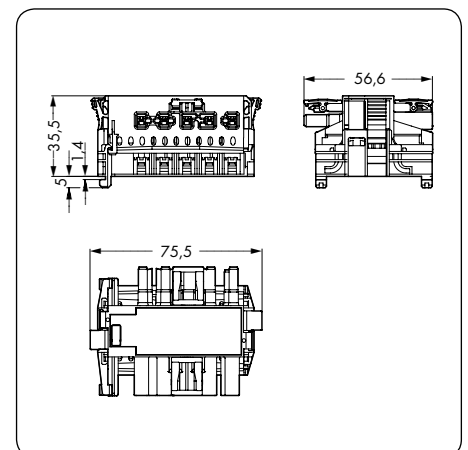
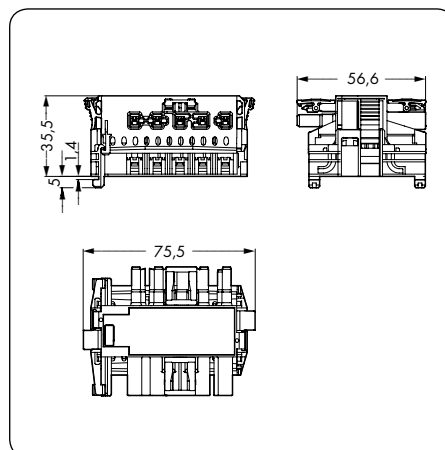
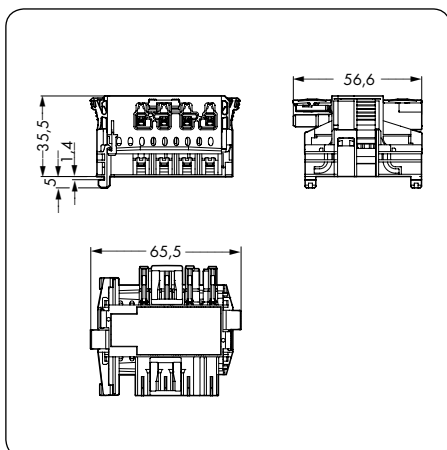


| Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|--|----------|------------|
| Linect® T-connector, 4-pole, socket - plug, white housing, white cover |          |            | Linect® T-connector, 5-pole, socket - plug, white housing |          |            | Linect® T-connector, 5-pole, socket - plug, white housing  |          |            |
| ○ white  | 770-6224 | 25         | ○ white   | 770-6225 | 25         | ● blue   | 770-7105 | 20         |
| Suitable for 294-8024 and 294-8124 lighting connectors                 |          |            | Suitable for 294-8015 and 294-8115 lighting connectors    |          |            | for DALI applications<br>Suitable for 294-8035 and 294-8135 lighting connectors                          |          |            |
|  |          |            |   |          |            | for emergency power<br>● dark gray 770-7505 20<br>Suitable for 294-8025 and 294-8125 lighting connectors |          |            |

### Item-Specific Accessories

|   |   |   |
|---|---|---|
| <b>Lockout cap, for socket, separable, 12-pole</b><br><br>black 770-201 100<br>white 770-221 100 | <b>Lockout cap, for socket, separable, 12-pole</b><br><br>black 770-201 100<br>white 770-221 100 | <b>Lockout cap, for socket, separable, 12-pole</b><br><br>black 770-201 100<br>white 770-221 100 |
| <b>Lockout cap, for plug, separable, 5-pole</b><br><br>yellow 770-360 100                        | <b>Lockout cap, for plug, separable, 5-pole</b><br><br>yellow 770-360 100                        | <b>Lockout cap, for plug, separable, 5-pole</b><br><br>yellow 770-360 100                        |
| <b>Coding pin, for plug (A and B coding)</b><br><br>gray 770-401 100                             |   |   |

### Dimensions







# 3 WINSTA® MIDI



## Sockets and Plugs, 2-Pole



118

|  |  |
|--|--|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ❶   2 x AWG 20 – 12<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>❷ Approvals</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ❶   2 x AWG 20 – 12<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>❷ Approvals</p> |
|--|--|



| Description  | Color  | Item No.        | Pack. Unit | Color  | Item No.        | Pack. Unit |
|--|--|-----------------|------------|--|-----------------|------------|
| Pluggable connectors, 2-pole, with CAGE CLAMP®S connection | Socket with strain relief housing, for 1 cable, 7 - 10.5 mm diameter ❸ |                 |            | Plug with strain relief housing, for 1 cable, 7 - 10.5 mm diameter ❸ |                 |            |
|  | ● black  | 770-102/041-000 | 25         | ● black  | 770-112/041-000 | 25         |
|  | ○ white  | 770-122/041-000 | 25         | ○ white  | 770-132/041-000 | 25         |

| Item-Specific Accessories |  |  |   |                   |   |                    |
|---------------------------|--|--|---|-------------------|---|--------------------|
|                           |  |  | Lockout cap, for socket, separable, 12-pole   |                   | Lockout cap, for plug, separable, 5-pole  |                    |
|                           |  |  |  | black 770-201 100 |  | yellow 770-360 100 |
|                           |  |  | white 770-221 100   |                   |   |                    |

| Accessories, 770 Series |  |  |   |                          |   |                          |
|-------------------------|--|--|---|--------------------------|---|--------------------------|
|                         |  |  | Locking lever, for "flying leads," manually operated                                |                          | Locking lever, for "flying leads," tool operated                                      |                          |
|                         |  |  |  | black 770-101 100 (4x25) |  | black 770-111 100 (4x25) |
|                         |  |  | white 770-121 100 (4x25)  | white 770-131 100 (4x25) |   |                          |

| Info | Dimensions |
|------|------------|
|------|------------|

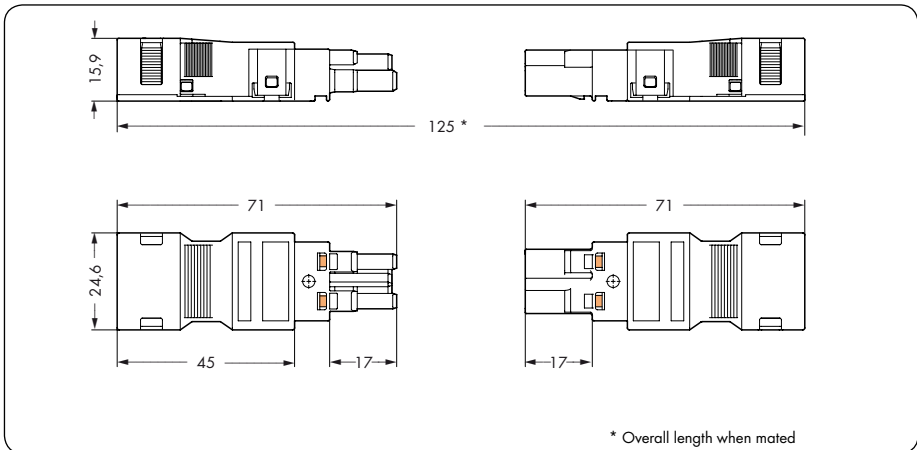
❶ Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"

❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

❸ For more strain relief housings, see page 118.

|             |          |           |
|-------------|----------|-----------|
| ● black     | Coding A | (L N)     |
| ○ white     | Coding A | (L N)     |
| ● blue      | Coding I | (DA+ DA-) |
| ● dark gray | Coding L | (L' N')   |

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|  |                        |  |                        |
|--|------------------------|--|------------------------|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> |
|--|------------------------|--|------------------------|



**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

| Color                                       | Item No. | Pack. Unit | Color                                     | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| <b>Socket without strain relief housing</b> |          |            | <b>Plug without strain relief housing</b> |          |            |
| ● black                                     | 770-202  | 100        | ● black                                   | 770-212  | 100        |
| ○ white                                     | 770-222  | 100        | ○ white                                   | 770-232  | 100        |
| ● blue                                      | 770-1102 | 100        | ● blue                                    | 770-1112 | 100        |
| ● dark gray                                 | 770-1162 | 100        | ● dark gray                               | 770-1172 | 100        |



Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)

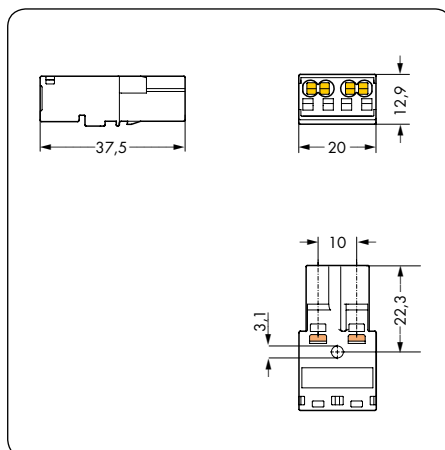
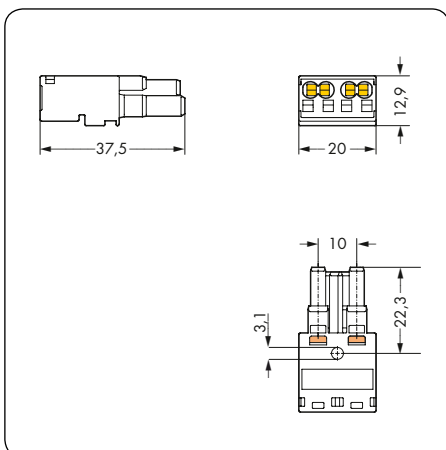
| Item-Specific Accessories                          |  |   |
|--|--|---|
| <b>Lockout cap, for socket, separable, 12-pole</b> |  | <b>Lockout cap, for plug, separable, 5-pole</b> |
|  | black 770-201 100<br>white 770-221 100 |   |
|  |  | yellow 770-360 100                              |

| Accessories, 770 Series                                     |  |   |
|---|--|---|
| <b>Locking lever, for "flying leads," manually operated</b> |  | <b>Locking lever, for "flying leads," tool operated</b> |
|   | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) | black 770-111 100 (4x25)<br>white 770-131 100 (4x25)    |



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

**Dimensions**





Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

## Strain Relief Housings, 2-Pole, for Different Cable Diameters

|  |  |  |
|--|--|--|
|  | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 2-pole sockets</li> <li>- 2-pole plugs</li> </ul> <p><b>1 Approvals</b></p> | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 2-pole sockets</li> <li>- 2-pole plugs</li> </ul> <p><b>1 Approvals</b></p> |
|--|--|--|



| Description            | Color  | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit |
|------------------------|--|-----------------|------------|---|-----------------|------------|
| Strain relief housings | Strain relief housing, for 1 cable, 5 - 9 mm diameter <b>2</b> |                 |            | Strain relief housing, for 1 cable, 7 - 10.5 mm diameter <b>2</b> |                 |            |
|                        | black  | 770-502/042-000 | 50         | black   | 770-502/041-000 | 50         |
|                        | white  | 770-512/042-000 | 50         | white   | 770-512/041-000 | 50         |
|                        |  |                 |            |   |                 |            |

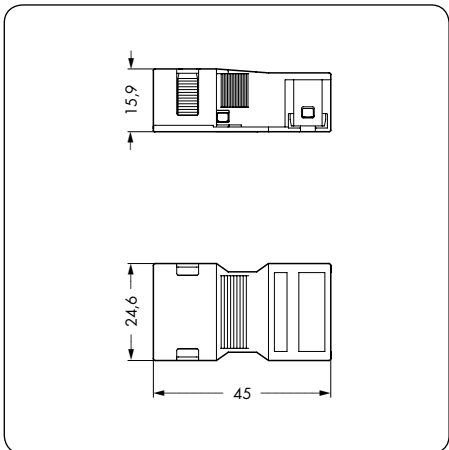
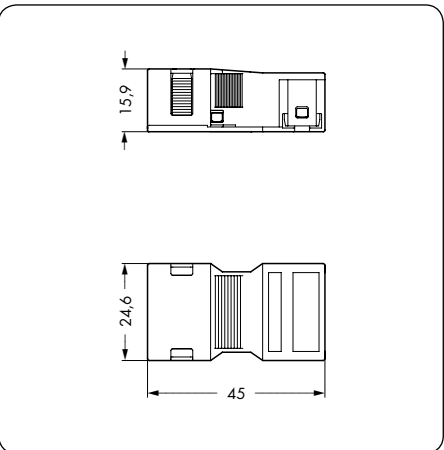
| Item-Specific Accessories |   |   |
|---------------------------|---|---|
|                           | <p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333</b> 100 Marking area: 20 x 6.5 mm</p>  | <p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333</b> 100 Marking area: 20 x 6.5 mm</p>  |
|                           |   |   |
|                           |   |   |
|                           |   |   |
|                           |   |   |

| Info | Dimensions |
|------|------------|
|------|------------|

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

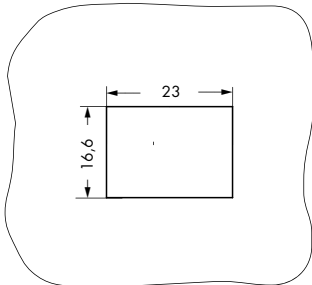
**2** For H05VV and NYM cables  
For other cables, please contact factory.


For coding information, see pages 238 to 240.  
Fire load data available upon request.



# Snap-In Frames, 2-Poles

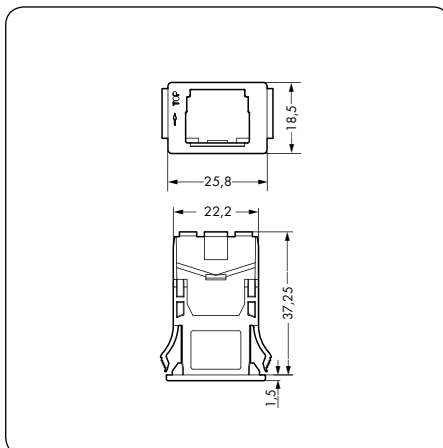
|   |   |  |
|---|---|--|
| <b>Cutout dimensions</b><br><br>Plate thickness: 1 – 3 mm<br>Cutout tolerance: + 0.1 mm | <b>Snap-in frames:</b><br>– for 2-pole sockets and plugs<br>(see page 117)<br>Plate thickness: 1 – 3 mm<br><br><b>➊ Approvals</b> |  |
|---|---|--|



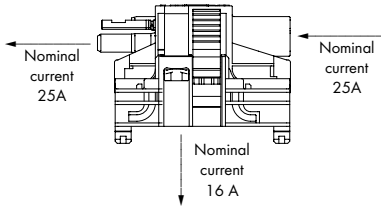
| Description                      | Color   | Item No. | Pack. Unit |
|----------------------------------|---|----------|------------|
| <b>Snap-in frames</b>            | <b>Snap-in frame, 2-pole</b>  |          |            |
|                                  | black   | 770-317  | 100        |
|                                  | white   | 770-337  | 100        |
| <b>Item-Specific Accessories</b> |   |          |            |
|                                  | <b>Locking lever, oversized,</b><br> tool operated<br>gray |          |            |
|                                  |   | 770-140  | 100 (4x25) |
| <b>Dimensions</b>                |   |          |            |



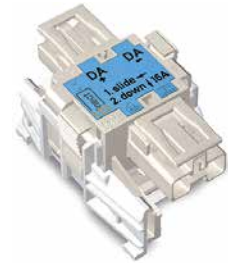
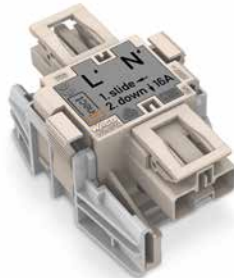
Insert the socket or plug into the frame (observe the "TOP" marking on the frame!). Snap the assembled unit into the cutout (example shows a 3-pole connector).







|  |  |  |
|--|--|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p> |
|--|--|--|



① Nominal current

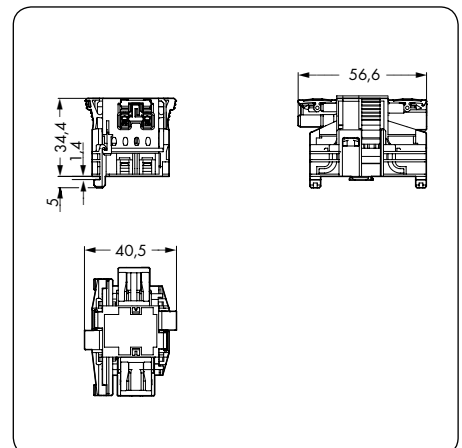
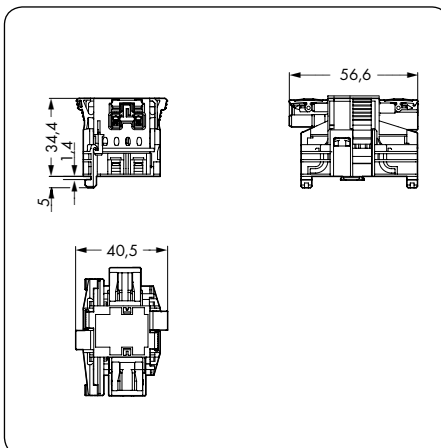


| Description                      | Color             | Item No.  | Pack. Unit | Color  | Item No.  | Pack. Unit |
|----------------------------------|-------------------|---|------------|--------|---|------------|
|                                  |                   | <b>Linect® T-connector, 2-pole, socket - plug, white housing, dark gray cover</b>   |            |        | <b>Linect® T-connector, 2-pole, socket - plug, white housing, blue cover</b>  |            |
|                                  | ● dark gray       | <b>770-7502</b>   | 25         | ● blue | <b>770-7102</b>   | 25         |
|                                  |                   | Suitable for 294-8022 lighting connector  |            |        | Suitable for 294-8032 lighting connector  |            |
| <b>Item-Specific Accessories</b> |                   |   |            |        |   |            |
|                                  |                   | <b>Lockout cap, for socket, separable, 12-pole</b>  |            |        | <b>Lockout cap, for socket, separable, 12-pole</b>  |            |
|                                  |                   | <br>black <b>770-201</b> 100<br>white <b>770-221</b> 100 |            |        | <br>black <b>770-201</b> 100<br>white <b>770-221</b> 100 |            |
|                                  |                   | <b>Lockout cap, for plug, separable, 5-pole</b>   |            |        | <b>Lockout cap, for plug, separable, 5-pole</b>   |            |
|                                  |                   | <br>yellow <b>770-360</b> 100                            |            |        | <br>yellow <b>770-360</b> 100                            |            |
| <b>Info</b>                      | <b>Dimensions</b> |   |            |        |   |            |

- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
- ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- ④ 6.0 mm Ø, 1 – 2.5 mm plate thickness

- black Coding A (L N)
- white Coding A (L N)
- blue Coding I (DA- DA+)
- dark gray Coding L (L' N')






For coding information, see pages 238 to 240.  
Fire load data available upon request.

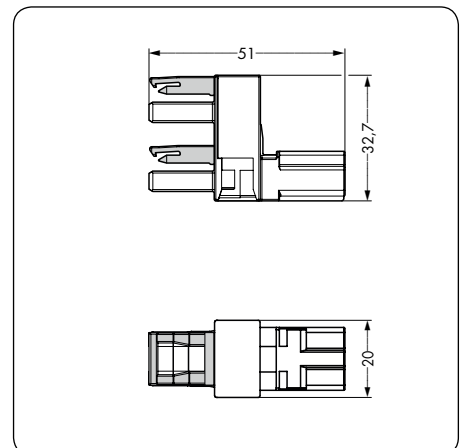
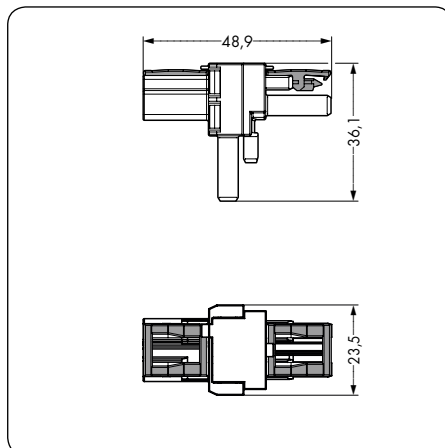
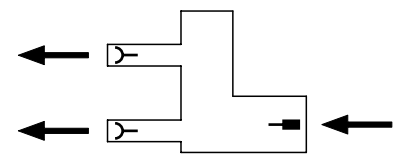
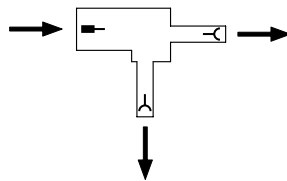



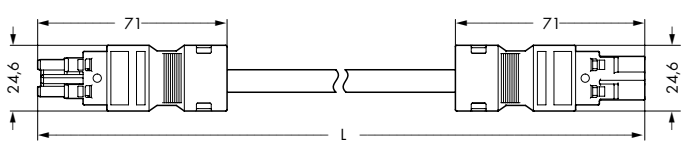

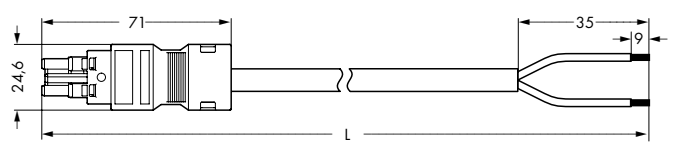

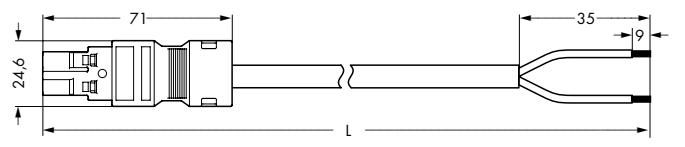




# T-Distribution Connectors, 2-Pole

|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>② Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>② Approvals</p> |
|--|---|---|



| Description                              | Color   | Item No.   | Pack. Unit | Color   | Item No.   | Pack. Unit |
|--|---|--|------------|---|--|------------|
| <b>T-distribution connectors, 2-pole</b> | <b>T-distribution connector, 1 x plug / 2 x socket</b>                              |  |            | <b>h-distribution connector, unidirectional, plug / socket - socket</b>               |  |            |
|  | ● black   | <b>770-1606</b>                                      | 50         | ● black   | <b>770-1634</b>  | 50         |
|  | ○ white   | <b>770-1656</b>                                      | 50         | ○ white   | <b>770-1684</b>  | 50         |
|  | for "flying leads," with 3rd locking lever  |  |            | for "flying leads," with 3rd locking lever  |  |            |
|  | ● black   | <b>770-1615</b>                                      | 50         | ● black   | <b>770-1636</b>  | 50         |
|  | ○ white   | <b>770-1665</b>                                      | 50         | ○ white   | <b>770-1686</b>  | 50         |
| <b>Item-Specific Accessories</b>         |   |  |            |   |  |            |
|  | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |  |            | <b>Mounting plate, for distribution connectors</b>                                    |  |            |
|  |  | black <b>770-201</b> 100<br>white <b>770-221</b> 100 |            |  | black <b>770-1626</b> 25<br>white <b>770-1627</b> 25     |            |
|  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |  |            | <b>Fixing pin, for mounting plates</b>  |  |            |
|  |  | yellow <b>770-360</b> 100                            |            |  | ③ black <b>890-601</b> 250<br>④ black <b>770-601</b> 250 |            |
|  |   |  |            | <b>Lockout cap, for socket, separable, 12-pole</b>                                    |  |            |
|  |   |  |            |  | black <b>770-201</b> 100<br>white <b>770-221</b> 100     |            |
| <b>Dimensions</b>                        |   |  |            |   |  |            |


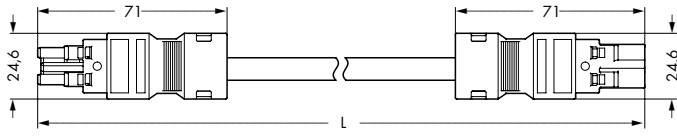

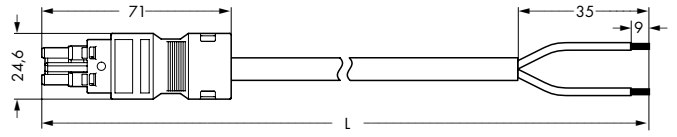

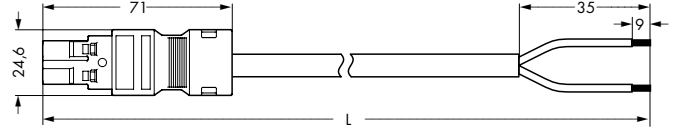






|   |  |  |                       |                       |                       |                       |
|---|--|--|-----------------------|-----------------------|-----------------------|-----------------------|
|   |  | PVC H05VV-F 2x1<br>halogen-free H05Z1 Z1-F 2x1<br><br>250 V/4 kV/3 I <sub>N</sub> 10 A<br><br>Conductor ends, bonded: 9 mm<br><b>Approvals</b> |                       |                       |                       |                       |
| <b>Interconnecting cable, socket – plug</b>   |  | <b>Length</b>  | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>   |  | ● <b>Coding I</b> ,<br>e.g., for dimming function (DALI)<br>PVC halogen-free   |                       |                       |                       |                       |
|   |  | 1 m  | 771-8982/005-101      | .../005-102           | 771-8982/015-101      | .../015-102           |
|   |  | 2 m  | 771-8982/005-201      | .../005-202           | 771-8982/015-201      | .../015-202           |
|   |  | 3 m  | 771-8982/005-301      | .../005-302           | 771-8982/015-301      | .../015-302           |
|   |  | 5 m  | 771-8982/005-501      | .../005-502           | 771-8982/015-501      | .../015-502           |
|   |  | 7 m  | 771-8982/005-701      | .../005-702           | 771-8982/015-701      | .../015-702           |
| <b>Connecting cable, socket – free end</b>  |  | <b>Length</b>  | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>  |  | ● <b>Coding I</b> ,<br>e.g., for dimming function (DALI)<br>PVC halogen-free   |                       |                       |                       |                       |
|   |  | 1 m  | 771-8982/105-101      | .../105-102           | 771-8982/115-101      | .../115-102           |
|   |  | 2 m  | 771-8982/105-201      | .../105-202           | 771-8982/115-201      | .../115-202           |
|   |  | 3 m  | 771-8982/105-301      | .../105-302           | 771-8982/115-301      | .../115-302           |
|   |  | 5 m  | 771-8982/105-501      | .../105-502           | 771-8982/115-501      | .../115-502           |
|   |  | 7 m  | 771-8982/105-701      | .../105-702           | 771-8982/115-701      | .../115-702           |
| <b>Connecting cable, plug – free end</b>  |  | <b>Length</b>  | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>   |  | ● <b>Coding I</b> ,<br>e.g., for dimming function (DALI)<br>PVC halogen-free   |                       |                       |                       |                       |
|   |  | 1 m  | 771-8982/205-101      | .../205-102           | 771-8982/215-101      | .../215-102           |
|   |  | 2 m  | 771-8982/205-201      | .../205-202           | 771-8982/215-201      | .../215-202           |
|   |  | 3 m  | 771-8982/205-301      | .../205-302           | 771-8982/215-301      | .../215-302           |
|   |  | 5 m  | 771-8982/205-501      | .../205-502           | 771-8982/215-501      | .../215-502           |
|   |  | 7 m  | 771-8982/205-701      | .../205-702           | 771-8982/215-701      | .../215-702           |
| <b>Info</b>   |  | <b>Accessories</b>   |                       |                       |                       |                       |
| <p><b>For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</b></p> <p>For other cables, please contact factory.</p> <p>● black Coding A (L N)<br/>                 ○ white Coding A (L N)<br/>                 ● blue Coding I (DA+ DA-)</p> <p>For coding information, see pages 238 to 240.<br/>                 Fire load data available upon request.</p> |  | Locking lever, for "flying leads,"<br>manually operated  |                       |                       |                       |                       |
|   |  |  black <b>770-101</b> 100 (4x25)                            |                       |                       |                       |                       |
|   |  | white <b>770-121</b> 100 (4x25)  |                       |                       |                       |                       |
|   |  | Locking lever, for "flying leads,"<br>tool operated  |                       |                       |                       |                       |
|   |  |  black <b>770-111</b> 100 (4x25)                            |                       |                       |                       |                       |
|   |  | white <b>770-131</b> 100 (4x25)  |                       |                       |                       |                       |
|   |  | Lockout cap, for socket, separable, 12-pole  |                       |                       |                       |                       |
|   |  |  black <b>770-201</b> 100                                   |                       |                       |                       |                       |
|   |  | white <b>770-221</b> 100   |                       |                       |                       |                       |
|   |  | Lockout cap, for plug, separable, 5-pole   |                       |                       |                       |                       |
|  yellow <b>770-360</b> 100   |  |  |                       |                       |                       |                       |



# Cable Assemblies 2 x 1.5 mm<sup>2</sup>



|   |                  | <p>PVC H05VV-F 2x1.5<br/>halogen-free H05Z1Z1-F 2x1.5</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|------------------|---|------------------|----------------|----------------|----------------|----------------|--------------|--|--|--|--|-----|--|--------------|--|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b> |                  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● ○ Coding A</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8992/006-101</td> <td>.../006-102</td> <td>771-8992/016-101</td> <td>.../016-102</td> </tr> <tr> <td>2 m</td> <td>771-8992/006-201</td> <td>.../006-202</td> <td>771-8992/016-201</td> <td>.../016-202</td> </tr> <tr> <td>3 m</td> <td>771-8992/006-301</td> <td>.../006-302</td> <td>771-8992/016-301</td> <td>.../016-302</td> </tr> <tr> <td>5 m</td> <td>771-8992/006-501</td> <td>.../006-502</td> <td>771-8992/016-501</td> <td>.../016-502</td> </tr> <tr> <td>7 m</td> <td>771-8992/006-701</td> <td>.../006-702</td> <td>771-8992/016-701</td> <td>.../016-702</td> </tr> </tbody> </table> | Length           | Item No. black | Item No. white | Item No. black | Item No. white | ● ○ Coding A |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 771-8992/006-101 | .../006-102 | 771-8992/016-101 | .../016-102 | 2 m | 771-8992/006-201 | .../006-202 | 771-8992/016-201 | .../016-202 | 3 m | 771-8992/006-301 | .../006-302 | 771-8992/016-301 | .../016-302 | 5 m | 771-8992/006-501 | .../006-502 | 771-8992/016-501 | .../016-502 | 7 m | 771-8992/006-701 | .../006-702 | 771-8992/016-701 | .../016-702 |
| Length                                      | Item No. black   | Item No. white  | Item No. black   | Item No. white |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● ○ Coding A                                |                  |   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |                  | halogen-free  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8992/006-101 | .../006-102   | 771-8992/016-101 | .../016-102    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8992/006-201 | .../006-202   | 771-8992/016-201 | .../016-202    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8992/006-301 | .../006-302   | 771-8992/016-301 | .../016-302    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8992/006-501 | .../006-502   | 771-8992/016-501 | .../016-502    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8992/006-701 | .../006-702   | 771-8992/016-701 | .../016-702    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  |   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>  |                  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● ○ Coding A</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8992/106-101</td> <td>.../106-102</td> <td>771-8992/116-101</td> <td>.../116-102</td> </tr> <tr> <td>2 m</td> <td>771-8992/106-201</td> <td>.../106-202</td> <td>771-8992/116-201</td> <td>.../116-202</td> </tr> <tr> <td>3 m</td> <td>771-8992/106-301</td> <td>.../106-302</td> <td>771-8992/116-301</td> <td>.../116-302</td> </tr> <tr> <td>5 m</td> <td>771-8992/106-501</td> <td>.../106-502</td> <td>771-8992/116-501</td> <td>.../116-502</td> </tr> <tr> <td>7 m</td> <td>771-8992/106-701</td> <td>.../106-702</td> <td>771-8992/116-701</td> <td>.../116-702</td> </tr> </tbody> </table> | Length           | Item No. black | Item No. white | Item No. black | Item No. white | ● ○ Coding A |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 771-8992/106-101 | .../106-102 | 771-8992/116-101 | .../116-102 | 2 m | 771-8992/106-201 | .../106-202 | 771-8992/116-201 | .../116-202 | 3 m | 771-8992/106-301 | .../106-302 | 771-8992/116-301 | .../116-302 | 5 m | 771-8992/106-501 | .../106-502 | 771-8992/116-501 | .../116-502 | 7 m | 771-8992/106-701 | .../106-702 | 771-8992/116-701 | .../116-702 |
| Length                                      | Item No. black   | Item No. white  | Item No. black   | Item No. white |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● ○ Coding A                                |                  |   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |                  | halogen-free  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8992/106-101 | .../106-102   | 771-8992/116-101 | .../116-102    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8992/106-201 | .../106-202   | 771-8992/116-201 | .../116-202    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8992/106-301 | .../106-302   | 771-8992/116-301 | .../116-302    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8992/106-501 | .../106-502   | 771-8992/116-501 | .../116-502    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8992/106-701 | .../106-702   | 771-8992/116-701 | .../116-702    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  |   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug – free end</b>    |                  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● ○ Coding A</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8992/206-101</td> <td>.../206-102</td> <td>771-8992/216-101</td> <td>.../216-102</td> </tr> <tr> <td>2 m</td> <td>771-8992/206-201</td> <td>.../206-202</td> <td>771-8992/216-201</td> <td>.../216-202</td> </tr> <tr> <td>3 m</td> <td>771-8992/206-301</td> <td>.../206-302</td> <td>771-8992/216-301</td> <td>.../216-302</td> </tr> <tr> <td>5 m</td> <td>771-8992/206-501</td> <td>.../206-502</td> <td>771-8992/216-501</td> <td>.../216-502</td> </tr> <tr> <td>7 m</td> <td>771-8992/206-701</td> <td>.../206-702</td> <td>771-8992/216-701</td> <td>.../216-702</td> </tr> </tbody> </table> | Length           | Item No. black | Item No. white | Item No. black | Item No. white | ● ○ Coding A |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 771-8992/206-101 | .../206-102 | 771-8992/216-101 | .../216-102 | 2 m | 771-8992/206-201 | .../206-202 | 771-8992/216-201 | .../216-202 | 3 m | 771-8992/206-301 | .../206-302 | 771-8992/216-301 | .../216-302 | 5 m | 771-8992/206-501 | .../206-502 | 771-8992/216-501 | .../216-502 | 7 m | 771-8992/206-701 | .../206-702 | 771-8992/216-701 | .../216-702 |
| Length                                      | Item No. black   | Item No. white  | Item No. black   | Item No. white |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● ○ Coding A                                |                  |   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |                  | halogen-free  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8992/206-101 | .../206-102   | 771-8992/216-101 | .../216-102    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8992/206-201 | .../206-202   | 771-8992/216-201 | .../216-202    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8992/206-301 | .../206-302   | 771-8992/216-301 | .../216-302    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8992/206-501 | .../206-502   | 771-8992/216-501 | .../216-502    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8992/206-701 | .../206-702   | 771-8992/216-701 | .../216-702    |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  |   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  | <b>Accessories</b>  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  | <p><b>Locking lever, for "flying leads,"</b></p> <p>manually operated</p> <table border="1"> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </table>   | black            | 770-101        | 100 (4x25)     | white          | 770-121        | 100 (4x25)   |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-101          | 100 (4x25)  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-121          | 100 (4x25)  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <table border="1"> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </table>   | black            | 770-111        | 100 (4x25)     | white          | 770-131        | 100 (4x25)   |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-111          | 100 (4x25)  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-131          | 100 (4x25)  |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </table>   | black            | 770-201        | 100            | white          | 770-221        | 100          |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-201          | 100   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-221          | 100   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |                  | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table>   | yellow           | 770-360        | 100            |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow                                      | 770-360          | 100   |                  |                |                |                |                |              |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |

|  |  |   |                       |                       |                       |                       |
|--|--|---|-----------------------|-----------------------|-----------------------|-----------------------|
|  |  | PVC H05VV-F 2x1.5<br>halogen-free H05Z1Z1-F 2x1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br><b>Approvals</b> |                       |                       |                       |                       |
| <b>Interconnecting cable, socket – plug</b>  |  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>  |  | ● <b>Coding I</b> ,<br>e.g., for dimming function (DALI)<br>PVC halogen-free  |                       |                       |                       |                       |
|  |  | 1 m   | 771-8982/006-101      | .../006-102           | 771-8982/016-101      | .../016-102           |
|  |  | 2 m   | 771-8982/006-201      | .../006-202           | 771-8982/016-201      | .../016-202           |
|  |  | 3 m   | 771-8982/006-301      | .../006-302           | 771-8982/016-301      | .../016-302           |
|  |  | 5 m   | 771-8982/006-501      | .../006-502           | 771-8982/016-501      | .../016-502           |
|  |  | 7 m   | 771-8982/006-701      | .../006-702           | 771-8982/016-701      | .../016-702           |
| <b>Connecting cable, socket – free end</b>   |  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>   |  | ● <b>Coding I</b> ,<br>e.g., for dimming function (DALI)<br>PVC halogen-free  |                       |                       |                       |                       |
|  |  | 1 m   | 771-8982/106-101      | .../106-102           | 771-8982/116-101      | .../116-102           |
|  |  | 2 m   | 771-8982/106-201      | .../106-202           | 771-8982/116-201      | .../116-202           |
|  |  | 3 m   | 771-8982/106-301      | .../106-302           | 771-8982/116-301      | .../116-302           |
|  |  | 5 m   | 771-8982/106-501      | .../106-502           | 771-8982/116-501      | .../116-502           |
|  |  | 7 m   | 771-8982/106-701      | .../106-702           | 771-8982/116-701      | .../116-702           |
| <b>Connecting cable, plug – free end</b>   |  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
| <br>  |  | ● <b>Coding I</b> ,<br>e.g., for dimming function (DALI)<br>PVC halogen-free  |                       |                       |                       |                       |
|  |  | 1 m   | 771-8982/206-101      | .../206-102           | 771-8982/216-101      | .../216-102           |
|  |  | 2 m   | 771-8982/206-201      | .../206-202           | 771-8982/216-201      | .../216-202           |
|  |  | 3 m   | 771-8982/206-301      | .../206-302           | 771-8982/216-301      | .../216-302           |
|  |  | 5 m   | 771-8982/206-501      | .../206-502           | 771-8982/216-501      | .../216-502           |
|  |  | 7 m   | 771-8982/206-701      | .../206-702           | 771-8982/216-701      | .../216-702           |
| <b>Info</b>  |  | <b>Accessories</b>  |                       |                       |                       |                       |
| <p>❶ For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>For other cables, please contact factory.</p> <p>● blue Coding I (DA+ DA-)<br/>                 ● dark gray Coding L (L' N')</p> <p>For coding information, see pages 238 to 240.<br/>                 Fire load data available upon request.</p> |  | Locking lever, for "flying leads,"<br>manually operated   |                       |                       |                       |                       |
|  |  |  black <b>770-101</b> 100 (4x25)                               |                       |                       |                       |                       |
|  |  | white <b>770-121</b> 100 (4x25)   |                       |                       |                       |                       |
|  |  | Locking lever, for "flying leads,"<br>tool operated   |                       |                       |                       |                       |
|  |  |  black <b>770-111</b> 100 (4x25)                               |                       |                       |                       |                       |
|  |  | white <b>770-131</b> 100 (4x25)   |                       |                       |                       |                       |
|  |  | Lockout cap, for socket, separable, 12-pole   |                       |                       |                       |                       |
|  |  |  black <b>770-201</b> 100                                      |                       |                       |                       |                       |
|  |  | white <b>770-221</b> 100  |                       |                       |                       |                       |
|  |  | Lockout cap, for plug, separable, 5-pole  |                       |                       |                       |                       |
|  yellow <b>770-360</b> 100  |  |   |                       |                       |                       |                       |

|   | <p>PVC H05VV-F 2x1.5<br/>halogen-free H05Z1Z1-F 2x1.5</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|---|----------------|------------------|----------------|----------------|----------------|------------|--|--|--|--|--|-----|--|--------------|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b> | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding L</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> <td colspan="2">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8982/006-103</td> <td>.../006-104</td> <td>771-8982/016-103</td> <td>.../016-104</td> </tr> <tr> <td>2 m</td> <td>771-8982/006-203</td> <td>.../006-204</td> <td>771-8982/016-203</td> <td>.../016-204</td> </tr> <tr> <td>3 m</td> <td>771-8982/006-303</td> <td>.../006-304</td> <td>771-8982/016-303</td> <td>.../016-304</td> </tr> <tr> <td>5 m</td> <td>771-8982/006-503</td> <td>.../006-504</td> <td>771-8982/016-503</td> <td>.../016-504</td> </tr> <tr> <td>7 m</td> <td>771-8982/006-703</td> <td>.../006-704</td> <td>771-8982/016-703</td> <td>.../016-704</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding L |  |  |  |  |  | PVC |  | halogen-free |  | 1 m | 771-8982/006-103 | .../006-104 | 771-8982/016-103 | .../016-104 | 2 m | 771-8982/006-203 | .../006-204 | 771-8982/016-203 | .../016-204 | 3 m | 771-8982/006-303 | .../006-304 | 771-8982/016-303 | .../016-304 | 5 m | 771-8982/006-503 | .../006-504 | 771-8982/016-503 | .../016-504 | 7 m | 771-8982/006-703 | .../006-704 | 771-8982/016-703 | .../016-704 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding L                                  |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | PVC   |                | halogen-free     |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8982/006-103  | .../006-104    | 771-8982/016-103 | .../016-104    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8982/006-203  | .../006-204    | 771-8982/016-203 | .../016-204    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8982/006-303  | .../006-304    | 771-8982/016-303 | .../016-304    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8982/006-503  | .../006-504    | 771-8982/016-503 | .../016-504    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8982/006-703  | .../006-704    | 771-8982/016-703 | .../016-704    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding L</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> <td colspan="2">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8982/106-103</td> <td>.../106-104</td> <td>771-8982/116-103</td> <td>.../116-104</td> </tr> <tr> <td>2 m</td> <td>771-8982/106-203</td> <td>.../106-204</td> <td>771-8982/116-203</td> <td>.../116-204</td> </tr> <tr> <td>3 m</td> <td>771-8982/106-303</td> <td>.../106-304</td> <td>771-8982/116-303</td> <td>.../116-304</td> </tr> <tr> <td>5 m</td> <td>771-8982/106-503</td> <td>.../106-504</td> <td>771-8982/116-503</td> <td>.../116-504</td> </tr> <tr> <td>7 m</td> <td>771-8982/106-703</td> <td>.../106-704</td> <td>771-8982/116-703</td> <td>.../116-704</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding L |  |  |  |  |  | PVC |  | halogen-free |  | 1 m | 771-8982/106-103 | .../106-104 | 771-8982/116-103 | .../116-104 | 2 m | 771-8982/106-203 | .../106-204 | 771-8982/116-203 | .../116-204 | 3 m | 771-8982/106-303 | .../106-304 | 771-8982/116-303 | .../116-304 | 5 m | 771-8982/106-503 | .../106-504 | 771-8982/116-503 | .../116-504 | 7 m | 771-8982/106-703 | .../106-704 | 771-8982/116-703 | .../116-704 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding L                                  |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | PVC   |                | halogen-free     |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8982/106-103  | .../106-104    | 771-8982/116-103 | .../116-104    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8982/106-203  | .../106-204    | 771-8982/116-203 | .../116-204    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8982/106-303  | .../106-304    | 771-8982/116-303 | .../116-304    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8982/106-503  | .../106-504    | 771-8982/116-503 | .../116-504    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8982/106-703  | .../106-704    | 771-8982/116-703 | .../116-704    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug – free end</b>    | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding L</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> <td colspan="2">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8982/206-103</td> <td>.../206-104</td> <td>771-8982/216-103</td> <td>.../216-104</td> </tr> <tr> <td>2 m</td> <td>771-8982/206-203</td> <td>.../206-204</td> <td>771-8982/216-203</td> <td>.../216-204</td> </tr> <tr> <td>3 m</td> <td>771-8982/206-303</td> <td>.../206-304</td> <td>771-8982/216-303</td> <td>.../216-304</td> </tr> <tr> <td>5 m</td> <td>771-8982/206-503</td> <td>.../206-504</td> <td>771-8982/216-503</td> <td>.../216-504</td> </tr> <tr> <td>7 m</td> <td>771-8982/206-703</td> <td>.../206-704</td> <td>771-8982/216-703</td> <td>.../216-704</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding L |  |  |  |  |  | PVC |  | halogen-free |  | 1 m | 771-8982/206-103 | .../206-104 | 771-8982/216-103 | .../216-104 | 2 m | 771-8982/206-203 | .../206-204 | 771-8982/216-203 | .../216-204 | 3 m | 771-8982/206-303 | .../206-304 | 771-8982/216-303 | .../216-304 | 5 m | 771-8982/206-503 | .../206-504 | 771-8982/216-503 | .../216-504 | 7 m | 771-8982/206-703 | .../206-704 | 771-8982/216-703 | .../216-704 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding L                                  |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | PVC   |                | halogen-free     |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8982/206-103  | .../206-104    | 771-8982/216-103 | .../216-104    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8982/206-203  | .../206-204    | 771-8982/216-203 | .../216-204    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8982/206-303  | .../206-304    | 771-8982/216-303 | .../216-304    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8982/206-503  | .../206-504    | 771-8982/216-503 | .../216-504    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8982/206-703  | .../206-704    | 771-8982/216-703 | .../216-704    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <b>Accessories</b>  |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b></p> <p>manually operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-101          | 100 (4x25)     | white          | 770-121        | 100 (4x25) |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-101   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-121   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-111          | 100 (4x25)     | white          | 770-131        | 100 (4x25) |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-111   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-131   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </tbody> </table>  | black          | 770-201          | 100            | white          | 770-221        | 100        |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-201   | 100            |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-221   | 100            |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tbody> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </tbody> </table>  | yellow         | 770-360          | 100            |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow                                      | 770-360   | 100            |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |




|  |  |   |                  |                |                  |                |
|--|--|---|------------------|----------------|------------------|----------------|
|  |  | PVC H05VV-F 2x2.5<br>halogen-free H05Z1 Z1-F 2x2.5<br><br>250 V/4 kV/3 I <sub>N</sub> 20 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|  |  | 1 m   | 771-8992/007-101 | .../007-102    | 771-8992/017-101 | .../017-102    |
|  |  | 2 m   | 771-8992/007-201 | .../007-202    | 771-8992/017-201 | .../017-202    |
|  |  | 3 m   | 771-8992/007-301 | .../007-302    | 771-8992/017-301 | .../017-302    |
|  |  | 5 m   | 771-8992/007-501 | .../007-502    | 771-8992/017-501 | .../017-502    |
|  |  | 7 m   | 771-8992/007-701 | .../007-702    | 771-8992/017-701 | .../017-702    |
| <b>Connecting cable, socket – free end</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|  |  | 1 m   | 771-8992/107-101 | .../107-102    | 771-8992/117-101 | .../117-102    |
|  |  | 2 m   | 771-8992/107-201 | .../107-202    | 771-8992/117-201 | .../117-202    |
|  |  | 3 m   | 771-8992/107-301 | .../107-302    | 771-8992/117-301 | .../117-302    |
|  |  | 5 m   | 771-8992/107-501 | .../107-502    | 771-8992/117-501 | .../117-502    |
|  |  | 7 m   | 771-8992/107-701 | .../107-702    | 771-8992/117-701 | .../117-702    |
| <b>Connecting cable, plug – free end</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|  |  | 1 m   | 771-8992/207-101 | .../207-102    | 771-8992/217-101 | .../217-102    |
|  |  | 2 m   | 771-8992/207-201 | .../207-202    | 771-8992/217-201 | .../217-202    |
|  |  | 3 m   | 771-8992/207-301 | .../207-302    | 771-8992/217-301 | .../217-302    |
|  |  | 5 m   | 771-8992/207-501 | .../207-502    | 771-8992/217-501 | .../217-502    |
|  |  | 7 m   | 771-8992/207-701 | .../207-702    | 771-8992/217-701 | .../217-702    |
| <b>Info</b>  |  | <b>Accessories</b>  |                  |                |                  |                |
| ① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.<br><br>For other cables, please contact factory.<br><br>● black Coding A (L N)<br>○ white Coding A (L N)<br>● dark gray Coding L (L' N')<br><br>For coding information, see pages 238 to 240.<br>Fire load data available upon request. |  | Locking lever, for "flying leads," manually operated  |                  |                |                  |                |
|  |  | black 770-101 100 (4x25)  |                  |                |                  |                |
|  |  | white 770-121 100 (4x25)  |                  |                |                  |                |
|  |  | Locking lever, for "flying leads," tool operated  |                  |                |                  |                |
|  |  | black 770-111 100 (4x25)  |                  |                |                  |                |
|  |  | white 770-131 100 (4x25)  |                  |                |                  |                |
|  |  | Lockout cap, for socket, separable, 12-pole   |                  |                |                  |                |
|  |  | black 770-201 100   |                  |                |                  |                |
|  |  | white 770-221 100   |                  |                |                  |                |
|  |  | Lockout cap, for plug, separable, 5-pole  |                  |                |                  |                |
| yellow 770-360 100   |  |   |                  |                |                  |                |




|   | <p>PVC H05VV-F 2x2.5<br/>halogen-free H05Z1Z1-F 2x2.5</p> <p>250 V/4 kV/3 I<sub>N</sub> 20 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|---|----------------|------------------|----------------|----------------|----------------|------------|--|--|--|--|--|-----|--|--------------|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b> | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding L</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> <td colspan="2">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8982/007-103</td> <td>.../007-104</td> <td>771-8982/017-103</td> <td>.../017-104</td> </tr> <tr> <td>2 m</td> <td>771-8982/007-203</td> <td>.../007-204</td> <td>771-8982/017-203</td> <td>.../017-204</td> </tr> <tr> <td>3 m</td> <td>771-8982/007-303</td> <td>.../007-304</td> <td>771-8982/017-303</td> <td>.../017-304</td> </tr> <tr> <td>5 m</td> <td>771-8982/007-503</td> <td>.../007-504</td> <td>771-8982/017-503</td> <td>.../017-504</td> </tr> <tr> <td>7 m</td> <td>771-8982/007-703</td> <td>.../007-704</td> <td>771-8982/017-703</td> <td>.../017-704</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding L |  |  |  |  |  | PVC |  | halogen-free |  | 1 m | 771-8982/007-103 | .../007-104 | 771-8982/017-103 | .../017-104 | 2 m | 771-8982/007-203 | .../007-204 | 771-8982/017-203 | .../017-204 | 3 m | 771-8982/007-303 | .../007-304 | 771-8982/017-303 | .../017-304 | 5 m | 771-8982/007-503 | .../007-504 | 771-8982/017-503 | .../017-504 | 7 m | 771-8982/007-703 | .../007-704 | 771-8982/017-703 | .../017-704 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding L                                  |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | PVC   |                | halogen-free     |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8982/007-103  | .../007-104    | 771-8982/017-103 | .../017-104    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8982/007-203  | .../007-204    | 771-8982/017-203 | .../017-204    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8982/007-303  | .../007-304    | 771-8982/017-303 | .../017-304    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8982/007-503  | .../007-504    | 771-8982/017-503 | .../017-504    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8982/007-703  | .../007-704    | 771-8982/017-703 | .../017-704    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding L</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> <td colspan="2">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8982/107-103</td> <td>.../107-104</td> <td>771-8982/117-103</td> <td>.../117-104</td> </tr> <tr> <td>2 m</td> <td>771-8982/107-203</td> <td>.../107-204</td> <td>771-8982/117-203</td> <td>.../117-204</td> </tr> <tr> <td>3 m</td> <td>771-8982/107-303</td> <td>.../107-304</td> <td>771-8982/117-303</td> <td>.../117-304</td> </tr> <tr> <td>5 m</td> <td>771-8982/107-503</td> <td>.../107-504</td> <td>771-8982/117-503</td> <td>.../117-504</td> </tr> <tr> <td>7 m</td> <td>771-8982/107-703</td> <td>.../107-704</td> <td>771-8982/117-703</td> <td>.../117-704</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding L |  |  |  |  |  | PVC |  | halogen-free |  | 1 m | 771-8982/107-103 | .../107-104 | 771-8982/117-103 | .../117-104 | 2 m | 771-8982/107-203 | .../107-204 | 771-8982/117-203 | .../117-204 | 3 m | 771-8982/107-303 | .../107-304 | 771-8982/117-303 | .../117-304 | 5 m | 771-8982/107-503 | .../107-504 | 771-8982/117-503 | .../117-504 | 7 m | 771-8982/107-703 | .../107-704 | 771-8982/117-703 | .../117-704 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding L                                  |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | PVC   |                | halogen-free     |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8982/107-103  | .../107-104    | 771-8982/117-103 | .../117-104    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8982/107-203  | .../107-204    | 771-8982/117-203 | .../117-204    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8982/107-303  | .../107-304    | 771-8982/117-303 | .../117-304    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8982/107-503  | .../107-504    | 771-8982/117-503 | .../117-504    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8982/107-703  | .../107-704    | 771-8982/117-703 | .../117-704    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug – free end</b>    | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding L</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> <td colspan="2">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8982/207-103</td> <td>.../207-104</td> <td>771-8982/217-103</td> <td>.../217-104</td> </tr> <tr> <td>2 m</td> <td>771-8982/207-203</td> <td>.../207-204</td> <td>771-8982/217-203</td> <td>.../217-204</td> </tr> <tr> <td>3 m</td> <td>771-8982/207-303</td> <td>.../207-304</td> <td>771-8982/217-303</td> <td>.../217-304</td> </tr> <tr> <td>5 m</td> <td>771-8982/207-503</td> <td>.../207-504</td> <td>771-8982/217-503</td> <td>.../217-504</td> </tr> <tr> <td>7 m</td> <td>771-8982/207-703</td> <td>.../207-704</td> <td>771-8982/217-703</td> <td>.../217-704</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding L |  |  |  |  |  | PVC |  | halogen-free |  | 1 m | 771-8982/207-103 | .../207-104 | 771-8982/217-103 | .../217-104 | 2 m | 771-8982/207-203 | .../207-204 | 771-8982/217-203 | .../217-204 | 3 m | 771-8982/207-303 | .../207-304 | 771-8982/217-303 | .../217-304 | 5 m | 771-8982/207-503 | .../207-504 | 771-8982/217-503 | .../217-504 | 7 m | 771-8982/207-703 | .../207-704 | 771-8982/217-703 | .../217-704 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding L                                  |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | PVC   |                | halogen-free     |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-8982/207-103  | .../207-104    | 771-8982/217-103 | .../217-104    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-8982/207-203  | .../207-204    | 771-8982/217-203 | .../217-204    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-8982/207-303  | .../207-304    | 771-8982/217-303 | .../217-304    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-8982/207-503  | .../207-504    | 771-8982/217-503 | .../217-504    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-8982/207-703  | .../207-704    | 771-8982/217-703 | .../217-704    |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <b>Accessories</b>  |                |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b><br/>manually operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </tbody> </table>   | black          | 770-101          | 100 (4x25)     | white          | 770-121        | 100 (4x25) |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-101   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-121   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b><br/>tool operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </tbody> </table>   | black          | 770-111          | 100 (4x25)     | white          | 770-131        | 100 (4x25) |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-111   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-131   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </tbody> </table>  | black          | 770-201          | 100            | white          | 770-221        | 100        |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-201   | 100            |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-221   | 100            |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tbody> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </tbody> </table>  | yellow         | 770-360          | 100            |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow                                      | 770-360   | 100            |                  |                |                |                |            |  |  |  |  |  |     |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |

|  |                        |  |                        |
|--|------------------------|--|------------------------|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ❶<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>❷ Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ❶<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>❷ Approvals</p> | <p>2 x AWG 20 – 12</p> |
|--|------------------------|--|------------------------|



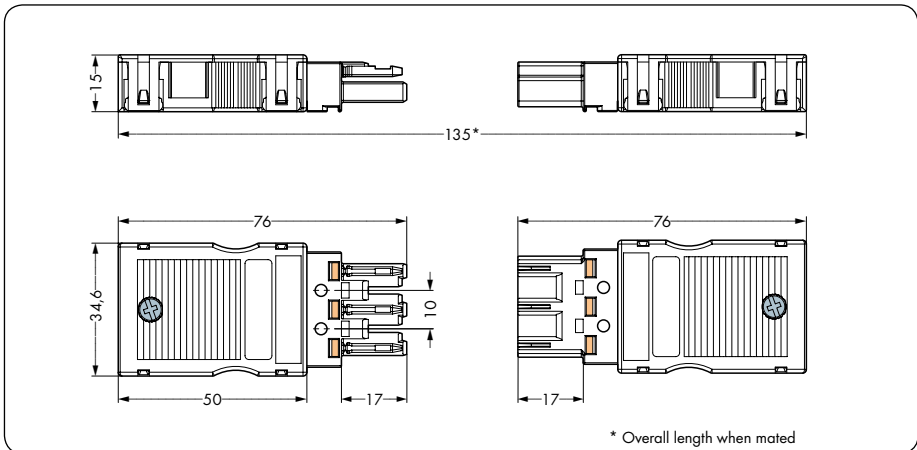
| Description   | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|---|----------|------------|---|----------|------------|
| Pluggable connectors, 3-pole, with CAGE CLAMP® S connection | Socket with strain relief housing, for 2 cables, 8 – 11.5 mm diameter ❸ |          |            | Plug with strain relief housing, for 2 cables, 8 – 11.5 mm diameter ❸ |          |            |
|   | ● black   | 770-103  | 25         | ● black   | 770-113  | 25         |
|   | ○ white   | 770-123  | 25         | ○ white   | 770-133  | 25         |

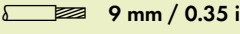
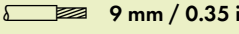
| Item-Specific Accessories |   |  |  |   |                    |  |
|---------------------------|---|--|--|---|--------------------|--|
|                           | Lockout cap, for socket, separable, 12-pole   |  |  | Lockout cap, for plug, separable, 5-pole  |                    |  |
|                           |  | black 770-201 100<br>white 770-221 100 |  |  | yellow 770-360 100 |  |
|                           |   |  |  | Coding pin, for plug (A and B coding)   |                    |  |
|                           |   |  |  |  | gray 770-401 100   |  |

| Accessories, 770 Series |   |  |  |   |  |  |
|-------------------------|---|--|--|---|--|--|
|                         | Locking lever, for "flying leads," manually operated                                |  |  | Locking lever, for "flying leads," tool operated                                      |  |  |
|                         |  | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |  |  | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |  |
|                         | Marker, for manual marking  |  |  |   |  |  |
|                         |  | white 770-450 50                                     |  |   |  |  |

| Info | Dimensions |
|------|------------|
|------|------------|

- ❶ Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ❸ For more strain relief housings, see pages 130 and 131.
- |          |          |             |
|----------|----------|-------------|
| ● black  | Coding A | (L ⊕ N)     |
| ○ white  | Coding A | (L ⊕ N)     |
| ● red    | Coding P | (L ⊕ N)     |
| ● orange | Coding R | (LON LON S) |
| ● brown  | Coding S | (1 2 L)     |
- For coding information, see pages 238 to 240.  
Fire load data available upon request.



|   |                 |   |                 |
|---|-----------------|---|-----------------|
| 2 x 0.5 – 4 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | 2 x AWG 20 – 12 | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | 2 x AWG 20 – 12 |
|---|-----------------|---|-----------------|






**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).

| Color                                       | Item No. | Pack. Unit | Color                                     | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| <b>Socket without strain relief housing</b> |          |            | <b>Plug without strain relief housing</b> |          |            |
| ● black                                     | 770-203  | 100        | ● black                                   | 770-213  | 100        |
| ○ white                                     | 770-223  | 100        | ○ white                                   | 770-233  | 100        |
| ● red                                       | 770-1303 | 100        | ● red                                     | 770-1313 | 100        |
| ● orange                                    | 770-1343 | 100        | ● orange                                  | 770-1353 | 100        |
| ● brown                                     | 770-1363 | 100        | ● brown                                   | 770-1373 | 100        |






Snap on locking lever. Observe direction!

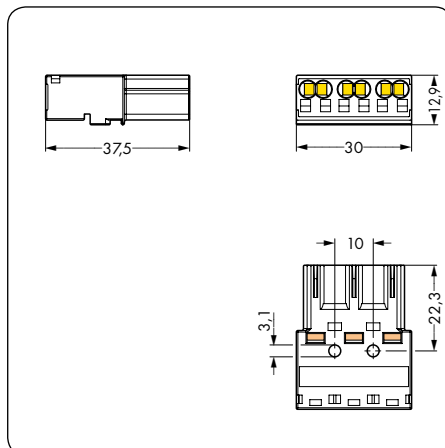
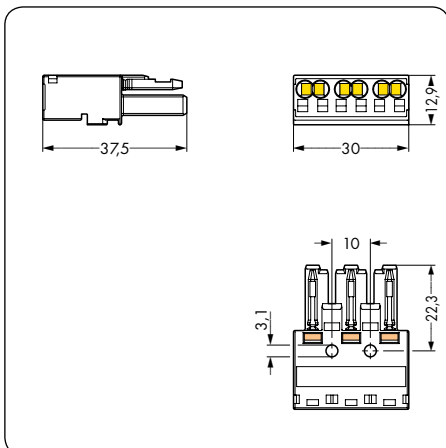
| Item-Specific Accessories   |   |              |   |                |     |
|---|---|--------------|---|----------------|-----|
| <b>Lockout cap, for socket, separable, 12-pole</b>                                  |   |              | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                |     |
|  | black 770-201   | 100          |  | yellow 770-360 | 100 |
|   | white 770-221   | 100          |   |                |     |
| <b>Coding pin, for plug (A and B coding)</b>  |   |              |   |                |     |
|   |  | gray 770-401 |   | 100            |     |



Locking lever, manually operated:  
 1.) Press on locking lever.  
 2.) Pull apart the connectors.

| Accessories, 770 Series   |               |            |   |               |            |
|---|---------------|------------|---|---------------|------------|
| <b>Locking lever, for “flying leads,” manually operated</b>                         |               |            | <b>Locking lever, for “flying leads,” tool operated</b>                             |               |            |
|  | black 770-101 | 100 (4x25) |  | black 770-111 | 100 (4x25) |
|   | white 770-121 | 100 (4x25) |   | white 770-131 | 100 (4x25) |
| <b>Marker, for manual marking</b>   |               |            |   |               |            |
|  | white 770-450 | 50         |   |               |            |

**Dimensions**



Locking lever, tool operated:  
 1.) Unlatch locking lever.  
 2.) Pull apart the connectors.



## Strain Relief Housings, 3-Pole, for Different Cable Diameters

|  |  |  |
|--|--|--|
|  | Snap-on type strain relief housings for:<br>- 3-pole sockets<br>- 3-pole plugs<br><br><b>1</b> Approvals | Snap-on type strain relief housings for:<br>- 3-pole sockets<br>- 3-pole plugs<br><br><b>1</b> Approvals |
|--|--|--|



| Description                    | Color   | Item No.        | Pack. Unit | Color  | Item No. | Pack. Unit |
|--------------------------------|---|-----------------|------------|--|----------|------------|
| Strain relief housings, 3-pole | Strain relief housing, for 2 cables, 4.5 - 8 mm diameter <b>2</b> |                 |            | Strain relief housing, for 2 cables, 8 - 11.5 mm diameter <b>2</b> |          |            |
|                                | black   | 770-503/023-000 | 50         | black  | 770-503  | 50         |
|                                | white   | 770-513/023-000 | 50         | white  | 770-513  | 50         |
|                                |   |                 |            |  |          |            |

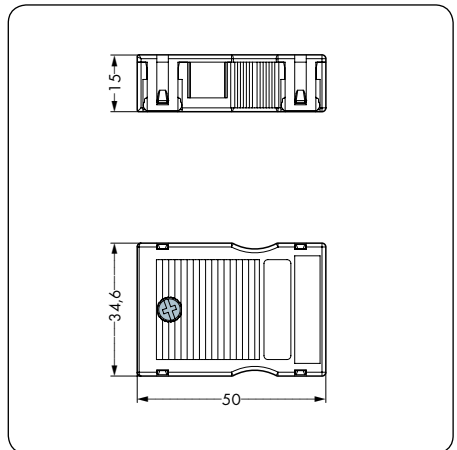
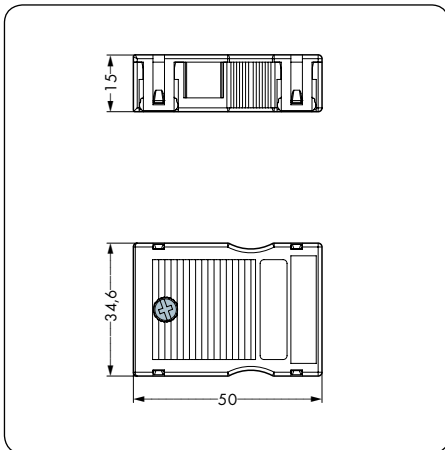
| Item-Specific Accessories |   |  |  |   |  |  |
|---------------------------|---|--|--|---|--|--|
|                           | <b>Marking strip</b> , self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333</b> 100<br>Marking area: 48 x 6.5 mm |  |  | <b>Marking strip</b> , self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333</b> 100<br>Marking area: 48 x 6.5 mm |  |  |
|                           | <b>Shield connecting plate</b> , for sockets and plugs, for 2 cables, 4 - 7.5 mm diameter <b>770-523</b> 25                                   |  |  |   |  |  |

| Info | Dimensions |
|------|------------|
|------|------------|

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

**2** For H05VV and NYM cables  
For other cables, please contact factory.

Fire load data available upon request.





|  |  |  |
|--|--|--|
| <p><b>Snap-on type strain relief housings for:</b><br/>                 - 3-pole sockets<br/>                 - 3-pole plugs</p> <p><b>1 Approvals</b></p> | <p><b>Snap-on type strain relief housings for:</b><br/>                 - 3-pole sockets<br/>                 - 3-pole plugs</p> <p><b>1 Approvals</b></p> | <p><b>Snap-on type strain relief housings for:</b><br/>                 - 3-pole sockets<br/>                 - 3-pole plugs</p> <p><b>1 Approvals</b></p> |
|--|--|--|

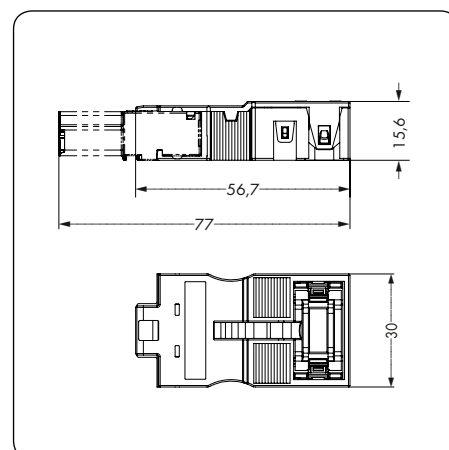
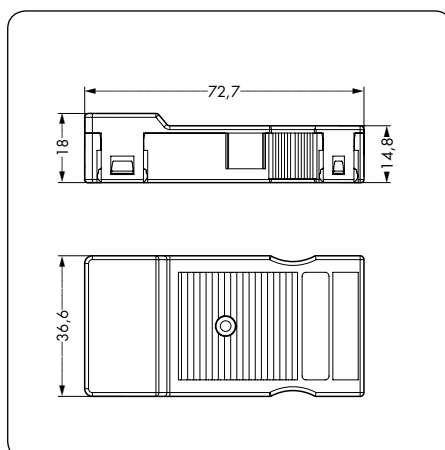
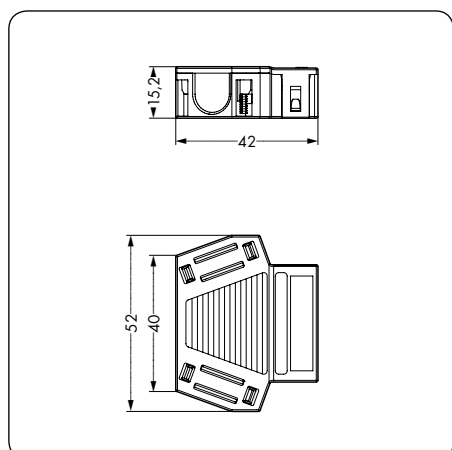


| Color   | Item No.        | Pack. Unit | Color  | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit |
|---|-----------------|------------|--|-----------------|------------|---|-----------------|------------|
| <b>Strain relief housing, angled</b><br>for 2 cables, 8 - 11.5 mm diameter <b>2</b> |                 |            | <b>Strain relief housing for 4 mm<sup>2</sup> conductors,</b><br>for 1 cable, 9 - 13 mm diameter <b>2</b><br>Strip length, outer insulation: 71 mm |                 |            | <b>Strain relief housing, for quick assembly,</b><br>for 1 cable, 7 - 11.5 mm diameter <b>2</b> |                 |            |
| black   | 770-503/032-000 | 25         | black  | 770-503/021-000 | 50         | black   | 770-503/035-000 | 50         |
| white   | 770-513/032-000 | 25         | white  | 770-513/021-000 | 50         | white   | 770-513/035-000 | 50         |
|   |                 |            |  |                 |            |   |                 |            |
|   |                 |            |  |                 |            |   |                 |            |
|   |                 |            |  |                 |            |   |                 |            |
|   |                 |            |  |                 |            |   |                 |            |

**Item-Specific Accessories**

|  |   |  |
|--|---|--|
| <p><b>Marking strip, self-adhesive, on DIN A4 carrier card,</b><br/>                     182 mm long,<br/>                     Strip height: 6 mm <b>210-333100</b><br/>                     Marking area: 48 x 6.5 mm</p>  | <p><b>Marking strip, self-adhesive, on DIN A4 carrier card,</b><br/>                     182 mm long,<br/>                     Strip height: 6 mm <b>210-333 100</b><br/>                     Marking area: 48 x 6.5 mm</p>  |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |
|  |   |  |



**Dimensions**

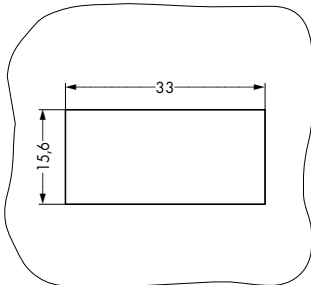


# 3 WINSTA® MIDI



## Snap-In Sockets, 3-Pole



134

|   |   |                        |   |   |
|---|---|------------------------|---|---|
| <b>Cutout dimensions</b><br><br><b>Plate thickness: 0.5 – 2 mm</b><br><b>Cutout tolerance: + 0.1 mm</b> | <b>2 x 0.5 – 4 mm<sup>2</sup> ①</b><br><b>250 V/4 kV/3</b><br><b>I<sub>N</sub> 25 A</b>                                       | <b>2 x AWG 20 – 12</b> | <b>2 x 0.5 – 4 mm<sup>2</sup> ①</b><br><b>250 V/4 kV/3</b><br><b>I<sub>N</sub> 25 A</b> | <b>2 x AWG 20 – 12</b>  |
|   |  <b>9 mm / 0.35 in</b><br><b>② Approvals</b> |                        |   |  <b>9 mm / 0.35 in</b><br><b>② Approvals</b> |



| Description  | Color         | Item No.        | Pack. Unit | Color                                   | Item No.               | Pack. Unit |
|--|---------------|-----------------|------------|---|------------------------|------------|
| <b>Pluggable connectors, snap-in device connection, 3-pole, with CAGE CLAMP® S connection, snap-in frame, 3-pole</b> | <b>Socket</b> |                 |            | <b>Socket with protruding interface</b> |                        |            |
|  | ● black       | <b>770-703</b>  | 100        | ● black                                 | <b>770-703/009-000</b> | 45         |
|  | ○ white       | <b>770-723</b>  | 100        | ○ white                                 | <b>770-723/009-000</b> | 45         |
|  | ● red         | <b>770-2303</b> | 100        |   |                        |            |
|  | ● orange      | <b>770-2343</b> | 100        |   |                        |            |
|  | ● brown       | <b>770-2363</b> | 100        |   |                        |            |

| Item-Specific Accessories |   |                      |     |   |                      |     |
|---------------------------|---|----------------------|-----|---|----------------------|-----|
|                           | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                      |     | <b>Lockout cap, for socket, separable, 12-pole</b>                                    |                      |     |
|                           |  | black <b>770-201</b> | 100 |  | black <b>770-201</b> | 100 |
|                           |   | white <b>770-221</b> | 100 |   | white <b>770-221</b> | 100 |

| Accessories, 770 Series |   |                      |     |   |                      |     |
|-------------------------|---|----------------------|-----|---|----------------------|-----|
|                         | <b>Lockout cap, for cutout, 3-pole</b>  |                      |     | <b>Lockout cap, for cutout, 3-pole</b>  |                      |     |
|                         |  | black <b>770-643</b> | 100 |  | black <b>770-643</b> | 100 |
|                         |   | white <b>770-693</b> | 100 |   | white <b>770-693</b> | 100 |

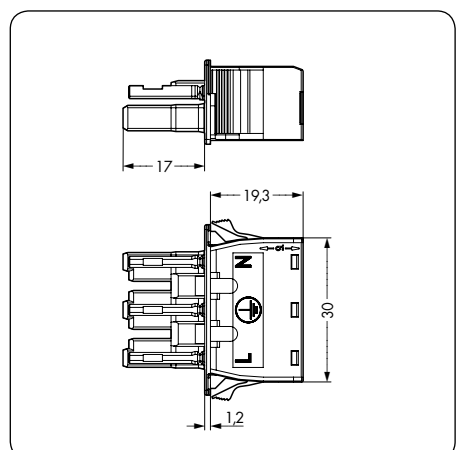
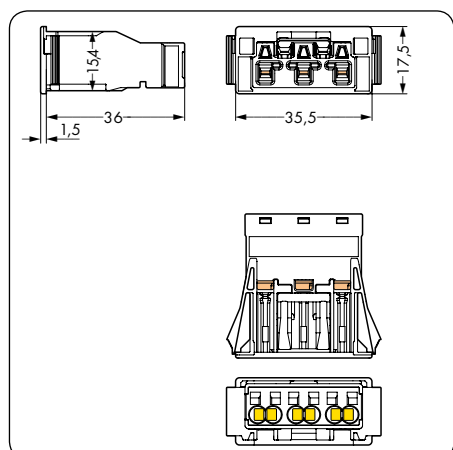
| Info | Dimensions |
|------|------------|
|------|------------|

① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"

② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

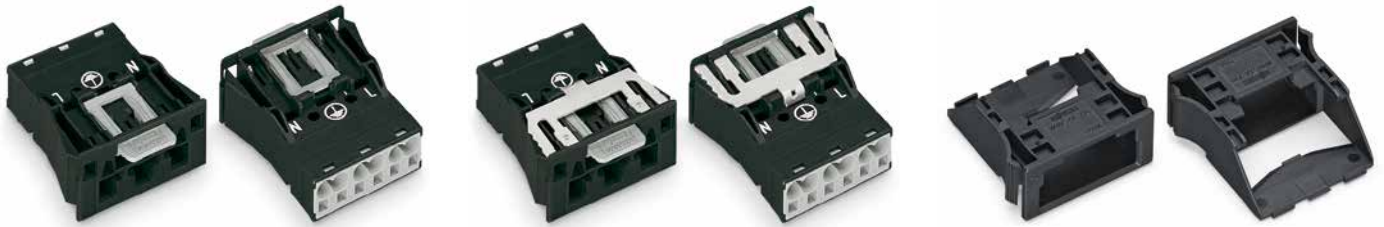
|          |          |             |
|----------|----------|-------------|
| ● black  | Coding A | (L ⊕ N)     |
| ○ white  | Coding A | (L ⊕ N)     |
| ● red    | Coding P | (L ⊕ N)     |
| ● orange | Coding R | (LON LON S) |
| ● brown  | Coding S | (1 2 L)     |

For coding information, see pages 238 to 240.  
Fire load data available upon request.



# Snap-In Plugs and Frames, 3-pole

|  |                        |  |                        |   |
|--|------------------------|--|------------------------|---|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>Snap-in frames:<br/>– for 3-pole sockets and plugs<br/>(see page 129)</p> <p>Plate thickness: 1 – 3 mm</p> |
|--|------------------------|--|------------------------|---|

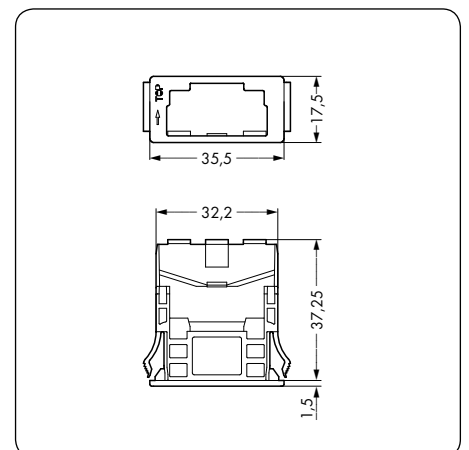
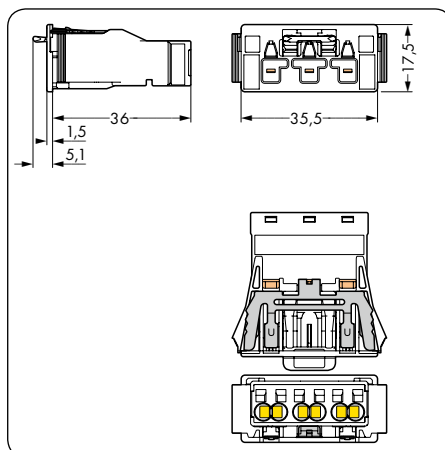
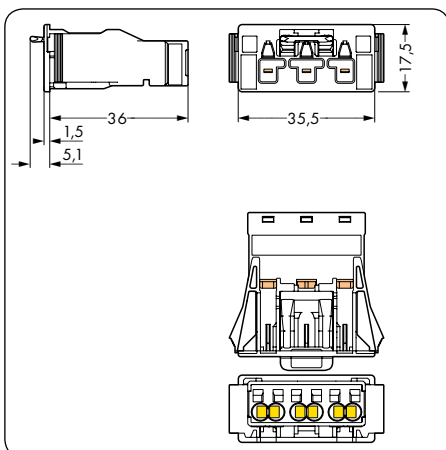


| Color       | Item No. | Pack. Unit | Color                                  | Item No.         | Pack. Unit | Color                        | Item No. | Pack. Unit |
|-------------|----------|------------|--|------------------|------------|------------------------------|----------|------------|
| <b>Plug</b> |          |            | <b>Plug with direct ground contact</b> |                  |            | <b>Snap-in frame, 3-pole</b> |          |            |
| ● black     | 770-713  | 100        | ● black                                | 770-713/007-000  | 100        | black                        | 770-318  | 100        |
| ○ white     | 770-733  | 100        | ○ white                                | 770-733/007-000  | 100        | white                        | 770-338  | 100        |
| ● red       | 770-2313 | 100        | ● red                                  | 770-2313/007-000 | 100        |                              |          |            |
| ● orange    | 770-2353 | 100        |  |                  |            |                              |          |            |

## Item-Specific Accessories

|  |  |   |
|--|--|---|
| <p><b>Lockout cap, for plug, separable, 5-pole</b></p>  <p>yellow 770-360 100</p>             | <p><b>Lockout cap, for plug, separable, 5-pole</b></p>  <p>yellow 770-360 100</p>             | <p><b>Locking lever, oversized, tool operated</b></p>  <p>gray 770-140 100 (4x25)</p>  |
| <p><b>Coding pin, for plug (A and B coding)</b></p>  <p>gray 770-401 100</p>                  | <p><b>Coding pin, for plug (A and B coding)</b></p>  <p>gray 770-401 100</p>                  |  <p>Insert the socket or plug into the frame (observe the "TOP" marking on the frame!). Snap the assembled unit into the cutout.</p> |
| <p><b>Accessories, 770 Series</b></p>  |  |   |
| <p><b>Lockout cap, for cutout, 3-pole</b></p>  <p>black 770-643 100<br/>white 770-693 100</p> | <p><b>Lockout cap, for cutout, 3-pole</b></p>  <p>black 770-643 100<br/>white 770-693 100</p> |   |

## Dimensions



|  |   |                        |  |
|--|---|------------------------|--|
|  | <p>2 x 0.5 – 4 mm<sup>2</sup><br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> | <p>2 x AWG 20 – 12</p> |  |
|  | <p> 9 mm / 0.35 in</p>  |                        |  |
|  | <p><b>1</b> Approvals</p>   |                        |  |



| Description  | Color  | Item No.               | Pack. Unit |
|--|--|------------------------|------------|
| <b>Plug with ground contact, device connector</b>                              | <b>Plug</b> , with ground contact, 3-pole, <b>without</b> strain relief housing; e.g., for assembly on luminaire casings |                        |            |
|  | ● black  | <b>770-213/002-000</b> | 25         |
|  | ○ white  | <b>770-233/002-000</b> | 25         |
| Please contact factory for delivery time and other colors for 4-/5-pole plugs. |  |                        |            |
|  | <b>Lockout cap</b> , for plug, separable, 5-pole   |                        |            |
|  |  | yellow <b>770-360</b>  | 100        |
|  | <b>Coding pin</b> , for plug (A and B coding)  |                        |            |
|  |  | gray <b>770-401</b>    | 100        |
| <b>Accessories, 770 Series</b>   |  |                        |            |
|  | <b>Locking lever</b> , for "flying leads," manually operated   |                        |            |
|  |  | black <b>770-101</b>   | 100 (4x25) |
|  |  | white <b>770-121</b>   | 100 (4x25) |
|  | <b>Locking lever</b> , for "flying leads," tool operated   |                        |            |
|  |  | black <b>770-111</b>   | 100 (4x25) |
|  |  | white <b>770-131</b>   | 100 (4x25) |
| <b>Info</b>  | <b>Application</b>   |                        |            |

- 1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
- 2** Internal connection via 0.8 mm thick current bars is possible. For other thicknesses, please contact factory.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)

For coding information, see pages 238 to 240.  
Fire load data available upon request.



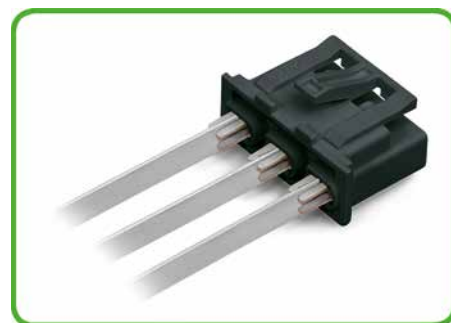
Plug with ground contact mounted on luminaire (example shows 5-pole plug).

# Device Connectors, 3-Pole

|   |   |
|---|---|
| 250 V/4 kV/3<br>$I_N$ 25 A<br><br>① Approvals | 250 V/4 kV/3<br>$I_N$ 25 A<br><br>① Approvals |
|---|---|



| Color                  | Item No. | Pack. Unit | Color                                   | Item No. | Pack. Unit |
|------------------------|----------|------------|---|----------|------------|
| <b>Socket module ②</b> |          |            | <b>Plug module with locking lever ②</b> |          |            |
| ● black                | 770-408  | 100        | ● black                                 | 770-418  | 100        |
| ○ white                | 770-428  | 100        | ○ white                                 | 770-438  | 100        |

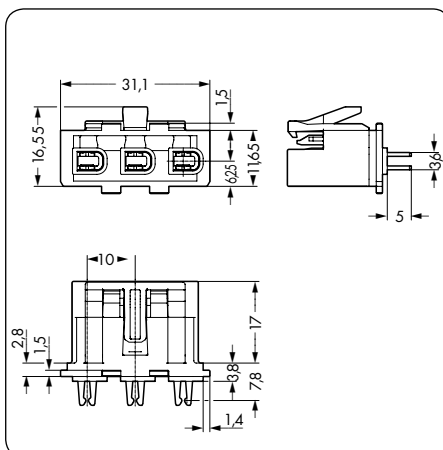
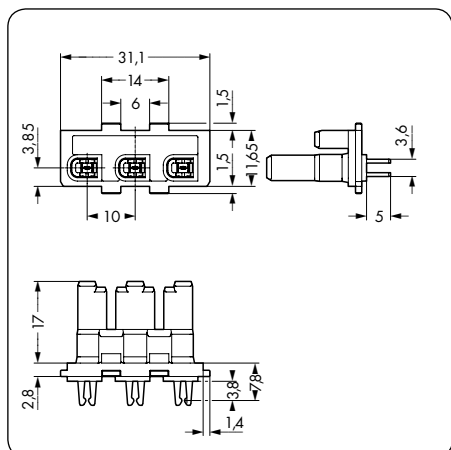


Device connectors can be cost-effectively installed in appropriate guide slots of a housing. Internal electrical connection is performed by contacting the 0.8 mm thick current bars. ②

| Item-Specific Accessories                          |       |         |   |  |        |         |     |
|--|-------|---------|---|--|--------|---------|-----|
| <b>Lockout cap, for socket, separable, 12-pole</b> |       |         | <b>Lockout cap, for plug, separable, 5-pole</b> |  |        |         |     |
|  | black | 770-201 | 100   |  | yellow | 770-360 | 100 |
|  | white | 770-221 | 100   |  |        |         |     |

| Accessories, 770 Series                                     |       |         |   |  |       |         |            |
|---|-------|---------|---|--|-------|---------|------------|
| <b>Locking lever, for "flying leads," manually operated</b> |       |         | <b>Locking lever, for "flying leads," tool operated</b> |  |       |         |            |
|   | black | 770-101 | 100 (4x25)  |  | black | 770-111 | 100 (4x25) |
|   | white | 770-121 | 100 (4x25)  |  | white | 770-131 | 100 (4x25) |

## Dimensions



|  |   |   |
|--|---|---|
|  | 250 V/4 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals | 250 V/4 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals |
|--|---|---|



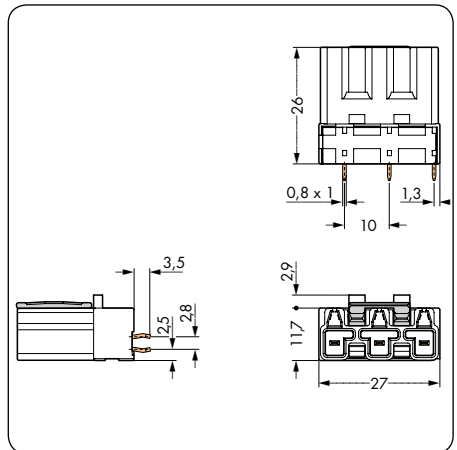
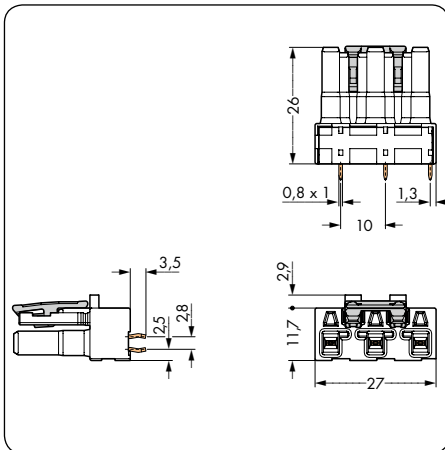
| Description                               | Color   | Item No.   | Pack. Unit | Color   | Item No.   | Pack. Unit |
|---|---|--|------------|---|--|------------|
| PCB connectors,<br>2 solder pins per pole | Socket, straight  |  |            | Plug, straight                                      |  |            |
|   | ● black   | 770-803  | 100        | ● black   | 770-813  | 100        |
|   | ○ white   | 770-823  | 100        | ○ white   | 770-833  | 100        |
| <b>Item-Specific Accessories</b>          |   |  |            |   |  |            |
|   | Lockout cap, for socket, separable, 12-pole             |  |            | Lockout cap, for plug, separable, 5-pole            |  |            |
|   |   | black 770-201 100<br>white 770-221 100               |            |   | yellow 770-360 100                                   |            |
|   |   |  |            | Coding pin, for plug (A and B coding)               |  |            |
|   |   |  |            |   | gray 770-401 100                                     |            |
| <b>Accessories, 770 Series</b>            |   |  |            |   |  |            |
|   | Locking lever, for "flying leads,"<br>manually operated |  |            | Locking lever, for "flying leads,"<br>tool operated |  |            |
|   |   | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |            |   | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |            |
| <b>Info</b>                               | <b>Dimensions</b>                                       |  |            |   |  |            |

① For current load, see table on page 139.

② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

● black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)

For coding information, see pages 238 to 240.  
Fire load data available upon request.





|   |   |
|---|---|
| 250 V/4 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals | 250 V/4 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals |
|---|---|



① Nominal current depends on PCB track dimensions

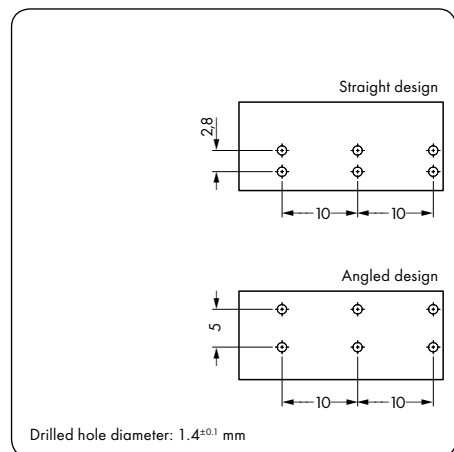
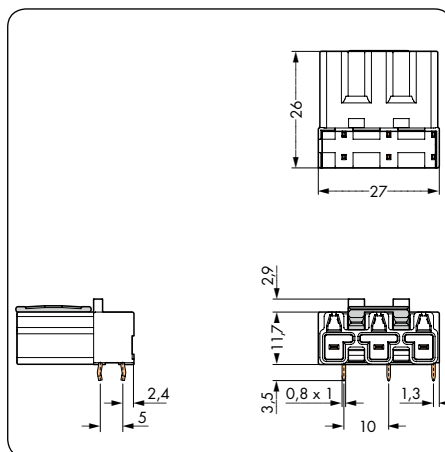
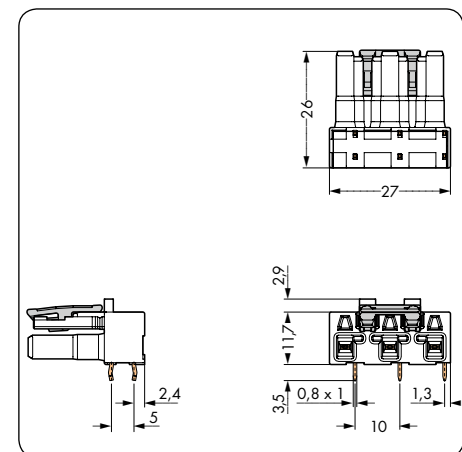
| Nominal current | Thickness of PCB track | Width of PCB track | Conductor size        |
|-----------------|------------------------|--------------------|-----------------------|
| 16 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 20 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 25 A            | 105 µm both sides      | 7 mm / 0.27 in     | △ 4 mm <sup>2</sup>   |

| Color                 | Item No.        | Pack. Unit | Color               | Item No.        | Pack. Unit |
|-----------------------|-----------------|------------|---------------------|-----------------|------------|
| <b>Socket, angled</b> |                 |            | <b>Plug, angled</b> |                 |            |
| ● black               | 770-803/011-000 | 100        | ● black             | 770-813/011-000 | 100        |
| ○ white               | 770-823/011-000 | 100        | ○ white             | 770-833/011-000 | 100        |

| Item-Specific Accessories                          |                   |  |   |                    |  |
|--|-------------------|--|---|--------------------|--|
| <b>Lockout cap, for socket, separable, 12-pole</b> |                   |  | <b>Lockout cap, for plug, separable, 5-pole</b> |                    |  |
|  | black 770-201 100 |  |   | yellow 770-360 100 |  |
|  | white 770-221 100 |  |   |                    |  |
| <b>Coding pin, for plug (A and B coding)</b>       |                   |  |   |                    |  |
|  |                   |  |   | gray 770-401 100   |  |

| Accessories, 770 Series                                     |                          |  |   |                          |  |
|---|--------------------------|--|---|--------------------------|--|
| <b>Locking lever, for "flying leads," manually operated</b> |                          |  | <b>Locking lever, for "flying leads," tool operated</b> |                          |  |
|   | black 770-101 100 (4x25) |  |   | black 770-111 100 (4x25) |  |
|   | white 770-121 100 (4x25) |  |   | white 770-131 100 (4x25) |  |

| Dimensions | Hole patterns |
|------------|---------------|
|------------|---------------|



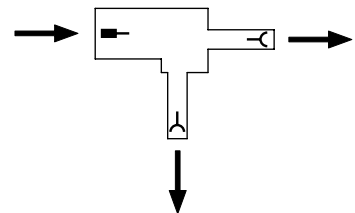
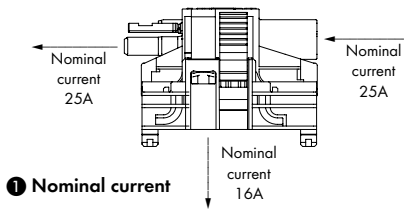
|  |  |   |
|--|--|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>② Approvals</p> |
|--|--|---|



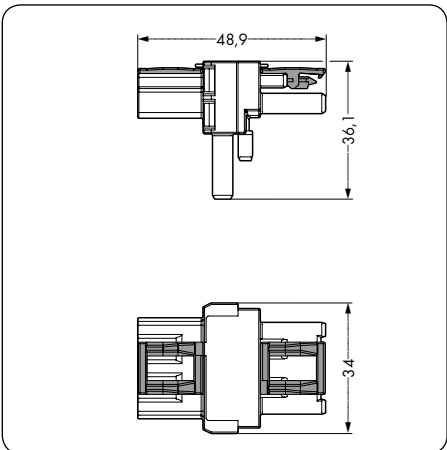
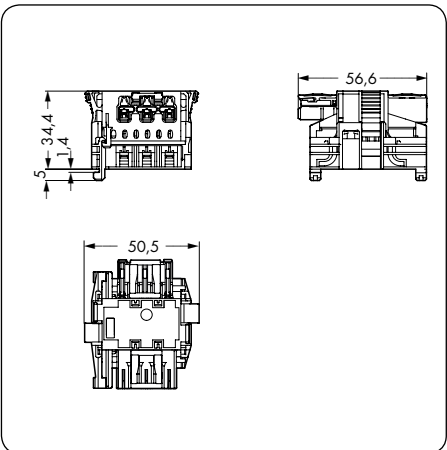
| Description               | Color   | Item No.   | Pack. Unit | Color   | Item No. | Pack. Unit |
|---------------------------|---------|--|------------|---|----------|------------|
| Linect® T-connector       |         | Linect® T-connector, 3-pole,                           |            | T-distribution connector, 1 x plug / 2 x socket |          |            |
| T-distribution connectors |         | socket - plug,   |            | ● black   | 770-606  | 50         |
| Intermediate couplers     |         | white housing, white cover                             |            | ○ white   | 770-656  | 50         |
| h-distribution connectors |         |  |            | ● orange  | 770-667  | 50         |
|                           | ○ white | 770-6223   | 25         |   |          |            |
|                           |         | Suitable for 294-8013 and 294-8113 lighting connectors |            | for "flying leads," with 3rd locking lever      |          |            |
|                           |         |  |            | ● black   | 770-615  | 50         |
|                           |         |  |            | ○ white   | 770-665  | 50         |
|                           |         |  |            | ● orange  | 770-670  | 50         |

| Item-Specific Accessories |  |   |         |     |   |         |
|---------------------------|--|---|---------|-----|---|---------|
|                           |  | Lockout cap, for socket, separable, 12-pole |         |     | Lockout cap, for socket, separable, 12-pole |         |
|                           |  |   |         |     |   |         |
|                           |  | black                                       | 770-201 | 100 | black                                       | 770-201 |
|                           |  | white                                       | 770-221 | 100 | white                                       | 770-221 |
|                           |  | Lockout cap, for plug, separable, 5-pole    |         |     | Lockout cap, for plug, separable, 5-pole    |         |
|                           |  |   |         |     |   |         |
|                           |  | yellow                                      | 770-360 | 100 | yellow                                      | 770-360 |
|                           |  | Coding pin, for plug (A and B coding)       |         |     |   |         |
|                           |  | gray  | 770-401 | 100 |   |         |

| Info | Dimensions |
|------|------------|
|------|------------|



- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
  - ④ 6.0 mm Ø, 1 – 2.5 mm plate thickness
- 
- black Coding A (L ⊕ N)
  - white Coding A (L ⊕ N)
  - red Coding P (L ⊕ N)
  - orange Coding R (LON LON S)
- For coding information, see pages 238 to 240.  
Fire load data available upon request.











# Intermediate Couplers and h-Distribution Connectors, 3-Pole

|   |   |   |
|---|---|---|
| 250 V/4 kV/3<br>$I_N$ 25 A<br><br>② Approvals | 250 V/4 kV/3<br>$I_N$ 25 A<br><br>② Approvals | 250 V/4 kV/3<br>$I_N$ 25 A<br><br>② Approvals |
|---|---|---|

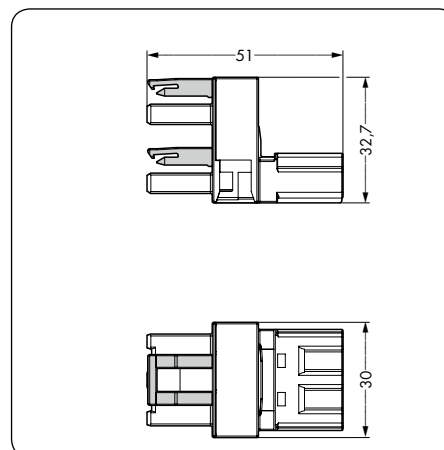
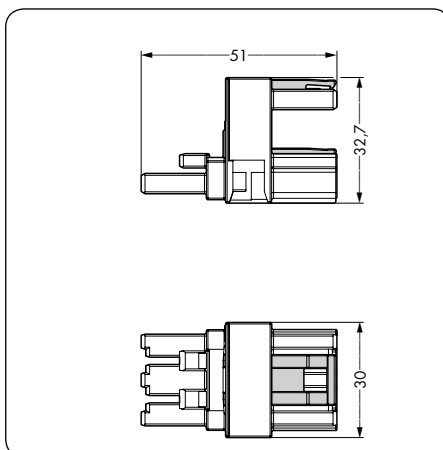
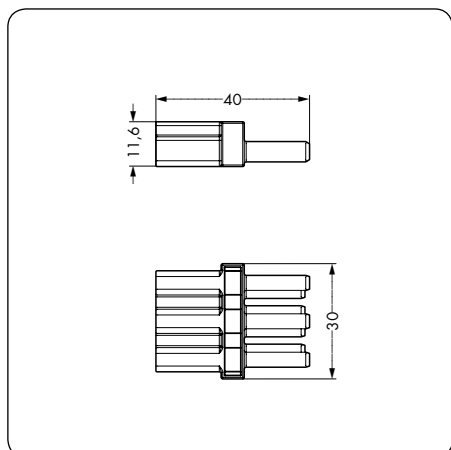
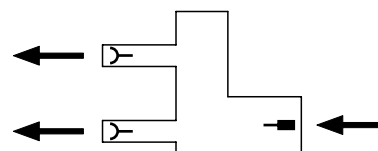
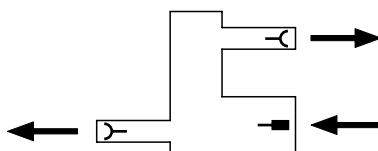
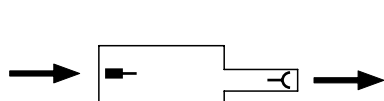


| Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|---|----------|------------|
| <b>Intermediate coupler, 1 x plug / 1 x socket</b> |          |            | <b>h-distribution connector, bi-directional, plug - socket / socket</b> |          |            | <b>h-distribution connector, unidirectional, plug / socket - socket</b> |          |            |
| ● black  | 770-603  | 100        | ● black   | 770-633  | 50         | ● black   | 770-634  | 50         |
| ○ white  | 770-653  | 100        | ○ white   | 770-683  | 50         | ○ white   | 770-684  | 50         |
|  |          |            | for "flying leads," with 3rd locking lever                              |          |            | for "flying leads," with 3rd locking lever                              |          |            |
| ● black  | 770-635  | 50         | ● black   | 770-635  | 50         | ● black   | 770-636  | 50         |
| ○ white  | 770-685  | 50         | ○ white   | 770-685  | 50         | ○ white   | 770-686  | 50         |
|  |          |            |   |          |            | ● red   |          |            |
|  |          |            |   |          |            | 770-936   |          |            |

## Item-Specific Accessories

|  |  |  |
|--|--|--|
| <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> | <b>Mounting plate, for distribution connectors</b><br> <ul style="list-style-type: none"> <li>black 770-623 25</li> <li>white 770-673 25</li> </ul>   | <b>Mounting plate, for distribution connectors</b><br> <ul style="list-style-type: none"> <li>black 770-623 25</li> <li>white 770-673 25</li> </ul>   |
| <b>Lockout cap, for plug, separable, 5-pole</b><br> <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>                              | <b>Fixing pin, for mounting plates</b><br> <ul style="list-style-type: none"> <li>③ black 890-601 250</li> <li>④ black 770-601 250</li> </ul>         | <b>Fixing pin, for mounting plates</b><br> <ul style="list-style-type: none"> <li>③ black 890-601 250</li> <li>④ black 770-601 250</li> </ul>         |
|  | <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> | <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> |

## Dimensions

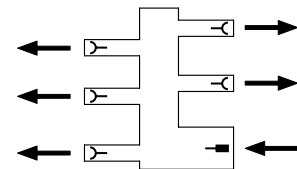
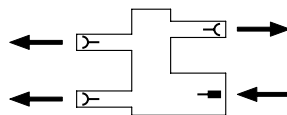


|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> |
|--|---|---|



| Description                        | Color   | Item No.   | Pack. Unit | Color   | Item No.   | Pack. Unit |
|------------------------------------|---------|--|------------|---------|--|------------|
| Distribution connectors, pluggable |         | Distribution connector, 3-way, 1 x plug / 3 x socket |            |         | Distribution connector, 5-way, 1 x plug / 5 x socket |            |
|                                    | ● black | 770-607  | 50         | ● black | 770-608  | 25         |
|                                    | ○ white | 770-657  | 50         | ○ white | 770-658  | 25         |
|                                    | ● red   | 770-907  | 50         |         |  |            |

| Item-Specific Accessories |   |  |  |   |  |  |
|---------------------------|---|--|--|---|--|--|
|                           | Mounting plate, for distribution connectors |  |  | Mounting plate, for distribution connectors |  |  |
|                           |   | black 770-623 25<br>white 770-673 25       |  |   | black 770-623 25<br>white 770-673 25       |  |
|                           | Fixing pin, for mounting plates             |  |  | Fixing pin, for mounting plates             |  |  |
|                           |   | ② black 890-601 250<br>③ black 770-601 250 |  |   | ② black 890-601 250<br>③ black 770-601 250 |  |
|                           | Lockout cap, for socket, separable, 12-pole |  |  | Lockout cap, for socket, separable, 12-pole |  |  |
|                           |   | black 770-201 100<br>white 770-221 100     |  |   | black 770-201 100<br>white 770-221 100     |  |
|                           | Lockout cap, for plug, separable, 5-pole    |  |  | Lockout cap, for plug, separable, 5-pole    |  |  |
|                           |   | yellow 770-360 100                         |  |   | yellow 770-360 100                         |  |



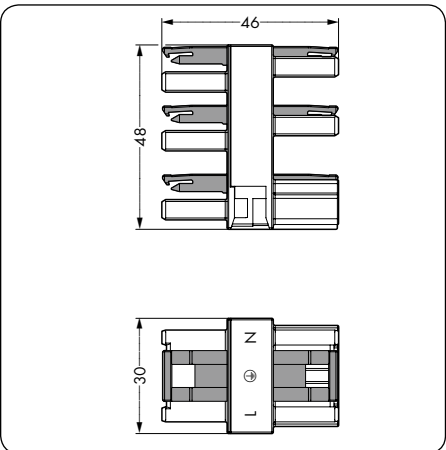
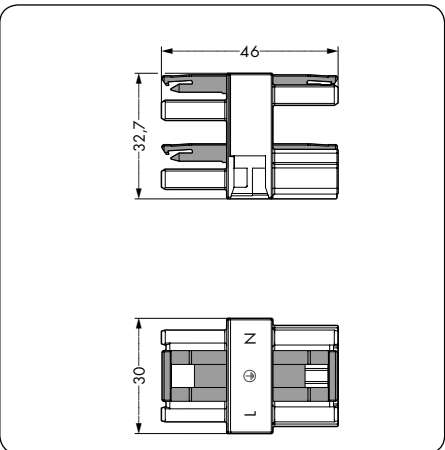
① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

② 5.0 mm Ø, 0.2 – 1.2 mm plate thickness

③ 6.0 mm Ø, 1 – 2.5 mm plate thickness

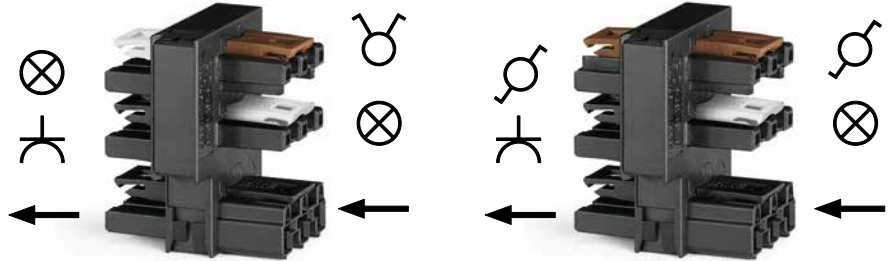
● black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)  
● red Coding P (L ⊕ N)









For coding information, see pages 238 to 240.  
Fire load data available upon request.

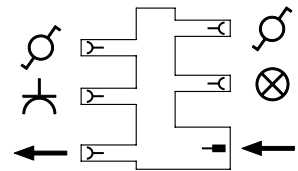
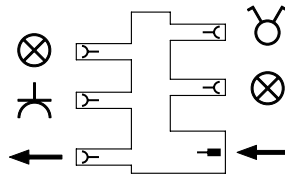




|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> |
|--|---|---|



| Description                               | Color  | Item No.                                   | Pack. Unit | Color   | Item No.                                   | Pack. Unit |
|---|--|--|------------|---|--|------------|
| <b>Distribution connectors, pluggable</b> | Distribution connector for single-pole switch and series circuits,<br>1 x plug, coding A, LL ④ black/white<br>2 x socket, coding A, LL ④ black/white |  |            | Distribution connector for single-pole switch and two-way circuits,<br>1 x plug, coding A, LL ④ black/white<br>2 x socket, coding A, LL ④ black/white |  |            |
|   | 2 x socket, coding A (lighting fixtures), LL ④ white/black<br>1 x socket, coding S (switch), LL ④ brown  |  |            | 2 x socket, coding A (lighting fixtures), LL ④ white/black<br>1 x socket, coding S (switch), LL ④ brown   |  |            |
|   | ● black  | 770-637                                    | 10         | ● black   | 770-638                                    | 10         |
|   | ○ white  | 770-687                                    | 10         | ○ white   | 770-688                                    | 10         |
|   | <b>Item-Specific Accessories</b>   |  |            |   |  |            |
|   | <b>Mounting plate, for distribution connectors</b>   |  |            | <b>Mounting plate, for distribution connectors</b>  |  |            |
|   |   | black 770-623 25<br>white 770-673 25       |            |    | black 770-623 25<br>white 770-673 25       |            |
|   | <b>Fixing pin, for mounting plates</b>   |  |            | <b>Fixing pin, for mounting plates</b>  |  |            |
|   |   | ② black 890-601 250<br>③ black 770-601 250 |            |    | ② black 890-601 250<br>③ black 770-601 250 |            |
|   | <b>Lockout cap, for socket, separable, 12-pole</b>   |  |            | <b>Lockout cap, for socket, separable, 12-pole</b>  |  |            |
|   |   | black 770-201 100<br>white 770-221 100     |            |    | black 770-201 100<br>white 770-221 100     |            |
|   | <b>Lockout cap, for plug, separable, 5-pole</b>  |  |            | <b>Lockout cap, for plug, separable, 5-pole</b>   |  |            |
|   |   | yellow 770-360 100                         |            |    | yellow 770-360 100                         |            |



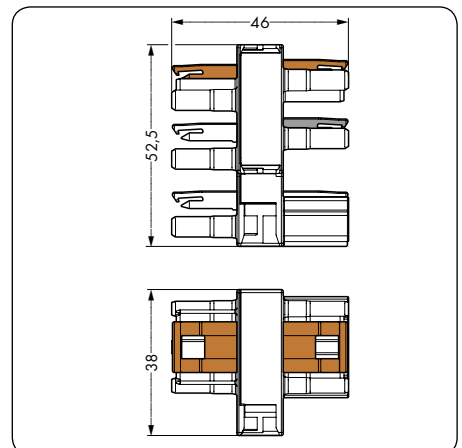
① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

② 5.0 mm Ø, 0.2 – 1.2 mm plate thickness  
③ 6.0 mm Ø, 1 – 2.5 mm plate thickness

④ LL = Locking lever

● black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)  
● brown Coding S

For coding information, see pages 238 to 240.  
Fire load data available upon request.



# Shorting Plugs, 3-Pole

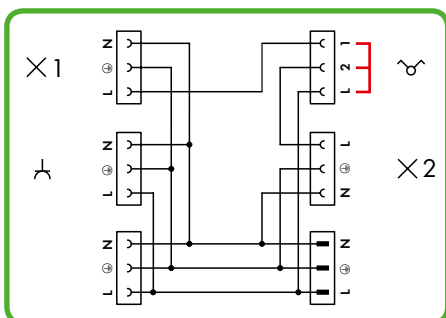
|   |  |
|---|--|
| <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A<br/><b>Note:</b><br/>Before finally connecting the switches, the shorting plugs may be used to switch on or off.</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A<br/><b>Note:</b><br/>If this shorting plug is connected to the 770-637 distribution connector as shown below, a motion sensor can be connected instead of the switch.</p> |
|---|--|



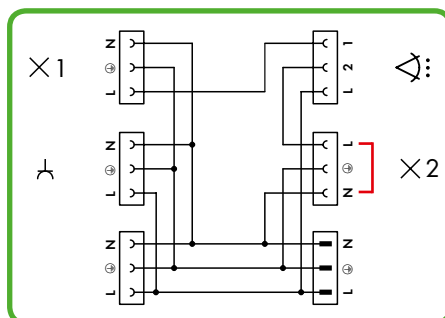
| Marking  | Item No.         | Pack. Unit | Marking   | Item No.        | Pack. Unit |
|--|------------------|------------|---|-----------------|------------|
| <b>Shorting plug,</b><br>brown plug with assembled strain relief housing |                  |            | <b>Shorting plug, coding A,</b><br>black plug with assembled strain relief housing and bridge |                 |            |
|  | 770-1373/146-000 | 50         |   | 770-113/147-000 | 50         |
|  | 770-1373/147-000 | 50         |   |                 |            |
|  | 770-1373/148-000 | 50         |   |                 |            |
|  | 770-1373/149-000 | 50         |   |                 |            |

| Item-Specific Accessories                       |   |
|---|---|
| <b>Lockout cap, for plug, separable, 5-pole</b> | <b>Lockout cap, for plug, separable, 5-pole</b> |
| yellow 770-360 100                              | yellow 770-360 100                              |

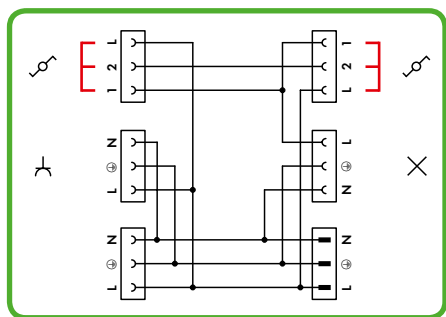
## Application Notes



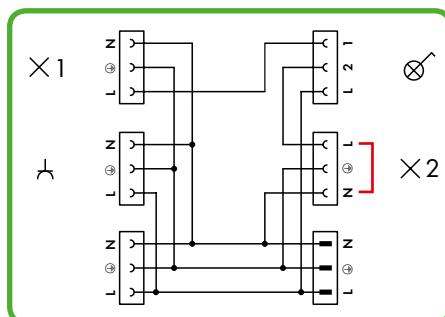
Internal circuit of 770-637 distribution connector with possible insertion position of 770-1373/14x-000 shorting plug.



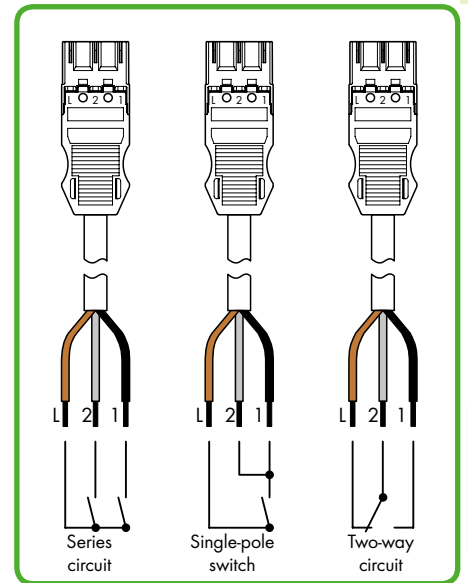
Internal circuit of 770-637 distribution connector with insertion position of 770-113/147-000 shorting plug for connecting a motion sensor.



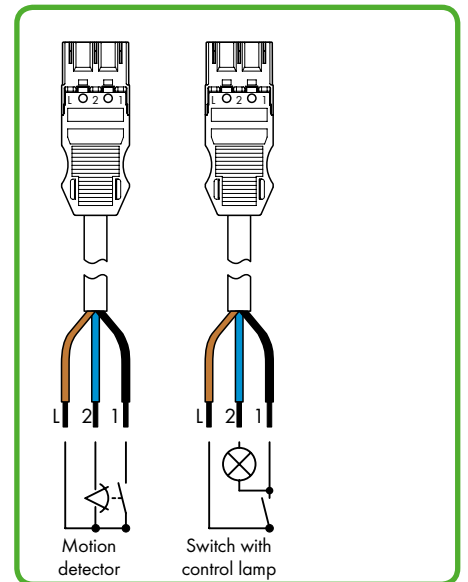
Internal circuit of 770-638 distribution connector with possible insertion positions of 770-1373/14x-000 shorting plug.



Internal circuit of 770-637 distribution connector with insertion position of 770-113/147-000 shorting plug for connecting a switch with control lamp.




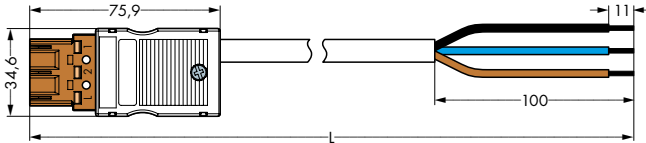
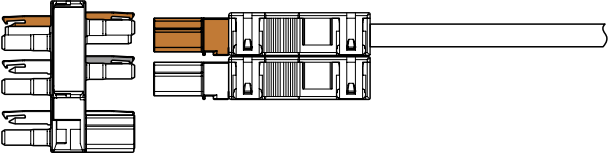
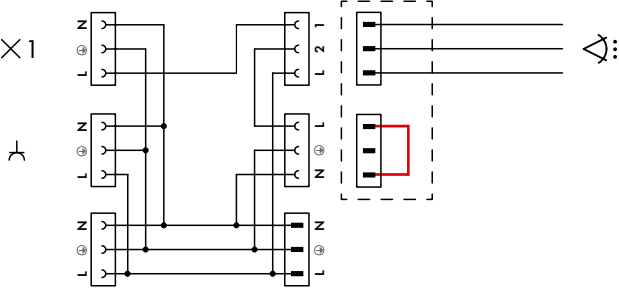
Cable assembly with coding S for connection to 770-637 and 770-638 distribution connectors.



Cable assembly with coding S for connection to 770-637 distribution connector when using 770-113/147-000 shorting plug.



|  |   |
|--|---|
|  | PVC H05VV-F 3x1.5<br>halogen-free H05Z1Z1-F 3x1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 11 mm<br>① Approvals |
|--|---|





| <b>Connecting cable, socket – plug</b><br><br><br><br><br><br><br><br> | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. black</th> </tr> </thead> <tbody> <tr> <td></td> <td>                     ● Coding S<br/>                     ● Coding A                 </td> <td></td> </tr> <tr> <td></td> <td colspan="2">PVC</td> </tr> <tr> <td>3 m</td> <td>771-5001/106-000</td> <td></td> </tr> <tr> <td>4 m</td> <td>771-5001/107-000</td> <td></td> </tr> </tbody> </table> <p>This cable combines a standard S-coded cable with an A-coded shorting plug. Both strain relief housings are locked together.<br/>A motion detector or switch with signal lamp can be directly connected using a cable equipped with 770-637 distribution connector.</p> | Length         | Item No. black | Item No. black |  | ● Coding S<br>● Coding A |  |  | PVC |  | 3 m | 771-5001/106-000 |  | 4 m | 771-5001/107-000 |  |
|---|--|----------------|----------------|----------------|--|--------------------------|--|--|-----|--|-----|------------------|--|-----|------------------|--|
| Length  | Item No. black   | Item No. black |                |                |  |                          |  |  |     |  |     |                  |  |     |                  |  |
|   | ● Coding S<br>● Coding A   |                |                |                |  |                          |  |  |     |  |     |                  |  |     |                  |  |
|   | PVC  |                |                |                |  |                          |  |  |     |  |     |                  |  |     |                  |  |
| 3 m   | 771-5001/106-000   |                |                |                |  |                          |  |  |     |  |     |                  |  |     |                  |  |
| 4 m   | 771-5001/107-000   |                |                |                |  |                          |  |  |     |  |     |                  |  |     |                  |  |

|             |                    |
|-------------|--------------------|
| <b>Info</b> | <b>Accessories</b> |
|-------------|--------------------|

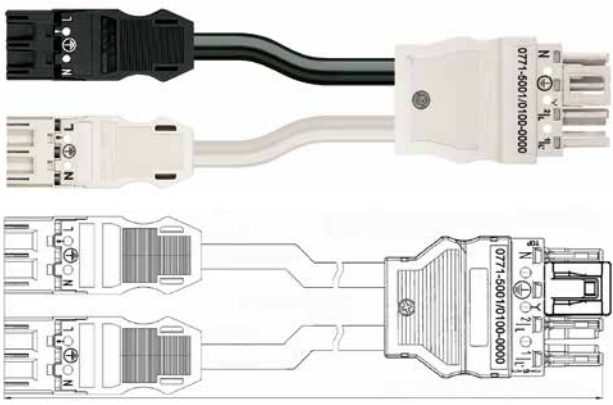
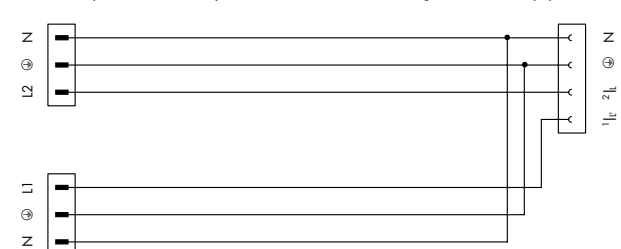
① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.

● black Coding A (L ⊕ N)  
 ● brown Coding S (L 2 1)

For coding information, see pages 238 to 240.  
 Fire load data available upon request.

|   |
|---|
|  manually operated<br>black 770-101 100 (4x25)<br>white 770-121 100 (4x25)             |
|  tool operated<br>black 770-111 100 (4x25)<br>white 770-131 100 (4x25)                 |
| Lockout cap, for socket, separable, 12-pole<br> black 770-201 100<br>white 770-221 100 |
| Lockout cap, for plug, separable, 5-pole<br> yellow 770-360 100                        |

# Cable Assemblies 3 x 1.5 mm<sup>2</sup>

|   |  |            |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
|---|--|------------|---------|------------|-------|---------|------------|-------|---------|------------|-------|---------|------------|--------|---------|-----|------|---------|-----|
|   | <p>PVC H05VV-F 3x1.5 I<sub>N</sub> 16 A</p> <p>250 V/4 kV/3</p> <p>① Approvals</p>   |            |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
| <p><b>Y-cable, 1 x 4-pole, 2 x 3-pole</b></p>  <p>Black plug:<br/>Continuous phase for battery</p> <p>White plug:<br/>Light with backup power function</p>  <p>White plug:<br/>Switched phase for the light ("on/off")</p> | <p>Length Item No.<br/>black</p> <p>● ○ Coding A</p> <p>0.6 m 771-5001/100-000</p> <p>This cable connects lights with backup power function (AkkuPack). The black 3-pole plug connects the continuous phase for the battery, while the white 3-pole plug connects the switched phase for the light ("on/off"). The white 4-pole socket can be directly plugged into the light.</p>   |            |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
|   | <p><b>Accessories</b></p> <p><b>Locking lever, for "flying leads,"</b><br/>manually operated</p> <table border="1"> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </table> <p><b>Locking lever, for "flying leads,"</b><br/>tool operated</p> <table border="1"> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </table> <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table> <p><b>Coding pin, for plug (A and B coding)</b></p> <table border="1"> <tr> <td>gray</td> <td>770-401</td> <td>100</td> </tr> </table> | black      | 770-101 | 100 (4x25) | white | 770-121 | 100 (4x25) | black | 770-111 | 100 (4x25) | white | 770-131 | 100 (4x25) | yellow | 770-360 | 100 | gray | 770-401 | 100 |
| black   | 770-101  | 100 (4x25) |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
| white   | 770-121  | 100 (4x25) |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
| black   | 770-111  | 100 (4x25) |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
| white   | 770-131  | 100 (4x25) |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
| yellow  | 770-360  | 100        |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |
| gray  | 770-401  | 100        |         |            |       |         |            |       |         |            |       |         |            |        |         |     |      |         |     |

|   |  |  |                   |                |                   |                |  |
|---|--|--|-------------------|----------------|-------------------|----------------|--|
|   |  | PVC H05VV-F 3G1.5<br>halogen-free H05Z1Z1-F 3G1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm/16 mm<br>① Approvals |                   |                |                   |                |  |
| <b>Interconnecting cable, socket – plug</b> |  | Length   | Item No. black    | Item No. white | Item No. black    | Item No. white |  |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                   |                |                   |                |  |
|   |  | 1 m  | 771-9993/006-101  | .../006-102    | 771-9993/016-101  | .../016-102    |  |
|   |  | 2 m  | 771-9993/006-201  | .../006-202    | 771-9993/016-201  | .../016-202    |  |
|   |  | 3 m  | 771-9993/006-301  | .../006-302    | 771-9993/016-301  | .../016-302    |  |
|   |  | 5 m  | 771-9993/006-501  | .../006-502    | 771-9993/016-501  | .../016-502    |  |
|   |  | 7 m  | 771-9993/006-701  | .../006-702    | 771-9993/016-701  | .../016-702    |  |
| <b>Connecting cable, socket – free end</b>  |  | Length   | Item No. black    | Item No. white | Item No. black    | Item No. white |  |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                   |                |                   |                |  |
|   |  | 1 m  | 771-9993/106-101  | .../106-102    | 771-9993/116-101  | .../116-102    |  |
|   |  | 2 m  | 771-9993/106-201  | .../106-202    | 771-9993/116-201  | .../116-202    |  |
|   |  | 3 m  | 771-9993/106-301  | .../106-302    | 771-9993/116-301  | .../116-302    |  |
|   |  | 5 m  | 771-9993/106-501  | .../106-502    | 771-9993/116-501  | .../116-502    |  |
|   |  | 7 m  | 771-9993/106-701  | .../106-702    | 771-9993/116-701  | .../116-702    |  |
| <b>Connecting cable, plug – free end</b>    |  | Length   | Item No. black    | Item No. white | Item No. black    | Item No. white |  |
|   |  | ● ○ Coding A ②<br>PVC halogen-free   |                   |                |                   |                |  |
|   |  | 1 m  | 771-9993/206-101  | .../206-102    | 771-9993/216-101  | .../216-102    |  |
|   |  | 2 m  | 771-9993/206-201  | .../206-202    | 771-9993/216-201  | .../216-202    |  |
|   |  | 3 m  | 771-9993/206-301  | .../206-302    | 771-9993/216-301  | .../216-302    |  |
|   |  | 5 m  | 771-9993/206-501  | .../206-502    | 771-9993/216-501  | .../216-502    |  |
|   |  | 7 m  | 771-9993/206-701  | .../206-702    | 771-9993/216-701  | .../216-702    |  |
|   |  | ● Coding A ③ (for installation of switches and outlets)  |                   |                |                   |                |  |
|   |  | 1 m  | 771-9993/3206-101 |                | 771-9993/3216-101 |                |  |
|   |  | 2 m  | 771-9993/3206-201 |                | 771-9993/3216-201 |                |  |
|   |  | 3 m  | 771-9993/3206-301 |                | 771-9993/3216-301 |                |  |
|   |  | 5 m  | 771-9993/3206-501 |                | 771-9993/3216-501 |                |  |
|   |  | 7 m  | 771-9993/3206-701 |                | 771-9993/3216-701 |                |  |

**Info**

① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.


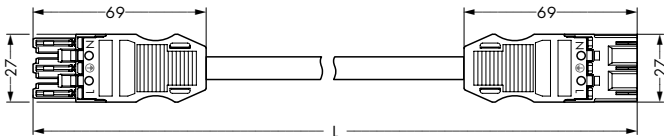

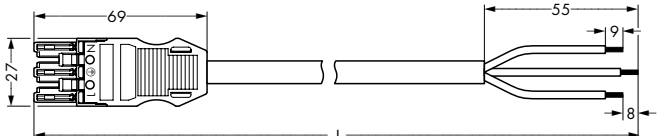

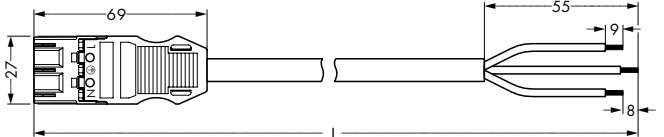





For other cables, please contact factory.


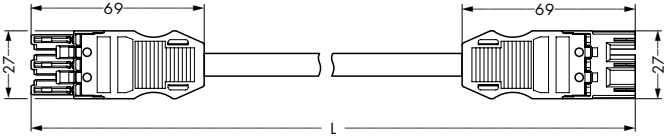

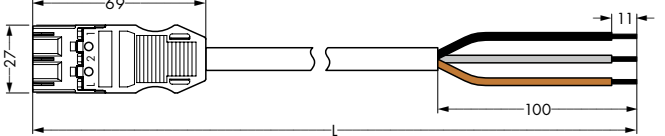

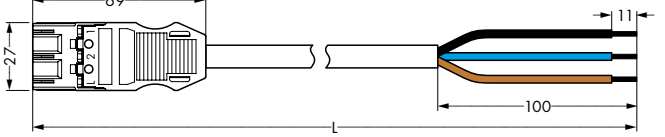












● black Coding A (L ⊕ N)  
 ○ white Coding A (L ⊕ N)  
 ● red Coding P (L ⊕ N)

For coding information, see pages 238 to 240.  
 Fire load data available upon request.

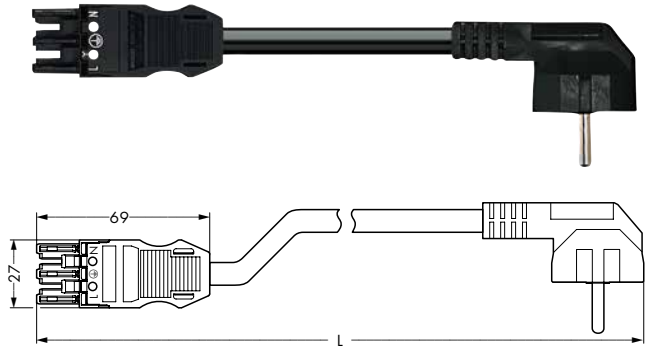
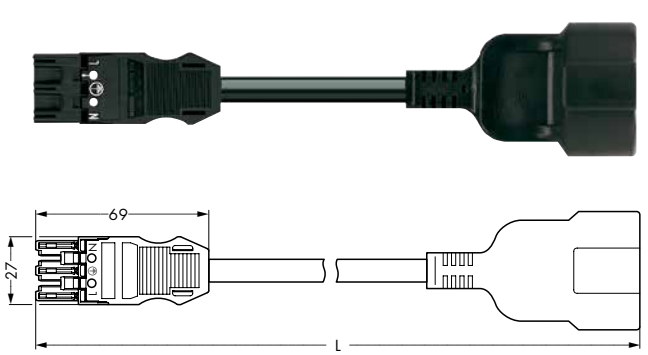
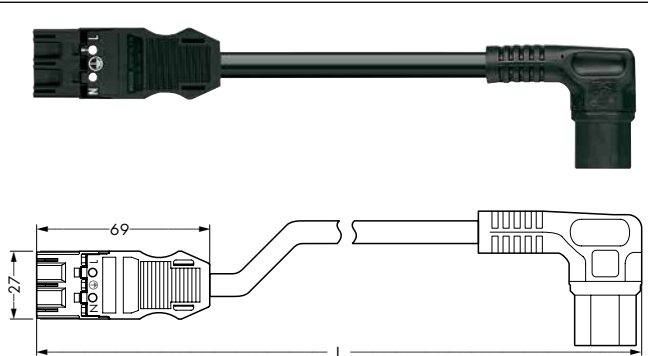
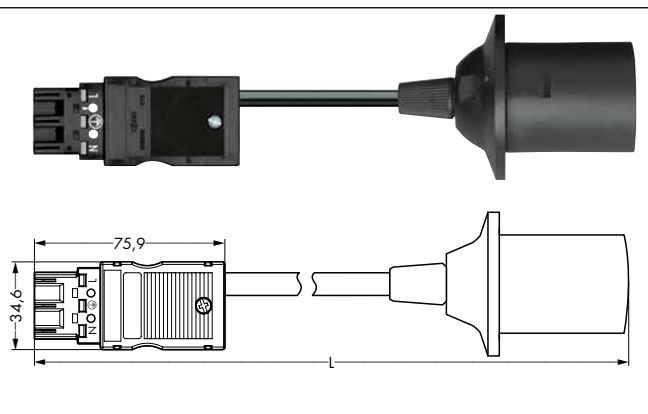
**Accessories**

|  |                   |         |            |
|--|-------------------|---------|------------|
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b> |                   |         |            |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>    |                   |         |            |
|  | yellow            | 770-360 | 100        |

|   |  | PVC   | H05VV-F 3G1.5    |   |                  |                |
|---|--|---|------------------|---|------------------|----------------|
|   |  | halogen-free  | H05Z1Z1-F 3G1.5  |   |                  |                |
|   |  | 250 V/4 kV/3 I <sub>N</sub> 16 A  |                  |   |                  |                |
|   |  | Conductor ends, bonded: 9 mm  |                  |   |                  |                |
|   |  | ① Approvals   |                  |   |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length  | Item No. black   | Item No. white  | Item No. black   | Item No. white |
|    |  | ● Coding P  |                  |   |                  |                |
|    |  | PVC halogen-free  |                  |   |                  |                |
|   |  | 1 m   | 771-9973/006-101 | .../006-102   | 771-9973/016-101 | .../016-102    |
|   |  | 2 m   | 771-9973/006-201 | .../006-202   | 771-9973/016-201 | .../016-202    |
|   |  | 3 m   | 771-9973/006-301 | .../006-302   | 771-9973/016-301 | .../016-302    |
|   |  | 5 m   | 771-9973/006-501 | .../006-502   | 771-9973/016-501 | .../016-502    |
|   |  | 7 m   | 771-9973/006-701 | .../006-702   | 771-9973/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white  | Item No. black   | Item No. white |
|   |  | ● Coding P  |                  |   |                  |                |
|  |  | PVC halogen-free  |                  |   |                  |                |
|   |  | 1 m   | 771-9973/106-101 | .../106-102   | 771-9973/116-101 | .../116-102    |
|   |  | 2 m   | 771-9973/106-201 | .../106-202   | 771-9973/116-201 | .../116-202    |
|   |  | 3 m   | 771-9973/106-301 | .../106-302   | 771-9973/116-301 | .../116-302    |
|   |  | 5 m   | 771-9973/106-501 | .../106-502   | 771-9973/116-501 | .../116-502    |
|   |  | 7 m   | 771-9973/106-701 | .../106-702   | 771-9973/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length  | Item No. black   | Item No. white  | Item No. black   | Item No. white |
|  |  | ● Coding P  |                  |   |                  |                |
|  |  | PVC halogen-free  |                  |   |                  |                |
|   |  | 1 m   | 771-9973/206-101 | .../206-102   | 771-9973/216-101 | .../216-102    |
|   |  | 2 m   | 771-9973/206-201 | .../206-202   | 771-9973/216-201 | .../216-202    |
|   |  | 3 m   | 771-9973/206-301 | .../206-302   | 771-9973/216-301 | .../216-302    |
|   |  | 5 m   | 771-9973/206-501 | .../206-502   | 771-9973/216-501 | .../216-502    |
|   |  | 7 m   | 771-9973/206-701 | .../206-702   | 771-9973/216-701 | .../216-702    |
|   |  | <b>Accessories</b>  |                  |   |                  |                |
|   |  | <b>Locking lever, for "flying leads,"</b>   |                  |   |                  |                |
|   |  | manually operated   |                  |   |                  |                |
|   |  |  | black            | 770-101   | 100              | (4x25)         |
|   |  |   | white            | 770-121   | 100              | (4x25)         |
|   |  | <b>Locking lever, for "flying leads,"</b>   |                  |   |                  |                |
|   |  | tool operated   |                  |   |                  |                |
|   |  |  | black            | 770-111   | 100              | (4x25)         |
|   |  |   | white            | 770-131   | 100              | (4x25)         |
|   |  | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                  |   |                  |                |
|   |  |  | black            | 770-201   | 100              |                |
|   |  |   | white            | 770-221   | 100              |                |
| <b>Coding pin, for plug (A and B coding)</b>  |  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                  |   |                  |                |
|  |  | gray  | 770-401          | 100   |                  |                |
|   |  |   |                  |  | yellow           | 770-360 100    |

|   |                   | PVC H05VV-F 3x1.5<br>halogen-free H05Z1Z1-F 3x1.5<br><br>250 V/4 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 11 mm<br>① Approvals   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|---|-------------------|---|---|----------------|----------------|---|---|-------------------|-----|--|--------------|---------|------------------|------------------|-------|------------------|------------------|---|------------------|------------------|-----|---|------------------|-----|------------------|------------------|---------|------------|--|-------|---------|------------|--|--|--|--|---|-------|---------|-----|-------|---------|-----|---|--|--|--|---|--------|---------|-----|
| <b>Interconnecting cable, socket – plug</b>   |                   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. black</th> </tr> </thead> <tbody> <tr> <td colspan="3">● Coding S</td> </tr> <tr> <td colspan="2">PVC</td> <td>halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-9973/006-105</td> <td>771-9973/016-105</td> </tr> <tr> <td>2 m</td> <td>771-9973/006-205</td> <td>771-9973/016-205</td> </tr> <tr> <td>3 m</td> <td>771-9973/006-305</td> <td>771-9973/016-305</td> </tr> <tr> <td>5 m</td> <td>771-9973/006-505</td> <td>771-9973/016-505</td> </tr> <tr> <td>7 m</td> <td>771-9973/006-705</td> <td>771-9973/016-705</td> </tr> </tbody> </table>   | Length                                    | Item No. black | Item No. black | ● Coding S  |   |                   | PVC |  | halogen-free | 1 m     | 771-9973/006-105 | 771-9973/016-105 | 2 m   | 771-9973/006-205 | 771-9973/016-205 | 3 m                                       | 771-9973/006-305 | 771-9973/016-305 | 5 m | 771-9973/006-505  | 771-9973/016-505 | 7 m | 771-9973/006-705 | 771-9973/016-705 |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| Length  | Item No. black    | Item No. black  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| ● Coding S  |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| PVC   |                   | halogen-free  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 1 m   | 771-9973/006-105  | 771-9973/016-105  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 2 m   | 771-9973/006-205  | 771-9973/016-205  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 3 m   | 771-9973/006-305  | 771-9973/016-305  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 5 m   | 771-9973/006-505  | 771-9973/016-505  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 7 m   | 771-9973/006-705  | 771-9973/016-705  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <br>   |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <b>Connecting cable, plug – free end ②</b>  |                   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. black</th> </tr> </thead> <tbody> <tr> <td colspan="3">● Coding S<br/>for distribution connectors (series and two-way circuits)</td> </tr> <tr> <td colspan="2">PVC</td> <td>halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-9973/206-105</td> <td>771-9973/216-105</td> </tr> <tr> <td>2 m</td> <td>771-9973/206-205</td> <td>771-9973/216-205</td> </tr> <tr> <td>3 m</td> <td>771-9973/206-305</td> <td>771-9973/216-305</td> </tr> <tr> <td>5 m</td> <td>771-9973/206-505</td> <td>771-9973/216-505</td> </tr> <tr> <td>7 m</td> <td>771-9973/206-705</td> <td>771-9973/216-705</td> </tr> </tbody> </table>   | Length                                    | Item No. black | Item No. black | ● Coding S<br>for distribution connectors (series and two-way circuits) |   |                   | PVC |  | halogen-free | 1 m     | 771-9973/206-105 | 771-9973/216-105 | 2 m   | 771-9973/206-205 | 771-9973/216-205 | 3 m                                       | 771-9973/206-305 | 771-9973/216-305 | 5 m | 771-9973/206-505  | 771-9973/216-505 | 7 m | 771-9973/206-705 | 771-9973/216-705 |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| Length  | Item No. black    | Item No. black  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| ● Coding S<br>for distribution connectors (series and two-way circuits)   |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| PVC   |                   | halogen-free  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 1 m   | 771-9973/206-105  | 771-9973/216-105  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 2 m   | 771-9973/206-205  | 771-9973/216-205  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 3 m   | 771-9973/206-305  | 771-9973/216-305  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 5 m   | 771-9973/206-505  | 771-9973/216-505  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 7 m   | 771-9973/206-705  | 771-9973/216-705  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <br>  |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <b>Connecting cable, plug – free end ②</b>  |                   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. black</th> </tr> </thead> <tbody> <tr> <td colspan="3">● Coding S<br/>for distribution connector (motion sensor)</td> </tr> <tr> <td colspan="2">PVC</td> <td>halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-9973/206-104</td> <td>771-9973/216-104</td> </tr> <tr> <td>2 m</td> <td>771-9973/206-204</td> <td>771-9973/216-204</td> </tr> <tr> <td>3 m</td> <td>771-9973/206-304</td> <td>771-9973/216-304</td> </tr> <tr> <td>5 m</td> <td>771-9973/206-504</td> <td>771-9973/216-504</td> </tr> <tr> <td>7 m</td> <td>771-9973/206-704</td> <td>771-9973/216-704</td> </tr> </tbody> </table>  | Length                                    | Item No. black | Item No. black | ● Coding S<br>for distribution connector (motion sensor)                |   |                   | PVC |  | halogen-free | 1 m     | 771-9973/206-104 | 771-9973/216-104 | 2 m   | 771-9973/206-204 | 771-9973/216-204 | 3 m                                       | 771-9973/206-304 | 771-9973/216-304 | 5 m | 771-9973/206-504  | 771-9973/216-504 | 7 m | 771-9973/206-704 | 771-9973/216-704 |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| Length  | Item No. black    | Item No. black  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| ● Coding S<br>for distribution connector (motion sensor)  |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| PVC   |                   | halogen-free  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 1 m   | 771-9973/206-104  | 771-9973/216-104  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 2 m   | 771-9973/206-204  | 771-9973/216-204  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 3 m   | 771-9973/206-304  | 771-9973/216-304  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 5 m   | 771-9973/206-504  | 771-9973/216-504  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| 7 m   | 771-9973/206-704  | 771-9973/216-704  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <br>   |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <b>Info</b>   |                   | <b>Accessories</b>  |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <p>① For “International Certification Organizations” and “Approvals – User Guide,” see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.</p> <p>② PVC H05VV-F 3 x 1.5<br/>halogen-free H05Z1Z1-F 3 x 1.5</p> <p>● black Coding A (L ⊕ N)<br/>○ white Coding A (L ⊕ N)<br/>● brown Coding S (L 2 1)</p> <p>For coding information, see pages 238 to 240.<br/>Fire load data available upon request.</p> |                   | <table border="1"> <tr> <td colspan="4"><b>Locking lever, for “flying leads,”</b></td> </tr> <tr> <td rowspan="2"></td> <td>manually operated</td> <td></td> <td></td> </tr> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td></td> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> <tr> <td colspan="4"><b>Locking lever, for “flying leads,”</b></td> </tr> <tr> <td rowspan="2"></td> <td>tool operated</td> <td></td> <td></td> </tr> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td></td> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> <tr> <td colspan="4"><b>Lockout cap, for socket, separable, 12-pole</b></td> </tr> <tr> <td rowspan="2"></td> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> <tr> <td colspan="4"><b>Lockout cap, for plug, separable, 5-pole</b></td> </tr> <tr> <td></td> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table> | <b>Locking lever, for “flying leads,”</b> |                |                |   |  | manually operated |     |  | black        | 770-101 | 100 (4x25)       |                  | white | 770-121          | 100 (4x25)       | <b>Locking lever, for “flying leads,”</b> |                  |                  |     |  | tool operated    |     |                  | black            | 770-111 | 100 (4x25) |  | white | 770-131 | 100 (4x25) | <b>Lockout cap, for socket, separable, 12-pole</b> |  |  |  |  | black | 770-201 | 100 | white | 770-221 | 100 | <b>Lockout cap, for plug, separable, 5-pole</b> |  |  |  |  | yellow | 770-360 | 100 |
| <b>Locking lever, for “flying leads,”</b>   |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|    | manually operated |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|   | black             | 770-101   | 100 (4x25)                                |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|   | white             | 770-121   | 100 (4x25)                                |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <b>Locking lever, for “flying leads,”</b>   |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|    | tool operated     |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|   | black             | 770-111   | 100 (4x25)                                |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|   | white             | 770-131   | 100 (4x25)                                |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <b>Lockout cap, for socket, separable, 12-pole</b>  |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|    | black             | 770-201   | 100                                       |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|   | white             | 770-221   | 100                                       |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
| <b>Lockout cap, for plug, separable, 5-pole</b>   |                   |   |   |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |
|    | yellow            | 770-360   | 100                                       |                |                |   |   |                   |     |  |              |         |                  |                  |       |                  |                  |   |                  |                  |     |   |                  |     |                  |                  |         |            |  |       |         |            |  |  |  |  |   |       |         |     |       |         |     |   |  |  |  |   |        |         |     |

# Cable Assemblies 3 x 1.5 mm<sup>2</sup> / 3 x 1 mm<sup>2</sup> / 3 x 0.75 mm<sup>2</sup>

|   |  |
|---|--|
|   | <p>PVC H05VV-F 3x1.5 I<sub>N</sub> 16 A<br/>         H05VV-F 3G1.0 I<sub>N</sub> 10 A ③<br/>         H05VV-F 3G0.75 I<sub>N</sub> 4 A ④</p> <p>250 V/4 kV/3</p> <p>① Approvals</p> |
| <p>Connecting cable, socket – SCHUKO plug, angled</p>                               | <p>Length Item No. black Item No. white</p>  |
|    | <p>● ○ Coding A<br/>         PVC</p> <p>1 m 771-9993/306-101 .../306-102<br/>         2 m 771-9993/306-201 .../306-202<br/>         3 m 771-9993/306-301 .../306-302</p>           |
| <p>Connecting cable, plug – SCHUKO coupler</p>                                      | <p>Length Item No. black Item No. white</p>  |
|   | <p>● ○ Coding A<br/>         PVC</p> <p>1 m 771-9993/406-101 .../406-102<br/>         2 m 771-9993/406-201 .../406-202<br/>         3 m 771-9993/406-301 .../406-302</p>           |
| <p>Interconnecting cable, plug – cold equipment coupling, angled ③</p>              | <p>Length Item No. black Item No. white</p>  |
|  | <p>● ○ Coding A<br/>         PVC</p> <p>1 m 771-9993/805-101 .../805-102<br/>         2 m 771-9993/805-201 .../805-202<br/>         3 m 771-9993/805-301 .../805-302</p>           |
| <p>Plug – lamp socket E 27 ④</p>  | <p>Length Item No. black</p>   |
|  | <p>● ○ Coding A<br/>         e.g., for temporary construction site lighting</p> <p>0.5m 771-8993/1004-051</p> <p>For other lengths, please contact factory.</p>                    |

|   |  |  |   |                |                   |                   |
|---|--|--|---|----------------|-------------------|-------------------|
|   |  | PVC H05VV-F 3G2.5<br>halogen-free H05Z1Z1-F 3G2.5<br><br>250 V/4 kV/3 I <sub>N</sub> 20 A<br><br>Conductor ends, bonded: 9 mm/16 mm<br>① Approvals |   |                |                   |                   |
| <b>Interconnecting cable, socket – plug</b> |  | Length   | Item No. black  | Item No. white | Item No. black    | Item No. white    |
|   |  | ● ○ Coding A<br>PVC halogen-free   |   |                |                   |                   |
|   |  | 1 m  | 771-9993/007-101                                      | .../007-102    | 771-9993/017-101  | .../017-102       |
|   |  | 2 m  | 771-9993/007-201                                      | .../007-202    | 771-9993/017-201  | .../017-202       |
|   |  | 3 m  | 771-9993/007-301                                      | .../007-302    | 771-9993/017-301  | .../017-302       |
|   |  | 5 m  | 771-9993/007-501                                      | .../007-502    | 771-9993/017-501  | .../017-502       |
|   |  | 7 m  | 771-9993/007-701                                      | .../007-702    | 771-9993/017-701  | .../017-702       |
| <b>Connecting cable, socket – free end</b>  |  | Length   | Item No. black  | Item No. white | Item No. black    | Item No. white    |
|   |  | ● ○ Coding A<br>PVC halogen-free   |   |                |                   |                   |
|   |  | 1 m  | 771-9993/107-101                                      | .../107-102    | 771-9993/117-101  | .../117-102       |
|   |  | 2 m  | 771-9993/107-201                                      | .../107-202    | 771-9993/117-201  | .../117-202       |
|   |  | 3 m  | 771-9993/107-301                                      | .../107-302    | 771-9993/117-301  | .../117-302       |
|   |  | 5 m  | 771-9993/107-501                                      | .../107-502    | 771-9993/117-501  | .../117-502       |
|   |  | 7 m  | 771-9993/107-701                                      | .../107-702    | 771-9993/117-701  | .../117-702       |
| <b>Connecting cable, plug – free end</b>    |  | Length   | Item No. black  | Item No. white | Item No. black    | Item No. white    |
|   |  | ● ○ Coding A ②<br>PVC halogen-free   |   |                |                   |                   |
|   |  | 1 m  | 771-9993/207-101                                      | .../207-102    | 771-9993/217-101  | .../217-102       |
|   |  | 2 m  | 771-9993/207-201                                      | .../207-202    | 771-9993/217-201  | .../217-202       |
|   |  | 3 m  | 771-9993/207-301                                      | .../207-302    | 771-9993/217-301  | .../217-302       |
|   |  | 5 m  | 771-9993/207-501                                      | .../207-502    | 771-9993/217-501  | .../217-502       |
|   |  | 7 m  | 771-9993/207-701                                      | .../207-702    | 771-9993/217-701  | .../217-702       |
|   |  | 1 m  | Coding A ③ (for installation of switches and outlets) |                | 771-9993/3207-101 | 771-9993/3217-101 |
|   |  | 2 m  | Coding A ③  |                | 771-9993/3207-201 | 771-9993/3217-201 |
|   |  | 3 m  | Coding A ③  |                | 771-9993/3207-301 | 771-9993/3217-301 |
|   |  | 5 m  | Coding A ③  |                | 771-9993/3207-501 | 771-9993/3217-501 |
|   |  | 7 m  | Coding A ③  |                | 771-9993/3207-701 | 771-9993/3217-701 |

**Info**

① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.


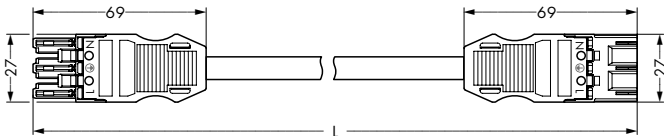

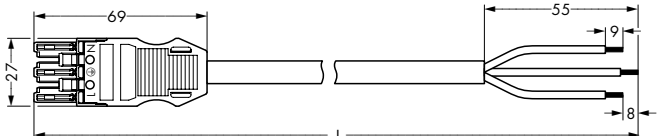

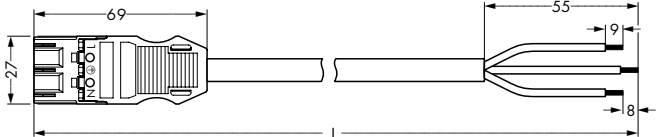





● black Coding A (L ⊕ N)  
 ○ white Coding A (L ⊕ N)  
 ● red Coding P (L ⊕ N)

For coding information, see pages 238 to 240.  
 Fire load data available upon request.

**Accessories**

|  |                   |         |            |
|--|-------------------|---------|------------|
| <b>Locking lever, for "flying leads,"</b>          |                   |         |            |
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
| <b>Locking lever, for "flying leads,"</b>          |                   |         |            |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b> |                   |         |            |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>    |                   |         |            |
|  | yellow            | 770-360 | 100        |



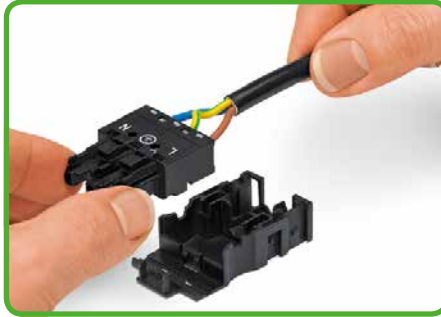
|   |  | PVC   | H05VV-F 3G2.5    |                |                  |                |
|---|--|---|------------------|----------------|------------------|----------------|
|   |  | halogen-free  | H05Z1Z1-F 3G2.5  |                |                  |                |
|   |  | 250 V/4 kV/3 I <sub>N</sub> 20 A  |                  |                |                  |                |
|   |  | Conductor ends, bonded: 9 mm  |                  |                |                  |                |
|   |  | ① Approvals   |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|    |  | ● Coding P  |                  |                |                  |                |
|    |  | PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9973/007-101 | .../007-102    | 771-9973/017-101 | .../017-102    |
|   |  | 2 m   | 771-9973/007-201 | .../007-202    | 771-9973/017-201 | .../017-202    |
|   |  | 3 m   | 771-9973/007-301 | .../007-302    | 771-9973/017-301 | .../017-302    |
|   |  | 5 m   | 771-9973/007-501 | .../007-502    | 771-9973/017-501 | .../017-502    |
|   |  | 7 m   | 771-9973/007-701 | .../007-702    | 771-9973/017-701 | .../017-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● Coding P  |                  |                |                  |                |
|  |  | PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9973/107-101 | .../107-102    | 771-9973/117-101 | .../117-102    |
|   |  | 2 m   | 771-9973/107-201 | .../107-202    | 771-9973/117-201 | .../117-202    |
|   |  | 3 m   | 771-9973/107-301 | .../107-302    | 771-9973/117-301 | .../117-302    |
|   |  | 5 m   | 771-9973/107-501 | .../107-502    | 771-9973/117-501 | .../117-502    |
|   |  | 7 m   | 771-9973/107-701 | .../107-702    | 771-9973/117-701 | .../117-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● Coding P  |                  |                |                  |                |
|  |  | PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9973/207-101 | .../207-102    | 771-9973/217-101 | .../217-102    |
|   |  | 2 m   | 771-9973/207-201 | .../207-202    | 771-9973/217-201 | .../217-202    |
|   |  | 3 m   | 771-9973/207-301 | .../207-302    | 771-9973/217-301 | .../217-302    |
|   |  | 5 m   | 771-9973/207-501 | .../207-502    | 771-9973/217-501 | .../217-502    |
|   |  | 7 m   | 771-9973/207-701 | .../207-702    | 771-9973/217-701 | .../217-702    |
|   |  | <b>Accessories</b>  |                  |                |                  |                |
|   |  | <b>Locking lever, for "flying leads,"</b>   |                  |                |                  |                |
|   |  | manually operated   |                  |                |                  |                |
|   |  |  |                  |                |                  |                |
|   |  | black   | 770-101          | 100            | (4x25)           |                |
|   |  | white   | 770-121          | 100            | (4x25)           |                |
|   |  | <b>Locking lever, for "flying leads,"</b>   |                  |                |                  |                |
|   |  | tool operated   |                  |                |                  |                |
|   |  |  |                  |                |                  |                |
|   |  | black   | 770-111          | 100            | (4x25)           |                |
|   |  | white   | 770-131          | 100            | (4x25)           |                |
|   |  | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                  |                |                  |                |
|   |  |  |                  |                |                  |                |
|   |  | black   | 770-201          | 100            |                  |                |
|   |  | white   | 770-221          | 100            |                  |                |
| <b>Coding pin, for plug (A and B coding)</b>  |  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                  |                |                  |                |
|  |  | gray  | 770-401          | 100            |                  |                |
|   |  |  |                  |                |                  |                |
|   |  | yellow  | 770-360          | 100            |                  |                |

# 3 WINSTA® MIDI, IP 2XD

154 for easily accessible areas



To terminate fine-stranded conductors, open clamping unit via 2.5mm screwdriver and insert stripped conductor until it hits backstop. Solid conductors can be terminated by simply pushing them in.



Insert wired connector onto the base of the strain relief housing.

## Strain relief installation



Prepare strain relief housing by snapping together upper and bottom part.

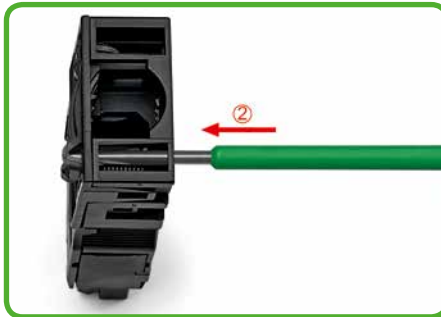


Push down strain relief clamp via 2.5mm screwdriver alternately on both sides.

## Strain relief removal



First, unlock strain relief clamp via 2.5 mm screwdriver from the bottom.



Then, push strain relief clamp via 2.5 mm screwdriver out of the locking position.

## Strain relief removal



Finally, unlock strain relief housing via 2.5 mm screwdriver on both sides.

## Strain Relief Housing, IP 2XD

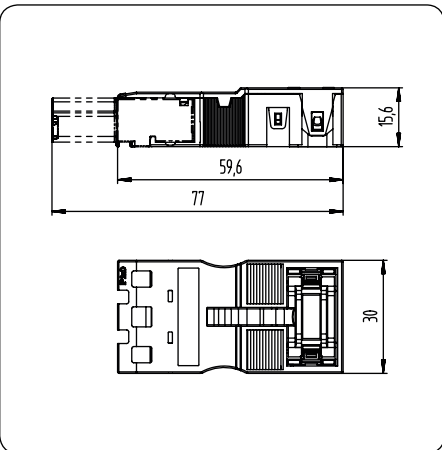
|  |  |  |
|--|--|--|
|  | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1</b> Approvals</p> |  |
|--|--|--|



| Description            | Color   | Item No.        | Pack. Unit |
|------------------------|---|-----------------|------------|
| Strain relief housings | Strain relief housing, for 1 cable, 7 - 11.5 mm diameter <b>2</b> |                 |            |
|                        | black   | 770-503/038-000 | 50         |
|                        | white   | 770-513/038-000 | 50         |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
|                        |   |                 |            |
| Info                   | Dimensions  |                 |            |

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.




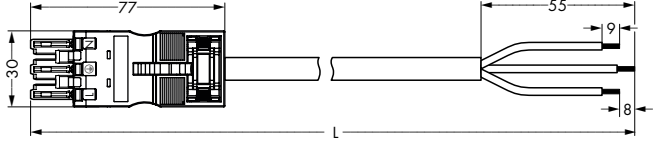

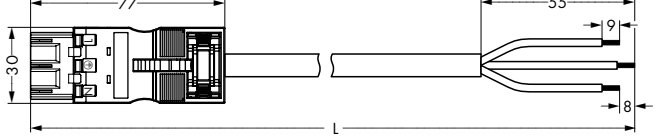
Fire load data available upon request.



# 3 WINSTA® MIDI, IP 2XD

for easily accessible areas

## Cable Assemblies 3 x 1.5 mm<sup>2</sup> IP 2XD

|   |  |                                  |                  |                |                  |                |
|---|--|----------------------------------|------------------|----------------|------------------|----------------|
|   |  | PVC                              | H05VV-F 3G1.5    |                |                  |                |
|   |  | halogen-free                     | H05Z1 Z1-F 3G1.5 |                |                  |                |
|   |  | 250 V/4 kV/3 I <sub>N</sub> 16 A |                  |                |                  |                |
|   |  | Conductor ends, bonded: 9 mm     |                  |                |                  |                |
|   |  | ① Approvals                      |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length                           | Item No. black   | Item No. white | Item No. black   | Item No. white |
|    |  | ● ○ Coding A                     |                  |                |                  |                |
|     |  | PVC halogen-free                 |                  |                |                  |                |
|   |  | 1 m                              | 771-6993/006-101 | .../006-102    | 771-6993/016-101 | .../016-102    |
|   |  | 2 m                              | 771-6993/006-201 | .../006-202    | 771-6993/016-201 | .../016-202    |
|   |  | 3 m                              | 771-6993/006-301 | .../006-302    | 771-6993/016-301 | .../016-302    |
|   |  | 5 m                              | 771-6993/006-501 | .../006-502    | 771-6993/016-501 | .../016-502    |
|   |  | 7 m                              | 771-6993/006-701 | .../006-702    | 771-6993/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length                           | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A                     |                  |                |                  |                |
|   |  | PVC halogen-free                 |                  |                |                  |                |
|   |  | 1 m                              | 771-6993/106-101 | .../106-102    | 771-6993/116-101 | .../116-102    |
|   |  | 2 m                              | 771-6993/106-201 | .../106-202    | 771-6993/116-201 | .../116-202    |
|   |  | 3 m                              | 771-6993/106-301 | .../106-302    | 771-6993/116-301 | .../116-302    |
|   |  | 5 m                              | 771-6993/106-501 | .../106-502    | 771-6993/116-501 | .../116-502    |
|   |  | 7 m                              | 771-6993/106-701 | .../106-702    | 771-6993/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>  |  | Length                           | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● ○ Coding A                     |                  |                |                  |                |
|   |  | PVC halogen-free                 |                  |                |                  |                |
|   |  | 1 m                              | 771-6993/206-101 | .../206-102    | 771-6993/216-101 | .../216-102    |
|   |  | 2 m                              | 771-6993/206-201 | .../206-202    | 771-6993/216-201 | .../216-202    |
|   |  | 3 m                              | 771-6993/206-301 | .../206-302    | 771-6993/216-301 | .../216-302    |
|   |  | 5 m                              | 771-6993/206-501 | .../206-502    | 771-6993/216-501 | .../216-502    |
|   |  | 7 m                              | 771-6993/206-701 | .../206-702    | 771-6993/216-701 | .../216-702    |

**Info**





① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.


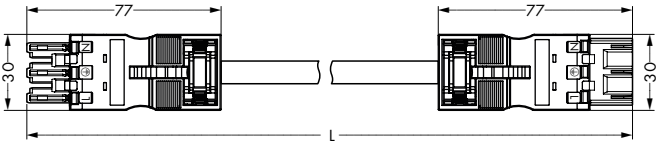

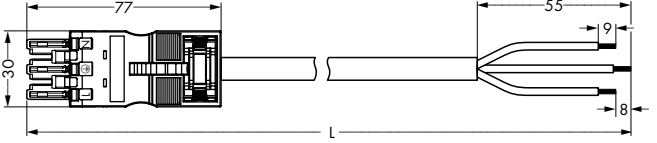

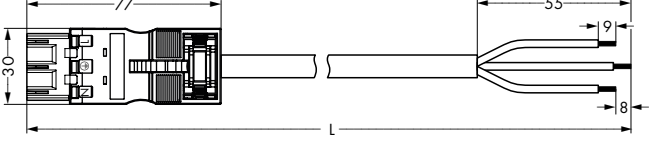




- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)



For coding information, see pages 238 to 240. Fire load data available upon request.

**Accessories**

|   |                   |         |            |
|---|-------------------|---------|------------|
| <b>Locking lever, for "flying leads,"</b>   |                   |         |            |
|  | manually operated |         |            |
|   | black             | 770-101 | 100 (4x25) |
|   | white             | 770-121 | 100 (4x25) |
| <b>Locking lever, for "flying leads,"</b>   |                   |         |            |
|  | tool operated     |         |            |
|   | black             | 770-111 | 100 (4x25) |
|   | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                   |         |            |
|  | black             | 770-201 | 100        |
|   | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                   |         |            |
|  | yellow            | 770-360 | 100        |




# Cable Assemblies 3 x 2.5 mm<sup>2</sup> IP 2XD




|   |  | PVC   | H05VV-F 3G2.5         |                       |                       |                       |
|---|--|---|-----------------------|-----------------------|-----------------------|-----------------------|
|   |  | halogen-free  | H05Z1Z1-F 3G2.5       |                       |                       |                       |
|   |  | 250 V/4 kV/3 I <sub>N</sub> 20 A  |                       |                       |                       |                       |
|   |  | Conductor ends, bonded: 9 mm  |                       |                       |                       |                       |
|   |  | ① Approvals   |                       |                       |                       |                       |
| <b>Interconnecting cable, socket – plug</b>   |  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
|    |  | ● ○ Coding A  |                       |                       |                       |                       |
|    |  | PVC halogen-free  |                       |                       |                       |                       |
|   |  | 1 m   | 771-6993/007-101      | .../007-102           | 771-6993/017-101      | .../017-102           |
|   |  | 2 m   | 771-6993/007-201      | .../007-202           | 771-6993/017-201      | .../017-202           |
|   |  | 3 m   | 771-6993/007-301      | .../007-302           | 771-6993/017-301      | .../017-302           |
|   |  | 5 m   | 771-6993/007-501      | .../007-502           | 771-6993/017-501      | .../017-502           |
|   |  | 7 m   | 771-6993/007-701      | .../007-702           | 771-6993/017-701      | .../017-702           |
| <b>Connecting cable, socket – free end</b>  |  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
|   |  | ● ○ Coding A  |                       |                       |                       |                       |
|  |  | PVC halogen-free  |                       |                       |                       |                       |
|   |  | 1 m   | 771-6993/107-101      | .../107-102           | 771-6993/117-101      | .../117-102           |
|   |  | 2 m   | 771-6993/107-201      | .../107-202           | 771-6993/117-201      | .../117-202           |
|   |  | 3 m   | 771-6993/107-301      | .../107-302           | 771-6993/117-301      | .../117-302           |
|   |  | 5 m   | 771-6993/107-501      | .../107-502           | 771-6993/117-501      | .../117-502           |
|   |  | 7 m   | 771-6993/107-701      | .../107-702           | 771-6993/117-701      | .../117-702           |
| <b>Connecting cable, plug – free end</b>  |  | <b>Length</b>   | <b>Item No. black</b> | <b>Item No. white</b> | <b>Item No. black</b> | <b>Item No. white</b> |
|  |  | ● ○ Coding A ②  |                       |                       |                       |                       |
|  |  | PVC halogen-free  |                       |                       |                       |                       |
|   |  | 1 m   | 771-6993/207-101      | .../207-102           | 771-6993/217-101      | .../217-102           |
|   |  | 2 m   | 771-6993/207-201      | .../207-202           | 771-6993/217-201      | .../217-202           |
|   |  | 3 m   | 771-6993/207-301      | .../207-302           | 771-6993/217-301      | .../217-302           |
|   |  | 5 m   | 771-6993/207-501      | .../207-502           | 771-6993/217-501      | .../217-502           |
|   |  | 7 m   | 771-6993/207-701      | .../207-702           | 771-6993/217-701      | .../217-702           |
|   |  | <b>Accessories</b>  |                       |                       |                       |                       |
|   |  | <b>Locking lever, for "flying leads,"</b>   |                       |                       |                       |                       |
|   |  | manually operated   |                       |                       |                       |                       |
|   |  |  | black                 | 770-101               | 100                   | (4x25)                |
|   |  |   | white                 | 770-121               | 100                   | (4x25)                |
|   |  | <b>Locking lever, for "flying leads,"</b>   |                       |                       |                       |                       |
|   |  | tool operated   |                       |                       |                       |                       |
|   |  |  | black                 | 770-111               | 100                   | (4x25)                |
|   |  |   | white                 | 770-131               | 100                   | (4x25)                |
|   |  | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                       |                       |                       |                       |
|   |  |  | black                 | 770-201               | 100                   |                       |
|   |  |   | white                 | 770-221               | 100                   |                       |
|   |  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                       |                       |                       |                       |
|   |  |  | yellow                | 770-360               | 100                   |                       |

|  |   |
|--|---|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ❶<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>❷ Approvals</p> | <p>2 x AWG 20 – 12</p> <p>2 x 0.5 – 4 mm<sup>2</sup> ❶<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>❷ Approvals</p> |
|--|---|



| Description  | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|--|---|----------|------------|---|----------|------------|
| Pluggable connectors, 4-pole, with CAGE CLAMP®S connection | Socket with strain relief housing, for 2 cables, 9 – 13 mm diameter ❸ |          |            | Plug with strain relief housing, for 2 cables, 9 – 13 mm diameter ❸ |          |            |
|  | ● black   | 770-104  | 25         | ● black   | 770-114  | 25         |
|  | ○ white   | 770-124  | 25         | ○ white   | 770-134  | 25         |

| Item-Specific Accessories |  |  |   |  |   |                    |
|---------------------------|--|--|---|--|---|--------------------|
|                           |  |  | Lockout cap, for socket, separable, 12-pole   |  | Lockout cap, for plug, separable, 5-pole  |                    |
|                           |  |  |  | black 770-201 100<br>white 770-221 100 |  | yellow 770-360 100 |
|                           |  |  |   |  | Coding pin, for plug (A and B coding)   |                    |
|                           |  |  |   |  |  | gray 770-401 100   |

| Accessories, 770 Series |  |  |   |  |   |  |
|-------------------------|--|--|---|--|---|--|
|                         |  |  | Locking lever, for "flying leads," manually operated                                |  | Locking lever, for "flying leads," tool operated                                      |  |
|                         |  |  |  | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |  | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |
|                         |  |  | Marker, for manual marking  |  |   |  |
|                         |  |  |  | white 770-450 50                                     |   |  |

| Info | Dimensions |
|------|------------|
|------|------------|

❶ Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"

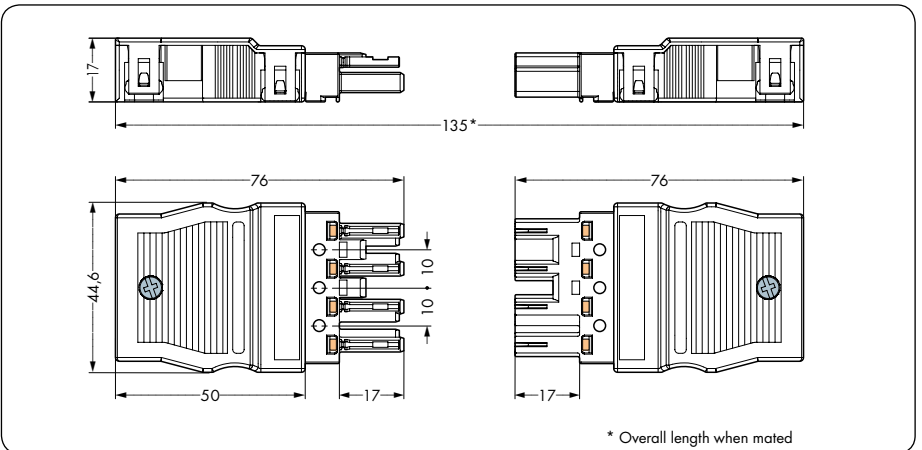
❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

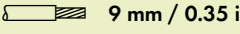
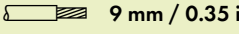
❸ For more strain relief housings, see page 160.

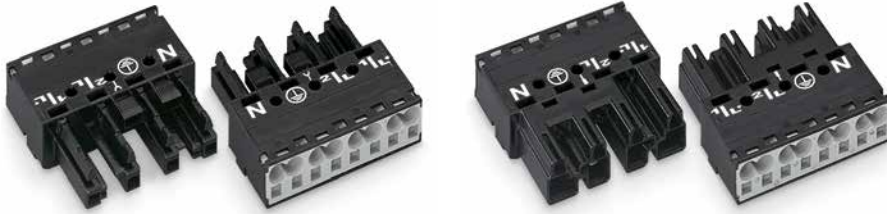
  

● black Coding A (N ⊕ 2IL 1IL')  
○ white Coding A (N ⊕ 2IL 1IL')  
● green Coding Q (N PE1 PE2 L)

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|   |                 |   |                 |
|---|-----------------|---|-----------------|
| 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | 2 x AWG 20 – 12 | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | 2 x AWG 20 – 12 |
|---|-----------------|---|-----------------|






**Note:**




All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).

| Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| <b>Socket without strain relief housing</b>         |          |            | <b>Plug without strain relief housing</b>           |          |            |
| ● black   | 770-204  | 50         | ● black   | 770-214  | 50         |
| ○ white   | 770-224  | 50         | ○ white   | 770-234  | 50         |
| For “Clean Earth” applications (loading up to 32A): |          |            | For “Clean Earth” applications (loading up to 32A): |          |            |
| ● green   | 770-1324 | 50         | ● green   | 770-1334 | 50         |



Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)

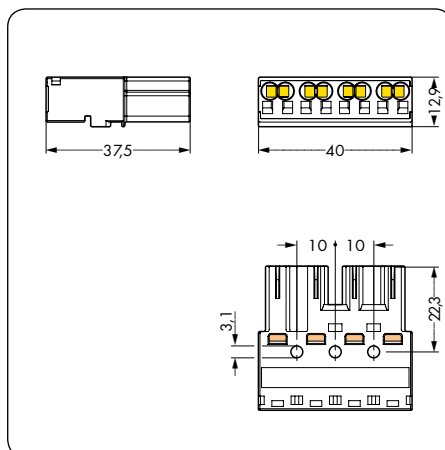
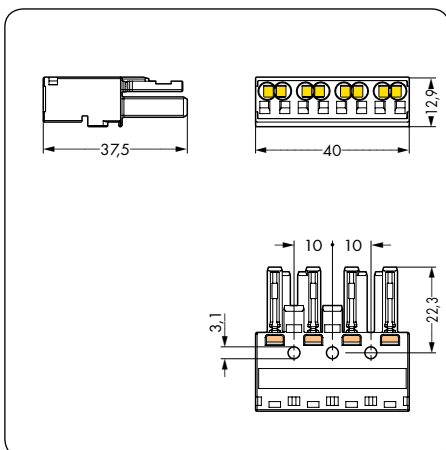
| Item-Specific Accessories  |   |
|--|---|
| <b>Lockout cap, for socket, separable, 12-pole</b><br> black 770-201 100<br>white 770-221 100 | <b>Lockout cap, for plug, separable, 5-pole</b><br> yellow 770-360 100 |
| <b>Coding pin, for plug (A and B coding)</b><br> gray 770-401 100                             |   |

| Accessories, 770 Series   |   |
|---|---|
| <b>Locking lever, for “flying leads,” manually operated</b><br> black 770-101 100 (4x25)<br>white 770-121 100 (4x25) | <b>Locking lever, for “flying leads,” tool operated</b><br> black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |
| <b>Marker, for manual marking</b><br> white 770-450 50   |   |



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

**Dimensions**



Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)



## Strain Relief Housings, 4-Pole, for Different Cable Diameters

|  |  |  |
|--|--|--|
|  | Snap-on type strain relief housings for:<br>- 4-pole sockets<br>- 4-pole plugs<br><br><b>1 Approvals</b> | Snap-on type strain relief housings for:<br>- 4-pole sockets<br>- 4-pole plugs<br><br><b>1 Approvals</b> |
|--|--|--|



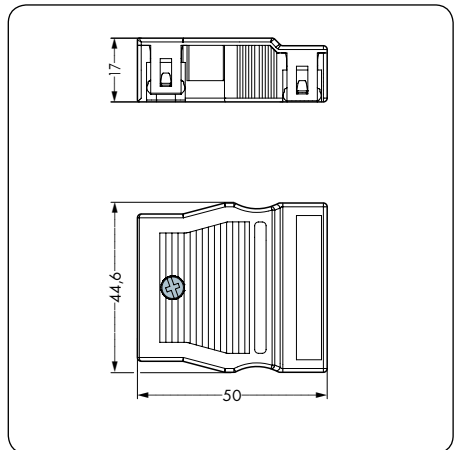
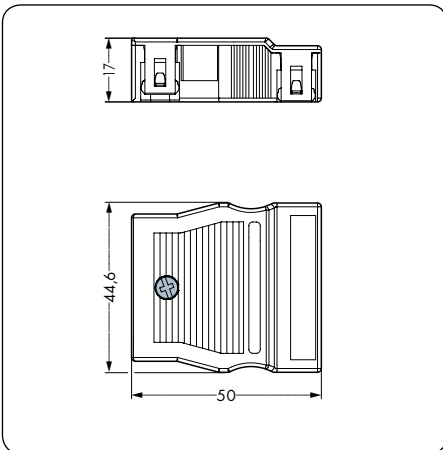
| Description            | Color   | Item No.        | Pack. Unit | Color  | Item No. | Pack. Unit |
|------------------------|---|-----------------|------------|--|----------|------------|
| Strain relief housings | Strain relief housing, for 2 cables, 5 - 9 mm diameter <b>2</b> |                 |            | Strain relief housing, for 2 cables, 9 - 13 mm diameter <b>2</b> |          |            |
|                        | black   | 770-504/023-000 | 50         | black  | 770-504  | 50         |
|                        | white   | 770-514/023-000 | 50         | white  | 770-514  | 50         |
|                        |   |                 |            |  |          |            |

| Item-Specific Accessories |   |  |  |  |  |  |
|---------------------------|---|--|--|--|--|--|
|                           | Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333100</b> Marking area: 38 x 6.5 mm |  |  | Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333 100</b> Marking area: 38 x 6.5 mm |  |  |
|                           |   |  |  |  |  |  |
|                           |   |  |  |  |  |  |
|                           |   |  |  |  |  |  |
|                           |   |  |  |  |  |  |

| Info | Dimensions |
|------|------------|
|------|------------|

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.  
**2** For H05VV and NYM cables  
 For other cables, please contact factory.

Fire load data available upon request.





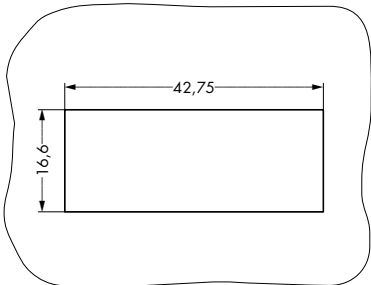


# 3 WINSTA® MIDI



## Snap-In Sockets and Plugs, 4-Pole



162

|   |   |                        |   |                        |
|---|---|------------------------|---|------------------------|
| <b>Cutout dimensions</b><br><br><b>Plate thickness: 0.5 – 2 mm</b><br><b>Cutout tolerance: + 0.1 mm</b> | <b>2 x 0.5 – 4 mm<sup>2</sup> ①</b><br><b>400 V/6 kV/3</b><br><b>I<sub>N</sub> 25 A</b>                                       | <b>2 x AWG 20 – 12</b> | <b>2 x 0.5 – 4 mm<sup>2</sup> ①</b><br><b>400 V/6 kV/3</b><br><b>I<sub>N</sub> 25 A</b>   | <b>2 x AWG 20 – 12</b> |
|   |  <b>9 mm / 0.35 in</b><br><b>② Approvals</b> |                        |  <b>9 mm / 0.35 in</b><br><b>② Approvals</b> |                        |



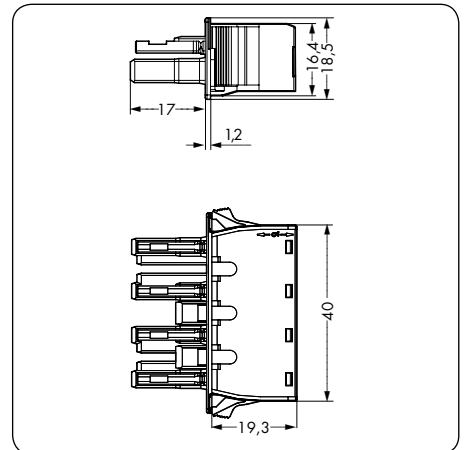
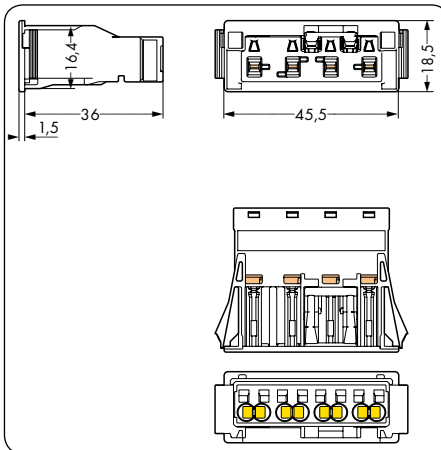
| Description  | Color  | Item No.       | Pack. Unit | Color                                   | Item No.               | Pack. Unit |
|--|--|----------------|------------|---|------------------------|------------|
| <b>Pluggable connectors, snap-in device connection, 4-pole, with CAGE CLAMP®S connection</b> | <b>Socket</b>  |                |            | <b>Socket with protruding interface</b> |                        |            |
|  | ● black  | <b>770-704</b> | 100        | ● black                                 | <b>770-704/009-000</b> | 100        |
|  | ○ white  | <b>770-724</b> | 100        | ○ white                                 | <b>770-724/009-000</b> | 100        |
|  | For "Clean Earth" applications (loading up to 32A):<br>● green <b>770-2324</b> 100 |                |            |   |                        |            |



| Item-Specific Accessories |  |  |   |   |  |  |
|---------------------------|--|--|---|---|--|--|
|                           |  |  | <b>Lockout cap, for socket, separable, 12-pole</b><br> | <b>Lockout cap, for socket, separable, 12-pole</b><br> |  |  |
|                           |  |  | ● black <b>770-201</b> 100<br>○ white <b>770-221</b> 100  |   |  |  |
|                           |  |  |   |   |  |  |

| Accessories, 770 Series |  |  |   |   |  |  |
|-------------------------|--|--|---|---|--|--|
|                         |  |  | <b>Lockout cap, for cutout, 4-pole</b><br> | <b>Lockout cap, for cutout, 4-pole</b><br> |  |  |
|                         |  |  | ● black <b>770-644</b> 100<br>○ white <b>770-694</b> 100  |   |  |  |
|                         |  |  |   |   |  |  |

| Info | Dimensions |
|------|------------|
|------|------------|





- ① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ Direct ground contact on position PE1
- 
- black Coding A (N ⊕ 2IL 1L')
  - white Coding A (N ⊕ 2IL 1L')
  - green Coding Q (N PE1 PE2 L)
- For coding information, see pages 238 to 240.  
Fire load data available upon request.


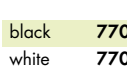

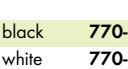


|   |                 |   |                 |
|---|-----------------|---|-----------------|
| 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | 2 x AWG 20 – 12 | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | 2 x AWG 20 – 12 |
|---|-----------------|---|-----------------|

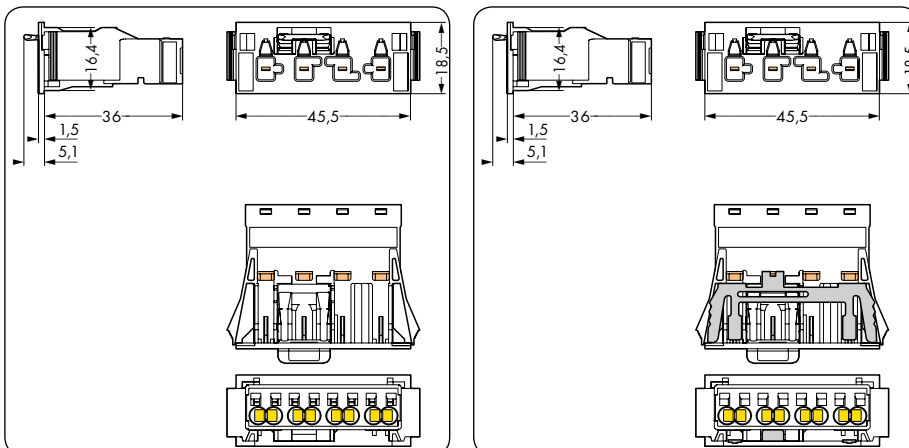


| Color   | Item No. | Pack. Unit | Color   | Item No.         | Pack. Unit |
|---|----------|------------|---|------------------|------------|
| <b>Plug</b>   |          |            | <b>Plug with direct ground contact</b>              |                  |            |
| ● black   | 770-714  | 100        | ● black   | 770-714/007-000  | 100        |
| ○ white   | 770-734  | 100        | ○ white   | 770-734/007-000  | 100        |
| For "Clean Earth" applications (loading up to 32A): |          |            | For "Clean Earth" applications (loading up to 32A): |                  |            |
| ● green   | 770-2334 | 100        | ● green   | 770-2334/007-000 | 100 ③      |

| Item-Specific Accessories  |  |
|--|--|
| <b>Lockout cap, for plug, separable, 5-pole</b><br> yellow <b>770-360</b> 100 | <b>Lockout cap, for plug, separable, 5-pole</b><br> yellow <b>770-360</b> 100 |
| <b>Coding pin, for plug (A and B coding)</b><br> gray <b>770-401</b> 100      | <b>Coding pin, for plug (A and B coding)</b><br> gray <b>770-401</b> 100      |

| Accessories, 770 Series  |  |
|--|--|
| <b>Lockout cap, for cutout, 4-pole</b><br> black <b>770-644</b> 100<br> white <b>770-694</b> 100 | <b>Lockout cap, for cutout, 4-pole</b><br> black <b>770-644</b> 100<br> white <b>770-694</b> 100 |

**Dimensions**



**Direct ground contact**



Varnish-piercing direct ground contact. ③

**Lockout cap**



Seal unused cutout with lockout cap.

|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ①</p> <p>② Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ①</p> <p>② Approvals</p> |
|--|---|---|



| Description                               | Color            | Item No. | Pack. Unit | Color          | Item No. | Pack. Unit |
|---|------------------|----------|------------|----------------|----------|------------|
| PCB connectors,<br>2 solder pins per pole | Socket, straight |          |            | Plug, straight |          |            |
|   | ● black          | 770-804  | 50         | ● black        | 770-814  | 50         |
|   | ○ white          | 770-824  | 50         | ○ white        | 770-834  | 50         |

| Item-Specific Accessories |   |  |  |  |                    |  |
|---------------------------|---|--|--|--|--------------------|--|
|                           | Lockout cap, for socket, separable, 12-pole |  |  | Lockout cap, for plug, separable, 5-pole |                    |  |
|                           |   | black 770-201 100<br>white 770-221 100 |  |  | yellow 770-360 100 |  |
|                           |   |  |  | Coding pin, for plug (A and B coding)    |                    |  |
|                           |   |  |  |  | gray 770-401 100   |  |

| Accessories, 770 Series |   |  |  |   |  |  |
|-------------------------|---|--|--|---|--|--|
|                         | Locking lever, for "flying leads,"<br>manually operated |  |  | Locking lever, for "flying leads,"<br>tool operated |  |  |
|                         |   | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |  |   | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |  |

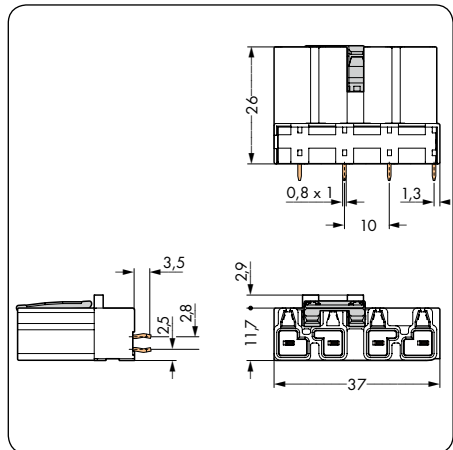
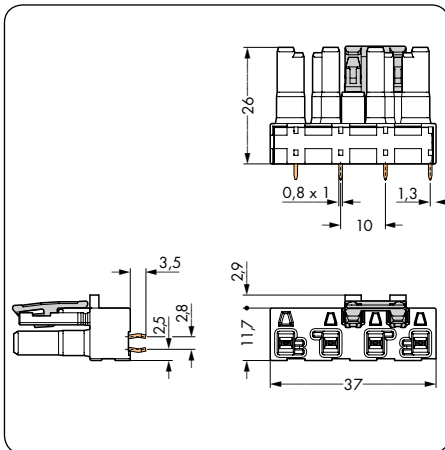
| Info | Dimensions |
|------|------------|
|------|------------|

① For current load, see table on page 165.

② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

● black Coding A (N ⊕ 2IL 1L'L)  
○ white Coding A (N ⊕ 2IL 1L'L)

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|   |   |
|---|---|
| 400 V/6 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals |
|---|---|



① Nominal current depends on PCB track dimensions

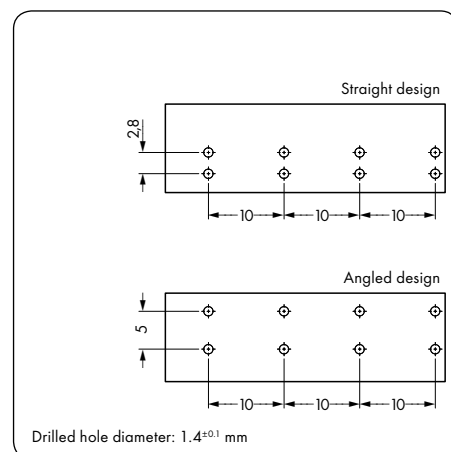
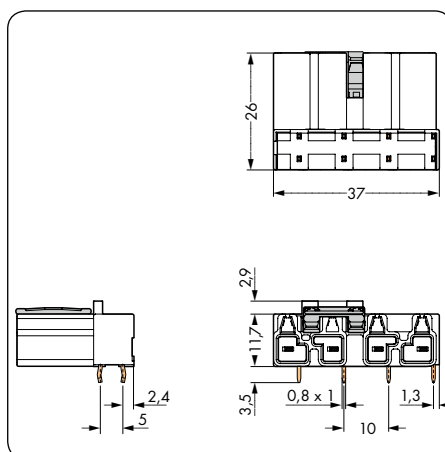
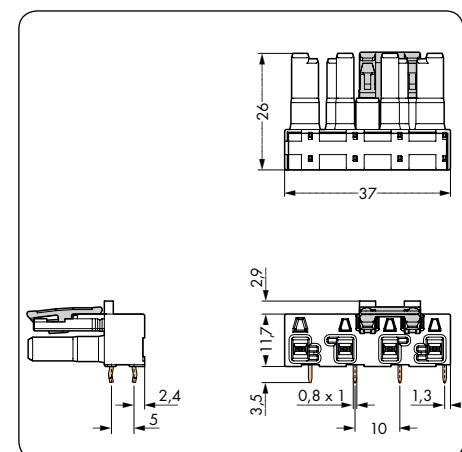
| Nominal current | Thickness of PCB track | Width of PCB track | Conductor size        |
|-----------------|------------------------|--------------------|-----------------------|
| 16 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 20 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 25 A            | 105 µm both sides      | 7 mm / 0.27 in     | △ 4 mm <sup>2</sup>   |

| Color                 | Item No.        | Pack. Unit | Color               | Item No.        | Pack. Unit |
|-----------------------|-----------------|------------|---------------------|-----------------|------------|
| <b>Socket, angled</b> |                 |            | <b>Plug, angled</b> |                 |            |
| ● black               | 770-804/011-000 | 50         | ● black             | 770-814/011-000 | 50         |
| ○ white               | 770-824/011-000 | 50         | ○ white             | 770-834/011-000 | 50         |

| Item-Specific Accessories                          |       |             |   |        |             |
|--|-------|-------------|---|--------|-------------|
| <b>Lockout cap, for socket, separable, 12-pole</b> |       |             | <b>Lockout cap, for plug, separable, 5-pole</b> |        |             |
|  | black | 770-201 100 |   | yellow | 770-360 100 |
|  | white | 770-221 100 |   |        |             |
| <b>Coding pin, for plug (A and B coding)</b>       |       |             |   |        |             |
|  |       |             |   | gray   | 770-401 100 |

| Accessories, 770 Series                                     |       |                    |   |       |                    |
|---|-------|--------------------|---|-------|--------------------|
| <b>Locking lever, for "flying leads," manually operated</b> |       |                    | <b>Locking lever, for "flying leads," tool operated</b> |       |                    |
|   | black | 770-101 100 (4x25) |   | black | 770-111 100 (4x25) |
|   | white | 770-121 100 (4x25) |   | white | 770-131 100 (4x25) |

| Dimensions | Hole patterns |
|------------|---------------|
|------------|---------------|



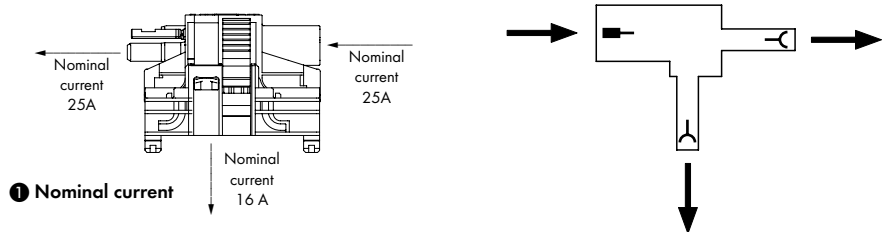
|  |  |   |
|--|--|---|
|  | 250 V/4 kV/3<br>$I_N$ 25 A (16 A) ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A<br><br>② Approvals |
|--|--|---|



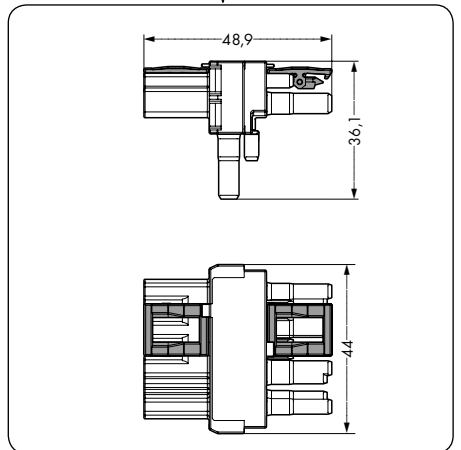
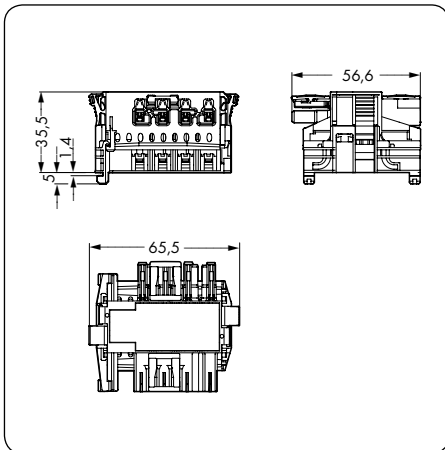
| Description                                    | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|--|---------|----------|------------|---|----------|------------|
| Linect® T-connector, T-distribution connectors |         |          |            | T-distribution connector, 1 x plug / 2 x socket |          |            |
|  |         |          |            | ● black   | 770-626  | 50         |
|  | ○ white | 770-6224 | 25         | ○ white   | 770-676  | 50         |
|  |         |          |            | for "flying leads," with 3rd locking lever      |          |            |
|  |         |          |            | ● black   | 770-627  | 50         |
|  |         |          |            | ○ white   | 770-677  | 50         |

| Item-Specific Accessories |  |   |             |  |   |             |
|---------------------------|--|---|-------------|--|---|-------------|
|                           |  | Lockout cap, for socket, separable, 12-pole |             |  | Lockout cap, for socket, separable, 12-pole |             |
|                           |  | black                                       | 770-201 100 |  | black                                       | 770-201 100 |
|                           |  | white                                       | 770-221 100 |  | white                                       | 770-221 100 |
|                           |  | Lockout cap, for plug, separable, 5-pole    |             |  | Lockout cap, for plug, separable, 5-pole    |             |
|                           |  | yellow                                      | 770-360 100 |  | yellow                                      | 770-360 100 |

| Info | Dimensions |
|------|------------|
|------|------------|



- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
  - ④ 6.0 mm Ø, 1 – 2.5 mm plate thickness
- black Coding A (N ⊕ 2IL 1L')
- white Coding A (N ⊕ 2IL 1L')
- For coding information, see pages 238 to 240.  
Fire load data available upon request.








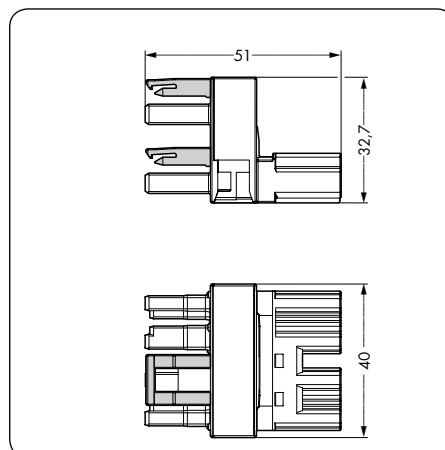
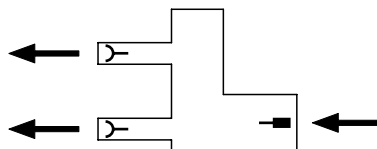
# h-Distribution Connectors, 4-Pole

|  |   |  |
|--|---|--|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p>② Approvals</p> |  |
|--|---|--|



| Description                      | Color   | Item No.       | Pack. Unit |
|----------------------------------|---|----------------|------------|
| <b>h-distribution connectors</b> | <b>h-distribution connector, unidirectional, plug / socket - socket</b> |                |            |
|                                  | ● black   | <b>770-944</b> | 50         |
|                                  | ○ white   | <b>770-994</b> | 50         |
|                                  | for "flying leads," with 3rd locking lever                              |                |            |
|                                  | ● black   | <b>770-945</b> | 50         |
|                                  | ○ white   | <b>770-995</b> | 50         |

| Item-Specific Accessories |   |         |                    |
|---------------------------|---|---------|--------------------|
|                           | <b>Mounting plate, for distribution connectors</b>                                  |         |                    |
|                           |  | black   | <b>770-624</b> 25  |
|                           |   | white   | <b>770-674</b> 25  |
|                           | <b>Fixing pin, for mounting plates</b>  |         |                    |
|                           |  | ③ black | <b>890-601</b> 250 |
|                           |   | ④ black | <b>770-601</b> 250 |
|                           | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |         |                    |
|                           |  | black   | <b>770-201</b> 100 |
|                           |   | white   | <b>770-221</b> 100 |
|                           | <b>Dimensions</b>   |         |                    |



|   |  |   |                  |                |                  |                |
|---|--|---|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 4G1.5<br>halogen-free H05Z1 Z1-F 4G1.5<br><br>400 V/6 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br>① Approvals |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b> |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9994/006-101 | .../006-102    | 771-9994/016-101 | .../016-102    |
|   |  | 2 m   | 771-9994/006-201 | .../006-202    | 771-9994/016-201 | .../016-202    |
|   |  | 3 m   | 771-9994/006-301 | .../006-302    | 771-9994/016-301 | .../016-302    |
|   |  | 5 m   | 771-9994/006-501 | .../006-502    | 771-9994/016-501 | .../016-502    |
|   |  | 7 m   | 771-9994/006-701 | .../006-702    | 771-9994/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9994/106-101 | .../106-102    | 771-9994/116-101 | .../116-102    |
|   |  | 2 m   | 771-9994/106-201 | .../106-202    | 771-9994/116-201 | .../116-202    |
|   |  | 3 m   | 771-9994/106-301 | .../106-302    | 771-9994/116-301 | .../116-302    |
|   |  | 5 m   | 771-9994/106-501 | .../106-502    | 771-9994/116-501 | .../116-502    |
|   |  | 7 m   | 771-9994/106-701 | .../106-702    | 771-9994/116-701 | .../116-702    |
| <b>Connecting cable, plug – free end</b>    |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9994/206-101 | .../206-102    | 771-9994/216-101 | .../216-102    |
|   |  | 2 m   | 771-9994/206-201 | .../206-202    | 771-9994/216-201 | .../216-202    |
|   |  | 3 m   | 771-9994/206-301 | .../206-302    | 771-9994/216-301 | .../216-302    |
|   |  | 5 m   | 771-9994/206-501 | .../206-502    | 771-9994/216-501 | .../216-502    |
|   |  | 7 m   | 771-9994/206-701 | .../206-702    | 771-9994/216-701 | .../216-702    |

**Info**

① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

● black Coding A (N ⊕ 2IL 1L'L)  
 ○ white Coding A (N ⊕ 2IL 1L'L)

For coding information, see pages 238 to 240.  
 Fire load data available upon request.

**Accessories**



|  |                   |         |            |
|--|-------------------|---------|------------|
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b> |                   |         |            |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>    |                   |         |            |
|  | yellow            | 770-360 | 100        |









# 3 WINSTA® MIDI

## Sockets and Plugs, 5-Pole

170

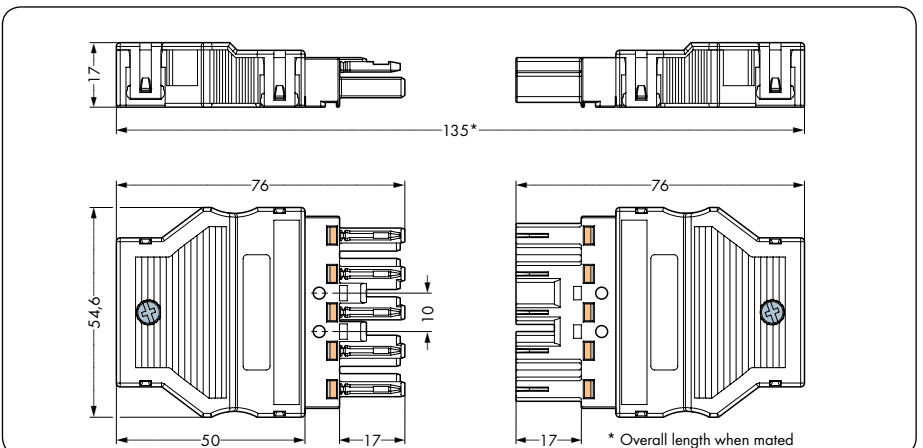
|  |                        |  |                        |
|--|------------------------|--|------------------------|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> |
|--|------------------------|--|------------------------|



| Description  | Color   | Item No.   | Pack. Unit | Color   | Item No.   | Pack. Unit |
|--|---|--|------------|---|--|------------|
| Pluggable connectors, 5-pole, with CAGE CLAMP®S connection | Socket with strain relief housing, for 2 cables, 9 – 13 mm diameter ③               |  |            | Plug with strain relief housing, for 2 cables, 9 – 13 mm diameter ③                   |  |            |
|  | ● black   | 770-105  | 25         | ● black   | 770-115  | 25         |
|  | ○ white   | 770-125  | 25         | ○ white   | 770-135  | 25         |
| <b>Item-Specific Accessories</b>                           |   |  |            |   |  |            |
|  | Lockout cap, for socket, separable, 12-pole   |  |            | Lockout cap, for plug, separable, 5-pole  |  |            |
|  |  | black 770-201 100<br>white 770-221 100               |            |  | yellow 770-360 100                                   |            |
|  |   |  |            | Coding pin, for plug (A and B coding)   |  |            |
|  |   |  |            |  | gray 770-401 100                                     |            |
| <b>Accessories, 770 Series</b>                             |   |  |            |   |  |            |
|  | Locking lever, for "flying leads," manually operated                                |  |            | Locking lever, for "flying leads," tool operated                                      |  |            |
|  |  | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |            |  | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |            |
|  | Marker, for manual marking  |  |            |   |  |            |
|  |  | white 770-450 50                                     |            |   |  |            |
| <b>Info</b>  | <b>Dimensions</b>   |  |            |   |  |            |

- ① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ For more strain relief housings, see pages 174 and 175.
- |             |          |                   |
|-------------|----------|-------------------|
| ● black     | Coding A | (N ⊕ L1 L2 L3)    |
| ○ white     | Coding A | (N ⊕ L1 L2 L3)    |
| ● blue      | Coding I | (N ⊕ L DA- DA+)   |
| ● dark gray | Coding L | (N ⊕ L N' L')     |
| ● red       | Coding P | (N ⊕ L1 L2 L3)    |
| ● green     | Coding Q | (N PE1 PE2 PE3 L) |

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|  |                        |  |                        |
|--|------------------------|--|------------------------|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①</p> <p>400 V/6 kV/3</p> <p>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①</p> <p>400 V/6 kV/3</p> <p>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> |
|--|------------------------|--|------------------------|



**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).

| Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| <b>Socket without strain relief housing</b>         |          |            | <b>Plug without strain relief housing</b>           |          |            |
| ● black   | 770-205  | 50         | ● black   | 770-215  | 50         |
| ○ white   | 770-225  | 50         | ○ white   | 770-235  | 50         |
| ● blue  | 770-1105 | 50         | ● blue  | 770-1115 | 50         |
| ● dark gray   | 770-1165 | 50         | ● dark gray   | 770-1175 | 50         |
| ● red   | 770-1305 | 50         | ● red   | 770-1315 | 50         |
| For “Clean Earth” applications (loading up to 32A): |          |            | For “Clean Earth” applications (loading up to 32A): |          |            |
| ● green   | 770-1325 | 50         | ● green   | 770-1335 | 50         |



Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)

| Item-Specific Accessories   |  |
|---|--|
| <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <p>black 770-201 100</p> <p>white 770-221 100</p> | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <p>yellow 770-360 100</p> |
|   | <p><b>Coding pin, for plug (A and B coding)</b></p> <p>gray 770-401 100</p>      |



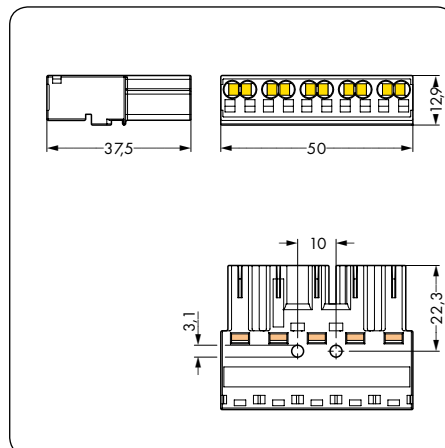
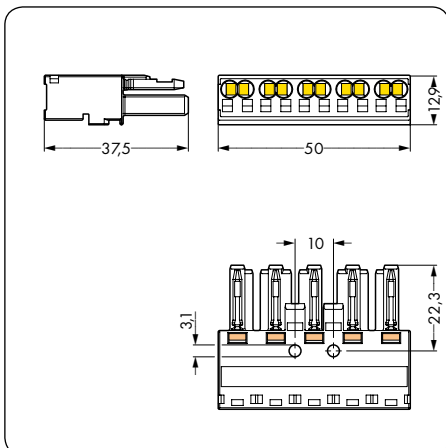
Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

| Accessories, 770 Series  |  |
|--|--|
| <p><b>Locking lever, for “flying leads,” manually operated</b></p> <p>black 770-101 100 (4x25)</p> <p>white 770-121 100 (4x25)</p> | <p><b>Locking lever, for “flying leads,” tool operated</b></p> <p>black 770-111 100 (4x25)</p> <p>white 770-131 100 (4x25)</p> |
| <p><b>Marker, for manual marking</b></p> <p>white 770-450 50</p>   |  |



Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

**Dimensions**

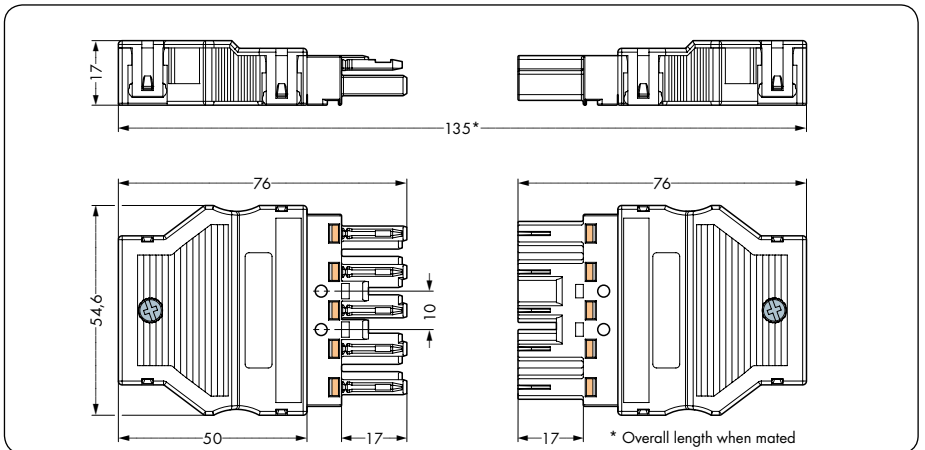


|  |                    |  |                    |
|--|--------------------|--|--------------------|
| <p>0.5 – 4 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 20 – 12</p> | <p>0.5 – 4 mm<sup>2</sup> ①<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in</p> <p>② Approvals</p> | <p>AWG 20 – 12</p> |
|--|--------------------|--|--------------------|





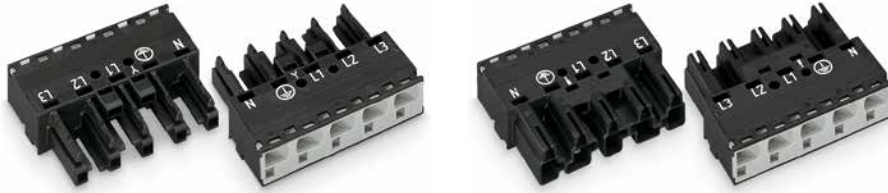
| Description   | Color  | Item No.   | Pack. Unit | Color  | Item No.   | Pack. Unit |
|---|--|--|------------|--|--|------------|
| <b>Pluggable connectors, 5-pole, 1-conductor, with CAGE CLAMP®S connection</b>                        | <b>Socket with strain relief housing, for 9 – 13 mm cable diameter ③</b> |  |            | <b>Plug with strain relief housing, for 9 – 13 mm cable diameter ③</b> |  |            |
| A large funneled conductor entry simplifies termination, especially with solid conductors (e.g., NYM) | ● black  | <b>770-305</b>   | 25         | ● black  | <b>770-315</b>   | 25         |
|   | ○ white  | <b>770-325</b>   | 25         | ○ white  | <b>770-335</b>   | 25         |
| <b>Item-Specific Accessories</b>  |  |  |            |  |  |            |
|   | <b>Lockout cap, for socket, separable, 12-pole</b>                       |  |            | <b>Lockout cap, for plug, separable, 5-pole</b>                        |  |            |
|   |  | black <b>770-201</b> 100<br>white <b>770-221</b> 100               |            |  | yellow <b>770-360</b> 100  |            |
|   |  |  |            | <b>Coding pin, for plug (A and B coding)</b>                           |  |            |
|   |  |  |            |  | gray <b>770-401</b> 100  |            |
| <b>Accessories, 770 Series</b>  |  |  |            |  |  |            |
|   | <b>Locking lever, for "flying leads," manually operated</b>              |  |            | <b>Locking lever, for "flying leads," tool operated</b>                |  |            |
|   |  | black <b>770-101</b> 100 (4x25)<br>white <b>770-121</b> 100 (4x25) |            |  | black <b>770-111</b> 100 (4x25)<br>white <b>770-131</b> 100 (4x25) |            |
|   | <b>Marker, for manual marking</b>  |  |            |  |  |            |
|   |  | white <b>770-450</b> 50  |            |  |  |            |
| <b>Info</b>   | <b>Dimensions</b>  |  |            |  |  |            |

- ① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ For more strain relief housings, see pages 174 and 175.
- black Coding A (N ⊕ L1 L2 L3)  
○ white Coding A (N ⊕ L1 L2 L3)
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





|   |             |   |             |
|---|-------------|---|-------------|
| 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | AWG 20 – 12 | 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A<br><br> 9 mm / 0.35 in<br>② Approvals | AWG 20 – 12 |
|---|-------------|---|-------------|








**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for “flying leads” (plug/socket).

| Color                                       | Item No. | Pack. Unit | Color                                     | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| <b>Socket without strain relief housing</b> |          |            | <b>Plug without strain relief housing</b> |          |            |
| ● black                                     | 770-405  | 50         | ● black                                   | 770-415  | 50         |
| ○ white                                     | 770-425  | 50         | ○ white                                   | 770-435  | 50         |



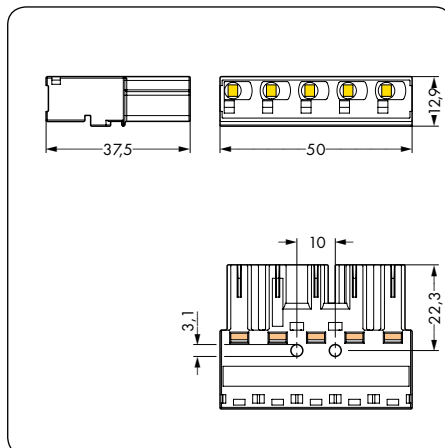
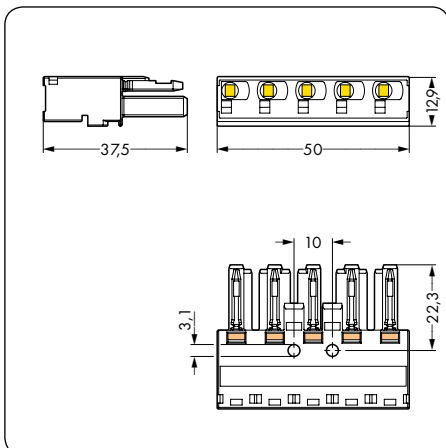
Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)

| Item-Specific Accessories   |  |  |   |  |  |
|---|--|--|---|--|--|
| <b>Lockout cap, for socket, separable, 12-pole</b>                                  |  |  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |  |  |
|  | black 770-201 100<br>white 770-221 100               |  |  | yellow 770-360 100                                   |  |
| <b>Accessories, 770 Series</b>  |  |  | <b>Accessories, 770 Series</b>  |  |  |
| <b>Locking lever, for “flying leads,” manually operated</b>                         |  |  | <b>Locking lever, for “flying leads,” tool operated</b>                             |  |  |
|  | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |  |  | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |  |
| <b>Marker, for manual marking</b>   |  |  |   |  |  |
|  | white 770-450 50                                     |  |   |  |  |



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

**Dimensions**



Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)



# 3 WINSTA® MIDI



174

## Strain Relief Housings, 5-Pole, for Different Cable Diameters

|  |  |  |
|--|--|--|
|  | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 5-pole sockets</li> <li>- 5-pole plugs</li> </ul> <p><b>1</b> Approvals</p> | <p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 5-pole sockets</li> <li>- 5-pole plugs</li> </ul> <p><b>1</b> Approvals</p> |
|--|--|--|



| Description                    | Color   | Item No.        | Pack. Unit | Color  | Item No. | Pack. Unit |
|--------------------------------|---|-----------------|------------|--|----------|------------|
| Strain relief housings, 5-pole | Strain relief housing, for 2 cables, 5 - 9 mm diameter <b>2</b> |                 |            | Strain relief housing, for 2 cables, 9 - 13 mm diameter <b>2</b> |          |            |
|                                | black   | 770-505/023-000 | 25         | black  | 770-505  | 25         |
|                                | white   | 770-515/023-000 | 25         | white  | 770-515  | 25         |
|                                |   |                 |            |  |          |            |

| Item-Specific Accessories |   |   |
|---------------------------|---|---|
|                           | <p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333</b> 100 Marking area: 48 x 6.5 mm</p>  | <p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long, Strip height: 6 mm <b>210-333</b> 100 Marking area: 48 x 6.5 mm</p>  |
|                           |   |   |
|                           |   |   |
|                           |   |   |
|                           |   |   |
|                           |   |   |

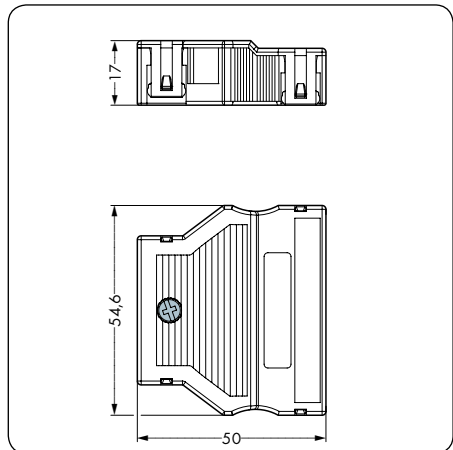
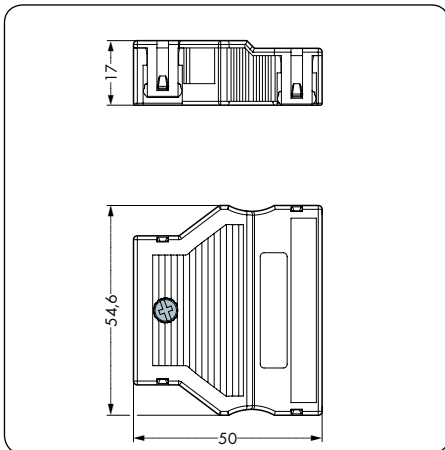
| Info | Dimensions |
|------|------------|
|------|------------|

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

**2** For H05VV and NYM cables

For other cables, please contact factory.

Fire load data available upon request.

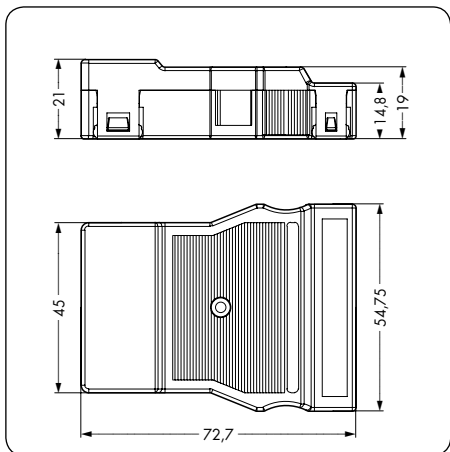


**Snap-on type strain relief housings for:**  
 - 5-pole sockets  
 - 5-pole plugs

① Approvals



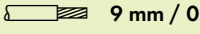
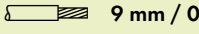
| Color   | Item No.               | Pack. Unit |
|---|------------------------|------------|
| <b>Strain relief housing for 4 mm<sup>2</sup> conductors,</b> |                        |            |
| for 1 cable, 11.5 – 16.5 mm diameter ②,                       |                        |            |
| Strip length, outer insulation: 71 mm                         |                        |            |
| black   | <b>770-505/021-000</b> | 25         |
| white   | <b>770-515/021-000</b> | 25         |
| <b>Marking strip, self-adhesive, on DIN A4 carrier card,</b>  |                        |            |
| 182 mm long,  |                        |            |
| 6 mm wide <b>210-333 100</b>                                  |                        |            |
| Marking area: 48 x 6.5 mm                                     |                        |            |
| <b>Dimensions</b>   |                        |            |

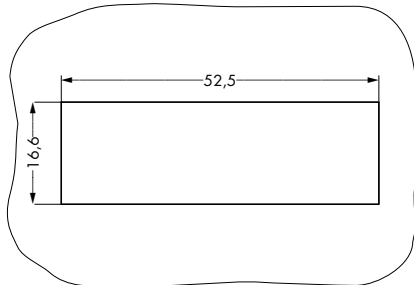


# 3 WINSTA® MIDI



## Snap-In Sockets and Plugs, 5-Pole



176

|   |   |                        |   |                        |
|---|---|------------------------|---|------------------------|
| <b>Cutout dimensions</b><br><br><b>Plate thickness: 0.5 – 2 mm</b><br><br><b>Cutout tolerance: + 0.1 mm</b> | <b>2 x 0.5 – 4 mm<sup>2</sup> ①</b><br><b>400 V/6 kV/3</b><br><b>I<sub>N</sub> 25 A</b>                                       | <b>2 x AWG 20 – 12</b> | <b>2 x 0.5 – 4 mm<sup>2</sup> ①</b><br><b>400 V/6 kV/3</b><br><b>I<sub>N</sub> 25 A</b>   | <b>2 x AWG 20 – 12</b> |
|   |  <b>9 mm / 0.35 in</b><br><b>② Approvals</b> |                        |  <b>9 mm / 0.35 in</b><br><b>② Approvals</b> |                        |



| Description   | Color   | Item No.        | Pack. Unit | Color                                   | Item No.               | Pack. Unit |
|---|---|-----------------|------------|---|------------------------|------------|
| <b>Pluggable connectors, snap-in device connection, 5-pole, with CAGE CLAMP® S connection</b> | <b>Socket</b>                                       |                 |            | <b>Socket with protruding interface</b> |                        |            |
|   | ● black   | <b>770-705</b>  | 100        | ● black                                 | <b>770-705/009-000</b> | 100        |
|   | ○ white   | <b>770-725</b>  | 100        | ○ white                                 | <b>770-725/009-000</b> | 100        |
|   | ● blue  | <b>770-2105</b> | 100        |   |                        |            |
|   | ● red   | <b>770-2305</b> | 100        |   |                        |            |
|   | For "Clean Earth" applications (loading up to 32A): |                 |            |   |                        |            |
|   | ● green   | <b>770-2325</b> | 100        |   |                        |            |

| Item-Specific Accessories |   |  |  |   |  |  |
|---------------------------|---|--|--|---|--|--|
|                           | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |  |  | <b>Lockout cap, for socket, separable, 12-pole</b>                                    |  |  |
|                           |  | black <b>770-201</b> 100<br>white <b>770-221</b> 100 |  |  | black <b>770-201</b> 100<br>white <b>770-221</b> 100 |  |

| Accessories, 770 Series |   |  |  |   |  |  |
|-------------------------|---|--|--|---|--|--|
|                         | <b>Lockout cap, for cutout, 5-pole</b>  |  |  | <b>Lockout cap, for cutout, 5-pole</b>  |  |  |
|                         |  | black <b>770-645</b> 100<br>white <b>770-695</b> 100 |  |  | black <b>770-645</b> 100<br>white <b>770-695</b> 100 |  |

| Info | Dimensions |
|------|------------|
|------|------------|

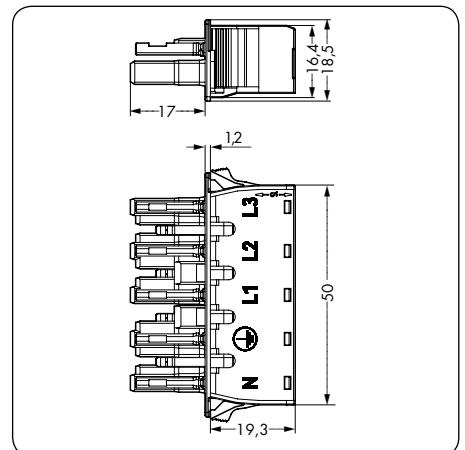
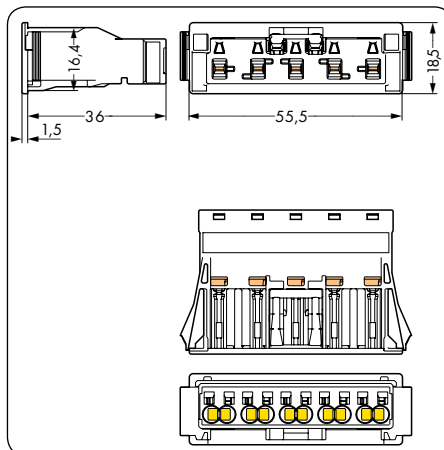
① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"



② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

③ Direct ground contact on position PE/PE1

|         |          |                   |
|---------|----------|-------------------|
| ● black | Coding A | (N ⊕ L1 L2 L3)    |
| ○ white | Coding A | (N ⊕ L1 L2 L3)    |
| ● blue  | Coding I | (N ⊕ L DA- DA+)   |
| ● red   | Coding P | (N ⊕ L1 L2 L3)    |
| ● green | Coding Q | (N PE1 PE2 PE3 L) |

For coding information, see pages 238 to 240.  
Fire load data available upon request.








|   |   |   |
|---|---|---|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①   2 x AWG 20 – 12</p> <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①   2 x AWG 20 – 12</p> <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>Snap-in frames:<br/>– for 5-pole sockets and plugs<br/>(see pages 171 and 173)</p> |
|---|---|---|





| Color   | Item No. | Pack. Unit | Color   | Item No.         | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|----------|------------|---|------------------|------------|---|----------|------------|
| <b>Plug</b>   |          |            | <b>Plug with direct ground contact ③</b>            |                  |            | <b>Snap-in frame, 5-pole, for 0.5 – 2 mm plate thickness</b>                                  |          |            |
| ● black   | 770-715  | 100        | ● black   | 770-715/007-000  | 100        | black   | 770-321  | 100        |
| ○ white   | 770-735  | 100        | ○ white   | 770-735/007-000  | 100        | white   | 770-341  | 100        |
| ● blue  | 770-2115 | 100        | ● blue  | 770-2115/007-000 | 100        | <b>Snap-in frame, 5-pole, for 1 – 3 mm plate thickness, suitable for coding A / I / P / Q</b> |          |            |
| ● red   | 770-2315 | 100        | For "Clean Earth" applications (loading up to 32A): |                  |            | black   | 770-320  | 100        |
| For "Clean Earth" applications (loading up to 32A): |          |            | For "Clean Earth" applications (loading up to 32A): |                  |            | white   | 770-340  | 100        |
| ● green   | 770-2335 | 100        | ● green   | 770-2335/007-000 | 100        |   |          |            |

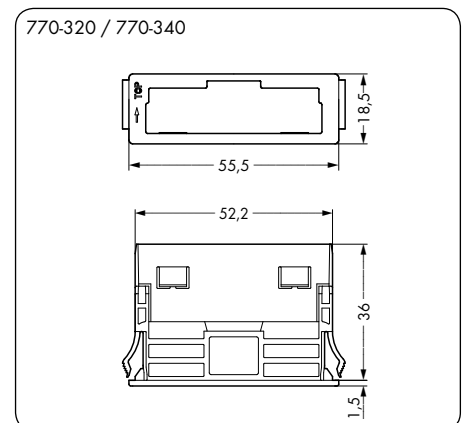
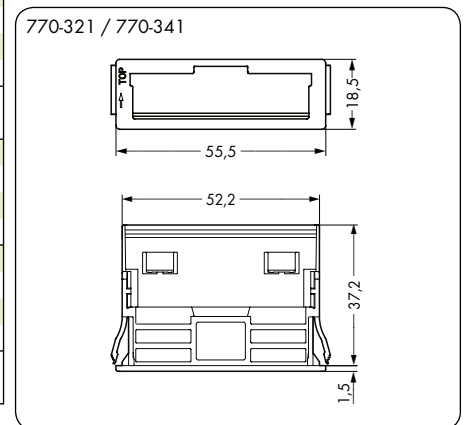
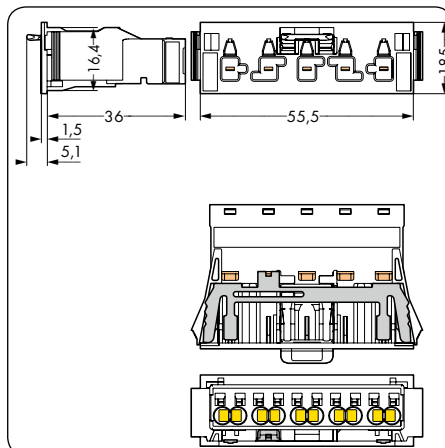
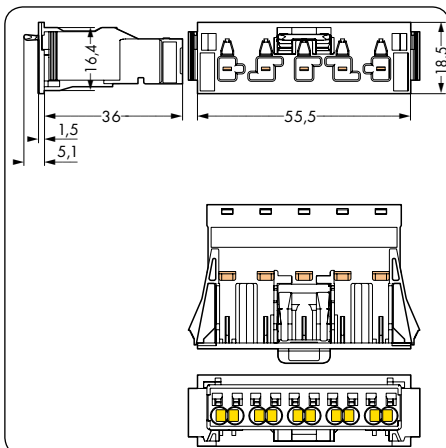
**Item-Specific Accessories**

|   |   |   |
|---|---|---|
| <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <p> yellow <b>770-360</b> 100</p> | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <p> yellow <b>770-360</b> 100</p> | <p><b>Locking lever, oversized, tool operated</b></p> <p> gray <b>770-140</b> 100 (4x25)</p> |
| <p><b>Coding pin, for plug (A and B coding)</b></p> <p> gray <b>770-401</b> 100</p>      | <p><b>Coding pin, for plug (A and B coding)</b></p> <p> gray <b>770-401</b> 100</p>      |   |

**Accessories, 770 Series**

|  |  |
|--|--|
| <p><b>Lockout cap, for cutout, 5-pole</b></p> <p> black <b>770-645</b> 100<br/>white <b>770-695</b> 100</p> | <p><b>Lockout cap, for cutout, 5-pole</b></p> <p> black <b>770-645</b> 100<br/>white <b>770-695</b> 100</p> |
|--|--|

**Dimensions**



# 3 WINSTA® MIDI

## PCB Connectors, 5-Pole

178

|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ①</p> <p>② Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ①</p> <p>② Approvals</p> |
|--|---|---|

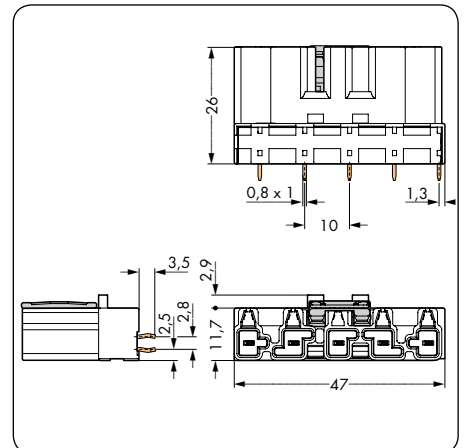
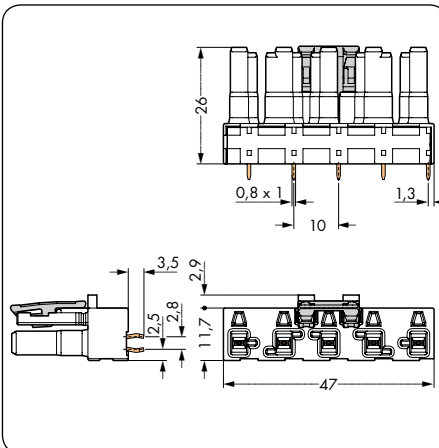


| Description                                      | Color                                       | Item No.                               | Pack. Unit | Color                                    | Item No.           | Pack. Unit |
|--|---|--|------------|--|--------------------|------------|
| PCB connectors, 5-pole<br>2 solder pins per pole | Socket, straight                            |  |            | Plug, straight                           |                    |            |
|  | ● black                                     | 770-805                                | 50         | ● black                                  | 770-815            | 50         |
|  | ○ white                                     | 770-825                                | 50         | ○ white                                  | 770-835            | 50         |
|  | ● blue                                      | 770-3105                               | 50         | ● blue                                   | 770-3115           | 50         |
| <b>Item-Specific Accessories</b>                 |   |  |            |  |                    |            |
|  | Lockout cap, for socket, separable, 12-pole |  |            | Lockout cap, for plug, separable, 5-pole |                    |            |
|  |   | black 770-201 100<br>white 770-221 100 |            |  | yellow 770-360 100 |            |
|  |   |  |            | Coding pin, for plug (A and B coding)    |                    |            |
|  |   |  |            |  | gray 770-401 100   |            |
| <b>Info</b>                                      | <b>Dimensions</b>                           |  |            |  |                    |            |

- ① For current load, see table on page 179.
- ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

- black Coding A (N ⊕ L1 L2 L3)
- white Coding A (N ⊕ L1 L2 L3)
- blue Coding I (N ⊕ L DA- DA+)

For coding information, see pages 238 to 240.  
Fire load data available upon request.






|   |   |
|---|---|
| 400 V/6 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A ①<br><br>② Approvals |
|---|---|



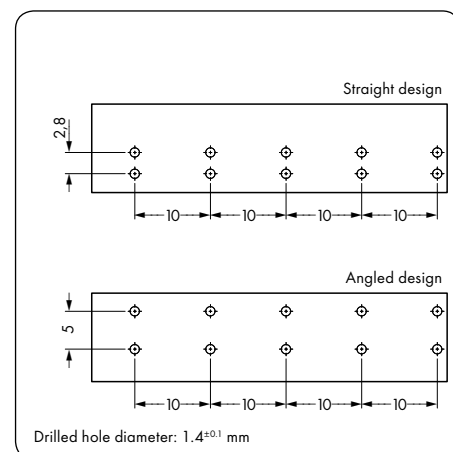
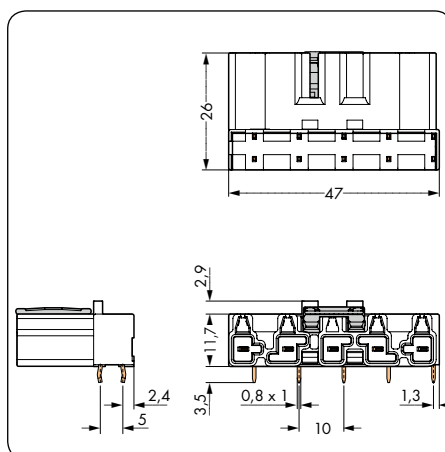
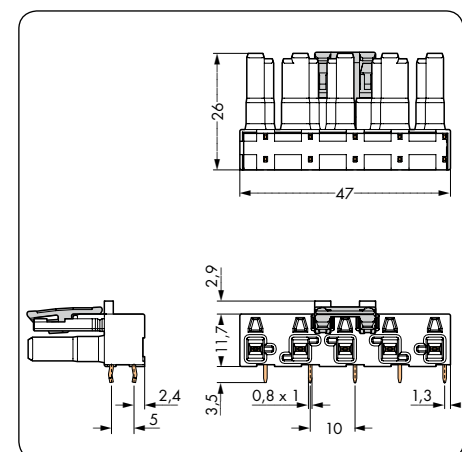
① Nominal current depends on PCB track dimensions

| Nominal current | Thickness of PCB track | Width of PCB track | Conductor size        |
|-----------------|------------------------|--------------------|-----------------------|
| 16 A            | 70 µm single side      | 7 mm / 0.27 in     | ≧ 1.5 mm <sup>2</sup> |
| 20 A            | 70 µm single side      | 7 mm / 0.27 in     | ≧ 1.5 mm <sup>2</sup> |
| 25 A            | 105 µm both sides      | 7 mm / 0.27 in     | ≧ 4 mm <sup>2</sup>   |

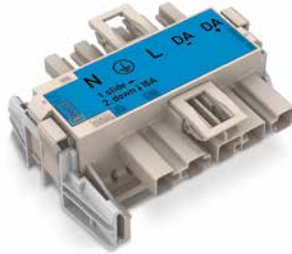
| Color                 | Item No.         | Pack. Unit | Color               | Item No.         | Pack. Unit |
|-----------------------|------------------|------------|---------------------|------------------|------------|
| <b>Socket, angled</b> |                  |            | <b>Plug, angled</b> |                  |            |
| ● black               | 770-805/011-000  | 50         | ● black             | 770-815/011-000  | 50         |
| ○ white               | 770-825/011-000  | 50         | ○ white             | 770-835/011-000  | 50         |
| ● blue                | 770-3105/011-000 | 50         | ● blue              | 770-3115/011-000 | 50         |

| Item-Specific Accessories  |   |
|--|---|
| <b>Lockout cap, for socket, separable, 12-pole</b><br> black 770-201 100<br>white 770-221 100 | <b>Lockout cap, for plug, separable, 5-pole</b><br> yellow 770-360 100 |
| <b>Coding pin, for plug (A and B coding)</b><br> gray 770-401 100                             |   |





| Dimensions | Hole patterns |
|------------|---------------|
|------------|---------------|

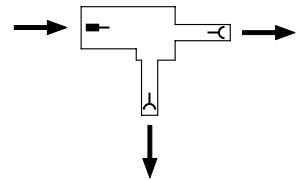
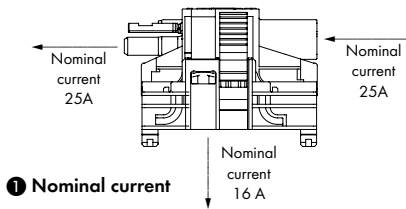


|  |  |   |
|--|--|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A (16 A) ❶</p> <p>❷ Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p>❷ Approvals</p> |
|--|--|---|

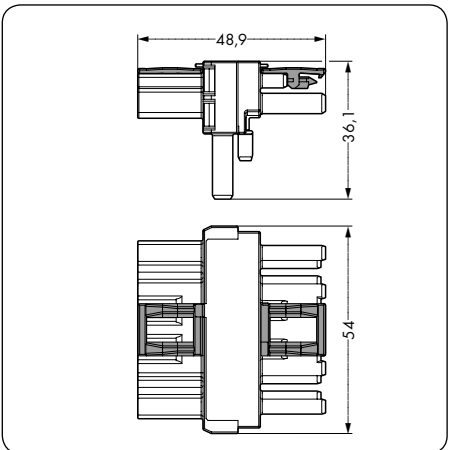
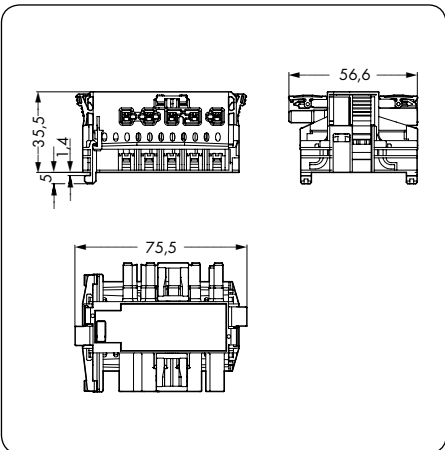


| Description               | Color | Item No.                              | Pack. Unit | Color                                      | Item No.   | Pack. Unit |
|---------------------------|-------|---------------------------------------|------------|--|--|------------|
| Linect® T-connectors      |       | <b>Linect® T-connector ❸, 5-pole,</b> |            |  | <b>T-distribution connector, 1 x plug / 2 x socket</b> |            |
| T-distribution connectors |       | socket - plug                         |            | ● black                                    | <b>770-621</b>   | 50         |
| Intermediate couplers     |       | White housing, white cover            |            | ○ white                                    | <b>770-671</b>   | 50         |
|                           |       | ○ white                               | 25         | ● blue                                     | <b>770-617</b>   | 50         |
|                           |       | White housing, blue cover ❹           |            | ● red                                      | <b>770-921</b>   | 50         |
|                           |       | ● blue                                | 20         | for "flying leads," with 3rd locking lever |  |            |
|                           |       | White housing, dark gray cover        |            | ● black                                    | <b>770-622</b>   | 50         |
|                           |       | ● dark gray                           | 20         | ○ white                                    | <b>770-672</b>   | 50         |
|                           |       |                                       |            | ● blue                                     | <b>770-620</b>   | 50         |
|                           |       |                                       |            | ● red                                      | <b>770-922</b>   | 50         |

| Item-Specific Accessories |                   |   |                |     |   |                |
|---------------------------|-------------------|---|----------------|-----|---|----------------|
|                           |                   | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                |     | <b>Lockout cap, for socket, separable, 12-pole</b>                                    |                |
|                           |                   |  |                |     |  |                |
|                           |                   | black   | <b>770-201</b> | 100 | black   | <b>770-201</b> |
|                           |                   | white   | <b>770-221</b> | 100 | white   | <b>770-221</b> |
|                           |                   | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                |     | <b>Lockout cap, for plug, separable, 5-pole</b>                                       |                |
|                           |                   |  |                |     |  |                |
|                           |                   | yellow  | <b>770-360</b> | 100 | yellow  | <b>770-360</b> |
| <b>Info</b>               | <b>Dimensions</b> |   |                |     |   |                |



- ❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ❸ For suitable lighting connectors, see page 117.
  - ❹ Connectors for DALI applications
  - ❺ One locking lever for each intermediate coupler is included.
- |             |          |                 |
|-------------|----------|-----------------|
| ● black     | Coding A | (N ⊕ L1 L2 L3)  |
| ○ white     | Coding A | (N ⊕ L1 L2 L3)  |
| ● blue      | Coding I | (N ⊕ L DA- DA+) |
| ● dark gray | Coding L | (N ⊕ L N' L')   |
| ● red       | Coding P | (N ⊕ L1 L2 L3)  |
- For coding information, see pages 238 to 240.  
Fire load data available upon request.





# Intermediate Couplers, 5-Pole

|   |   |  |
|---|---|--|
| 400 V/6 kV/3<br>$I_N$ 25 A<br><br>② Approvals | 250 V/4 kV/3<br>400 V/6 kV/3<br>$I_N$ 25 A<br><br>② Approvals |  |
|---|---|--|

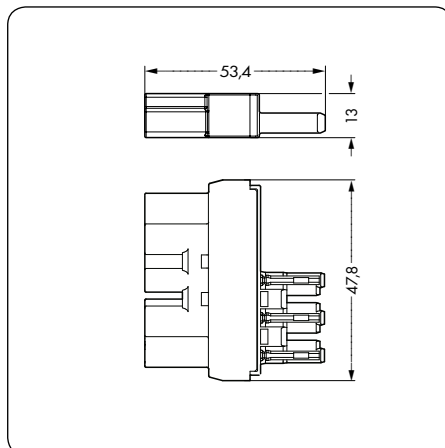
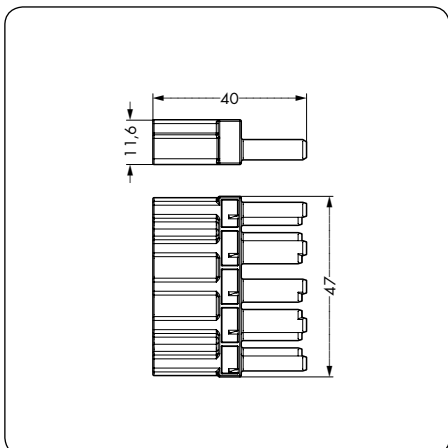


| Color  | Item No. | Pack. Unit | Color                                       | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| <b>Intermediate coupler, 1 x plug / 1 x socket</b> |          |            | <b>Intermediate coupler, 5- to 3-pole ⑤</b> |          |            |
| ● black  | 770-605  | 100        | ● L1 - L                                    | 770-901  | 100        |
| ○ white  | 770-655  | 100        | ○ L1 - L                                    | 770-951  | 100        |
| ● blue   | 770-619  | 100        | ● L1 - L                                    | 770-911  | 100        |
|  |          |            | ● L2 - L                                    | 770-902  | 100        |
|  |          |            | ○ L2 - L                                    | 770-952  | 100        |
|  |          |            | ● L2 - L                                    | 770-912  | 100        |
|  |          |            | ● L3 - L                                    | 770-903  | 100        |
|  |          |            | ○ L3 - L                                    | 770-953  | 100        |
|  |          |            | ● L3 - L                                    | 770-913  | 100        |

## Item-Specific Accessories

|  |  |
|--|--|
| <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> | <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> |
| <b>Lockout cap, for plug, separable, 5-pole</b><br> <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>                              | <b>Lockout cap, for plug, separable, 5-pole</b><br> <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>                              |







## Dimensions

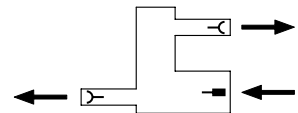
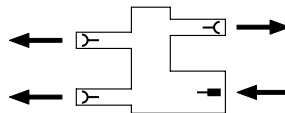


|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> |
|--|---|---|

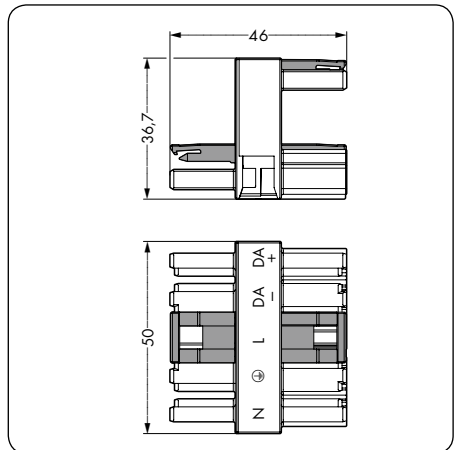
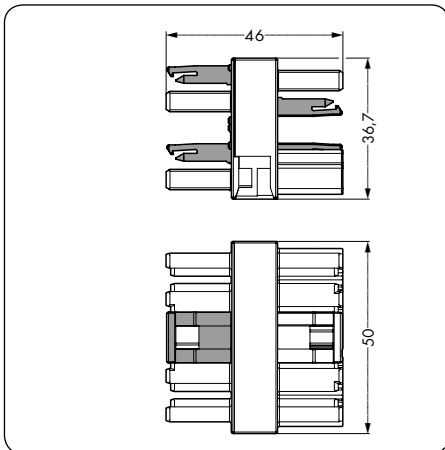


| Description   | Color   | Item No. | Pack. Unit | Color                                      | Item No. | Pack. Unit |
|---|---------|----------|------------|--|----------|------------|
| Distribution connectors, 3-way,<br>h-distribution connectors,<br>three-phase to single-phase distribution connectors,<br>5-pole | ● black | 770-609  | 25         | ● blue                                     | 770-992  | 50         |
|   | ○ white | 770-659  | 25         |  |          |            |
|   | ● blue  | 770-618  | 50         |  |          |            |
|   | ● red   | 770-909  | 50         | ● blue                                     | 770-993  | 50         |
|   |         |          |            | for "flying leads," with 3rd locking lever |          |            |

| Item-Specific Accessories |   |  |  |   |  |  |
|---------------------------|---|--|--|---|--|--|
|                           | <b>Mounting plate</b> , for distribution connectors<br> <ul style="list-style-type: none"> <li>black 770-625 25</li> <li>white 770-675 25</li> </ul>   |  |  | <b>Mounting plate</b> , for distribution connectors<br> <ul style="list-style-type: none"> <li>black 770-625 25</li> <li>white 770-675 25</li> </ul>   |  |  |
|                           | <b>Fixing pin</b> , for mounting plates<br> <ul style="list-style-type: none"> <li>③ black 890-601 250</li> <li>④ black 770-601 250</li> </ul>         |  |  | <b>Fixing pin</b> , for mounting plates<br> <ul style="list-style-type: none"> <li>③ black 890-601 250</li> <li>④ black 770-601 250</li> </ul>         |  |  |
|                           | <b>Lockout cap</b> , for socket, separable, 12-pole<br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> |  |  | <b>Lockout cap</b> , for socket, separable, 12-pole<br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> |  |  |
| <b>Info</b>               | <b>Dimensions</b>   |  |  |   |  |  |



- ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ② Position of jumper when delivered: L2
  - ③ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
  - ④ 6.0 mm Ø, 1 – 2.5 mm plate thickness
- |         |          |                 |
|---------|----------|-----------------|
| ● black | Coding A | (N ⊕ L1 L2 L3)  |
| ○ white | Coding A | (N ⊕ L1 L2 L3)  |
| ● blue  | Coding I | (N ⊕ L DA- DA+) |
| ● red   | Coding P | (N ⊕ L1 L2 L3)  |
- For coding information, see pages 238 to 240.  
Fire load data available upon request.



# Three-Phase to Single-Phase Distribution Connectors with Phase Selection, 5-Pole

250 V/4 kV/3  
400 V/6 kV/3  
I<sub>N</sub> 25 A

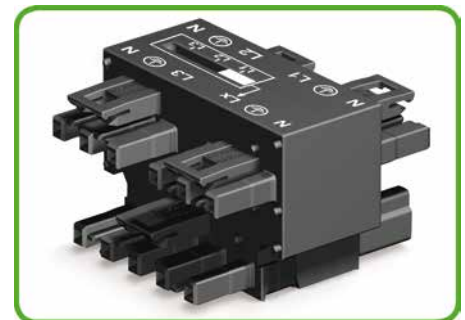
1 Approvals



The different jumper positions allow for a wide range of different tap-off options to be selected. In addition to the 3 set tap-offs (L1/L2/L3), the selectable 4th tap-off provides for a high degree of flexibility before, during and after installation.



Movable jumper



Jumper pushed down, flush with the housing (position L1).







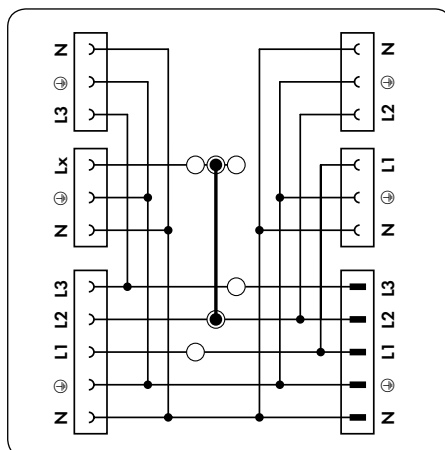
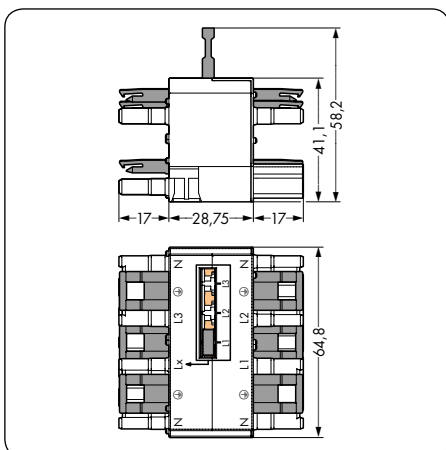
An additional h-distribution connector doubles L1. This results in the following connection options:  
L1/L1/L2/L2/L3 with jumper in position L2  
L1/L1/L2/L3/L3 with jumper in position L3



Additional h-distribution connectors double L1 and L3. This results in the following connection option:  
L1/L1/L2/L2/L3/L3 with jumper in position L2

NOTICE: h-distribution connectors can only be plugged on L1 and L3.

| Color   | Item No.            | Pack. Unit  |                    |
|---|---------------------|---|--------------------|
| <b>Three-phase to single-phase distribution connector 2</b>                         |                     |   |                    |
| ● black   | 770-640             | 10  |                    |
| ○ white   | 770-690             | 10  |                    |
| ● red   | 770-940             | 10  |                    |
| <b>Item-Specific Accessories</b>  |                     |   |                    |
| <b>Mounting plate</b> , for distribution connectors                                 |                     | <b>Lockout cap</b> , for socket, separable, 12-pole                                 |                    |
|  | black 770-625 25    |  | black 770-201 100  |
|   | white 770-675 25    |   | white 770-221 100  |
| <b>Fixing pin</b> , for mounting plates   |                     | <b>Lockout cap</b> , for plug, separable, 5-pole                                    |                    |
|  | 3 black 890-601 250 |  | yellow 770-360 100 |
|   | 4 black 770-601 250 |   |                    |
| <b>Dimensions and Internal Circuit</b>  |                     |   |                    |



# 3 WINSTA® MIDI

## Distribution Connectors with Phase Selection

|   |                    |
|---|--------------------|
| <p>0.5 – 4 mm<sup>2</sup> ❶<br/>                 250 V/4 kV/3<br/>                 400 V/6 kV/3<br/>                 I<sub>N</sub> 25 A<br/>                 9 mm / 0.35 in</p> | <p>AWG 20 – 12</p> |
| <p>❷ Approvals</p>  |                    |



Lift jumper out of delivery position (L2) using a screwdriver and move it into the desired position.



Push down jumper in its new position (picture shows L3).



The 5-pole energy circuit can be extended using plug-gable cable assemblies.



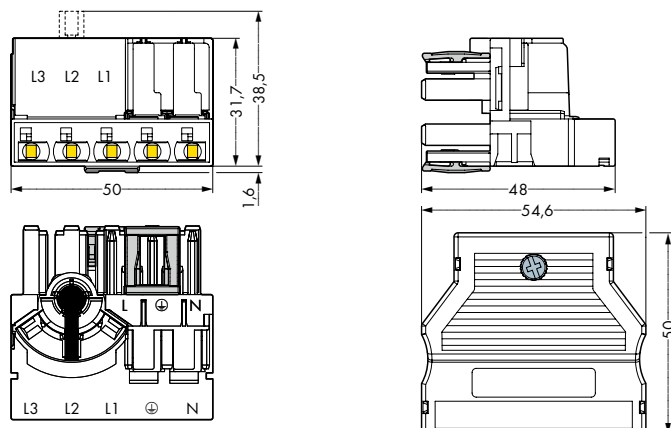
Plugging a 3-pole tap-off cable.

| Description  | Color  | Item No.      | Pack. Unit |
|--|--|---------------|------------|
| <b>Distribution connectors with phase selection, with CAGE CLAMP®S connection,</b> | <b>Distribution connector with phase selection, with strain relief housing, for 9 – 13 mm cable diameter ❹</b> |               |            |
| Tap-off: Socket, 3-pole, N ⊕ L   |  |               |            |
| Through contact: Socket, 5-pole, N ⊕ L1 L2 L3                                      |  |               |            |
|  | ● black  | 770-611       | 10         |
|  | ○ white  | 770-661       | 10         |
| <b>Item-Specific Accessories</b>   |  |               |            |
|  | <b>Mounting plate, for distribution connectors</b>   |               |            |
|  |  | black 770-625 | 25         |
|  |  | white 770-675 | 25         |
|  | <b>Fixing pin, for mounting plates</b>   |               |            |
|  | ❺ black  | 890-601       | 250        |
|  | ❻ black  | 770-601       | 250        |
|  | <b>Lockout cap, for socket, separable, 12-pole</b>   |               |            |
|  |  | black 770-201 | 100        |
|  |  | white 770-221 | 100        |
| <b>Info</b>  | <b>Dimensions</b>  |               |            |




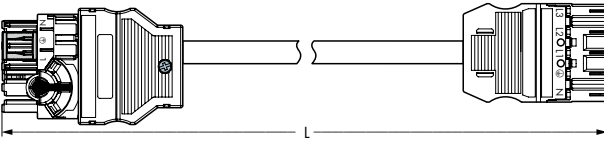





- ❶ Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st" 0.5 – 2.5 mm<sup>2</sup> "stranded"
- ❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
- ❸ Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.
- ❹ For more strain relief housings, see page 174.
- ❺ 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- ❻ 6.0 mm Ø, 1 – 2.5 mm plate thickness

- black Coding A (N ⊕ L1 L2 L3)
- white Coding A (N ⊕ L1 L2 L3)

For coding information, see pages 238 to 240.  
 Fire load data available upon request.



Cable Assemblies, 5-Pole

|  |  |  |                   |                   |                   |
|--|--|--|-------------------|-------------------|-------------------|
|  |  | PVC H05VV-F 5G2.5<br>halogen-free H05Z1Z1-F 5G2.5<br>250 V/4 kV/3 I <sub>N</sub> 20 A<br>400 V/6 kV/3 I <sub>N</sub> 20 A<br>Conductor ends, bonded: 9 mm<br>② ③ Approvals |                   |                   |                   |
| <b>Distribution connector with phase selection - free end</b>  |  | Length Item No.<br>black   | Item No.<br>white | Item No.<br>black | Item No.<br>white |
|  <p>N<br/>PE<br/>L1<br/>L2<br/>L3</p> | ● ○ Coding A<br>PVC halogen-free   |  |                   |                   |                   |
|  | 1 m 771-8965/107-101 .../107-102 771-8965/117-101 .../117-102<br>2 m 771-8965/107-201 .../107-202 771-8965/117-201 .../117-202 |  |                   |                   |                   |
|                                       |  |  |                   |                   |                   |
| <b>Distribution connector with phase selection - plug</b>  |  | Length Item No.<br>black   | Item No.<br>white | Item No.<br>black | Item No.<br>white |
|                                      | ● ○ Coding A<br>PVC halogen-free   |  |                   |                   |                   |
|  | 1 m 771-8965/007-101 .../007-102 771-8965/017-101 .../017-102<br>2 m 771-8965/007-201 .../007-202 771-8965/017-201 .../017-202 |  |                   |                   |                   |
|                                     |  |  |                   |                   |                   |
|  |  | <b>Accessories</b>   |                   |                   |                   |
|  |  | <b>Locking lever, for "flying leads,"</b><br>manually operated   |                   |                   |                   |
|  |  |  black <b>770-101</b> 100 (4x25)<br>white <b>770-121</b> 100 (4x25)                     |                   |                   |                   |
|  |  | <b>Locking lever, for "flying leads,"</b><br>tool operated   |                   |                   |                   |
|  |  |  black <b>770-111</b> 100 (4x25)<br>white <b>770-131</b> 100 (4x25)                     |                   |                   |                   |
|  |  | <b>Lockout cap, for socket, separable, 12-pole</b>   |                   |                   |                   |
|  |  |  black <b>770-201</b> 100<br>white <b>770-221</b> 100                                   |                   |                   |                   |
| <b>Coding pin, for plug (A and B coding)</b>   |  | <b>Lockout cap, for plug, separable, 5-pole</b>  |                   |                   |                   |
|  gray <b>770-401</b> 100            |  |  yellow <b>770-360</b> 100  |                   |                   |                   |

|   |  |   |                  |                |                  |                |
|---|--|---|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 5G1.5<br>halogen-free H05Z1Z1-F 5G1.5<br><br>400 V/6 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br><b>1 Approvals</b> |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b> |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9995/006-101 | .../006-102    | 771-9995/016-101 | .../016-102    |
|   |  | 2 m   | 771-9995/006-201 | .../006-202    | 771-9995/016-201 | .../016-202    |
|   |  | 3 m   | 771-9995/006-301 | .../006-302    | 771-9995/016-301 | .../016-302    |
|   |  | 5 m   | 771-9995/006-501 | .../006-502    | 771-9995/016-501 | .../016-502    |
|   |  | 7 m   | 771-9995/006-701 | .../006-702    | 771-9995/016-701 | .../016-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9995/106-101 | .../106-102    | 771-9995/116-101 | .../116-102    |
|   |  | 2 m   | 771-9995/106-201 | .../106-202    | 771-9995/116-201 | .../116-202    |
|   |  | 3 m   | 771-9995/106-301 | .../106-302    | 771-9995/116-301 | .../116-302    |
|   |  | 5 m   | 771-9995/106-501 | .../106-502    | 771-9995/116-501 | .../116-502    |
|   |  | 7 m   | 771-9995/106-701 | .../106-702    | 771-9995/116-701 | .../116-702    |
| <b>Connecting cable, plug - free end</b>    |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-9995/206-101 | .../206-102    | 771-9995/216-101 | .../216-102    |
|   |  | 2 m   | 771-9995/206-201 | .../206-202    | 771-9995/216-201 | .../216-202    |
|   |  | 3 m   | 771-9995/206-301 | .../206-302    | 771-9995/216-301 | .../216-302    |
|   |  | 5 m   | 771-9995/206-501 | .../206-502    | 771-9995/216-501 | .../216-502    |
|   |  | 7 m   | 771-9995/206-701 | .../206-702    | 771-9995/216-701 | .../216-702    |

**Info**

**1** For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

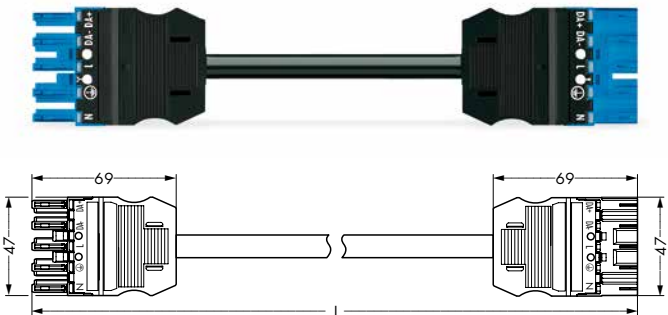
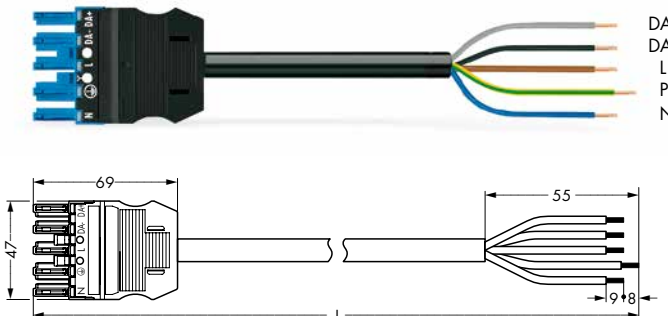
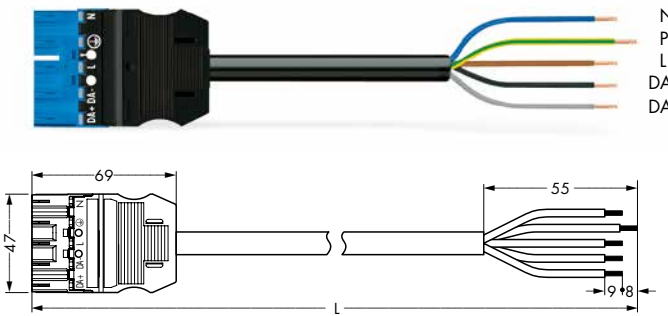


|         |          |                 |
|---------|----------|-----------------|
| ● black | Coding A | (N ⊕ L1 L2 L3)  |
| ○ white | Coding A | (N ⊕ L1 L2 L3)  |
| ● blue  | Coding I | (N ⊕ L DA- DA+) |

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Accessories**


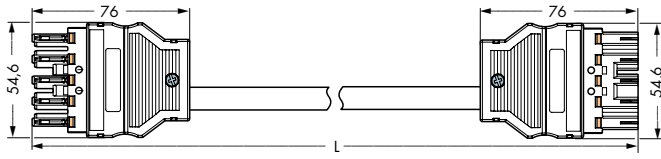

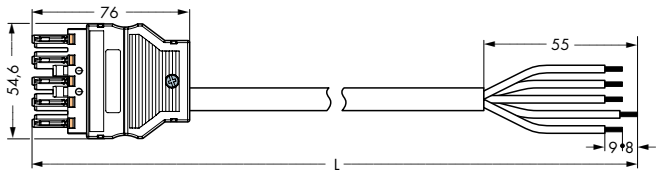

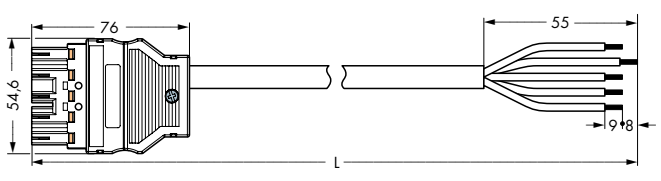
|  |                   |         |            |
|--|-------------------|---------|------------|
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b> |                   |         |            |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>    |                   |         |            |
|  | yellow            | 770-360 | 100        |



|   | <p>PVC H05VV-F 5G1.5<br/>halogen-free H05Z1Z1-F 5G1.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|--|----------------|------------------|---|----------------|----------------|--|--|--|--|--|-----|--|--------------|--|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b>   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-9985/006-101</td> <td>.../006-102</td> <td>771-9985/016-101</td> <td>.../016-102</td> </tr> <tr> <td>2 m</td> <td>771-9985/006-201</td> <td>.../006-202</td> <td>771-9985/016-201</td> <td>.../016-202</td> </tr> <tr> <td>3 m</td> <td>771-9985/006-301</td> <td>.../006-302</td> <td>771-9985/016-301</td> <td>.../016-302</td> </tr> <tr> <td>5 m</td> <td>771-9985/006-501</td> <td>.../006-502</td> <td>771-9985/016-501</td> <td>.../016-502</td> </tr> <tr> <td>7 m</td> <td>771-9985/006-701</td> <td>.../006-702</td> <td>771-9985/016-701</td> <td>.../016-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white  | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 771-9985/006-101 | .../006-102 | 771-9985/016-101 | .../016-102 | 2 m | 771-9985/006-201 | .../006-202 | 771-9985/016-201 | .../016-202 | 3 m | 771-9985/006-301 | .../006-302 | 771-9985/016-301 | .../016-302 | 5 m | 771-9985/006-501 | .../006-502 | 771-9985/016-501 | .../016-502 | 7 m | 771-9985/006-701 | .../006-702 | 771-9985/016-701 | .../016-702 |
| Length  | Item No. black   | Item No. white | Item No. black   | Item No. white  |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI)  |  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |  | halogen-free   |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9985/006-101   | .../006-102    | 771-9985/016-101 | .../016-102   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9985/006-201   | .../006-202    | 771-9985/016-201 | .../016-202   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9985/006-301   | .../006-302    | 771-9985/016-301 | .../016-302   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9985/006-501   | .../006-502    | 771-9985/016-501 | .../016-502   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9985/006-701   | .../006-702    | 771-9985/016-701 | .../016-702   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <p>Technical drawing showing dimensions: 69 mm width, 47 mm height, and length L.</p>   |  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-9985/106-101</td> <td>.../106-102</td> <td>771-9985/116-101</td> <td>.../116-102</td> </tr> <tr> <td>2 m</td> <td>771-9985/106-201</td> <td>.../106-202</td> <td>771-9985/116-201</td> <td>.../116-202</td> </tr> <tr> <td>3 m</td> <td>771-9985/106-301</td> <td>.../106-302</td> <td>771-9985/116-301</td> <td>.../116-302</td> </tr> <tr> <td>5 m</td> <td>771-9985/106-501</td> <td>.../106-502</td> <td>771-9985/116-501</td> <td>.../116-502</td> </tr> <tr> <td>7 m</td> <td>771-9985/106-701</td> <td>.../106-702</td> <td>771-9985/116-701</td> <td>.../116-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white  | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 771-9985/106-101 | .../106-102 | 771-9985/116-101 | .../116-102 | 2 m | 771-9985/106-201 | .../106-202 | 771-9985/116-201 | .../116-202 | 3 m | 771-9985/106-301 | .../106-302 | 771-9985/116-301 | .../116-302 | 5 m | 771-9985/106-501 | .../106-502 | 771-9985/116-501 | .../116-502 | 7 m | 771-9985/106-701 | .../106-702 | 771-9985/116-701 | .../116-702 |
| Length  | Item No. black   | Item No. white | Item No. black   | Item No. white  |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI)  |  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |  | halogen-free   |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9985/106-101   | .../106-102    | 771-9985/116-101 | .../116-102   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9985/106-201   | .../106-202    | 771-9985/116-201 | .../116-202   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9985/106-301   | .../106-302    | 771-9985/116-301 | .../116-302   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9985/106-501   | .../106-502    | 771-9985/116-501 | .../116-502   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9985/106-701   | .../106-702    | 771-9985/116-701 | .../116-702   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <p>Technical drawing showing dimensions: 69 mm width, 47 mm height, 55 mm length to conductors, and 9+8 mm conductor spacing.</p>  | <p>DA+<br/>DA-<br/>L<br/>PE<br/>N</p>  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug - free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I,<br/>e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-9985/206-101</td> <td>.../206-102</td> <td>771-9985/216-101</td> <td>.../216-102</td> </tr> <tr> <td>2 m</td> <td>771-9985/206-201</td> <td>.../206-202</td> <td>771-9985/216-201</td> <td>.../216-202</td> </tr> <tr> <td>3 m</td> <td>771-9985/206-301</td> <td>.../206-302</td> <td>771-9985/216-301</td> <td>.../216-302</td> </tr> <tr> <td>5 m</td> <td>771-9985/206-501</td> <td>.../206-502</td> <td>771-9985/216-501</td> <td>.../216-502</td> </tr> <tr> <td>7 m</td> <td>771-9985/206-701</td> <td>.../206-702</td> <td>771-9985/216-701</td> <td>.../216-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white  | Item No. black | Item No. white | ● Coding I,<br>e.g., for dimming function (DALI) |  |  |  |  | PVC |  | halogen-free |  |  | 1 m | 771-9985/206-101 | .../206-102 | 771-9985/216-101 | .../216-102 | 2 m | 771-9985/206-201 | .../206-202 | 771-9985/216-201 | .../216-202 | 3 m | 771-9985/206-301 | .../206-302 | 771-9985/216-301 | .../216-302 | 5 m | 771-9985/206-501 | .../206-502 | 771-9985/216-501 | .../216-502 | 7 m | 771-9985/206-701 | .../206-702 | 771-9985/216-701 | .../216-702 |
| Length  | Item No. black   | Item No. white | Item No. black   | Item No. white  |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding I,<br>e.g., for dimming function (DALI)  |  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |  | halogen-free   |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9985/206-101   | .../206-102    | 771-9985/216-101 | .../216-102   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9985/206-201   | .../206-202    | 771-9985/216-201 | .../216-202   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9985/206-301   | .../206-302    | 771-9985/216-301 | .../216-302   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9985/206-501   | .../206-502    | 771-9985/216-501 | .../216-502   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9985/206-701   | .../206-702    | 771-9985/216-701 | .../216-702   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <p>Technical drawing showing dimensions: 69 mm width, 47 mm height, 55 mm length to conductors, and 9+8 mm conductor spacing.</p> | <p>N<br/>PE<br/>L<br/>DA-<br/>DA+</p>  |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <b>Accessories</b>   |                |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b><br/>manually operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-101          | 100 (4x25)  | white          | 770-121        | 100 (4x25)                                       |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 770-101  | 100 (4x25)     |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 770-121  | 100 (4x25)     |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b><br/>tool operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-111          | 100 (4x25)  | white          | 770-131        | 100 (4x25)                                       |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 770-111  | 100 (4x25)     |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 770-131  | 100 (4x25)     |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </tbody> </table>   | black          | 770-201          | 100   | white          | 770-221        | 100  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 770-201  | 100            |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 770-221  | 100            |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Coding pin, for plug (A and B coding)</b>  | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tbody> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </tbody> </table>   | yellow         | 770-360          | 100   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow  | 770-360  | 100            |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <table border="1"> <tbody> <tr> <td>gray</td> <td>770-401</td> <td>100</td> </tr> </tbody> </table>                               | gray   | 770-401        | 100              |  |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| gray  | 770-401  | 100            |                  |   |                |                |  |  |  |  |  |     |  |              |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |

Recommended items are shown in red and available for immediate delivery!



|   |  |   |                  |                |                  |                |
|---|--|---|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 5G1.5<br>halogen-free H05Z1Z1-F 5G1.5<br><br>400 V/6 kV/3 I <sub>N</sub> 16 A<br><br>Conductor ends, bonded: 9 mm<br><b>1 Approvals</b> |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b>   |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|    |  | ● Coding L<br>PVC halogen-free  |                  |                |                  |                |
|     |  | 1 m   | 771-8985/006-103 | .../006-104    | 771-8985/016-103 | .../016-104    |
|   |  | 2 m   | 771-8985/006-203 | .../006-204    | 771-8985/016-203 | .../016-204    |
|   |  | 3 m   | 771-8985/006-303 | .../006-304    | 771-8985/016-303 | .../016-304    |
|   |  | 5 m   | 771-8985/006-503 | .../006-504    | 771-8985/016-503 | .../016-504    |
|   |  | 7 m   | 771-8985/006-703 | .../006-704    | 771-8985/016-703 | .../016-704    |
| <b>Connecting cable, socket – free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● Coding L<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-8985/106-103 | .../106-104    | 771-8985/116-103 | .../116-104    |
|   |  | 2 m   | 771-8985/106-203 | .../106-204    | 771-8985/116-203 | .../116-204    |
|   |  | 3 m   | 771-8985/106-303 | .../106-304    | 771-8985/116-303 | .../116-304    |
|   |  | 5 m   | 771-8985/106-503 | .../106-504    | 771-8985/116-503 | .../116-504    |
|   |  | 7 m   | 771-8985/106-703 | .../106-704    | 771-8985/116-703 | .../116-704    |
| <b>Connecting cable, plug - free end</b>  |  | Length  | Item No. black   | Item No. white | Item No. black   | Item No. white |
|  |  | ● Coding L<br>PVC halogen-free  |                  |                |                  |                |
|   |  | 1 m   | 771-8985/206-103 | .../206-104    | 771-8985/216-103 | .../216-104    |
|   |  | 2 m   | 771-8985/206-203 | .../206-204    | 771-8985/216-203 | .../216-204    |
|   |  | 3 m   | 771-8985/206-303 | .../206-304    | 771-8985/216-303 | .../216-304    |
|   |  | 5 m   | 771-8985/206-503 | .../206-504    | 771-8985/216-503 | .../216-504    |
|   |  | 7 m   | 771-8985/206-703 | .../206-704    | 771-8985/216-703 | .../216-704    |

**Info**

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.





For other cables, please contact factory.

● dark gray Coding L (N ⊕ L N' L')

● red Coding P (N ⊕ L1 L2 L3)

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Accessories**

|   |                   |         |            |
|---|-------------------|---------|------------|
|  | manually operated |         |            |
|   | black             | 770-101 | 100 (4x25) |
|   | white             | 770-121 | 100 (4x25) |
|  | tool operated     |         |            |
|   | black             | 770-111 | 100 (4x25) |
|   | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                   |         |            |
|  | black             | 770-201 | 100        |
|   | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                   |         |            |
|  | yellow            | 770-360 | 100        |

|   | <p>PVC H05VV-F 5G1.5<br/>halogen-free H05Z1Z1-F 5G1.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|---|----------------|------------------|----------------|----------------|----------------|------------|--|--|--|--|-----|--|--|--------------|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b> | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding P</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PVC</td> <td></td> <td></td> <td>halogen-free</td> <td></td> </tr> <tr> <td>1 m</td> <td>771-9975/006-101</td> <td>.../006-102</td> <td>771-9975/016-101</td> <td>.../016-102</td> </tr> <tr> <td>2 m</td> <td>771-9975/006-201</td> <td>.../006-202</td> <td>771-9975/016-201</td> <td>.../016-202</td> </tr> <tr> <td>3 m</td> <td>771-9975/006-301</td> <td>.../006-302</td> <td>771-9975/016-301</td> <td>.../016-302</td> </tr> <tr> <td>5 m</td> <td>771-9975/006-501</td> <td>.../006-502</td> <td>771-9975/016-501</td> <td>.../016-502</td> </tr> <tr> <td>7 m</td> <td>771-9975/006-701</td> <td>.../006-702</td> <td>771-9975/016-701</td> <td>.../016-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding P |  |  |  |  | PVC |  |  | halogen-free |  | 1 m | 771-9975/006-101 | .../006-102 | 771-9975/016-101 | .../016-102 | 2 m | 771-9975/006-201 | .../006-202 | 771-9975/016-201 | .../016-202 | 3 m | 771-9975/006-301 | .../006-302 | 771-9975/016-301 | .../016-302 | 5 m | 771-9975/006-501 | .../006-502 | 771-9975/016-501 | .../016-502 | 7 m | 771-9975/006-701 | .../006-702 | 771-9975/016-701 | .../016-702 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding P                                  |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |   |                | halogen-free     |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9975/006-101  | .../006-102    | 771-9975/016-101 | .../016-102    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9975/006-201  | .../006-202    | 771-9975/016-201 | .../016-202    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9975/006-301  | .../006-302    | 771-9975/016-301 | .../016-302    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9975/006-501  | .../006-502    | 771-9975/016-501 | .../016-502    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9975/006-701  | .../006-702    | 771-9975/016-701 | .../016-702    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding P</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PVC</td> <td></td> <td></td> <td>halogen-free</td> <td></td> </tr> <tr> <td>1 m</td> <td>771-9975/106-101</td> <td>.../106-102</td> <td>771-9975/116-101</td> <td>.../116-102</td> </tr> <tr> <td>2 m</td> <td>771-9975/106-201</td> <td>.../106-202</td> <td>771-9975/116-201</td> <td>.../116-202</td> </tr> <tr> <td>3 m</td> <td>771-9975/106-301</td> <td>.../106-302</td> <td>771-9975/116-301</td> <td>.../116-302</td> </tr> <tr> <td>5 m</td> <td>771-9975/106-501</td> <td>.../106-502</td> <td>771-9975/116-501</td> <td>.../116-502</td> </tr> <tr> <td>7 m</td> <td>771-9975/106-701</td> <td>.../106-702</td> <td>771-9975/116-701</td> <td>.../116-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding P |  |  |  |  | PVC |  |  | halogen-free |  | 1 m | 771-9975/106-101 | .../106-102 | 771-9975/116-101 | .../116-102 | 2 m | 771-9975/106-201 | .../106-202 | 771-9975/116-201 | .../116-202 | 3 m | 771-9975/106-301 | .../106-302 | 771-9975/116-301 | .../116-302 | 5 m | 771-9975/106-501 | .../106-502 | 771-9975/116-501 | .../116-502 | 7 m | 771-9975/106-701 | .../106-702 | 771-9975/116-701 | .../116-702 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding P                                  |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |   |                | halogen-free     |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9975/106-101  | .../106-102    | 771-9975/116-101 | .../116-102    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9975/106-201  | .../106-202    | 771-9975/116-201 | .../116-202    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9975/106-301  | .../106-302    | 771-9975/116-301 | .../116-302    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9975/106-501  | .../106-502    | 771-9975/116-501 | .../116-502    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9975/106-701  | .../106-702    | 771-9975/116-701 | .../116-702    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug - free end</b>    | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding P</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PVC</td> <td></td> <td></td> <td>halogen-free</td> <td></td> </tr> <tr> <td>1 m</td> <td>771-9975/206-101</td> <td>.../206-102</td> <td>771-9975/216-101</td> <td>.../216-102</td> </tr> <tr> <td>2 m</td> <td>771-9975/206-201</td> <td>.../206-202</td> <td>771-9975/216-201</td> <td>.../216-202</td> </tr> <tr> <td>3 m</td> <td>771-9975/206-301</td> <td>.../206-302</td> <td>771-9975/216-301</td> <td>.../216-302</td> </tr> <tr> <td>5 m</td> <td>771-9975/206-501</td> <td>.../206-502</td> <td>771-9975/216-501</td> <td>.../216-502</td> </tr> <tr> <td>7 m</td> <td>771-9975/206-701</td> <td>.../206-702</td> <td>771-9975/216-701</td> <td>.../216-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding P |  |  |  |  | PVC |  |  | halogen-free |  | 1 m | 771-9975/206-101 | .../206-102 | 771-9975/216-101 | .../216-102 | 2 m | 771-9975/206-201 | .../206-202 | 771-9975/216-201 | .../216-202 | 3 m | 771-9975/206-301 | .../206-302 | 771-9975/216-301 | .../216-302 | 5 m | 771-9975/206-501 | .../206-502 | 771-9975/216-501 | .../216-502 | 7 m | 771-9975/206-701 | .../206-702 | 771-9975/216-701 | .../216-702 |
| Length                                      | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding P                                  |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC   |   |                | halogen-free     |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9975/206-101  | .../206-102    | 771-9975/216-101 | .../216-102    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9975/206-201  | .../206-202    | 771-9975/216-201 | .../216-202    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9975/206-301  | .../206-302    | 771-9975/216-301 | .../216-302    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9975/206-501  | .../206-502    | 771-9975/216-501 | .../216-502    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9975/206-701  | .../206-702    | 771-9975/216-701 | .../216-702    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <b>Accessories</b>  |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b></p> <p>manually operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-101          | 100 (4x25)     | white          | 770-121        | 100 (4x25) |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-101   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-121   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-111          | 100 (4x25)     | white          | 770-131        | 100 (4x25) |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-111   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-131   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </tbody> </table>  | black          | 770-201          | 100            | white          | 770-221        | 100        |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black                                       | 770-201   | 100            |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white                                       | 770-221   | 100            |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tbody> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </tbody> </table>  | yellow         | 770-360          | 100            |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow                                      | 770-360   | 100            |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |

|   |  |  |                  |                |                  |                |
|---|--|--|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 5G2.5<br>halogen-free H05Z1 Z1-F 5G2.5<br><br>400 V/6 kV/3 I <sub>N</sub> 20 A<br><br>Conductor ends, bonded: 9 mm<br><b>1 Approvals</b> |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b> |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 771-9995/007-101 | .../007-102    | 771-9995/017-101 | .../017-102    |
|   |  | 2 m  | 771-9995/007-201 | .../007-202    | 771-9995/017-201 | .../017-202    |
|   |  | 3 m  | 771-9995/007-301 | .../007-302    | 771-9995/017-301 | .../017-302    |
|   |  | 5 m  | 771-9995/007-501 | .../007-502    | 771-9995/017-501 | .../017-502    |
|   |  | 7 m  | 771-9995/007-701 | .../007-702    | 771-9995/017-701 | .../017-702    |
| <b>Connecting cable, socket – free end</b>  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 771-9995/107-101 | .../107-102    | 771-9995/117-101 | .../117-102    |
|   |  | 2 m  | 771-9995/107-201 | .../107-202    | 771-9995/117-201 | .../117-202    |
|   |  | 3 m  | 771-9995/107-301 | .../107-302    | 771-9995/117-301 | .../117-302    |
|   |  | 5 m  | 771-9995/107-501 | .../107-502    | 771-9995/117-501 | .../117-502    |
|   |  | 7 m  | 771-9995/107-701 | .../107-702    | 771-9995/117-701 | .../117-702    |
| <b>Connecting cable, plug - free end</b>    |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● ○ Coding A<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 771-9995/207-101 | .../207-102    | 771-9995/217-101 | .../217-102    |
|   |  | 2 m  | 771-9995/207-201 | .../207-202    | 771-9995/217-201 | .../217-202    |
|   |  | 3 m  | 771-9995/207-301 | .../207-302    | 771-9995/217-301 | .../217-302    |
|   |  | 5 m  | 771-9995/207-501 | .../207-502    | 771-9995/217-501 | .../217-502    |
|   |  | 7 m  | 771-9995/207-701 | .../207-702    | 771-9995/217-701 | .../217-702    |
| <b>Info</b>                                 |  | <b>Accessories</b>   |                  |                |                  |                |

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

- black Coding A (N ⊕ L1 L2 L3)
- white Coding A (N ⊕ L1 L2 L3)
- blue Coding I (N ⊕ L DA- DA+)

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Locking lever, for "flying leads,"**



|                   |         |     |        |
|-------------------|---------|-----|--------|
| manually operated |         |     |        |
| black             | 770-101 | 100 | (4x25) |
| white             | 770-121 | 100 | (4x25) |

**Locking lever, for "flying leads,"**



|               |         |     |        |
|---------------|---------|-----|--------|
| tool operated |         |     |        |
| black         | 770-111 | 100 | (4x25) |
| white         | 770-131 | 100 | (4x25) |

**Lockout cap, for socket, separable, 12-pole**

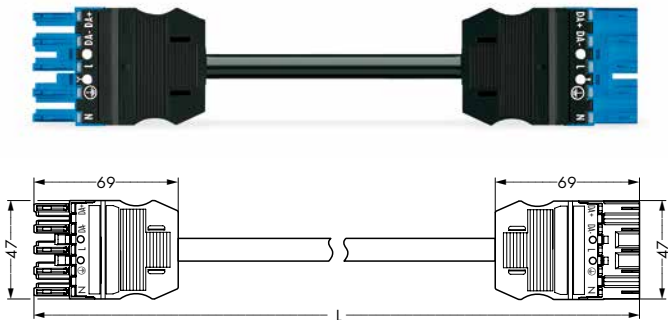
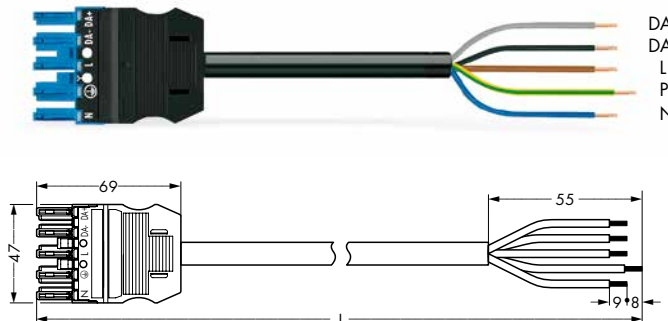
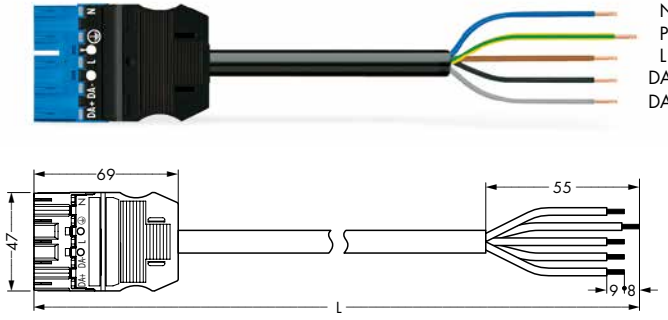


|       |         |     |
|-------|---------|-----|
| black | 770-201 | 100 |
| white | 770-221 | 100 |

**Lockout cap, for plug, separable, 5-pole**



|        |         |     |
|--------|---------|-----|
| yellow | 770-360 | 100 |
|--------|---------|-----|

|   | <p>PVC H05VV-F 5G2.5<br/>halogen-free H05Z1Z1-F 5G2.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 20 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|---|---|----------------|------------------|----------------|----------------|----------------|--|--|--|--|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b>   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5"> <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> </td> </tr> <tr> <td>1 m</td> <td>771-9985/007-101</td> <td>.../007-102</td> <td>771-9985/017-101</td> <td>.../017-102</td> </tr> <tr> <td>2 m</td> <td>771-9985/007-201</td> <td>.../007-202</td> <td>771-9985/017-201</td> <td>.../017-202</td> </tr> <tr> <td>3 m</td> <td>771-9985/007-301</td> <td>.../007-302</td> <td>771-9985/017-301</td> <td>.../017-302</td> </tr> <tr> <td>5 m</td> <td>771-9985/007-501</td> <td>.../007-502</td> <td>771-9985/017-501</td> <td>.../017-502</td> </tr> <tr> <td>7 m</td> <td>771-9985/007-701</td> <td>.../007-702</td> <td>771-9985/017-701</td> <td>.../017-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> |  |  |  |  | 1 m | 771-9985/007-101 | .../007-102 | 771-9985/017-101 | .../017-102 | 2 m | 771-9985/007-201 | .../007-202 | 771-9985/017-201 | .../017-202 | 3 m | 771-9985/007-301 | .../007-302 | 771-9985/017-301 | .../017-302 | 5 m | 771-9985/007-501 | .../007-502 | 771-9985/017-501 | .../017-502 | 7 m | 771-9985/007-701 | .../007-702 | 771-9985/017-701 | .../017-702 |
| Length  | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p>    |   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9985/007-101  | .../007-102    | 771-9985/017-101 | .../017-102    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9985/007-201  | .../007-202    | 771-9985/017-201 | .../017-202    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9985/007-301  | .../007-302    | 771-9985/017-301 | .../017-302    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9985/007-501  | .../007-502    | 771-9985/017-501 | .../017-502    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9985/007-701  | .../007-702    | 771-9985/017-701 | .../017-702    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|    |   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5"> <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> </td> </tr> <tr> <td>1 m</td> <td>771-9985/107-101</td> <td>.../107-102</td> <td>771-9985/117-101</td> <td>.../117-102</td> </tr> <tr> <td>2 m</td> <td>771-9985/107-201</td> <td>.../107-202</td> <td>771-9985/117-201</td> <td>.../117-202</td> </tr> <tr> <td>3 m</td> <td>771-9985/107-301</td> <td>.../107-302</td> <td>771-9985/117-301</td> <td>.../117-302</td> </tr> <tr> <td>5 m</td> <td>771-9985/107-501</td> <td>.../107-502</td> <td>771-9985/117-501</td> <td>.../117-502</td> </tr> <tr> <td>7 m</td> <td>771-9985/107-701</td> <td>.../107-702</td> <td>771-9985/117-701</td> <td>.../117-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> |  |  |  |  | 1 m | 771-9985/107-101 | .../107-102 | 771-9985/117-101 | .../117-102 | 2 m | 771-9985/107-201 | .../107-202 | 771-9985/117-201 | .../117-202 | 3 m | 771-9985/107-301 | .../107-302 | 771-9985/117-301 | .../117-302 | 5 m | 771-9985/107-501 | .../107-502 | 771-9985/117-501 | .../117-502 | 7 m | 771-9985/107-701 | .../107-702 | 771-9985/117-701 | .../117-702 |
| Length  | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p>    |   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9985/107-101  | .../107-102    | 771-9985/117-101 | .../117-102    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9985/107-201  | .../107-202    | 771-9985/117-201 | .../117-202    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9985/107-301  | .../107-302    | 771-9985/117-301 | .../117-302    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9985/107-501  | .../107-502    | 771-9985/117-501 | .../117-502    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9985/107-701  | .../107-702    | 771-9985/117-701 | .../117-702    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p>DA+<br/>DA-<br/>L<br/>PE<br/>N</p>   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug - free end</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5"> <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> </td> </tr> <tr> <td>1 m</td> <td>771-9985/207-101</td> <td>.../207-102</td> <td>771-9985/217-101</td> <td>.../217-102</td> </tr> <tr> <td>2 m</td> <td>771-9985/207-201</td> <td>.../207-202</td> <td>771-9985/217-201</td> <td>.../217-202</td> </tr> <tr> <td>3 m</td> <td>771-9985/207-301</td> <td>.../207-302</td> <td>771-9985/217-301</td> <td>.../217-302</td> </tr> <tr> <td>5 m</td> <td>771-9985/207-501</td> <td>.../207-502</td> <td>771-9985/217-501</td> <td>.../217-502</td> </tr> <tr> <td>7 m</td> <td>771-9985/207-701</td> <td>.../207-702</td> <td>771-9985/217-701</td> <td>.../217-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p> |  |  |  |  | 1 m | 771-9985/207-101 | .../207-102 | 771-9985/217-101 | .../217-102 | 2 m | 771-9985/207-201 | .../207-202 | 771-9985/217-201 | .../217-202 | 3 m | 771-9985/207-301 | .../207-302 | 771-9985/217-301 | .../217-302 | 5 m | 771-9985/207-501 | .../207-502 | 771-9985/217-501 | .../217-502 | 7 m | 771-9985/207-701 | .../207-702 | 771-9985/217-701 | .../217-702 |
| Length  | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <p>● Coding I,<br/>e.g., for dimming function (DALI)</p> <p>PVC halogen-free</p>    |   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m   | 771-9985/207-101  | .../207-102    | 771-9985/217-101 | .../217-102    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m   | 771-9985/207-201  | .../207-202    | 771-9985/217-201 | .../217-202    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m   | 771-9985/207-301  | .../207-302    | 771-9985/217-301 | .../217-302    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m   | 771-9985/207-501  | .../207-502    | 771-9985/217-501 | .../217-502    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m   | 771-9985/207-701  | .../207-702    | 771-9985/217-701 | .../217-702    |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p>N<br/>PE<br/>L<br/>DA-<br/>DA+</p>   |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <b>Accessories</b>  |                |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b><br/>manually operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </tbody> </table>   | black          | 770-101          | 100 (4x25)     | white          | 770-121        | 100 (4x25)   |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 770-101   | 100 (4x25)     |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 770-121   | 100 (4x25)     |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Locking lever, for "flying leads,"</b><br/>tool operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </tbody> </table>   | black          | 770-111          | 100 (4x25)     | white          | 770-131        | 100 (4x25)   |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 770-111   | 100 (4x25)     |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 770-131   | 100 (4x25)     |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </tbody> </table>  | black          | 770-201          | 100            | white          | 770-221        | 100  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black   | 770-201   | 100            |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white   | 770-221   | 100            |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|   | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tbody> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </tbody> </table>  | yellow         | 770-360          | 100            |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow  | 770-360   | 100            |                  |                |                |                |  |  |  |  |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |

Recommended items are shown in red and available for immediate delivery!

|   |  |  |                  |                |                  |                |
|---|--|--|------------------|----------------|------------------|----------------|
|   |  | PVC H05VV-F 5G2.5<br>halogen-free H05Z1 Z1-F 5G2.5<br><br>400 V/6 kV/3 I <sub>N</sub> 20 A<br><br>Conductor ends, bonded: 9 mm<br><br><b>1 Approvals</b> |                  |                |                  |                |
| <b>Interconnecting cable, socket – plug</b> |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● Coding L<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 771-8985/007-103 | .../007-104    | 771-8985/017-103 | .../017-104    |
|   |  | 2 m  | 771-8985/007-203 | .../007-204    | 771-8985/017-203 | .../017-204    |
|   |  | 3 m  | 771-8985/007-303 | .../007-304    | 771-8985/017-303 | .../017-304    |
|   |  | 5 m  | 771-8985/007-503 | .../007-504    | 771-8985/017-503 | .../017-504    |
|   |  | 7 m  | 771-8985/007-703 | .../007-704    | 771-8985/017-703 | .../017-704    |
| <b>Connecting cable, socket – free end</b>  |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● Coding L<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 771-8985/107-103 | .../107-104    | 771-8985/117-103 | .../117-104    |
|   |  | 2 m  | 771-8985/107-203 | .../107-204    | 771-8985/117-203 | .../117-204    |
|   |  | 3 m  | 771-8985/107-303 | .../107-304    | 771-8985/117-303 | .../117-304    |
|   |  | 5 m  | 771-8985/107-503 | .../107-504    | 771-8985/117-503 | .../117-504    |
|   |  | 7 m  | 771-8985/107-703 | .../107-704    | 771-8985/117-703 | .../117-704    |
| <b>Connecting cable, plug - free end</b>    |  | Length   | Item No. black   | Item No. white | Item No. black   | Item No. white |
|   |  | ● Coding L<br>PVC halogen-free   |                  |                |                  |                |
|   |  | 1 m  | 771-8985/207-103 | .../207-104    | 771-8985/217-103 | .../217-104    |
|   |  | 2 m  | 771-8985/207-203 | .../207-204    | 771-8985/217-203 | .../217-204    |
|   |  | 3 m  | 771-8985/207-303 | .../207-304    | 771-8985/217-303 | .../217-304    |
|   |  | 5 m  | 771-8985/207-503 | .../207-504    | 771-8985/217-503 | .../217-504    |
|   |  | 7 m  | 771-8985/207-703 | .../207-704    | 771-8985/217-703 | .../217-704    |

**Info**

**1** For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

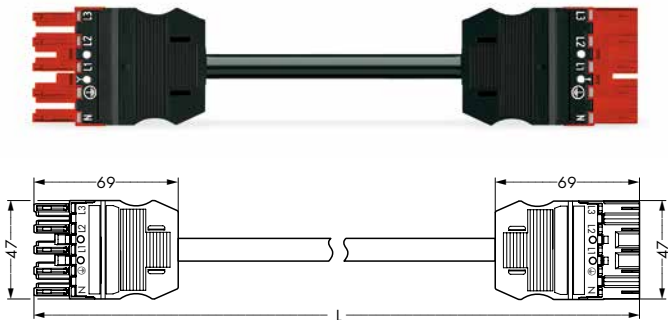
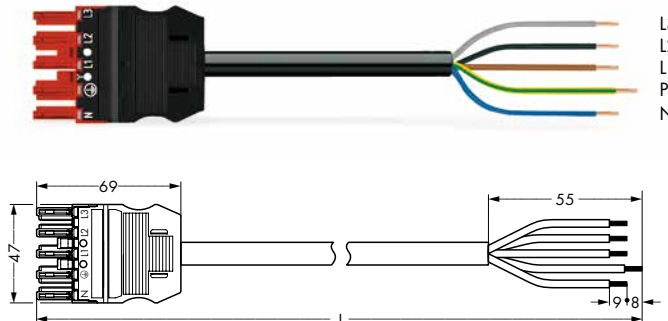
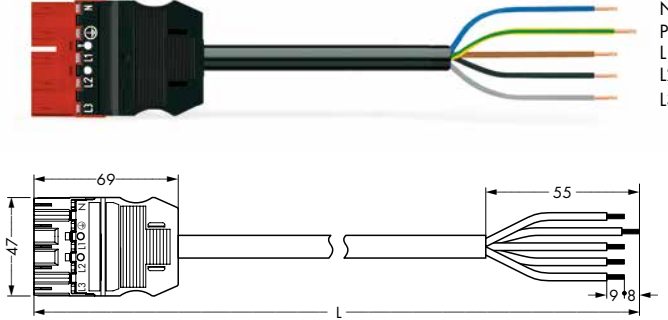
● dark gray Coding L (N ⊕ L N' L')

● red Coding P (N ⊕ L1 L2 L3)

For coding information, see pages 238 to 240.  
Fire load data available upon request.

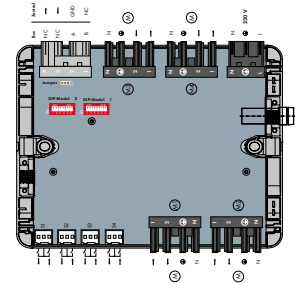
**Accessories**





|  |                   |         |            |
|--|-------------------|---------|------------|
| <b>Locking lever, for "flying leads,"</b>          |                   |         |            |
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
| <b>Locking lever, for "flying leads,"</b>          |                   |         |            |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
| <b>Lockout cap, for socket, separable, 12-pole</b> |                   |         |            |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
| <b>Lockout cap, for plug, separable, 5-pole</b>    |                   |         |            |
|  | yellow            | 770-360 | 100        |

|  | <p>PVC H05VV-F 5G2.5<br/>halogen-free H05Z1Z1-F 5G2.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 20 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|--|---|----------------|------------------|----------------|----------------|----------------|------------|--|--|--|--|-----|--|--|--------------|--|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|-----|------------------|-------------|------------------|-------------|
| <b>Interconnecting cable, socket – plug</b>  | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding P</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PVC</td> <td></td> <td></td> <td>halogen-free</td> <td></td> </tr> <tr> <td>1 m</td> <td>771-9975/007-101</td> <td>.../007-102</td> <td>771-9975/017-101</td> <td>.../017-102</td> </tr> <tr> <td>2 m</td> <td>771-9975/007-201</td> <td>.../007-202</td> <td>771-9975/017-201</td> <td>.../017-202</td> </tr> <tr> <td>3 m</td> <td>771-9975/007-301</td> <td>.../007-302</td> <td>771-9975/017-301</td> <td>.../017-302</td> </tr> <tr> <td>5 m</td> <td>771-9975/007-501</td> <td>.../007-502</td> <td>771-9975/017-501</td> <td>.../017-502</td> </tr> <tr> <td>7 m</td> <td>771-9975/007-701</td> <td>.../007-702</td> <td>771-9975/017-701</td> <td>.../017-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding P |  |  |  |  | PVC |  |  | halogen-free |  | 1 m | 771-9975/007-101 | .../007-102 | 771-9975/017-101 | .../017-102 | 2 m | 771-9975/007-201 | .../007-202 | 771-9975/017-201 | .../017-202 | 3 m | 771-9975/007-301 | .../007-302 | 771-9975/017-301 | .../017-302 | 5 m | 771-9975/007-501 | .../007-502 | 771-9975/017-501 | .../017-502 | 7 m | 771-9975/007-701 | .../007-702 | 771-9975/017-701 | .../017-702 |
| Length   | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding P   |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC  |   |                | halogen-free     |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m  | 771-9975/007-101  | .../007-102    | 771-9975/017-101 | .../017-102    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 771-9975/007-201  | .../007-202    | 771-9975/017-201 | .../017-202    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 771-9975/007-301  | .../007-302    | 771-9975/017-301 | .../017-302    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 771-9975/007-501  | .../007-502    | 771-9975/017-501 | .../017-502    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 771-9975/007-701  | .../007-702    | 771-9975/017-701 | .../017-702    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <p>Technical drawing showing two views of the interconnecting cable. The top view shows the cable with two 12-pole sockets on both ends. Dimensions: length L, socket width 69 mm, socket height 47 mm.</p>  |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, socket – free end</b>   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding P</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PVC</td> <td></td> <td></td> <td>halogen-free</td> <td></td> </tr> <tr> <td>1 m</td> <td>771-9975/107-101</td> <td>.../107-102</td> <td>771-9975/117-101</td> <td>.../117-102</td> </tr> <tr> <td>2 m</td> <td>771-9975/107-201</td> <td>.../107-202</td> <td>771-9975/117-201</td> <td>.../117-202</td> </tr> <tr> <td>3 m</td> <td>771-9975/107-301</td> <td>.../107-302</td> <td>771-9975/117-301</td> <td>.../117-302</td> </tr> <tr> <td>5 m</td> <td>771-9975/107-501</td> <td>.../107-502</td> <td>771-9975/117-501</td> <td>.../117-502</td> </tr> <tr> <td>7 m</td> <td>771-9975/107-701</td> <td>.../107-702</td> <td>771-9975/117-701</td> <td>.../117-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding P |  |  |  |  | PVC |  |  | halogen-free |  | 1 m | 771-9975/107-101 | .../107-102 | 771-9975/117-101 | .../117-102 | 2 m | 771-9975/107-201 | .../107-202 | 771-9975/117-201 | .../117-202 | 3 m | 771-9975/107-301 | .../107-302 | 771-9975/117-301 | .../117-302 | 5 m | 771-9975/107-501 | .../107-502 | 771-9975/117-501 | .../117-502 | 7 m | 771-9975/107-701 | .../107-702 | 771-9975/117-701 | .../117-702 |
| Length   | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding P   |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC  |   |                | halogen-free     |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m  | 771-9975/107-101  | .../107-102    | 771-9975/117-101 | .../117-102    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 771-9975/107-201  | .../107-202    | 771-9975/117-201 | .../117-202    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 771-9975/107-301  | .../107-302    | 771-9975/117-301 | .../117-302    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 771-9975/107-501  | .../107-502    | 771-9975/117-501 | .../117-502    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 771-9975/107-701  | .../107-702    | 771-9975/117-701 | .../117-702    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <p>Technical drawing showing two views of the connecting cable. The top view shows a 12-pole socket on one end and four individual conductors (L3, L2, L1, PE, N) on the other. Dimensions: socket width 69 mm, socket height 47 mm, conductor bundle width 55 mm, conductor length 9+8 mm.</p> |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| <b>Connecting cable, plug - free end</b>   | <table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td>● Coding P</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PVC</td> <td></td> <td></td> <td>halogen-free</td> <td></td> </tr> <tr> <td>1 m</td> <td>771-9975/207-101</td> <td>.../207-102</td> <td>771-9975/217-101</td> <td>.../217-102</td> </tr> <tr> <td>2 m</td> <td>771-9975/207-201</td> <td>.../207-202</td> <td>771-9975/217-201</td> <td>.../217-202</td> </tr> <tr> <td>3 m</td> <td>771-9975/207-301</td> <td>.../207-302</td> <td>771-9975/217-301</td> <td>.../217-302</td> </tr> <tr> <td>5 m</td> <td>771-9975/207-501</td> <td>.../207-502</td> <td>771-9975/217-501</td> <td>.../217-502</td> </tr> <tr> <td>7 m</td> <td>771-9975/207-701</td> <td>.../207-702</td> <td>771-9975/217-701</td> <td>.../217-702</td> </tr> </tbody> </table> | Length         | Item No. black   | Item No. white | Item No. black | Item No. white | ● Coding P |  |  |  |  | PVC |  |  | halogen-free |  | 1 m | 771-9975/207-101 | .../207-102 | 771-9975/217-101 | .../217-102 | 2 m | 771-9975/207-201 | .../207-202 | 771-9975/217-201 | .../217-202 | 3 m | 771-9975/207-301 | .../207-302 | 771-9975/217-301 | .../217-302 | 5 m | 771-9975/207-501 | .../207-502 | 771-9975/217-501 | .../217-502 | 7 m | 771-9975/207-701 | .../207-702 | 771-9975/217-701 | .../217-702 |
| Length   | Item No. black  | Item No. white | Item No. black   | Item No. white |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| ● Coding P   |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| PVC  |   |                | halogen-free     |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 1 m  | 771-9975/207-101  | .../207-102    | 771-9975/217-101 | .../217-102    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 2 m  | 771-9975/207-201  | .../207-202    | 771-9975/217-201 | .../217-202    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 3 m  | 771-9975/207-301  | .../207-302    | 771-9975/217-301 | .../217-302    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 5 m  | 771-9975/207-501  | .../207-502    | 771-9975/217-501 | .../217-502    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| 7 m  | 771-9975/207-701  | .../207-702    | 771-9975/217-701 | .../217-702    |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  <p>Technical drawing showing two views of the connecting cable. The top view shows a 12-pole plug on one end and four individual conductors (N, PE, L1, L2, L3) on the other. Dimensions: plug width 69 mm, plug height 47 mm, conductor bundle width 55 mm, conductor length 9+8 mm.</p>      |   |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <b>Accessories</b>  |                |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p><b>Locking lever, for "flying leads,"</b></p> <p>manually operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-101          | 100 (4x25)     | white          | 770-121        | 100 (4x25) |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black  | 770-101   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white  | 770-121   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p><b>Locking lever, for "flying leads,"</b></p> <p>tool operated</p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </tbody> </table>  | black          | 770-111          | 100 (4x25)     | white          | 770-131        | 100 (4x25) |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black  | 770-111   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white  | 770-131   | 100 (4x25)     |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tbody> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </tbody> </table>  | black          | 770-201          | 100            | white          | 770-221        | 100        |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| black  | 770-201   | 100            |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| white  | 770-221   | 100            |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
|  | <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tbody> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </tbody> </table>  | yellow         | 770-360          | 100            |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |
| yellow   | 770-360   | 100            |                  |                |                |                |            |  |  |  |  |     |  |  |              |  |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |     |                  |             |                  |             |



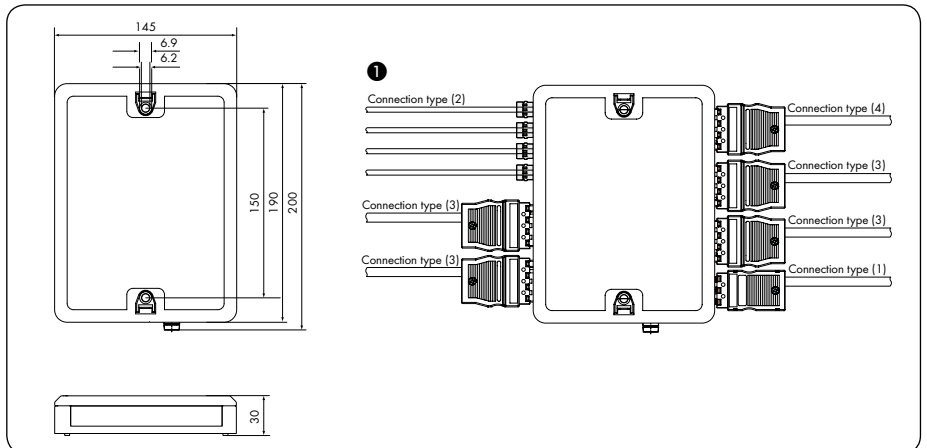
|  |   |                       |
|--|---|-----------------------|
|  | <b>Sunblind box with 4 switch inputs and with 4 power outputs</b> | <b>Technical data</b> |
|--|---|-----------------------|



| Description  | Color  | Item No.                | Pack. Unit  | Technical data   |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
|--|--|-------------------------|-------------|--|--------------|----------------------|---------------|--------|-----------------|---|---------------|-----------------------|--------|--------------------------------------|----------------|------|---------|---|-------------------|---------|-------------------|--------------------|---------|--|---|--------------------|------------------|--------------|-------------------|---------------|----------------------|------|-------------------|-----|-----------------|----|
| <b>Sunblind box</b><br>The WINSTA® sunblind box is a decentralized, stand-alone unit that controls 4 sunblind motors operated via standard switches. Output group configuration, operating time and "slat/sunblind" mode selection are performed via DIP switch.<br>Operating the boxes in a network configuration provides extended functionality:<br>1. The sunblinds of all connected boxes are moved into the upper or end position via a central 24V control line. Either a weather station, timer or central switch can enable this functionality.<br>2. The boxes also connect to a serial bus, allowing a higher-level control system to access up to 16 boxes connected to one bus segment. This operating mode addresses both individual channels and groups of boxes. | <b>Sunblind box</b><br><br>black   | <b>770-629/130-000</b>  | 1           | <table border="1"> <tr><td>Power supply</td><td>230 VAC / 50 - 60 Hz</td></tr> <tr><td>Voltage range</td><td>± 10 %</td></tr> <tr><td>Fuse protection</td><td>Internal, miniature metric fuse, accessible from outside, 5 x 20 mm, max. 6.3 A</td></tr> <tr><td>Configuration</td><td>via DIP switch/header</td></tr> <tr><td>Inputs</td><td>4 switch inputs for on-site switches</td></tr> <tr><td>Signal voltage</td><td>12 V</td></tr> <tr><td>Outputs</td><td>4 power outputs (up, down, interlocked)</td></tr> <tr><td>Switching voltage</td><td>230 VAC</td></tr> <tr><td>Switching current</td><td>1 x 6 A at 230 VAC</td></tr> <tr><td>Control</td><td>Bus control or central control via 24 VDC signal</td></tr> <tr><td>Permissible ambient operating temperature</td><td>- 5 °C ... + 55 °C</td></tr> <tr><td>Type of mounting</td><td>Screw fixing</td></tr> <tr><td>Installation site</td><td>Interior area</td></tr> <tr><td>Degree of protection</td><td>IP20</td></tr> <tr><td>Mounting position</td><td>any</td></tr> <tr><td>Conformity mark</td><td>CE</td></tr> </table> | Power supply | 230 VAC / 50 - 60 Hz | Voltage range | ± 10 % | Fuse protection | Internal, miniature metric fuse, accessible from outside, 5 x 20 mm, max. 6.3 A | Configuration | via DIP switch/header | Inputs | 4 switch inputs for on-site switches | Signal voltage | 12 V | Outputs | 4 power outputs (up, down, interlocked) | Switching voltage | 230 VAC | Switching current | 1 x 6 A at 230 VAC | Control | Bus control or central control via 24 VDC signal | Permissible ambient operating temperature | - 5 °C ... + 55 °C | Type of mounting | Screw fixing | Installation site | Interior area | Degree of protection | IP20 | Mounting position | any | Conformity mark | CE |
| Power supply   | 230 VAC / 50 - 60 Hz   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Voltage range  | ± 10 %   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Fuse protection  | Internal, miniature metric fuse, accessible from outside, 5 x 20 mm, max. 6.3 A  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Configuration  | via DIP switch/header  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Inputs   | 4 switch inputs for on-site switches   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Signal voltage   | 12 V   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Outputs  | 4 power outputs (up, down, interlocked)  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Switching voltage  | 230 VAC  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Switching current  | 1 x 6 A at 230 VAC   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Control  | Bus control or central control via 24 VDC signal   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Permissible ambient operating temperature  | - 5 °C ... + 55 °C   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Type of mounting   | Screw fixing   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Installation site  | Interior area  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Degree of protection   | IP20   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Mounting position  | any  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| Conformity mark  | CE   |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| <b>Item-Specific Accessories</b>   |  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| I/O module, with RS-485 interface, configurable<br> <b>750-653/003-000</b>  | <b>Miniature metric fuse, 5 x 20 mm, 6.3 A (time-delay)</b><br> | <b>282-451</b>          | 200 (20x10) |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| h-distribution connector, bi-directional, plug - socket / socket<br> <b>770-633</b>   | <b>Connector set, for sunblind box ①</b><br>                    | <b>770-5001/100-000</b> | 50 / 1      |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |
| <b>Info</b>  | <b>Dimensions</b>  |                         |             |  |              |                      |               |        |                 |   |               |                       |        |                                      |                |      |         |   |                   |         |                   |                    |         |  |   |                    |                  |              |                   |               |                      |      |                   |     |                 |    |

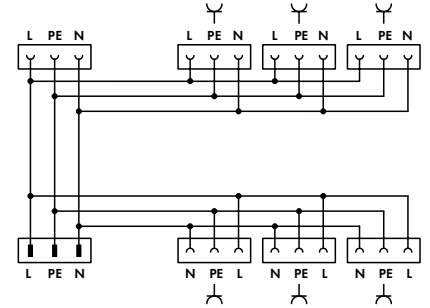
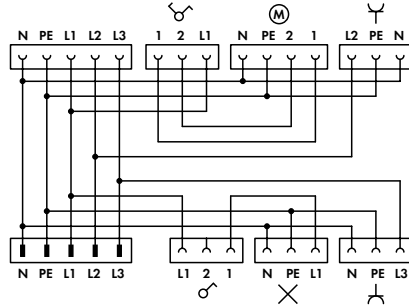
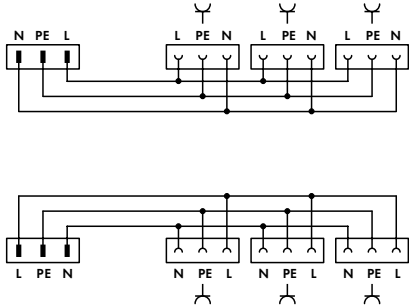
For more information, please visit [www.wago.com](http://www.wago.com).

Fire load data available upon request.

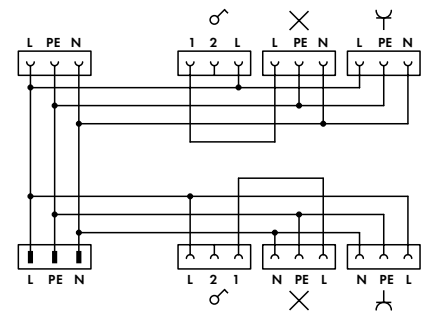
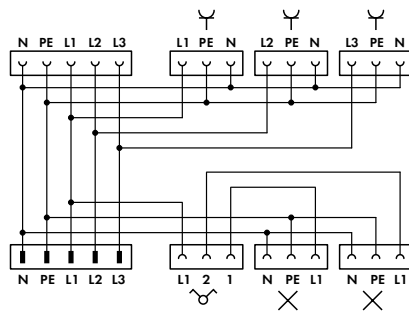
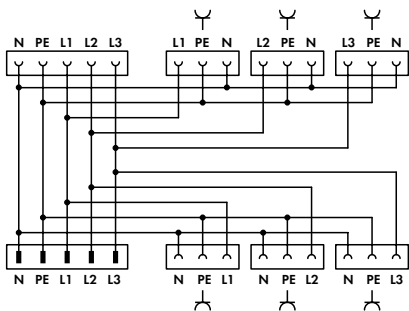




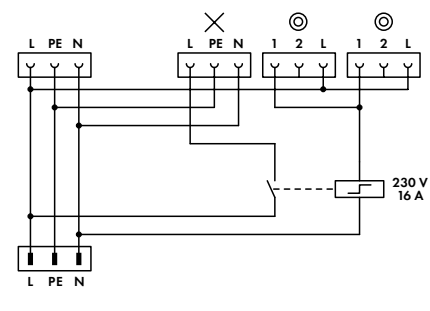
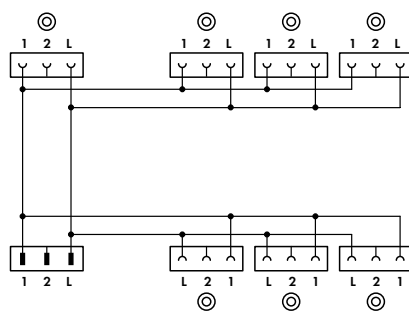
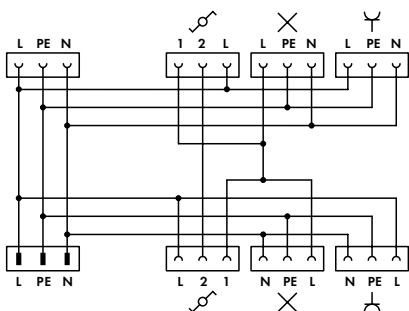
|  |  |   |
|--|--|---|
| <p><b>Internal wiring 4 mm<sup>2</sup></b><br/>                 400 V / 6 kV / 3 5-pole<br/>                 250 V / 4 kV / 3 3-pole<br/>                 I<sub>N</sub> 25 A</p> | <p><b>Internal wiring 4 mm<sup>2</sup></b><br/>                 400 V / 6 kV / 3 5-pole<br/>                 250 V / 4 kV / 3 3-pole<br/>                 I<sub>N</sub> 25 A</p> | <p><b>Internal wiring 2.5 mm<sup>2</sup> / 4 mm<sup>2</sup></b><br/>                 400 V / 6 kV / 3 5-pole<br/>                 250 V / 4 kV / 3 3-pole<br/>                 max. 25 A, depends on the built-in appliance</p> |
|--|--|---|



| Color                                      | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit |
|--|-----------------|------------|---|-----------------|------------|---|-----------------|------------|
| <b>Distribution box, separate circuits</b> |                 |            | <b>Distribution box, sunblind control, single-pole switch, distribution</b> |                 |            | <b>Distribution box, 1-phase distribution</b> |                 |            |
| black                                      | 770-631/106-000 | 1          | black   | 770-631/107-000 | 1          | black   | 770-631/104-000 | 1          |
| white                                      | 770-681/106-000 | 1          | white   | 770-681/107-000 | 1          | white   | 770-681/104-000 | 1          |



| Color   | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit | Color  | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|--|-----------------|------------|
| <b>Distribution box, 3-phase/1-phase distribution</b> |                 |            | <b>Distribution box, series circuits and distribution</b> |                 |            | <b>Distribution box, single-pole switch and distribution</b> |                 |            |
| black   | 770-631/100-000 | 1          | black   | 770-631/109-000 | 1          | black  | 770-631/110-000 | 1          |
| white   | 770-681/100-000 | 1          | white   | 770-681/109-000 | 1          | white  | 770-681/110-000 | 1          |



| Color   | Item No.        | Pack. Unit | Color  | Item No.        | Pack. Unit | Color   | Item No.        | Pack. Unit |
|---|-----------------|------------|--|-----------------|------------|---|-----------------|------------|
| <b>Distribution box, two-way circuit and distribution</b> |                 |            | <b>Distribution box, push-button version</b> |                 |            | <b>Distribution box, surge switch circuit</b> |                 |            |
| black   | 770-631/111-000 | 1          | black  | 770-631/112-000 | 1          | black   | 770-632/138-000 | 1          |
| white   | 770-681/111-000 | 1          | white  | 770-681/112-000 | 1          | white   | 770-682/138-000 | 1          |

For other circuits, please contact factory.

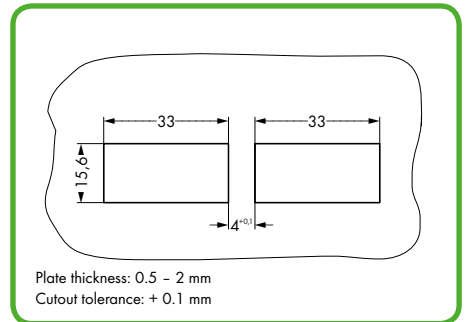
Snap-on type strain relief housings for:

- two 3-pole sockets
- two 3-pole plugs
- 3-pole socket and 3-pole plug



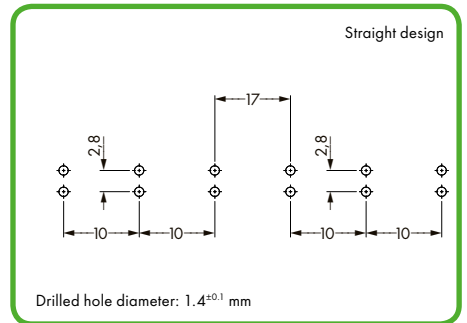
Application example: 6-pole connector

| Description            | Color   | Item No.        | Pack. Unit |
|------------------------|---|-----------------|------------|
| Strain relief housings | <b>Strain relief housing,</b><br>for 2 cables, 8.5 - 13.5 mm diameter ❶ |                 |            |
|                        | black   | 770-506/029-000 | 50         |
|                        | white   | 770-516/029-000 | 50         |



Using a 6-pole strain relief housing with snap-in connectors requires the cutout dimensions shown above.

| Item-Specific Accessories |   |
|---------------------------|---|
|                           | <b>Marking strip,</b> self-adhesive, on DIN A4 carrier card,<br>182 mm long,<br>Strip height: 6 mm <b>210-333100</b><br>Marking area: 62 x 6.5 mm |



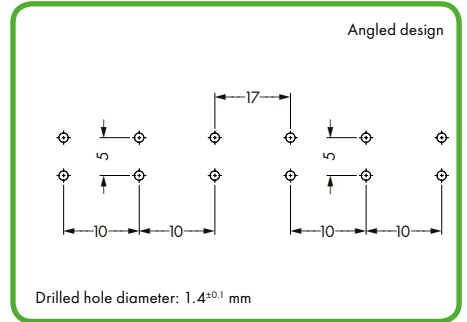
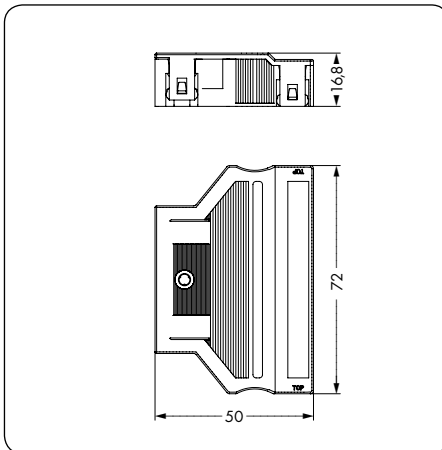
Using a straight, 6-pole PCB connector requires the hole patterns shown above.

| Info | Dimensions |
|------|------------|
|------|------------|

❶ For H05VV and NYM cables  
❷ For H05VV cables

For other cables, please contact factory.

Fire load data available upon request.



Using an angled, 6-pole PCB connector requires the hole patterns shown above.

# Strain Relief Housings, 7-Pole

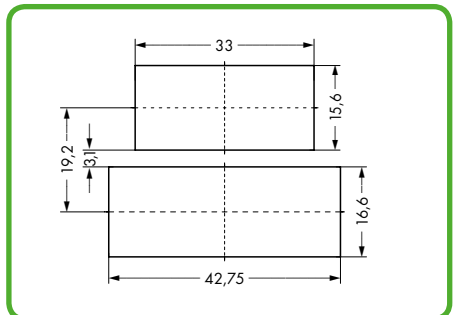
Snap-on type strain relief housings for:  
- 3-pole socket or plug  
and  
- 4-pole socket or plug



Application example: 7-pole connector

| Description            | Color  | Item No.        | Pack. Unit |
|------------------------|--|-----------------|------------|
| Strain relief housings | Strain relief housing, for 1 cable, 8 - 15 mm diameter ② |                 |            |
|                        | black  | 770-507/047-000 | 200        |
|                        | white  | 770-517/047-000 | 200        |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
|                        |  |                 |            |
| Dimensions             |  |                 |            |

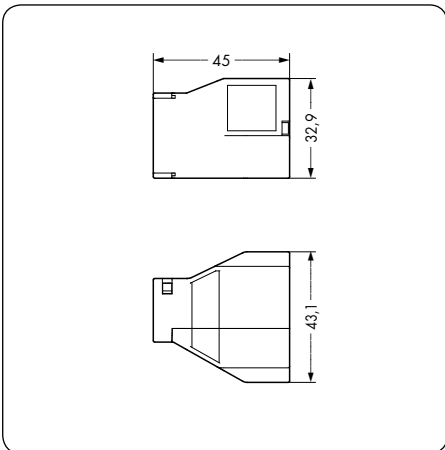
3



Using a 7-pole strain relief housing with snap-in connectors requires the cutout dimensions shown above.



"Flying leads"  
(NOTICE: Only use locking levers on upper position)



"Flying leads"



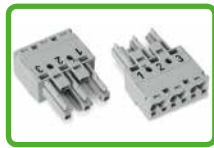
#### Important note:

B-Coded components of the *WINSTA*<sup>®</sup> MIDI special series are designed for specialty applications (e.g., measurement, control and regulation technology) and certified according to DIN EN 61984. In addition to the gray models for 110–400V voltages, there is now also a variant in light green for low voltages up to 48V, as well as a pink one for bus applications.

Each of the three versions is available in 2-, 3- or 4- and 5-pole configurations. Pole marking can be printed at the factory to suit customer requirements. According to IEC 61535, B-Coded products are protected against mismatching with all other coding types found in the *WINSTA*<sup>®</sup> system. Within B Coding, all special variants can mate with each other. The variable coding system provides clear circuit identification. Special variants can be clearly differentiated according to color and pole marking. They can be coded on-site or delivered with factory-installed custom coding.

# WINSTA® MIDI special 770/771 Series, up to 4 mm<sup>2</sup> / 25 A

- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with other systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.



|                              |     |
|------------------------------|-----|
| <b>770 Series</b>            |     |
| Pluggable Connectors, 2-Pole | 201 |
| Pluggable Connectors, 3-Pole | 206 |
| Pluggable Connectors, 4-Pole | 214 |
| Pluggable Connectors, 5-Pole | 222 |



|                                   |     |
|-----------------------------------|-----|
| <b>770 Series</b>                 |     |
| Snap-In Device Connectors, 2-Pole | 202 |
| Snap-In Device Connectors, 3-Pole | 207 |
| Snap-In Device Connectors, 4-Pole | 215 |
| Snap-In Device Connectors, 5-Pole | 223 |



|                        |           |
|------------------------|-----------|
| <b>770 Series</b>      |           |
| PCB Connectors, 3-Pole | 208 - 209 |
| PCB Connectors, 4-Pole | 216 - 217 |
| PCB Connectors, 5-Pole | 224 - 225 |



|                                 |           |
|---------------------------------|-----------|
| <b>770 Series</b>               |           |
| Distribution Connectors, 2-Pole | 203       |
| Distribution Connectors, 3-Pole | 212 - 213 |
| Distribution Connectors, 4-Pole | 218 - 219 |
| Distribution Connectors, 5-Pole | 226       |

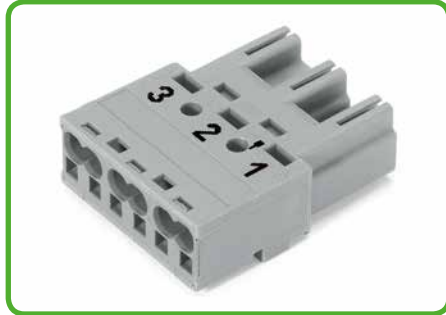


|                          |           |
|--------------------------|-----------|
| <b>771 Series</b>        |           |
| Cable Assemblies, 2-Pole | 204 - 205 |
| Cable Assemblies, 3-Pole | 210 - 217 |
| Cable Assemblies, 4-Pole | 220 - 221 |
| Cable Assemblies, 5-Pole | 228 - 229 |

# 3 Handling WINSTA® MINI special, 770 Series

200

## Pole marking



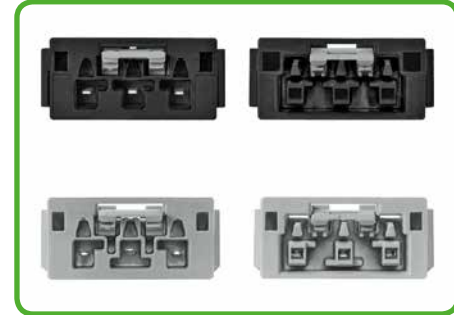
Gray, B-coded connector with "3 2 1" marking; e.g., control signal (A circuit).

## Circuit identification



Easy circuit identification via different marking and colors.

## Compatibility

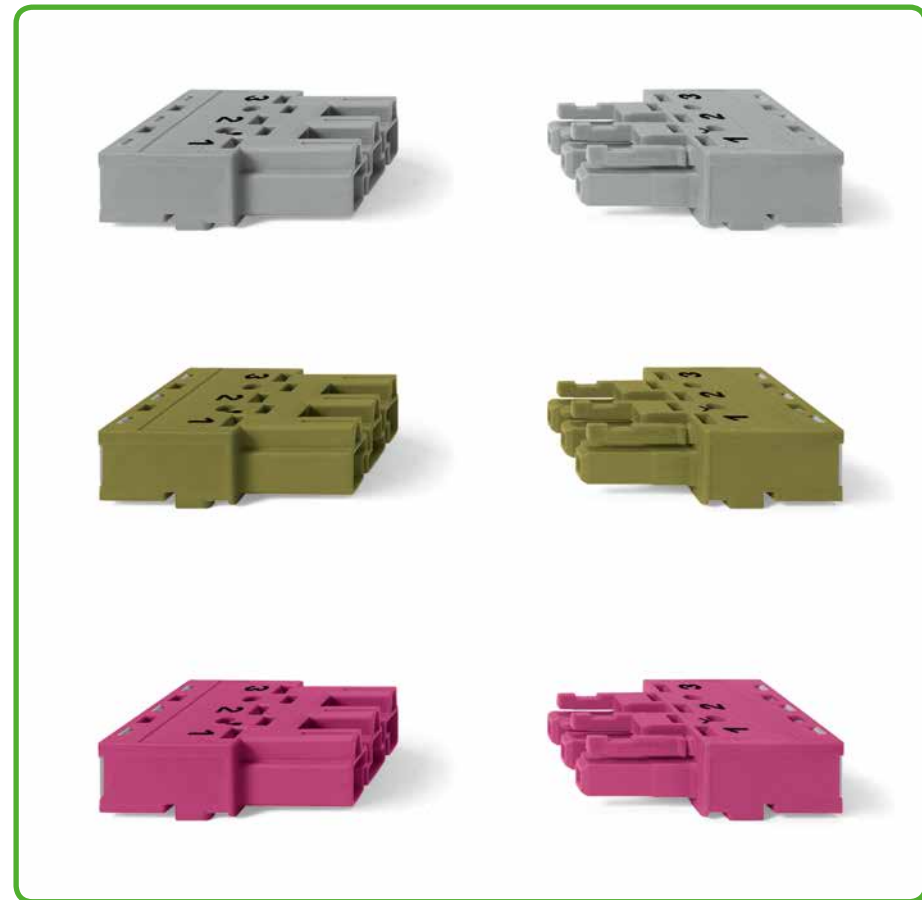


B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

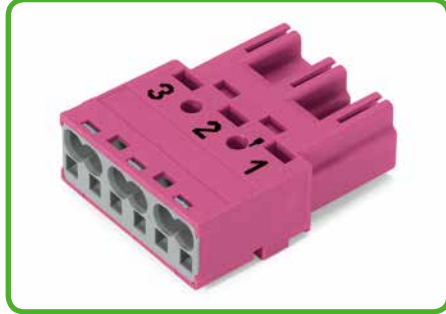
## Pole marking



Light green, B-coded connector with "3 2 1" marking; e.g., DC power supply (24V circuit).

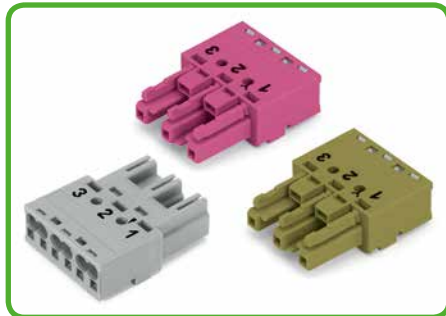


## Pole marking



Pink, B-coded connector with "3 2 1" marking; e.g., bus signal (B circuit).

## Plug compatibility



B-coded connectors with different colors can be plugged together.

### Important note:



Different colors and/or pole marking are used for circuit identification. Only connectors of the same color and same pole marking must be plugged together.

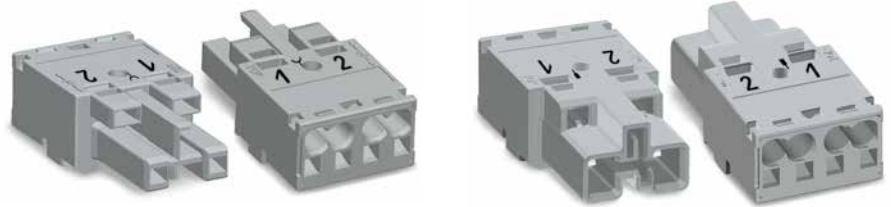
# WINSTA® MIDI special Sockets and Plugs, 2-Pole

CAGE CLAMP® S





3



201

|  |                        |  |                        |
|--|------------------------|--|------------------------|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> |
|--|------------------------|--|------------------------|



| Description  | Color                                | Item No.         | Pack. Unit | Color                              | Item No.         | Pack. Unit |
|--|--------------------------------------|------------------|------------|------------------------------------|------------------|------------|
| Pluggable connectors, 2-pole, with CAGE CLAMP®S connection | Socket without strain relief housing |                  |            | Plug without strain relief housing |                  |            |
|  | gray                                 | 770-242          | 100        | gray                               | 770-252          | 100        |
|  | gray                                 | 770-242/060-000* | 100        | gray                               | 770-252/060-000* | 100        |
|  | light green                          | 770-262          | 100        | light green                        | 770-272          | 100        |
|  | pink                                 | 770-282          | 100        | pink                               | 770-292          | 100        |
|  | pink                                 | 770-282/080-000* | 100        | pink                               | 770-292/080-000* | 100        |
|  | pink                                 | 770-282/082-000* | 100        | pink                               | 770-292/082-000* | 100        |
|  | * Pole marking, see page 241.        |                  |            | * Pole marking, see page 241.      |                  |            |

| Item-Specific Accessories  |  |
|--|--|
| <p>Strain relief housing, for 1 cable, 5 - 9 mm diameter</p> <p> black 770-502/042-000 50<br/>white 770-512/042-000 50</p>    | <p>Strain relief housing, for 1 cable, 5 - 9 mm diameter</p> <p> black 770-502/042-000 50<br/>white 770-512/042-000 50</p>    |
| <p>Strain relief housing, for 1 cable, 7 - 10.5 mm diameter</p> <p> black 770-502/041-000 50<br/>white 770-512/041-000 50</p> | <p>Strain relief housing, for 1 cable, 7 - 10.5 mm diameter</p> <p> black 770-502/041-000 50<br/>white 770-512/041-000 50</p> |

| Accessories, 770 Series  |  |
|--|--|
| <p>Locking lever, for "flying leads," manually operated</p> <p> black 770-101 100 (4x25)<br/>white 770-121 100 (4x25)</p> | <p>Locking lever, for "flying leads," tool operated</p> <p> black 770-111 100 (4x25)<br/>white 770-131 100 (4x25)</p> |

| Info | Dimensions |
|------|------------|
|------|------------|

① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"

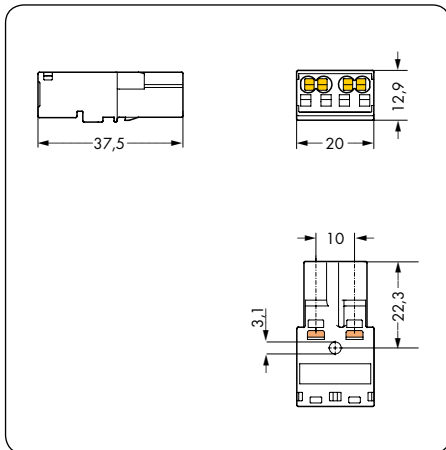
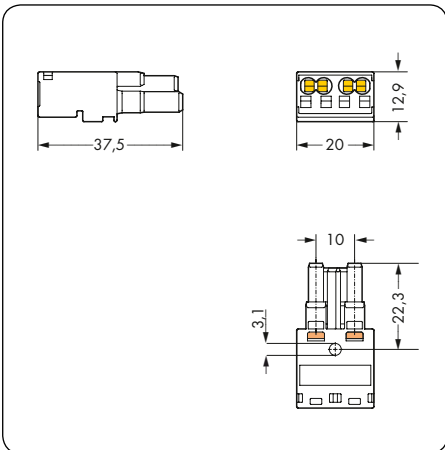
② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

Standard printing (without suffix number)

- gray Coding B (1 2)
- light green Coding B (1 2)
- pink Coding B (1 2)

For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.

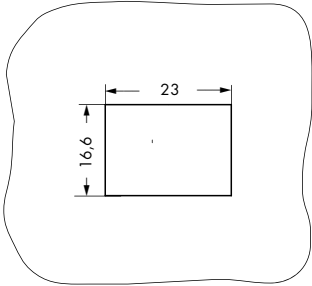




# 3 WINSTA® MIDI special Snap-In Frames, 2-Poles

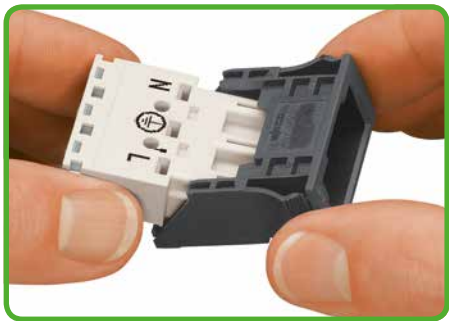
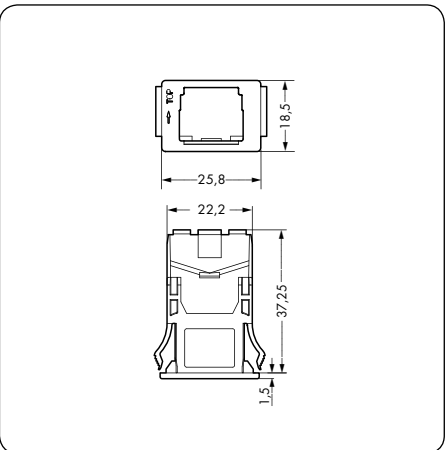
202

|   |   |  |
|---|---|--|
| <b>Cutout dimensions</b><br><br>Plate thickness: 1 – 3 mm<br>Cutout tolerance: + 0.1 mm | <b>Snap-in frames:</b><br>– for 2-pole sockets and plugs<br>(see page 201)<br><br>Plate thickness: 1 – 3 mm |  |
|---|---|--|



| Description                      | Color   | Item No. | Pack. Unit |
|----------------------------------|---|----------|------------|
| <b>Snap-in frames</b>            | <b>Snap-in frame, 2-pole</b>  |          |            |
|                                  | black   | 770-317  | 100        |
|                                  | white   | 770-337  | 100        |
| <b>Item-Specific Accessories</b> |   |          |            |
|                                  | <b>Locking lever, oversized,</b><br>tool operated<br>gray <b>770-140</b> 100 (4x25) |          |            |
| <b>Info</b>                      |   |          |            |
| <b>Dimensions</b>                |   |          |            |

- ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ② 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
  - ③ 6.0 mm Ø, 1 – 2.5 mm plate thickness
- 
- gray Coding B (1 2)
  - light green Coding B (1 2)
  - pink Coding B (1 2)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
 Fire load data available upon request.








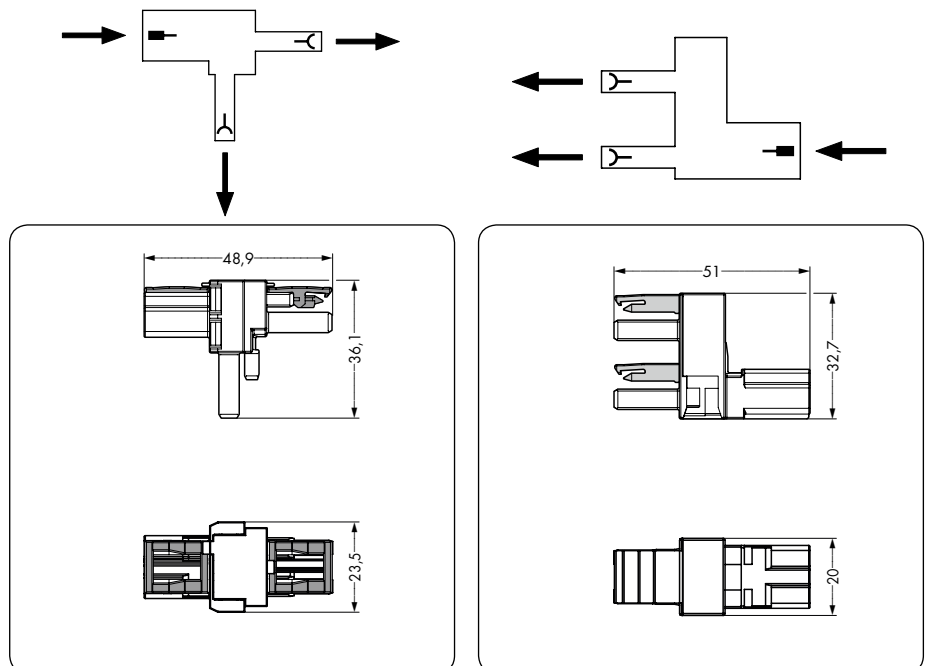
Insert the socket or plug into the frame (observe the "TOP" marking on the frame!). Snap the assembled unit into the cutout. (Example shows a 3-pole connector)


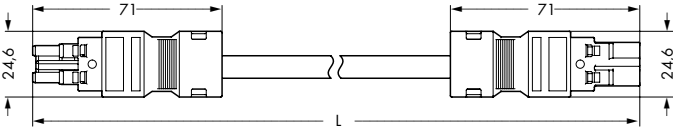

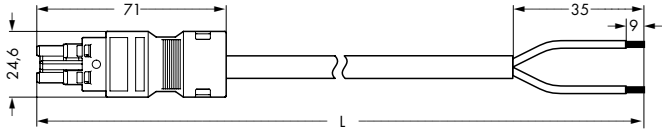

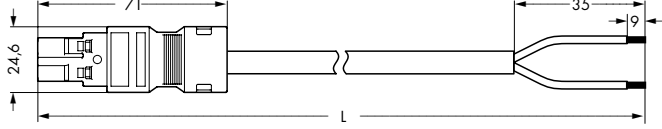
# T- and h-Distribution Connectors, 2-Pole

|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> |
|--|---|---|



| Description   | Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|---|--|----------|------------|--|----------|------------|
| <b>T-distribution connectors, h-distribution connectors</b> | <b>T-distribution connector, 1 x plug / 2 x socket</b>   |          |            | <b>h-distribution connector, unidirectional, plug / socket - socket</b>  |          |            |
|   | gray   | 770-1601 | 50         | gray   | 770-1651 | 50         |
|   | light green  | 770-1602 | 50         | light green  | 770-1652 | 50         |
|   | pink   | 770-1603 | 50         | pink   | 770-1653 | 50         |
|   | for "flying leads," with 3rd locking lever   |          |            | for "flying leads," with 3rd locking lever   |          |            |
|   | gray   | 770-1701 | 50         | gray   | 770-1751 | 50         |
|   | light green  | 770-1702 | 50         | light green  | 770-1752 | 50         |
|   | pink   | 770-1703 | 50         | pink   | 770-1753 | 50         |
|   | <b>For additional pole marking, see page 241.</b>  |          |            | <b>For additional pole marking, see page 241.</b>  |          |            |
|   | <b>Item-Specific Accessories</b>   |          |            |  |          |            |
|   | <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> |          |            | <b>Mounting plate, for distribution connectors</b><br> <ul style="list-style-type: none"> <li>black 770-1626 25</li> <li>white 770-1627 25</li> </ul> |          |            |
|   | <b>Lockout cap, for plug, separable, 5-pole</b><br> <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>                              |          |            | <b>Fixing pin, for mounting plates</b><br> <ul style="list-style-type: none"> <li>② black 890-601 250</li> <li>③ black 770-601 250</li> </ul>         |          |            |
|   |  |          |            | <b>Lockout cap, for socket, separable, 12-pole</b><br> <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul> |          |            |
| <b>Dimensions</b>   |  |          |            |  |          |            |



|   |  |                                  |                             |                  |
|---|--|----------------------------------|-----------------------------|------------------|
|   |  | PVC                              | Control line: 2 x 1.5, gray |                  |
|   |  | 250 V/4 kV/3 I <sub>N</sub> 16 A |                             |                  |
|   |  | Conductor ends, bonded: 9 mm     |                             |                  |
|   |  | ① Approvals                      |                             |                  |
| <b>Interconnecting cable, socket – plug</b>   |  | Color                            | Length                      | Item No.         |
|    |  | black                            |                             |                  |
|     |  | Coding B                         |                             |                  |
|   |  | PVC                              |                             |                  |
|   |  | ●                                | 1 m                         | 771-8992/006-103 |
|   |  | ●                                | 1 m                         | 771-8992/006-105 |
|   |  | ●                                | 1 m                         | 771-8992/006-107 |
| <b>Connecting cable, socket – free end</b>  |  | Color                            | Length                      | Item No.         |
|   |  | black                            |                             |                  |
|   |  | Coding B                         |                             |                  |
|   |  | PVC                              |                             |                  |
|   |  | ●                                | 1 m                         | 771-8992/106-103 |
|   |  | ●                                | 1 m                         | 771-8992/106-105 |
|   |  | ●                                | 1 m                         | 771-8992/106-107 |
| <b>Connecting cable, plug - free end</b>  |  | Color                            | Length                      | Item No.         |
|  |  | black                            |                             |                  |
|   |  | Coding B                         |                             |                  |
|   |  | PVC                              |                             |                  |
|   |  | ●                                | 1 m                         | 771-8992/206-103 |
|   |  | ●                                | 1 m                         | 771-8992/206-105 |
|   |  | ●                                | 1 m                         | 771-8992/206-107 |

**Info**

① For “International Certification Organizations” and “Approvals – User Guide,” see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.





For other cables, please contact factory.

- gray Coding B (1 2)
- light green Coding B (1 2)
- pink Coding B (1 2)


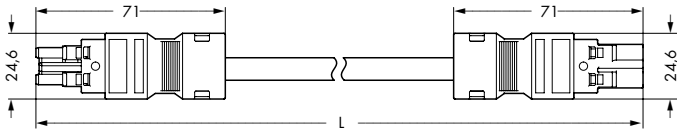



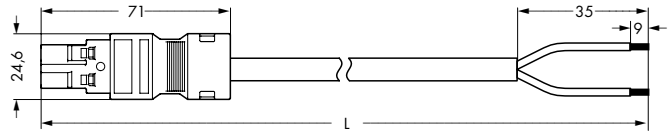
For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Accessories**

|   |  |         |            |
|---|--|---------|------------|
|  | Locking lever, for “flying leads,” manually operated |         |            |
|   | black  | 770-101 | 100 (4x25) |
|   | white  | 770-121 | 100 (4x25) |
|  | Locking lever, for “flying leads,” tool operated     |         |            |
|   | black  | 770-111 | 100 (4x25) |
|   | white  | 770-131 | 100 (4x25) |
|  | Lockout cap, for socket, separable, 12-pole          |         |            |
|   | black  | 770-201 | 100        |
|   | white  | 770-221 | 100        |
|  | Lockout cap, for plug, separable, 5-pole             |         |            |
|   | yellow   | 770-360 | 100        |

# Cable Assemblies 2 x 2.5 mm<sup>2</sup>

|   |  |                                  |                             |                  |       |
|---|--|----------------------------------|-----------------------------|------------------|-------|
|   |  | PVC                              | Control line: 2 x 2.5, gray |                  |       |
|   |  | 250 V/4 kV/3 I <sub>N</sub> 20 A |                             |                  |       |
|   |  | Conductor ends, bonded: 9 mm     |                             |                  |       |
|   |  | ① Approvals                      |                             |                  |       |
| <b>Interconnecting cable, socket – plug</b>   |  | Color                            | Length                      | Item No.         | black |
|    |  | Coding B                         |                             |                  |       |
|    |  | PVC                              |                             |                  |       |
|   |  |                                  | 1 m                         | 771-8992/007-103 |       |
|   |  |                                  | 1 m                         | 771-8992/007-105 |       |
|   |  |                                  | 1 m                         | 771-8992/007-107 |       |
| <b>Connecting cable, socket – free end</b>  |  | Color                            | Length                      | Item No.         | black |
|   |  | Coding B                         |                             |                  |       |
|  |  | PVC                              |                             |                  |       |
|   |  |                                  | 1 m                         | 771-8992/107-103 |       |
|   |  |                                  | 1 m                         | 771-8992/107-105 |       |
|   |  |                                  | 1 m                         | 771-8992/107-107 |       |
| <b>Connecting cable, plug - free end</b>  |  | Color                            | Length                      | Item No.         | black |
|  |  | Coding B                         |                             |                  |       |
|  |  | PVC                              |                             |                  |       |
|   |  |                                  | 1 m                         | 771-8992/207-103 |       |
|   |  |                                  | 1 m                         | 771-8992/207-105 |       |
|   |  |                                  | 1 m                         | 771-8992/207-107 |       |

## Item numbers overview for other cable lengths

|             |       |   |   |   |   |   |   |   |   |    |   |    |    |    |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
| gray        | 771   | - | 8 | 9 | 9 | 2 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 771   | - | 8 | 9 | 9 | 2 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 771   | - | 8 | 9 | 9 | 2 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |



The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 2-pole, socket – plug, PVC control line, 2 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-8992/016-107

The 10th position defines the cable cross-section. For example, a 2 x 1.5 mm<sup>2</sup> cable with light green connectors has the following item number: 771-8992/006-105





The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 771-8992/006-503



# 3 WINSTA® MIDI special Sockets and Plugs, 3-Pole

|  |                        |  |                        |
|--|------------------------|--|------------------------|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ①<br/>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in</p> <p>② Approvals</p> | <p>2 x AWG 20 – 12</p> |
|--|------------------------|--|------------------------|



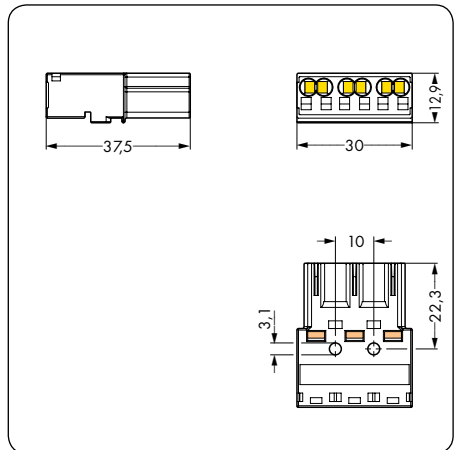
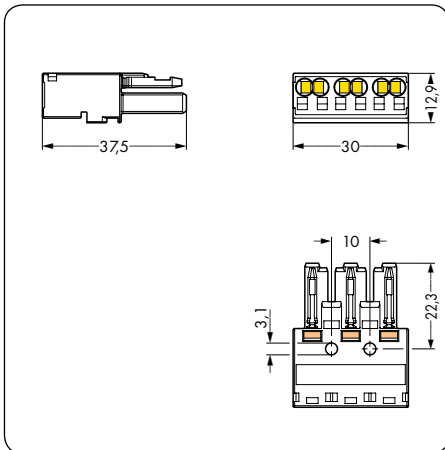
| Description   | Color                         | Item No.         | Pack. Unit | Color                         | Item No.         | Pack. Unit |
|---|-------------------------------|------------------|------------|-------------------------------|------------------|------------|
| Pluggable connectors, 3-pole, with CAGE CLAMP® S connection | Socket                        |                  |            | Plug                          |                  |            |
|   | ● gray                        | 770-243          | 100        | ● gray                        | 770-253          | 100        |
|   | ● gray                        | 770-243/060-000* | 100        | ● gray                        | 770-253/060-000* | 100        |
|   | ● gray                        | 770-243/062-000* | 100        | ● gray                        | 770-253/062-000* | 100        |
|   | ● light green                 | 770-263          | 100        | ● light green                 | 770-273          | 100        |
|   | ● light green                 | 770-263/071-000* | 100        | ● light green                 | 770-273/071-000* | 100        |
|   | ● light green                 | 770-263/073-000* | 100        | ● light green                 | 770-273/073-000* | 100        |
|   | ● pink                        | 770-283          | 100        | ● pink                        | 770-293          | 100        |
|   | ● pink                        | 770-283/081-000* | 100        | ● pink                        | 770-293/081-000* | 100        |
|   | ● pink                        | 770-283/082-000* | 100        | ● pink                        | 770-293/082-000* | 100        |
|   | * Pole marking, see page 241. |                  |            | * Pole marking, see page 241. |                  |            |

| Item-Specific Accessories   |   |
|---|---|
| <p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 4.5 – 8 mm diameter</p> <p>black 770-503/023-000 50</p> <p>white 770-513/023-000 50</p> | <p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 4.5 – 8 mm diameter</p> <p>black 770-503/023-000 50</p> <p>white 770-513/023-000 50</p> |
| <p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 8.5 – 11.5 mm diameter</p> <p>black 770-503 50</p> <p>white 770-513 50</p>              | <p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 8.5 – 11.5 mm diameter</p> <p>black 770-503 50</p> <p>white 770-513 50</p>              |



| Accessories, 770 Series   |   |
|---|---|
| <p><b>Locking lever, for "flying leads,"</b></p> <p> manually operated</p> <p>black 770-101 100 (4x25)</p> <p>white 770-121 100 (4x25)</p> | <p><b>Locking lever, for "flying leads,"</b></p> <p> tool operated</p> <p>black 770-111 100 (4x25)</p> <p>white 770-131 100 (4x25)</p> |

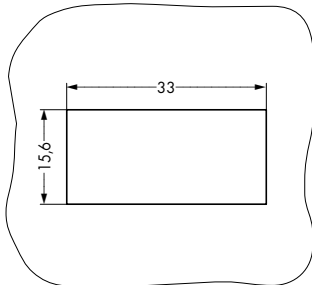
| Info | Dimensions |
|------|------------|
|------|------------|





- ① Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ③ For more strain relief housings, see pages 132 and 133.
- Standard printing (without suffix number)
- gray Coding B (1 2 3)
  - light green Coding B (1 2 3)
  - pink Coding B (1 2 3)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.

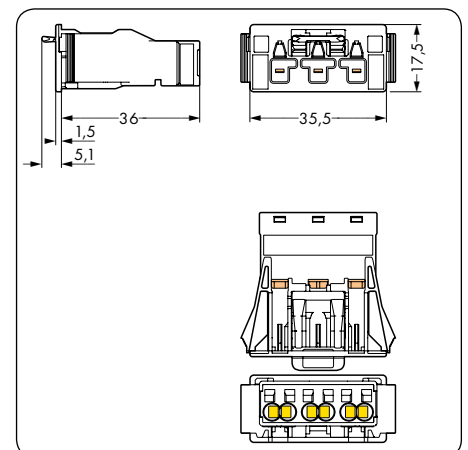
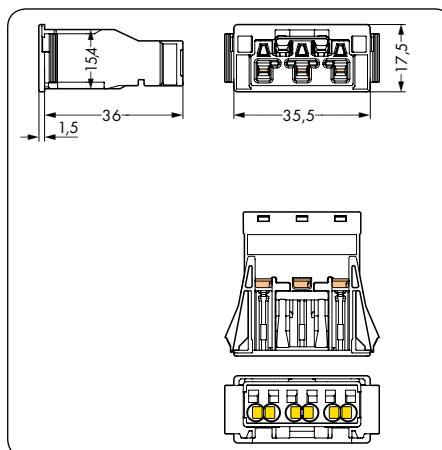


# Snap-In Sockets and Plugs, 3-Pole

|  |   |                 |   |                 |
|--|---|-----------------|---|-----------------|
| Cutout dimensions<br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 25 A  | 2 x AWG 20 – 12 | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>250 V/4 kV/3<br>I <sub>N</sub> 25 A  | 2 x AWG 20 – 12 |
|  |  9 mm / 0.35 in<br>② Approvals |                 |  9 mm / 0.35 in<br>② Approvals |                 |



| Description   | Color   | Item No.         | Pack. Unit | Color   | Item No.         | Pack. Unit |
|---|---|------------------|------------|---|------------------|------------|
| Pluggable connectors, snap-in device connection, 3-pole, with CAGE CLAMP®S connection | Socket  |                  |            | Plug  |                  |            |
|   | gray  | 770-743          | 100        | gray  | 770-753          | 100        |
|   | gray  | 770-743/060-000* | 100        | gray  | 770-753/060-000* | 100        |
|   | gray  | 770-743/062-000* | 100        | gray  | 770-753/062-000* | 100        |
|   | light green   | 770-763          | 100        | light green   | 770-773          | 100        |
|   | light green   | 770-763/071-000* | 100        | light green   | 770-773/071-000* | 100        |
|   | light green   | 770-763/073-000* | 100        | light green   | 770-773/073-000* | 100        |
|   | pink  | 770-783          | 100        | pink  | 770-793          | 100        |
|   | pink  | 770-783/081-000* | 100        | pink  | 770-793/081-000* | 100        |
|   | pink  | 770-783/082-000* | 100        | pink  | 770-793/082-000* | 100        |
|   | * Pole marking, see page 241.   |                  |            | * Pole marking, see page 241.   |                  |            |
| <b>Item-Specific Accessories</b>  |   |                  |            |   |                  |            |
|   | Lockout cap, for socket, separable, 12-pole<br> black 770-201 100<br>white 770-221 100 |                  |            | Lockout cap, for plug, separable, 5-pole<br> yellow 770-360 100            |                  |            |
| <b>Accessories, 770 Series</b>  |   |                  |            |   |                  |            |
|   | Lockout cap, for cutout, 3-pole<br> black 770-643 100<br>white 770-693 100             |                  |            | Lockout cap, for cutout, 3-pole<br> black 770-643 100<br>white 770-693 100 |                  |            |
| <b>Dimensions</b>   |   |                  |            |   |                  |            |



# 3 WINSTA® MIDI special PCB Connectors, 3-Pole

208

|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A ①</p> <p>② Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A ①</p> <p>② Approvals</p> |
|--|---|---|



| Description                               | Color                                      | Item No. | Pack. Unit | Color                                      | Item No. | Pack. Unit |
|---|--|----------|------------|--|----------|------------|
| PCB connectors,<br>2 solder pins per pole | Socket, straight                           |          |            | Plug, straight                             |          |            |
|   | gray                                       | 770-843  | 100        | gray                                       | 770-853  | 100        |
|   | light green                                | 770-863  | 100        | light green                                | 770-873  | 100        |
|   | pink                                       | 770-883  | 100        | pink                                       | 770-893  | 100        |
|   | For additional pole marking, see page 241. |          |            | For additional pole marking, see page 241. |          |            |

| Item-Specific Accessories |   |  |  |  |                    |  |
|---------------------------|---|--|--|--|--------------------|--|
|                           | Lockout cap, for socket, separable, 12-pole |  |  | Lockout cap, for plug, separable, 5-pole |                    |  |
|                           |   | black 770-201 100<br>white 770-221 100 |  |  | yellow 770-360 100 |  |
|                           |   |  |  | Coding pin, for plug (A and B coding)    |                    |  |
|                           |   |  |  |  | gray 770-401 100   |  |

| Accessories, 770 Series |   |  |  |   |  |  |
|-------------------------|---|--|--|---|--|--|
|                         | Locking lever, for "flying leads,"<br>manually operated |  |  | Locking lever, for "flying leads,"<br>tool operated |  |  |
|                         |   | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |  |   | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |  |

| Info | Dimensions |
|------|------------|
|------|------------|

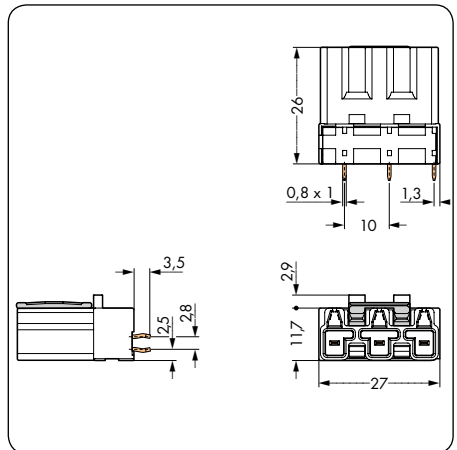
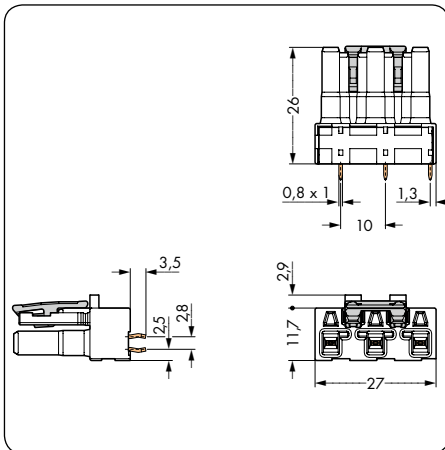
① For current load, see table on page 209.

② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

- gray Coding B (1 2 3)
- light green Coding B (1 2 3)
- pink Coding B (1 2 3)

For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.





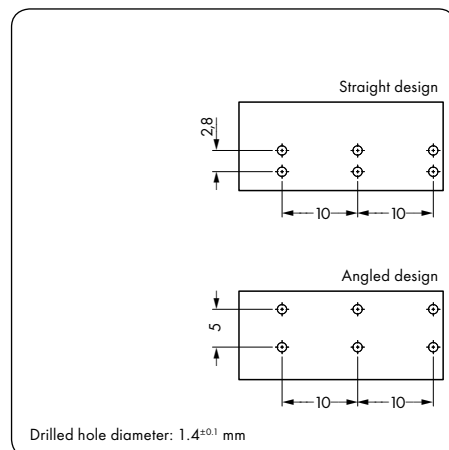
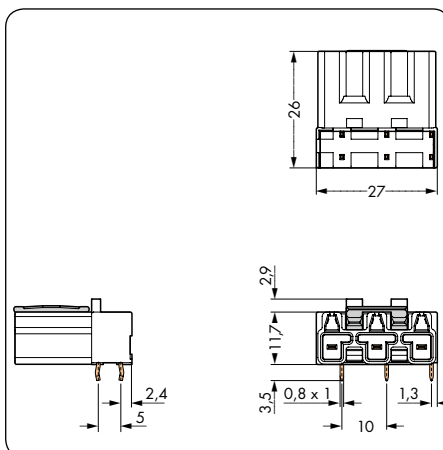
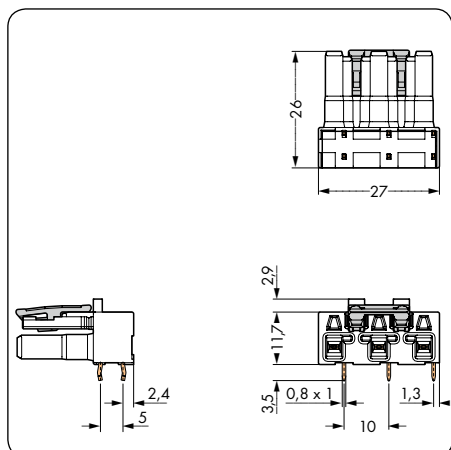
|                                       |                                       |
|---------------------------------------|---------------------------------------|
| 250 V/4 kV/3<br>I <sub>N</sub> 25 A ① | 250 V/4 kV/3<br>I <sub>N</sub> 25 A ① |
| ② Approvals                           | ② Approvals                           |



① Nominal current depends on PCB track dimensions

| Nominal current | Thickness of PCB track | Width of PCB track | Conductor size        |
|-----------------|------------------------|--------------------|-----------------------|
| 16 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 20 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 25 A            | 105 µm both sides      | 7 mm / 0.27 in     | △ 4 mm <sup>2</sup>   |

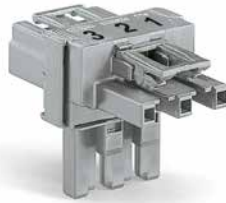
| Color   | Item No.   | Pack. Unit | Color   | Item No.   | Pack. Unit |
|---|--|------------|---|--|------------|
| <b>Socket, angled</b>                                       |  |            | <b>Plug, angled</b>                                     |  |            |
| gray  | 770-843/011-000                                      | 100        | gray  | 770-853/011-000                                      | 100        |
| light green   | 770-863/011-000                                      | 100        | light green   | 770-873/011-000                                      | 100        |
| pink  | 770-883/011-000                                      | 100        | pink  | 770-893/011-000                                      | 100        |
| For additional pole marking, see page 241.                  |  |            | For additional pole marking, see page 241.              |  |            |
| <b>Item-Specific Accessories</b>                            |  |            |   |  |            |
| <b>Lockout cap, for socket, separable, 12-pole</b>          |  |            | <b>Lockout cap, for plug, separable, 5-pole</b>         |  |            |
|   | black 770-201 100<br>white 770-221 100               |            |   | yellow 770-360 100                                   |            |
|   |  |            | <b>Coding pin, for plug (A and B coding)</b>            |  |            |
|   |  |            | gray 770-401 100  |  |            |
| <b>Accessories, 770 Series</b>                              |  |            |   |  |            |
| <b>Locking lever, for "flying leads," manually operated</b> |  |            | <b>Locking lever, for "flying leads," tool operated</b> |  |            |
|   | black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |            |   | black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |            |
| <b>Dimensions</b>   |  |            | <b>Hole patterns</b>                                    |  |            |



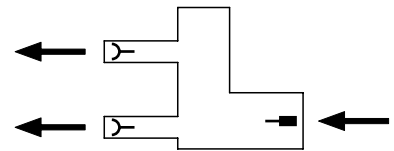
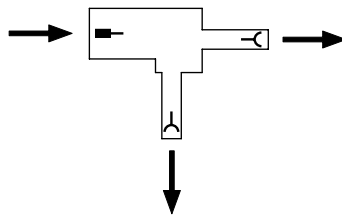
# 3 WINSTA® MIDI special T- and h-Distribution Connectors, 3-Pole

210

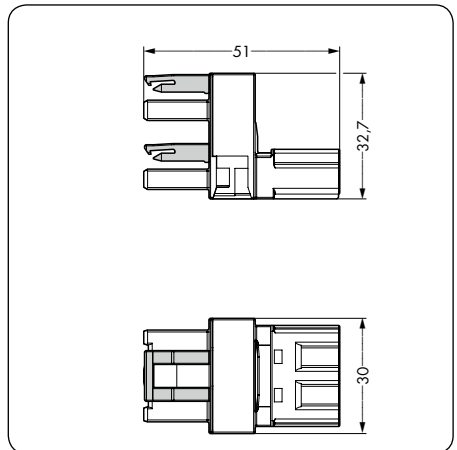
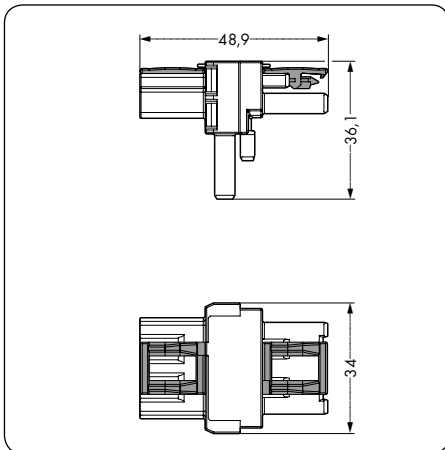
|  |   |   |
|--|---|---|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>① Approvals</p> |
|--|---|---|



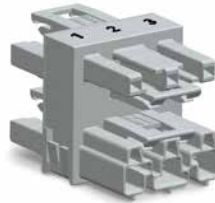
| Description   | Color   | Item No.                               | Pack. Unit | Color   | Item No.                                   | Pack. Unit |
|---|---|--|------------|---|--|------------|
| T-distribution connectors,<br>h-distribution connectors | T-distribution connector, 1 x plug / 2 x socket |  |            | h-distribution connector, unidirectional,<br>plug / socket - socket |  |            |
|   | gray  | 770-967                                | 50         | gray  | 770-1661                                   | 50         |
|   | light green                                     | 770-1612                               | 50         | light green   | 770-1662                                   | 50         |
|   | pink  | 770-1613                               | 50         | pink  | 770-1663                                   | 50         |
|   | for "flying leads," with 3rd locking lever      |  |            | for "flying leads," with 3rd locking lever                          |  |            |
|   | gray  | 770-970                                | 50         | gray  | 770-1761                                   | 50         |
|   | light green                                     | 770-1712                               | 50         | light green   | 770-1762                                   | 50         |
|   | pink  | 770-1713                               | 50         | pink  | 770-1763                                   | 50         |
|   | For additional pole marking, see page 241.      |  |            | For additional pole marking, see page 241.                          |  |            |
| <b>Item-Specific Accessories</b>                        |   |  |            |   |  |            |
|   | Lockout cap, for socket, separable, 12-pole     |  |            | Mounting plate, for distribution connectors                         |  |            |
|   |   | black 770-201 100<br>white 770-221 100 |            |   | black 770-623 100<br>white 770-673 100     |            |
|   | Lockout cap, for plug, separable, 5-pole        |  |            | Fixing pin, for mounting plates                                     |  |            |
|   |   | yellow 770-360 100                     |            |   | ② black 890-601 250<br>③ black 770-601 250 |            |
|   |   |  |            | Lockout cap, for socket, separable, 12-pole                         |  |            |
|   |   |  |            |   | black 770-201 100<br>white 770-221 100     |            |
| <b>Info</b>   | <b>Dimensions</b>                               |  |            |   |  |            |







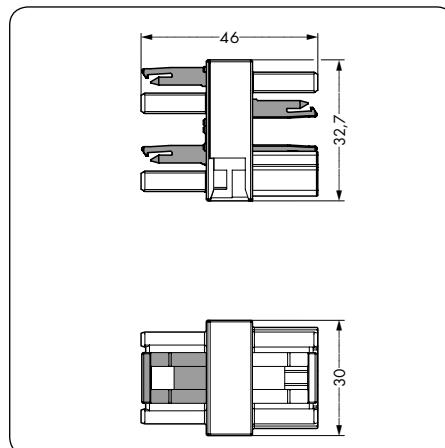
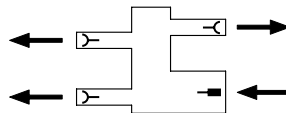
- ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ② 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
  - ③ 6.0 mm Ø, 1 – 2.5 mm plate thickness
- gray Coding B (1 2 3)  
 ● light green Coding B (1 2 3)  
 ● pink Coding B (1 2 3)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.






























|  |   |  |
|--|---|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>1 Approvals</p> |  |
|--|---|--|



| Description                            | Color   | Item No.        | Pack. Unit |
|--|---|-----------------|------------|
| <b>Distribution connectors, 3-pole</b> | <b>Distribution connector, 3-way, 1 x plug / 3 x socket</b>                         |                 |            |
|  | gray  | 770-1714        | 50         |
|  | light green   | 770-1715        | 50         |
|  | pink  | 770-1716        | 50         |
|  | For additional pole marking, see page 241.  |                 |            |
| <b>Item-Specific Accessories</b>       |   |                 |            |
|  | <b>Mounting plate, for distribution connectors</b>                                  |                 |            |
|  |  | black 770-623   | 25         |
|  |   | white 770-673   | 25         |
|  | <b>Fixing pin, for mounting plates</b>  |                 |            |
|  |  | 2 black 890-601 | 250        |
|  |   | 3 black 770-601 | 250        |
|  | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                 |            |
|  |  | black 770-201   | 100        |
|  |   | white 770-221   | 100        |
|  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                 |            |
|  |  | yellow 770-360  | 100        |
|  | <b>Dimensions</b>   |                 |            |






|   |   |   |     |                  |   |     |                  |   |     |                  |
|---|---|---|-----|------------------|---|-----|------------------|---|-----|------------------|
|   | <p>PVC Control line: 3 x 1.5, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |   |     |                  |   |     |                  |   |     |                  |
| Interconnecting cable, socket – plug  | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td></td><td>1 m</td><td>771-9993/006-103</td></tr> <tr><td></td><td>1 m</td><td>771-9993/006-105</td></tr> <tr><td></td><td>1 m</td><td>771-9993/006-107</td></tr> </table>       |    | 1 m | 771-9993/006-103 |    | 1 m | 771-9993/006-105 |    | 1 m | 771-9993/006-107 |
|    | 1 m   | 771-9993/006-103  |     |                  |   |     |                  |   |     |                  |
|    | 1 m   | 771-9993/006-105  |     |                  |   |     |                  |   |     |                  |
|    | 1 m   | 771-9993/006-107  |     |                  |   |     |                  |   |     |                  |
| Connecting cable, socket – free end   | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td></td><td>1 m</td><td>771-9993/106-103</td></tr> <tr><td></td><td>1 m</td><td>771-9993/106-105</td></tr> <tr><td></td><td>1 m</td><td>771-9993/106-107</td></tr> </table>    |    | 1 m | 771-9993/106-103 |   | 1 m | 771-9993/106-105 |  | 1 m | 771-9993/106-107 |
|    | 1 m   | 771-9993/106-103  |     |                  |   |     |                  |   |     |                  |
|   | 1 m   | 771-9993/106-105  |     |                  |   |     |                  |   |     |                  |
|  | 1 m   | 771-9993/106-107  |     |                  |   |     |                  |   |     |                  |
| Connecting cable, plug - free end   | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td></td><td>1 m</td><td>771-9993/206-103</td></tr> <tr><td></td><td>1 m</td><td>771-9993/206-105</td></tr> <tr><td></td><td>1 m</td><td>771-9993/206-107</td></tr> </table> |  | 1 m | 771-9993/206-103 |  | 1 m | 771-9993/206-105 |  | 1 m | 771-9993/206-107 |
|  | 1 m   | 771-9993/206-103  |     |                  |   |     |                  |   |     |                  |
|  | 1 m   | 771-9993/206-105  |     |                  |   |     |                  |   |     |                  |
|  | 1 m   | 771-9993/206-107  |     |                  |   |     |                  |   |     |                  |

**Info**

① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.





For other cables, please contact factory.

|  |             |          |         |
|--|-------------|----------|---------|
|  | gray        | Coding B | (1 2 3) |
|  | light green | Coding B | (1 2 3) |
|  | pink        | Coding B | (1 2 3) |

For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Accessories**

|   |  |         |            |
|---|--|---------|------------|
|  | Locking lever, for "flying leads," manually operated |         |            |
|   | black  | 770-101 | 100 (4x25) |
|   | white  | 770-121 | 100 (4x25) |
|  | Locking lever, for "flying leads," tool operated     |         |            |
|   | black  | 770-111 | 100 (4x25) |
|   | white  | 770-131 | 100 (4x25) |
|  | Lockout cap, for socket, separable, 12-pole          |         |            |
|   | black  | 770-201 | 100        |
|   | white  | 770-221 | 100        |
|  | Lockout cap, for plug, separable, 5-pole             |         |            |
|   | yellow   | 770-360 | 100        |

|   |  |
|---|--|
|   | <p>PVC Control line: 3 x 2.5, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 20 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>   |
| <b>Interconnecting cable, socket – plug</b> | <p>Color Length Item No.<br/>black black</p> <p>Coding B<br/>PVC</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: gray; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/007-103</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #808000; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/007-105</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #C00040; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/007-107</li> </ul> |
|   |  |
| <b>Connecting cable, socket – free end</b>  | <p>Color Length Item No.<br/>black black</p> <p>Coding B<br/>PVC</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: gray; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/107-103</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #808000; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/107-105</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #C00040; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/107-107</li> </ul> |
|   |  |
| <b>Connecting cable, plug - free end</b>    | <p>Color Length Item No.<br/>black black</p> <p>Coding B<br/>PVC</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: gray; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/207-103</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #808000; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/207-105</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: #C00040; border-radius: 50%; margin-right: 5px;"></span> 1 m 771-8993/207-107</li> </ul> |
|   |  |

**Item numbers overview for other cable lengths**

|             |       |   |   |   |   |   |   |   |   |    |   |    |    |    |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
| gray        | 771   | - | 9 | 9 | 9 | 3 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 771   | - | 9 | 9 | 9 | 3 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 771   | - | 9 | 9 | 9 | 3 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |



The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 3-pole, socket – plug, PVC control line, 3 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-9993/016-107

The 10th position defines the cable cross-section. For example, a 3 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 771-9993/005-105





The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 771-9993/006-503



# WINSTA® MIDI special Sockets and Plugs, 4-Pole

|  |  |
|--|--|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ❶   2 x AWG 20 – 12<br/>                 400 V/6 kV/3<br/>                 I<sub>N</sub> 25 A ❸</p> <p> 9 mm / 0.35 in<br/>                 ❷ Approvals</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ❶   2 x AWG 20 – 12<br/>                 400 V/6 kV/3<br/>                 I<sub>N</sub> 25 A ❸</p> <p> 9 mm / 0.35 in<br/>                 ❷ Approvals</p> |
|--|--|

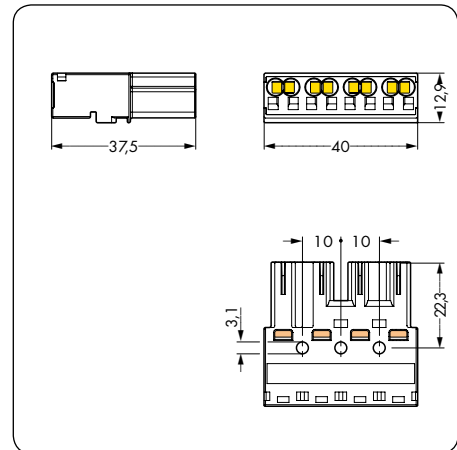
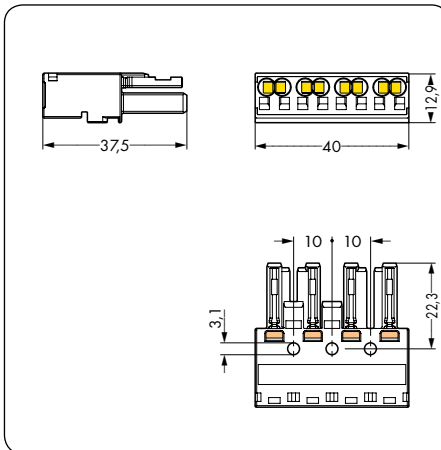


| Description  | Color                                | Item No.         | Pack. Unit | Color                              | Item No.         | Pack. Unit |
|--|--------------------------------------|------------------|------------|------------------------------------|------------------|------------|
| Pluggable connectors, 4-pole, with CAGE CLAMP®S connection | Socket without strain relief housing |                  |            | Plug without strain relief housing |                  |            |
|  | gray                                 | 770-244          | 50         | gray                               | 770-254          | 50         |
|  | gray                                 | 770-244/060-000* | 50         | gray                               | 770-254/060-000* | 50         |
|  | gray                                 | 770-244/062-000* | 50         | gray                               | 770-254/062-000* | 50         |
|  | gray                                 | 770-244/064-000* | 50         | gray                               | 770-254/064-000* | 50         |
|  | light green                          | 770-264          | 50         | light green                        | 770-274          | 50         |
|  | light green                          | 770-264/071-000* | 50         | light green                        | 770-274/071-000* | 50         |
|  | light green                          | 770-264/072-000* | 50         | light green                        | 770-274/072-000* | 50         |
|  | light green                          | 770-264/073-000* | 50         | light green                        | 770-274/073-000* | 50         |
|  | pink                                 | 770-284          | 50         | pink                               | 770-294          | 50         |
| pink   | 770-284/081-000*                     | 50               | pink       | 770-294/081-000*                   | 50               |            |
|  | *Pole marking, see page 241.         |                  |            | *Pole marking, see page 241.       |                  |            |



| Item-Specific Accessories |  |  |                    |  |  |  |                    |
|---------------------------|--|--|--------------------|--|--|--|--------------------|
|                           |  | <b>Strain relief housing, for 2 cables,</b><br>5 – 9 mm diameter<br>  |                    |  |  | <b>Strain relief housing, for 2 cables,</b><br>5 – 9 mm diameter<br>  |                    |
|                           |  | black  | 770-504/023-000 50 |  |  | black  | 770-504/023-000 50 |
|                           |  | white  | 770-514/023-000 50 |  |  | white  | 770-514/023-000 50 |
|                           |  | <b>Strain relief housing, for 2 cables,</b><br>9 – 13 mm diameter<br> |                    |  |  | <b>Strain relief housing, for 2 cables,</b><br>9 – 13 mm diameter<br> |                    |
|                           |  | black  | 770-504 50         |  |  | black  | 770-504 50         |
|                           |  | white  | 770-514 50         |  |  | white  | 770-514 50         |

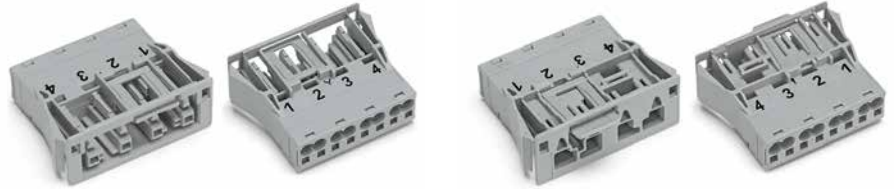
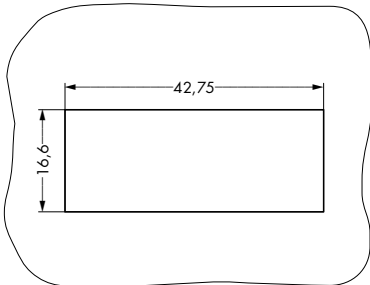
| Accessories, 770 Series |                   |   |                    |  |  |   |                    |
|-------------------------|-------------------|---|--------------------|--|--|---|--------------------|
|                         |                   | <b>Locking lever, for "flying leads,"</b><br>manually operated<br> |                    |  |  | <b>Locking lever, for "flying leads,"</b><br>tool operated<br> |                    |
|                         |                   | black   | 770-101 100 (4x25) |  |  | black   | 770-111 100 (4x25) |
|                         |                   | white   | 770-121 100 (4x25) |  |  | white   | 770-131 100 (4x25) |
| <b>Info</b>             | <b>Dimensions</b> |   |                    |  |  |   |                    |

- ❶ Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ❸ Full rated current can only be applied to a maximum of 3 poles!
- Standard printing (without suffix number)
- gray Coding B (1 2 3 4)
  - light green Coding B (1 2 3 4)
  - pink Coding B (1 2 3 4)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
 Fire load data available upon request.







# Snap-In Sockets and Plugs, 4-Pole

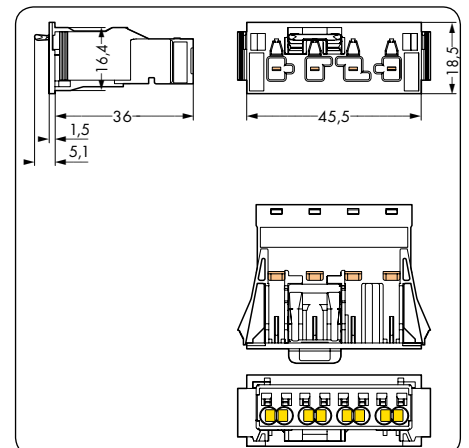
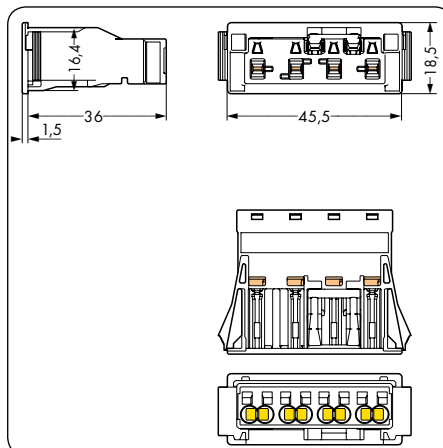
|  |   |                 |   |                 |
|--|---|-----------------|---|-----------------|
| Cutout dimensions<br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A ③  | 2 x AWG 20 – 12 | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A ③  | 2 x AWG 20 – 12 |
|  |  9 mm / 0.35 in<br>② Approvals |                 |  9 mm / 0.35 in<br>② Approvals |                 |



| Description  | Color                         | Item No.         | Pack. Unit | Color                         | Item No.         | Pack. Unit |
|--|-------------------------------|------------------|------------|-------------------------------|------------------|------------|
| Pluggable connectors, snap-in device connection, 3-pole, with CAGE CLAMP® S connection | Socket                        |                  |            | Plug                          |                  |            |
|  | gray                          | 770-744          | 50         | gray                          | 770-754          | 50         |
|  | gray                          | 770-744/060-000* | 50         | gray                          | 770-754/060-000* | 50         |
|  | gray                          | 770-744/062-000* | 50         | gray                          | 770-754/062-000* | 50         |
|  | gray                          | 770-744/064-000* | 50         | gray                          | 770-754/064-000* | 50         |
|  | light green                   | 770-764          | 50         | light green                   | 770-774          | 50         |
|  | light green                   | 770-764/071-000* | 50         | light green                   | 770-774/071-000* | 50         |
|  | light green                   | 770-764/072-000* | 50         | light green                   | 770-774/072-000* | 50         |
|  | light green                   | 770-764/073-000* | 50         | light green                   | 770-774/073-000* | 50         |
|  | pink                          | 770-784          | 50         | pink                          | 770-794          | 50         |
|  | pink                          | 770-784/081-000* | 50         | pink                          | 770-794/081-000* | 50         |
|  | * Pole marking, see page 241. |                  |            | * Pole marking, see page 241. |                  |            |

| Item-Specific Accessories  |       |         |   |  |        |         |
|--|-------|---------|---|--|--------|---------|
| Lockout cap, for socket, separable, 12-pole<br> |       |         | Lockout cap, for plug, separable, 5-pole<br> |  |        |         |
|  | black | 770-201 | 100   |  | yellow | 770-360 |
|  | white | 770-221 | 100   |  |        |         |

| Accessories, 770 Series  |       |         |  |       |         |     |
|--|-------|---------|--|-------|---------|-----|
| Lockout cap, for cutout, 4-pole<br> |       |         | Lockout cap, for cutout, 4-pole<br> |       |         |     |
|  | black | 770-644 | 100  | black | 770-644 | 100 |
|  | white | 770-694 | 100  | white | 770-694 | 100 |
| <b>Dimensions</b>  |       |         |  |       |         |     |





|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ① ③</p> <p>② Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ① ③</p> <p>② Approvals</p> |
|--|---|---|



| Description                                | Color            | Item No. | Pack. Unit                                 | Color          | Item No. | Pack. Unit |
|--|------------------|----------|--|----------------|----------|------------|
| PCB connectors,<br>2 solder pins per pole  | Socket, straight |          |  | Plug, straight |          |            |
|  | gray             | 770-844  | 100  | gray           | 770-854  | 100        |
|  | light green      | 770-864  | 100  | light green    | 770-874  | 100        |
|  | pink             | 770-884  | 100  | pink           | 770-894  | 100        |
| For additional pole marking, see page 241. |                  |          | For additional pole marking, see page 241. |                |          |            |

| Item-Specific Accessories                   |       |         |  |  |        |         |     |
|---|-------|---------|--|--|--------|---------|-----|
| Lockout cap, for socket, separable, 12-pole |       |         | Lockout cap, for plug, separable, 5-pole |  |        |         |     |
|   | black | 770-201 | 100                                      |  | yellow | 770-360 | 100 |
|   | white | 770-221 | 100                                      |  |        |         |     |
|   |       |         | Coding pin, for plug (A and B coding)    |  |        |         |     |
|   |       |         |  |  |        |         |     |
|   |       |         | gray                                     |  |        |         |     |
|   |       |         | 770-401                                  |  |        |         |     |
|   |       |         | 100                                      |  |        |         |     |

| Accessories, 770 Series                                 |       |         |   |  |       |         |            |
|---|-------|---------|---|--|-------|---------|------------|
| Locking lever, for "flying leads,"<br>manually operated |       |         | Locking lever, for "flying leads,"<br>tool operated |  |       |         |            |
|   | black | 770-101 | 100 (4x25)  |  | black | 770-111 | 100 (4x25) |
|   | white | 770-121 | 100 (4x25)  |  | white | 770-131 | 100 (4x25) |

| Info | Dimensions |
|------|------------|
|------|------------|

① For current load, see table on page 217.

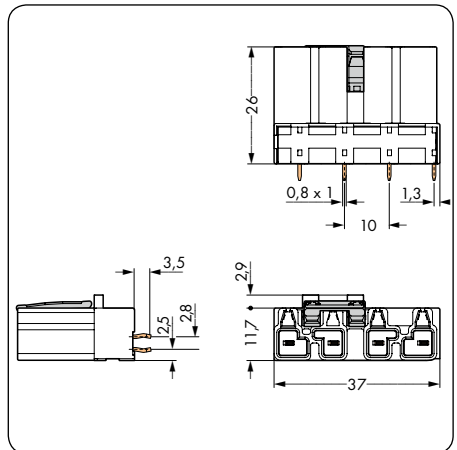
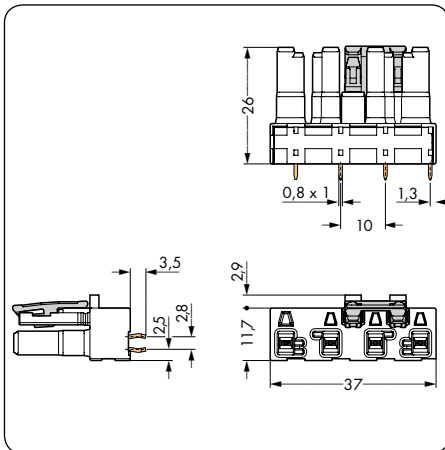
② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

③ Full rated current can only be applied to a maximum of 3 poles!

● gray Coding B (1 2 3 4)  
 ● light green Coding B (1 2 3 4)  
 ● pink Coding B (1 2 3 4)

For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|   |   |
|---|---|
| 400 V/6 kV/3<br>$I_N$ 25 A ① ③<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A ① ③<br><br>② Approvals |
|---|---|



① Nominal current depends on PCB track dimensions

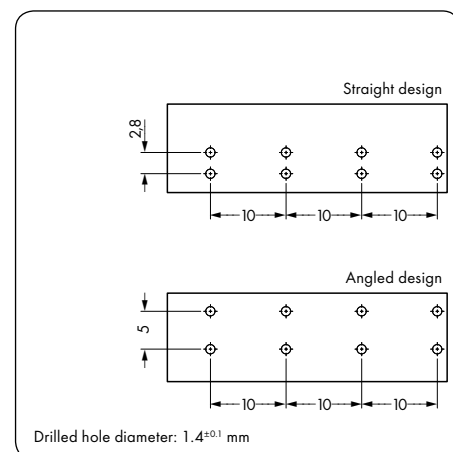
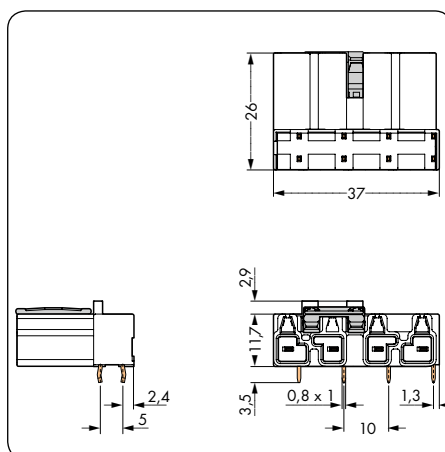
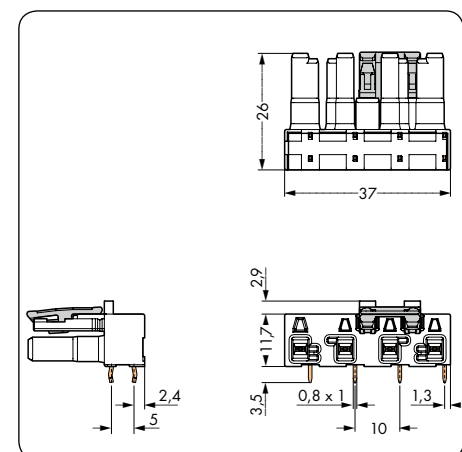
| Nominal current | Thickness of PCB track | Width of PCB track | Conductor size        |
|-----------------|------------------------|--------------------|-----------------------|
| 16 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 20 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 25 A            | 105 µm both sides      | 7 mm / 0.27 in     | △ 4 mm <sup>2</sup>   |

| Color                                      | Item No.        | Pack. Unit | Color                                      | Item No.        | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|
| <b>Socket, angled</b>                      |                 |            | <b>Plug, angled</b>                        |                 |            |
| gray                                       | 770-844/011-000 | 100        | gray                                       | 770-854/011-000 | 100        |
| light green                                | 770-864/011-000 | 100        | light green                                | 770-874/011-000 | 100        |
| pink                                       | 770-884/011-000 | 100        | pink                                       | 770-894/011-000 | 100        |
| For additional pole marking, see page 241. |                 |            | For additional pole marking, see page 241. |                 |            |

| Item-Specific Accessories                          |       |             |   |        |             |
|--|-------|-------------|---|--------|-------------|
| <b>Lockout cap, for socket, separable, 12-pole</b> |       |             | <b>Lockout cap, for plug, separable, 5-pole</b> |        |             |
|  | black | 770-201 100 |   | yellow | 770-360 100 |
|  | white | 770-221 100 |   |        |             |
|  |       |             | <b>Coding pin, for plug (A and B coding)</b>    |        |             |
|  |       |             |   | gray   | 770-401 100 |

| Accessories, 770 Series                                     |       |                    |   |       |                    |
|---|-------|--------------------|---|-------|--------------------|
| <b>Locking lever, for "flying leads," manually operated</b> |       |                    | <b>Locking lever, for "flying leads," tool operated</b> |       |                    |
|   | black | 770-101 100 (4x25) |   | black | 770-111 100 (4x25) |
|   | white | 770-121 100 (4x25) |   | white | 770-131 100 (4x25) |

| Dimensions | Hole patterns |
|------------|---------------|
|------------|---------------|



# 3 WINSTA® MIDI special

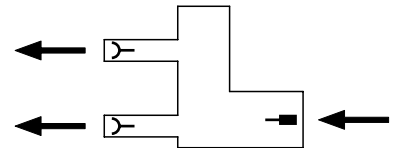
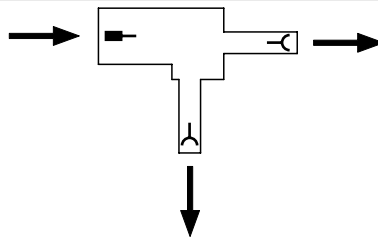
## T- and h-Distribution Connectors, 4-Pole

218

|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ④</p> <p>① Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ④</p> <p>① Approvals</p> |
|--|---|---|



| Description  | Color   | Item No.                               | Pack. Unit                                 | Color   | Item No.                                   | Pack. Unit |
|--|---|--|--|---|--|------------|
| T-distribution connectors,<br>h-distribution connectors,<br>4-pole | T-distribution connector, 1 x plug / 2 x socket |  |  | h-distribution connector, unidirectional,<br>plug / socket - socket |  |            |
|  | gray  | 770-1631                               | 50   | gray  | 770-1681                                   | 50         |
|  | light green                                     | 770-1632                               | 50   | light green   | 770-1682                                   | 50         |
|  | pink  | 770-1633                               | 50   | pink  | 770-1683                                   | 50         |
|  | for "flying leads," with 3rd locking lever      |  |  | for "flying leads," with 3rd locking lever                          |  |            |
|  | gray  | 770-1731                               | 50   | gray  | 770-1781                                   | 50         |
|  | light green                                     | 770-1732                               | 50   | light green   | 770-1782                                   | 50         |
|  | pink  | 770-1733                               | 50   | pink  | 770-1783                                   | 50         |
| For additional pole marking, see page 241.                         |   |  | For additional pole marking, see page 241. |   |  |            |
| <b>Item-Specific Accessories</b>                                   |   |  |  |   |  |            |
|  | Lockout cap, for socket, separable, 12-pole     |  |  | Mounting plate, for distribution connectors                         |  |            |
|  |   | black 770-201 100<br>white 770-221 100 |  |   | black 770-624 100<br>white 770-674 100     |            |
|  | Lockout cap, for plug, separable, 5-pole        |  |  | Fixing pin, for mounting plates                                     |  |            |
|  |   | yellow 770-360 100                     |  |   | ② black 890-601 250<br>③ black 770-601 250 |            |
|  |   |  |  | Lockout cap, for socket, separable, 12-pole                         |  |            |
|  |   |  |  |   | black 770-201 100<br>white 770-221 100     |            |
| <b>Info</b>  | <b>Dimensions</b>                               |  |  |   |  |            |



① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

② 5.0 mm Ø, 0.2 – 1.2 mm plate thickness

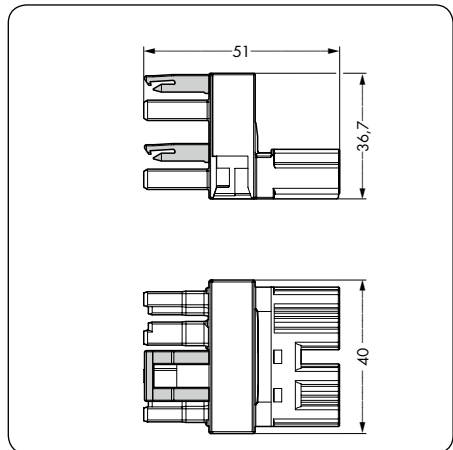
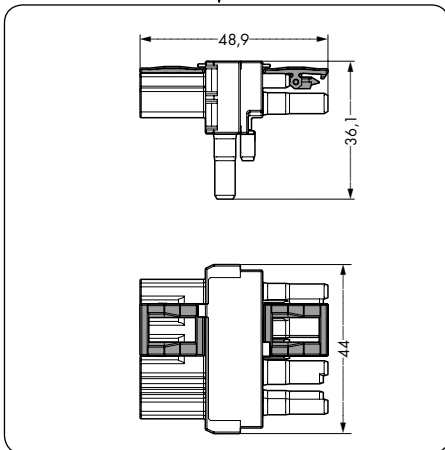
③ 6.0 mm Ø, 1 – 2.5 mm plate thickness

④ Full rated current can only be applied to a maximum of 3 poles!

gray Coding B (1 2 3 4)  
light green Coding B (1 2 3 4)  
pink Coding B (1 2 3 4)

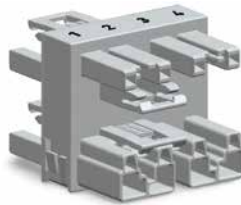
For additional pole marking, see page 241.





For coding information, see pages 238 to 240.  
Fire load data available upon request.

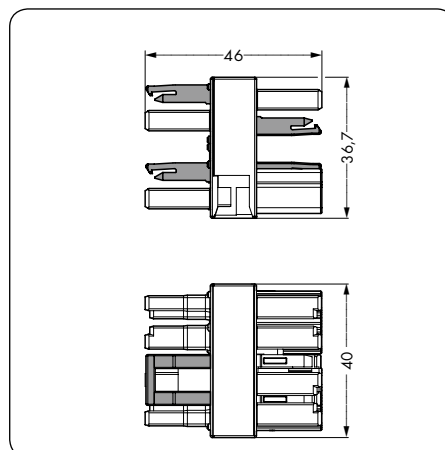
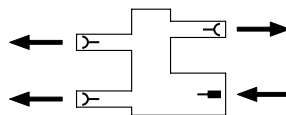


# Distribution Connectors, 4-Pole

|  |   |  |
|--|---|--|
|  | <p>250 V/4 kV/3<br/>I<sub>N</sub> 25 A</p> <p>1 Approvals</p> |  |
|--|---|--|



| Description                            | Color   | Item No.        | Pack. Unit |
|--|---|-----------------|------------|
| <b>Distribution connectors, 4-pole</b> | <b>Distribution connector, 3-way, 1 x plug / 3 x socket</b>                         |                 |            |
|  | gray  | 770-1734        | 50         |
|  | light green   | 770-1735        | 50         |
|  | pink  | 770-1736        | 50         |
|  | For additional pole marking, see page 241.  |                 |            |
| <b>Item-Specific Accessories</b>       |   |                 |            |
|  | <b>Mounting plate, for distribution connectors</b>                                  |                 |            |
|  |  | black 770-623   | 25         |
|  |   | white 770-673   | 25         |
|  | <b>Fixing pin, for mounting plates</b>  |                 |            |
|  |  | 2 black 890-601 | 250        |
|  |   | 3 black 770-601 | 250        |
|  | <b>Lockout cap, for socket, separable, 12-pole</b>                                  |                 |            |
|  |  | black 770-201   | 100        |
|  |   | white 770-221   | 100        |
|  | <b>Lockout cap, for plug, separable, 5-pole</b>                                     |                 |            |
|  |  | yellow 770-360  | 100        |
|  | <b>Dimensions</b>   |                 |            |



# 3 WINSTA® MIDI special Cable Assemblies 4 x 1.5 mm<sup>2</sup>

220

|                                      |   |                  |     |                  |   |     |                  |   |     |                  |
|--------------------------------------|---|------------------|-----|------------------|---|-----|------------------|---|-----|------------------|
|                                      | <p>PVC Control line: 4 x 1.5, gray</p> <p>400 V/6 kV/3 I<sub>N</sub> 16 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                  |     |                  |   |     |                  |   |     |                  |
| Interconnecting cable, socket – plug | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td>●</td><td>1 m</td><td>771-8994/006-103</td></tr> <tr><td>●</td><td>1 m</td><td>771-8994/006-105</td></tr> <tr><td>●</td><td>1 m</td><td>771-8994/006-107</td></tr> </table> | ●                | 1 m | 771-8994/006-103 | ● | 1 m | 771-8994/006-105 | ● | 1 m | 771-8994/006-107 |
| ●                                    | 1 m   | 771-8994/006-103 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8994/006-105 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8994/006-107 |     |                  |   |     |                  |   |     |                  |
|                                      |   |                  |     |                  |   |     |                  |   |     |                  |
| Connecting cable, socket – free end  | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td>●</td><td>1 m</td><td>771-8994/106-103</td></tr> <tr><td>●</td><td>1 m</td><td>771-8994/106-105</td></tr> <tr><td>●</td><td>1 m</td><td>771-8994/106-107</td></tr> </table> | ●                | 1 m | 771-8994/106-103 | ● | 1 m | 771-8994/106-105 | ● | 1 m | 771-8994/106-107 |
| ●                                    | 1 m   | 771-8994/106-103 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8994/106-105 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8994/106-107 |     |                  |   |     |                  |   |     |                  |
|                                      |   |                  |     |                  |   |     |                  |   |     |                  |
| Connecting cable, plug - free end    | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td>●</td><td>1 m</td><td>771-8994/206-103</td></tr> <tr><td>●</td><td>1 m</td><td>771-8994/206-105</td></tr> <tr><td>●</td><td>1 m</td><td>771-8994/206-107</td></tr> </table> | ●                | 1 m | 771-8994/206-103 | ● | 1 m | 771-8994/206-105 | ● | 1 m | 771-8994/206-107 |
| ●                                    | 1 m   | 771-8994/206-103 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8994/206-105 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8994/206-107 |     |                  |   |     |                  |   |     |                  |
|                                      |   |                  |     |                  |   |     |                  |   |     |                  |


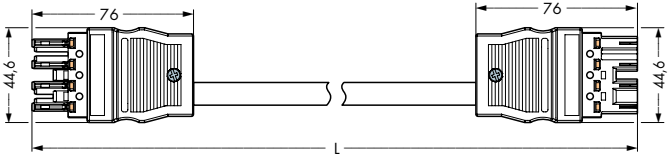

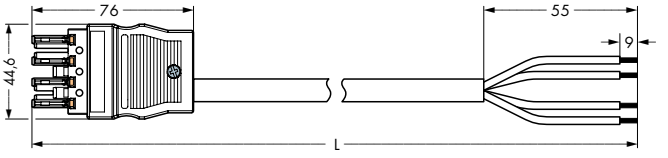

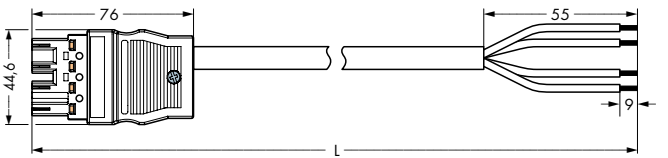
**Info**

- ① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.
  - ② Full rated current can only be applied to a maximum of 3 poles!  
For other cables, please contact factory.
- |               |          |           |
|---------------|----------|-----------|
| ● gray        | Coding B | (1 2 3 4) |
| ● light green | Coding B | (1 2 3 4) |
| ● pink        | Coding B | (1 2 3 4) |
- For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Accessories**

|  |                   |         |            |
|--|-------------------|---------|------------|
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
|  | yellow            | 770-360 | 100        |

|   |  |                                    |                             |                  |
|---|--|------------------------------------|-----------------------------|------------------|
|   |  | PVC                                | Control line: 4 x 2.5, gray |                  |
|   |  | 400 V/6 kV/3 I <sub>N</sub> 20 A ② |                             |                  |
|   |  | Conductor ends, bonded: 9 mm       |                             |                  |
|   |  | ① Approvals                        |                             |                  |
| <b>Interconnecting cable, socket – plug</b>   |  | Color                              | Length                      | Item No.         |
|    |  | black                              |                             |                  |
|    |  | Coding B                           |                             |                  |
|   |  | PVC                                |                             |                  |
|   |  |                                    | 1 m                         | 771-8994/007-103 |
|   |  |                                    | 1 m                         | 771-8994/007-105 |
|   |  |                                    | 1 m                         | 771-8994/007-107 |
| <b>Connecting cable, socket – free end</b>  |  | Color                              | Length                      | Item No.         |
|   |  | black                              |                             |                  |
|  |  | Coding B                           |                             |                  |
|   |  | PVC                                |                             |                  |
|   |  |                                    | 1 m                         | 771-8994/107-103 |
|   |  |                                    | 1 m                         | 771-8994/107-105 |
|   |  |                                    | 1 m                         | 771-8994/107-107 |
| <b>Connecting cable, plug - free end</b>  |  | Color                              | Length                      | Item No.         |
|  |  | black                              |                             |                  |
|  |  | Coding B                           |                             |                  |
|   |  | PVC                                |                             |                  |
|   |  |                                    | 1 m                         | 771-8994/207-103 |
|   |  |                                    | 1 m                         | 771-8994/207-105 |
|   |  |                                    | 1 m                         | 771-8994/207-107 |

**Item numbers overview for other cable lengths**

|             |       |   |   |   |   |   |   |   |   |    |   |    |    |    |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
| gray        | 771   | - | 8 | 9 | 9 | 4 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 771   | - | 8 | 9 | 9 | 4 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 771   | - | 8 | 9 | 9 | 4 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 4-pole, socket – plug, PVC control line, 4 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-8994/016-107



The 10th position defines the cable cross-section. For example, a 4 x 1.5 mm<sup>2</sup> cable with light green connectors has the following item number: 771-8994/006-105

The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 771-8994/006-503

# 3 WINSTA® MIDI special

## Sockets and Plugs, 5-Pole

222

|   |   |
|---|---|
| <p>2 x 0.5 – 4 mm<sup>2</sup> ❶   2 x AWG 20 – 12<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ❸</p> <p> 9 mm / 0.35 in<br/>❷ Approvals</p> | <p>2 x 0.5 – 4 mm<sup>2</sup> ❶   2 x AWG 20 – 12<br/>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ❸</p> <p> 9 mm / 0.35 in<br/>❷ Approvals</p> |
|---|---|



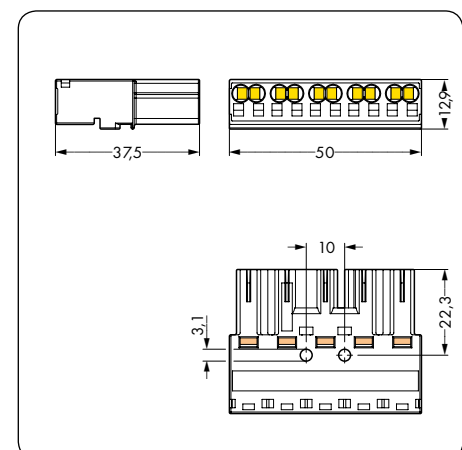
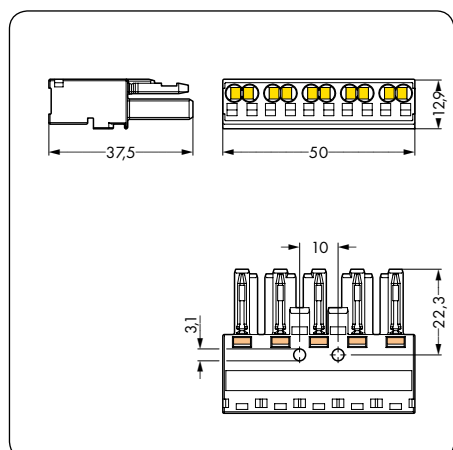
| Description  | Color                                | Item No.         | Pack. Unit                    | Color                              | Item No.         | Pack. Unit |
|--|--------------------------------------|------------------|-------------------------------|------------------------------------|------------------|------------|
| Pluggable connectors, 4-pole, with CAGE CLAMP®S connection | Socket without strain relief housing |                  |                               | Plug without strain relief housing |                  |            |
|  | gray                                 | 770-245          | 50                            | gray                               | 770-255          | 50         |
|  | gray                                 | 770-245/060-000* | 50                            | gray                               | 770-255/060-000* | 50         |
|  | gray                                 | 770-245/062-000* | 50                            | gray                               | 770-255/062-000* | 50         |
|  | gray                                 | 770-245/064-000* | 50                            | gray                               | 770-255/064-000* | 50         |
|  | light green                          | 770-265          | 50                            | light green                        | 770-275          | 50         |
|  | light green                          | 770-265/073-000* | 50                            | light green                        | 770-275/073-000* | 50         |
|  | pink                                 | 770-285          | 50                            | pink                               | 770-295          | 50         |
|  | pink                                 | 770-285/080-000* | 50                            | pink                               | 770-295/080-000* | 50         |
|  | pink                                 | 770-285/082-000* | 50                            | pink                               | 770-295/082-000* | 50         |
| * Pole marking, see page 241.                              |                                      |                  | * Pole marking, see page 241. |                                    |                  |            |

| Item-Specific Accessories |  |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|--|
|                           |  | <b>Strain relief housing, for 2 cables, ❹</b><br>5 – 9 mm diameter<br>black 770-505/023-000 25<br>white 770-515/023-000 25 |  |  |  | <b>Strain relief housing, for 2 cables, ❹</b><br>5 – 9 mm diameter<br>black 770-505/023-000 25<br>white 770-515/023-000 25 |  |
|                           |  | <b>Strain relief housing, for 2 cables, ❹</b><br>9 – 13 mm diameter<br>black 770-505 25<br>white 770-515 25                |  |  |  | <b>Strain relief housing, for 2 cables, ❹</b><br>9 – 13 mm diameter<br>black 770-505 25<br>white 770-515 25                |  |

| Accessories, 770 Series |  |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|
|                         |  | <b>Locking lever, for "flying leads,"</b><br>manually operated<br>black 770-101 100 (4x25)<br>white 770-121 100 (4x25) |  |  |  | <b>Locking lever, for "flying leads,"</b><br>tool operated<br>black 770-111 100 (4x25)<br>white 770-131 100 (4x25) |  |



| Info | Dimensions |
|------|------------|
|------|------------|

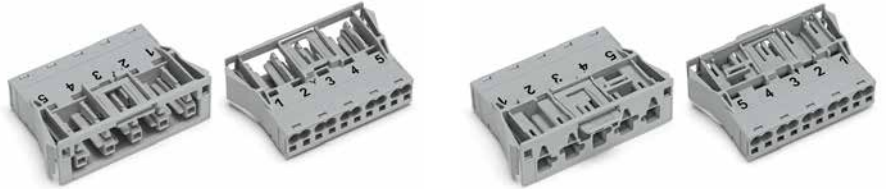
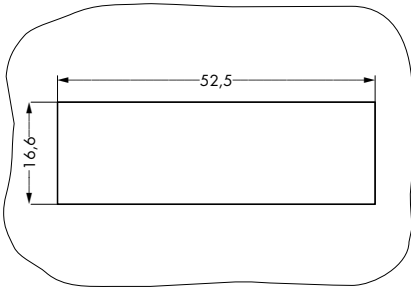
- ❶ Conductor sizes: 0.5 – 4 mm<sup>2</sup> "s + f-st"  
0.5 – 2.5 mm<sup>2</sup> "stranded"
  - ❷ For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
  - ❸ Full rated current can only be applied to a maximum of 3 poles!
  - ❹ For more strain relief housings, see page 175.
- Standard printing (without suffix number)
- gray Coding B (1 2 3 4 5)
  - light green Coding B (1 2 3 4 5)
  - pink Coding B (1 2 3 4 5)
- For additional pole marking, see page 241.
- For coding information, see pages 238 to 240.  
Fire load data available upon request.









# Snap-In Sockets and Plugs, 5-Pole

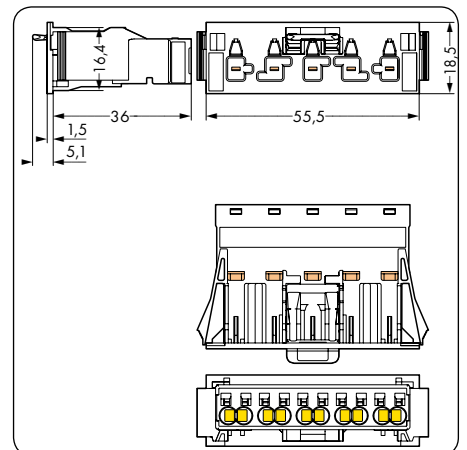
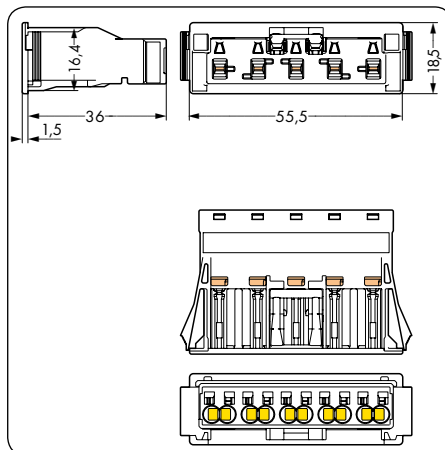
|  |   |                 |   |                 |
|--|---|-----------------|---|-----------------|
| Cutout dimensions<br><br>Plate thickness: 0.5 – 2 mm<br>Cutout tolerance: + 0.1 mm | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A ③  | 2 x AWG 20 – 12 | 2 x 0.5 – 4 mm <sup>2</sup> ①<br>400 V/6 kV/3<br>I <sub>N</sub> 25 A ③  | 2 x AWG 20 – 12 |
|  |  9 mm / 0.35 in<br>② Approvals |                 |  9 mm / 0.35 in<br>② Approvals |                 |



| Description  | Color       | Item No.         | Pack. Unit                    | Color       | Item No.         | Pack. Unit |
|--|-------------|------------------|-------------------------------|-------------|------------------|------------|
| Pluggable connectors, snap-in device connection, 5-pole, with CAGE CLAMP® S connection | Socket      |                  |                               | Plug        |                  |            |
|  | gray        | 770-745          | 50                            | gray        | 770-755          | 50         |
|  | gray        | 770-745/060-000* | 50                            | gray        | 770-755/060-000* | 50         |
|  | gray        | 770-745/062-000* | 50                            | gray        | 770-755/062-000* | 50         |
|  | gray        | 770-745/064-000* | 50                            | gray        | 770-755/064-000* | 50         |
|  | light green | 770-765          | 50                            | light green | 770-775          | 50         |
|  | light green | 770-765/073-000* | 50                            | light green | 770-775/073-000* | 50         |
|  | pink        | 770-785          | 50                            | pink        | 770-795          | 50         |
|  | pink        | 770-785/080-000* | 50                            | pink        | 770-795/080-000* | 50         |
|  | pink        | 770-785/082-000* | 50                            | pink        | 770-795/082-000* | 50         |
| * Pole marking, see page 241.  |             |                  | * Pole marking, see page 241. |             |                  |            |

| Item-Specific Accessories  |       |         |   |  |        |         |
|--|-------|---------|---|--|--------|---------|
| Lockout cap, for socket, separable, 12-pole<br> |       |         | Lockout cap, for plug, separable, 5-pole<br> |  |        |         |
|  | black | 770-201 | 100   |  | yellow | 770-360 |
|  | white | 770-221 | 100   |  |        |         |

| Accessories, 770 Series  |       |         |  |  |       |         |
|--|-------|---------|--|--|-------|---------|
| Lockout cap, for cutout, 5-pole<br> |       |         | Lockout cap, for cutout, 5-pole<br> |  |       |         |
|  | black | 770-645 | 100  |  | black | 770-645 |
|  | white | 770-695 | 100  |  | white | 770-695 |
| <b>Dimensions</b>  |       |         |  |  |       |         |



# 3 WINSTA® MIDI special

## PCB Connectors, 5-Pole

224

|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ① ③</p> <p>② Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ① ③</p> <p>② Approvals</p> |
|--|---|---|



| Description                               | Color                                      | Item No. | Pack. Unit | Color                                      | Item No. | Pack. Unit |
|---|--|----------|------------|--|----------|------------|
| PCB connectors,<br>2 solder pins per pole | Socket, straight                           |          |            | Plug, straight                             |          |            |
|   | gray                                       | 770-845  | 100        | gray                                       | 770-855  | 100        |
|   | light green                                | 770-865  | 100        | light green                                | 770-875  | 100        |
|   | pink                                       | 770-885  | 100        | pink                                       | 770-895  | 100        |
|   | For additional pole marking, see page 241. |          |            | For additional pole marking, see page 241. |          |            |

| Item-Specific Accessories |   |               |     |  |                |     |
|---------------------------|---|---------------|-----|--|----------------|-----|
|                           | Lockout cap, for socket, separable, 12-pole |               |     | Lockout cap, for plug, separable, 5-pole |                |     |
|                           |   | black 770-201 | 100 |  | yellow 770-360 | 100 |
|                           |   | white 770-221 | 100 |  |                |     |
|                           |   |               |     | Coding pin, for plug (A and B coding)    |                |     |
|                           |   |               |     |  | gray 770-401   | 100 |

| Accessories, 770 Series |   |               |            |   |               |            |
|-------------------------|---|---------------|------------|---|---------------|------------|
|                         | Locking lever, for "flying leads,"<br>manually operated |               |            | Locking lever, for "flying leads,"<br>tool operated |               |            |
|                         |   | black 770-101 | 100 (4x25) |   | black 770-111 | 100 (4x25) |
|                         |   | white 770-121 | 100 (4x25) |   | white 770-131 | 100 (4x25) |

| Info | Dimensions |
|------|------------|
|------|------------|

① For current load, see table on page 225.

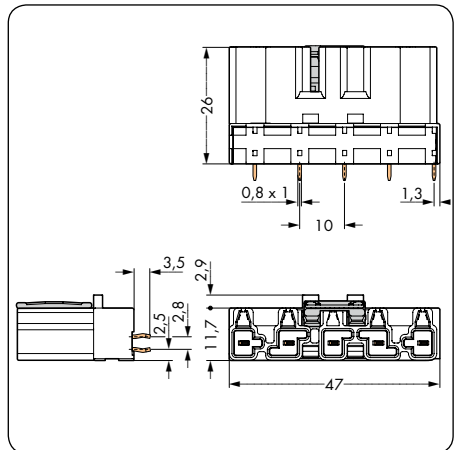
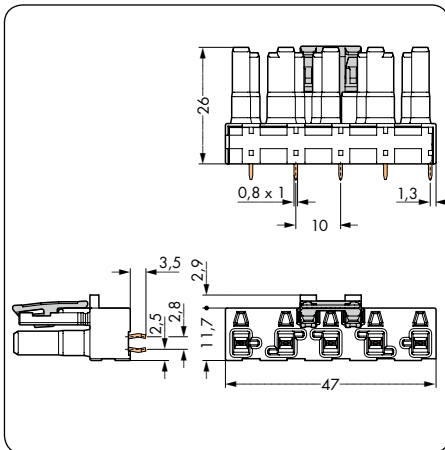
② For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

③ Full rated current can only be applied to a maximum of 3 poles!

● gray Coding B (1 2 3 4 5)  
 ● light green Coding B (1 2 3 4 5)  
 ● pink Coding B (1 2 3 4 5)

For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|   |   |
|---|---|
| 400 V/6 kV/3<br>$I_N$ 25 A ① ③<br><br>② Approvals | 400 V/6 kV/3<br>$I_N$ 25 A ① ③<br><br>② Approvals |
|---|---|



① Nominal current depends on PCB track dimensions

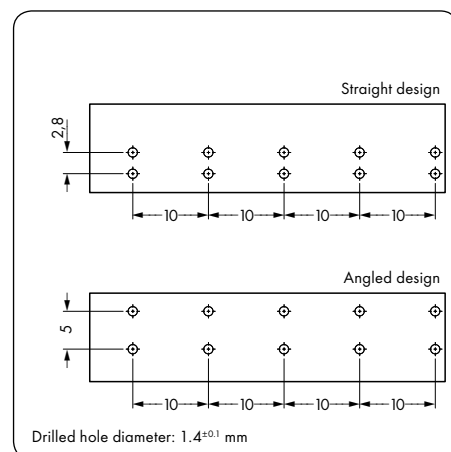
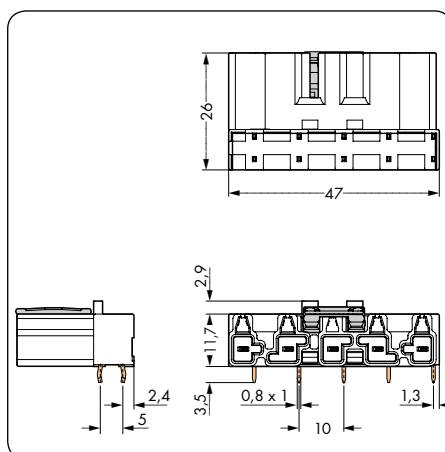
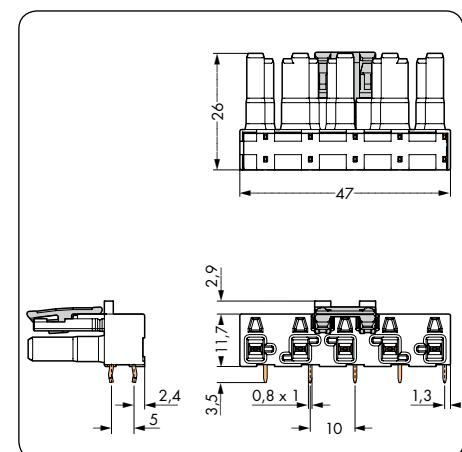
| Nominal current | Thickness of PCB track | Width of PCB track | Conductor size        |
|-----------------|------------------------|--------------------|-----------------------|
| 16 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 20 A            | 70 µm single side      | 7 mm / 0.27 in     | △ 1.5 mm <sup>2</sup> |
| 25 A            | 105 µm both sides      | 7 mm / 0.27 in     | △ 4 mm <sup>2</sup>   |

| Color                                      | Item No.        | Pack. Unit | Color                                      | Item No.        | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|
| <b>Socket, angled</b>                      |                 |            | <b>Plug, angled</b>                        |                 |            |
| gray                                       | 770-845/011-000 | 100        | gray                                       | 770-855/011-000 | 100        |
| light green                                | 770-865/011-000 | 100        | light green                                | 770-875/011-000 | 100        |
| pink                                       | 770-885/011-000 | 100        | pink                                       | 770-895/011-000 | 100        |
| For additional pole marking, see page 241. |                 |            | For additional pole marking, see page 241. |                 |            |

| Item-Specific Accessories                          |       |             |   |        |             |
|--|-------|-------------|---|--------|-------------|
| <b>Lockout cap, for socket, separable, 12-pole</b> |       |             | <b>Lockout cap, for plug, separable, 5-pole</b> |        |             |
|  | black | 770-201 100 |   | yellow | 770-360 100 |
|  | white | 770-221 100 |   |        |             |
| <b>Coding pin, for plug (A and B coding)</b>       |       |             |   |        |             |
|  | gray  | 770-401 100 |   |        |             |

| Accessories, 770 Series                                     |       |                    |   |       |                    |
|---|-------|--------------------|---|-------|--------------------|
| <b>Locking lever, for "flying leads," manually operated</b> |       |                    | <b>Locking lever, for "flying leads," tool operated</b> |       |                    |
|   | black | 770-101 100 (4x25) |   | black | 770-111 100 (4x25) |
|   | white | 770-121 100 (4x25) |   | white | 770-131 100 (4x25) |

| Dimensions | Hole patterns |
|------------|---------------|
|------------|---------------|



# 3 WINSTA® MIDI special

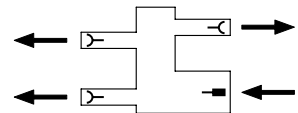
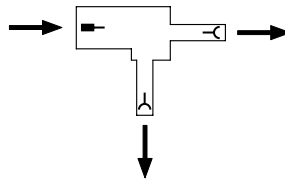
## T-Distribution Connectors and Distribution Connectors, 5-Pole

226

|  |   |   |
|--|---|---|
|  | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ④</p> <p>① Approvals</p> | <p>400 V/6 kV/3<br/>I<sub>N</sub> 25 A ④</p> <p>① Approvals</p> |
|--|---|---|



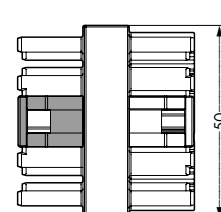
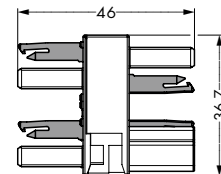
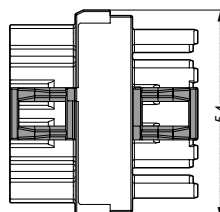
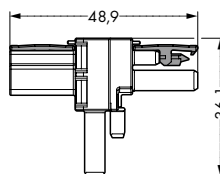
| Description  | Color   | Item No.                               | Pack. Unit | Color                                       | Item No.                                   | Pack. Unit |
|--|---|--|------------|---|--|------------|
| T-distribution connectors, distribution connectors, 5-pole | T-distribution connector, 1 x plug / 2 x socket |  |            |   |  |            |
|  | gray  | 770-1641                               | 50         | gray  | 770-1744                                   | 50         |
|  | light green                                     | 770-1642                               | 50         | light green                                 | 770-1745                                   | 50         |
|  | pink  | 770-1643                               | 50         | pink  | 770-1746                                   | 50         |
|  | for "flying leads," with 3rd locking lever      |  |            |   |  |            |
|  | gray  | 770-1741                               | 50         |   |  |            |
|  | light green                                     | 770-1742                               | 50         |   |  |            |
|  | pink  | 770-1743                               | 50         |   |  |            |
|  | For additional pole marking, see page 241.      |  |            | For additional pole marking, see page 241.  |  |            |
| <b>Item-Specific Accessories</b>                           |   |  |            |   |  |            |
|  | Lockout cap, for socket, separable, 12-pole     |  |            | Mounting plate, for distribution connectors |  |            |
|  |   | black 770-201 100<br>white 770-221 100 |            |   | black 770-625 100<br>white 770-675 100     |            |
|  | Lockout cap, for plug, separable, 5-pole        |  |            | Fixing pin, for mounting plates             |  |            |
|  |   | yellow 770-360 100                     |            |   | ② black 890-601 250<br>③ black 770-601 250 |            |
|  |   |  |            | Lockout cap, for socket, separable, 12-pole |  |            |
|  |   |  |            |   | black 770-201 100<br>white 770-221 100     |            |
| <b>Info</b>  | <b>Dimensions</b>                               |  |            |   |  |            |



- ① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.
- ② 5.0 mm Ø, 0.2 – 1.2 mm plate thickness
- ③ 6.0 mm Ø, 1 – 2.5 mm plate thickness
- ④ Full rated current can only be applied to a maximum of 3 poles!

- gray Coding B (1 2 3 4 5)
  - light green Coding B (1 2 3 4 5)
  - pink Coding B (1 2 3 4 5)
- For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.





# 3 WINSTA® MIDI special Cable Assemblies 5 x 1.5 mm<sup>2</sup>

228

|                                      |   |                  |     |                  |   |     |                  |   |     |                  |
|--------------------------------------|---|------------------|-----|------------------|---|-----|------------------|---|-----|------------------|
|                                      | <p>PVC Control line: 5 x 1.5, gray</p> <p>400 V/6 kV/3 I<sub>N</sub> 16 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>  |                  |     |                  |   |     |                  |   |     |                  |
| Interconnecting cable, socket – plug | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td>●</td><td>1 m</td><td>771-8995/006-103</td></tr> <tr><td>●</td><td>1 m</td><td>771-8995/006-105</td></tr> <tr><td>●</td><td>1 m</td><td>771-8995/006-107</td></tr> </table> | ●                | 1 m | 771-8995/006-103 | ● | 1 m | 771-8995/006-105 | ● | 1 m | 771-8995/006-107 |
| ●                                    | 1 m   | 771-8995/006-103 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8995/006-105 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8995/006-107 |     |                  |   |     |                  |   |     |                  |
|                                      |   |                  |     |                  |   |     |                  |   |     |                  |
| Connecting cable, socket – free end  | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td>●</td><td>1 m</td><td>771-8995/106-103</td></tr> <tr><td>●</td><td>1 m</td><td>771-8995/106-105</td></tr> <tr><td>●</td><td>1 m</td><td>771-8995/106-107</td></tr> </table> | ●                | 1 m | 771-8995/106-103 | ● | 1 m | 771-8995/106-105 | ● | 1 m | 771-8995/106-107 |
| ●                                    | 1 m   | 771-8995/106-103 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8995/106-105 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8995/106-107 |     |                  |   |     |                  |   |     |                  |
|                                      |   |                  |     |                  |   |     |                  |   |     |                  |
| Connecting cable, plug - free end    | <p>Color Length Item No.<br/>black</p> <p>Coding B<br/>PVC</p> <table border="0"> <tr><td>●</td><td>1 m</td><td>771-8995/206-103</td></tr> <tr><td>●</td><td>1 m</td><td>771-8995/206-105</td></tr> <tr><td>●</td><td>1 m</td><td>771-8995/206-107</td></tr> </table> | ●                | 1 m | 771-8995/206-103 | ● | 1 m | 771-8995/206-105 | ● | 1 m | 771-8995/206-107 |
| ●                                    | 1 m   | 771-8995/206-103 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8995/206-105 |     |                  |   |     |                  |   |     |                  |
| ●                                    | 1 m   | 771-8995/206-107 |     |                  |   |     |                  |   |     |                  |
|                                      |   |                  |     |                  |   |     |                  |   |     |                  |


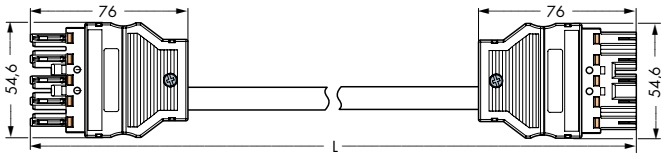

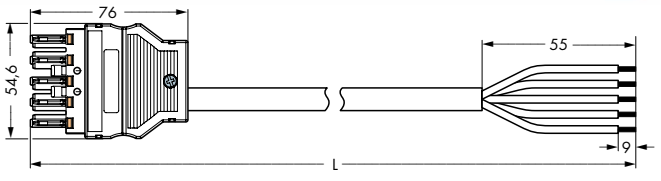

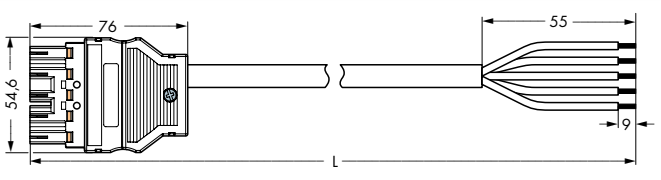
**Info**

- ① For "International Certification Organizations" and "Approvals – User Guide," see pages 528 to 531. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.
  - ② Full rated current can only be applied to a maximum of 3 poles!  
For other cables, please contact factory.
- |   |             |          |             |
|---|-------------|----------|-------------|
| ● | gray        | Coding B | (1 2 3 4 5) |
| ● | light green | Coding B | (1 2 3 4 5) |
| ● | pink        | Coding B | (1 2 3 4 5) |
- For additional pole marking, see page 241.

For coding information, see pages 238 to 240.  
Fire load data available upon request.

**Accessories**

|  |                   |         |            |
|--|-------------------|---------|------------|
|  | manually operated |         |            |
|  | black             | 770-101 | 100 (4x25) |
|  | white             | 770-121 | 100 (4x25) |
|  | tool operated     |         |            |
|  | black             | 770-111 | 100 (4x25) |
|  | white             | 770-131 | 100 (4x25) |
|  | black             | 770-201 | 100        |
|  | white             | 770-221 | 100        |
|  | yellow            | 770-360 | 100        |

|   |  |                                    |                             |                  |  |
|---|--|------------------------------------|-----------------------------|------------------|--|
|   |  | PVC                                | Control line: 5 x 2.5, gray |                  |  |
|   |  | 400 V/6 kV/3 I <sub>N</sub> 20 A ② |                             |                  |  |
|   |  | Conductor ends, bonded: 9 mm       |                             |                  |  |
|   |  | ① Approvals                        |                             |                  |  |
| <b>Interconnecting cable, socket – plug</b>   |  | <b>Color</b>                       | <b>Length</b>               | <b>Item No.</b>  |  |
|    |  | black                              |                             |                  |  |
|    |  | <b>Coding B</b>                    |                             |                  |  |
|   |  | PVC                                |                             |                  |  |
|   |  | ●                                  | 1 m                         | 771-8995/007-103 |  |
|   |  | ●                                  | 1 m                         | 771-8995/007-105 |  |
|   |  | ●                                  | 1 m                         | 771-8995/007-107 |  |
| <b>Connecting cable, socket – free end</b>  |  | <b>Color</b>                       | <b>Length</b>               | <b>Item No.</b>  |  |
|   |  | black                              |                             |                  |  |
|  |  | <b>Coding B</b>                    |                             |                  |  |
|   |  | PVC                                |                             |                  |  |
|   |  | ●                                  | 1 m                         | 771-8995/107-103 |  |
|   |  | ●                                  | 1 m                         | 771-8995/107-105 |  |
|   |  | ●                                  | 1 m                         | 771-8995/107-107 |  |
| <b>Connecting cable, plug - free end</b>  |  | <b>Color</b>                       | <b>Length</b>               | <b>Item No.</b>  |  |
|  |  | black                              |                             |                  |  |
|  |  | <b>Coding B</b>                    |                             |                  |  |
|   |  | PVC                                |                             |                  |  |
|   |  | ●                                  | 1 m                         | 771-8995/207-103 |  |
|   |  | ●                                  | 1 m                         | 771-8995/207-105 |  |
|   |  | ●                                  | 1 m                         | 771-8995/207-107 |  |

**Item numbers overview for other cable lengths**

|             |       |   |   |   |   |   |   |   |   |    |   |    |    |    |
|-------------|-------|---|---|---|---|---|---|---|---|----|---|----|----|----|
| Position    | 1 - 3 | - | 4 | 5 | 6 | 7 | / | 8 | 9 | 10 | - | 11 | 12 | 13 |
| gray        | 771   | - | 8 | 9 | 9 | 5 | / | 0 | 0 | 6  | - | 1  | 0  | 3  |
| light green | 771   | - | 8 | 9 | 9 | 5 | / | 0 | 0 | 6  | - | 1  | 0  | 5  |
| pink        | 771   | - | 8 | 9 | 9 | 5 | / | 0 | 0 | 6  | - | 1  | 0  | 7  |

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 5-pole, socket – plug, PVC control line, 5 x 1.5 mm<sup>2</sup>, 1 m

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-8995/016-107

The 10th position defines the cable cross-section. For example, a 5 x 1.5 mm<sup>2</sup> cable with light green connectors has the following item number: 771-8995/006-105

The 11th position defines the cable length. For example, a 5 m cable with gray connectors has the following item number: 771-8995/006-503





- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards (IEC 61535) does not guarantee hazard-avoiding, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.
  - WINSTA® KNX connectors are not intended for installation in open or easily accessible areas.



**893 Series  
Pluggable Connectors, 2-Pole**

233



**893 Series  
Snap-In Device Connectors, 2-Pole**

234



**893 Series  
T-Distribution Connectors, 2-Pole**

235



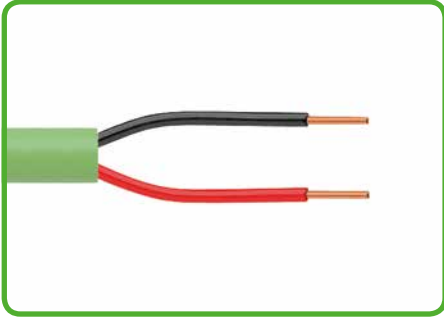
**894 Series  
Cable Assemblies, 2 x 0.8 mm Ø**

236 - 237

# 3 Handling WINSTA® KNX, 893 Series

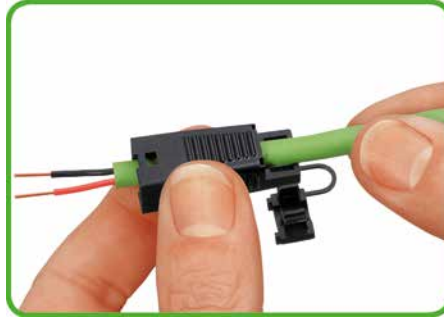
232

## Preparation

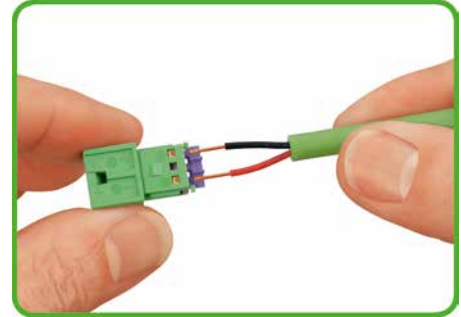


- 1. Strip length, outer insulation: = 23 mm
- 2. Strip length = 9 mm

## Conductor termination

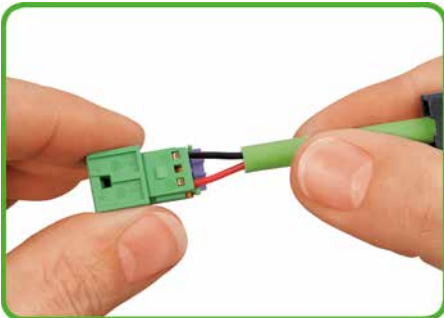


Prior to termination, pull the strain relief housing over the cable.

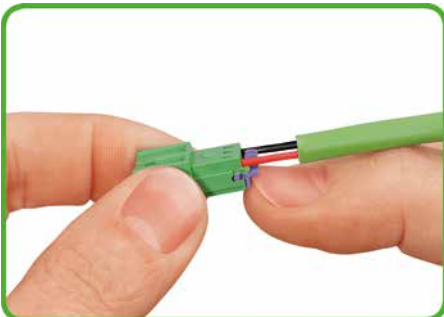


Insert stripped conductor directly into the conductor entry.

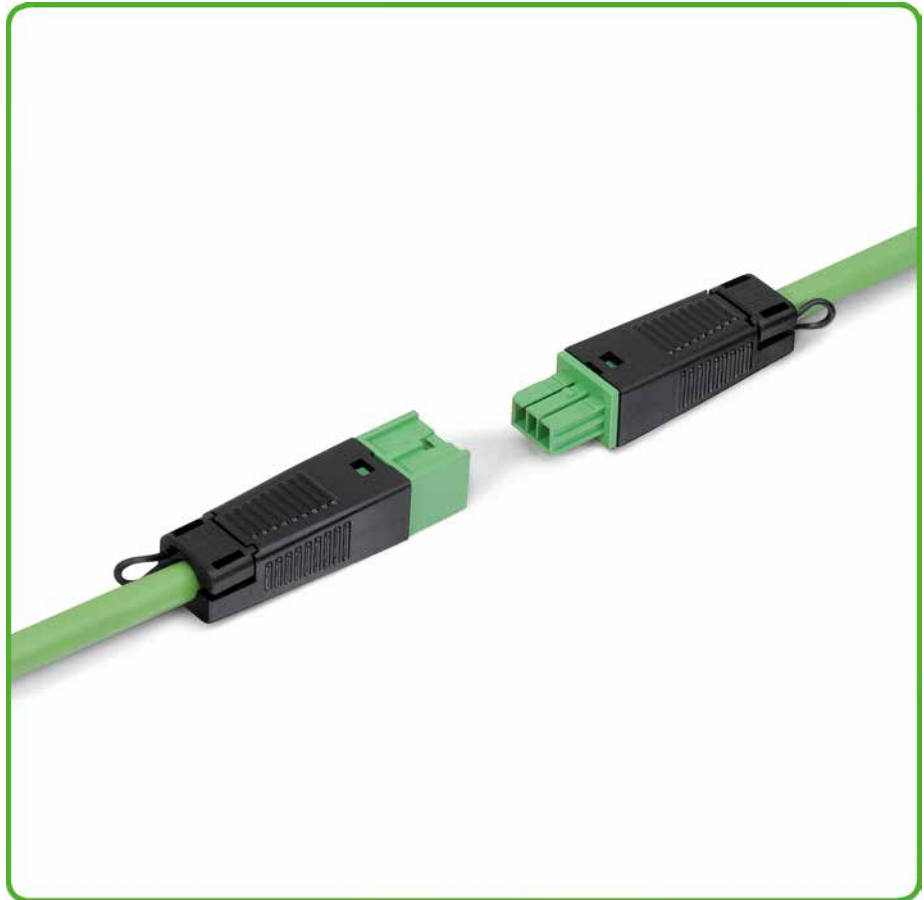
## Conductor termination



Push conductors until they hit backstop.



To disconnect, open clamping unit via purple actuator and pull out conductor.



## Strain relief assembly





Snap wired connector into strain relief housing.

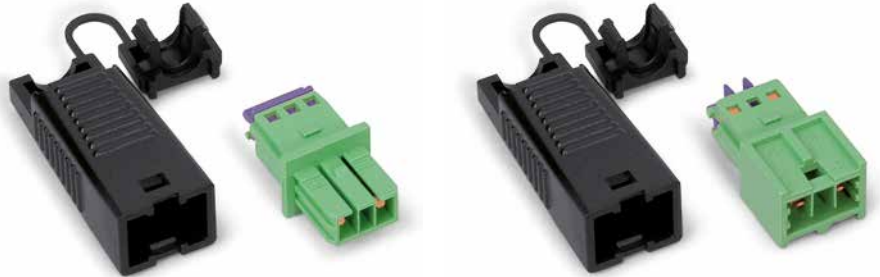


Press strain relief firmly on the cable.



Pre-assembled KNX connector.

|   |   |
|---|---|
| <p><b>0.8 mm Ø</b><br/>50 V/0.8 kV/3<br/>I<sub>N</sub> 3 A</p> <p> 9 mm / 0.35 in</p> <p>① Approvals</p> | <p><b>0.8 mm Ø</b><br/>50 V/0.8 kV/3<br/>I<sub>N</sub> 3 A</p> <p> 9 mm / 0.35 in</p> <p>① Approvals</p> |
|---|---|



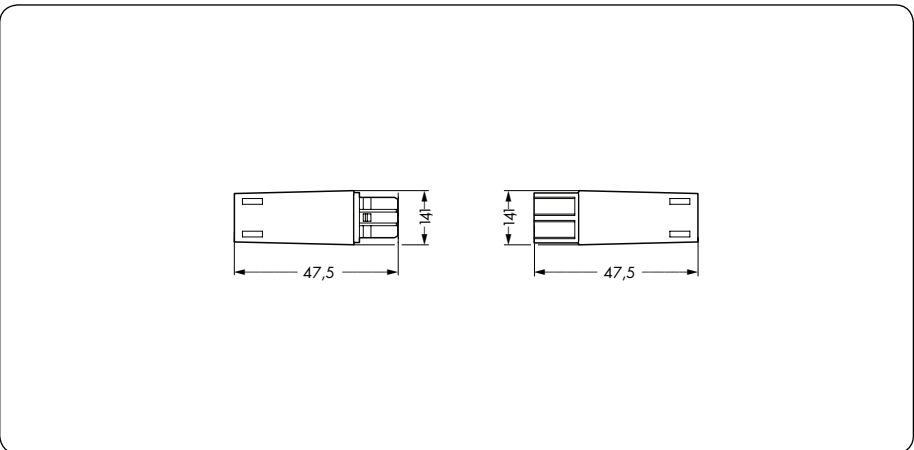
| Description  | Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|--|----------|------------|--|----------|------------|
| Pluggable connectors, 2-pole, with spring clamp connection | Socket with strain relief housing, 5 - 7 mm cable diameter ② |          |            | Plug with strain relief housing, 5 - 7 mm cable diameter ② |          |            |
|  | ● green  | 893-1002 | 50         | ● green  | 893-1012 | 50         |
|  | Special coding:  |          |            | Special coding:  |          |            |
|  | ○ light gray   | 893-1022 | 50         | ○ light gray   | 893-1032 | 50         |
| Info   | Dimensions   |          |            |  |          |            |



① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

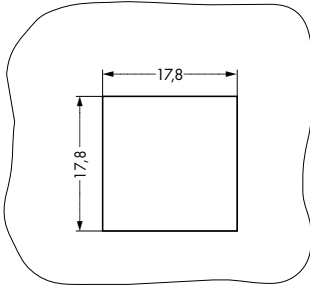
② 2Y(ST)2x(2x0.8)

● green Coding E (1+ 2-)  
○ light gray Coding F (1+ 2-)

For coding information, see pages 238 to 240.  
Fire load data available upon request.



|   |  |  |
|---|--|--|
| <p>Cutout dimensions</p> <p>Plate thickness: 0.5 – 2 mm</p> <p>Cutout tolerance: + 0.1 mm</p> | <p>0.8 mm Ø</p> <p>50 V/0.8 kV/3</p> <p>I<sub>N</sub> 3 A</p> <p> 9 mm / 0.35 in</p> <p>① Approvals</p> | <p>0.8 mm Ø</p> <p>50 V/0.8 kV/3</p> <p>I<sub>N</sub> 3 A</p> <p> 9 mm / 0.35 in</p> <p>① Approvals</p> |
|---|--|--|

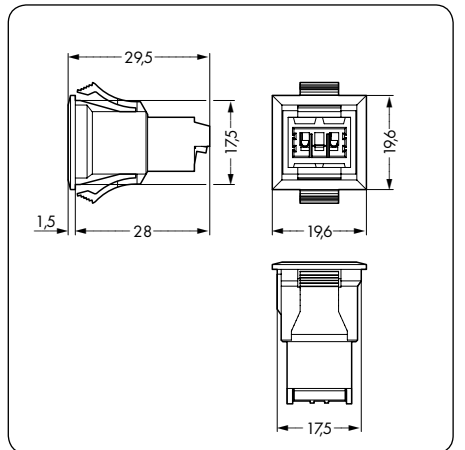
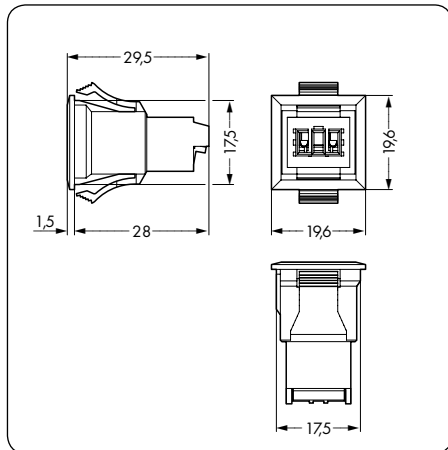


| Description   | Color                        | Item No. | Pack. Unit | Color                      | Item No. | Pack. Unit |
|---|------------------------------|----------|------------|----------------------------|----------|------------|
| Snap-in connectors, 2-pole, with spring clamp connection, T-distribution connectors | Socket, for KNX applications |          |            | Plug, for KNX applications |          |            |
|   | ● green                      | 893-2002 | 50         | ● green                    | 893-2012 | 50         |
|   | Special coding:              |          |            | Special coding:            |          |            |
|   | ○ light gray                 | 893-2022 | 50         | ○ light gray               | 893-2032 | 50         |
| Info  | Dimensions                   |          |            |                            |          |            |

① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.

● green Coding E (1+ 2-)  
○ light gray Coding F (1+ 2-)

For coding information, see pages 238 to 240.  
Fire load data available upon request.



# T-Distribution Connectors, 2-Pole

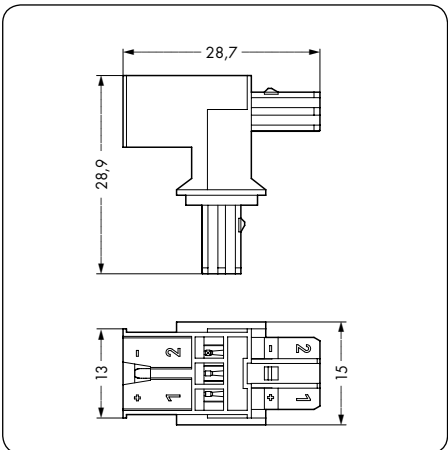
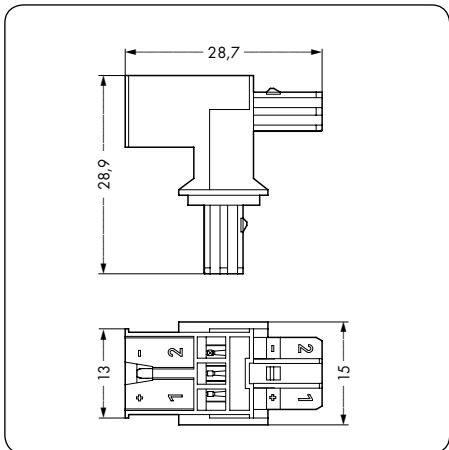
|   |   |
|---|---|
| 50 V/0.8 kV/3<br>$I_N$ 3 A<br><br>① Approvals | 50 V/0.8 kV/3<br>$I_N$ 3 A<br><br>① Approvals |
|---|---|

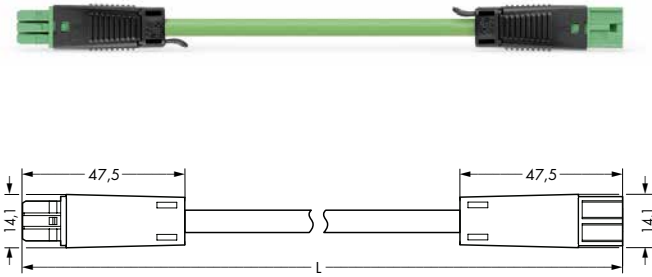
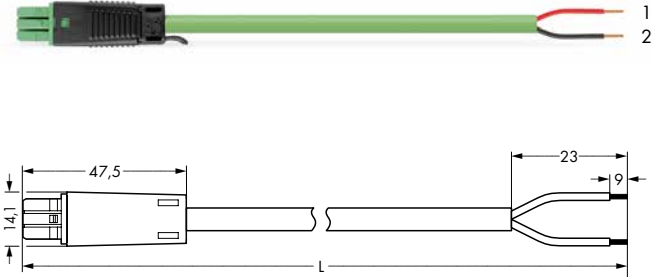
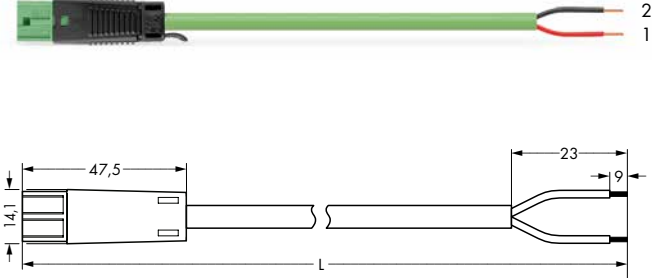


| Color   | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| T-distribution connector, 1 x plug / 2 x socket, for KNX applications |          |            | T-distribution connector, 1 x plug / 2 x socket, with special coding |          |            |
| ● green   | 893-1606 | 25         | ○ light gray   | 893-1656 | 25         |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
|   |          |            |  |          |            |
| <b>Dimensions</b>   |          |            |  |          |            |

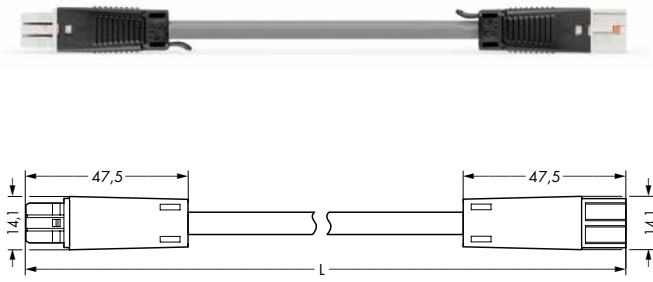
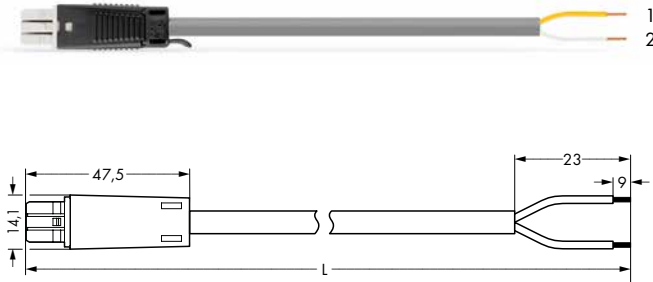
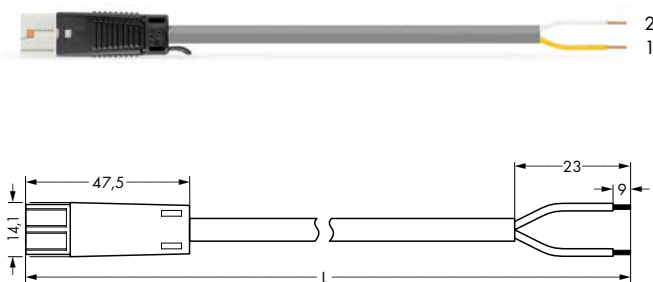


"Flying leads" using a T-distribution connector

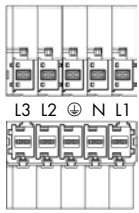

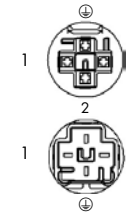
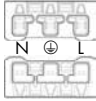
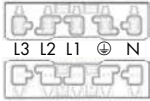






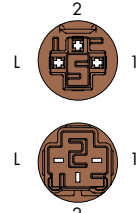


|  |  |
|--|--|
|  | <p>PVC                      UNITRONIC BUS EIB 2x2x0.8</p> <p>50 V/0.8 kV/3 I<sub>N</sub> 3 A</p> <p>① Approvals</p>                              |
| <p><b>Interconnecting cable, socket – plug</b></p>   | <p>Length Item No.</p>   |
|   | <p>● Coding E,<br/>for KNX applications<br/>PVC</p> <p>1 m    894-8992/033-106</p> <p>3 m    894-8992/033-306</p> <p>5 m    894-8992/033-506</p> |
| <p><b>Connecting cable, socket – free end</b></p>  | <p>Length Item No.</p>   |
|    | <p>● Coding E,<br/>for KNX applications<br/>PVC</p> <p>1 m    894-8992/133-106</p> <p>3 m    894-8992/133-306</p> <p>5 m    894-8992/133-506</p> |
| <p><b>Connecting cable, plug - free end</b></p>  | <p>Length Item No.</p>   |
|   | <p>● Coding E,<br/>for KNX applications<br/>PVC</p> <p>1 m    894-8992/233-106</p> <p>3 m    894-8992/233-306</p> <p>5 m    894-8992/233-506</p> |
| <p><b>Info</b></p>   |  |
| <p>① For "International Certification Organizations" and "Approvals - User Guide," see pages 528 to 531.</p> <p>For halogen-free cables, please contact factory.</p> <p>② Cable core assignment, coding F:</p> <p>yellow    1+</p> <p>white     2-</p> <p>● green    Coding E     (1+ 2-)</p> <p>○ light gray Coding F   (1+ 2-)</p> <p>For coding information, see pages 238 to 240.<br/>Fire load data available upon request.</p> |  |




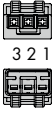


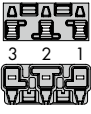
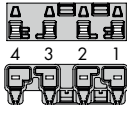
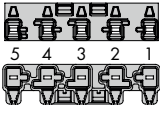



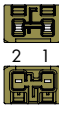
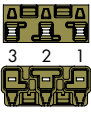
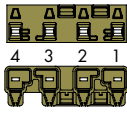
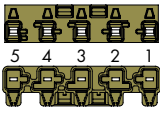



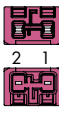
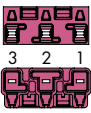
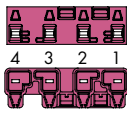
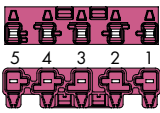
|   |   |
|---|---|
|   | <p>PVC J-Y(ST)Y...LG 2x2x0.8</p> <p>50 V/0.8 kV/3 I<sub>N</sub> 3 A</p> <p>① Approvals</p>  |
| <p>Interconnecting cable, socket – plug</p>   | <p>Length Item No.</p>  |
|    | <p>○ Coding F, ②<br/>for standard fieldbus applications<br/>PVC</p> <p>1 m 894-8992/033-107</p> <p>3 m 894-8992/033-307</p> <p>5 m 894-8992/033-507</p> |
| <p>Connecting cable, socket – free end</p>  | <p>Length Item No.</p>  |
|   | <p>○ Coding F, ②<br/>for standard fieldbus applications<br/>PVC</p> <p>1 m 894-8992/133-107</p> <p>3 m 894-8992/133-307</p> <p>5 m 894-8992/133-507</p> |
| <p>Connecting cable, plug - free end</p>  | <p>Length Item No.</p>  |
|  | <p>○ Coding F, ②<br/>for standard fieldbus applications<br/>PVC</p> <p>1 m 894-8992/233-107</p> <p>3 m 894-8992/233-307</p> <p>5 m 894-8992/233-507</p> |
|   |   |

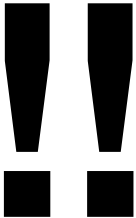
| Description   | WINSTA® MINI |           |               |               | WINSTA® MIDI |               |                 |                     |
|---|--------------|-----------|---------------|---------------|--------------|---------------|-----------------|---------------------|
|   | 2-pole       | 3-pole    | 4-pole        | 5-pole        | 2-pole       | 3-pole        | 4-pole          | 5-pole              |
| <b>Series</b>   | 890/891      | 890/891   | 890/891       | 890/891       | 770/771      | 770/771       | 770/771         | 770/771             |
| <b>Coding A</b><br>black<br>white<br><br>e.g., general applications | <br>N L      | <br>N ⊕ L | <br>1L 2L ⊕ N | <br>3 2 1 ⊕ N | <br>N L      | <br>N ⊕ L     | <br>1L 2L ⊕ N   | <br>L3 L2 L1 ⊕ N    |
| <b>Coding E</b><br>green<br>KNX applications                        |              |           |               |               |              |               |                 |                     |
| <b>Coding F</b><br>light gray<br>specialty coding                   |              |           |               |               |              |               |                 |                     |
| <b>Coding I</b><br>blue<br><br>e.g., dimming                        | <br>- +      |           |               | <br>+ - L ⊕ N | <br>DA DA    |               |                 | <br>DA DA L ⊕ N     |
| <b>Coding L</b><br>dark gray<br><br>e.g., emergency power supply    |              |           |               |               | <br>N' L'    |               |                 | <br>L' N' L ⊕ N     |
| <b>Coding P</b><br>red<br><br>e.g., computer applications (UPS)     |              |           |               |               |              | <br>N ⊕ L     |                 | <br>L3 L2 L1 ⊕ N    |
| <b>Coding Q</b><br>green<br><br>"Clean Earth" applications          |              |           |               |               |              |               | <br>L PE2 PE1 N | <br>L PE3 PE2 PE1 N |
| <b>Coding R</b><br>orange<br><br>e.g., LON bus                      |              |           |               |               |              | <br>S LON LON |                 |                     |
| <b>Coding S</b><br>brown<br><br>e.g., switching applications        |              |           |               |               |              | <br>L 2 1     |                 |                     |

| Description   | WINSTA® MAXI  | WINSTA® RD  |   | WINSTA® KNX   |   | WINSTA® IDC   |   |
|---|---|---|---|---|---|---|---|
|   | 5-pole  | 3-pole  | 4-pole  | 2-pole  | 2-pole  | 3-pole  | 5-pole  |
| <b>Series</b>   | <b>831</b>  | <b>774</b>  | <b>774</b>  | <b>893/894</b>  | <b>893/894</b>  | <b>772</b>  | <b>772</b>  |
| <b>Coding A</b><br>black<br>white<br><br>e.g., general applications                                   |  |    |  |   |   |    |    |
| <b>Coding E</b><br>green<br>KNX applications<br><br><b>Coding F</b><br>light gray<br>specialty coding |   |   |   | <br>1+ 2-<br> | <br>1+ 2-<br> |   |   |
| <b>Coding I</b><br>blue<br><br>e.g., dimming  |   |   |   |   |   |   |   |
| <b>Coding L</b><br>dark gray<br><br>e.g., emergency power supply                                      |   |   |   |   |   |   |   |
| <b>Coding P</b><br>red<br><br>e.g., computer applications (UPS)                                       |   |   |   |   |   |  |  |
| <b>Coding Q</b><br>green<br><br>"Clean Earth"<br>applications   |   |   |   |   |   |   |   |
| <b>Coding R</b><br>orange<br><br>e.g., LON bus  |   |   |   |   |   |   |   |
| <b>Coding S</b><br>brown<br><br>e.g., switching applications  |   |  |   |   |   |   |   |

# WINSTA® MINI special with Coding B

# WINSTA® MIDI special with Coding B

| Description   | WINSTA® MINI special   |  |  | WINSTA® MIDI special / WINSTA® IDC   |  |  |  |
|---|--|--|--|--|--|--|--|
|   | 2-pole   | 3-pole   | 4-pole   | 2-pole   | 3-pole   | 4-pole   | 5-pole   |
| <b>Series</b>   | 890/891  | 890/891  | 890/891  | 770/771  | 770/771/772  | 770/771  | 770/771/772  |
| <b>Coding B</b><br>gray<br><br>Control and general applications (mains applications 110–400V) | <br>2 1 | <br>3 2 1 | <br>4 3 2 1 | <br>2 1 | <br>3 2 1 | <br>4 3 2 1 | <br>5 4 3 2 1 |
| <b>Coding B</b><br>light green<br><br>Control and general applications (low voltages 0–48V)   | <br>2 1 | <br>3 2 1 | <br>4 3 2 1 | <br>2 1 | <br>3 2 1 | <br>4 3 2 1 | <br>5 4 3 2 1 |
| <b>Coding B</b><br>pink<br><br>Control and general applications (bus applications)            | <br>2 1 | <br>3 2 1 | <br>4 3 2 1 | <br>2 1 | <br>3 2 1 | <br>4 3 2 1 | <br>5 4 3 2 1 |



**Important note:**

Components of both WINSTA® MINI special and WINSTA® MIDI special series with B Coding are designed for specialty applications (e.g., measurement, control and regulation technology) and certified according to DIN EN 61984. In addition to the gray models for 110–400V voltages, there is now also a variant in light green for low voltages up to 48V, as well as a pink one for bus applications.

Each of the three versions is available in 2-, 3- or 4- and 5-pole configurations. Pole marking can be printed at the factory to suit customer requirements. According to IEC 61535, B-Coded products are protected against mismatching with all other coding types found in the WINSTA® system. Within B Coding, all special variants can mate with each other. The variable coding system provides clear circuit identification. Special variants can be clearly differentiated according to color and pole marking. They can be coded on-site or delivered with factory-installed custom coding.

| Suffix Number | Marking |           |                                    |              | Application                             |
|---------------|---------|-----------|------------------------------------|--------------|---|
|               | 2-pole  | 3-pole    | 4-pole                             | 5-pole       |   |
| without       | 1 2     | 1 2 3     | 1 2 3 4                            | 1 2 3 4 5    | General                                 |
| /060-000      | L N     | L ⊕ N     | N ⊕ <sup>2</sup> L <sup>1</sup> L' | N ⊕ L1 L2 L3 | Standard 230V/400V network applications |
| /062-000      |         | 2 PE 1    | 3 PE 2 1                           | N PE 3 2 1   | Fan Step switching                      |
| /064-000      |         |           | 2L ⊕ 1L L                          | N ⊕ L 2L 1L  | 230V + switched                         |
|               |         |           |                                    |              |   |
| without       | 1 2     | 1 2 3     | 1 2 3 4                            | 1 2 3 4 5    | General                                 |
| /071-000      |         | U+ X/Y U- | U- S U+ X/Y                        |              | AI / AO 0-10V                           |
| /072-000      |         |           | U- U+ DI AI                        |              | Presence detector incl. light sensor    |
| /073-000      |         | 1 ⊕ 2     | 1 ⊕ 2 3                            | 1 ⊕ 2 3 4    | Control signal incl. ground             |
|               |         |           |                                    |              |   |
| without       | 1 2     | 1 2 3     | 1 2 3 4                            | 1 2 3 4 5    | General                                 |
| /080-000      | I+ I-   |           |                                    | N ⊕ L I- I+  | SMI bus                                 |
| /081-000      |         | 1 2 5     | 1 2 5 3                            |              | MP-Bus                                  |
| /082-000      | + -     | + S -     |                                    | N ⊕ L - +    | General bus applications                |

Distribution connectors and cable assemblies with above-mentioned pole marking are available upon request.

Item number example:

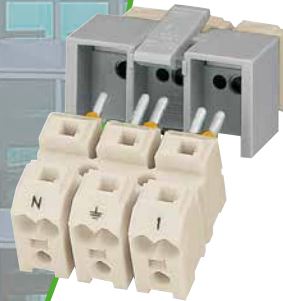
WINSTA® MIDI special, plug, 4-pole, light green, with U- U+ DI AI pole marking **770-274/072-000**



Connector System for  
Fluorescent Lighting Fixtures



Connectors for In-Line Mounting  
of Fluorescent Lighting Fixtures



Fully Polarized  
Connectors



Luminaire Disconnect Connectors

# 4



**Connector System with Phase Selection  
for Fluorescent Lighting Fixtures, Conductor Supports**  
267 Series

244 - 253



**Connectors for In-Line Mounting  
of Fluorescent Lighting Fixtures**  
267 Series

253



**Connection System with Phase Selection  
for Fluorescent Lighting Fixtures**  
277 Series

254 - 257



**Fully Polarized Connectors for  
Lighting Fixtures in Dropped Ceilings**  
272 Series

258 - 262

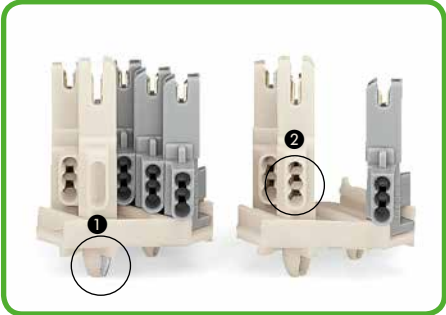


**Luminaire Disconnect Connectors (US Version Only)**  
873 Series

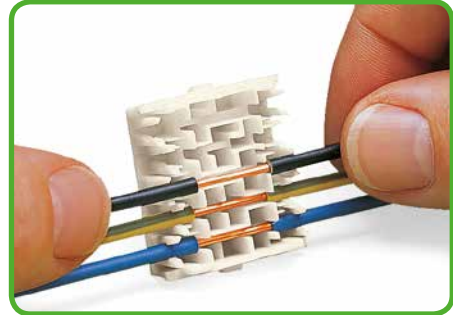
264 - 265



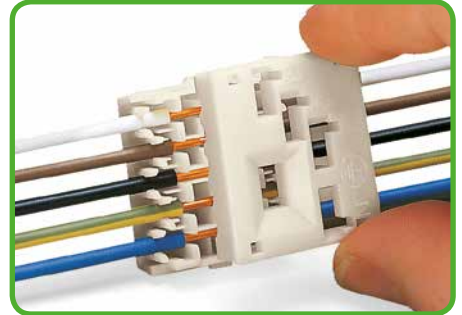
# 4 Description and Handling 267 Series for Partially Stripped Conductors



- ❶ Female connector with direct ground contact to lighting fixture panel.
- ❷ Base female connector with PUSH WIRE® connection for ground conductors.

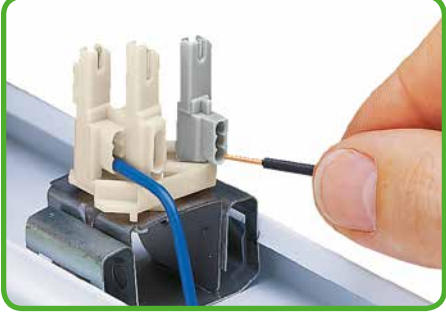


Snapping partially stripped conductor into base of conductor support. Conductor supports replace standard female connectors.

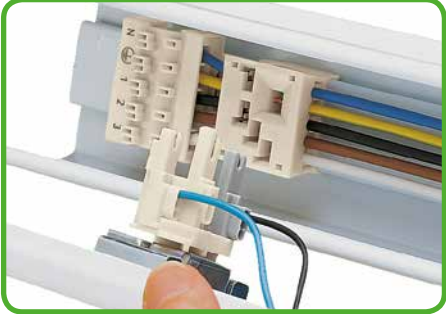


Latching conductor support cover.

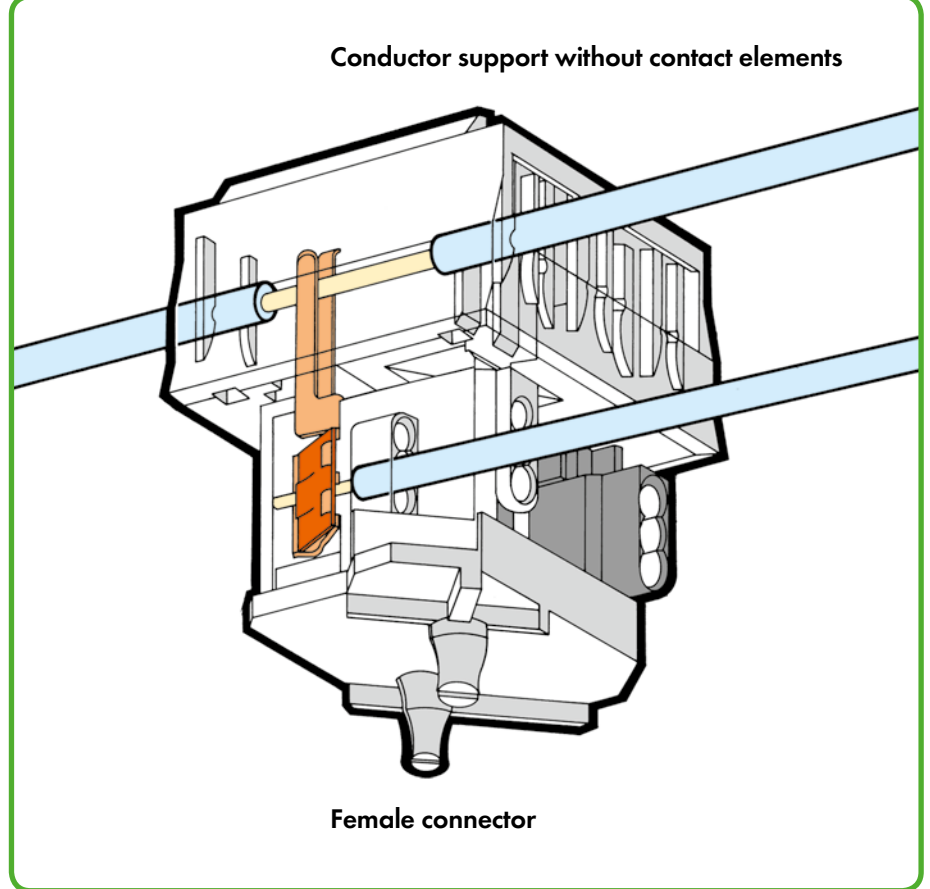
## 267 Series



Inserting stripped conductor until it hits backstop.



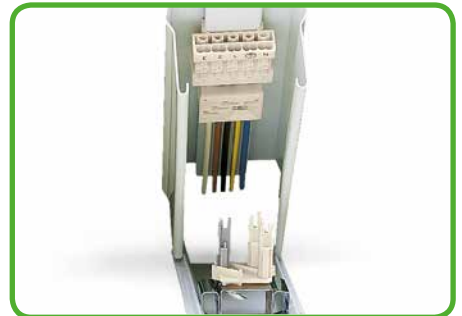
Inserting female connector into conductor support.



Power supply connector with direct ground contact to lighting fixture panel.



Connector with snap-on foot for rail mounting.



Fluorescent lighting fixture with female and power supply connectors.



**PUSH WIRE®** clamps the following copper conductors:  
solid

# System Description and Handling

## 267 Series with Insulation Displacement Connection (IDC)

PUSH WIRE®

4

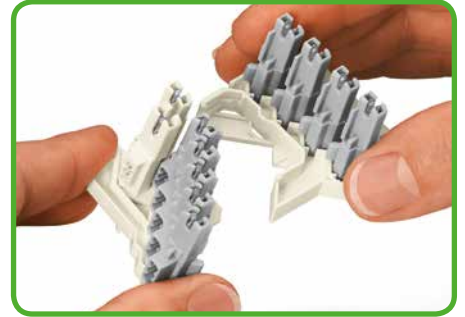
245



Base female connector with PUSH WIRE® connection for ground conductors.



Snap-on type female connector, 2- to 4-pole.



Securing base and snap-on type female connectors together (system expansion: 7 + 4 poles).

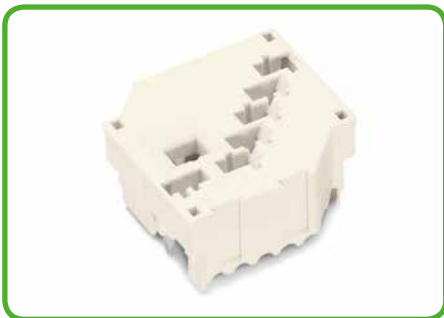
### 267 Series



System expansion assembly: female connector and conductor support.



System expansion assembly: conductor support.



Conductor support cover with dovetail mount for snap-on type conductor support.

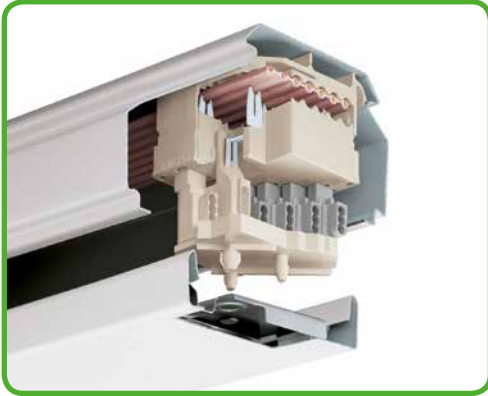


Snap-on type conductor support, 4-pole.



Securing the snap-on type conductor support to the cover (system expansion: 7 + 4 poles).

4



#### 267 Series for Partially Stripped Conductors

- Contact-free conductor support
- Compact design

#### 267 Series with Insulation Displacement Connection (IDC)

- Flexible, modular 5- to 11-pole connector system
- IDC connection for through-wiring applications
- Scalable – future system expansions also possible

#### Technical data:

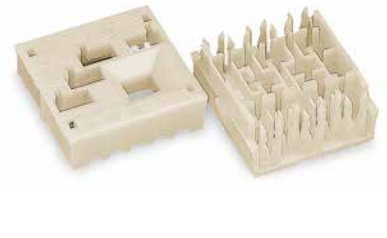
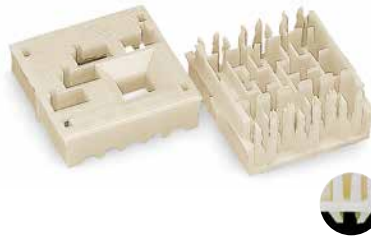
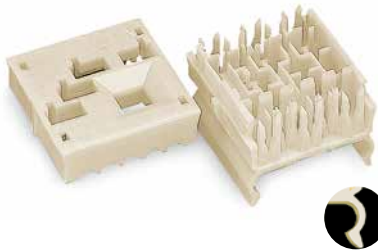
|                      | PUSH WIRE® connection  | PUSH WIRE® connection | IDC connection      |
|----------------------|--|-----------------------|---------------------|
|                      | Connector for in-line mounting of fluorescent lighting fixtures and snap-on type conductor support | Female connector      | Conductor support   |
| Rating per           | <b>IEC/EN 61984</b>  | <b>IEC/EN 61984</b>   | <b>IEC/EN 61984</b> |
| Overvoltage category | II   | II                    | II                  |
| Pollution degree     | 2  | 2                     | 2                   |
| Rated voltage        | 500 V  | 500 V                 | 500 V               |
| Rated surge voltage  | 4 kV   | 4 kV                  | 4 kV                |
| Nominal current      | 16 A   | 6 A                   | 6 A                 |
| Approvals per        | <b>UL 1977</b>   | <b>UL 1977</b>        | <b>UL 1977</b>      |
| Rated voltage        | 600 V  | 600 V                 | 600 V               |
| Nominal current UL   | 15 A   | 6 A                   | 6 A                 |
|                      |  |                       |                     |

#### Material data:

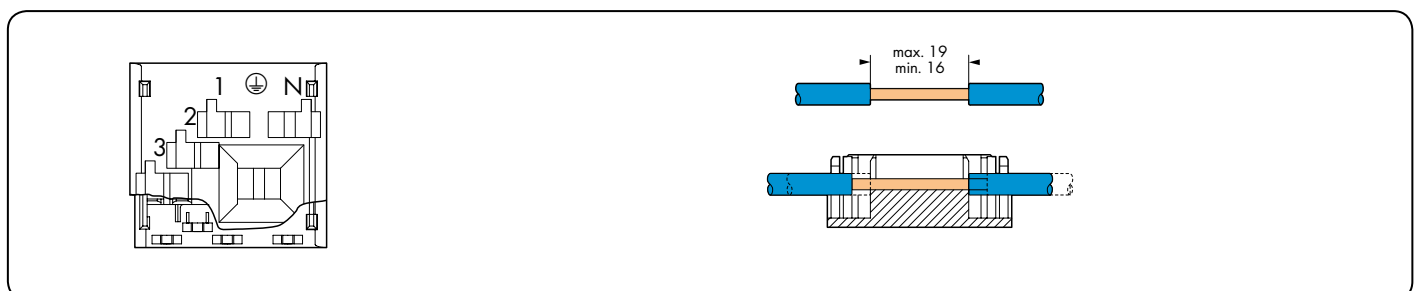
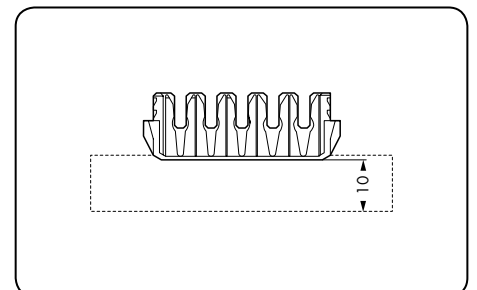
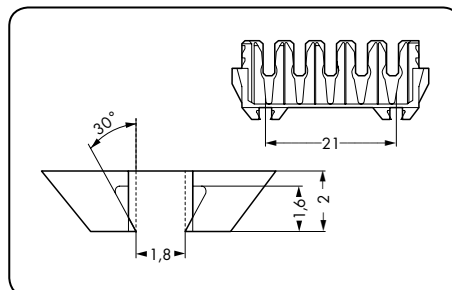
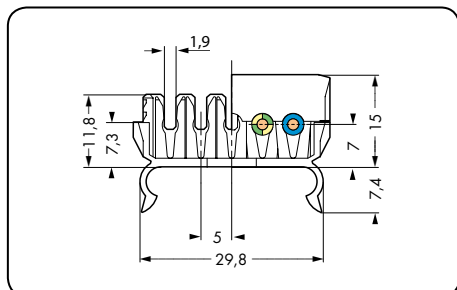
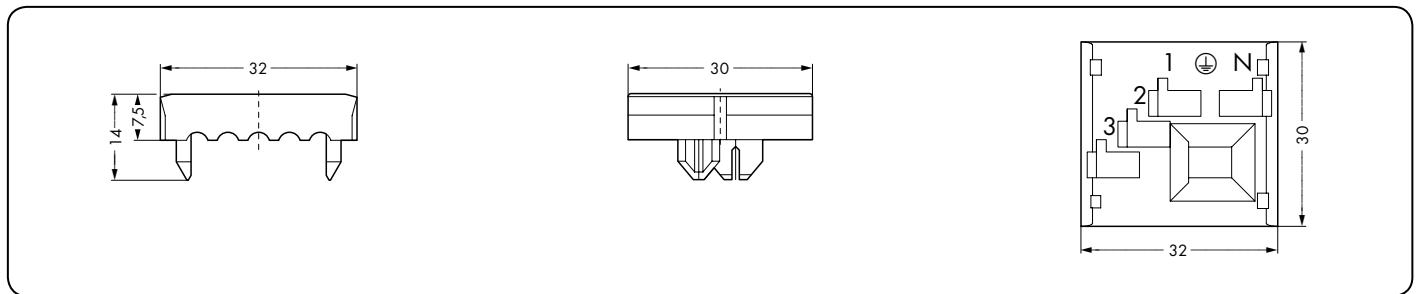
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Polyamide 6.6 (PA 6.6)                 |
| Temperature stability         | 105 °C                                 |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

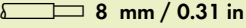
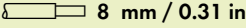
# Connection System with Phase Selection for Fluorescent Lighting Fixtures Conductor Supports – Partially Stripped Conductors

| With snap-on foot                    |                        | With dovetail                        |                        | With custom foot                     |                        |
|--------------------------------------|------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------|
| 5 x 1.5 – 2.5 mm <sup>2</sup> "sol." | 5 x AWG 16 – 14 "sol." | 5 x 1.5 – 2.5 mm <sup>2</sup> "sol." | 5 x AWG 16 – 14 "sol." | 5 x 1.5 – 2.5 mm <sup>2</sup> "sol." | 5 x AWG 16 – 14 "sol." |
| 500 V/4 kV/2 6 A                     | 600 V/6 A              | 500 V/4 kV/2 6 A                     | 600 V/6 A              | 500 V/4 kV/2 6 A                     | 600 V/6 A              |



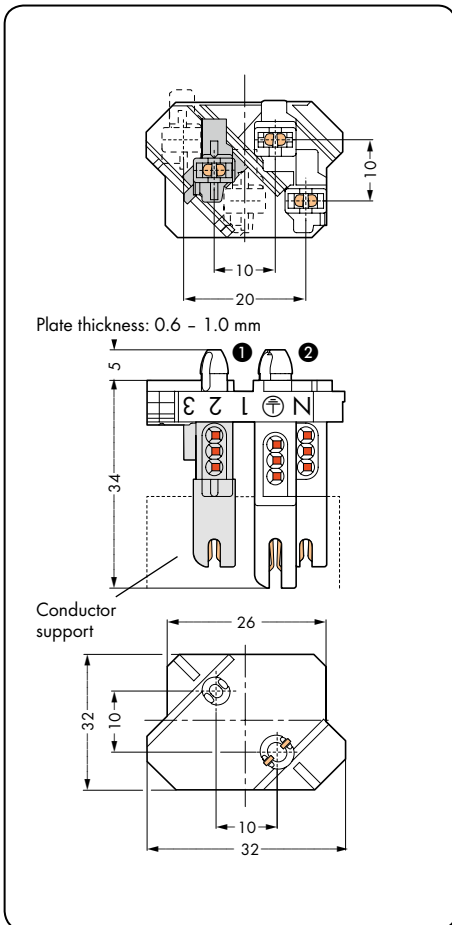
| Pole No.  | Pole Marking | Item No. | Pack. Unit | Pole No.  | Pole Marking | Item No. | Pack. Unit | Pole No.   | Pole Marking | Item No.  | Pack. Unit |
|---|--------------|----------|------------|---|--------------|----------|------------|--|--------------|-----------|------------|
| Conductor support with snap-on foot, consisting of base and cover, with molded pole marking on cover, white |              |          |            | Conductor support with dovetail, consisting of base and cover, with molded pole marking on cover, white |              |          |            | Conductor support with custom foot, consisting of base and cover, with molded pole marking on cover, white |              |           |            |
| <b>Cover</b>  |              |          |            | <b>Cover</b>  |              |          |            | <b>Cover</b>   |              |           |            |
| 5   | N ⊕ 1 2 3    | 267-140  | 500        | 5   | N ⊕ 1 2 3    | 267-140  | 500        | 5  | N ⊕ 1 2 3    | 267-140   | 500        |
| <b>Base</b>   |              |          |            | <b>Base</b>   |              |          |            | <b>Base</b>  |              |           |            |
| 5   |              | 267-141  | 500        | 5   |              | 267-143  | 500        | 5  |              | 267-... ① | 500        |
| ① acc. to customer specifications   |              |          |            |   |              |          |            |  |              |           |            |



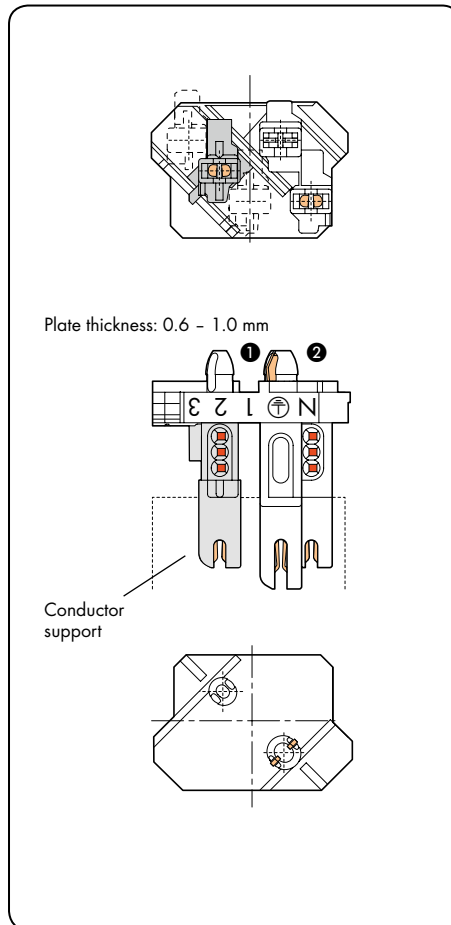
|   |  |  |  |
|---|--|--|--|
| <b>With PUSH WIRE® connection for ground conductors</b><br>0.5 - 1 mm <sup>2</sup> "sol."   AWG 22 - 18 "sol."<br>500 V/4 kV/2 6 A   600 V/6 A<br> 8 mm / 0.31 in |  | <b>With direct ground contact</b><br>0.5 - 1 mm <sup>2</sup> "sol."   AWG 22 - 18 "sol."<br>500 V/4 kV/2 6 A   600 V/6 A<br> 8 mm / 0.31 in |  |
|---|--|--|--|



| Pole No.   | Item No. | Pack. Unit | Pole No.   | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|
| <b>Female connector with snap-in mounting feet and PUSH WIRE® connection for ground conductors, white /gray, with molded pole marking, gray female connector for phase selection to 1 - 2 - 3 (not possible with 5-pole female connectors)</b> |          |            | <b>Female connector with snap-in mounting feet and direct ground contact, white /gray, with molded pole marking, gray female connector for phase selection to 1 - 2 - 3 (not possible with 5-pole female connectors)</b> |          |            |
| 3  | 267-113  | 500        | 3  | 267-123  | 500        |
| 4  | 267-114  | 500        | 4  | 267-124  | 500        |
| 5  | 267-115  | 500        | 5  | 267-125  | 500        |



- ① Diameter of drilled hole: 4.2 mm
- ② Diameter of drilled hole: 5.2 mm



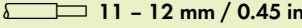
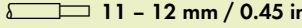
- ① Diameter of drilled hole: 4.2 mm
  - ② Diameter of drilled hole: 5.2 mm
- Drilled hole for direct ground contact must be free of varnish and oxide films. Equipped with varnished metal plates upon request.

# Connector System with Phase Selection for Fluorescent Lighting Fixtures, Conductor Supports with Power Supply Connections

PUSH WIRE®

4

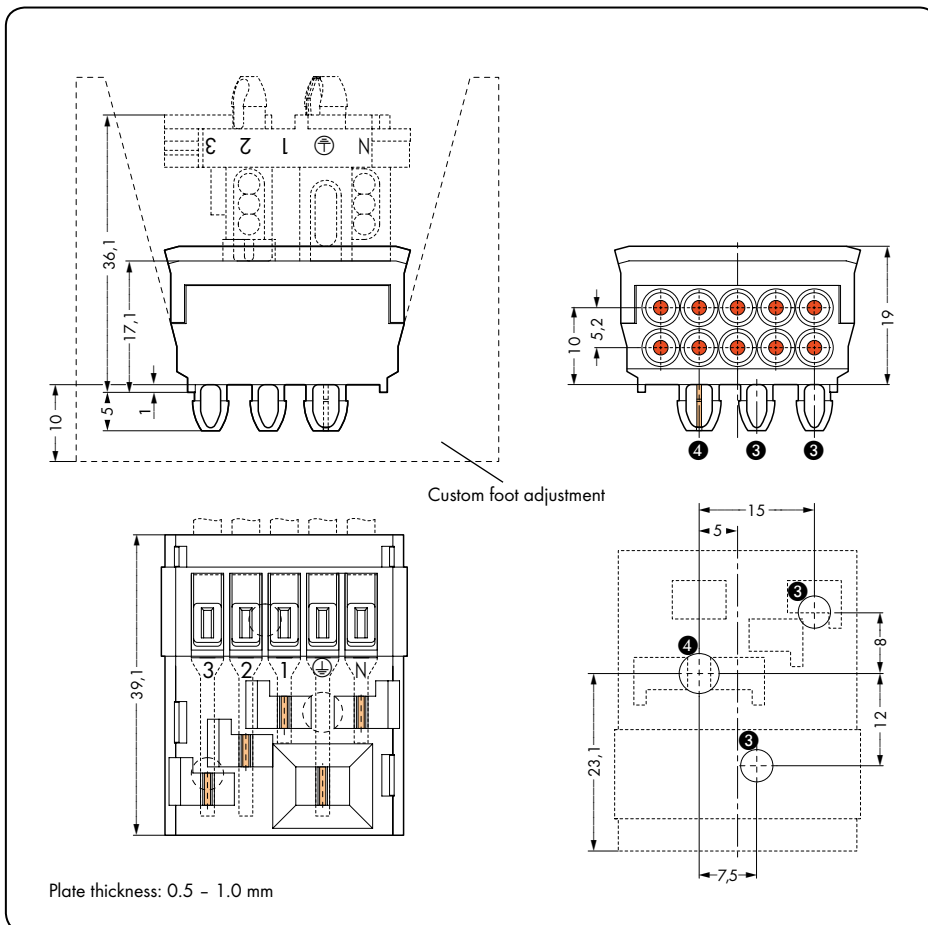
249

|   |                        | With direct ground contact  |                        |
|---|------------------------|---|------------------------|
| 5 x 2/1.5 - 2.5 mm <sup>2</sup> "sol."  | 5 x AWG 16 - 14 "sol." | 5 x 2/1.5 - 2.5 mm <sup>2</sup> "sol."  | 5 x AWG 16 - 14 "sol." |
| 500 V/4 kV/2 6 A  | 600 V/6 A              | 500 V/4 kV/2 6 A  | 600 V/6 A              |
|  |                        |  |                        |



| Pole No.  | Pole Marking | Item No. | Pack. Unit | Pole No.  | Pole Marking | Item No. | Pack. Unit |
|---|--------------|----------|------------|---|--------------|----------|------------|
| Conductor support with power supply connection and snap-in mounting feet, white |              |          |            | Conductor support with power supply connection and snap-in mounting feet, with direct ground contact, white |              |          |            |
| 3   | N PE 1       | 267-313  | 50         | 3   | N PE 1       | 267-303  | 50         |
| 4   | N PE 1 2     | 267-314  | 50         | 4   | N PE 1 2     | 267-304  | 50         |
| 3   | N PE 1 2 3   | 267-315  | 50         | 3   | N PE 1 2 3   | 267-305  | 50         |

4



③ Diameter of drilled hole: 4.2 mm

④ Diameter of drilled hole: 5.2 mm

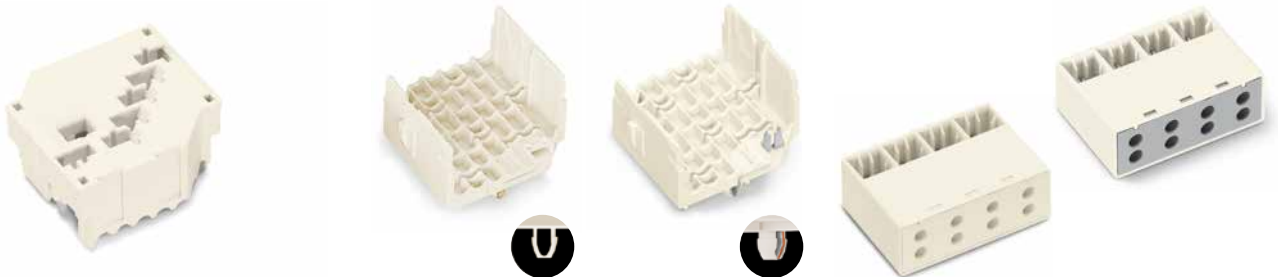
Drilled hole for direct ground contact must be free of varnish and oxide films. Equipped with varnished metal plates upon request.



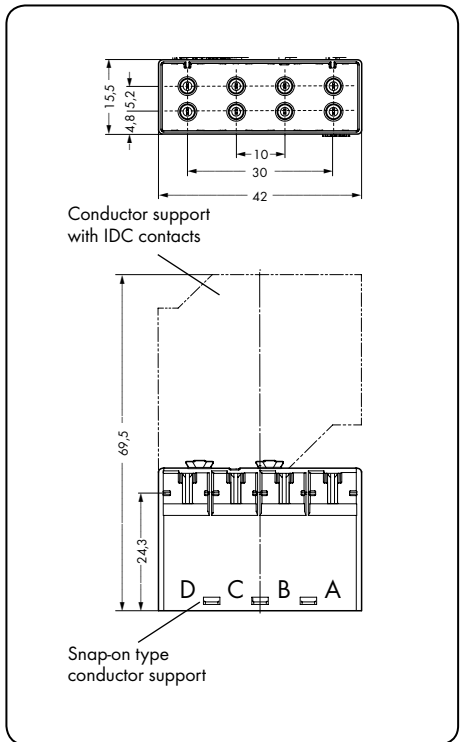
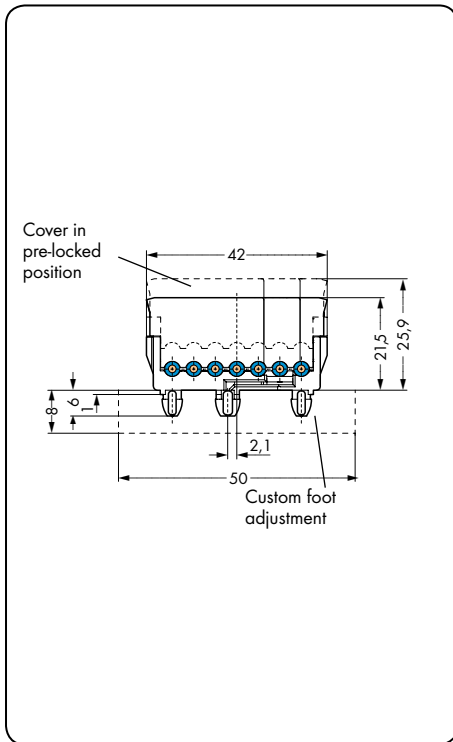
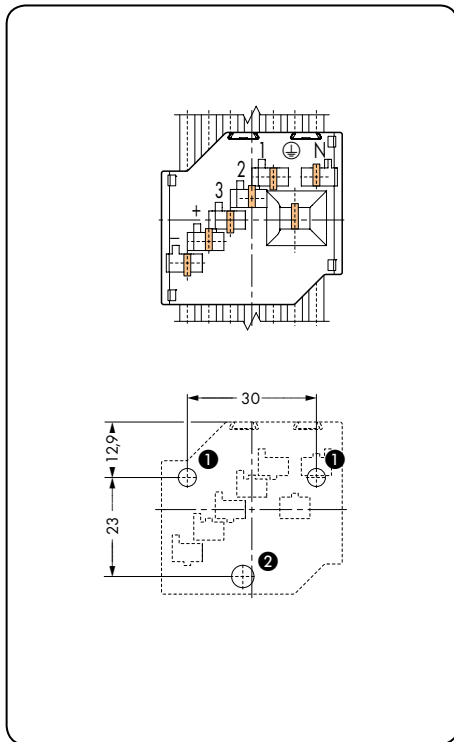
# Connection System with Phase Selection for Fluorescent Lighting Fixtures, Conductor Supports with Insulation Displacement Connection (IDC)



| With dovetail guide and IDC contacts |                    | With direct ground contact       |                    | Snap-on type conductor support |            |
|--------------------------------------|--------------------|----------------------------------|--------------------|--------------------------------|------------|
| 1.5 - 2.5 mm <sup>2</sup> "sol."     | AWG 16 - 14 "sol." | 1.5 - 2.5 mm <sup>2</sup> "sol." | AWG 16 - 14 "sol." | 500 V/4 kV/2 16 A              | 600 V/15 A |
| 500 V/4 kV/2 6 A                     | 600 V/6 A          | 500 V/4 kV/2 6 A                 | 600 V/6 A          |                                |            |



| Pole No.   | Pole Marking  | Item No. | Pack. Unit | Item No.   | Pack. Unit | Color                                  | Item No. | Pack. Unit |
|--|---------------|----------|------------|--|------------|--|----------|------------|
| Conductor support cover, with dovetail guide and IDC contacts, with molded pole marking, white |               |          |            | Conductor support base with snap-in mounting feet, white |            | Snap-on type conductor support, 4-pole |          |            |
|  |               |          |            | without snap-in ground contact                           |            | 0.75 - 1.5 mm <sup>2</sup>             |          |            |
| 5  | N ⊕ 1 2 3     | 267-435  | 50         | 267-412  | 250        | ○ Cover, white                         | 267-324  | 500        |
| 7  | N ⊕ 1 2 3 + - | 267-437  | 50         |  |            | 1.5 - 2.5 mm <sup>2</sup>              |          |            |
|  |               |          |            | with snap-in ground contact                              |            | ● Cover, gray                          |          |            |
|  |               |          |            | 267-422  | 500        | 267-328 500                            |          |            |

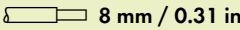
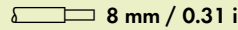
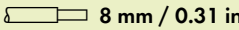


- ❶ Diameter of drilled hole: 4.2 mm
- ❷ Diameter of drilled hole: 5.2 mm



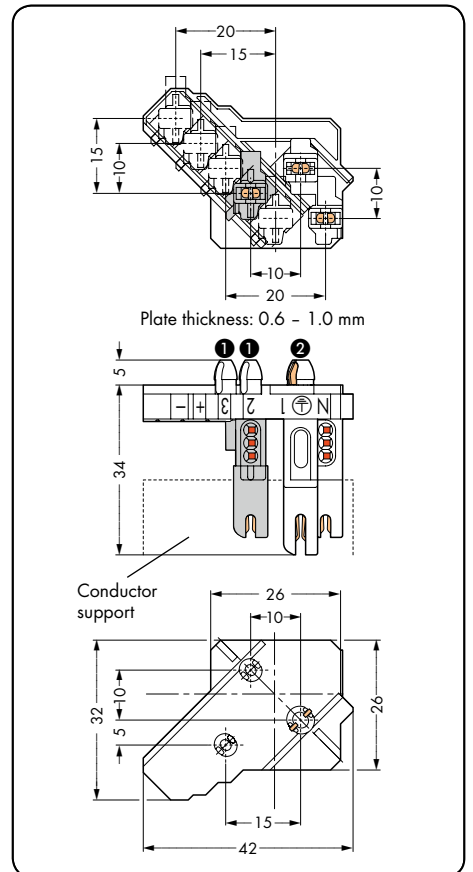
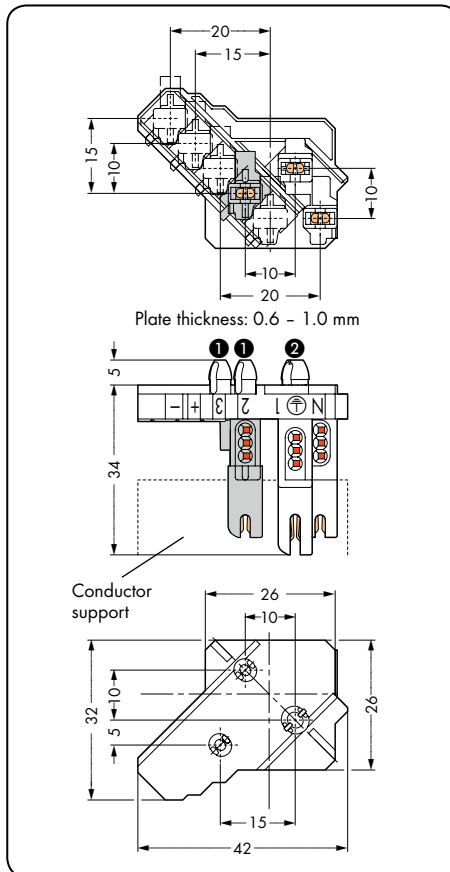
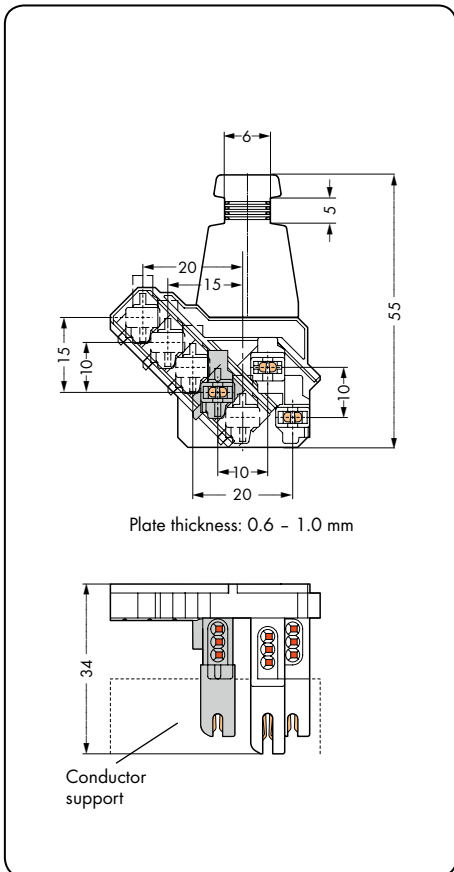
# Connection System with Phase Selection for Fluorescent Lighting Fixtures, Female Connectors for Conductor Supports with Insulation Displacement Connection (IDC)

PUSH WIRE®

|   |  |   |  |   |  |
|---|--|---|--|---|--|
| with PUSH WIRE® connection for ground conductors and strain relief plate<br>0.5 - 1 mm <sup>2</sup> "sol."   AWG 22 - 18 "sol."<br>500 V/4 kV/2 6 A   600 V/6 A<br> 8 mm / 0.31 in |  | With PUSH WIRE® connection for ground conductors<br>0.5 - 1 mm <sup>2</sup> "sol."   AWG 22 - 18 "sol."<br>500 V/4 kV/2 6 A   600 V/6 A<br> 8 mm / 0.31 in |  | With direct ground contact<br>0.5 - 1 mm <sup>2</sup> "sol."   AWG 22 - 18 "sol."<br>500 V/4 kV/2 6 A   600 V/6 A<br> 8 mm / 0.31 in |  |
|---|--|---|--|---|--|



| Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|---|----------|------------|
| Female connector with PUSH WIRE® connection for ground conductors and strain relief plate, white/gray |          |            | Female connector with snap-in mounting feet and PUSH WIRE® connection for ground conductors, white /gray, with molded pole marking, gray female connector for phase selection to 1, 2, 3, +, - (not possible with 7-pole female connectors) |          |            | Female connector with snap-in mounting feet and direct ground contact, white /gray, with molded pole marking, gray female connector for phase selection to 1, 2, 3, +, - (not possible with 7-pole female connectors) |          |            |
| 3   | 267-223  | 500        | 3   | 267-163  | 500        | 3   | 267-173  | 500        |
| 4   | 267-224  | 500        | 4   | 267-164  | 500        | 4   | 267-174  | 500        |
| 5   | 267-225  | 500        | 5   | 267-165  | 500        | 5   | 267-175  | 500        |
| 6   | 267-226  | 500        | 6   | 267-166  | 500        | 6   | 267-176  | 500        |
| 7   | 267-227  | 500        | 7   | 267-167  | 500        | 7   | 267-177  | 500        |



- ① Diameter of drilled hole: 4.2 mm
- ② Diameter of drilled hole: 5.2 mm

- ① Diameter of drilled hole: 4.2 mm
  - ② Diameter of drilled hole: 5.2 mm
- Drilled hole for direct ground contact must be free of varnish and oxide films. Equipped with varnished metal plates upon request.

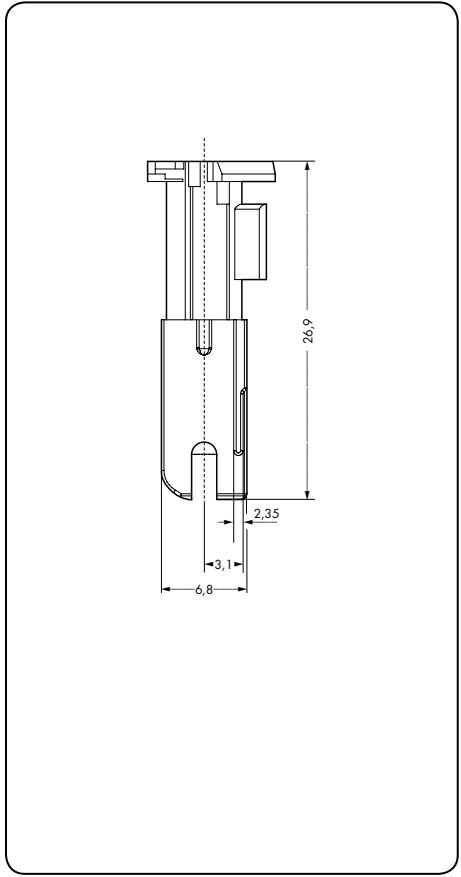
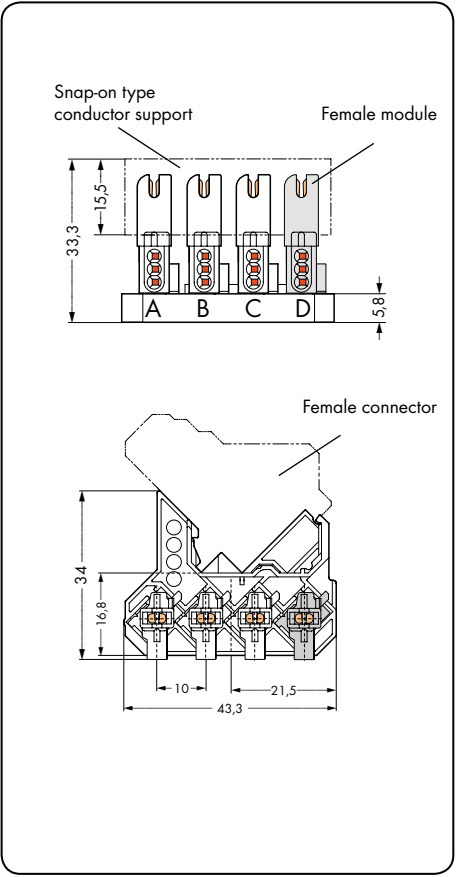
# 4 Connection System with Phase Selection for Fluorescent Lighting Fixtures, Female Connectors/Female Modules for Conductor Supports with Insulation Displacement Connection (IDC)



| Snap-on type female connector    |                    | Female module                        |                    |
|----------------------------------|--------------------|--------------------------------------|--------------------|
| 0.5 - 2.5 mm <sup>2</sup> "sol." | AWG 16 - 14 "sol." | 2 x 1.5 - 2.5 mm <sup>2</sup> "sol." | AWG 16 - 14 "sol." |
| 500 V/4 kV/2 16 A                | 600 V/6 A          | 500 V/4 kV/2 16 A                    | 600 V/6 A          |
| 8 mm / 0.31 in                   |                    | 8 mm / 0.31 in                       |                    |



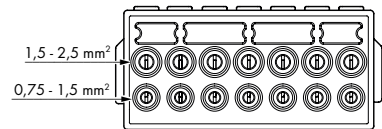
| Pole No.                      | Item No. | Pack. Unit | Color                 | Item No. | Pack. Unit |
|-------------------------------|----------|------------|-----------------------|----------|------------|
| Snap-on type female connector |          |            | Female module, 1-pole |          |            |
| 2                             | 267-232  | 500        | ● black               | 267-109  | 500        |
| 3                             | 267-233  | 500        | ● gray                | 267-101  | 500        |
| 4                             | 267-234  | 500        | ● red                 | 267-120  | 500        |
|                               |          |            | ● yellow              | 267-110  | 500        |
|                               |          |            | ● purple              | 267-119  | 500        |



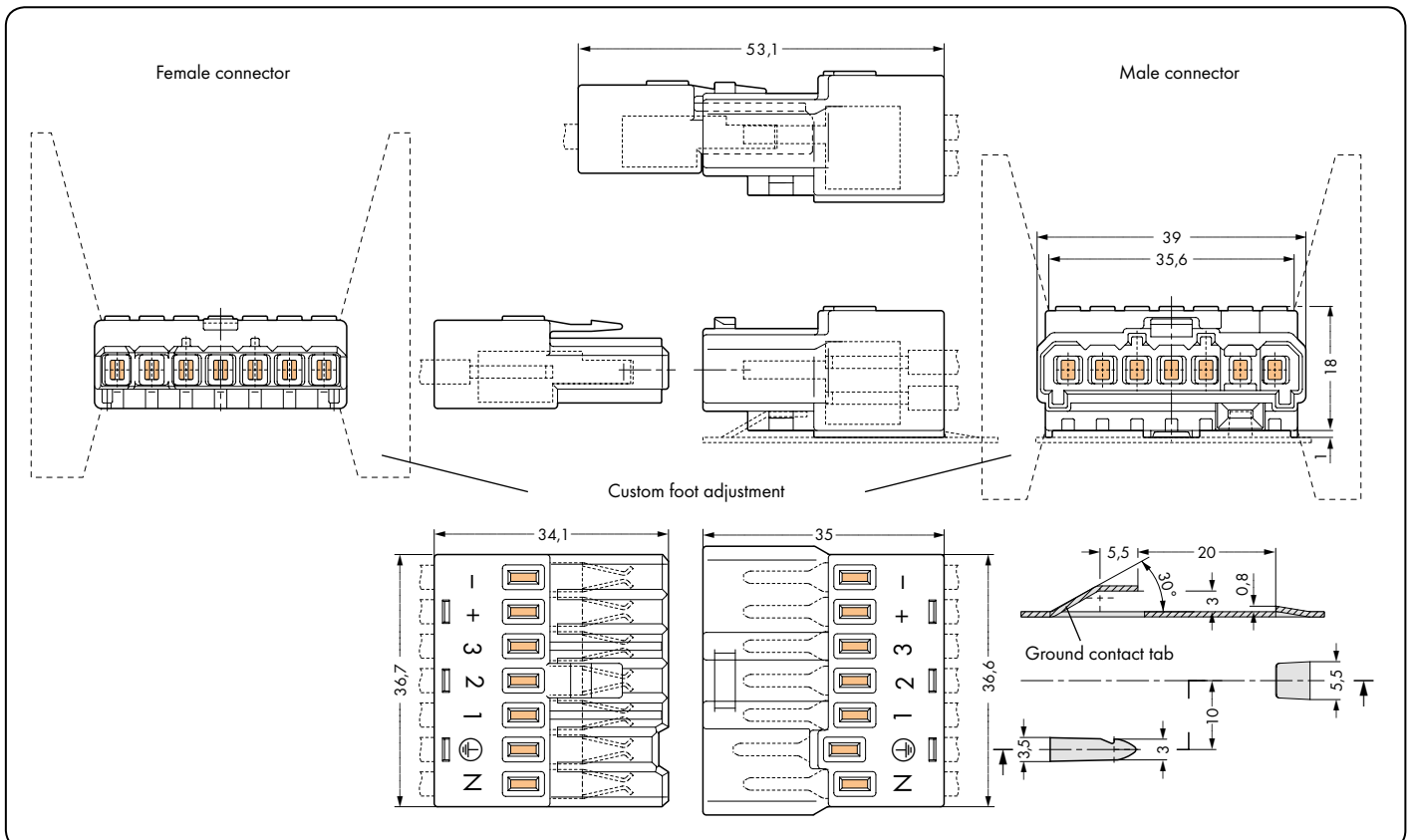
| Without ground contact tab       |                    | With ground contact tab              |                    | With ground contact tab           |                    |
|----------------------------------|--------------------|--------------------------------------|--------------------|-----------------------------------|--------------------|
| 1.5 - 2.5 mm <sup>2</sup> "sol." | AWG 16 - 14 "sol." | 2 x 1.5 - 2.5 mm <sup>2</sup> "sol." | AWG 16 - 14 "sol." | 1.5 - 2.5 mm <sup>2</sup> "sol."  | AWG 16 - 14 "sol." |
| 500 V/4 kV/2 16 A                | 600 V/15 A         | 500 V/4 kV/2 16 A                    | 600 V/15 A         | 0.75 - 1.5 mm <sup>2</sup> "sol." | AWG 18 - 16 "sol." |
| 11 - 12 mm / 0.45 in             |                    | 11 - 12 mm / 0.45 in                 |                    | 11 - 12 mm / 0.45 in              |                    |



| Pole No.                        | Pole Marking  | Item No. | Pack. Unit | Pole No.   | Pole Marking  | Item No. | Pack. Unit | Pole No.  | Pole Marking  | Item No. | Pack. Unit |
|---------------------------------|---------------|----------|------------|--|---------------|----------|------------|---|---------------|----------|------------|
| <b>Female connector, white</b>  |               |          |            | <b>Male connector with connection for ground contact tab, white</b>  |               |          |            | <b>Male connector with connection for ground contact tab, white</b> |               |          |            |
| 7                               | N ⊕ 1 2 3 + - | 267-501  | 50         | 7  | N ⊕ 1 2 3 + - | 267-510  | 50         | 7   | N ⊕ 1 2 3 + - | 267-521  | 50         |
| 5                               | N ⊕ 1 2 3     | 267-502  | 50         | 7  | N ⊕ 1 2 3 + - | 267-516* | 50         |   |               |          |            |
|                                 |               |          |            | 5  | N ⊕ 1 2 3     | 267-519  | 50         |   |               |          |            |
| <b>Female connector, gray</b>   |               |          |            | <b>Male connector with connection for ground contact tab, gray</b>   |               |          |            |   |               |          |            |
| 4                               | A B C D       | 267-506  | 50         | 4  | A B C D       | 267-518* | 50         |   |               |          |            |
| <b>Female connector, yellow</b> |               |          |            | <b>Male connector with connection for ground contact tab, yellow</b> |               |          |            |   |               |          |            |
| 4                               | A B C D       | 267-507  | 50         | 4  | A B C D       | 267-520* | 50         |   |               |          |            |

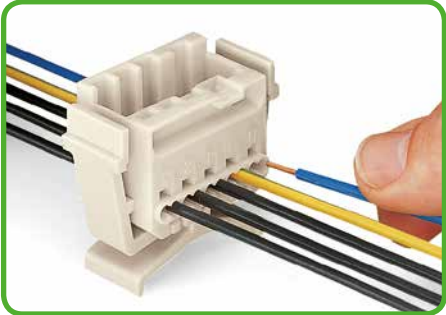


If the power for the 3-phase circuit is supplied via the male connector's termination side, current may only be supplied within one individual lighting fixture, or one continuous row of luminaires.

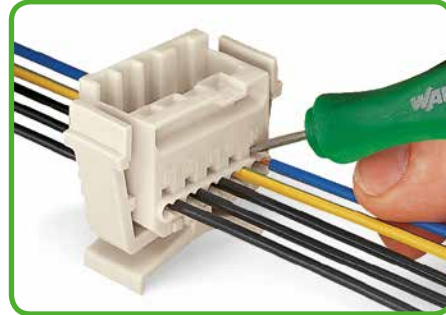


# 4 Description and Handling Connection System with Phase Selection for Fluorescent Lighting Fixtures, 277 Series

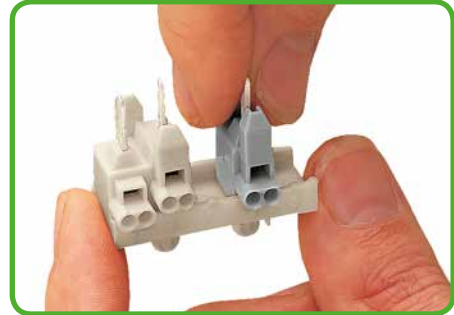
**PUSH WIRE®**



Inserting solid conductor via push-in termination.

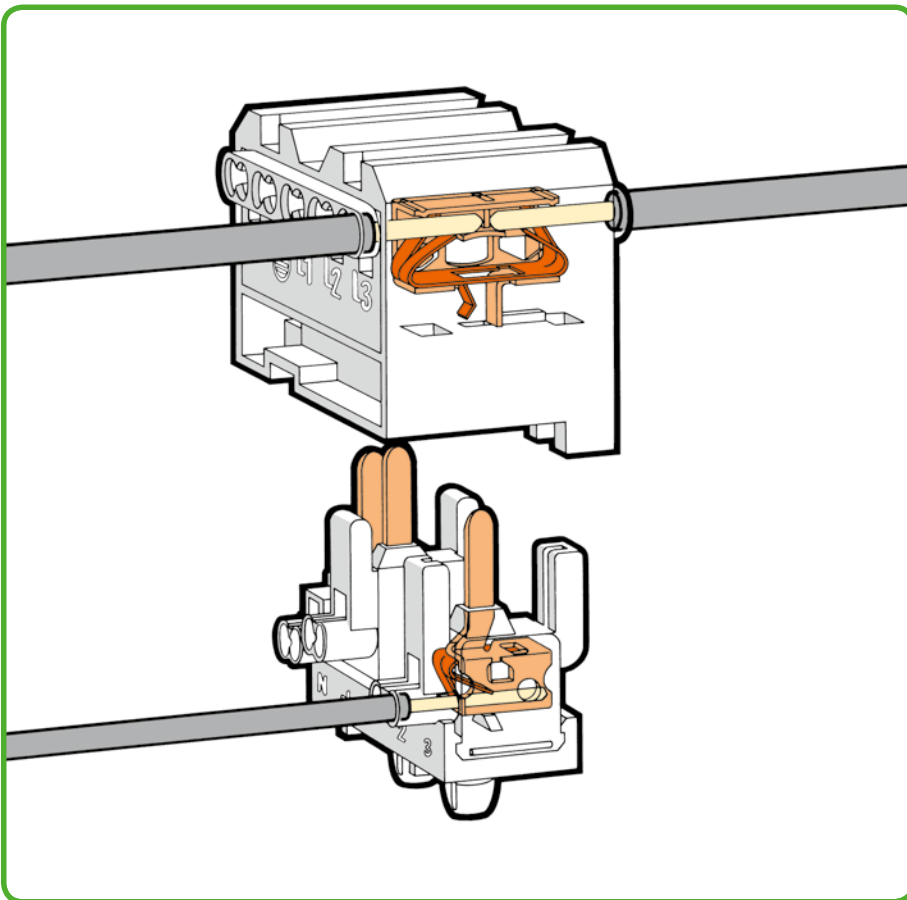


Removing conductor.

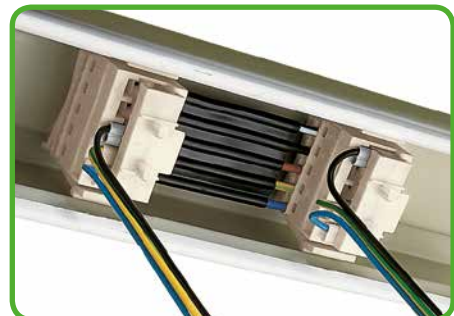


Selecting a phase via movable phase contacts.

## 277 Series



## Phase selection



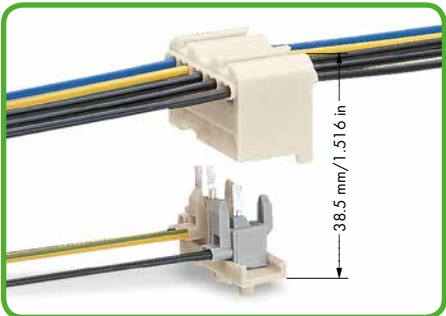
Equal load on each phase via phase selection.

## Connecting a lighting fixture

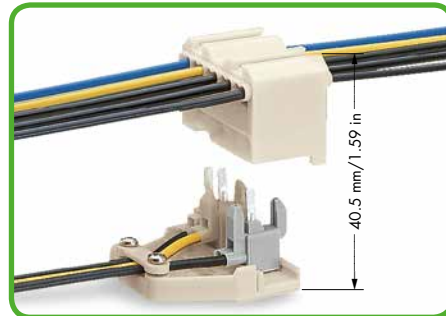


Connecting a lighting fixture equipped with a fixed female connector.

## Dimensions refer to a mated assembly



Female connector without mounting adapter. Male connector with snap-in mounting feet.



Female connector without mounting adapter. Male connector with strain relief.

## Marking

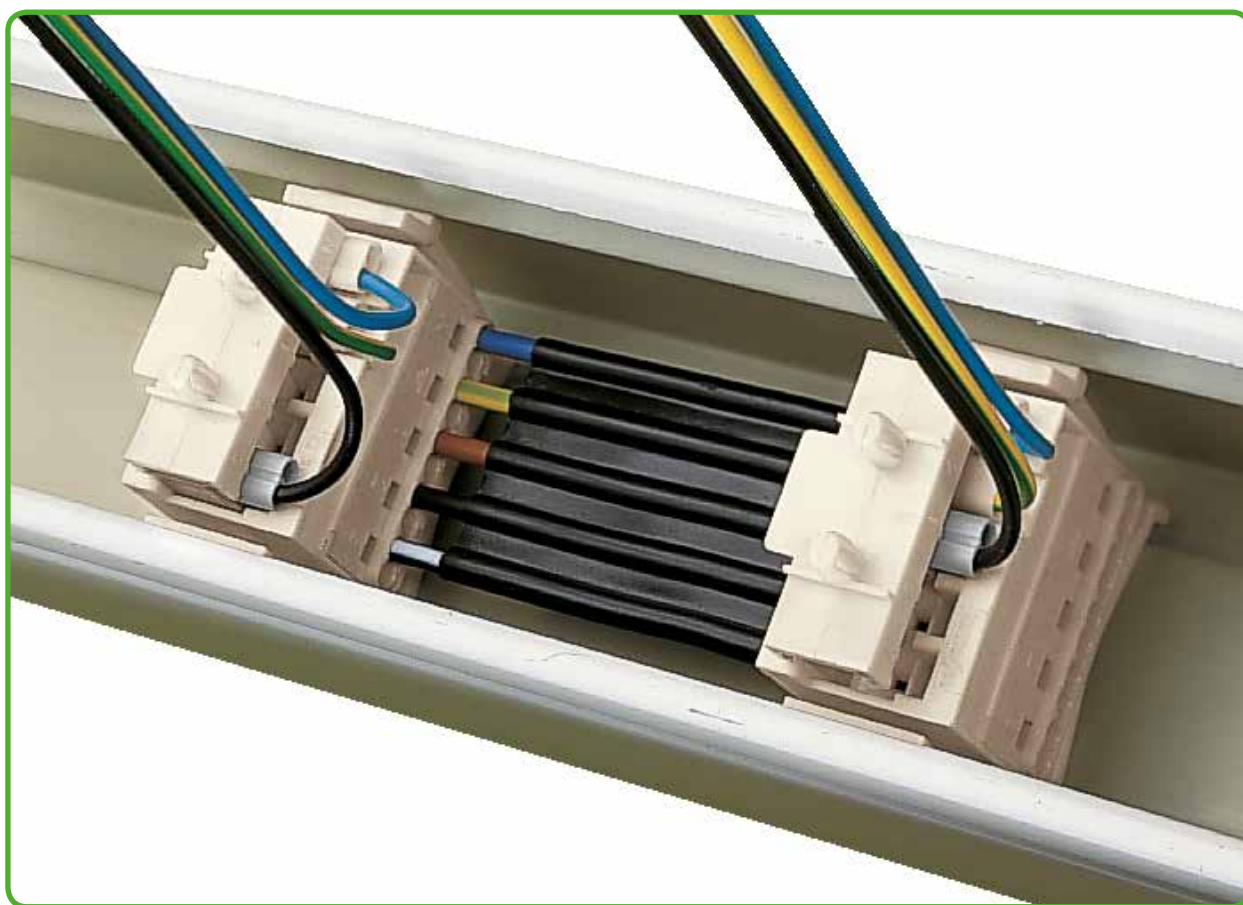


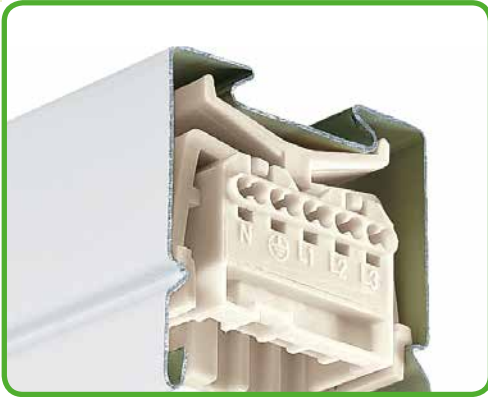
Molded pole marking.



**PUSH WIRE®** clamps the following copper conductors:

solid





- Flexible connection system equipped with PUSH WIRE® connection
- Phase selection

### Technical data:

|                      | Female connector    | Male connector      |  |
|----------------------|---------------------|---------------------|--|
| Rating per           | <b>IEC/EN 61984</b> | <b>IEC/EN 61984</b> |  |
| Overvoltage category | II                  | II                  |  |
| Pollution degree     | 2                   | 2                   |  |
| Rated voltage        | 400 V               | 400 V               |  |
| Rated surge voltage  | 4 kV                | 4 kV                |  |
| Nominal current      | 16 A                | 10 A                |  |
| Approvals per        | <b>UL 1977</b>      | <b>UL 1977</b>      |  |
| Rated voltage        | 600 V               | 600 V               |  |
| Nominal current UL   | 7 A                 | 7 A                 |  |
|                      |                     |                     |  |




### Material data:

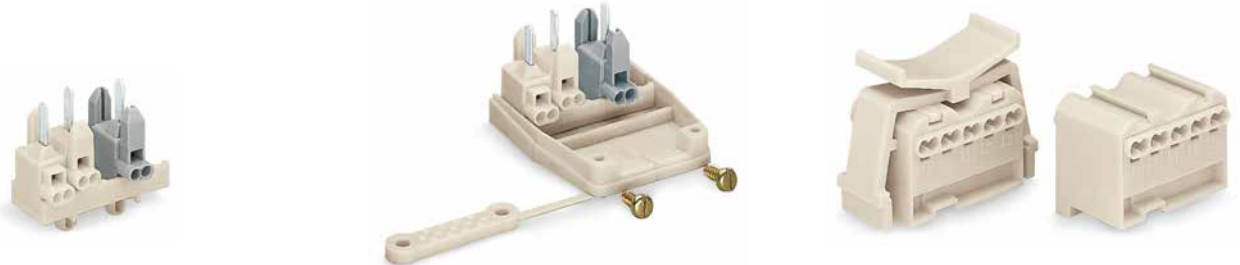
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Polyamide 6.6 (PA 6.6)                 |
| Temperature stability         | 105 °C                                 |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |



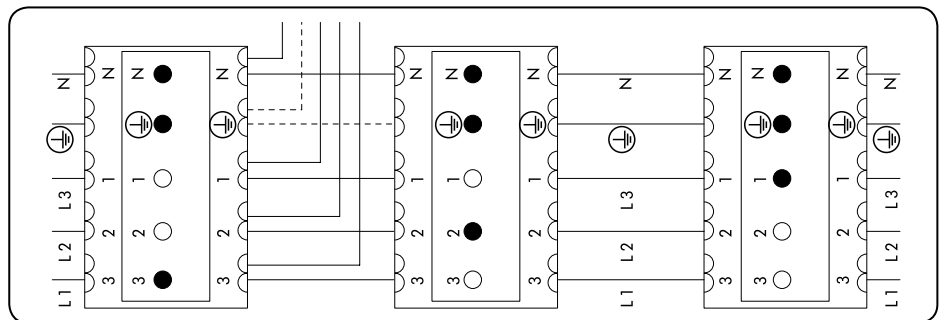
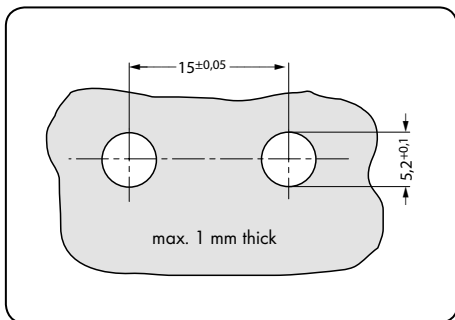
# Connection System with Phase Selection for Fluorescent Lighting Fixtures, Male and Female Connectors

PUSH WIRE®

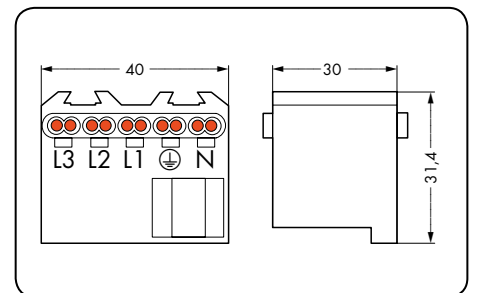
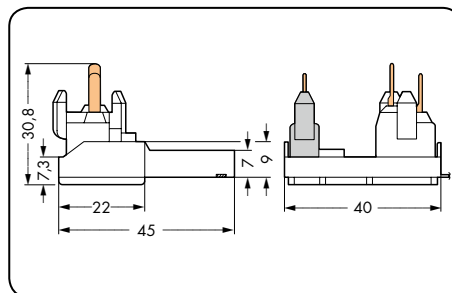
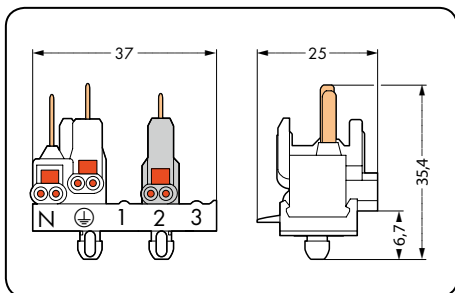
| Male connectors with snap-in mounting feet   |                    | Male connectors with strain relief   |                    | Female connectors with/without mounting adapter  |                        |
|--|--------------------|--|--------------------|--|------------------------|
| 0.5 x 1.0 mm <sup>2</sup> "sol."   | AWG 20 - 18 "sol." | 0.5 x 1.0 mm <sup>2</sup> "sol."   | AWG 20 - 18 "sol." | 5 x 1.5 - 2.5 mm <sup>2</sup> "sol."   | 5 x AWG 16 - 14 "sol." |
| 400 V/4 kV/2 10 A  | 600 V/7 A          | 400 V/4 kV/2 10 A  | 600 V/7 A          | 400 V/4 kV/2 16 A  | 600 V/7 A              |
|  10 - 11 mm / 0.41 in |                    |  10 - 11 mm / 0.41 in |                    |  11 - 12 mm / 0.45 in |                        |



| Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|---|----------|------------|
| Male connector with snap-in mounting feet, white/gray, with molded pole marking, gray, movable phase selection contacts (not for 5-pole male connector) |          |            | Male connector with strain relief, white/gray, with molded pole marking, gray, movable phase selection contacts (not for 5-pole male connector) |          |            | Female connector, white, with molded pole marking |          |            |
| 3   | 277-123  | 500        | 3   | 277-126  | 250        | without mounting adapter                          |          |            |
| 4   | 277-124  | 500        | 4   | 277-127  | 250        | 5   | 277-121  | 250        |
| 5   | 277-125  | 500        | 5   | 277-128  | 250        | with mounting adapter                             |          |            |
|   |          |            |   |          |            | 5   | 277-131  | 250        |



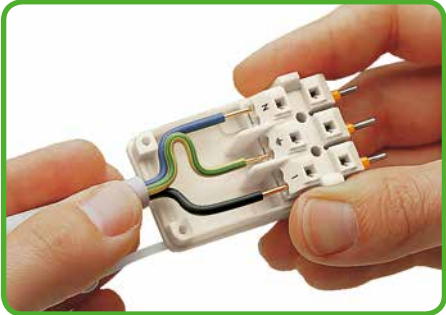
Wiring example: Equal load on each phase via phase selection on male connector, without altering existing wiring.



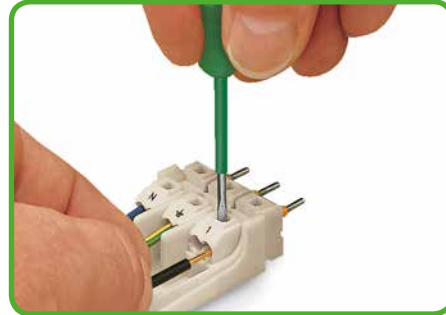


# 4 Description and Handling Fully Polarized Connectors for Lighting Fixtures with Push-Wire Connection

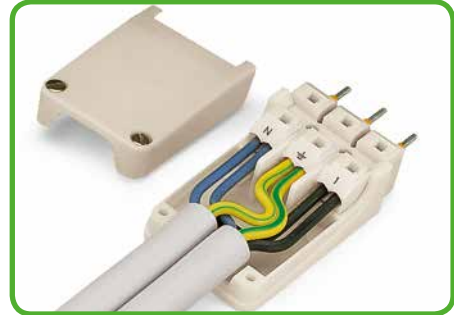
## Push-wire connection



Connection of conductors:  
Push conductor in FIRMLY until FULLY inserted!

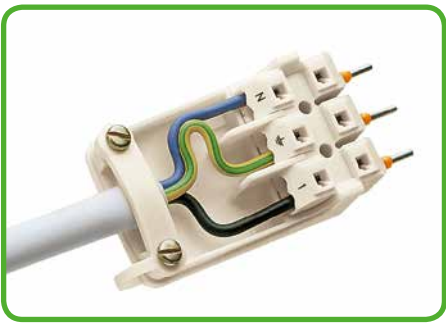


Removal of conductor



Clamping of 2 conductors, each conductor is clamped independently

### Strain relief



Strain relief with cable clamp

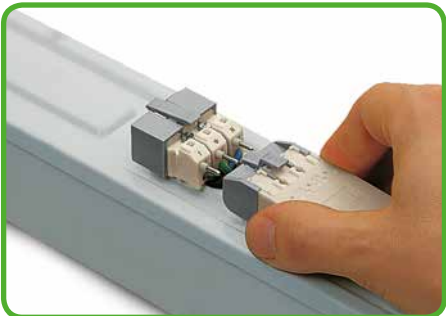
### Application



Lighting fixture ready for connection with center receptacles (internal wiring complete with WAGO terminal blocks)

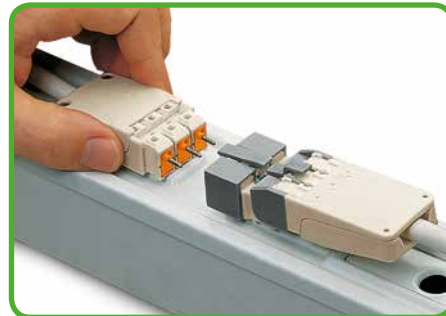


### Supply



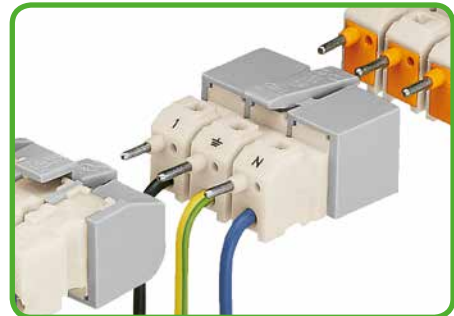
Supply of lighting fixture by pushing the female connector onto the center receptacle

### Plugging



Plugging in the female connector with connecting lead to the next lighting fixture

### Marking



Series marking of poles



**PUSH WIRE®** clamps the following copper conductors:

solid

Strain relief



Male connector with complete strain relief device

Connection of 2 lighting fixtures

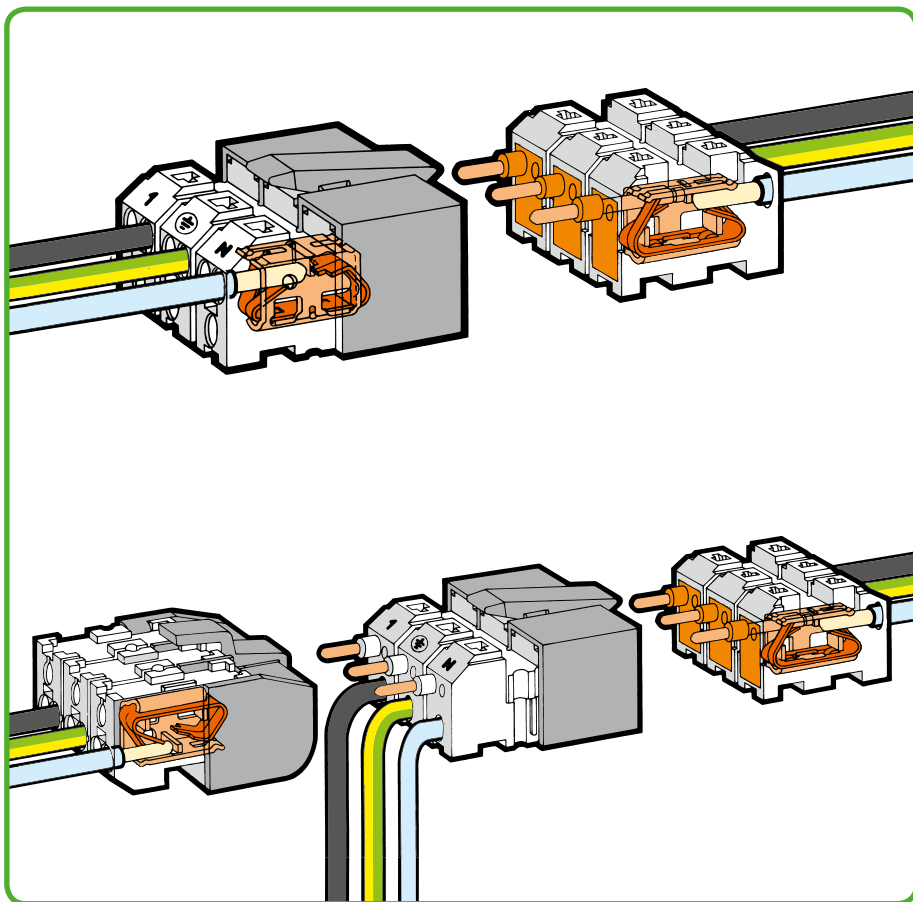


Mating of connecting cables of two lighting fixtures

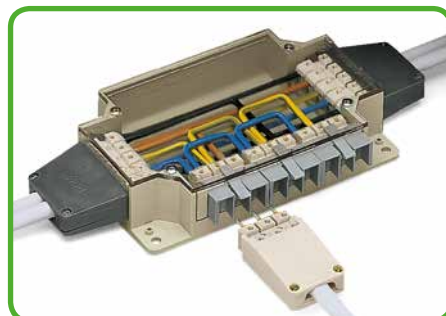
Application



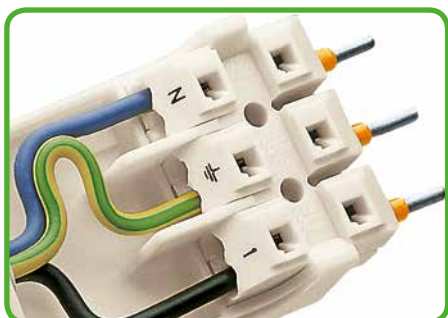
Lighting fixture ready for connection



Application



Ceiling or flushmount distribution



Series marking of poles

Coding



Connector with additional coding pins/holes

# 4 Fully Polarized Connectors for Lighting Fixtures in Dropped Ceilings

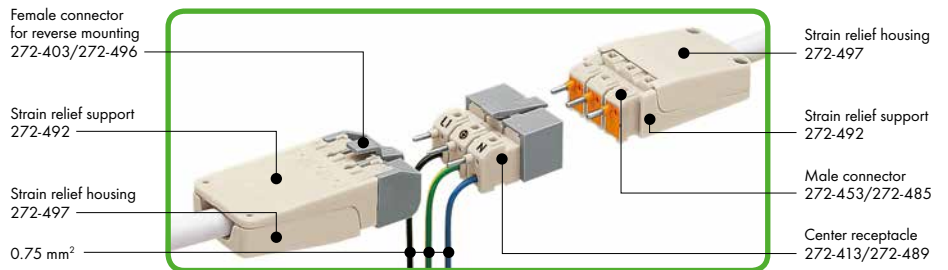
|   |  |
|---|--|
| <p>2 x 0.5 – 2.5 mm<sup>2</sup> "s"   2 x AWG 20 – 14 sol.<br/>                 200 V/4 kV/3 ①<br/>                 400 V/4 kV/2 ①<br/>                 16 A</p> <p> 8 – 9 mm / 0.33 in</p> | <p>1 x 0.5/0.75 mm<sup>2</sup> "s"   1 x AWG 20 – 18 sol.<br/>                 200 V/4 kV/3 ①<br/>                 400 V/4 kV/2 ①<br/>                 16 A (through connection),<br/>                 6 A (connection to the lighting fixture)</p> <p> 8 – 9 mm / 0.33 in</p> |
|---|--|

- ① In grounded (earthed) supply systems  
 200/400 V = rated voltage  
 4 kV = rated surge voltage  
 2/3 = pollution degree  
 (see also section 10)
- ② Suitable for assembly without tool
- ③ or of a cable NYM 3 x 2.5 mm<sup>2</sup>/5 x 2.5 mm<sup>2</sup>  
 (AWG 14)



| Description   | No. of Poles   | Item No.                      | Pack. Unit                | No. of Poles  | Item No.                         | Pack. Unit |
|---|--|-------------------------------|---------------------------|---|----------------------------------|------------|
| <b>Fully polarized connectors for lighting fixtures in dropped ceilings</b> , for screw or screwless fixing (WAGO pins), with standard printing, push-in type strain relief devices, coding mask of center receptacle and female connectors with integrated locking device. | <b>Male connector</b> , with preceding earth contact, white        |                               |                           | <b>Center receptacle</b> , with coding mask, white/gray                           |                                  |            |
|   | 3  | <b>272-453/272-485</b>        | 500                       | 3   | <b>272-413/272-489</b>           | 500        |
|   | <b>Diitto</b> , with additional coding pins (poles ⊕ and 1), white |                               |                           | <b>Diitto</b> , with additional coding pins and holes (poles ⊕ and 1), white/gray |                                  |            |
|   | 3  | <b>272-453/272-469</b>        | 500                       | 3   | <b>272-413/272-419</b>           | 500        |
|   | 5  | <b>272-455/272-485</b>        | 250                       | 5   | <b>272-415/272-491</b>           | 250        |
| <b>Accessories</b>  |  |                               |                           |   |                                  |            |
| <b>Strain relief support</b> , with clamp for 2 cables  | 3-pole   | 3 x 1.5 mm <sup>2</sup> ③     | <b>272-492</b>            | 500   |                                  |            |
|   | NYM max.   | 5-pole                        | 5 x 1.5 mm <sup>2</sup> ③ | <b>272-493</b>  | 250                              |            |
| <b>Strain relief housing</b> , for 2 cables NYM max.  | 3-pole   | 3 x 1.5 mm <sup>2</sup> ③     | <b>272-497</b>            | 500   |                                  |            |
|   | 5-pole   | 5 x 1.5 mm <sup>2</sup> ③     | <b>272-498</b>            | 250   |                                  |            |
| <b>Pins</b> , for plate thickness   |  |                               |                           |   | 1 mm/0.039 in <b>271-702</b>     | 1000       |
|   |  |                               |                           |   | 1 mm/0.039 in <b>271-711</b> ②   | 1000       |
|   |  |                               |                           |   | 1.5 mm/0.059 in <b>271-712</b> ② | 1000       |
| <b>Pin terminals</b> , insulated  | 0.5/0.75 mm <sup>2</sup>   | I <sub>N</sub> 6/8 A, green   | <b>209-151</b>            | 100   |                                  |            |
|   | 1/1.5 mm <sup>2</sup>  | I <sub>N</sub> 10/16 A, beige | <b>209-164</b>            | 100   |                                  |            |
|   | 2.5 mm <sup>2</sup>  | I <sub>N</sub> 20 A, blue     | <b>209-157</b>            | 100   |                                  |            |
| <b>Crimping tool</b> , for pin terminals, crimping range 0.5-2.5 mm <sup>2</sup> /AWG 20 – 14   |  |                               | <b>210-176</b>            | 1   |                                  |            |

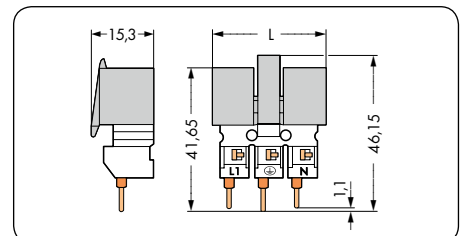
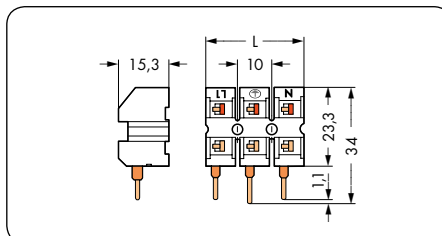
A fully polarized 3-pole connector for lighting fixtures in dropped ceilings is consisting of the following element:



## Dimensions (in mm)

| No. of Poles | Dimension L (mm) |                   |                  |
|--------------|------------------|-------------------|------------------|
|              | Male connector   | Center receptacle | Female connector |
| 3            | 28.5             | 33                | 33               |
| 5            | 48.5             | 53                | 53               |

Overall length of the connectors in mated condition: 142 mm/5.591 in (incl. strain relief device)



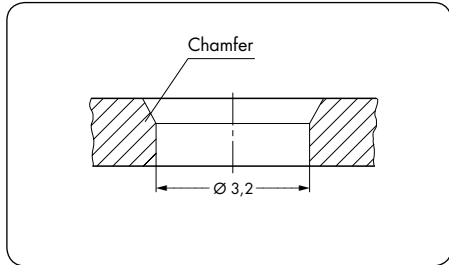
\* For further approvals with corresponding ratings see pages 528 to 531.



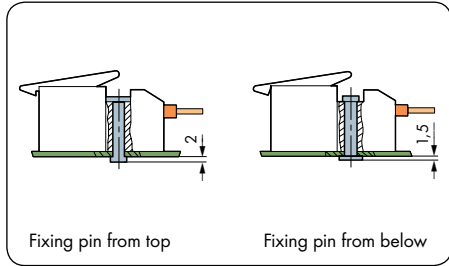
|   |   |  |
|---|---|--|
| 2 x 0.5 – 2.5 mm <sup>2</sup> “s”<br>200 V/4 kV/3 ①<br>400 V/4 kV/2 ①<br>16 A | 2 x AWG 20 – 14 sol.<br><br>300 V, 10 A |  |
| 8 – 9 mm / 0.33 in  |   |  |



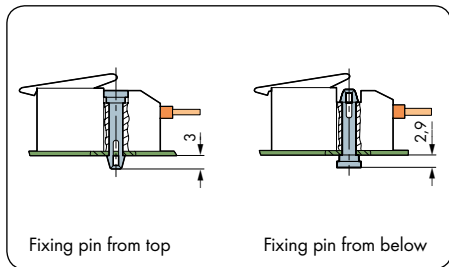
| No. of Poles   | Item No.               | Pack. Unit |
|--|------------------------|------------|
| <b>Female connector for reverse mounting,</b>              |                        |            |
| with coding mask, white-/grey                              |                        |            |
| 3  | <b>272-403/272-496</b> | 500        |
| <b>Ditto, with additional coding holes (poles ⊕ and 1)</b> |                        |            |
| 3  | <b>272-403/272-486</b> | 500        |
| 5  | <b>272-405/272-514</b> | 250        |
|  |                        |            |
| 3 x 1.5 mm <sup>2</sup> ③                                  | <b>272-492</b>         | 500        |
| 5 x 1.5 mm <sup>2</sup> ③                                  | <b>272-493</b>         | 250        |
| 3 x 1.5 mm <sup>2</sup> ③                                  | <b>272-497</b>         | 500        |
| 5 x 1.5 mm <sup>2</sup> ③                                  | <b>272-498</b>         | 250        |
|  |                        |            |
| I <sub>N</sub> 6/8 A, green                                | <b>209-151</b>         | 100        |
| I <sub>N</sub> 10/16 A, beige                              | <b>209-164</b>         | 100        |
| I <sub>N</sub> 20 A, blue                                  | <b>209-157</b>         | 100        |
|  | <b>210-176</b>         | 1          |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |
|  |                        |            |



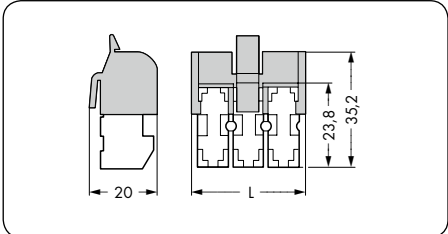
Dimensions of fixing holes for pins



Screwless fixing with pins 271-702



Screwless fixing with pins 271-711 or 271-712



Connector with additional coding pins/holes

# 4 Fully Polarized Connectors for Lighting Fixtures

|   |   |
|---|---|
| <p>2 x 0.5 – 2.5 mm<sup>2</sup> "s"   2 x AWG 20 – 14 sol.<br/>                 200 V/4 kV/3 ①   300 V, 10 A ②<br/>                 400 V/4 kV/2 ①   300 V, 10 A ③<br/>                 16 A</p> <p> 8 – 9 mm / 0.33 in</p> | <p>2 x 0.5 – 2.5 mm<sup>2</sup> "s"   2 x AWG 20 – 14 sol.<br/>                 200 V/4 kV/3 ①   300 V, 10 A ②<br/>                 400 V/4 kV/2 ①   300 V, 10 A ③<br/>                 16 A</p> <p> 8 – 9 mm / 0.33 in</p> |
|---|---|

- ① In grounded (earthed) supply systems  
 200/400 V = rated voltage  
 4 kV = rated surge voltage  
 2/3 = pollution degree  
 (see also section 10)
- ② If 2 cables NYM are connected at the same time  
 only up to 0.75 mm<sup>2</sup> "s"/AWG 18 "solid"!
- ③ Suitable for mounting without tool

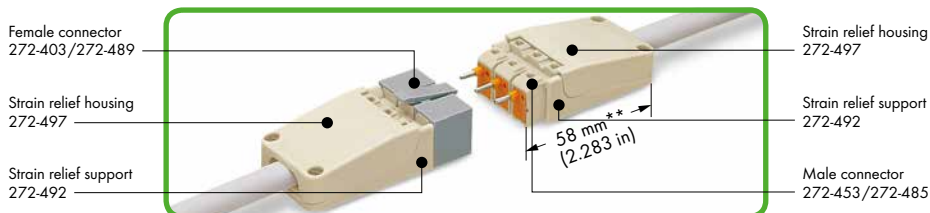


| Description  | No. of Poles                 | Item No.        | Pack. Unit | No. of Poles  | Item No.        | Pack. Unit |
|--|------------------------------|-----------------|------------|---|-----------------|------------|
| <b>Fully polarized connectors for lighting fixtures,</b><br>for screw or screwless fixing (WAGO pins), with<br>standard printing, push-in type strain relief devices,<br>coding mask of female connectors with integrated locking<br>device. | <b>Male connector, white</b> |                 |            | <b>Female connector, with coding mask, white/gray</b> |                 |            |
|  | 2                            | 272-452         | 500        | 2   | 272-402/272-488 | 500        |
|  | 3                            | 272-453/272-485 | 500        | 3   | 272-403/272-489 | 500        |
|  | 4                            | 272-454/272-485 | 250        | 4   | 272-404/272-490 | 250        |
|  | 5 with coding pins           | 272-455/272-485 | 250        | 5   | 272-405/272-491 | 250        |

### Accessories

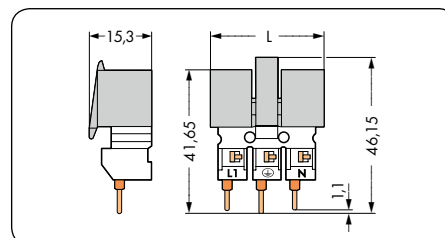
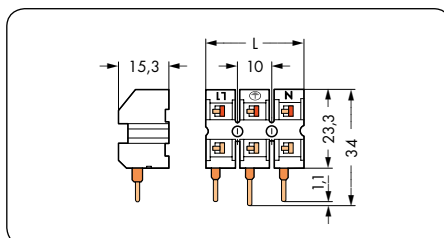
|  |  |                          |                                |           |      |                                |           |      |
|--|--|--------------------------|--------------------------------|-----------|------|--------------------------------|-----------|------|
|  | <b>Strain relief support,</b>  | 2-pole                   | 2 x 1.5 mm <sup>2</sup> ②      | 272-536   | 500  | 2 x 1.5 mm <sup>2</sup> ②      | 272-536   | 500  |
|  | with clamp for 2 cables  | 3-pole                   | 3 x 1.5 mm <sup>2</sup>        | 272-492   | 500  | 3 x 1.5 mm <sup>2</sup>        | 272-492   | 500  |
|  | NYM max.   | 4-pole                   | 4 x 1.5 mm <sup>2</sup>        | 272-516   | 250  | 4 x 1.5 mm <sup>2</sup>        | 272-516   | 250  |
|  |  | 5-pole                   | 5 x 1.5 mm <sup>2</sup>        | 272-493   | 250  | 5 x 1.5 mm <sup>2</sup>        | 272-493   | 250  |
|  |  |                          |                                |           |      |                                |           |      |
|  | <b>Strain relief housing,</b>  | 2-pole                   | 2 x 1.5 mm <sup>2</sup> ②      | 272-537   | 500  | 2 x 1.5 mm <sup>2</sup> ②      | 272-537   | 500  |
|  | for 2 cables NYM max.  | 3-pole                   | 3 x 1.5 mm <sup>2</sup>        | 272-497   | 500  | 3 x 1.5 mm <sup>2</sup>        | 272-497   | 500  |
|  |  | 4-pole                   | 4 x 1.5 mm <sup>2</sup>        | 272-517   | 250  | 4 x 1.5 mm <sup>2</sup>        | 272-517   | 250  |
|  |  | 5-pole                   | 5 x 1.5 mm <sup>2</sup>        | 272-498   | 250  | 5 x 1.5 mm <sup>2</sup>        | 272-498   | 250  |
|  | <b>Strain relief housing,</b>  | 3-pole                   | up to 6 x 2.5 mm <sup>2</sup>  | 272-494   | 500  | up to 6 x 2.5 mm <sup>2</sup>  | 272-494   | 500  |
|  | for single insulated<br>conductors   | 5-pole                   | up to 10 x 2.5 mm <sup>2</sup> | 272-495   | 250  | up to 10 x 2.5 mm <sup>2</sup> | 272-495   | 250  |
|  | <b>Pins,</b>   |                          | 1 mm/0.039 in                  | 271-702   | 1000 | 1 mm/0.039 in                  | 271-702   | 1000 |
|  | for plate thickness  |                          | 1 mm/0.039 in                  | 271-711 ③ | 1000 | 1 mm/0.039 in                  | 271-711 ③ | 1000 |
|  |  |                          | 1.5 mm/0.059 in                | 271-712 ③ | 1000 | 1.5 mm/0.059 in                | 271-712 ③ | 1000 |
|  | <b>Pin terminals,</b>  | 0.5/0.75 mm <sup>2</sup> | I <sub>N</sub> 6/8 A, green    | 209-151   | 100  | I <sub>N</sub> 6/8 A, green    | 209-151   | 100  |
|  |  | 1/1.5 mm <sup>2</sup>    | I <sub>N</sub> 10/16 A, beige  | 209-164   | 100  | I <sub>N</sub> 10/16 A, beige  | 209-164   | 100  |
|  | insulated  | 2.5 mm <sup>2</sup>      | I <sub>N</sub> 20 A, blue      | 209-157   | 100  | I <sub>N</sub> 20 A, blue      | 209-157   | 100  |
|  | <b>Crimping tool,</b><br>for pin terminals, crimping range<br>0.5-2.5 mm <sup>2</sup> /AWG 20 - 14 |                          |                                | 210-176   | 1    |                                | 210-176   | 1    |

A fully polarized 3-pole connector is consisting of the following elements:



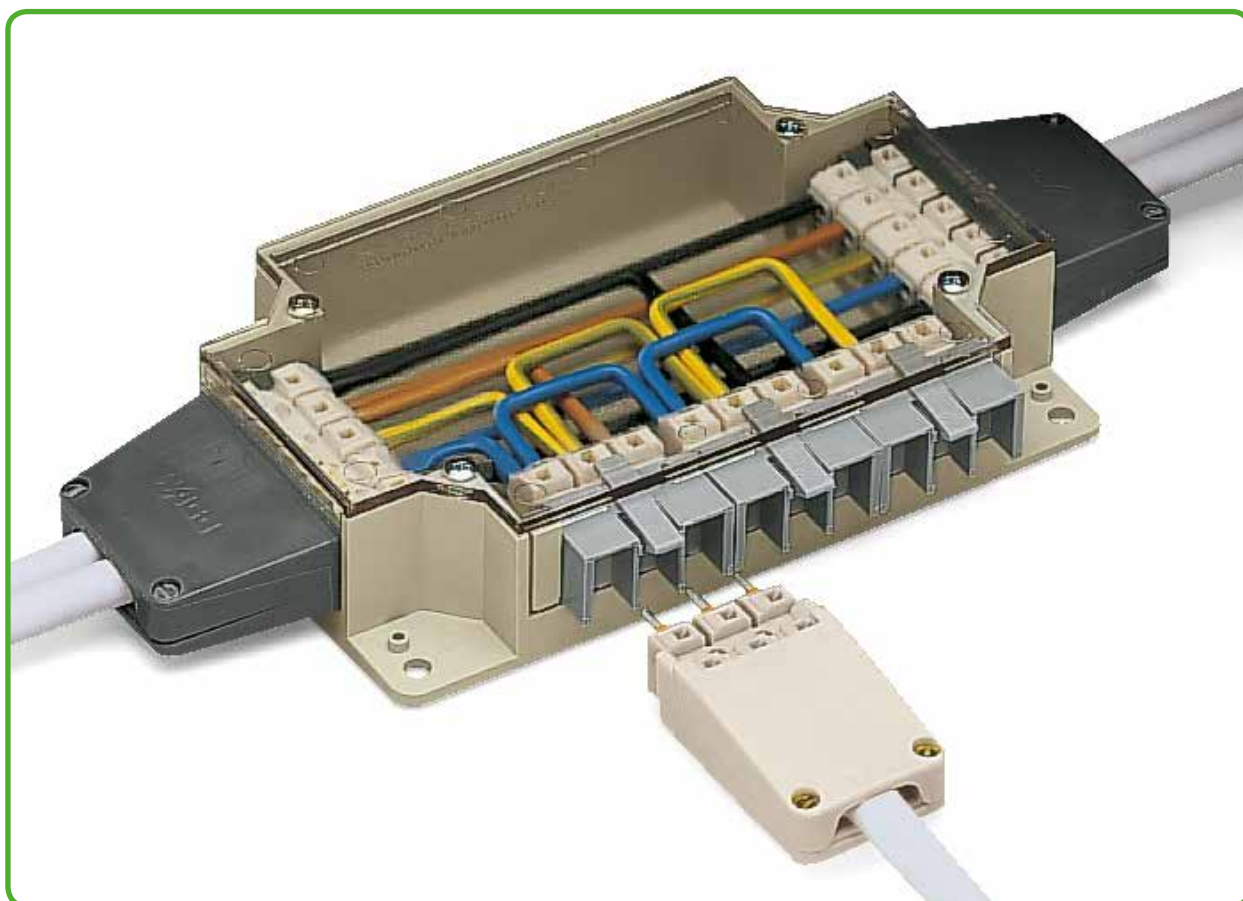
### Dimensions (in mm)

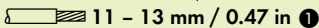
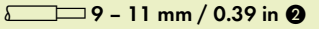
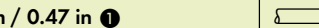
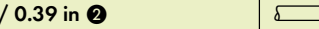
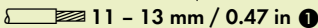
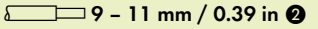

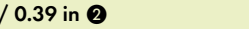
| No. of Poles | Dimension L (mm) Male connector | Dimension L (mm) Female connector |
|--------------|---------------------------------|-----------------------------------|
| 2            | 18.5                            | 23                                |
| 3            | 28.5                            | 33                                |
| 4            | 38.5                            | 43                                |
| 5            | 48.5                            | 53                                |



\*\* Overall length of the connectors in mated condition:  
 117 mm / 4.606 in (incl. strain relief devices)

\* For further approvals with corresponding ratings see pages 528 to 531.



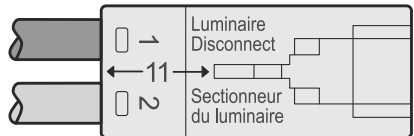
|   |   |   |   |
|---|---|---|---|
| <b>2-conductor plug ①</b><br>AWG 18 - 12 „s“<br>AWG 16 - 12 „st“<br> 11 - 13 mm / 0.47 in ①<br> 9 - 11 mm / 0.39 in ② | <b>1-conductor socket ②</b><br>AWG 18 „s“<br>600 V, 6 AⓈ<br> 11 - 13 mm / 0.47 in ①<br> 9 - 11 mm / 0.39 in ② | <b>2-conductor plug ①</b><br>AWG 18 - 12 „s“<br>AWG 16 - 12 „st“<br> 11 - 13 mm / 0.47 in ①<br> 9 - 11 mm / 0.39 in ② | <b>1-conductor socket ②</b><br>AWG 18 „s“<br>600 V, 6 AⓈ<br> 11 - 13 mm / 0.47 in ①<br> 9 - 11 mm / 0.39 in ② |
|---|---|---|---|



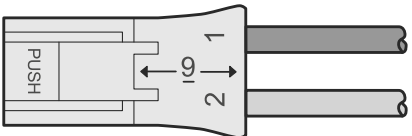
- ① 2-conductor plug
- ② 1-conductor socket

| Pole No.                              | Item No. | Pack. Unit | Pole No.                              | Item No. | Pack. Unit |
|---------------------------------------|----------|------------|---------------------------------------|----------|------------|
| <b>Luminaire disconnect connector</b> |          |            | <b>Luminaire disconnect connector</b> |          |            |
| 2                                     | 873-902  | 40         | 3                                     | 873-903  | 20         |
|                                       |          |            |                                       |          |            |
|                                       |          |            |                                       |          |            |
|                                       |          |            |                                       |          |            |
|                                       |          |            |                                       |          |            |

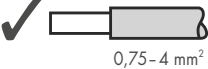
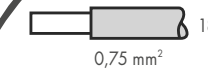
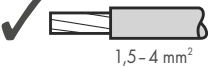

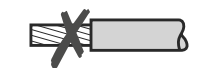


Touchproof connectors are required for ballast supply cables in the USA and Canada.  
 When exchanging a ballast:  
 1. The touchproof plug-in connection is disconnected first  
 2. The ballast is replaced  
 3. Network connection is restored by plugging the connection.  
 This streamlines ballast replacement while enhancing safety by safeguarding the installer from electric shock.  
 The 873 Series connectors are approved according to UL 2459 and CSA 22.2 for this type of application.

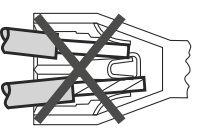
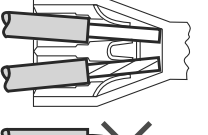


Luminaire Disconnect  
Sectionneur du luminaire



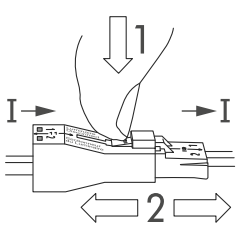
PUSH

|  |  |
|--|--|
| ✓  18-12 AWG CU, SOL, UL/CSA<br>0,75 - 4 mm <sup>2</sup>  | ✓  18 AWG CU, SOL, UL/CSA<br>0,75 mm <sup>2</sup>   |
| ✓  16-12 AWG (≤ 19 str.) CU, UL<br>14-12 AWG (≤ 19 str.) CU, CSA<br>1,5 - 4 mm <sup>2</sup><br>One-time use only - Do not reuse<br>N'utiliser qu'une seule fois | ✗ <br>✗  |
|  0.45 inch / 11 - 13 mm   |  0.35 inch / 9 - 11 mm  |

**Correct method of solid wire removal**  
 Hold wire to be removed in one hand, the connector in the other - twist slightly while pulling the connector.

**Déconnexion correcte du conducteur rigide**  
 Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur - Opérer une légère torsion du conducteur tout en tirant sur le connecteur.



The 873 Series is also approved to EN 60998 and EN 61984 as follows:

**EN 60998**  
 0.75 mm<sup>2</sup> solid, 6A for female part  
 1.5 mm<sup>2</sup> - 4 mm<sup>2</sup> solid, 32A for male part  
 400 V/4 kV/2

**EN 61984**  
 0.75 mm<sup>2</sup> solid, 6A for female part  
 0.75 mm<sup>2</sup> - 4 mm<sup>2</sup> solid, 32A for male part  
 400 V/4 kV/2



# Luminaire Disconnect Connectors (US Version) 873 Series

|   |   |
|---|---|
| <b>2-conductor plug ①</b><br>AWG 18 - 12 „s“<br>AWG 16 - 12 „st“<br>11 - 13 mm / 0.47 in ①<br>9 - 11 mm / 0.39 in ② | <b>1-conductor socket ②</b><br>AWG 18 „s“ |
|---|---|



- ① 2-conductor plug
- ② 1-conductor socket

| Pole No.                                    | Item No.       | Pack. Unit |
|---|----------------|------------|
| <b>Luminaire disconnect connector,</b>      |                |            |
| preceding ground contact in center position |                |            |
| 3   | <b>873-953</b> | 500        |
|   |                |            |
|   |                |            |
|   |                |            |
|   |                |            |

Touchproof connectors are required for ballast supply cables in the USA and Canada.  
When exchanging a ballast:  
**1.** The touchproof plug-in connection is disconnected first  
**2.** The ballast is replaced  
**3.** Network connection is restored by plugging the connection.  
 This streamlines ballast replacement while enhancing safety by safeguarding the installer from electric shock.  
 The 873 Series connectors are approved according to UL 2459 and CSA 22.2 for this type of application.

|   |  |
|---|--|
| <p>✓  18-12 AWG CU, SOL, UL/CSA<br/>0,75 - 4 mm<sup>2</sup></p> <p>✓  16-12 AWG (≤ 19 str.) CU, UL<br/>14-12 AWG (≤ 19 str.) CU, CSA<br/>1,5 - 4 mm<sup>2</sup><br/>One-time use only - Do not reuse<br/>N'utiliser qu'une seule fois</p> <p></p> | <p>✓  18 AWG CU, SOL, UL/CSA<br/>0,75 mm<sup>2</sup></p> <p></p> <p></p> |
| <p> 0.45 inch / 11 - 13 mm</p>  | <p> 0.35 inch / 9 - 11 mm</p>  |

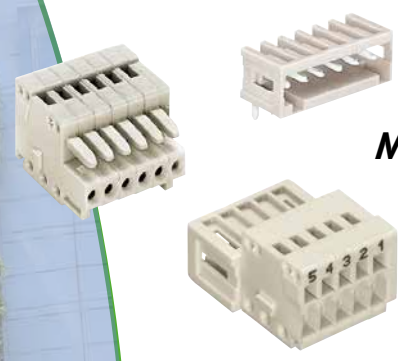
**Correct method of solid wire removal**  
Hold wire to be removed in one hand, the connector in the other - twist slightly while pulling the connector.

**Déconnexion correcte du conducteur rigide**  
Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur - Opérer une légère torsion du conducteur tout en tirant sur le connecteur.

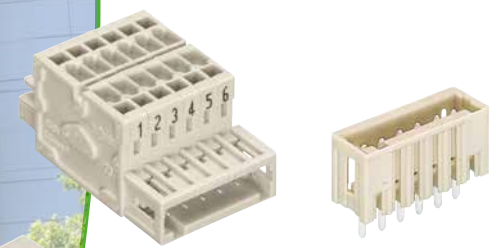
The 873 Series is also approved to EN 60998 and EN 61984 as follows:

**EN 60998**  
0.75 mm<sup>2</sup> solid, 6A for female part  
1.5 mm<sup>2</sup> - 4 mm<sup>2</sup> solid, 32A for male part  
400 V/4 kV/2

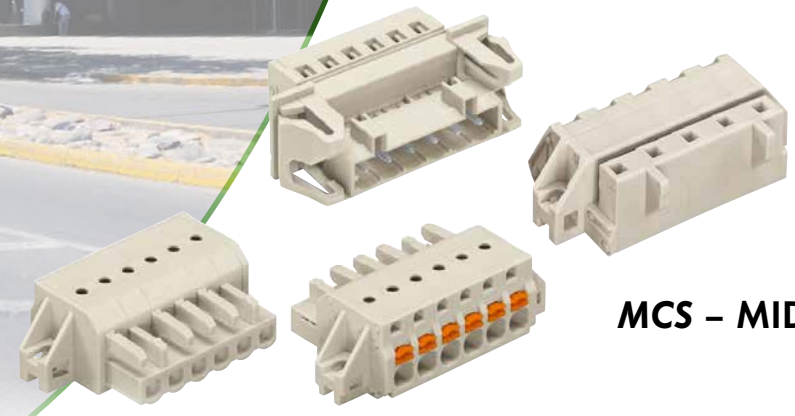
**EN 61984**  
0.75 mm<sup>2</sup> solid, 6A for female part  
0.75 mm<sup>2</sup> - 4 mm<sup>2</sup> solid, 32A for male part  
400 V/4 kV/2



**MCS - MICRO**



**MCS - MINI**



**MCS - MIDI**

# 5



**MCS – MICRO**  
Pin Spacing 2.5 mm / 0.098 in

270 - 283



**MCS – MINI**  
Pin Spacing 3.5 mm / 0.138 in  
Pin Spacing 3.81 mm / 0.15 in

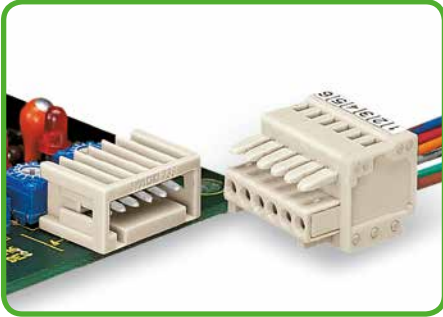
286 - 322



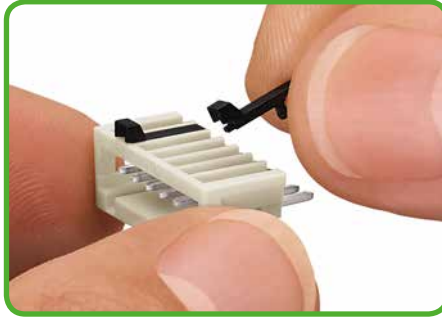
**MCS – MIDI**  
Pin Spacing 5 mm / 0.197 in

326 - 367

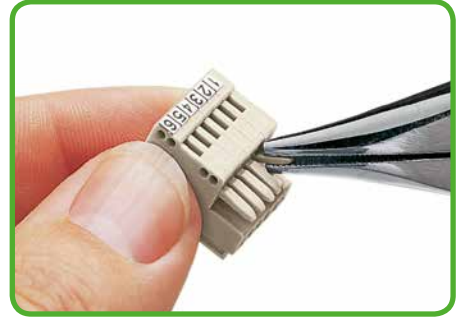
# Description and Handling MCS - MULTI CONNECTION SYSTEM MICRO



Male header and female connector - 100% protected against mismatching. Only mating halves with the same pole number can be connected together.



Coding a male header - fitting coding key(s).



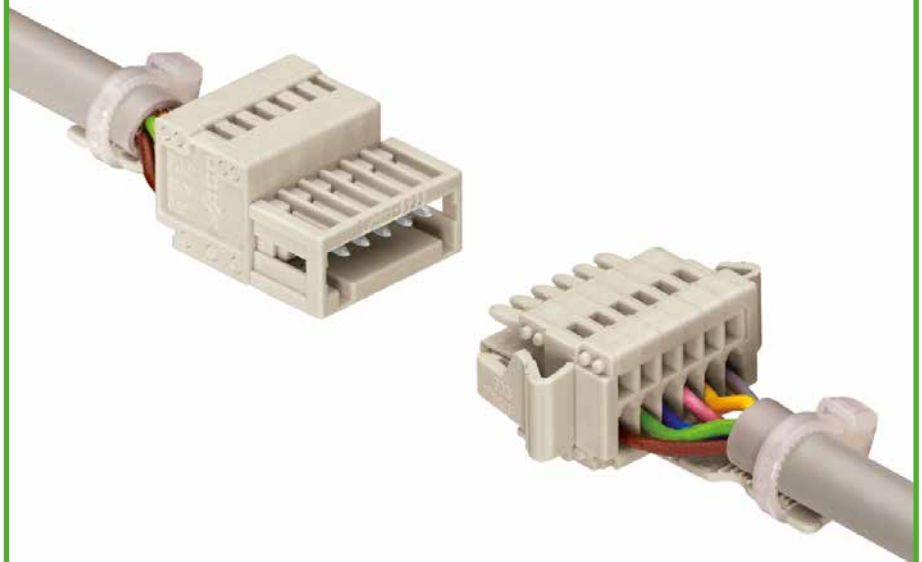
Coding a female connector - removing coding finger(s).

## 733 Series



"Wire-to-wire" connection of single conductors.

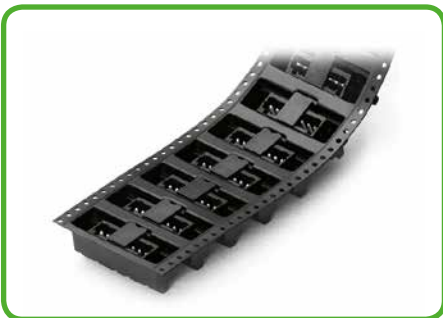
100% protected against mismatching



"Wire-to-wire" connection of multi-core cables  
Plug-in connection using strain relief plates and locking levers



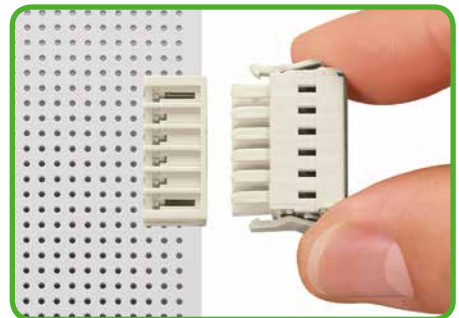
THR male headers for reflow soldering in SMT production.



Tape-and-reel packaging for THR male headers.



Locking levers prevent accidental disconnection.



CAGE CLAMP® clamps the following copper conductors:\*

solid



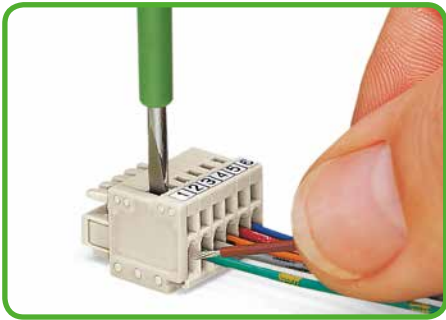
stranded



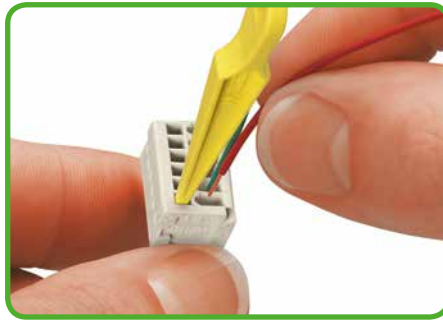
fine-stranded, also with tinned single strands

\* For aluminum conductors, see notes in Section 9.

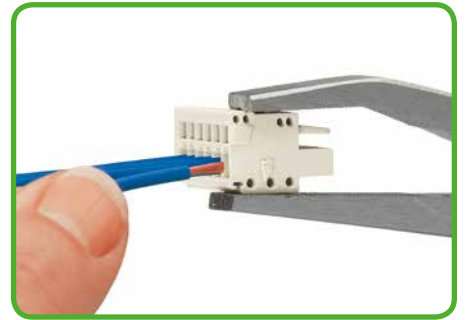




Inserting conductor via (2.5 x 0.4) mm screwdriver. Actuation perpendicular to conductor termination.



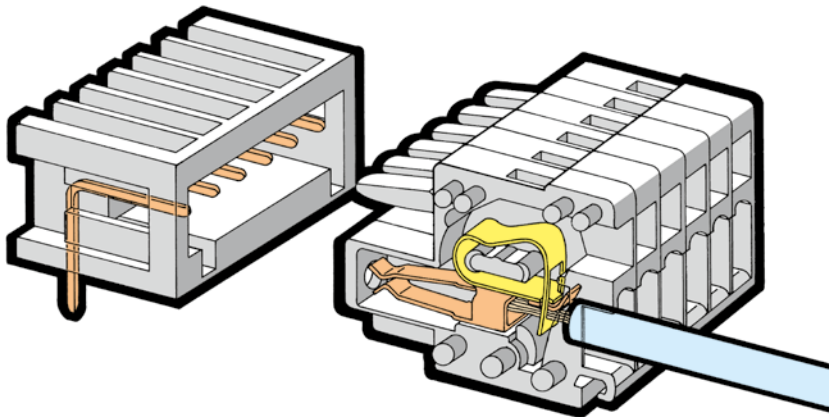
Inserting conductor via 233-331 operating tool. Operation parallel to conductor termination.



Inserting conductor via 210-251 operating tool.

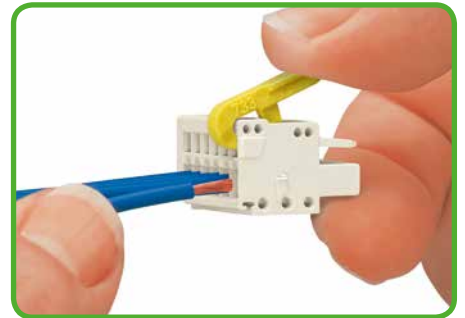
733 Series

100% protected against mismatching



MCS-MICRO

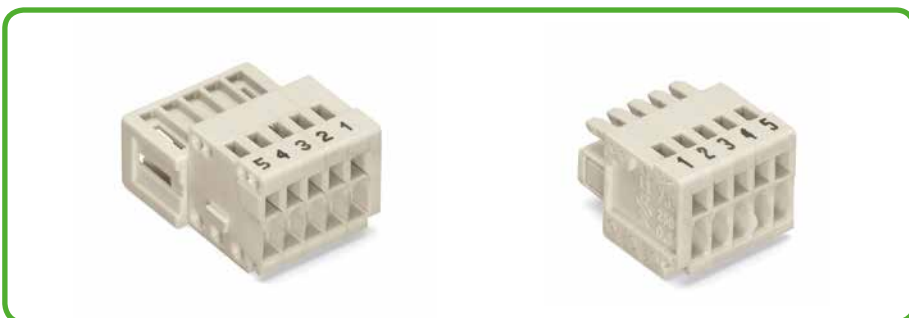
Pin spacing 2.5 mm/0.098 in



Inserting conductor via 733-191 operating lever.



Testing with 1 mm Ø test pin (735-500), touch contact with current bar.



Marking options via self-adhesive marker strips or factory direct printing.



Strain relief plates for factory or in-the-field assembly.



fine-stranded, tip-bonded

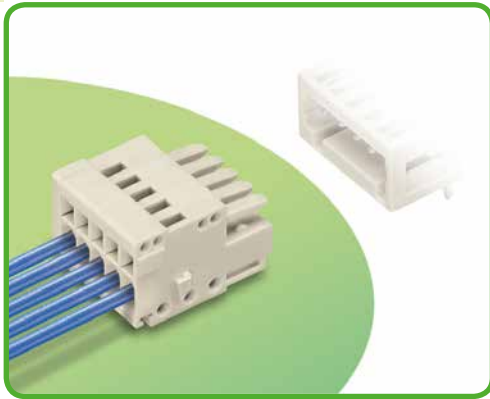


fine-stranded with crimped ferrules (gas-tight)



fine-stranded with crimped pin ends (gas-tight)

# Female Connectors Pin Spacing 2.5 mm MCS-MICRO



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates for field or factory assembly
- 100% protected against mismatching
- With coding fingers

**Technical data:**

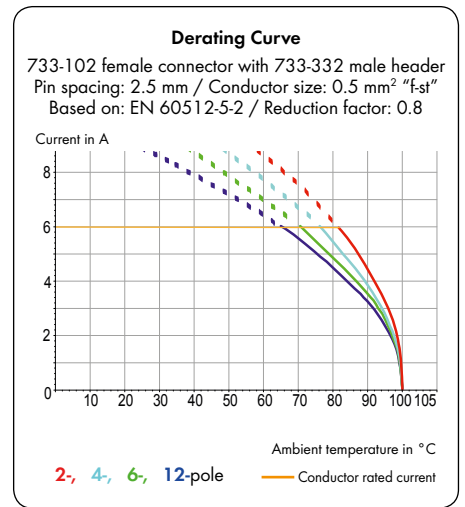
| Pin Spacing          | 2.5 mm<br>0.098 in |        |        |
|----------------------|--------------------|--------|--------|
| Rating per           | IEC/EN 60664-1     |        |        |
| Overtension category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 100 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 6 A                | 6 A    | 6 A    |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | 150 V              | -      | -      |
| Nominal current UL   | 4 A                | -      | -      |
| Nominal current CSA  | 4 A                | -      | -      |

**Conductor data:**

|                               |  |
|-------------------------------|--|
| Connection technology         | CAGE CLAMP®  |
| Conductor size: solid         | 0.08 - 0.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.08 - 0.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 28 - 20  |
| Strip length                  | 5 - 6 mm / 0.20 - 0.24 in                              |

**Material data:**

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +100 °C                  |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix .../010-000" is added to the "basic item no."         |                                   |



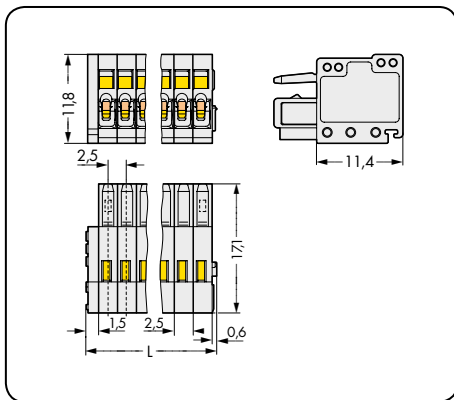
**MCS-MICRO accessories:** **Page:**

|                      |           |
|----------------------|-----------|
| Marking accessories  | 508 - 511 |
| Operating tools      | 280 - 281 |
| Direct marking       | 283       |
| Test pin             | 506       |
| Strain relief plates | 282       |

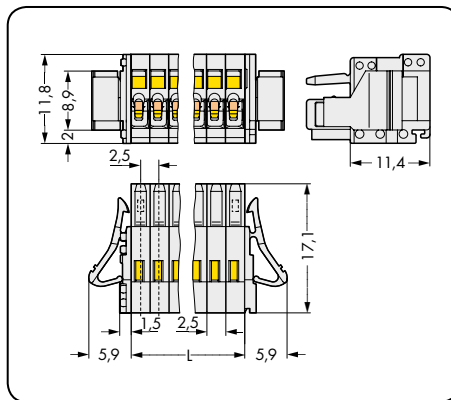
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design ensure that header pins, which can be touched, are not live in unmated condition.

# Female Connectors MCS-MICRO

| Pin spacing 2.5 mm / 0.098 in |             | With locking levers<br>Pin spacing 2.5 mm / 0.098 in |             |
|-------------------------------|-------------|--|-------------|
| 0.08 - 0.5 mm <sup>2</sup>    | AWG 28 - 20 | 0.08 - 0.5 mm <sup>2</sup>                           | AWG 28 - 20 |
| 160 V/2.5 kV/2 6 A            | 150 V/4 A   | 160 V/2.5 kV/2 6 A                                   | 150 V/4 A   |



L = (pole no. x pin spacing) + 2.1 mm



L = pole no. x pin spacing

| Pole No.                                | Item No. | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|---|----------|------------|---|-----------------|------------|
| <b>Female connector,<br/>light gray</b> |          |            | <b>Female connector with locking levers,<br/>light gray</b> |                 |            |
| 2                                       | 733-102  | 200        | 2   | 733-102/037-000 | 100        |
| 3                                       | 733-103  | 200        | 3   | 733-103/037-000 | 100        |
| 4                                       | 733-104  | 200        | 4   | 733-104/037-000 | 100        |
| 5                                       | 733-105  | 100        | 5   | 733-105/037-000 | 100        |
| 6                                       | 733-106  | 100        | 6   | 733-106/037-000 | 100        |
| 7                                       | 733-107  | 100        | 7   | 733-107/037-000 | 50         |
| 8                                       | 733-108  | 100        | 8   | 733-108/037-000 | 50         |
| 9                                       | 733-109  | 100        | 9   | 733-109/037-000 | 50         |
| 10                                      | 733-110  | 100        | 10  | 733-110/037-000 | 50         |
| 12                                      | 733-112  | 50         | 12  | 733-112/037-000 | 50         |



# Male Headers with Solder Pins and Press-In Pins

## Pin Spacing 2.5 mm

### MCS-MICRO



- Horizontal or vertical PCB mounting via straight or angled solder pins
- Also available with press-in pins for solder-free connection to the PCB
- 100% protected against mismatching; only mating halves with the same pole number can be connected together
- With coding keys

**Technical data:**

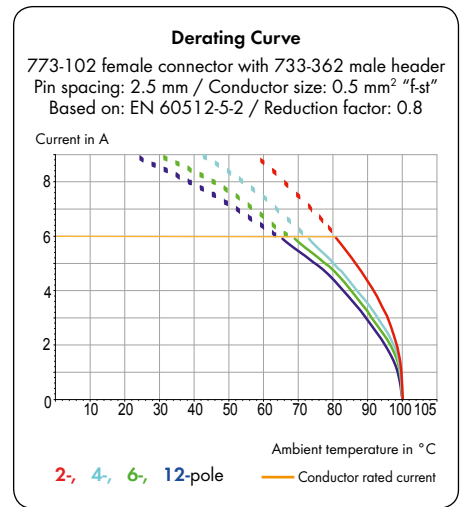
| Pin Spacing          | 2.5 mm / 0.098 in |        |        | Press-In Technology<br>2.5 mm / 0.098 in |        |        |
|----------------------|-------------------|--------|--------|--|--------|--------|
|                      | IEC/EN 60664-1    |        |        | IEC/EN 60664-1                           |        |        |
| Rating per           |                   |        |        |  |        |        |
| Overvoltage category | III               | III    | II     | III                                      | III    | II     |
| Pollution degree     | 3                 | 2      | 2      | 3  | 2      | 2      |
| Rated voltage        | 80 V              | 160 V  | 320 V  | 80 V                                     | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV            | 2.5 kV | 2.5 kV | 2.5 kV                                   | 2.5 kV | 2.5 kV |
| Nominal current      | 6 A               | 6 A    | 6 A    | 4 A                                      | 4 A    | 4 A    |
| Approvals per        | UL/CSA            |        |        | UL/CSA                                   |        |        |
| Use group UL 1059    | B                 | C      | D      | B  | C      | D      |
| Rated voltage        | 150 V             | -      | -      | 150 V                                    | -      | -      |
| Nominal current UL   | 4 A               | -      | -      | 4 A                                      | -      | -      |
| Nominal current CSA  | 4 A               | -      | -      | 4 A                                      | -      | -      |

**Solder and press-in pin data:**

|                                     |                                  |
|-------------------------------------|----------------------------------|
| Solder pin: length/width            | 4.6 mm / 0.8 x 0.8 mm (straight) |
| Solder pin: length/width            | 3.7 mm / 0.8 x 0.8 mm (angled)   |
| Solder pin: drilled hole diameter   | 1.1 <sup>+0.1</sup> mm           |
| Press-in pin: length/width          | 3.2 mm / 0.6 x 1.2 mm            |
| Press-in pin: drilled hole diameter | 1.15 <sup>+0.025</sup> mm        |
| Press-in pin: metal-plated hole     | 1.0 mm (HAL Sn)                  |
| Press-in pin: metal-plated hole     | 1.0 mm (Chem. Sn)                |

**Material data:**

|  |   |
|--|---|
| Material group   | I   |
| Insulating material  | Nylon 6.6 (PA 6.6)  |
| Flammability rating per UL 94  | V0  |
| Lower/Upper temperature limit  | -60 °C / +100 °C / Press-in pin: -40 °C / +85 °C                    |
| Contact material   | Electrolytic copper (E <sub>Cu</sub> ) / Press-in pin: copper alloy |
| Contact plating  | tin-plated  |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |   |



**MCS-MICRO accessories:**

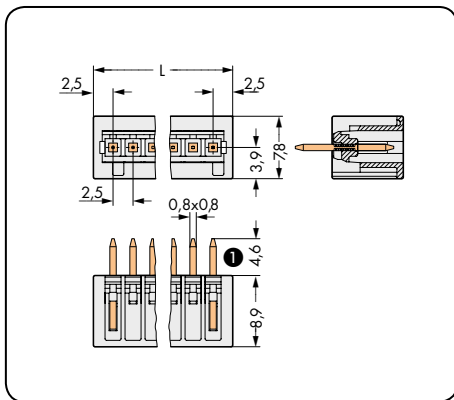
**Page:**

|             |     |
|-------------|-----|
| Coding keys | 281 |
|             |     |
|             |     |
|             |     |
|             |     |

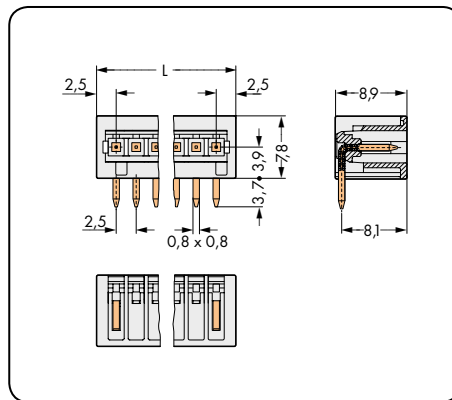
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Male Headers with Solder Pins and Press-In Pins MCS-MICRO

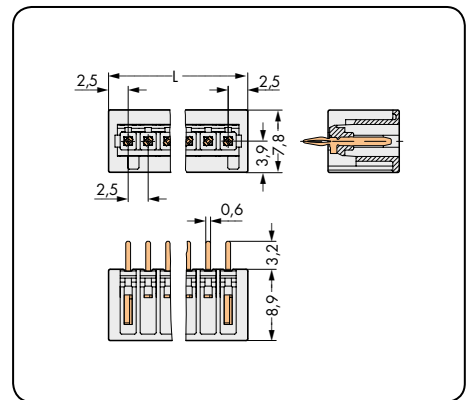
| With straight solder pins<br>Pin spacing 2.5 mm / 0.098 in |           | With angled solder pins<br>Pin spacing 2.5 mm / 0.098 in |           | With press-in pins*<br>Pin spacing 2.5 mm / 0.098 in |           |
|--|-----------|--|-----------|--|-----------|
| 160 V/2.5 kV/2 6 A   | 150 V/4 A | 160 V/2.5 kV/2 6 A                                       | 150 V/4 A | 160 V/2.5 kV/2 4 A                                   | 150 V/4 A |



L = (pole no. + 1) x pin spacing



L = (pole no. + 1) x pin spacing



L = (pole no. + 1) x pin spacing

| Pole No.   | Item No. | Pack. Unit | Pole No.   | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|----------|------------|--|----------|------------|--|-----------------|------------|
| <b>Male header with straight solder pins, light gray</b> |          |            | <b>Male header with angled solder pins, light gray</b> |          |            | <b>Male header for press-in technology*, with straight press-in pins, light gray</b> |                 |            |
| 2  | 733-332  | 200        | 2  | 733-362  | 200        | 2  | 733-332/100-000 | 200        |
| 3  | 733-333  | 200        | 3  | 733-363  | 200        | 3  | 733-333/100-000 | 200        |
| 4  | 733-334  | 200        | 4  | 733-364  | 200        | 4  | 733-334/100-000 | 200        |
| 5  | 733-335  | 200        | 5  | 733-365  | 200        | 5  | 733-335/100-000 | 200        |
| 6  | 733-336  | 200        | 6  | 733-366  | 200        | 6  | 733-336/100-000 | 200        |
| 7  | 733-337  | 200        | 7  | 733-367  | 200        | 7  | 733-337/100-000 | 200        |
| 8  | 733-338  | 200        | 8  | 733-368  | 200        | 8  | 733-338/100-000 | 200        |
| 9  | 733-339  | 200        | 9  | 733-369  | 200        | 9  | 733-339/100-000 | 200        |
| 10   | 733-340  | 200        | 10   | 733-370  | 200        | 10   | 733-340/100-000 | 200        |
| 12   | 733-342  | 100        | 12   | 733-372  | 100        | 12   | 733-342/100-000 | 100        |

1 MCS-MICRO male headers with straight solder pins are also available with 3.8 mm pin projection. Add item no. suffix ... /046-000.

**\*Unique features of WAGO press-in technology:**

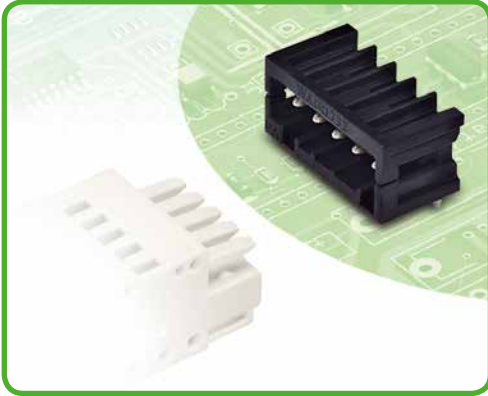
- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameters
  - 1.0 or 1.45<sup>+0.09</sup><sub>-0.08</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.09</sup><sub>-0.08</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx. 3.2 mm - no unnecessary projection on underside of PCB
- Low press-in force required - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole - reduces wear and tear on PCB and contact points

For other lengths, please contact factory.

# Male Headers with Solder Pins, THR (Through-Hole Reflow\*)

## Pin Spacing 2.5 mm

### MCS-MICRO



- THR male headers for reflow soldering in SMT production
- Available in tape-and-reel packaging for automated pick-and-place assembly
- Optimal thermal penetration via pin enclosure design provides lower soldering temperatures
- 100% protected against mismatching
- With coding keys

**Technical data:**

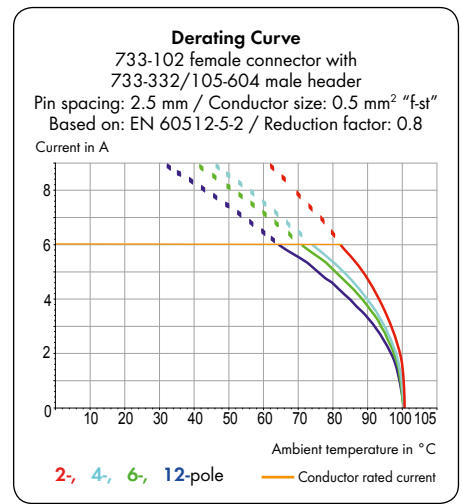
| Pin Spacing          | 2.5 mm<br>0.098 in |        |        |
|----------------------|--------------------|--------|--------|
| Rating per           | IEC/EN 60664-1     |        |        |
| Overvoltage category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 80 V               | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 6 A                | 6 A    | 6 A    |
| Approvals per        | UL/CSA**           |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | -                  | -      | -      |
| Nominal current UL   | -                  | -      | -      |
| Nominal current CSA  | -                  | -      | -      |

**Solder pin data:**

|   |                        |
|---|------------------------|
| Solder pin: length/width                      | 2.4 mm / 0.8 x 0.8 mm  |
| Solder pin: metal-plated hole diameter        | 1.2 <sup>+0.1</sup> mm |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
| For other pin lengths, please contact factory |                        |

**Material data:**

|  |   |
|--|---|
| Material group   | I   |
| Insulating material  | Glass fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94  | V0  |
| Lower/Upper temperature limit  | -60 °C / +100 °C                                |
| Contact material   | Electrolytic copper (E <sub>CU</sub> )          |
| Contact plating  | tin-plated                                      |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |   |



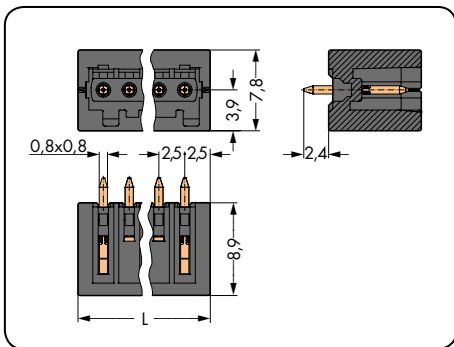
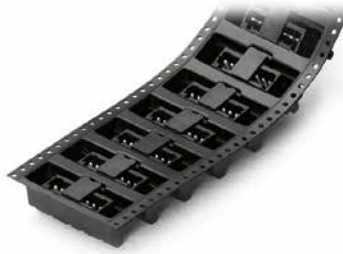
**MCS-MICRO accessories: Page:**

|             |     |
|-------------|-----|
| Coding keys | 281 |
|             |     |
|             |     |
|             |     |
|             |     |

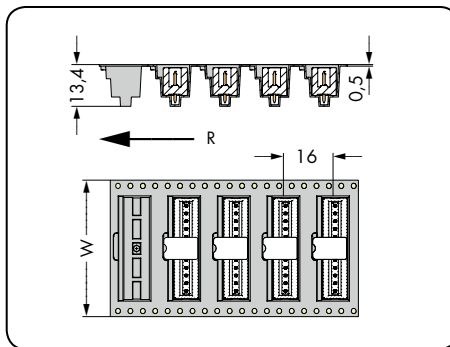
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Male Headers with Solder Pins, THR MCS-MICRO

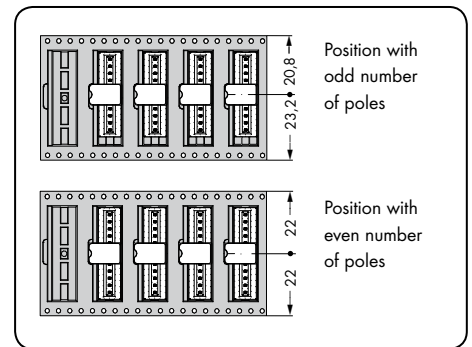
|   |   |
|---|---|
| <p><b>With straight solder pins</b><br/>Pin spacing 2.5 mm / 0.098 in</p> <p>160 V/2.5 kV/2 6 A</p> | <p><b>Male headers in tape-and-reel packaging</b><br/>Pin spacing 2.5 mm / 0.098 in</p> <p>160 V/2.5 kV/2 6 A</p> |
|---|---|



L = (pole no. + 1) x pin spacing



W = Tape width  
R = Feed direction



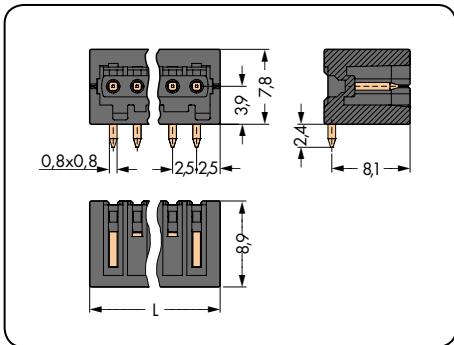
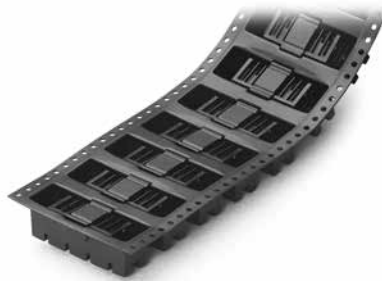
Position with  
odd number  
of poles

Position with  
even number  
of poles

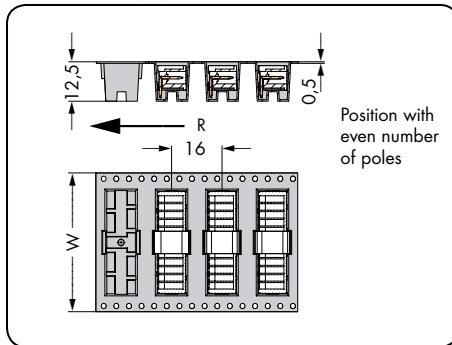
| Pole No.                                     | Item No.        | Pack. Unit | Pole No.   | Item No.                | W  |
|--|-----------------|------------|--|-------------------------|----|
| Male header with straight solder pins, black |                 |            | Male header with straight solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                         |    |
| (mm)   |                 |            |  |                         |    |
| 2  | 733-332/105-604 | 200        | 2  | 733-332/105-604/997-446 | 44 |
| 3  | 733-333/105-604 | 200        | 3  | 733-333/105-604/997-446 | 44 |
| 4  | 733-334/105-604 | 200        | 4  | 733-334/105-604/997-446 | 44 |
| 5  | 733-335/105-604 | 200        | 5  | 733-335/105-604/997-446 | 44 |
| 6  | 733-336/105-604 | 200        | 6  | 733-336/105-604/997-446 | 44 |
| 7  | 733-337/105-604 | 200        | 7  | 733-337/105-604/997-446 | 44 |
| 8  | 733-338/105-604 | 200        | 8  | 733-338/105-604/997-446 | 44 |
| 9  | 733-339/105-604 | 200        | 9  | 733-339/105-604/997-446 | 44 |
| 10   | 733-340/105-604 | 200        | 10   | 733-340/105-604/997-446 | 44 |
| 12   | 733-342/105-604 | 100        | 12   | 733-342/105-604/997-446 | 44 |
| Reel diameter: 330 mm, 290 pieces per reel   |                 |            |  |                         |    |

# Male Headers with Solder Pins, THR MCS-MICRO

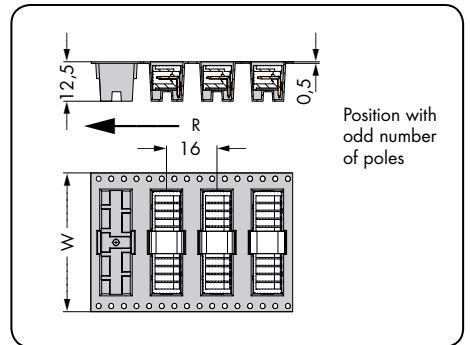
|   |   |
|---|---|
| <p><b>With angled solder pins</b><br/>Pin spacing 2.5 mm / 0.098 in</p> <p>160 V/2.5 kV/2 6 A</p> | <p><b>Male headers in tape-and-reel packaging</b><br/>Pin spacing 2.5 mm / 0.098 in</p> <p>160 V/2.5 kV/2 6 A</p> |
|---|---|



L = (pole no. + 1) x pin spacing



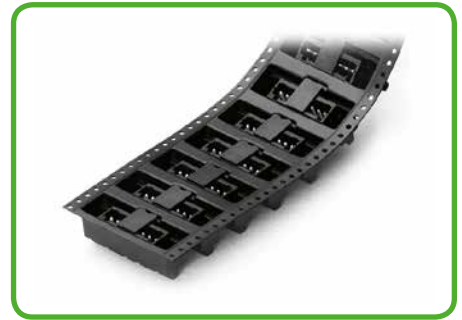
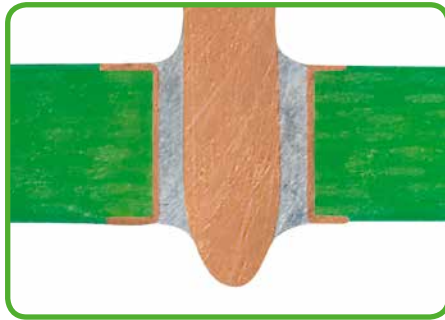
W = Tape width  
R = Feed direction



W = Tape width  
R = Feed direction

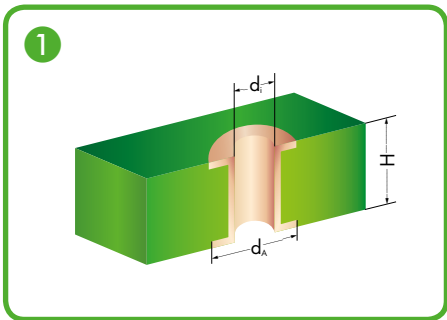
| Pole No.                                   | Item No.        | Pack. Unit | Pole No.   | Item No.                | W  |
|--|-----------------|------------|--|-------------------------|----|
| Male header with angled solder pins, black |                 |            | Male header with angled solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                         |    |
| (mm)                                       |                 |            |  |                         |    |
| 2  | 733-362/105-604 | 200        | 2  | 733-362/105-604/997-406 | 44 |
| 3  | 733-363/105-604 | 200        | 3  | 733-363/105-604/997-406 | 44 |
| 4  | 733-364/105-604 | 200        | 4  | 733-364/105-604/997-406 | 44 |
| 5  | 733-365/105-604 | 200        | 5  | 733-365/105-604/997-406 | 44 |
| 6  | 733-366/105-604 | 200        | 6  | 733-366/105-604/997-406 | 44 |
| 7  | 733-367/105-604 | 200        | 7  | 733-366/105-604/997-406 | 44 |
| 8  | 733-368/105-604 | 200        | 8  | 733-368/105-604/997-406 | 44 |
| 9  | 733-369/105-604 | 200        | 9  | 733-368/105-604/997-406 | 44 |
| 10   | 733-370/105-604 | 200        | 10   | 733-370/105-604/997-406 | 44 |
| 12   | 733-372/105-604 | 100        | 12   | 733-372/105-604/997-406 | 44 |
| Reel diameter: 330 mm, 300 pieces per reel |                 |            |  |                         |    |

# THR (Through-Hole Reflow) Soldering Process

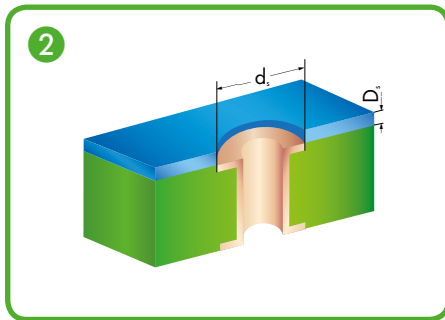


By using high-temperature resistant plastic and a streamlined pin design, the WAGO Through-Hole Reflow headers and PCB terminal blocks meet requirements for SMT process capability while maintaining necessary stability. The THR headers and THR PCB terminal blocks are simply pushed into the solder paste-filled PCB holes and then soldered along with the SMT components using the reflow soldering technique. The previous wave soldering process is no longer necessary. The result is a perfect connection – both mechanically and electrically.

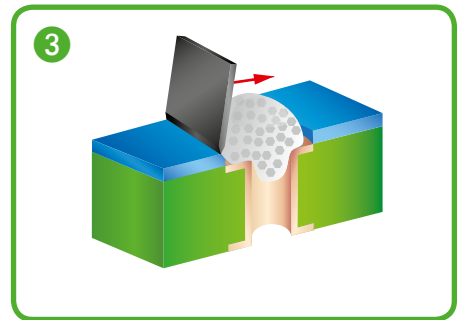
Male headers with additional suction pad in tape-and-reel packaging acc. to IEC 60286-3



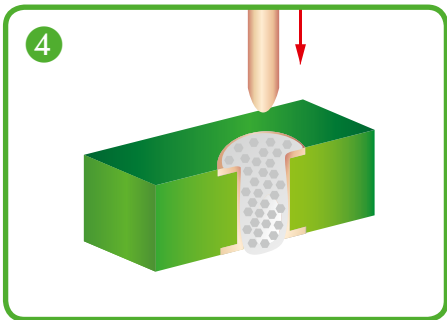
Metal-plated PCB bore hole



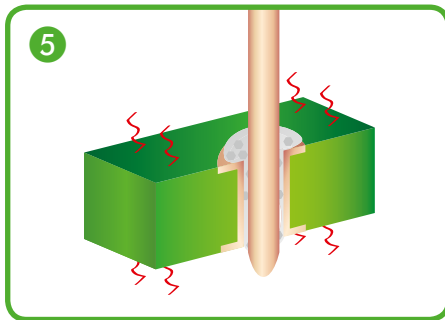
SMD positioning pattern



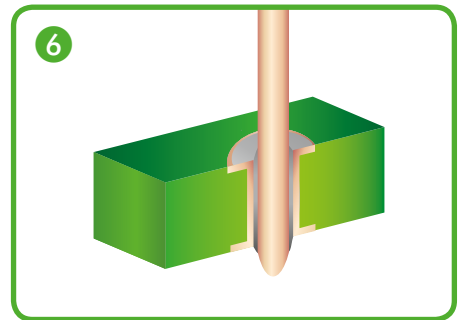
Application of solder paste



Component assembly automatic/by hand

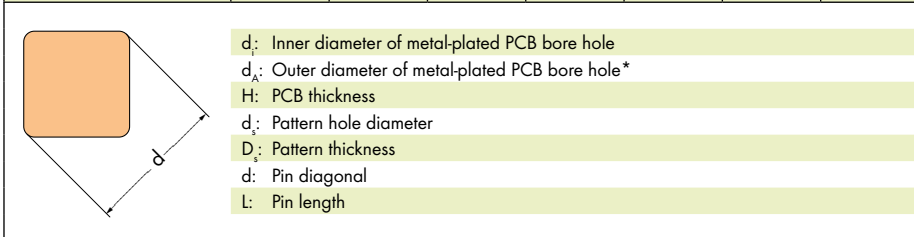


Reflow soldering process



THR soldering joint

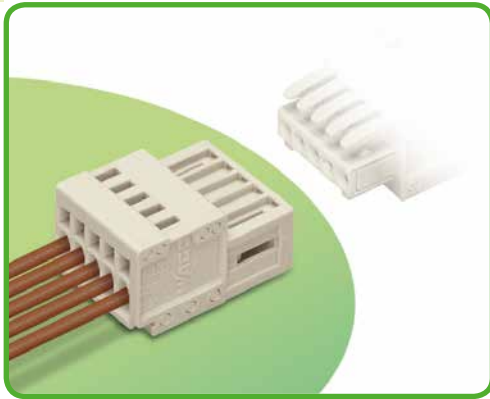
| Series             | $d_i$ (mm)   | $d_A$ (mm) | H(mm) | $d_s$ (mm) | $D_s$ ( $\mu$ m) | d(mm) | L(mm) |
|--------------------|--------------|------------|-------|------------|------------------|-------|-------|
| 231 (1 x 1 mm)     | $1,4^{+0,1}$ | 2,5        | < 2   | 2,4        | 150              | 1,2   | 2,4   |
| 231 (1,2 x 1,2 mm) | $1,7^{+0,1}$ | 2,8        | < 2   | 2,7        | 150              | 1,5   | 2,4   |
| 713                | $1,2^{+0,1}$ | 1,9        | < 2   | 1,8        | 150              | 1,0   | 2,4   |
| 733                | $1,2^{+0,1}$ | 1,9        | < 2   | 1,8        | 150              | 1,0   | 2,4   |
| 734                | $1,4^{+0,1}$ | 2,5        | < 2   | 2,4        | 150              | 1,2   | 2,4   |



WAGO recommends both a temperature profile that adheres to EN 61760-1 and the use of forced convection ovens for processing THR components.

\* When laying out the metal-plated bore holes, the clearance and creepage distance requirements – as specified in the equipment standards – must be considered.

# Male Connectors Pin Spacing 2.5 mm MCS-MICRO



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” connections
- 100% protected against mismatching
- With coding keys

**Technical data:**

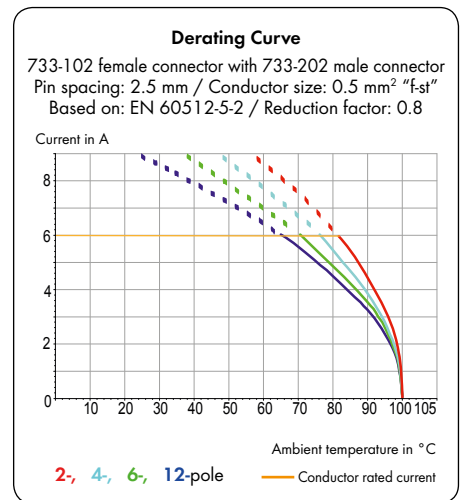
| Pin Spacing          | 2.5 mm<br>0.098 in |        |        |
|----------------------|--------------------|--------|--------|
| Rating per           | IEC/EN 60664-1     |        |        |
| Overtension category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 100 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 6 A                | 6 A    | 6 A    |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | 150 V              | -      | -      |
| Nominal current UL   | 4 A                | -      | -      |
| Nominal current CSA  | 4 A                | -      | -      |

**Conductor data:**

|                               |  |
|-------------------------------|--|
| Connection technology         | CAGE CLAMP®  |
| Conductor size: solid         | 0.08 - 0.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.08 - 0.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 28 - 20  |
| Strip length                  | 5 - 6 mm / 0.20 - 0.24 in                              |

**Material data:**

|  |  |
|--|--|
| Material group   | I                                      |
| Insulating material  | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94  | V0                                     |
| Lower/Upper temperature limit  | -60 °C / +100 °C                       |
| Clamping spring material   | Chrome-nickel spring steel (CrNi)      |
| Contact material   | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating  | tin-plated                             |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |  |
| Depending on the version requested, “item no. suffix . . . /010-000” is added to the “basic item no.”      |  |



**MCS-MICRO accessories:**

**Page:**

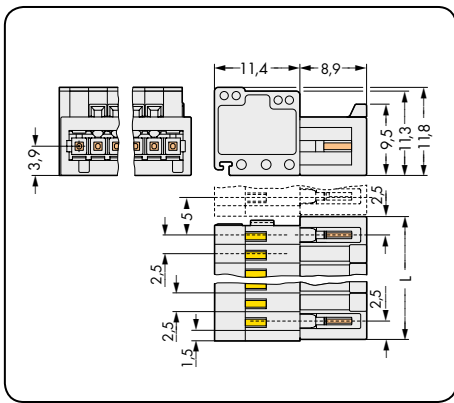
|                      |           |
|----------------------|-----------|
| Marking accessories  | 508 - 511 |
| Operating tools      | 280 - 281 |
| Direct marking       | 283       |
| Coding keys          | 281       |
| Test pin             | 506       |
| Strain relief plates | 282       |

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.



# Male Connectors MCS-MICRO

|  |                          |
|--|--------------------------|
| <b>Pin spacing 2.5 mm / 0.098 in</b>             |                          |
| 0.08 - 0.5 mm <sup>2</sup><br>160 V/2.5 kV/2 6 A | AWG 28 - 20<br>150 V/4 A |



L = (pole no. + 1) x pin spacing

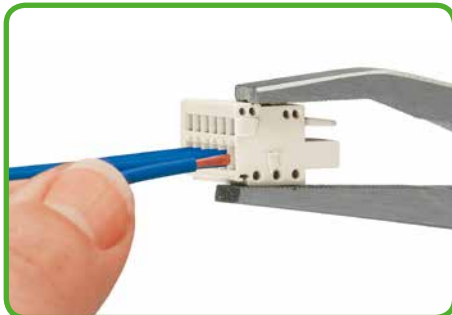
| Pole No.                          | Item No. | Pack. Unit |
|-----------------------------------|----------|------------|
| <b>Male connector, light gray</b> |          |            |
| 2                                 | 733-202  | 200        |
| 3                                 | 733-203  | 200        |
| 4                                 | 733-204  | 200        |
| 5                                 | 733-205  | 100        |
| 6                                 | 733-206  | 100        |
| 7                                 | 733-207  | 100        |
| 8                                 | 733-208  | 100        |
| 9                                 | 733-209  | 100        |
| 10                                | 733-210  | 100        |
| 12                                | 733-212  | 50         |

# Accessories Operating Tools MCS-MICRO

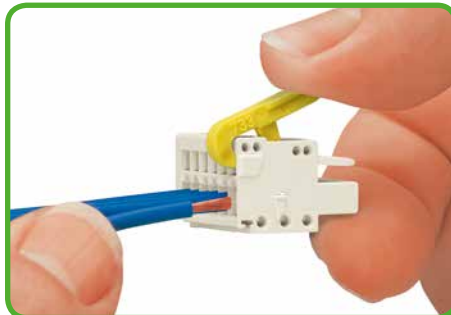
| <p><b>Operating tool</b></p> <p>for male and female connectors with CAGE CLAMP® connection</p> | <p><b>Operating levers</b></p> <p>for male and female connectors with CAGE CLAMP® connection</p> | <p><b>Operating tools</b></p> <p>for male and female connectors with CAGE CLAMP® connection</p> |
|--|--|---|
|--|--|---|



| Color   | Item No. | Pack. Unit | Color                                      | Item No. | Pack. Unit   | Color                                     | Item No. | Pack. Unit |
|---|----------|------------|--|----------|--------------|---|----------|------------|
| <b>Operating tool, 2.5 mm, 3.5 mm and 3.81 mm pin spacing</b> |          |            | <b>Operating lever, 2.5 mm pin spacing</b> |          |              | <b>Operating tool, 2.5 mm pin spacing</b> |          |            |
| yellow  | 210-251  | 1          | natural                                    | 733-130  | 100 (4 x 25) | natural                                   | 233-332  | 25         |
|   |          |            | yellow                                     | 733-191  | 100 (4 x 25) | yellow                                    | 233-331  | 25         |



Inserting conductor via operating tool.



Inserting conductor via operating lever.



Inserting conductor via 233-331 operating tool. Operation parallel to conductor entry.

# Accessories

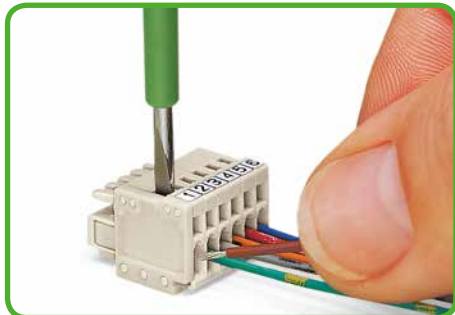
## Operating Tools and Coding Keys

### MCS-MICRO

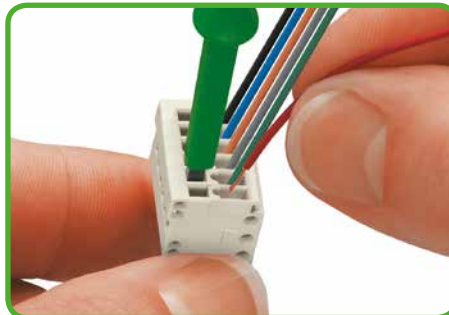
|   |  |  |
|---|--|--|
| <b>Operating tool</b><br>with partially insulated shaft<br>Type 1 | <b>Operating tool</b><br>with partially insulated shaft<br>for male and female connectors<br>with CAGE CLAMP® connection | <b>Coding keys</b><br>for male headers |
|---|--|--|



| Item No.  | Pack. Unit | Item No.                                      | Pack. Unit | Color                                 | Item No. | Pack. Unit |
|---|------------|---|------------|---------------------------------------|----------|------------|
| Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade |            | Operating tool with partially insulated shaft |            | Coding key                            |          |            |
| 210-719   | 1          | 233-335                                       | 1          | white                                 | 733-330  | 100        |
|   |            |   |            | black<br>(suitable for THR soldering) | 733-331  | 100        |



Inserting conductor via (2.5 x 0.4) mm screwdriver. Actuation perpendicular to conductor entry.



Inserting conductor via 233-335 operating tool. Operation parallel to conductor entry.



Coding via snap-on coding keys for male headers.

# Accessories

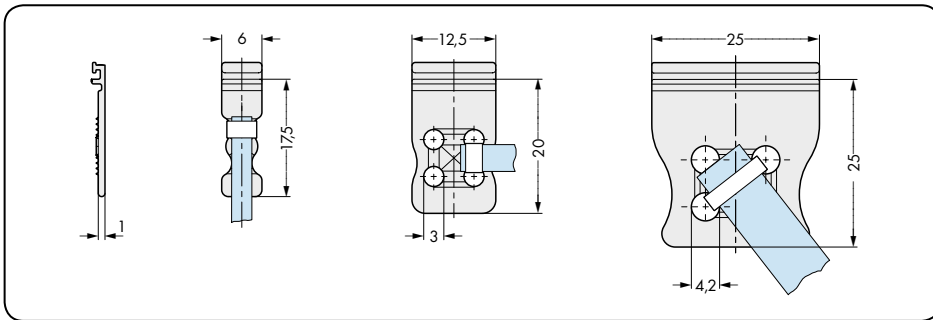
## Strain Relief Plates

### MCS-MICRO

|  |   |
|--|---|
| <p><b>Strain relief plates<br/>for in-the-field assembly</b></p> <p>for male and female connectors<br/>with CAGE CLAMP® connection</p> | <p><b>Strain relief plates,<br/>factory-assembled</b></p> <p>for male and female connectors<br/>with CAGE CLAMP® connection</p> |
|--|---|

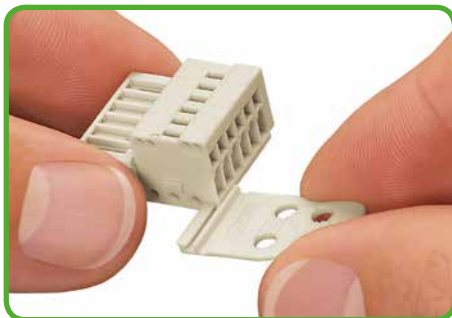


| Width   | Pole No. | Item No.       | Pack. Unit   | Width                                     | Pole No. | Item No. Suffix | Pack. Unit |
|---|----------|----------------|--------------|---|----------|-----------------|------------|
| <b>Strain relief plate</b>  |          |                |              | <b>Strain relief plate, pre-assembled</b> |          |                 |            |
| 6 mm  | 2 - 4    | <b>734-127</b> | 100 (4 x 25) | 6 mm                                      | 2 - 4    | .../032-000     |            |
| 12.5 mm   | 5 - 9    | <b>734-128</b> | 100 (4 x 25) | 12.5 mm                                   | 5 - 9    | .../033-000     |            |
| 25 mm   | 10 - 12  | <b>734-129</b> | 100 (4 x 25) | 25 mm                                     | 10 - 12  | .../034-000     |            |
| <p><b>Ordering example:</b><br/>Female connector with strain relief plate,<br/>2.5 mm pin spacing, 2-pole, light gray:<br/><b>733-102/032-000</b></p> <p>An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of male or female connector.</p> |          |                |              |   |          |                 |            |



The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellaermann.



**734-128 734-128** strain relief plate, for in-the-field assembly.



Pre-assembled strain relief plate, female connector, 2.5 mm pin spacing, light gray, 2-pole, with **733-102/032-000** strain relief plate.



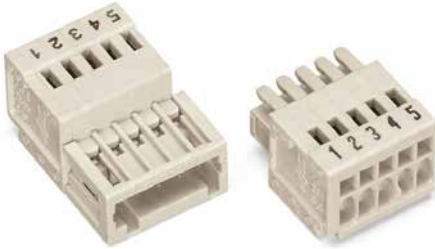
Pre-assembled strain relief plate, female connector, 2.5 mm pin spacing, light gray, 12-pole, with **733-112/034-000** strain relief plate.

# Accessories

## Direct Marking

### MCS-MICRO

|   |   |   |
|---|---|---|
| <p><b>Direct marking</b></p> <p>of male and female connectors<br/>for conductor termination</p> | <p><b>Direct marking<br/>1 - pole no.</b></p> <p>of female connectors<br/>for conductor termination</p> | <p><b>Direct marking<br/>Pole no. - 1</b></p> <p>of male connectors<br/>for conductor termination</p> |
|---|---|---|



**MCS-MICRO direct marking:**

Male and female connectors for conductor termination can be marked with "1 - pole no." via factory direct printing.

Two standard marking axes are available:

1. Marking perpendicular to conductor entry
2. Marking parallel to conductor entry

Other customized marking options are available upon request.

Direct marking is not suitable for MCS male headers with solder pins. WAGO recommends PCB pole marking for these headers.

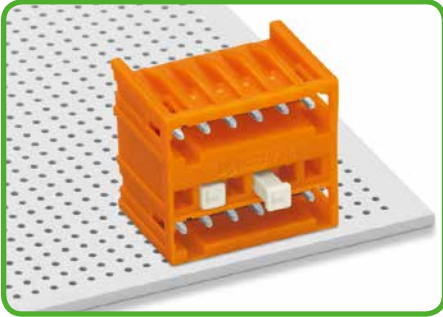
| Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /... - 047   | Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /... - 044   |
|---|---|
| <b>Ordering examples:</b>   | <b>Ordering examples:</b>   |
| <b>Female connector,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/000-047</b>  | <b>Male connector,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-205/000-044</b>                          |
| <b>Female connector with locking levers,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/037-047</b>                              | <b>Male connector with strain relief plate,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-205/033-044</b> |
| <b>Female connector with strain relief plate,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/033-047</b>                         |   |
| <b>Female connector with locking levers and strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/037-047/033-000</b> |   |



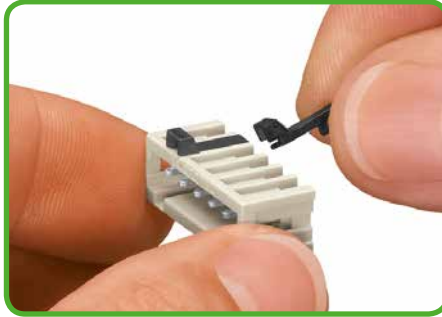
| Marking Parallel to Conductor Entry<br>Item No. Suffix: /... - 9037  | Marking Parallel to Conductor Entry<br>Item No. Suffix: /... - 9034  |
|--|--|
| <b>Ordering examples:</b>  | <b>Ordering examples:</b>  |
| <b>Female connector,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/000-9037</b>  | <b>Male connector,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-205/000-9034</b>                          |
| <b>Female connector with locking levers,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/037-9037</b>                              | <b>Male connector with strain relief plate,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-205/033-9034</b> |
| <b>Female connector with strain relief plate,</b><br>2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/033-9037</b>                         |  |
| <b>Female connector with locking levers and strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray<br><b>733-105/037-9037/033-000</b> |  |

# Description and Handling

## MCS - MULTI CONNECTION SYSTEM MINI



Coding a double-deck male header with solder pins - lower level.

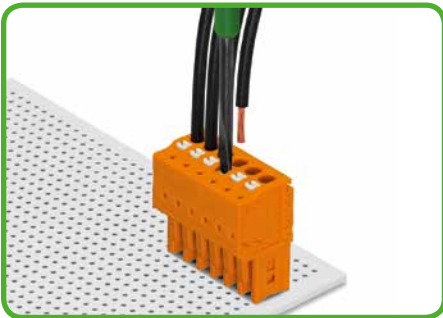


Coding a male header - fitting of coding key(s).

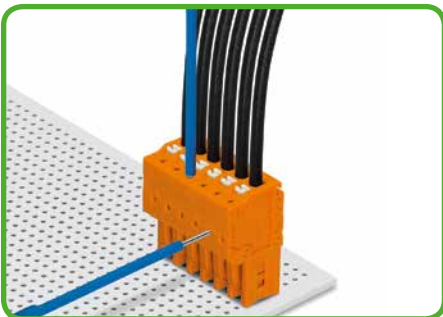


Coding a female connector - removal of coding finger(s).

### 2734 Series Female Connectors with Push-Buttons and CAGE CLAMP®S



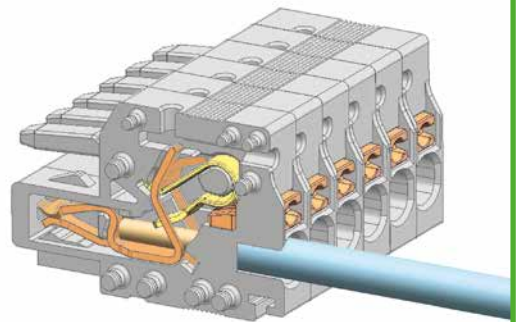
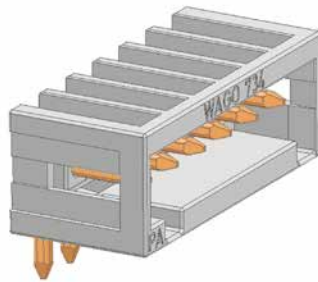
Inserting fine-stranded conductor into CAGE CLAMP®S unit via push-button; solid conductors can be simply pushed in.



Testing with 735-500 test plug, 1 mm Ø - CAGE CLAMP®S connection - insertion parallel to conductor entry.

100% protected against mismatching

CAGE CLAMP®S

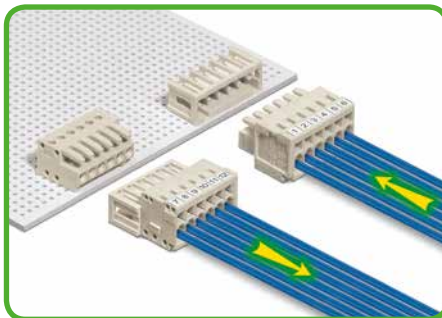


MCS-MINI

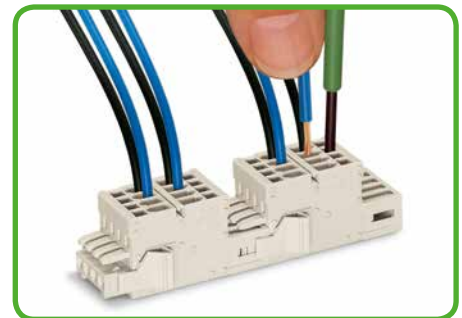
Pin spacing: 3.5 mm and 3.81 mm



THR male headers in tape-and-reel packaging for SMT applications.



Easy-to-identify PCB inputs and outputs.



2-conductor Combi strips with locking levers for multiplying potentials.



CAGE CLAMP®S and CAGE CLAMP® clamp the following copper conductors:\*  
solid

\* For aluminum conductors, see notes in Section 9.

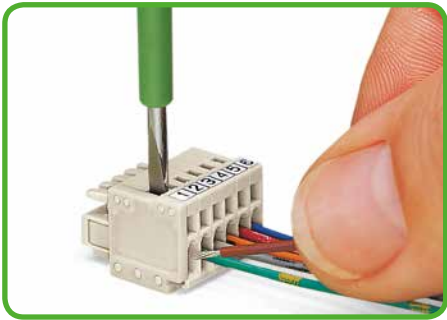


stranded

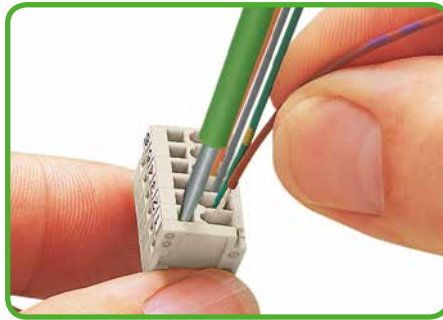


fine-stranded, also with tinned single strands

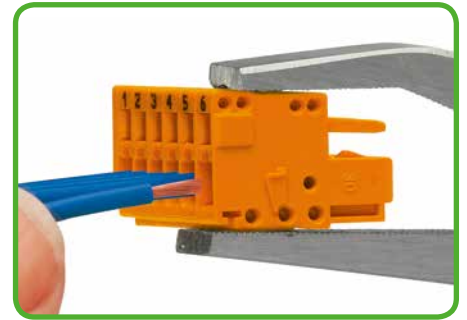




Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.

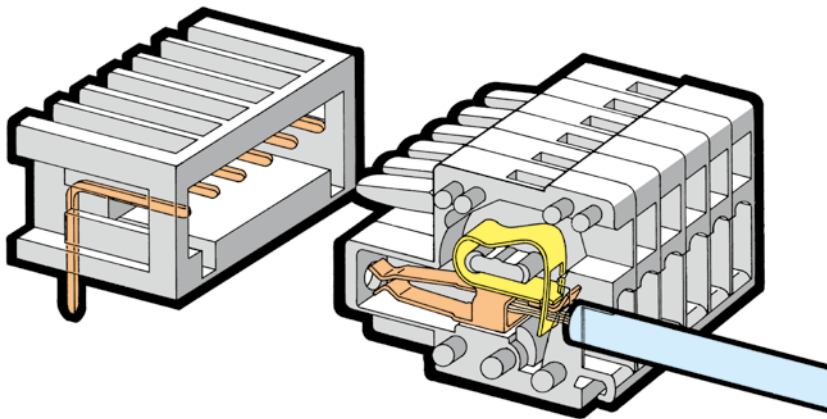


Inserting conductor into CAGE CLAMP® unit via 210-251 or 210-250 operating tool.

734 Series Female Connectors with CAGE CLAMP®

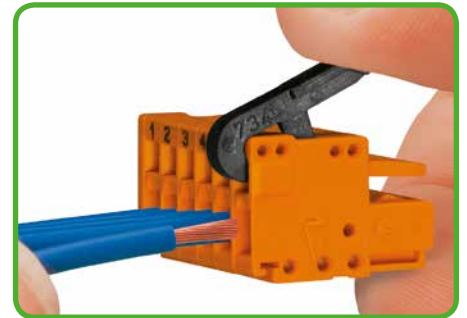
100% protected against mismatching

CAGE CLAMP®

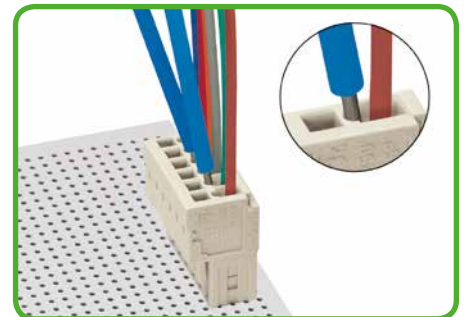


MCS-MINI

Pin spacing: 3.5 mm and 3.81 mm



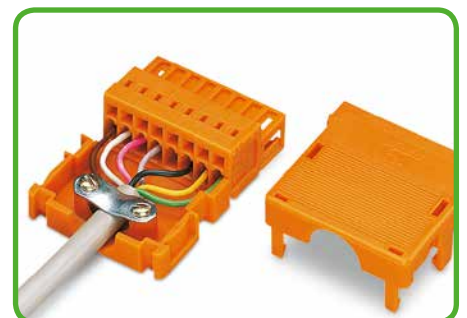
Inserting conductor into CAGE CLAMP® unit via 734-191 operating lever.



Testing with 735-500 test pin, 1 mm Ø – CAGE CLAMP® connection – touch contact with current bar.



Marking via self-adhesive marker strips or factory direct printing.



Strain relief housing for 734 Series male and female connectors with CAGE CLAMP®; strain relief plates for 734 and 2734 Series.



fine-stranded, tip-bonded



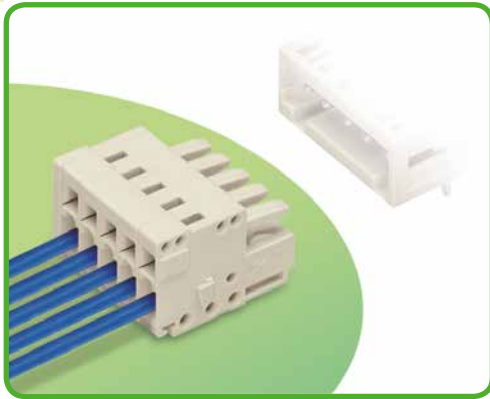
fine-stranded with crimped ferrules (gas-tight)



fine-stranded with crimped pin terminals (gas-tight)



# Female Connectors Pin Spacing 3.5 mm, 3.81 mm MCS-MINI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates and housings for in-the-field assembly
- 100% protected against mismatching
- With coding fingers

**Technical data:**

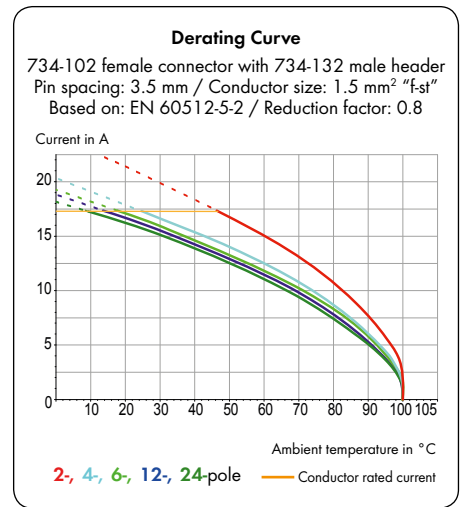
| Pin Spacing          | 3.5 mm<br>0.138 in |        |        | 3.81 mm<br>0.15 in |        |        |
|----------------------|--------------------|--------|--------|--------------------|--------|--------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |        |        |
| Rating per           |                    |        |        |                    |        |        |
| Overtoltage category | III                | III    | II     | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 10 A               | 10 A   | 10 A   | 10 A               | 10 A   | 10 A   |
| Approvals per        | UL/CSA             |        |        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      | B                  | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  | 300 V              | -      | 300 V  |
| Nominal current UL   | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |
| Nominal current CSA  | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |

**Conductor data:**

|  |  |                |
|--|--|----------------|
| Connection technology  | CAGE CLAMP®  |                |
| Conductor size: solid  | 0.08 - 1.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded  | 0.08 - 1.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded  | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)    |                |
| Conductor size: fine-stranded  | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule)* |                |
| AWG  | 28 - 14  | 14: THHN, THWN |
| Strip length   | 6 - 7 mm / 0.24 - 0.28 in                              |                |
| * Only every other clamping unit can be terminated using 1.5 mm <sup>2</sup> connectors with insulated ferrules. |  |                |

**Material data:**

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +100 °C                  |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix . . . /010-000" is added to the "basic item no."      |                                   |



**MCS-MINI accessories:**

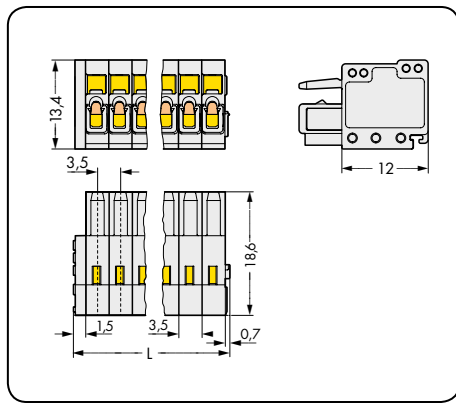
**Page:**

|                       |           |
|-----------------------|-----------|
| Marking accessories   | 508 - 511 |
| Operating tools       | 316       |
| Direct marking        | 320 - 321 |
| Mounting adapter      | 363       |
| Test pin              | 506       |
| Strain relief housing | 318       |
| Strain relief plates  | 319       |

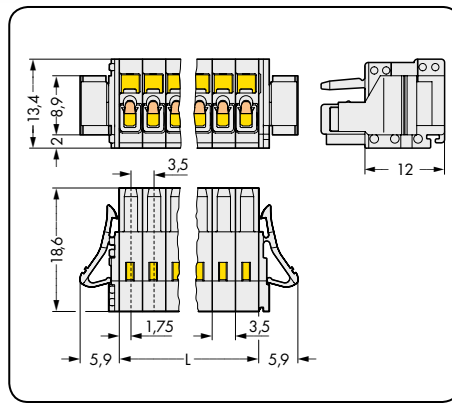
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Female Connectors MCS-MINI

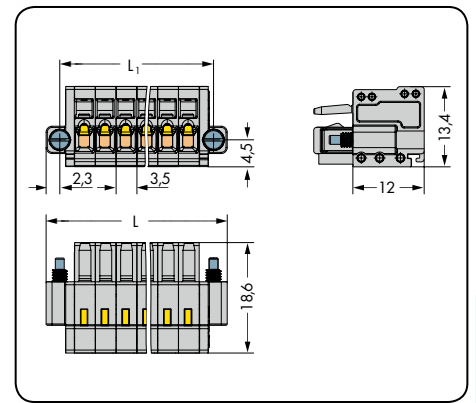
| Pin spacing 3.5 mm / 0.138 in |             | With locking levers<br>Pin spacing 3.5 mm / 0.138 in |             | With screw flanges<br>Pin spacing 3.5 mm / 0.138 in |             |
|-------------------------------|-------------|--|-------------|---|-------------|
| 0.08 - 1.5 mm <sup>2</sup>    | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                           | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                          | AWG 28 - 14 |
| 160 V/2.5 kV/2 10 A           | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                 | 300 V/10 A  |



L = (pole no. x pin spacing) + 2.2 mm



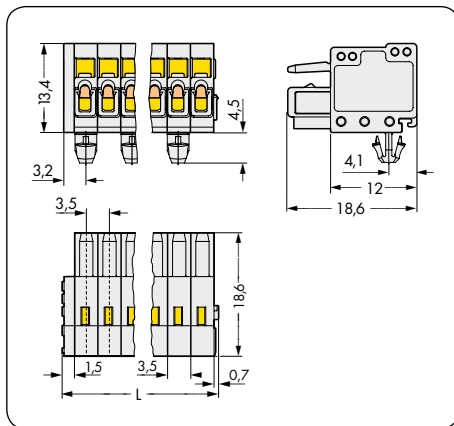
L = pole no. x pin spacing



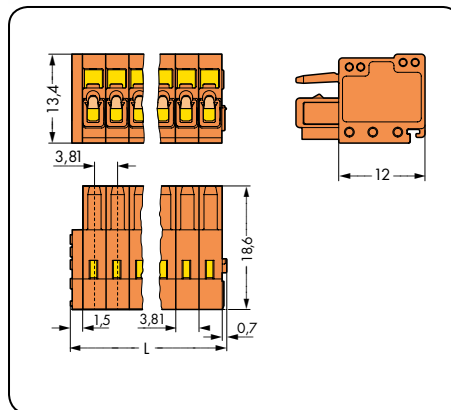
L = (pole no. x pin spacing) + 9.5 mm  
L<sub>1</sub> = (pole no. x pin spacing) + 4.9 mm

| Pole No.                     | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|------------------------------|----------|------------|--|-----------------|------------|---|-----------------|------------|
| Female connector, light gray |          |            | Female connector with locking levers, light gray |                 |            | Female connector with screw flanges, light gray |                 |            |
| 2                            | 734-102  | 200        | 2  | 734-102/037-000 | 100        | 2   | 734-102/107-000 | 100        |
| 3                            | 734-103  | 200        | 3  | 734-103/037-000 | 100        | 3   | 734-103/107-000 | 100        |
| 4                            | 734-104  | 100        | 4  | 734-104/037-000 | 100        | 4   | 734-104/107-000 | 100        |
| 5                            | 734-105  | 100        | 5  | 734-105/037-000 | 50         | 5   | 734-105/107-000 | 50         |
| 6                            | 734-106  | 100        | 6  | 734-106/037-000 | 50         | 6   | 734-106/107-000 | 50         |
| 7                            | 734-107  | 100        | 7  | 734-107/037-000 | 50         | 7   | 734-107/107-000 | 50         |
| 8                            | 734-108  | 50         | 8  | 734-108/037-000 | 50         | 8   | 734-108/107-000 | 50         |
| 9                            | 734-109  | 50         | 9  | 734-109/037-000 | 50         | 9   | 734-109/107-000 | 50         |
| 10                           | 734-110  | 50         | 10   | 734-110/037-000 | 50         | 10  | 734-110/107-000 | 50         |
| 11                           | 734-111  | 50         | 11   | 734-111/037-000 | 50         | 11  | 734-111/107-000 | 50         |
| 12                           | 734-112  | 50         | 12   | 734-112/037-000 | 50         | 12  | 734-112/107-000 | 50         |
| 13                           | 734-113  | 50         | 13   | 734-113/037-000 | 25         | 13  | 734-113/107-000 | 25         |
| 14                           | 734-114  | 50         | 14   | 734-114/037-000 | 25         | 14  | 734-114/107-000 | 25         |
| 16                           | 734-116  | 25         | 16   | 734-116/037-000 | 25         | 16  | 734-116/107-000 | 25         |
| 18                           | 734-118  | 25         | 18   | 734-118/037-000 | 25         | 18  | 734-118/107-000 | 25         |
| 20                           | 734-120  | 25         | 20   | 734-120/037-000 | 25         | 20  | 734-120/107-000 | 25         |
| 24                           | 734-124  | 25         | 24   | 734-124/037-000 | 10         | 24  | 734-124/107-000 | 10         |

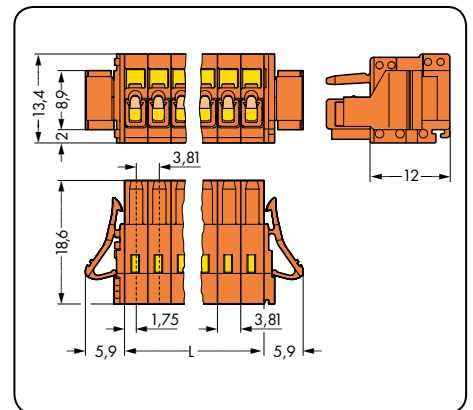
| with Snap-in mounting feet<br>Pin spacing 3.5 mm / 0.138 in |                           | Pin spacing 3.81 mm / 0.15 in                     |                           | With locking levers<br>Pin spacing 3.81 mm / 0.15 in |                           |
|---|---------------------------|---|---------------------------|--|---------------------------|
| 0.08 - 1.5 mm <sup>2</sup><br>160 V/2.5 kV/2 10 A           | AWG 28 - 14<br>300 V/10 A | 0.08 - 1.5 mm <sup>2</sup><br>160 V/2.5 kV/2 10 A | AWG 28 - 14<br>300 V/10 A | 0.08 - 1.5 mm <sup>2</sup><br>160 V/2.5 kV/2 10 A    | AWG 28 - 14<br>300 V/10 A |



L = (pole no. x pin spacing) + 2.2 mm



L = (pole no. x pin spacing) + 2.2 mm



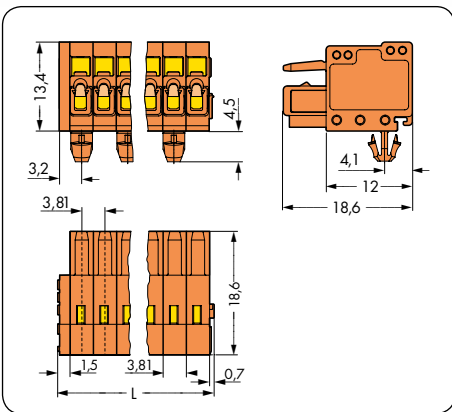
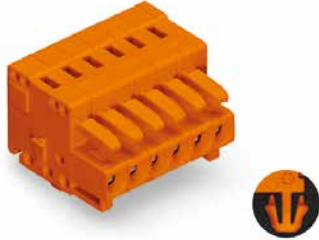
L = pole no. x pin spacing

| Pole No.   | Item No.        | Pack. Unit | Pole No.                           | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|-----------------|------------|------------------------------------|----------|------------|--|-----------------|------------|
| <b>Female connector with snap-in mounting feet,</b><br>for 0.6 - 1.2 mm plate thickness,<br>3.5 mm mounting hole diameter, light gray    |                 |            | <b>Female connector,</b><br>orange |          |            | <b>Female connector with locking levers,</b><br>orange |                 |            |
| 2  | 734-102/008-000 | 200        | 2                                  | 734-202  | 200        | 2  | 734-202/037-000 | 100        |
| 3  | 734-103/008-000 | 200        | 3                                  | 734-203  | 200        | 3  | 734-203/037-000 | 100        |
| 4  | 734-104/008-000 | 100        | 4                                  | 734-204  | 100        | 4  | 734-204/037-000 | 100        |
| 5  | 734-105/008-000 | 100        | 5                                  | 734-205  | 100        | 5  | 734-205/037-000 | 50         |
| 6  | 734-106/008-000 | 100        | 6                                  | 734-206  | 100        | 6  | 734-206/037-000 | 50         |
| 7  | 734-107/008-000 | 100        | 8                                  | 734-208  | 50         | 8  | 734-208/037-000 | 50         |
| 8  | 734-108/008-000 | 50         | 9                                  | 734-209  | 50         | 9  | 734-209/037-000 | 50         |
| 9  | 734-109/008-000 | 50         | 10                                 | 734-210  | 50         | 10   | 734-210/037-000 | 50         |
| 10   | 734-110/008-000 | 50         | 12                                 | 734-212  | 25         | 12   | 734-212/037-000 | 25         |
| 11   | 734-111/008-000 | 50         | 14                                 | 734-214  | 25         | 14   | 734-214/037-000 | 25         |
| 12   | 734-112/008-000 | 50         | 16                                 | 734-216  | 25         | 16   | 734-216/037-000 | 25         |
| 13   | 734-113/008-000 | 50         | 18                                 | 734-218  | 25         | 18   | 734-218/037-000 | 25         |
| 14   | 734-114/008-000 | 50         | 19                                 | 734-219  | 25         | 19   | 734-219/037-000 | 25         |
| 16   | 734-116/008-000 | 25         | 20                                 | 734-220  | 25         | 20   | 734-220/037-000 | 25         |
| 18   | 734-118/008-000 | 25         |                                    |          |            |  |                 |            |
| 20   | 734-120/008-000 | 25         |                                    |          |            |  |                 |            |
| 24   | 734-124/008-000 | 25         |                                    |          |            |  |                 |            |
| Three or more pole female connectors have a snap-in mounting foot at every other pole (2-pole female connectors/2 snap-in mounting feet) |                 |            |                                    |          |            |  |                 |            |

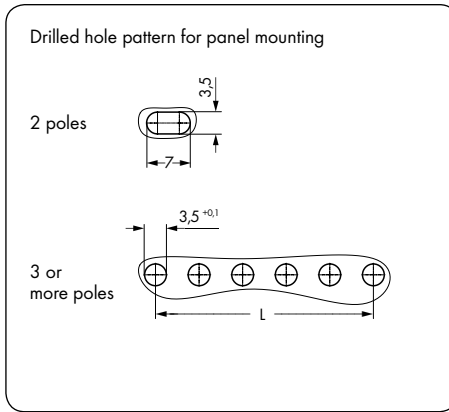
| Product Accessories   | Page |
|---|------|
| Mounting adapter for DIN 35 rail, min. length 3 poles (209-137) | 363  |

# Female Connectors MCS-MINI

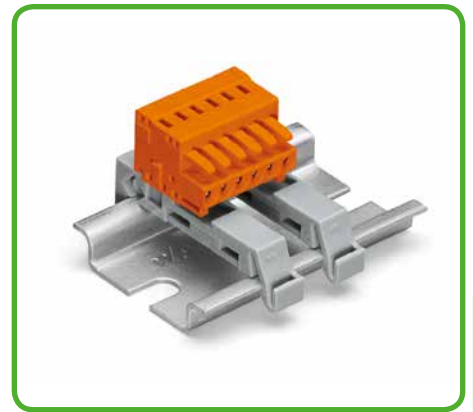
|  |   |  |
|--|---|--|
| <b>With Snap-in mounting feet</b><br><b>Pin spacing 3.81 mm / 0.15 in</b>    | <b>With Snap-in mounting feet</b><br><b>Drilled hole pattern for panel mounting</b> |  |
| 0.08 - 1.5 mm <sup>2</sup>   AWG 28 - 14<br>160 V/2.5 kV/2 10 A   300 V/10 A |   |  |



L = pole no. x pin spacing



Even pole number: L = (pole no. - 2) x pin spacing  
 Odd pole number: L = (pole no. - 1) x pin spacing



Using two DIN 35-rail mounting adapters (209-137) for 3 or more poles. Distance between two mounting adapters: maximum 7 poles.

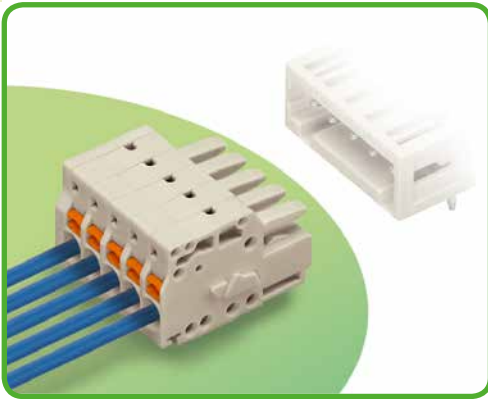
| Pole No.  | Item No.        | Pack. Unit  |
|---|-----------------|-------------|
| <b>Female connector with snap-in mounting feet,</b>   |                 |             |
| for 0.6 - 1.2 mm plate thickness,<br>3.5 mm mounting hole diameter, orange  |                 |             |
| 2   | 734-202/008-000 | 100         |
| 3   | 734-203/008-000 | 100         |
| 4   | 734-204/008-000 | 100         |
| 5   | 734-205/008-000 | 50          |
| 6   | 734-206/008-000 | 50          |
| 8   | 734-208/008-000 | 50          |
| 9   | 734-209/008-000 | 50          |
| 10  | 734-210/008-000 | 50          |
| 12  | 734-212/008-000 | 50          |
| 14  | 734-214/008-000 | 25          |
| 16  | 734-216/008-000 | 25          |
| 18  | 734-218/008-000 | 25          |
| 19  | 734-219/008-000 | 25          |
| 20  | 734-220/008-000 | 25          |
| Three or more pole female connectors have a snap-in mounting foot at every other pole<br>(2-pole female connectors/2 snap-in mounting feet) |                 |             |
| <b>Product Accessories</b>  |                 | <b>Page</b> |
| Mounting adapter for DIN 35 rail, min. length 3 poles (209-137)   |                 | 363         |

# 5 Female Connectors with Push-Buttons

## Pin spacing 3.5 mm, 3.81 mm

### MCS-MINI

290



- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire mated halves
- Push-in termination of both solid and ferruled, fine-stranded conductors
- Integrated test ports for testing parallel to conductor entry
- 100% protected against mismatching
- With coding fingers

#### Technical data:

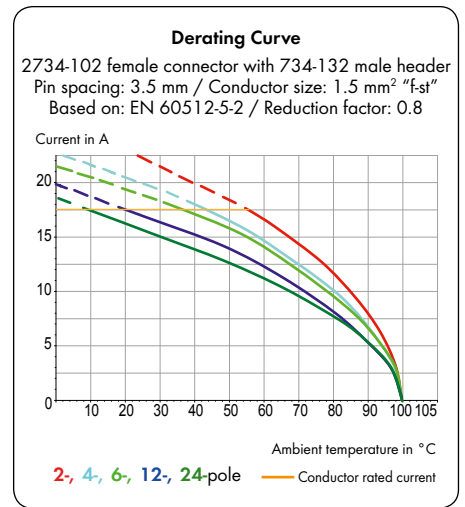
| Pin Spacing          | 3.5 mm<br>0.138 in |        |        | 3.81 mm<br>0.15 in |        |        |
|----------------------|--------------------|--------|--------|--------------------|--------|--------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |        |        |
| Rating per           |                    |        |        |                    |        |        |
| Overtoltage category | III                | III    | II     | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 10 A               | 10 A   | 10 A   | 10 A               | 10 A   | 10 A   |
| Approvals per        | UL/CSA             |        |        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      | B                  | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  | 300 V              | -      | 300 V  |
| Nominal current UL   | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |
| Nominal current CSA  | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |

#### Conductor data:

|                               |   |                |
|-------------------------------|---|----------------|
| Connection technology         | CAGE CLAMP®S  |                |
| Conductor size: solid         | 0.2 - 1.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded | 0.2 - 1.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded | 0.25 - 0.75 mm <sup>2</sup> (with insulated ferrule)  |                |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |                |
| AWG                           | 28 - 16   | 14: THHN, THWN |
| Strip length                  | 8 - 9 mm / 0.31 - 0.35 in                             |                |

#### Material data:

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +100 °C                  |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix . . . /010-000" is added to the "basic item no."      |                                   |



#### MCS-MINI accessories:

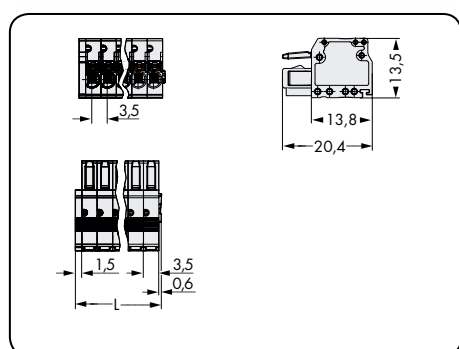
#### Page:

|                      |           |
|----------------------|-----------|
| Marking accessories  | 508 - 511 |
| Operating tools      | 316       |
| Direct marking       | 320 - 321 |
| Test pin             | 506       |
| Screws               | 514       |
| Strain relief plates | 319       |

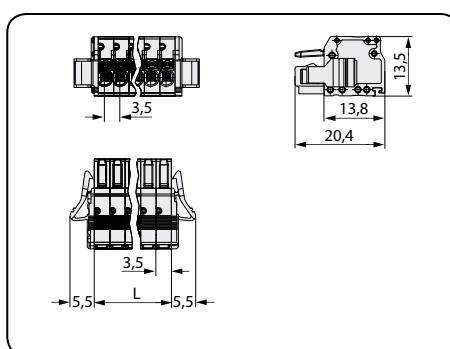
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Female Connectors with Push-Buttons MCS-MINI

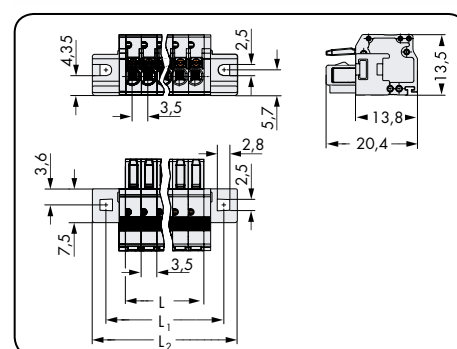
| Pin spacing 3.5 mm / 0.138 in |             | With locking levers<br>Pin spacing 3.5 mm / 0.138 in |             | With fixing flanges<br>Pin spacing 3.5 mm / 0.138 in |             |
|-------------------------------|-------------|--|-------------|--|-------------|
| 0.2 - 1.5 mm <sup>2</sup>     | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>                            | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>                            | AWG 24 - 16 |
| 160 V/2.5 kV/2 10 A           | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  |



L = (pole no. x pin spacing) + 2.1 mm



L = pole no. x pin spacing

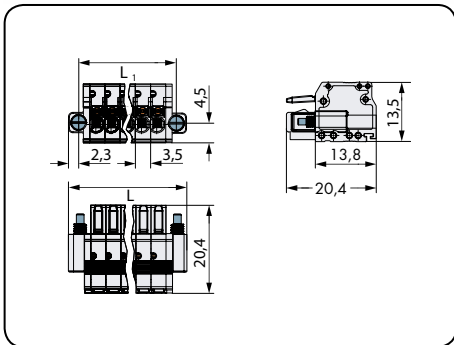


L = pole no. x pin spacing  
L<sub>1</sub> = (pole no. x pin spacing) + 8.8 mm  
L<sub>2</sub> = (pole no. x pin spacing) + 14.8 mm

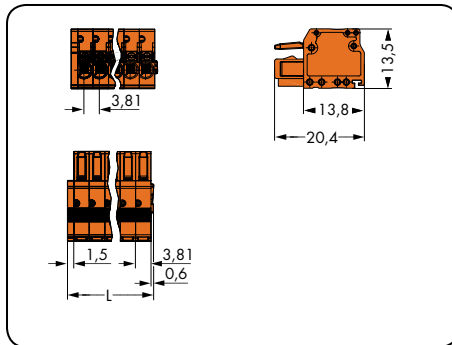
| Pole No.                                       | Item No. | Pack. Unit | Pole No.  | Item No.         | Pack. Unit | Pole No.  | Item No.         | Pack. Unit |
|--|----------|------------|---|------------------|------------|---|------------------|------------|
| Female connector with push-buttons, light gray |          |            | Female connector with push-buttons and locking levers, light gray |                  |            | Female connector with push-buttons and fixing flanges, light gray |                  |            |
| 2  | 2734-102 | 200        | 2   | 2734-102/037-000 | 100        | 2   | 2734-102/031-000 | 100        |
| 3  | 2734-103 | 200        | 3   | 2734-103/037-000 | 100        | 3   | 2734-103/031-000 | 100        |
| 4  | 2734-104 | 100        | 4   | 2734-104/037-000 | 100        | 4   | 2734-104/031-000 | 50         |
| 5  | 2734-105 | 100        | 5   | 2734-105/037-000 | 50         | 5   | 2734-105/031-000 | 50         |
| 6  | 2734-106 | 100        | 6   | 2734-106/037-000 | 50         | 6   | 2734-106/031-000 | 50         |
| 7  | 2734-107 | 100        | 7   | 2734-107/037-000 | 50         | 7   | 2734-107/031-000 | 50         |
| 8  | 2734-108 | 50         | 8   | 2734-108/037-000 | 50         | 8   | 2734-108/031-000 | 50         |
| 9  | 2734-109 | 50         | 9   | 2734-109/037-000 | 50         | 9   | 2734-109/031-000 | 50         |
| 10   | 2734-110 | 50         | 10  | 2734-110/037-000 | 50         | 10  | 2734-110/031-000 | 50         |
| 11   | 2734-111 | 50         | 11  | 2734-111/037-000 | 50         | 11  | 2734-111/031-000 | 25         |
| 12   | 2734-112 | 50         | 12  | 2734-112/037-000 | 50         | 12  | 2734-112/031-000 | 25         |
| 13   | 2734-113 | 50         | 13  | 2734-113/037-000 | 25         | 13  | 2734-113/031-000 | 25         |
| 14   | 2734-114 | 50         | 14  | 2734-114/037-000 | 25         | 14  | 2734-114/031-000 | 25         |
| 16   | 2734-116 | 25         | 16  | 2734-116/037-000 | 25         | 16  | 2734-116/031-000 | 25         |
| 18   | 2734-118 | 25         | 18  | 2734-118/037-000 | 25         | 18  | 2734-118/031-000 | 25         |
| 20   | 2734-120 | 25         | 20  | 2734-120/037-000 | 25         | 20  | 2734-120/031-000 | 25         |
| 24   | 2734-124 | 25         | 24  | 2734-124/037-000 | 10         | 24  | 2734-124/031-000 | 10         |
| For cutout dimensions, see page 322, table 2.  |          |            |   |                  |            |   |                  |            |

# Female Connectors with Push-Buttons MCS-MINI

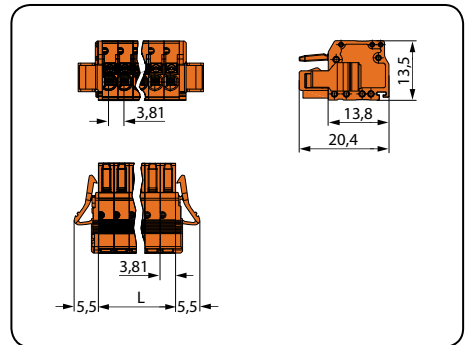
| With screw flanges<br>Pin spacing 3.5 mm / 0.138 in |             | Pin spacing 3.81 mm / 0.15 in |             | With locking levers<br>Pin spacing 3.81 mm / 0.15 in |             |
|---|-------------|-------------------------------|-------------|--|-------------|
| 0.2 - 1.5 mm <sup>2</sup>                           | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>     | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>                            | AWG 24 - 16 |
| 160 V/2.5 kV/2 10 A                                 | 300 V/10 A  | 160 V/2.5 kV/2 10 A           | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  |



L = (pole no. x pin spacing) + 9.5 mm  
L<sub>1</sub> = (pole no. x pin spacing) + 4.9 mm



L = (pole no. x pin spacing) + 2.1 mm



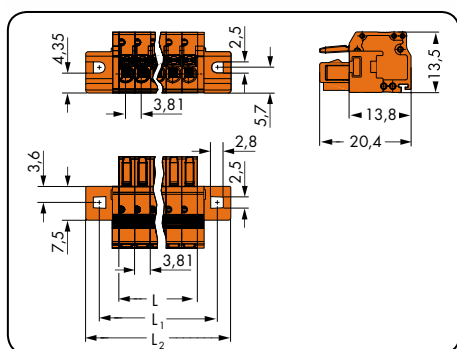
L = pole no. x pin spacing

| Pole No.   | Item No.         | Pack. Unit | Pole No.                                   | Item No. | Pack. Unit | Pole No.  | Item No.         | Pack. Unit |
|--|------------------|------------|--|----------|------------|---|------------------|------------|
| Female connector with push-buttons and screw flanges, light gray |                  |            | Female connector with push-buttons, orange |          |            | Female connector with push-buttons and locking levers, orange |                  |            |
| 2  | 2734-102/107-000 | 100        | 2  | 2734-202 | 200        | 2   | 2734-202/037-000 | 100        |
| 3  | 2734-103/107-000 | 100        | 3  | 2734-203 | 200        | 3   | 2734-203/037-000 | 100        |
| 4  | 2734-104/107-000 | 100        | 4  | 2734-204 | 100        | 4   | 2734-204/037-000 | 100        |
| 5  | 2734-105/107-000 | 50         | 5  | 2734-205 | 100        | 5   | 2734-205/037-000 | 50         |
| 6  | 2734-106/107-000 | 50         | 6  | 2734-206 | 100        | 6   | 2734-206/037-000 | 50         |
| 7  | 2734-107/107-000 | 50         |  |          |            |   |                  |            |
| 8  | 2734-108/107-000 | 50         | 8  | 2734-208 | 50         | 8   | 2734-208/037-000 | 50         |
| 9  | 2734-109/107-000 | 50         | 9  | 2734-209 | 50         | 9   | 2734-209/037-000 | 50         |
| 10   | 2734-110/107-000 | 50         | 10   | 2734-210 | 50         | 10  | 2734-210/037-000 | 50         |
| 11   | 2734-111/107-000 | 50         |  |          |            |   |                  |            |
| 12   | 2734-112/107-000 | 50         | 12   | 2734-212 | 25         | 12  | 2734-212/037-000 | 25         |
| 13   | 2734-113/107-000 | 25         |  |          |            |   |                  |            |
| 14   | 2734-114/107-000 | 25         | 14   | 2734-214 | 25         | 14  | 2734-214/037-000 | 25         |
| 16   | 2734-116/107-000 | 25         | 16   | 2734-216 | 25         | 16  | 2734-216/037-000 | 25         |
| 18   | 2734-118/107-000 | 25         | 18   | 2734-218 | 25         | 18  | 2734-218/037-000 | 25         |
| 20   | 2734-120/107-000 | 25         | 19   | 2734-219 | 25         | 19  | 2734-219/037-000 | 25         |
| 24   | 2734-124/107-000 | 10         | 20   | 2734-220 | 25         | 20  | 2734-220/037-000 | 25         |



# Female Connectors with Push-Buttons MCS-MINI

|  |             |  |
|--|-------------|--|
| <p>With fixing flanges<br/>Pin spacing 3.81 mm / 0.15 in</p> |             |  |
| 0.2 - 1.5 mm <sup>2</sup>                                    | AWG 24 - 16 |  |
| 160 V/2.5 kV/2 10 A  | 300 V/10 A  |  |



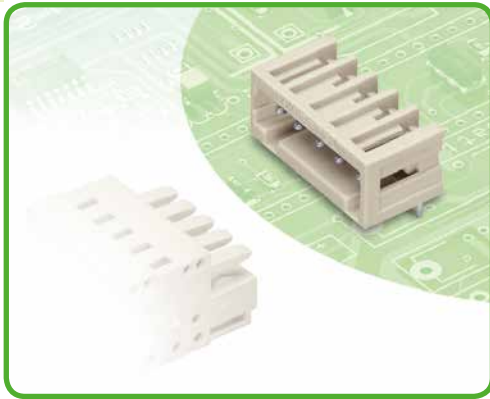
L = pole no. x pin spacing  
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$

| Pole No.   | Item No.         | Pack. Unit |
|--|------------------|------------|
| <b>Female connector with push-buttons and fixing flanges, orange</b> |                  |            |
| 2  | 2734-202/031-000 | 100        |
| 3  | 2734-203/031-000 | 100        |
| 4  | 2734-204/031-000 | 50         |
| 5  | 2734-205/031-000 | 50         |
| 6  | 2734-206/031-000 | 50         |
| 8  | 2734-208/031-000 | 50         |
| 9  | 2734-209/031-000 | 50         |
| 10   | 2734-210/031-000 | 50         |
| 12   | 2734-212/031-000 | 25         |
| 14   | 2734-214/031-000 | 25         |
| 16   | 2734-216/031-000 | 25         |
| 18   | 2734-218/031-000 | 25         |
| 19   | 2734-219/031-000 | 25         |
| 20   | 2734-220/031-000 | 25         |
| For cutout dimensions, see page 322, table 2.                        |                  |            |

## Male Headers with Solder Pins and Press-In Pins

### Pin Spacing 3.5/3.81 mm

### MCS-MINI



- Male headers may be mounted horizontally or vertically via straight or angled solder pins
- 1 x 1 mm pin cross section allows nominal current up to 10 A
- Double-deck male headers save space on the PCB, providing a large number of "wire-to-board" connections
- 100% protected against mismatching
- With coding keys

#### Technical data:

| Pin Spacing          | 3.5/3.81 mm<br>0.138 in |        |        | 3.5/3.81 mm<br>0.138 in |        |        | 3.5/3.81 mm<br>0.138 in |        |        |
|----------------------|-------------------------|--------|--------|-------------------------|--------|--------|-------------------------|--------|--------|
|                      | IEC/EN 60664-1          |        |        | IEC/EN 60664-1          |        |        | IEC/EN 60664-1          |        |        |
| Rating per           | III                     | III    | II     | III                     | III    | II     | III                     | III    | II     |
| Overtoltage category | 3                       | 2      | 2      | 3                       | 2      | 2      | 3                       | 2      | 2      |
| Pollution degree     | 160 V                   | 160 V  | 320 V  | 160 V                   | 160 V  | 320 V  | 160 V                   | 160 V  | 320 V  |
| Rated voltage        | 2.5 kV                  | 2.5 kV | 2.5 kV | 2.5 kV                  | 2.5 kV | 2.5 kV | 2.5 kV                  | 2.5 kV | 2.5 kV |
| Rated surge voltage  | 10 A                    | 10 A   | 10 A   | 8 A                     | 8 A    | 8 A    | 10 A                    | 10 A   | 10 A   |
| Nominal current      | UL/CSA                  |        |        | UL/CSA                  |        |        | UL/CSA                  |        |        |
| Approvals per        | B                       | C      | D      | B                       | C      | D      | B                       | C      | D      |
| Use group UL 1059    | 300 V                   | -      | 300 V  | 300 V                   | -      | 300 V  | 300 V                   | -      | 300 V  |
| Rated voltage        | 10 A                    | -      | 10 A   | 10 A                    | -      | 10 A   | 10 A                    | -      | 10 A   |
| Nominal current UL   | 10 A                    | -      | 10 A   | 10 A                    | -      | 10 A   | 10 A                    | -      | 10 A   |
| Nominal current CSA  |                         |        |        |                         |        |        |                         |        |        |

#### Press-in technology:

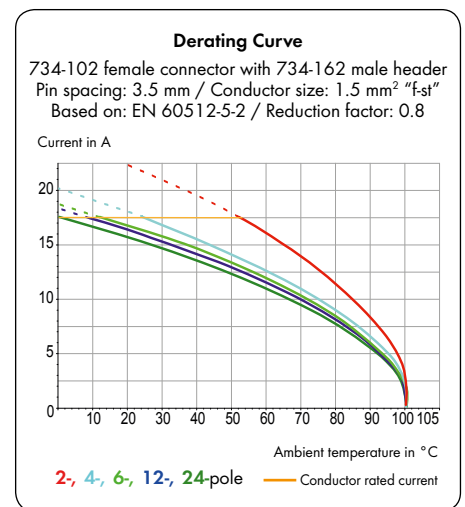
#### Double-deck version:

#### Solder and press-in pin data:

|   |  |
|---|--|
| Solder pin: length/width                      | 4.5 mm / 1 x 1 mm (straight)                 |
| Solder pin: length/width                      | 3.8 mm / 1 x 1 mm (angled)                   |
| Solder pin: length/width                      | 3.6 mm / 1 x 1 mm (double-deck male headers) |
| Solder pin: drilled hole diameter             | 1.4 <sup>+0.1</sup> mm                       |
| Press-in pin: length/width                    | 2.9 mm / 0.6 x 1.2 mm                        |
| Press-in pin: drilled hole diameter           | 1.15 <sup>±0.025</sup>                       |
| Press-in pin: metal-plated hole diameter      | 1.0 mm (HAL Sn)                              |
| Press-in pin: metal-plated hole diameter      | 1.0 mm (Chem. Sn)                            |
| For other pin lengths, please contact factory |  |

#### Material data:

|  |   |
|--|---|
| Material group   | I   |
| Insulating material  | Nylon 6.6 (PA 6.6)  |
| Flammability rating per UL 94  | V0  |
| Lower/Upper temperature limit  | -60 °C / +100 °C / Press-in pin: -40 °C / +85 °C                    |
| Contact material   | Electrolytic copper (E <sub>cu</sub> ) / Press-in pin: copper alloy |
| Contact plating  | tin-plated  |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |   |
| Depending on the version requested, "item no. suffix .../010-000" is added to the "basic item no."         |   |



#### MCS-MINI accessories:

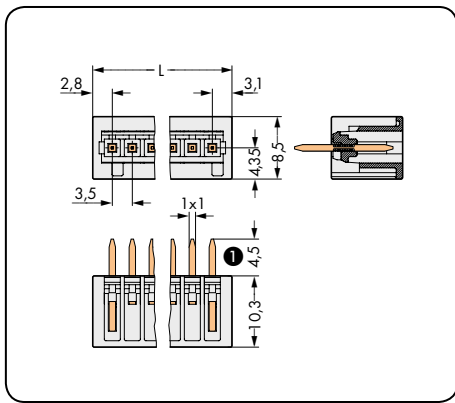
#### Page:

|             |     |
|-------------|-----|
| Coding keys | 317 |
|             |     |
|             |     |
|             |     |
|             |     |

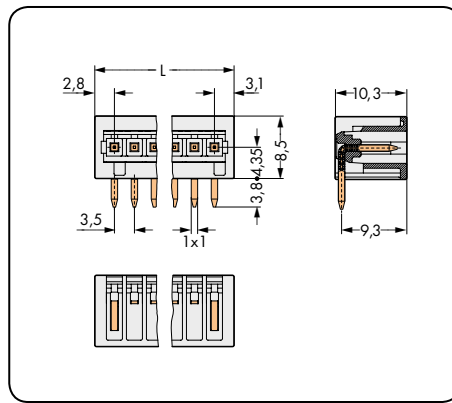
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Male Headers with Solder Pins MCS-MINI

| With straight solder pins<br>Pin spacing 3.5 mm / 0.138 in |            | With angled solder pins<br>Pin spacing 3.5 mm / 0.138 in |            |
|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A                                      | 300 V/10 A |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



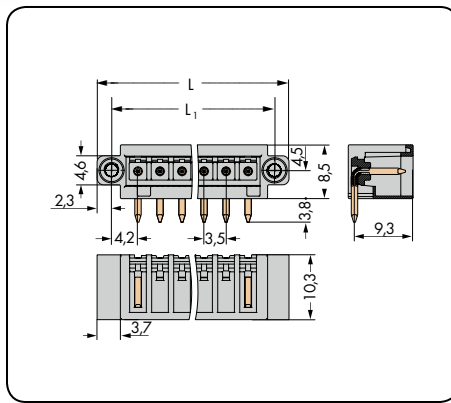
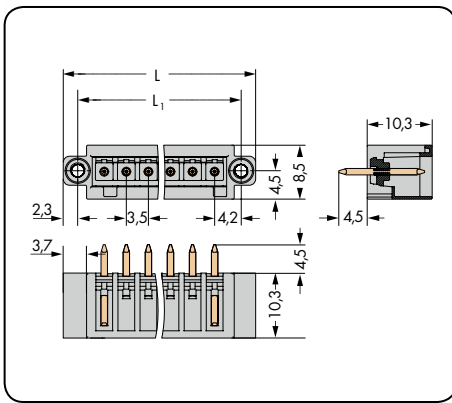
$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

| Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| Male header with straight solder pins, light gray |          |            | Male header with angled solder pins, light gray |          |            |
| 2   | 734-132  | 200        | 2   | 734-162  | 200        |
| 3   | 734-133  | 200        | 3   | 734-163  | 200        |
| 4   | 734-134  | 200        | 4   | 734-164  | 200        |
| 5   | 734-135  | 200        | 5   | 734-165  | 200        |
| 6   | 734-136  | 100        | 6   | 734-166  | 100        |
| 7   | 734-137  | 100        | 7   | 734-167  | 100        |
| 8   | 734-138  | 100        | 8   | 734-168  | 100        |
| 9   | 734-139  | 100        | 9   | 734-169  | 100        |
| 10  | 734-140  | 100        | 10  | 734-170  | 100        |
| 11  | 734-141  | 100        | 11  | 734-171  | 100        |
| 12  | 734-142  | 100        | 12  | 734-172  | 100        |
| 13  | 734-143  | 100        | 13  | 734-173  | 100        |
| 14  | 734-144  | 100        | 14  | 734-174  | 100        |
| 16  | 734-146  | 50         | 16  | 734-176  | 50         |
| 18  | 734-148  | 50         | 18  | 734-178  | 50         |
| 20  | 734-150  | 50         | 20  | 734-180  | 50         |
| 24  | 734-154  | 50         | 24  | 734-184  | 50         |

1 MCS-MINI male headers with straight solder pins are also available with 3.8 mm pin projection. Add item no. suffix .../046-000.

# Male Headers with Solder Pins and Threaded Flanges MCS-MINI

| With straight solder pins<br>Pin spacing 3.5 mm / 0.138 in |            | With angled solder pins<br>Pin spacing 3.5 mm / 0.138 in |            |
|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A                                      | 300 V/10 A |

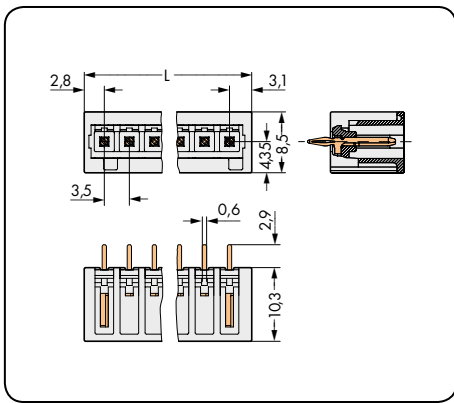
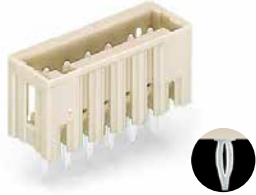


$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$   
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$

| Pole No.  | Item No.        | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|
| <b>Male header with straight solder pins and threaded flanges, light gray</b> |                 |            | <b>Male header with angled solder pins and threaded flanges, light gray</b> |                 |            |
| 2   | 734-132/108-000 | 200        | 2   | 734-162/108-000 | 200        |
| 3   | 734-133/108-000 | 200        | 3   | 734-163/108-000 | 200        |
| 4   | 734-134/108-000 | 200        | 4   | 734-164/108-000 | 200        |
| 5   | 734-135/108-000 | 100        | 5   | 734-165/108-000 | 100        |
| 6   | 734-136/108-000 | 100        | 6   | 734-166/108-000 | 100        |
| 7   | 734-137/108-000 | 100        | 7   | 734-167/108-000 | 100        |
| 8   | 734-138/108-000 | 100        | 8   | 734-168/108-000 | 100        |
| 9   | 734-139/108-000 | 100        | 9   | 734-169/108-000 | 100        |
| 10  | 734-140/108-000 | 100        | 10  | 734-170/108-000 | 100        |
| 11  | 734-141/108-000 | 100        | 11  | 734-171/108-000 | 100        |
| 12  | 734-142/108-000 | 100        | 12  | 734-172/108-000 | 100        |
| 13  | 734-143/108-000 | 50         | 13  | 734-173/108-000 | 50         |
| 14  | 734-144/108-000 | 50         | 14  | 734-174/108-000 | 50         |
| 16  | 734-146/108-000 | 50         | 16  | 734-176/108-000 | 50         |
| 18  | 734-148/108-000 | 50         | 18  | 734-178/108-000 | 50         |
| 20  | 734-150/108-000 | 50         | 20  | 734-180/108-000 | 50         |
| 24  | 734-154/108-000 | 50         | 24  | 734-184/108-000 | 50         |

# Male Headers for Press-In Technology MCS-MINI

|   |                   |                                   |
|---|-------------------|-----------------------------------|
| <p><b>With straight press-in pins</b><br/> <b>Pin spacing 3.5 mm / 0.138 in</b></p> |                   | <p><b>Press-in technology</b></p> |
| <p>160 V/2.5 kV/2 8 A</p>   | <p>300 V/10 A</p> |                                   |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

| Pole No.                                    | Item No.        | Pack. Unit |
|---|-----------------|------------|
| <b>Male header for press-in technology,</b> |                 |            |
| 0.6 x 1.2 mm press-in pin, light gray       |                 |            |
| 2   | 734-132/100-000 | 200        |
| 3   | 734-133/100-000 | 200        |
| 4   | 734-134/100-000 | 200        |
| 5   | 734-135/100-000 | 200        |
| 6   | 734-136/100-000 | 100        |
| 7   | 734-137/100-000 | 100        |
| 8   | 734-138/100-000 | 100        |
| 9   | 734-139/100-000 | 100        |
| 10  | 734-140/100-000 | 100        |
| 11  | 734-141/100-000 | 100        |
| 12  | 734-142/100-000 | 100        |

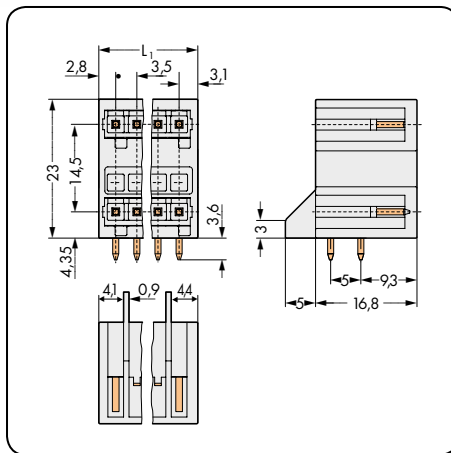
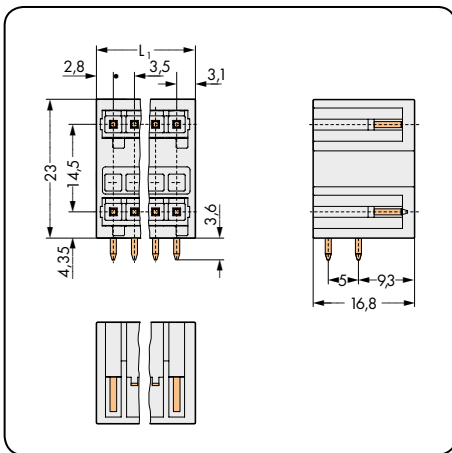
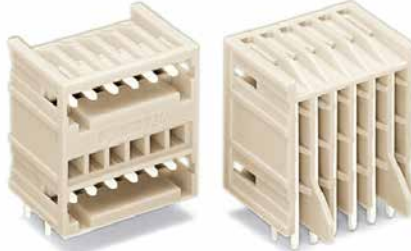
### Unique features of WAGO press-in technology:

- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability.
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.02</sup><sub>-0.02</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.02</sup><sub>-0.02</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm
  - no unnecessary projection on underside of PCB
- Low press-in force required
  - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN EN 603 52-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area  $\geq 1.3 \text{ mm}$
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole
  - reduces wear and tear on PCB and contact points

# Double-Deck Male Headers with Solder Pins

## MCS-MINI

| With angled solder pins<br>Pin spacing 3.5 mm / 0.138 in |            | With angled solder pins and support<br>Pin spacing 3.5 mm / 0.138 in |            |
|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A                                      | 300 V/10 A | 160 V/2.5 kV/2 10 A  | 300 V/10 A |

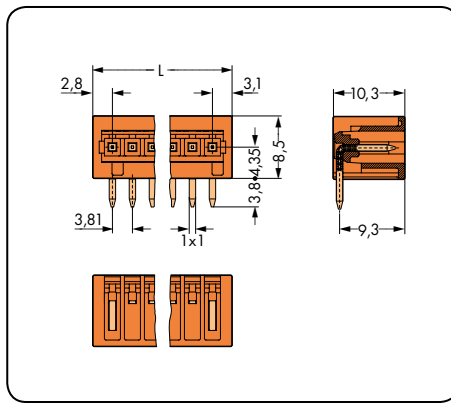
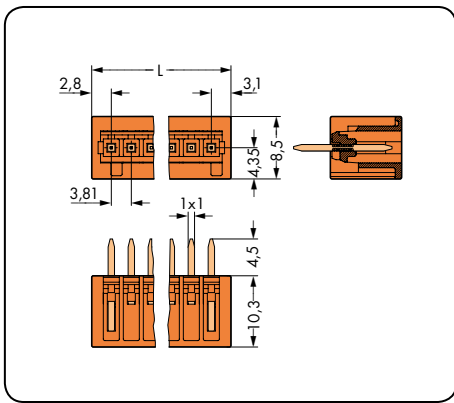


$L_1 = (\text{pole no.}/2 - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

| Pole No.   | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|----------|------------|--|-----------------|------------|
| <b>Double-deck male header with angled solder pins</b><br>light gray |          |            | <b>Double-deck male header with angled solder pins</b><br><b>and support, light gray</b> |                 |            |
| 4 (2 x 2)  | 734-402  | 100        | 4 (2 x 2)  | 734-402/001-000 | 100        |
| 6 (3 x 2)  | 734-403  | 100        | 6 (3 x 2)  | 734-403/001-000 | 100        |
| 8 (4 x 2)  | 734-404  | 100        | 8 (4 x 2)  | 734-404/001-000 | 100        |
| 10 (5 x 2)   | 734-405  | 100        | 10 (5 x 2)   | 734-405/001-000 | 100        |
| 12 (6 x 2)   | 734-406  | 100        | 12 (6 x 2)   | 734-406/001-000 | 50         |
| 14 (7 x 2)   | 734-407  | 50         | 14 (7 x 2)   | 734-407/001-000 | 50         |
| 16 (8 x 2)   | 734-408  | 50         | 16 (8 x 2)   | 734-408/001-000 | 50         |
| 18 (9 x 2)   | 734-409  | 50         | 18 (9 x 2)   | 734-409/001-000 | 50         |
| 20 (10 x 2)  | 734-410  | 50         | 20 (10 x 2)  | 734-410/001-000 | 50         |
| 24 (12 x 2)  | 734-412  | 50         | 24 (12 x 2)  | 734-412/001-000 | 50         |

# Male Headers with Solder Pins MCS-MINI

| With straight solder pins<br>Pin spacing 3.81 mm / 0.15 in |            | With angled solder pins<br>Pin spacing 3.81 mm / 0.15 in |            |
|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A                                      | 300 V/10 A |



L = (pole no. - 1) x pin spacing + 5.9 mm

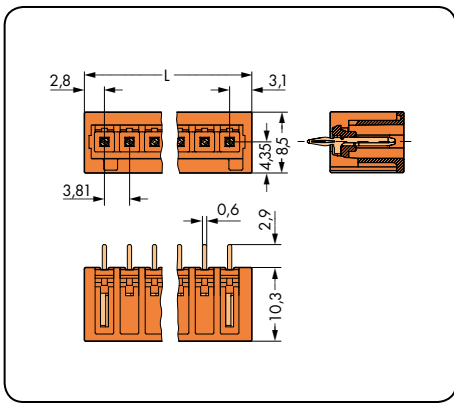
| Pole No.                                      | Item No. | Pack. Unit | Pole No.                                    | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| Male header with straight solder pins, orange |          |            | Male header with angled solder pins, orange |          |            |
| 2   | 734-232  | 200        | 2   | 734-262  | 200        |
| 3   | 734-233  | 200        | 3   | 734-263  | 200        |
| 4   | 734-234  | 200        | 4   | 734-264  | 200        |
| 5   | 734-235  | 200        | 5   | 734-265  | 200        |
| 6   | 734-236  | 100        | 6   | 734-266  | 100        |
| 8   | 734-238  | 100        | 8   | 734-268  | 100        |
| 9   | 734-239  | 100        | 9   | 734-269  | 100        |
| 10  | 734-240  | 100        | 10  | 734-270  | 100        |
| 12  | 734-242  | 100        | 12  | 734-272  | 100        |
| 14  | 734-244  | 100        | 14  | 734-274  | 100        |
| 16  | 734-246  | 50         | 16  | 734-276  | 50         |
| 18  | 734-248  | 50         | 18  | 734-778  | 50         |
| 19  | 734-249  | 50         | 18  | 734-779  | 50         |
| 20  | 734-250  | 50         | 20  | 734-280  | 50         |



# 5 Male Headers for Press-In Technology MCS MINI

300

|  |                   |                            |
|--|-------------------|----------------------------|
| <p>With straight press-in pins<br/>Pin spacing 3.81 mm / 0.15 in</p> |                   | <p>Press-in technology</p> |
| <p>160 V/2.5 kV/2 8 A</p>  | <p>300 V/10 A</p> |                            |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

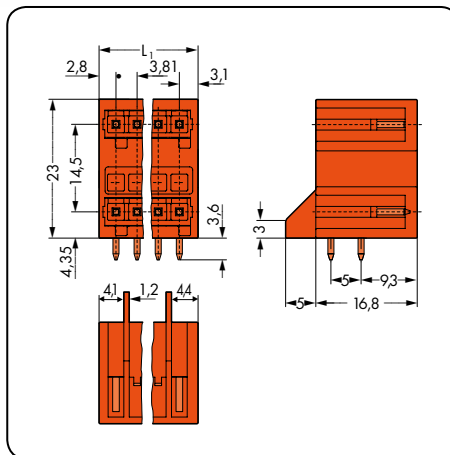
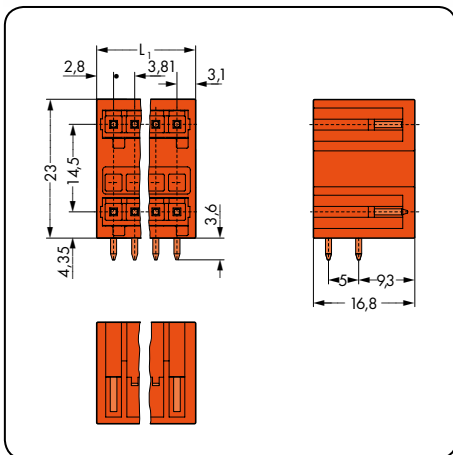
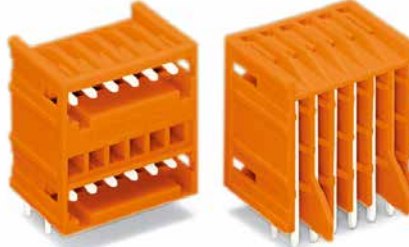
| Pole No.                                    | Item No.        | Pack. Unit |
|---|-----------------|------------|
| <b>Male header for press-in technology,</b> |                 |            |
| 0.6 x 1.2 mm press-in pin, orange           |                 |            |
| 2   | 734-232/100-000 | 200        |
| 3   | 734-233/100-000 | 200        |
| 4   | 734-234/100-000 | 200        |
| 5   | 734-235/100-000 | 200        |
| 6   | 734-236/100-000 | 100        |
| 8   | 734-238/100-000 | 100        |
| 9   | 734-239/100-000 | 100        |
| 10  | 734-240/100-000 | 100        |
| 12  | 734-242/100-000 | 100        |

### Unique features of WAGO press-in technology:

- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability.
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.09</sup><sub>-0.00</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.09</sup><sub>-0.00</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm
  - no unnecessary projection on underside of PCB
- Low press-in force required
  - reduces wear and tear on both PCB and components
- High retention force within the PCB - double the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole
  - reduces wear and tear on both PCB and contact points

# Double-Deck Male Headers with Solder Pins MCS-MINI

| With angled solder pins<br>Pin spacing 3.81 mm / 0.15 in |            | With angled solder pins and support<br>Pin spacing 3.81 mm / 0.15 in |            |
|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A                                      | 300 V/10 A | 160 V/2.5 kV/2 10 A  | 300 V/10 A |



$L_1 = (\text{pole no.}/2 - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

| Pole No.   | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|----------|------------|--|-----------------|------------|
| <b>Double-deck male header with angled solder pins, orange</b> |          |            | <b>Double-deck male header with angled solder pins and support, orange</b> |                 |            |
| 4 (2 x 2)  | 734-432  | 100        | 4 (2 x 2)  | 734-432/001-000 | 100        |
| 6 (3 x 2)  | 734-433  | 100        | 6 (3 x 2)  | 734-433/001-000 | 100        |
| 8 (4 x 2)  | 734-434  | 100        | 8 (4 x 2)  | 734-434/001-000 | 100        |
| 10 (5 x 2)   | 734-435  | 100        | 10 (5 x 2)   | 734-435/001-000 | 100        |
| 12 (6 x 2)   | 734-436  | 100        | 12 (6 x 2)   | 734-436/001-000 | 50         |
| 14 (7 x 2)   | 734-437  | 50         | 14 (7 x 2)   | 734-437/001-000 | 50         |
| 16 (8 x 2)   | 734-438  | 50         | 16 (8 x 2)   | 734-438/001-000 | 50         |
| 18 (9 x 2)   | 734-439  | 50         | 18 (9 x 2)   | 734-439/001-000 | 50         |
| 20 (10 x 2)  | 734-440  | 50         | 20 (10 x 2)  | 734-440/001-000 | 50         |
| 24 (12 x 2)  | 734-442  | 50         | 24 (12 x 2)  | 734-442/001-000 | 50         |

## Male Headers with Solder Pins, THR (Through-Hole Reflow\*) Pin Spacing 3.5 mm, 3.81 mm MCS-MINI



- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place assembly
- Optimal thermal penetration via pin enclosure design provides lower soldering temperatures
- 100% protected against mismating
- With coding keys

**Technical data:**

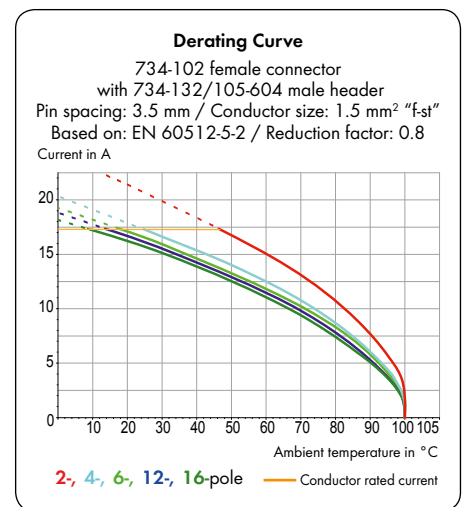
| Pin Spacing          | 3.5 mm<br>0.138 in |        |        | 3.81 mm<br>0.15 in |        |        |
|----------------------|--------------------|--------|--------|--------------------|--------|--------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |        |        |
| Rating per           | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |        |        |
| Overvoltage category | III                | III    | II     | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 10 A               | 10 A   | 10 A   | 10 A               | 10 A   | 10 A   |
| Approvals per        | UL/CSA             |        |        | UL/CSA**           |        |        |
| Use group UL 1059    | B                  | C      | D      | B                  | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  | -                  | -      | -      |
| Nominal current UL   | 10 A               | -      | 10 A   | -                  | -      | -      |
| Nominal current CSA  | 10 A               | -      | 10 A   | -                  | -      | -      |

**Solder pin data:**

|   |                        |
|---|------------------------|
| Solder pin: length/width                      | 2.4 mm / 1 x 1 mm      |
| Solder pin: metal-plated hole diameter        | 1.4 <sup>+0.1</sup> mm |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
|   |                        |
| For other pin lengths, please contact factory |                        |

**Material data:**

|  |   |
|--|---|
| Material group   | I   |
| Insulating material  | Glass fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94  | V0  |
| Lower/Upper temperature limit  | -60 °C / +100 °C                                |
| Contact material   | Electrolytic copper (E <sub>Cu</sub> )          |
| Contact plating  | tin-plated                                      |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |   |



**MCS-MINI accessories:**

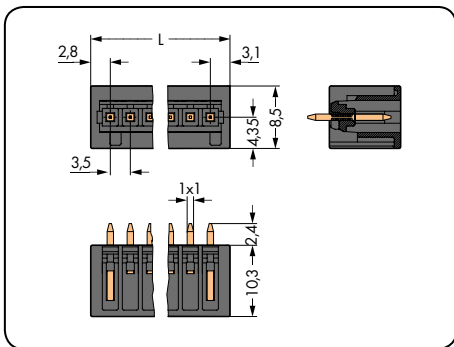
**Page:**

|             |     |
|-------------|-----|
| Coding keys | 317 |
|             |     |
|             |     |
|             |     |
|             |     |

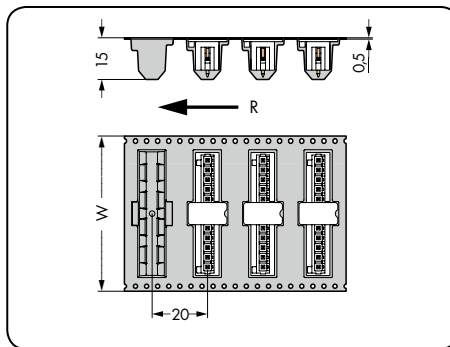
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Male Headers with Solder Pins, THR MCS-MINI

|  |            |  |            |
|--|------------|--|------------|
| <b>With straight solder pins</b><br><b>Pin spacing 3.5 mm / 0.138 in</b> |            | <b>With straight solder pins,</b><br><b>in tape-and-reel packaging</b><br><b>Pin spacing 3.5 mm / 0.138 in</b> |            |
| 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A  | 300 V/10 A |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



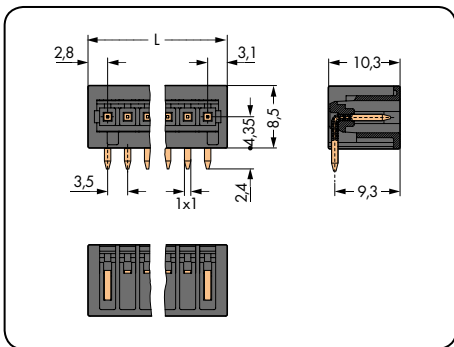
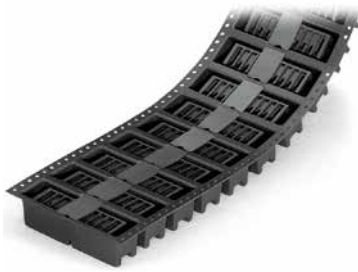
W= Tape width  
R = Feed direction

| Pole No.                                     | Item No.        | Pack. Unit | Pole No.  | Item No.                | W  |
|--|-----------------|------------|---|-------------------------|----|
| Male header with straight solder pins, black |                 |            | Male headers with straight solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                         |    |
| (mm)   |                 |            |   |                         |    |
| 2  | 734-132/105-604 | 200        | 2   | 734-132/105-604/997-405 | 32 |
| 3  | 734-133/105-604 | 200        | 3   | 734-133/105-604/997-405 | 32 |
| 4  | 734-134/105-604 | 200        | 4   | 734-134/105-604/997-405 | 32 |
| 5  | 734-135/105-604 | 200        | 5   | 734-135/105-604/997-405 | 32 |
| 6  | 734-136/105-604 | 100        | 6   | 734-136/105-604/997-407 | 56 |
| 7  | 734-137/105-604 | 100        | 7   | 734-137/105-604/997-407 | 56 |
| 8  | 734-138/105-604 | 100        | 8   | 734-138/105-604/997-407 | 56 |
| 9  | 734-139/105-604 | 100        | 9   | 734-139/105-604/997-407 | 56 |
| 10   | 734-140/105-604 | 100        | 10  | 734-140/105-604/997-407 | 56 |
| 11   | 734-141/105-604 | 100        | 11  | 734-141/105-604/997-407 | 56 |
| 12   | 734-142/105-604 | 100        | 12  | 734-142/105-604/997-407 | 56 |
| 14   | 734-144/105-604 | 100        | 14  | 734-144/105-604/997-408 | 72 |
| 16   | 734-146/105-604 | 50         | 16  | 734-146/105-604/997-408 | 72 |
| Reel diameter: 330 mm, 200 pieces per reel   |                 |            |   |                         |    |

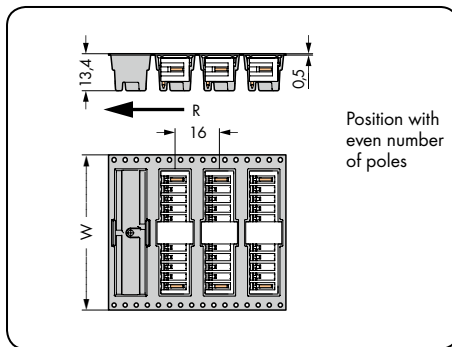
For other lengths, please contact factory.

# Male Headers with Solder Pins, THR MCS-MINI

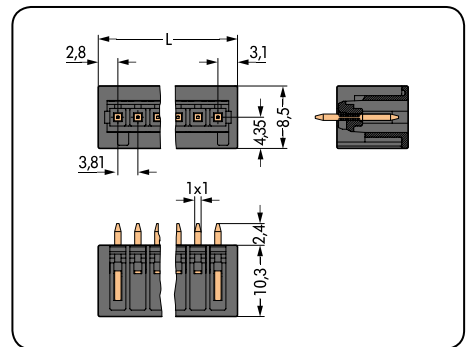
| With straight solder pins<br>Pin spacing 3.5 mm / 0.138 in |            | With angled solder pins,<br>in tape-and-reel packaging<br>Pin spacing 3.5 mm / 0.138 in |            | With straight solder pins<br>Pin spacing 3.81 mm / 0.15 in |  |
|--|------------|---|------------|--|--|
| 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A   | 300 V/10 A | 160 V/2.5 kV/2 10 A  |  |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

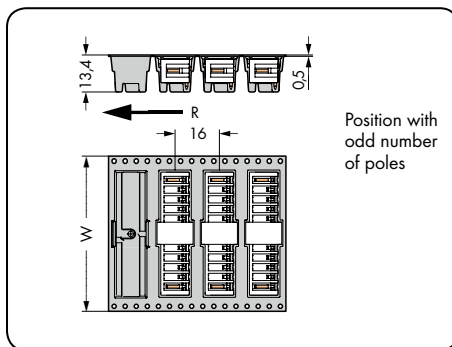


W= Tape width      R = Feed direction



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

| Pole No.                                   | Item No.        | Pack. Unit | Pole No.  | Item No.                | W  | Pole No.                                     | Item No.        | Pack. Unit |  |
|--|-----------------|------------|---|-------------------------|----|--|-----------------|------------|--|
| Male header with angled solder pins, black |                 |            | Male headers with angled solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                         |    | Male header with straight solder pins, black |                 |            |  |
|  |                 |            |   |                         |    | (mm)   |                 |            |  |
| 2  | 734-162/105-604 | 200        | 2   | 734-162/105-604/997-405 | 32 | 2  | 734-232/105-604 | 200        |  |
| 3  | 734-163/105-604 | 200        | 3   | 734-163/105-604/997-405 | 32 | 3  | 734-233/105-604 | 200        |  |
| 4  | 734-164/105-604 | 200        | 4   | 734-164/105-604/997-405 | 32 | 4  | 734-234/105-604 | 200        |  |
| 5  | 734-165/105-604 | 200        | 5   | 734-165/105-604/997-405 | 32 | 5  | 734-235/105-604 | 200        |  |
| 6  | 734-166/105-604 | 100        | 6   | 734-166/105-604/997-407 | 56 | 6  | 734-236/105-604 | 100        |  |
| 7  | 734-167/105-604 | 100        | 7   | 734-167/105-604/997-407 | 56 | 8  | 734-238/105-604 | 100        |  |
| 8  | 734-168/105-604 | 100        | 8   | 734-168/105-604/997-407 | 56 | 10   | 734-240/105-604 | 100        |  |
| 9  | 734-169/105-604 | 100        | 9   | 734-169/105-604/997-407 | 56 | 12   | 734-242/105-604 | 100        |  |
| 10   | 734-170/105-604 | 100        | 10  | 734-170/105-604/997-407 | 56 |  |                 |            |  |
| 11   | 734-171/105-604 | 100        | 11  | 734-171/105-604/997-407 | 56 |  |                 |            |  |
| 12   | 734-172/105-604 | 100        | 12  | 734-172/105-604/997-407 | 56 |  |                 |            |  |
| 14   | 734-174/105-604 | 100        | 14  | 734-174/105-604/997-408 | 72 |  |                 |            |  |
| 16   | 734-176/105-604 | 50         | 16  | 734-176/105-604/997-408 | 72 |  |                 |            |  |
|  |                 |            |   |                         |    | Reel diameter: 330 mm, 280 pieces per reel   |                 |            |  |

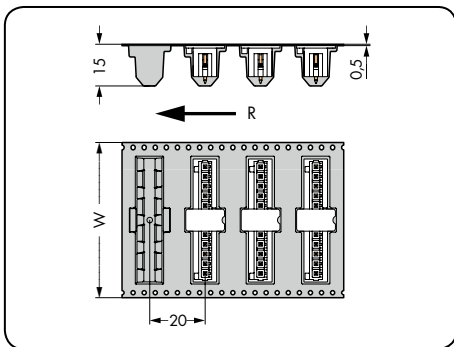


W= Tape width      R = Feed direction

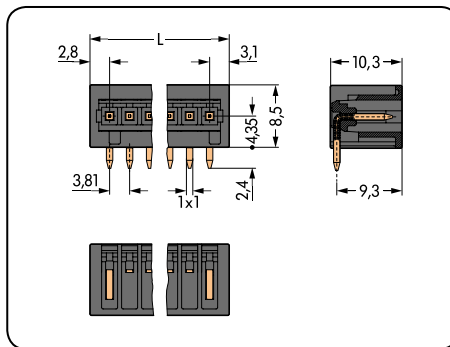
For other lengths, please contact factory.

# Male Headers with Solder Pins, THR MCS-MINI

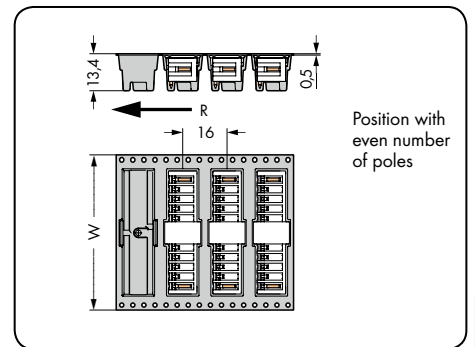
|   |   |   |
|---|---|---|
| <p>With straight solder pins,<br/>in tape-and-reel packaging<br/>Pin spacing 3.81 mm / 0.15 in</p> <p>160 V/2.5 kV/2 10 A</p> | <p>With angled solder pins<br/>Pin spacing 3.81 mm / 0.15 in</p> <p>160 V/2.5 kV/2 10 A</p> | <p>With angled solder pins,<br/>in tape-and-reel packaging<br/>Pin spacing 3.81 mm / 0.15 in</p> <p>160 V/2.5 kV/2 10 A</p> |
|---|---|---|



W= Tape width  
R = Feed direction

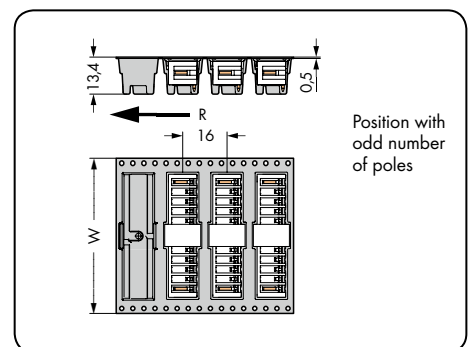


$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



W= Tape width  
R = Feed direction

| Pole No.  | Item No.                | W  | Pole No.                                      | Item No.        | Pack. Unit | Pole No.  | Item No.                | W  |
|---|-------------------------|----|---|-----------------|------------|---|-------------------------|----|
| Male headers with straight solder pins,<br>in tape-and-reel packaging acc. to IEC 60286-3,<br>black |                         |    | Male header with angled solder pins,<br>black |                 |            | Male headers with angled solder pins,<br>in tape-and-reel packaging acc. to IEC 60286-3,<br>black |                         |    |
| (mm)  |                         |    |   |                 |            | (mm)  |                         |    |
| 2   | 734-232/105-604/997-405 | 32 | 2   | 734-262/105-604 | 200        | 2   | 734-262/105-604/997-405 | 32 |
| 3   | 734-233/105-604/997-405 | 32 | 3   | 734-263/105-604 | 200        | 3   | 734-263/105-604/997-405 | 32 |
| 4   | 734-234/105-604/997-405 | 32 | 4   | 734-264/105-604 | 200        | 4   | 734-264/105-604/997-405 | 32 |
| 5   | 734-235/105-604/997-407 | 56 | 5   | 734-265/105-604 | 200        | 5   | 734-265/105-604/997-407 | 56 |
| 6   | 734-236/105-604/997-407 | 56 | 6   | 734-266/105-604 | 100        | 6   | 734-266/105-604/997-407 | 56 |
| 8   | 734-238/105-604/997-407 | 56 | 8   | 734-268/105-604 | 100        | 8   | 734-268/105-604/997-407 | 56 |
| 10  | 734-240/105-604/997-407 | 56 | 10  | 734-270/105-604 | 100        | 10  | 734-270/105-604/997-407 | 56 |
| 12  | 734-242/105-604/997-408 | 72 | 12  | 734-272/105-604 | 100        | 12  | 734-272/105-604/997-408 | 72 |
| Reel diameter: 330 mm, 200 pieces per reel  |                         |    |   |                 |            | Reel diameter: 330 mm, 280 pieces per reel  |                         |    |



W= Tape width  
R = Feed direction

# Male Connectors Pin Spacing 3.5 mm, 3.81 mm MCS-MINI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Strain relief plates and housings for factory and in-the-field assembly
- 100% protected against mismatching
- With coding keys

**Technical data:**

| Pin Spacing          | 3.5 mm<br>0.138 in |        |        | 3.81 mm<br>0.15 in |        |        |
|----------------------|--------------------|--------|--------|--------------------|--------|--------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |        |        |
| Rating per           |                    |        |        |                    |        |        |
| Overtoltage category | III                | III    | II     | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 10 A               | 10 A   | 10 A   | 10 A               | 10 A   | 10 A   |
| Approvals per        | UL/CSA             |        |        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      | B                  | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  | 300 V              | -      | 300 V  |
| Nominal current UL   | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |
| Nominal current CSA  | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |

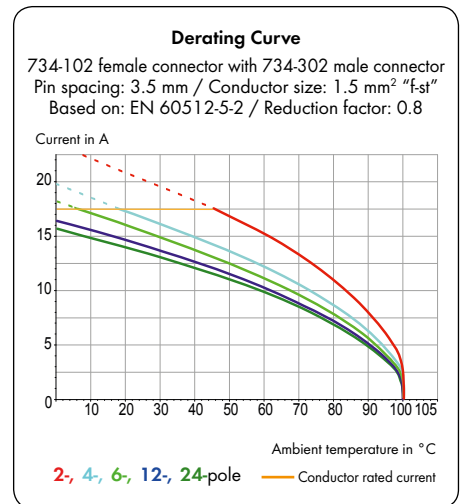
**Conductor data:**

|  |   |
|--|---|
| Connection technology  | CAGE CLAMP®   |
| Conductor size: solid  | 0.08 - 1.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded  | 0.08 - 1.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded  | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)*  |
| Conductor size: fine-stranded  | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG  | 28 - 14      14: THHN, THWN                           |
| Strip length   | 6 - 7 mm / 0.24 - 0.28 in                             |
| * Only every other clamping unit can be terminated using 1.5 mm <sup>2</sup> connectors with insulated ferrules. |   |

**Material data:**

|  |  |
|--|--|
| Material group   | I                                      |
| Insulating material  | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94  | V0                                     |
| Lower/Upper temperature limit  | -60 °C / +100 °C                       |
| Clamping spring material   | Chrome-nickel spring steel (CrNi)      |
| Contact material   | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating  | tin-plated                             |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |  |
| Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”        |  |

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.



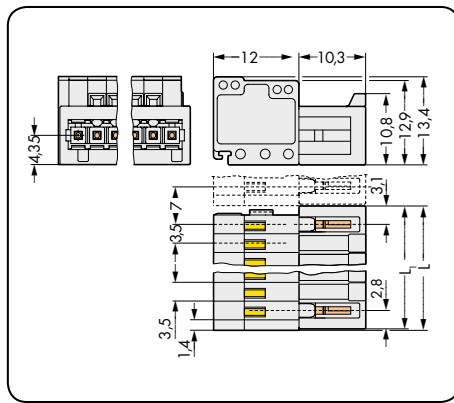
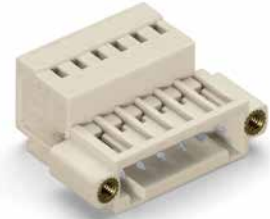
**MCS-MINI accessories:**

**Page:**

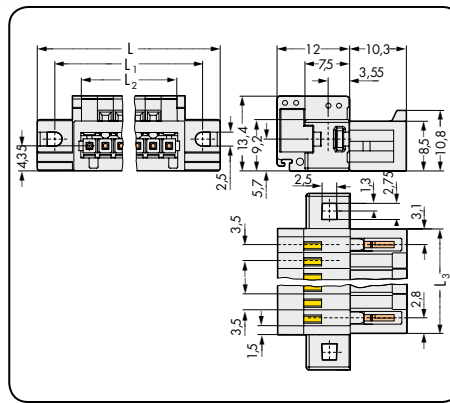
|                       |           |
|-----------------------|-----------|
| Marking accessories   | 508 - 511 |
| Operating tools       | 316       |
| Direct marking        | 320 - 321 |
| Coding keys           | 317       |
| Mounting adapter      | 363       |
| Screws                | 514       |
| Strain relief housing | 318       |
| Stress relief plates  | 319       |



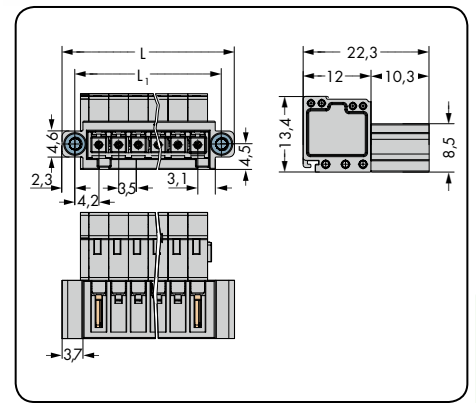
| Pin spacing 3.5 mm / 0.138 in |             | With fixing flanges<br>Pin spacing 3.5 mm / 0.138 in |             | With threaded flanges<br>Pin spacing 3.5 mm / 0.138 in |             |
|-------------------------------|-------------|--|-------------|--|-------------|
| 0.08 - 1.5 mm <sup>2</sup>    | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                           | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                             | AWG 28 - 14 |
| 160 V/2.5 kV/2 10 A           | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                    | 300 V/10 A  |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$   
 $L_1 = L - 0.45 \text{ mm}$



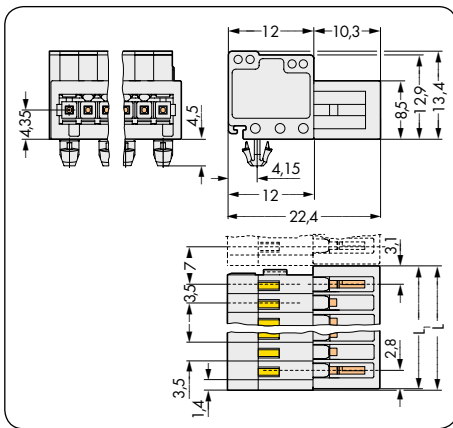
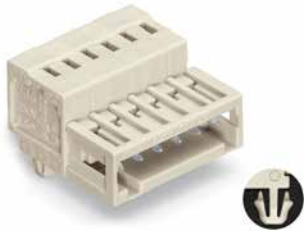
$L = \text{pole no.} \times \text{pin spacing} + 14.8 \text{ mm}$   
 $L_1 = \text{pole no.} \times \text{pin spacing} + 8.8 \text{ mm}$   
 $L_2 = \text{pole no.} \times \text{pin spacing}$   
 $L_3 = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



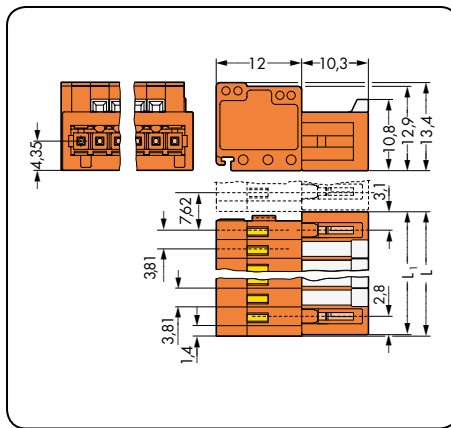
$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$   
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$

| Pole No.                                      | Item No. | Pack. Unit | Pole No.                                       | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|---|----------|------------|--|-----------------|------------|--|-----------------|------------|
| Male connector, light gray                    |          |            | Male connector with fixing flanges, light gray |                 |            | Male connector with threaded flanges, light gray |                 |            |
| 2   | 734-302  | 200        | 2  | 734-302/019-000 | 100        | 2  | 734-302/109-000 | 100        |
| 3   | 734-303  | 200        | 3  | 734-303/019-000 | 100        | 3  | 734-303/109-000 | 100        |
| 4   | 734-304  | 100        | 4  | 734-304/019-000 | 50         | 4  | 734-304/109-000 | 100        |
| 5   | 734-305  | 100        | 5  | 734-305/019-000 | 50         | 5  | 734-305/109-000 | 50         |
| 6   | 734-306  | 100        | 6  | 734-306/019-000 | 50         | 6  | 734-306/109-000 | 50         |
| 7   | 734-307  | 100        | 7  | 734-307/019-000 | 50         | 7  | 734-307/109-000 | 50         |
| 8   | 734-308  | 50         | 8  | 734-308/019-000 | 50         | 8  | 734-308/109-000 | 50         |
| 9   | 734-309  | 50         | 9  | 734-309/019-000 | 50         | 9  | 734-309/109-000 | 50         |
| 10  | 734-310  | 50         | 10   | 734-310/019-000 | 50         | 10   | 734-310/109-000 | 50         |
| 11  | 734-311  | 50         | 11   | 734-311/019-000 | 25         | 11   | 734-311/109-000 | 50         |
| 12  | 734-312  | 50         | 12   | 734-312/019-000 | 25         | 12   | 734-312/109-000 | 50         |
| 13  | 734-313  | 50         | 13   | 734-313/019-000 | 25         | 13   | 734-313/109-000 | 25         |
| 14  | 734-314  | 50         | 14   | 734-314/019-000 | 25         | 14   | 734-314/109-000 | 25         |
| 16  | 734-316  | 25         | 16   | 734-316/019-000 | 25         | 16   | 734-316/109-000 | 25         |
| 18  | 734-318  | 25         | 18   | 734-318/019-000 | 25         | 18   | 734-318/109-000 | 25         |
| 20  | 734-320  | 25         | 20   | 734-320/019-000 | 25         | 20   | 734-320/109-000 | 25         |
| 24  | 734-324  | 25         | 24   | 734-324/019-000 | 10         | 24   | 734-324/109-000 | 10         |
| For cutout dimensions, see page 322, table 1. |          |            |  |                 |            |  |                 |            |

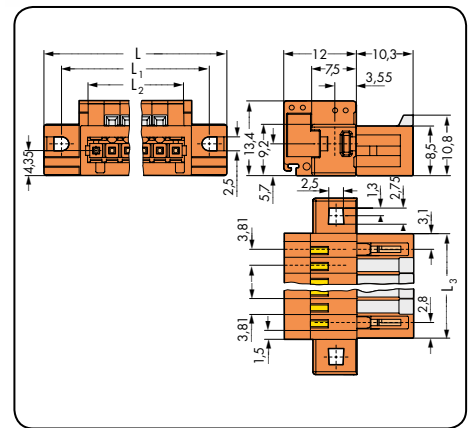
| With Snap-in mounting feet<br>Pin spacing 3.5 mm / 0.138 in |             | Pin spacing 3.81 mm / 0.15 in |             | With fixing flanges<br>Pin spacing 3.81 mm / 0.15 in |             |
|---|-------------|-------------------------------|-------------|--|-------------|
| 0.08 - 1.5 mm <sup>2</sup>                                  | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>    | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                           | AWG 28 - 14 |
| 160 V/2.5 kV/2 10 A   | 300 V/10 A  | 160 V/2.5 kV/2 10 A           | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  |



L = (pole no. - 1) x pin spacing + 5.9 mm + 0.45 mm  
L<sub>1</sub> = L - 0.45 mm



L = (pole no. - 1) x pin spacing + 5.9 mm + 0.45 mm  
L<sub>1</sub> = L - 0.45 mm



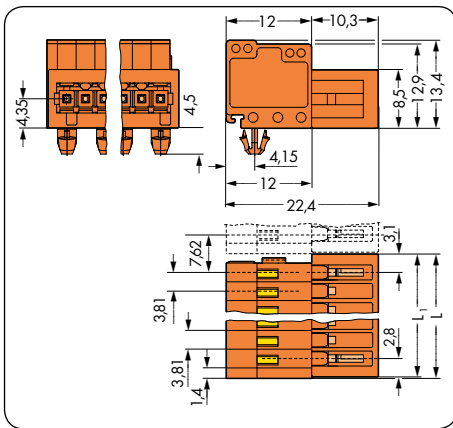
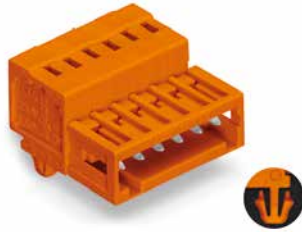
L = pole no. x pin spacing + 14.8 mm  
L<sub>1</sub> = pole no. x pin spacing + 8.8 mm  
L<sub>2</sub> = pole no. x pin spacing  
L<sub>3</sub> = (pole no. - 1) x pin spacing + 5.9 mm

| Pole No.   | Item No.        | Pack. Unit | Pole No.                         | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|-----------------|------------|----------------------------------|----------|------------|--|-----------------|------------|
| <b>Male connector with snap-in mounting feet,</b><br>for 0.6 - 1.2 mm plate thickness,<br>3.5 mm mounting hole diameter, light gray  |                 |            | <b>Male connector,</b><br>orange |          |            | <b>Male connector with fixing flanges,</b><br>orange |                 |            |
| 2  | 734-302/018-000 | 200        | 2                                | 734-332  | 200        | 2  | 734-332/019-000 | 100        |
| 3  | 734-303/018-000 | 200        | 3                                | 734-333  | 200        | 3  | 734-333/019-000 | 100        |
| 4  | 734-304/018-000 | 100        | 4                                | 734-334  | 100        | 4  | 734-334/019-000 | 50         |
| 5  | 734-305/018-000 | 100        | 5                                | 734-335  | 100        | 5  | 734-335/019-000 | 50         |
| 6  | 734-306/018-000 | 100        | 6                                | 734-336  | 100        | 6  | 734-336/019-000 | 50         |
| 7  | 734-307/018-000 | 100        | 8                                | 734-338  | 50         | 8  | 734-338/019-000 | 50         |
| 8  | 734-308/018-000 | 50         | 9                                | 734-339  | 50         | 9  | 734-339/019-000 | 50         |
| 9  | 734-309/018-000 | 50         | 10                               | 734-340  | 50         | 10   | 734-340/019-000 | 50         |
| 10   | 734-310/018-000 | 50         | 12                               | 734-342  | 25         | 12   | 734-342/019-000 | 25         |
| 11   | 734-311/018-000 | 50         | 14                               | 734-344  | 25         | 14   | 734-344/019-000 | 25         |
| 12   | 734-312/018-000 | 50         | 16                               | 734-346  | 25         | 16   | 734-346/019-000 | 25         |
| 13   | 734-313/018-000 | 50         | 18                               | 734-348  | 25         | 18   | 734-348/019-000 | 25         |
| 14   | 734-314/018-000 | 50         | 19                               | 734-349  | 25         | 19   | 734-349/019-000 | 25         |
| 16   | 734-316/018-000 | 25         | 20                               | 734-350  | 25         | 20   | 734-350/019-000 | 25         |
| 18   | 734-318/018-000 | 25         |                                  |          |            |  |                 |            |
| 20   | 734-320/018-000 | 25         |                                  |          |            |  |                 |            |
| 24   | 734-324/018-000 | 25         |                                  |          |            |  |                 |            |
| Three or more pole male connectors have a snap-in mounting foot at every other pole (2-pole male connectors/2 snap-in mounting feet) |                 |            |                                  |          |            | For cutout dimensions, see page 322, table 1.        |                 |            |

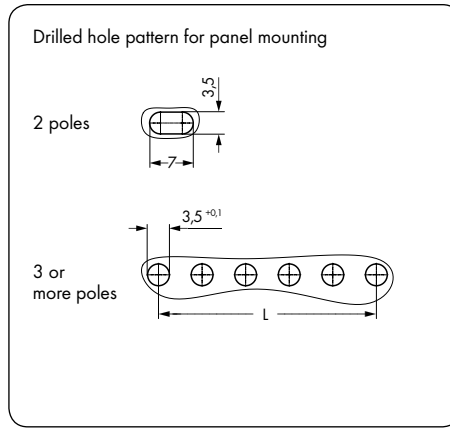
| Product Accessories  | Page |
|--|------|
| Mounting adapter for DIN 35 rail,<br>min. length 3 poles (209-137) | 363  |

# Male Connectors MCS-MINI

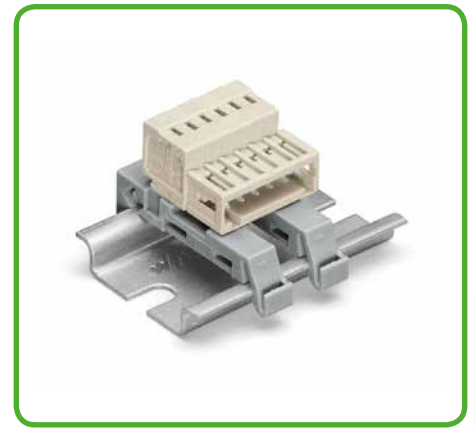
|  |  |  |
|--|--|--|
| <p><b>With Snap-in mounting feet</b><br/>Pin spacing 3.81 mm / 0.15 in</p> <p>0.08 - 1.5 mm<sup>2</sup>   AWG 28 - 14<br/>160 V/2.5 kV/2 10 A   300 V/10 A</p> | <p><b>With Snap-in mounting feet</b></p> <p><b>Drilled hole pattern for panel mounting</b></p> |  |
|--|--|--|



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$   
 $L_1 = L - 0.45 \text{ mm}$

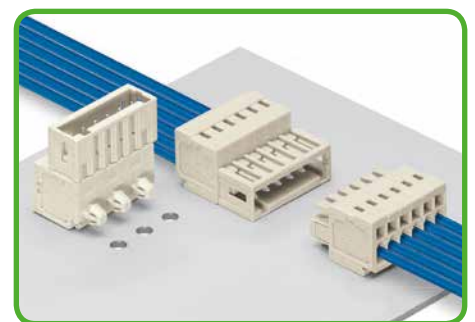


Even pole number:  $L = (\text{pole no.} - 2) \times \text{pin spacing}$   
 Odd pole number:  $L = (\text{pole no.} - 1) \times \text{pin spacing}$

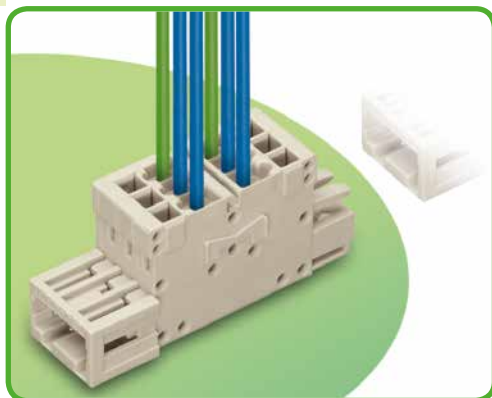


Using two DIN 35-rail mounting adapters (209-137) for 3 or more poles. Distance between two mounting adapters: maximum 7 poles.

| Pole No.  | Item No.        | Pack. Unit  |
|---|-----------------|-------------|
| <b>Male connector with snap-in mounting feet,</b><br>for 0.6 - 1.2 mm plate thickness,<br>3.5 mm mounting hole diameter, orange         |                 |             |
| 2   | 734-332/018-000 | 100         |
| 3   | 734-333/018-000 | 100         |
| 4   | 734-334/018-000 | 100         |
| 5   | 734-335/018-000 | 50          |
| 6   | 734-336/018-000 | 50          |
| 8   | 734-338/018-000 | 50          |
| 9   | 734-339/018-000 | 50          |
| 10  | 734-340/018-000 | 50          |
| 12  | 734-342/018-000 | 50          |
| 14  | 734-344/018-000 | 25          |
| 16  | 734-346/018-000 | 25          |
| 18  | 734-348/018-000 | 25          |
| 19  | 734-349/018-000 | 25          |
| 20  | 734-350/018-000 | 25          |
| Three or more pole male connectors have a snap-in mounting foot at every other pole<br>(2-pole male connectors/2 snap-in mounting feet) |                 |             |
| <b>Product Accessories</b>  |                 | <b>Page</b> |
| Mounting adapter for DIN 35 rail,<br>min. length 3 poles (209-137)  |                 | 363         |



## 2-Conductor Combi Strips Pin Spacing 3.5 mm MCS-MINI



- Universal connection for all conductor types
- 2-conductor strip combines pin and socket connections
- For multiplying potentials
- Strain relief plates for factory and in-the-field assembly
- Supply via pin-contact side
- Combi strips may be connected to multiple outputs
- 100% protected against mismatching
- With coding keys

### Technical data:

| Pin Spacing          | 3.5 mm<br>0.138 in |        |        |
|----------------------|--------------------|--------|--------|
| Rating per           | IEC/EN 60664-1     |        |        |
| Overvoltage category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 10 A               | 10 A   | 10 A   |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  |
| Nominal current UL   | 10 A               | -      | 10 A   |
| Nominal current CSA  | 10 A               | -      | 10 A   |

### Conductor data:

|                               |   |                |
|-------------------------------|---|----------------|
| Connection technology         | CAGE CLAMP®   |                |
| Conductor size: solid         | 0.08 - 1.5 mm <sup>2</sup>                            |                |
| Conductor size: fine-stranded | 0.08 - 1.5 mm <sup>2</sup>                            |                |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)*  |                |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |                |
| AWG                           | 28 - 14   | 14: THHN, THWN |
| Strip length                  | 6 - 7 mm / 0.24 - 0.28 in                             |                |

\* Only every other clamping unit can be terminated using 1.5 mm<sup>2</sup> connectors with insulated ferrules.

### Material data:

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +100 °C                  |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix . . . /010-000" is added to the "basic item no."      |                                   |

### MCS-MINI accessories:

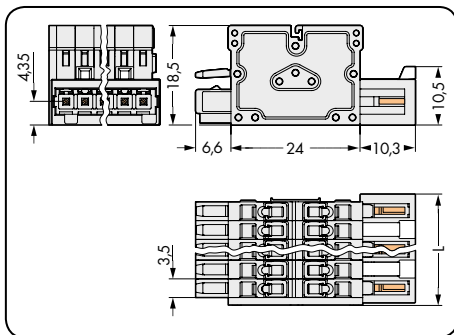
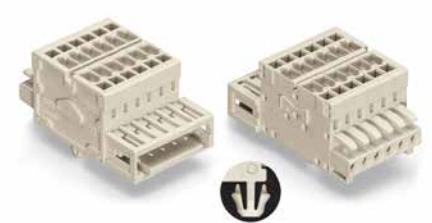
### Page:

|                      |           |
|----------------------|-----------|
| Marking accessories  | 508 - 511 |
| Operating tools      | 316       |
| Direct marking       | 320 - 321 |
| Coding keys          | 317       |
| Mounting adapter     | 363       |
| Test pin             | 506       |
| Stress relief plates | 319       |

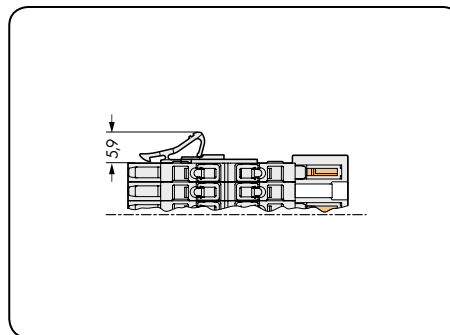
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# 2-Conductor Combi Strips MCS-MINI

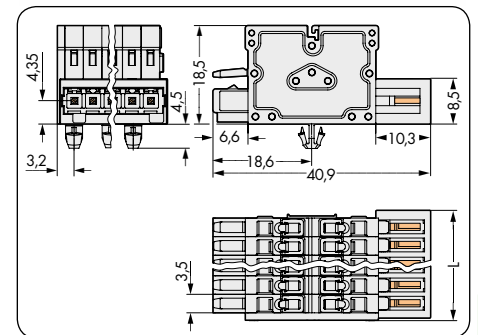
| Pin spacing 3.5 mm / 0.138 in |             | With locking levers<br>Pin spacing 3.5 mm / 0.138 in |             | With Snap-in mounting feet<br>Pin spacing 3.5 mm / 0.138 in |             |
|-------------------------------|-------------|--|-------------|---|-------------|
| 0.08 - 1.5 mm <sup>2</sup>    | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                           | AWG 28 - 14 | 0.08 - 1.5 mm <sup>2</sup>                                  | AWG 28 - 14 |
| 160 V/2.5 kV/2 10 A           | 300 V/10 A  | 160 V/2.5 kV/2 10 A                                  | 300 V/10 A  | 160 V/2.5 kV/2 10 A   | 300 V/10 A  |



L = (pole no. - 1) x pin spacing + 5.9 mm + 0.45 mm



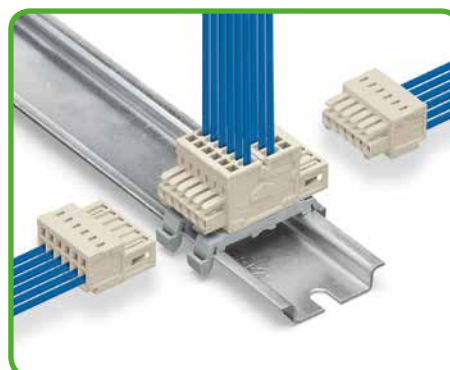
See drawing at left for other dimensions.



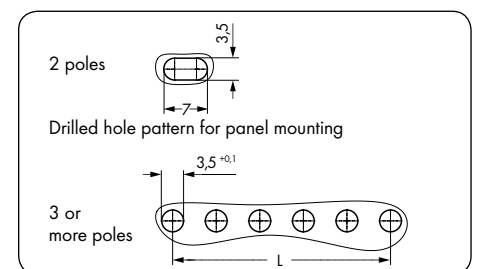
L = (pole no. - 1) x pin spacing + 5.9 mm + 0.45 mm

| Pole No.                       | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--------------------------------|----------|------------|--|-----------------|------------|--|-----------------|------------|
| <b>Combi strip, light gray</b> |          |            | <b>Combi strip with locking levers, light gray</b> |                 |            | <b>Combi strip with snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm mounting hole diameter, light gray</b>           |                 |            |
| 2                              | 734-362  | 100        | 2  | 734-362/037-000 | 100        | 2  | 734-362/008-000 | 100        |
| 3                              | 734-363  | 50         | 3  | 734-363/037-000 | 50         | 3  | 734-363/008-000 | 50         |
| 4                              | 734-364  | 50         | 4  | 734-364/037-000 | 50         | 4  | 734-364/008-000 | 50         |
| 5                              | 734-365  | 50         | 5  | 734-365/037-000 | 50         | 5  | 734-365/008-000 | 50         |
| 6                              | 734-366  | 50         | 6  | 734-366/037-000 | 50         | 6  | 734-366/008-000 | 50         |
| 7                              | 734-367  | 50         | 7  | 734-367/037-000 | 50         | 7  | 734-367/008-000 | 25         |
| 8                              | 734-368  | 50         | 8  | 734-368/037-000 | 25         | 8  | 734-368/008-000 | 25         |
| 9                              | 734-369  | 25         | 9  | 734-369/037-000 | 25         | 9  | 734-369/008-000 | 25         |
| 10                             | 734-370  | 25         | 10   | 734-370/037-000 | 25         | 10   | 734-370/008-000 | 25         |
| 11                             | 734-371  | 25         | 11   | 734-371/037-000 | 25         | 11   | 734-371/008-000 | 25         |
| 12                             | 734-372  | 25         | 12   | 734-372/037-000 | 25         | 12   | 734-372/008-000 | 25         |
|                                |          |            |  |                 |            | Three or more pole male connectors have a snap-in mounting foot at every other pole (2-pole male connectors/2 snap-in mounting feet) |                 |            |

| Product Accessories   | Page |
|---|------|
| Mounting adapter for DIN 35 rail, min. length 3 poles (209-137) | 363  |



Using two DIN 35-rail mounting adapters (209-137) for 3 or more poles. Distance between two mounting adapters: maximum 7 poles.



Even pole number: L = (pole no. - 2) x pin spacing  
Odd pole number: L = (pole no. - 1) x pin spacing

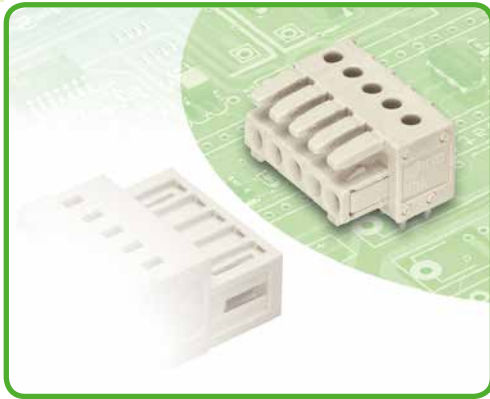
For other lengths, please contact factory.

# 5 Female Headers with Solder Pins

## Pin Spacing 3.5 mm, 3.81 mm

### MCS-MINI

312



- Female headers may be mounted horizontally or vertically via straight or angled solder pins
- Integrated test ports for 2 mm Ø test plugs
- For “board-to-board” and “board-to-wire” connections
- Touch-proof PCB outputs
- Easy-to-identify inputs and outputs
- 100% protected against mismatching
- With coding fingers

#### Technical data:

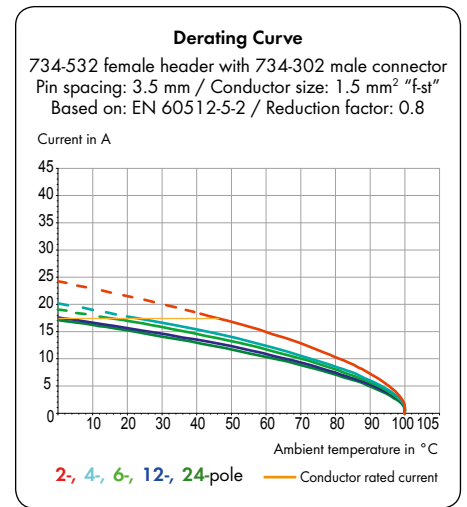
| Pin Spacing          | 3.5 mm<br>0.138 in |        |        | 3.81 mm<br>0.15 in |        |        |
|----------------------|--------------------|--------|--------|--------------------|--------|--------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |        |        |
| Rating per           | III                | III    | II     | III                | III    | II     |
| Overtoltage category | 3                  | 2      | 2      | 3                  | 2      | 2      |
| Pollution degree     | 3                  | 2      | 2      | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 10 A               | 10 A   | 10 A   | 10 A               | 10 A   | 10 A   |
| Approvals per        | UL                 | CSA    | UL/CSA | UL                 | CSA    | UL/CSA |
| Use group UL 1059    | B                  | C      | D      | B                  | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  | 300 V              | -      | 300 V  |
| Nominal current UL   | 10 A               | -      | 10 A   | 10 A               | -      | 10 A   |
| Nominal current CSA  | -                  | -      | -      | -                  | -      | -      |

#### Conductor and solder pin data:

|                                   |                        |
|-----------------------------------|------------------------|
| Solder pin: length/width          | 3.8 mm / 0.9 x 0.9 mm  |
| Solder pin: drilled hole diameter | 1.4 <sup>+0.1</sup> mm |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |

#### Material data:

|  |                    |
|--|--------------------|
| Material group   | I                  |
| Insulating material  | Nylon 6.6 (PA 6.6) |
| Flammability rating per UL 94  | V0                 |
| Lower/Upper temperature limit  | -60 °C / +100 °C   |
| Contact material   | Copper alloy       |
| Contact plating  | tin-plated         |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                    |
| Depending on the version requested, “item no. suffix . . . /010-000” is added to the “basic item no.”      |                    |



#### MCS-MINI accessories:

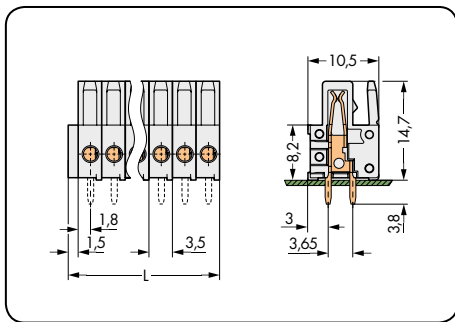
#### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Test plug, 2 mm Ø   | 506       |
|                     |           |
|                     |           |
|                     |           |

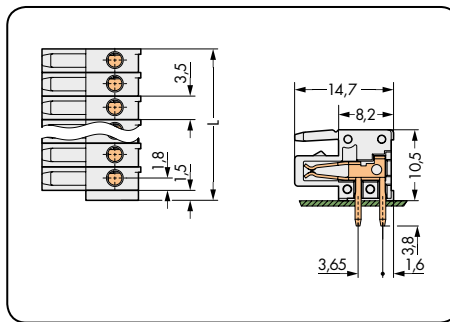
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Female Headers with Solder Pins MCS-MINI

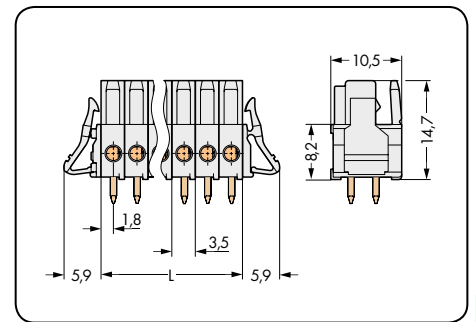
| With straight solder pins<br>Pin spacing 3.5 mm / 0.138 in |            | With straight solder pins<br>Pin spacing 3.5 mm / 0.138 in |            | With straight solder pins<br>and locking levers<br>Pin spacing 3.5 mm / 0.138 in |            |
|--|------------|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A  | 300 V/10 A |



L = (pole no. x pin spacing) + 1.5 mm



L = (pole no. x pin spacing) + 1.5 mm



L = pole no. x pin spacing

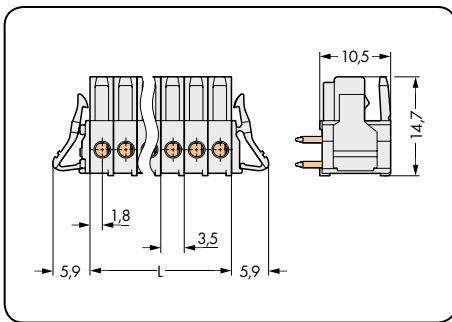
| Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|---|----------|------------|---|----------|------------|--|-----------------|------------|
| Female header with straight solder pins, light gray |          |            | Female header with angled solder pins, light gray |          |            | Female header with straight solder pins and locking levers, light gray |                 |            |
| 2   | 734-462  | 200        | 2   | 734-532  | 200        | 2  | 734-462/037-000 | 100        |
| 3   | 734-463  | 200        | 3   | 734-533  | 200        | 3  | 734-463/037-000 | 100        |
| 4   | 734-464  | 100        | 4   | 734-534  | 100        | 4  | 734-464/037-000 | 100        |
| 5   | 734-465  | 100        | 5   | 734-535  | 100        | 5  | 734-465/037-000 | 50         |
| 6   | 734-466  | 100        | 6   | 734-536  | 100        | 6  | 734-466/037-000 | 50         |
| 7   | 734-467  | 100        | 7   | 734-537  | 100        | 7  | 734-467/037-000 | 50         |
| 8   | 734-468  | 50         | 8   | 734-538  | 50         | 8  | 734-468/037-000 | 50         |
| 9   | 734-469  | 50         | 9   | 734-539  | 50         | 9  | 734-469/037-000 | 50         |
| 10  | 734-470  | 50         | 10  | 734-540  | 50         | 10   | 734-470/037-000 | 50         |
| 11  | 734-471  | 50         | 11  | 734-541  | 50         | 11   | 734-471/037-000 | 50         |
| 12  | 734-472  | 50         | 12  | 734-542  | 50         | 12   | 734-472/037-000 | 50         |
| 13  | 734-473  | 50         | 13  | 734-543  | 50         | 13   | 734-473/037-000 | 25         |
| 14  | 734-474  | 50         | 14  | 734-544  | 50         | 14   | 734-474/037-000 | 25         |
| 16  | 734-476  | 25         | 16  | 734-546  | 25         | 16   | 734-476/037-000 | 25         |
| 18  | 734-478  | 25         | 18  | 734-548  | 25         | 18   | 734-478/037-000 | 25         |
| 20  | 734-480  | 25         | 20  | 734-550  | 25         | 20   | 734-480/037-000 | 25         |
| 24  | 734-484  | 25         | 24  | 734-554  | 25         | 24   | 734-484/037-000 | 10         |



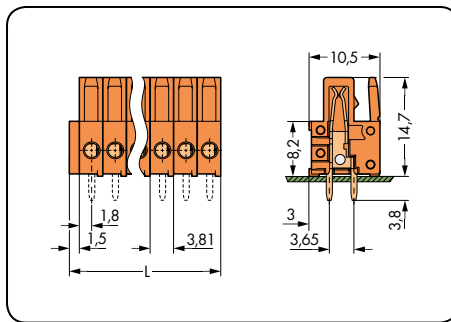
# 5 Female Headers with Solder Pins MCS-MINI

314

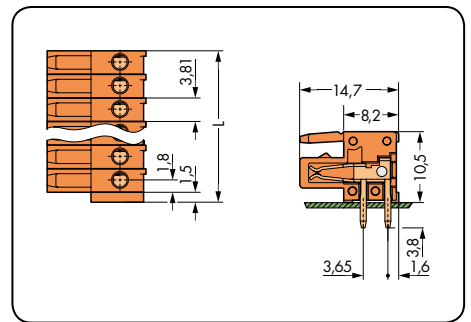
| With angled solder pins and locking levers<br>Pin spacing 3.5 mm / 0.138 in |            | With straight solder pins<br>Pin spacing 3.81 mm / 0.15 in |            | With angled solder pins<br>Pin spacing 3.81 mm / 0.15 in |            |
|---|------------|--|------------|--|------------|
| 160 V/2.5 kV/2 10 A   | 300 V/10 A | 160 V/2.5 kV/2 10 A  | 300 V/10 A | 160 V/2.5 kV/2 10 A                                      | 300 V/10 A |



L = pole no. x pin spacing



L = (pole no. x pin spacing) + 1.5 mm

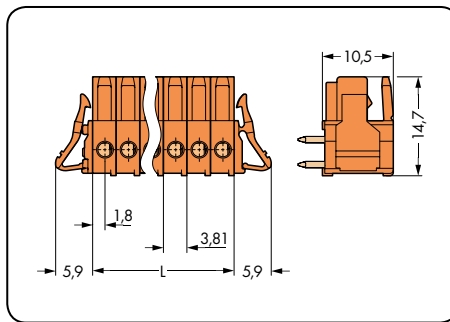
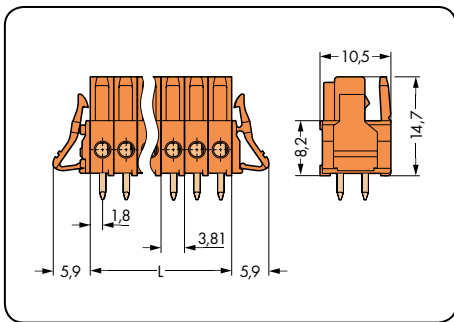


L = (pole no. x pin spacing) + 1.5 mm

| Pole No.   | Item No.        | Pack. Unit | Pole No.  | Item No. | Pack. Unit | Pole No.                                      | Item No. | Pack. Unit |
|--|-----------------|------------|---|----------|------------|---|----------|------------|
| Female header with angled solder pins and locking levers, light gray |                 |            | Female header with straight solder pins, orange |          |            | Female header with angled solder pins, orange |          |            |
| 2  | 734-532/037-000 | 100        | 2   | 734-502  | 200        | 2   | 734-562  | 200        |
| 3  | 734-533/037-000 | 100        | 3   | 734-503  | 200        | 3   | 734-563  | 200        |
| 4  | 734-534/037-000 | 100        | 4   | 734-504  | 100        | 4   | 734-564  | 100        |
| 5  | 734-535/037-000 | 50         | 5   | 734-505  | 100        | 5   | 734-565  | 100        |
| 6  | 734-536/037-000 | 50         | 6   | 734-506  | 100        | 6   | 734-566  | 100        |
| 7  | 734-537/037-000 | 50         |   |          |            |   |          |            |
| 8  | 734-538/037-000 | 50         | 8   | 734-508  | 50         | 8   | 734-568  | 50         |
| 9  | 734-539/037-000 | 50         | 9   | 734-509  | 50         | 9   | 734-569  | 50         |
| 10   | 734-540/037-000 | 50         | 10  | 734-510  | 50         | 10  | 734-570  | 50         |
| 11   | 734-541/037-000 | 50         |   |          |            |   |          |            |
| 12   | 734-542/037-000 | 50         | 12  | 734-512  | 25         | 12  | 734-572  | 25         |
| 13   | 734-543/037-000 | 25         |   |          |            |   |          |            |
| 14   | 734-544/037-000 | 25         | 14  | 734-514  | 25         | 14  | 734-574  | 25         |
| 16   | 734-546/037-000 | 25         | 16  | 734-516  | 25         | 16  | 734-576  | 25         |
| 18   | 734-548/037-000 | 25         |   |          |            |   |          |            |
| 20   | 734-550/037-000 | 25         | 20  | 734-520  | 25         | 20  | 734-580  | 25         |
| 24   | 734-554/037-000 | 10         |   |          |            |   |          |            |

# Female Headers with Solder Pins MCS-MINI

|   |  |   |  |
|---|--|---|--|
| <b>With straight solder pins and locking levers</b><br><b>Pin spacing 3.81 mm / 0.15 in</b><br>160 V/2.5 kV/2 10 A   300 V/10 A |  | <b>With angled solder pins and locking levers</b><br><b>Pin spacing 3.81 mm / 0.15 in</b><br>160 V/2.5 kV/2 10 A   300 V/10 A |  |
|---|--|---|--|



L = pole no. x pin spacing

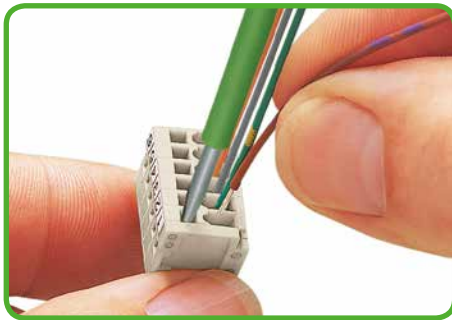
| Pole No.  | Item No.        | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|
| <b>Female header with straight solder pins and locking levers, orange</b> |                 |            | <b>Female header with angled solder pins and locking levers, orange</b> |                 |            |
| 2   | 734-502/037-000 | 100        | 2   | 734-562/037-000 | 100        |
| 3   | 734-503/037-000 | 100        | 3   | 734-563/037-000 | 100        |
| 4   | 734-504/037-000 | 100        | 4   | 734-564/037-000 | 100        |
| 5   | 734-505/037-000 | 50         | 5   | 734-565/037-000 | 50         |
| 6   | 734-506/037-000 | 50         | 6   | 734-566/037-000 | 50         |
| 8   | 734-508/037-000 | 50         | 8   | 734-568/037-000 | 50         |
| 9   | 734-509/037-000 | 50         | 9   | 734-569/037-000 | 50         |
| 10  | 734-510/037-000 | 50         | 10  | 734-570/037-000 | 50         |
| 12  | 734-512/037-000 | 25         | 12  | 734-572/037-000 | 25         |
| 14  | 734-514/037-000 | 25         | 14  | 734-574/037-000 | 25         |
| 16  | 734-516/037-000 | 25         | 16  | 734-576/037-000 | 25         |
| 20  | 734-520/037-000 | 25         | 20  | 734-580/037-000 | 25         |

# Accessories Operating Tools MCS-MINI

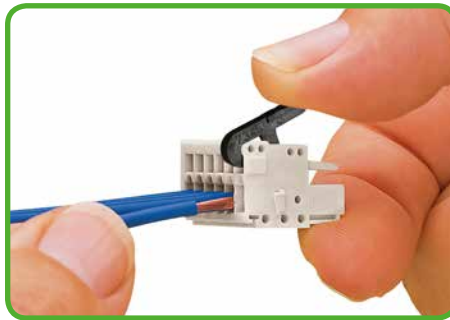
|   |   |  |
|---|---|--|
| <b>Operating tool</b><br>with partially insulated shaft<br>Type 1 | <b>Operating levers</b><br>for male and female connectors<br>with CAGE CLAMP® | <b>Operating tools</b><br>for male and female connectors<br>with CAGE CLAMP® |
|---|---|--|



| Color   | Item No. | Pack. Unit | Color                                    | Item No. | Pack. Unit   | Color                                   | Item No. | Pack. Unit   |
|---|----------|------------|--|----------|--------------|---|----------|--------------|
| Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade |          |            | Operating lever, 3.5/3.81 mm pin spacing |          |              | Operating tool, 3.5/3.81 mm pin spacing |          |              |
|   | 210-719  | 1          | white                                    | 734-230  | 100 (4 x 25) | white                                   | 734-190  | 100 (4 x 25) |
|   |          |            | black                                    | 734-191  | 100 (4 x 25) | black                                   | 734-231  | 100 (4 x 25) |



Conductor termination parallel to screwdriver actuation



Conductor termination via operating lever

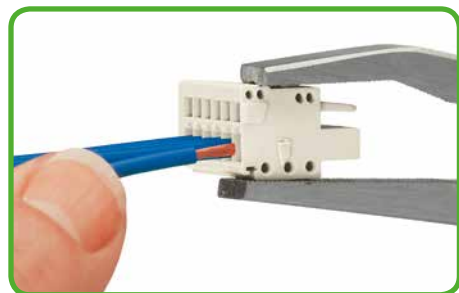


Conductor termination parallel to CAGE CLAMP® actuation

| Color                       | Item No. | Pack. Unit |
|-----------------------------|----------|------------|
| Operating tool for MCS-MINI |          |            |
| red                         | 210-250  | 1          |
| yellow                      | 210-251  | 1          |



Conductor termination perpendicular to CAGE CLAMP® actuation



**Note:** Terminating MCS-MINI male and female connectors with CAGE CLAMP® can be performed via 210-250 and 210-251 operating tools.

# Accessories

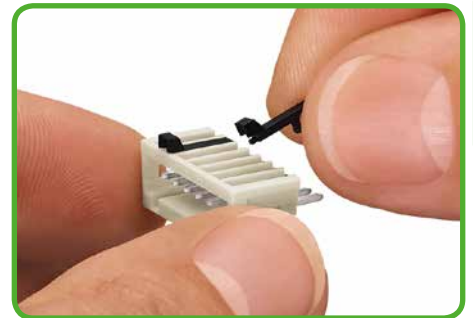
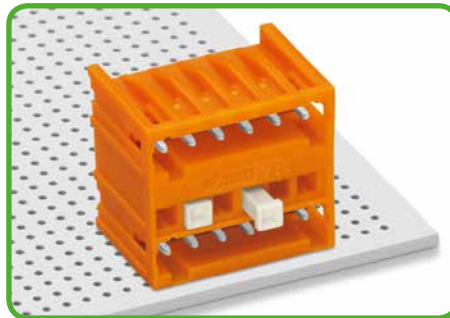
## Insulation Stop and Coding Accessories

### MCS-MINI

|  |   |  |
|--|---|--|
| <b>Insulation stop</b><br><br>for male and female connectors<br>with CAGE CLAMP® | <b>Coding keys</b><br><br>for double-deck male headers<br>to be snapped in bottom level | <b>Coding keys</b><br><br>for male headers |
|--|---|--|



| Conductor Size  | Item No.       | Pack. Unit   | Color   | Item No.       | Pack. Unit | Color   | Item No.                                       | Pack. Unit |
|---|----------------|--------------|---|----------------|------------|---|--|------------|
| <b>Insulation stop,</b><br>8 pcs per strand,<br><b>3.5 mm pin spacing</b> |                |              | <b>Coding key for double-deck male headers,</b><br>to be snapped in bottom level,<br><b>3.5/3.81 mm pin spacing</b> |                |            | <b>Coding key for male headers,</b><br><b>3.5/3.81 mm pin spacing</b> |  |            |
| 0.08 - 0.2 mm <sup>2</sup> "sol." (0.14 mm <sup>2</sup> "fst")            |                |              | light gray  | <b>734-400</b> | 100        | white   | <b>734-130</b>                                 | 100        |
| white   | <b>734-671</b> | 200 (8 x 25) |   |                |            | black   | <b>734-159</b><br>(suitable for THR soldering) | 100        |



Small and very small fine-stranded conductors are highly flexible, and deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. Insulation stops for 734 Series male and female connectors equipped with CAGE CLAMP® reliably ensure proper termination.

Coding a double-deck male header – lower level.

Coding a male header via snap-on coding keys.

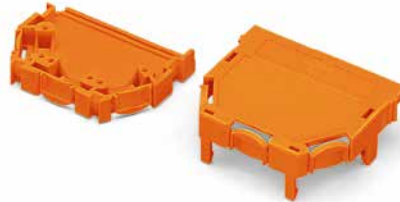
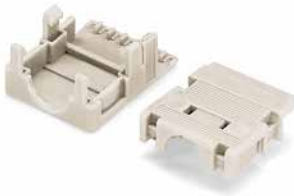
# Accessories Strain Relief Housings MCS-MINI

### Snap-on type strain relief housings Pin spacing 3.5 mm / 0.138 in

for male and female connectors with CAGE CLAMP® connection



### Snap-on type strain relief housings Pin spacing 3.81 mm / 0.15 in

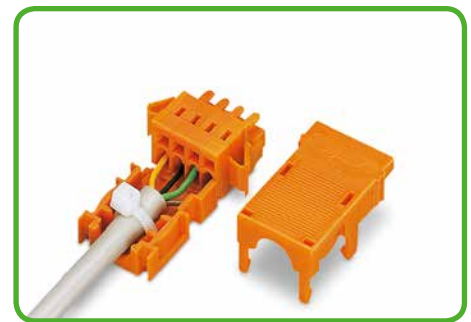
for male and female connectors with CAGE CLAMP® connection



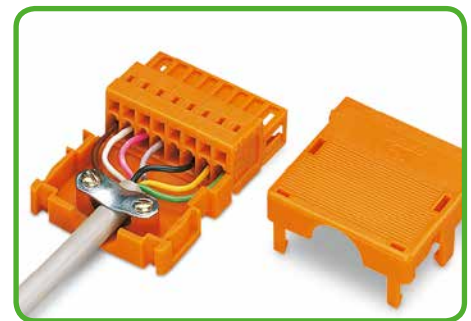
| Pole No.  | Item No. | Pack. Unit | Pole No.   | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| Snap-on type strain relief housing, suitable for 3.5 mm pin spacing, light gray consisting of strain relief support and housing |          |            | Snap-on type strain relief housing, suitable for 3.81 mm pin spacing, orange consisting of strain relief support and housing |          |            |
| 2   | 734-602  | 50         | 2  | 734-632  | 50         |
| 3   | 734-603  | 25         | 3  | 734-633  | 25         |
| 4   | 734-604  | 25         | 4  | 734-634  | 25         |
| 5   | 734-605  | 25         | 5  | 734-635  | 25         |
| 6   | 734-606  | 25         | 6  | 734-636  | 25         |
| 7   | 734-607  | 25         |  |          |            |
| 8   | 734-608  | 25         | 8  | 734-638  | 25         |
| 9   | 734-609  | 25         | 9  | 734-639  | 25         |
| 10  | 734-610  | 25         | 10   | 734-640  | 25         |
| 11  | 734-611  | 25         |  |          |            |
| 12  | 734-612  | 25         | 12   | 734-642  | 25         |

2 to 5-pole, only suitable for cable ties, 1 cable outlet (rear side), max. cable tie width 3.6 mm  
6 to 9-pole, suitable for cable clamp, 1 cable outlet (rear side)  
10 to 12-pole, suitable for cable clamp, 1 cable outlets (rear side) and 2 cable outlets (side), removable built-in lockout cap

| Product Accessories  | Item No. | Pack. Unit |
|--|----------|------------|
| <b>Cable clamp</b> , for strain relief, 6 - 12 poles                               |          |            |
|  | 209-177  | 25         |
| <b>Fixing screws</b> , for cable clamp, 6 - 12 poles                               |          |            |
|  | 209-172  | 50         |

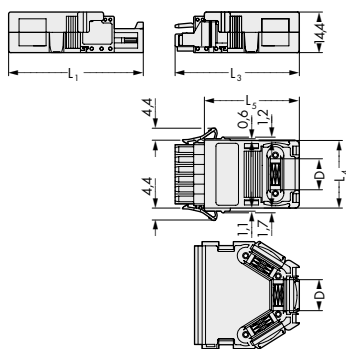


4-pole female connector with locking levers and strain relief housing (2- to 5-pole strain relief housing suitable only for cable ties)



8-pole male connector with strain relief housing (6- to 12-pole strain relief housing suitable for cable clamps)

### Strain Relief Housing Dimensions



| Pole No. | L <sub>4</sub><br>Pin Spacing |      | L <sub>3</sub> | L <sub>1</sub> | L <sub>5</sub> | D    |
|----------|-------------------------------|------|----------------|----------------|----------------|------|
|          | 3.5                           | 3.81 |                |                |                |      |
| 2        | 10.0                          | 10.6 | 43.1           | 46.8           | 32.7           | 5.0  |
| 3        | 13.5                          | 14.4 | 43.1           | 46.8           | 32.7           | 8.5  |
| 4        | 17.0                          | 18.2 | 43.1           | 46.8           | 32.7           | 8.5  |
| 5        | 20.5                          | 22.0 | 43.1           | 46.8           | 32.7           | 8.5  |
| 6        | 24.0                          | 25.9 | 44.1           | 47.8           | 33.7           | 11.5 |
| 7        | 27.5                          | -    | 44.1           | 47.8           | 33.7           | 11.5 |
| 8        | 31.0                          | 33.5 | 44.1           | 47.8           | 33.7           | 11.5 |
| 9        | 34.5                          | 37.3 | 44.1           | 47.8           | 33.7           | 11.5 |
| 10       | 38.0                          | 41.1 | 53.1           | 56.8           | 42.7           | 11.5 |
| 11       | 41.5                          | -    | 53.1           | 56.8           | 42.7           | 11.5 |
| 12       | 45.0                          | 48.7 | 53.1           | 56.8           | 42.7           | 11.5 |

# Accessories

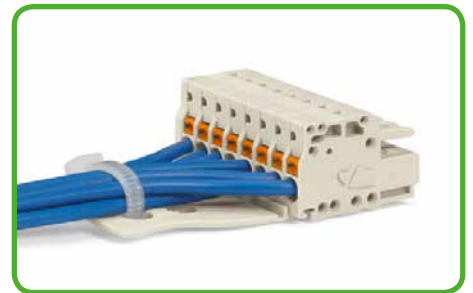
## Strain Relief Plates

### MCS-MINI

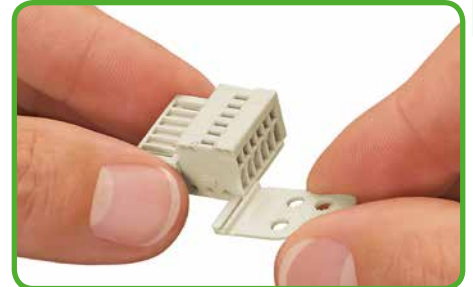
|  |   |
|--|---|
| <p><b>Stress relief plates</b><br/>for in-the-field assembly</p> <p>for male and female connectors with<br/>CAGE CLAMP® and CAGE CLAMP®S</p> | <p><b>Strain relief plates,</b><br/>factory-assembled</p> <p>for male and female connectors with<br/>CAGE CLAMP® and CAGE CLAMP®S</p> |
|--|---|



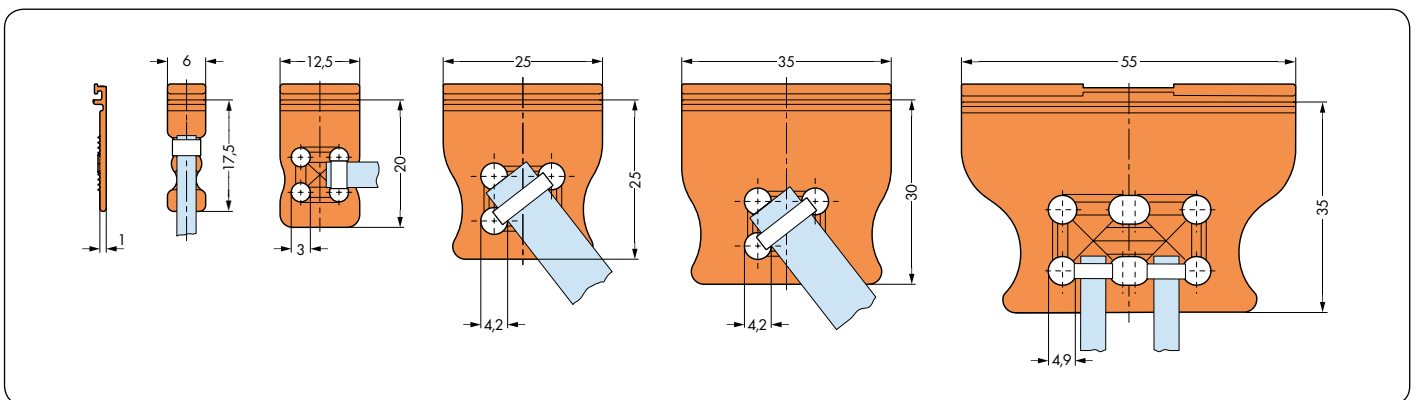
| Width   | Pole No. | Item No.       | Pack. Unit   | Width   | Pole No. | Item No. Suffix |
|---|----------|----------------|--------------|---|----------|-----------------|
| <p><b>Strain relief plate,</b><br/>3.5 mm pin spacing, light gray</p>   |          |                |              | <p><b>Strain relief plate, pre-assembled,</b><br/>3.5/3.81 mm pin spacing</p>   |          |                 |
| 6 mm  | 2- 3     | <b>734-127</b> | 100 (4 x 25) | 6 mm  | 2- 3     | .../032-000     |
| 12.5 mm   | 4- 8     | <b>734-128</b> | 100 (4 x 25) | 12.5 mm   | 4- 8     | .../033-000     |
| 25 mm   | 9-12     | <b>734-129</b> | 100 (4 x 25) | 25 mm   | 9-12     | .../034-000     |
| 35 mm   | 13-16    | <b>734-126</b> | 100 (4 x 25) | 35 mm   | 13-16    | .../035-000     |
| 55 mm   | 17- max. | <b>734-426</b> | 50 (2 x 25)  | 55 mm   | 17- max. | .../036-000     |
| Width   | Pole No. | Item No.       | Pack. Unit   |   |          |                 |
| <p><b>Strain relief plate,</b><br/>3.81 mm pin spacing, orange</p>  |          |                |              | <p><b>Ordering example:</b><br/>Female connector, 3.81 mm pin spacing, 8-pole, orange, with strain relief plate: <b>734-208/033-000</b></p> |          |                 |
| 6 mm  | 2- 3     | <b>734-227</b> | 100 (4 x 25) |   |          |                 |
| 12.5 mm   | 4- 8     | <b>734-228</b> | 100 (4 x 25) |   |          |                 |
| 25 mm   | 9-12     | <b>734-229</b> | 100 (4 x 25) |   |          |                 |
| 35 mm   | 13-16    | <b>734-226</b> | 100 (4 x 25) |   |          |                 |
| 55 mm   | 17- max. | <b>734-428</b> | 50 (2 x 25)  |   |          |                 |
| <p>An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of male or female connector.</p> |          |                |              |   |          |                 |



**Ordering example:**  
Female connector, 3.5 mm pin spacing, 8-pole, light gray, with strain relief plate: **2734-108/033-000**



734-128 strain relief plate, for in-the-field assembly.



The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.



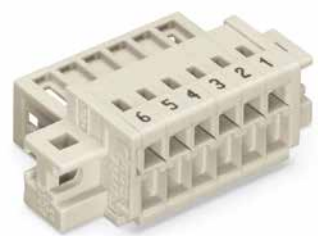
# 5 Accessories

## Finger Guard and Direct Marking

### MCS-MINI

320

|  |   |   |
|--|---|---|
| <b>Finger guard</b><br>for male headers<br><b>IP20</b> | <b>Direct marking</b><br>of male and female connectors<br>for conductor termination | <b>Direct marking</b><br><b>Pole no. - 1</b><br>of male connectors<br>for conductor termination |
|--|---|---|



| Pole No.   | Item No.       | Pack. Unit   | Marking MCS-MINI   | Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /... - 044   |
|--|----------------|--------------|--|---|
| <b>Finger guard for male headers, black</b><br><b>Pin spacing: 3.5/3.81 mm</b>           |                |              | Male and female connectors for conductor termination can be marked with "1 - pole no." via factory direct printing.<br><br>Two standard marking orientations are available:<br>1. Marking perpendicular to conductor entry<br>2. Marking parallel to conductor entry<br><br>Other custom marking options are available upon request.<br><br>Direct marking is not suitable for MCS male headers with solder pins. WAGO recommends pole marking on the PCB for these headers.<br><br>Female headers with solder pins are exposed to aggressive flux agents during wave soldering. Special direct marking procedures are available upon request for these items.<br><br>The marking type is always defined by the second 4-digit block of the item no. suffix for items with standard colors and materials.<br>Example: 734-106/... - xxxx<br>xxxx = Item no. suffix for marking | <b>Ordering examples:</b><br><b>Male connector,</b><br>3.5 mm pin spacing, 6-pole, light gray<br><b>734-306/000-044</b>   |
| 4-way  | <b>734-420</b> | 100 (4 x 25) |  | <b>Male connector with fixing flanges,</b><br>3.5 mm pin spacing, 6-pole, light gray<br><b>734-306/019-044</b><br><br><b>Male connector with fixing flanges and strain relief plate,</b><br>3.5 mm pin spacing, 6-pole, light gray<br><b>734-306/019-044/033-000</b>  |
| <p>Finger guards provide touch-proof protection (IP20).</p>                              |                |              | <p>Insert the finger guard into the male header to be protected.</p>   | <b>Marking Parallel to Conductor Entry</b><br><b>Item No. Suffix: /... - 9034</b><br><br><b>Ordering examples:</b><br><b>Male connector,</b><br>3.5 mm pin spacing, 6-pole, light gray<br><b>734-306/000-9034</b><br><br><b>Male connector with fixing flanges,</b><br>3.5 mm pin spacing, 6-pole, light gray<br><b>734-306/019-9034</b><br><br><b>Male connector with fixing flanges and strain relief plate,</b><br>3.5 mm pin spacing, 6-pole, light gray<br><b>734-306/019-9034/033-000</b> |
| <p>Cut fingers guard to the required number of poles. Do not use single-pole covers!</p> |                |              |  |   |

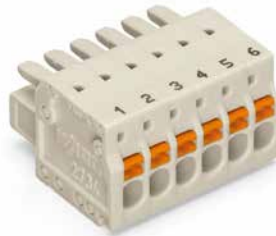
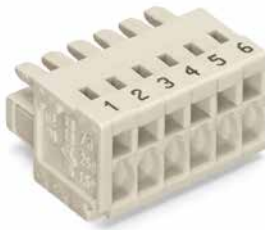


# Accessories

## Direct Marking

### MCS-MINI

|   |   |  |
|---|---|--|
| <p><b>Direct marking</b><br/>1 – pole no.</p> <p>of female connectors<br/>for conductor termination</p> | <p><b>Direct marking</b><br/>1 – pole no.</p> <p>of female connectors with push-buttons<br/>for conductor termination</p> | <p><b>Direct marking</b><br/>1 – pole no.</p> <p>of 2-conductor combi strips<br/>for conductor termination</p> |
|---|---|--|

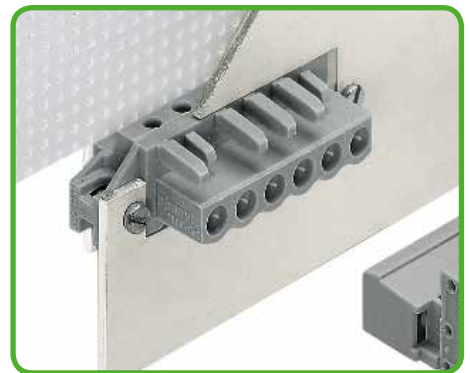
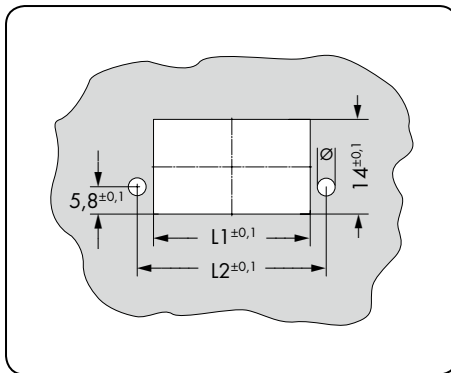
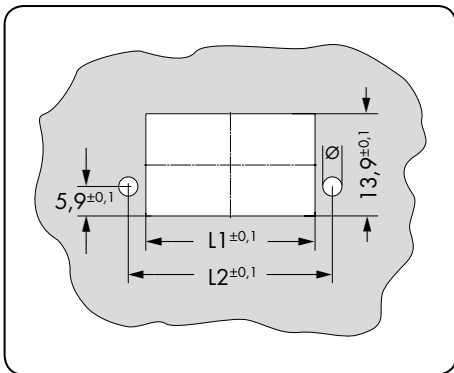


| Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /...-047   | Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /...-047  | Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /...-047  |
|---|--|--|
| <p><b>Ordering examples:</b></p> <p><b>Female connector,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/000-047</b></p>                    | <p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/000-047</b></p>                | <p><b>Ordering examples:</b></p> <p><b>2-conductor combi strip,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-366/000-047</b></p>                    |
| <p><b>Female connector with locking levers,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/037-047</b></p>                                 | <p><b>Female connector with push-buttons and locking levers,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/037-047</b></p>                              | <p><b>2-conductor combi strip with locking levers,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-366/037-047</b></p>                                 |
| <p><b>Female connector with strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/033-047</b></p>                            | <p><b>Female connector with push-buttons and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/033-047</b></p>                         | <p><b>2-conductor combi strip with locking levers and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-366/037-047/033-000</b></p> |
| <p><b>Female connector with locking levers and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/037-047/033-000</b></p> | <p><b>Female connector with push-buttons, locking levers and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/037-047/033-000</b></p> |  |



| Marking Parallel to Conductor Entry<br>Item No. Suffix: /...-9037  | Marking Parallel to Conductor Entry<br>Item No. Suffix: /...-9037   | Marking Parallel to Conductor Entry<br>Item No. Suffix: /...-9037   |
|--|---|---|
| <p><b>Ordering examples:</b></p> <p><b>Female connector,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/000-9037</b></p>                    | <p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/000-9037</b></p>                | <p><b>Ordering examples:</b></p> <p><b>2-conductor combi strip,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-366/000-9037</b></p>                    |
| <p><b>Female connector with locking levers,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/037-9037</b></p>                                 | <p><b>Female connector with push-buttons and locking levers,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/037-9037</b></p>                              | <p><b>2-conductor combi strip with locking levers,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-366/037-9037</b></p>                                 |
| <p><b>Female connector with strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/033-9037</b></p>                            | <p><b>Female connector with push-buttons and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>2734-106/033-9037</b></p>                         | <p><b>2-conductor combi strip with locking levers and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-366/037-9037/033-000</b></p> |
| <p><b>Female connector with locking levers and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>734-106/037-9037/033-000</b></p> | <p><b>Female connector with push-buttons, locking levers and strain relief plate,</b><br/>Pin spacing 3.5 mm, 6-pole, light gray<br/><b>2734-106/037-9037/033-000</b></p> |   |

|  |   |                      |
|--|---|----------------------|
| <p><b>Cutout</b></p> <p>for 734 Series male connectors<br/>with fixing flanges</p> | <p><b>Cutout</b></p> <p>for 2734 Series female connectors<br/>with fixing flanges</p> | <p><b>Screws</b></p> |
|--|---|----------------------|



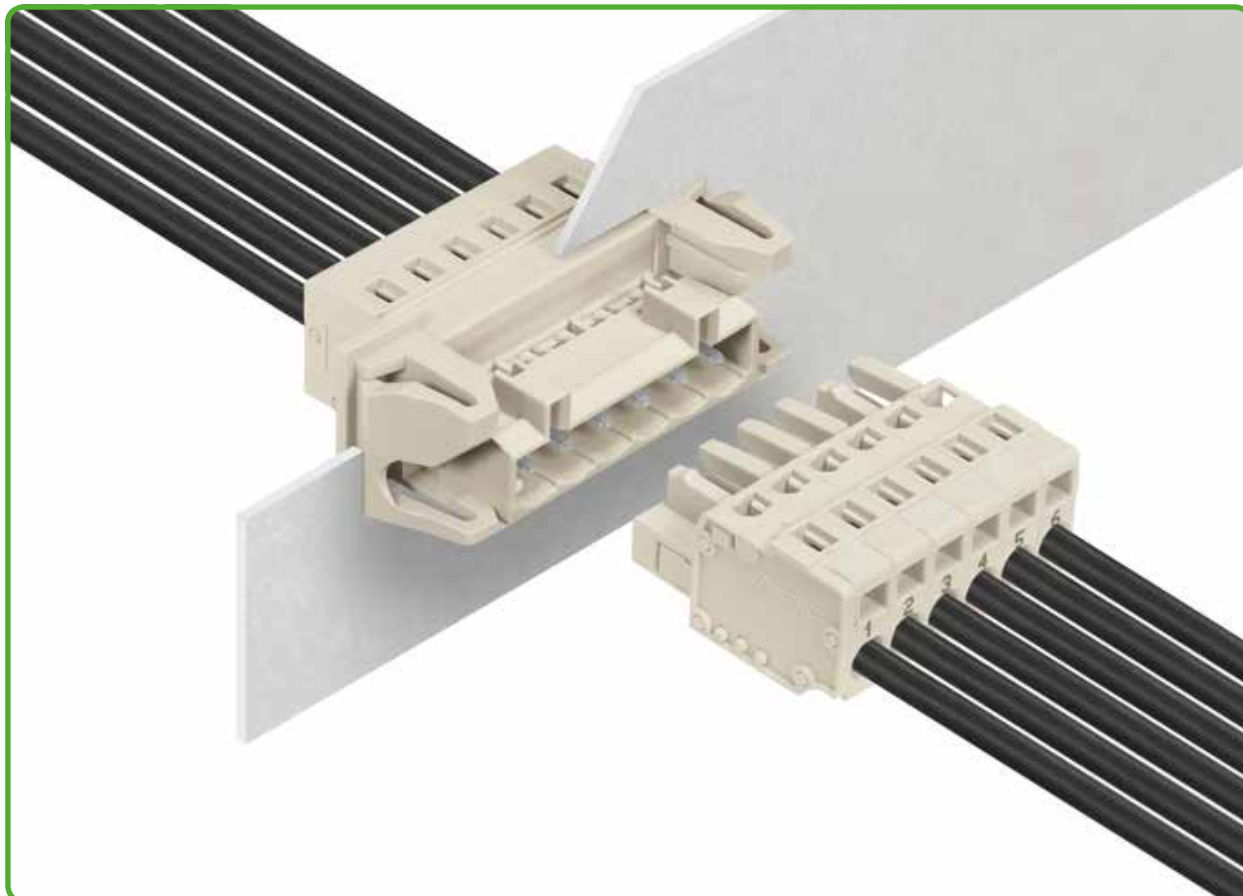
Drilled hole Ø: Depends on the type of screw used (see screws on the left).

M 2.5 x 10 screws with nuts (e.g., fixing flanges)

Table 1

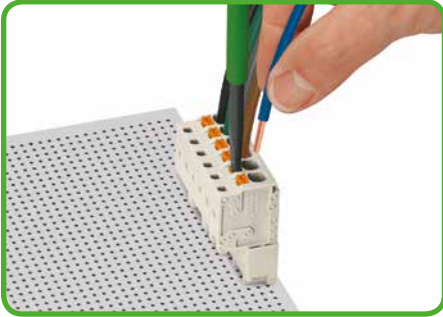
Table 2

| Pole No. | Pin Spacing 3.5 |      | Pin Spacing 3.81 |      | Pole No. | Pin Spacing 3.5 |      | Pin Spacing 3.81 |      | Dimensions  | Item No.       | Pack. Unit      |
|----------|-----------------|------|------------------|------|----------|-----------------|------|------------------|------|---|----------------|-----------------|
|          | L1              | L2   | L1               | L2   |          | L1              | L2   | L1               | L2   |   |                |                 |
| 2        | 9.8             | 15.5 | 10.1             | 16.1 | 2        | 10.4            | 15.5 | 11.0             | 16.1 | <b>Self-tapping screws</b><br>1.8 <sup>±0.1</sup> mm mounting hole diameter |                |                 |
| 3        | 13.3            | 19.0 | 13.9             | 19.9 | 3        | 13.9            | 19.0 | 14.8             | 19.9 |   |                |                 |
| 4        | 16.8            | 22.5 | 17.7             | 23.7 | 4        | 17.4            | 22.5 | 18.6             | 23.7 |   |                |                 |
| 5        | 20.3            | 26.0 | 21.5             | 27.6 | 5        | 20.9            | 26.0 | 22.5             | 27.6 |   |                |                 |
| 6        | 24.0            | 29.4 | 25.6             | 31.3 | 6        | 24.6            | 29.4 | 26.5             | 31.3 |   |                |                 |
| 7        | 27.5            | 32.9 | 29.4             | 35.1 | 7        | 28.1            | 32.9 | 30.3             | 35.1 |   |                |                 |
| 8        | 31.0            | 36.4 | 33.2             | 38.9 | 8        | 31.6            | 36.4 | 34.1             | 38.9 |   |                |                 |
| 9        | 34.5            | 39.9 | 37.0             | 42.7 | 9        | 35.1            | 39.9 | 37.9             | 42.7 |   |                |                 |
| 10       | 38.0            | 43.4 | 40.8             | 46.5 | 10       | 38.6            | 43.4 | 41.7             | 46.5 |   |                |                 |
| 11       | 41.5            | 46.9 | 44.6             | 50.3 | 11       | 42.1            | 46.9 | 45.5             | 50.3 |   |                |                 |
| 12       | 45.0            | 50.4 | 48.4             | 54.1 | 12       | 45.6            | 50.4 | 49.3             | 54.1 |   |                |                 |
| 13       | 48.8            | 53.8 | 52.5             | 57.8 | 13       | 49.4            | 53.8 | 53.4             | 57.8 |   |                |                 |
| 14       | 52.3            | 57.3 | 56.3             | 61.6 | 14       | 52.9            | 57.3 | 57.2             | 61.6 |   |                |                 |
| 15       | 55.8            | 60.8 | 60.1             | 65.5 | 15       | 56.4            | 60.8 | 61.1             | 65.5 |   |                |                 |
| 16       | 59.3            | 64.3 | 64.0             | 69.3 | 16       | 59.9            | 64.3 | 64.9             | 69.3 |   |                |                 |
| 17       | 62.8            | 67.8 | 67.8             | 73.1 | 17       | 63.4            | 67.8 | 68.7             | 73.1 |   |                |                 |
| 18       | 66.3            | 71.3 | 71.6             | 76.9 | 18       | 66.9            | 71.3 | 72.5             | 76.9 |   |                |                 |
| 19       | 69.9            | 74.7 | 75.5             | 80.6 | 19       | 70.5            | 74.7 | 76.4             | 80.6 |   |                |                 |
| 20       | 73.4            | 78.2 | 79.3             | 84.4 | 20       | 74.0            | 78.2 | 80.2             | 84.4 |   |                |                 |
| 21       | 76.9            | 81.7 | 83.1             | 88.2 | 21       | 77.5            | 81.7 | 84.0             | 88.2 | <b>Screws with nuts</b><br>3.0 <sup>±0.1</sup> mm mounting hole diameter    |                |                 |
| 22       | 80.4            | 85.2 | 86.9             | 92.0 | 22       | 81.0            | 85.2 | 87.8             | 92.0 |   |                |                 |
| 23       | 83.9            | 88.7 | 90.7             | 95.8 | 23       | 84.5            | 88.7 | 91.6             | 95.8 |   |                |                 |
| 24       | 87.4            | 92.2 | 94.5             | 99.6 | 24       | 88.0            | 92.2 | 95.4             | 99.6 |   |                |                 |
|          |                 |      |                  |      |          |                 |      |                  |      | M 2.5 x 10 mm   | <b>231-295</b> | 200 ( 2 x 100 ) |

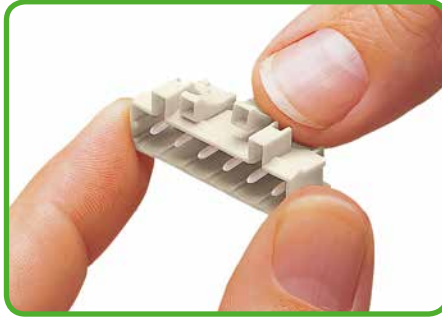


# Description and Handling

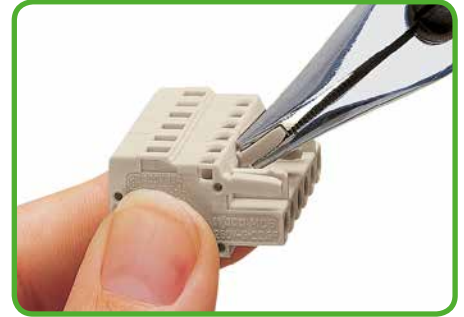
## MCS - MULTI CONNECTION SYSTEM MIDI 100% Protected Against Mismatching



Inserting/removing conductor via 3.5 mm screwdriver - CAGE CLAMP<sup>®</sup>S actuation in mated condition.

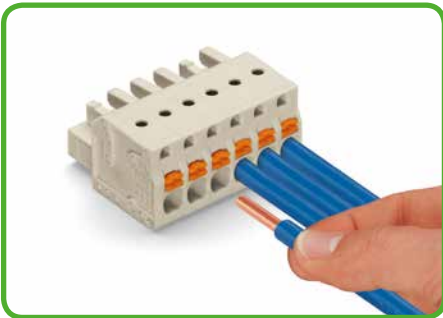


Coding a male header - fitting coding key(s).

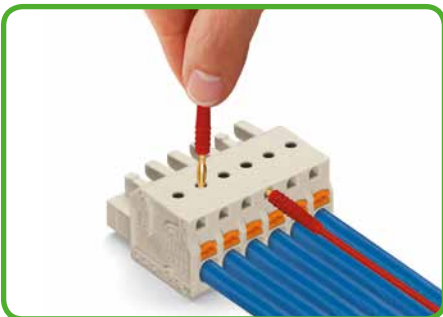


Coding a female connector - removing coding finger(s).

### 2721 Series Female Connector with Push-Buttons

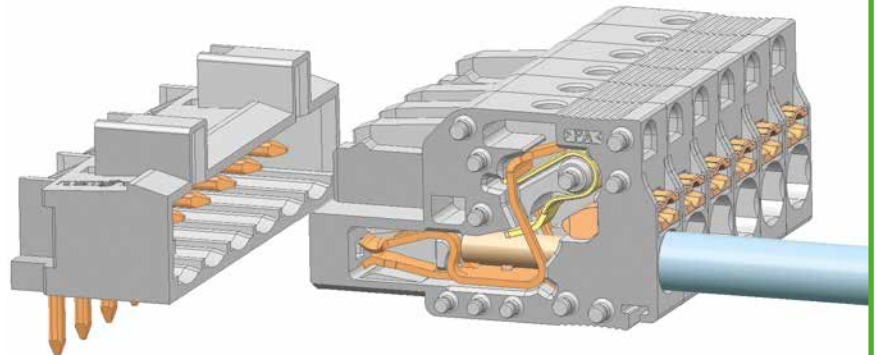


Inserting solid or ferruled conductors via CAGE CLAMP<sup>®</sup>S push-in terminations.



Testing parallel to conductor entry via integrated test ports - female connector with push-button actuated CAGE CLAMP<sup>®</sup>S. Tip contact with current bar from top of unit.

100% protected against mismatching

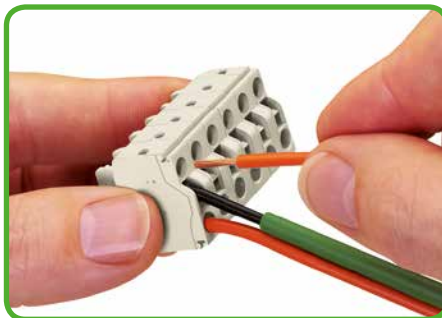


MCS-MIDI

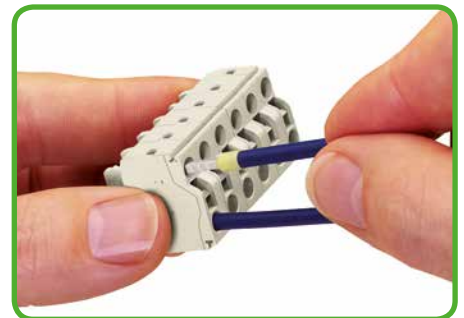
Pin spacing 5 mm and 7.5 mm



Marking via self-adhesive marker strips or factory direct printing.



Inserting conductor via 3.5 mm screwdriver into a 2-conductor female connector equipped with CAGE CLAMP<sup>®</sup>S.



Inserting ferruled, fine-stranded conductors via CAGE CLAMP<sup>®</sup>S push-in terminations.



CAGE CLAMP<sup>®</sup> and CAGE CLAMP<sup>®</sup>S clamp the following copper conductors:  
solid



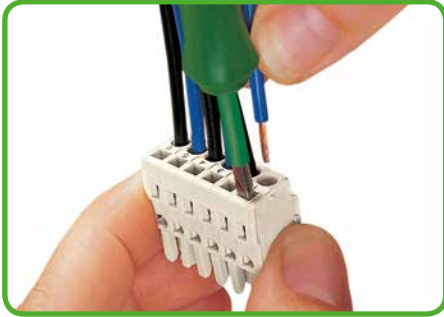
stranded



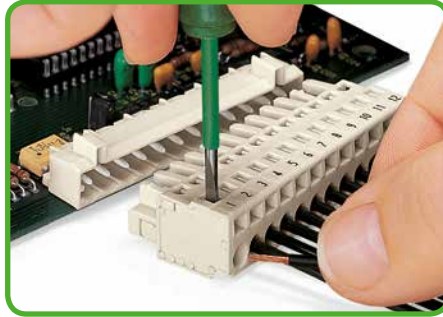
fine-stranded, also with tinned single strands

\* For aluminum conductors, see notes in Section 9.





Inserting conductor via 3.5 mm screwdriver – horizontal CAGE CLAMP® actuation.



Inserting conductor via 3.5 mm screwdriver – vertical CAGE CLAMP® actuation.

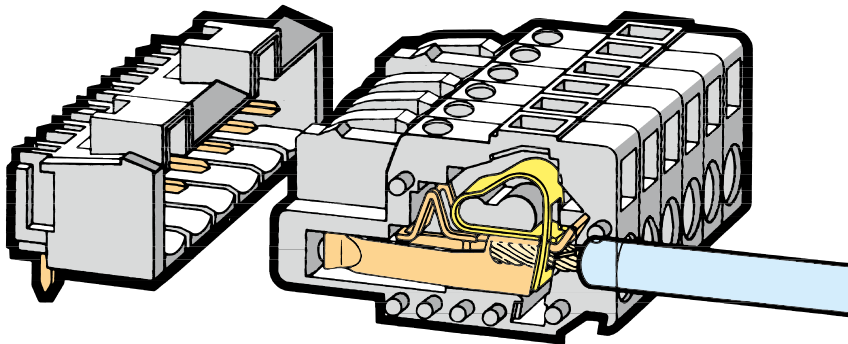


Inserting conductor – CAGE CLAMP® actuation via 231-291 push-buttons.

### 721, 722 and 723 Series

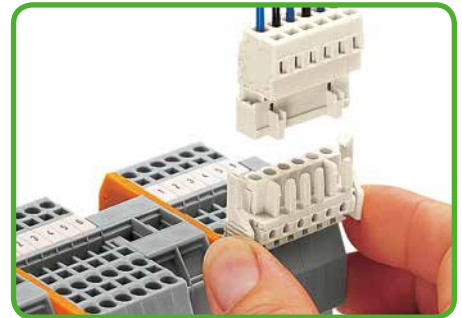
100% protected against mismatching

CAGE CLAMP®



MCS-MIDI

Pin spacing 5 mm and 7.5 mm



Connectors for 280 Series rail-mounted terminal blocks.



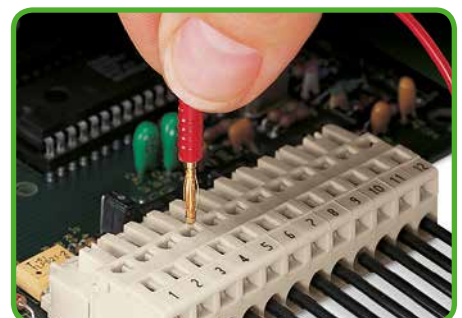
Angled female connector for panel mounting.



Male connector with strain relief plate.



Strain relief housing with a male connector equipped with CAGE CLAMP®.



Testing – female connector with CAGE CLAMP®. Vertical insertion of 2 mm Ø and 2.3 mm Ø test plugs.



fine-stranded, tip-bonded

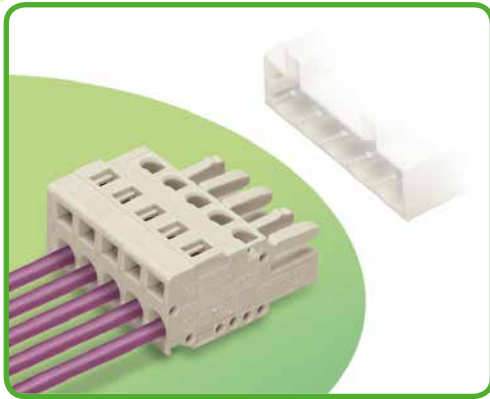


fine-stranded with crimped ferrules (gas-tight)



fine-stranded with crimped pin terminal (gas-tight)

# Female Connectors Pin Spacing 5 mm MCS-MIDI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Integrated test ports
- 100% protected against mismatching
- With coding fingers

**Technical data:**

| Pin Spacing          | Straight<br>5 mm / 0.197 in |       |       | Angled<br>5 mm / 0.197 in |       |       |
|----------------------|-----------------------------|-------|-------|---------------------------|-------|-------|
|                      | IEC/EN 60664-1              |       |       | IEC/EN 60664-1            |       |       |
| Rating per           |                             |       |       |                           |       |       |
| Overtoltage category | III                         | III   | II    | III                       | III   | II    |
| Pollution degree     | 3                           | 2     | 2     | 3                         | 2     | 2     |
| Rated voltage        | 320 V                       | 320 V | 630 V | 320 V                     | 320 V | 630 V |
| Rated surge voltage  | 4 kV                        | 4 kV  | 4 kV  | 4 kV                      | 4 kV  | 4 kV  |
| Nominal current      | 16 A                        | 16 A  | 16 A  | 14 A                      | 14 A  | 14 A  |
| Approvals per        | UL/CSA                      |       |       | UL/CSA                    |       |       |
| Use group UL 1059    | B                           | C     | D     | B                         | C     | D     |
| Rated voltage        | 300 V                       | -     | 300 V | 300 V                     | -     | 300 V |
| Nominal current UL   | 15 A                        | -     | 10 A  | 15 A                      | -     | 10 A  |
| Nominal current CSA  | 15 A                        | -     | 10 A  | 15 A                      | -     | 10 A  |

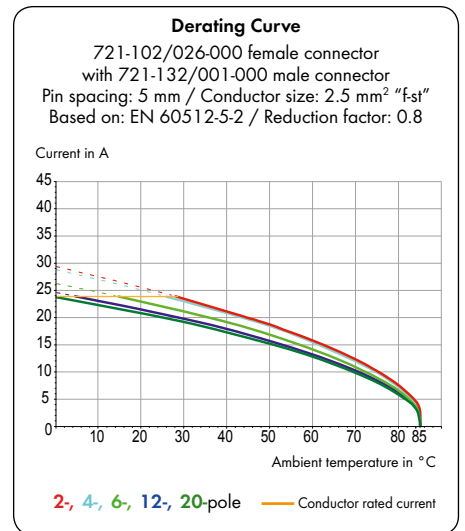
The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

|                               |                            |                            |
|-------------------------------|----------------------------|----------------------------|
| Connection technology         | CAGE CLAMP®                |                            |
| Conductor size: solid         | 0.08 - 2.5 mm <sup>2</sup> |                            |
| Conductor size: fine-stranded | 0.08 - 2.5 mm <sup>2</sup> |                            |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> | (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 2.5 mm <sup>2</sup> | (with uninsulated ferrule) |
| AWG                           | 28 - 12                    | 12: THHN, THWN             |
| Strip length                  | 8 - 9 mm / 31 - 35 in      |                            |

**Material data:**

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +85 °C                   |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |                                   |



**MCS-MIDI accessories:**

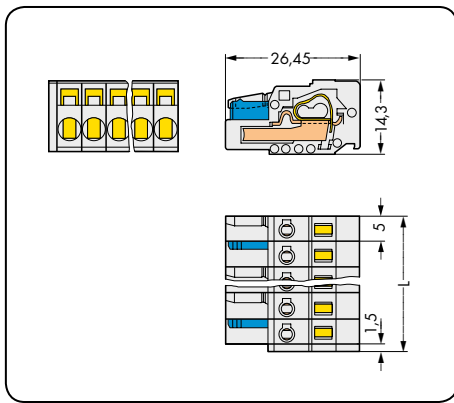
**Page:**

|                        |           |
|------------------------|-----------|
| Marking accessories    | 508 - 511 |
| Operating tool         | 354 - 355 |
| Direct marking         | 350 - 351 |
| Comb-style jumper bars | 364       |
| Insulation stop        | 357       |
| Test plug adapter      | 362       |
| Test plugs             | 506       |
| Screws                 | 514       |
| Strain relief housings | 360 - 361 |
| Strain relief plates   | 358 - 359 |

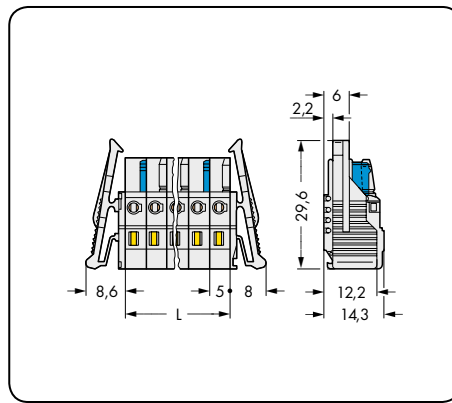
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Female Connectors MCS-MIDI

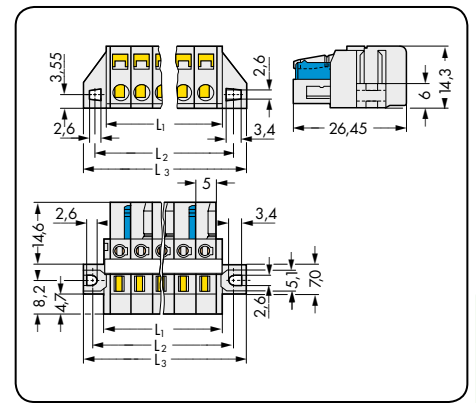
| Pin spacing 5 mm / 0.197 in                     |                           | With locking levers<br>Pin spacing 5 mm / 0.197 in |                           | With fixing flanges,<br>for racks and through-panel mounting<br>Pin spacing 5 mm / 0.197 in |                           |
|---|---------------------------|--|---------------------------|---|---------------------------|
| 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A | AWG 28 - 12<br>300 V/15 A | 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A    | AWG 28 - 12<br>300 V/15 A | 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A   | AWG 28 - 12<br>300 V/15 A |



L = (pole no. x pin spacing) + 1.5 mm



L = pole no. x pin spacing



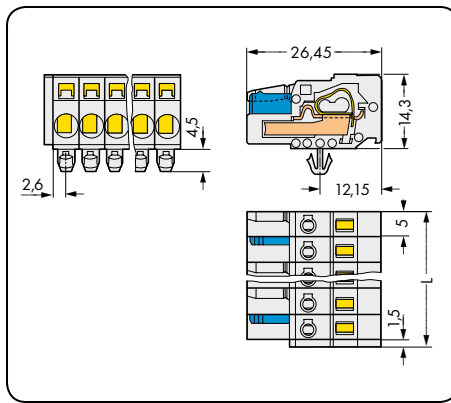
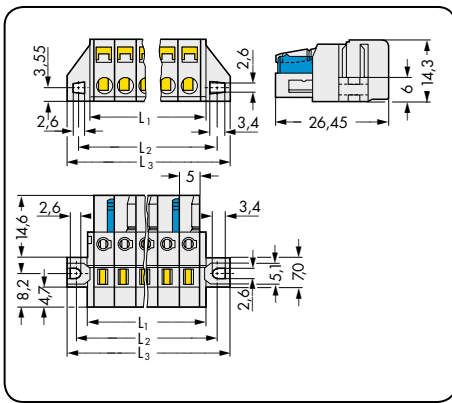
L<sub>1</sub> = (pole no. x pin spacing) + 3 mm  
L<sub>2</sub> = (pole no. x pin spacing) + 8.8 mm  
L<sub>3</sub> = (pole no. x pin spacing) + 14.8 mm

| Pole No.                                  | Item No.        | Pack. Unit | Pole No.  | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|--|-----------------|------------|
| <b>Female connector, light gray</b>       |                 |            | <b>Female connector with locking levers, light gray</b> |                 |            | <b>Female connector with fixing flanges, for racks and through-panel mounting, with reinforcing strips, light gray</b> |                 |            |
| 2   | 721-102/026-000 | 100        | 2   | 721-102/037-000 | 100        | 2  | 721-102/031-000 | 100        |
| 3   | 721-103/026-000 | 100        | 3   | 721-103/037-000 | 50         | 3  | 721-103/031-000 | 50         |
| 4   | 721-104/026-000 | 100        | 4   | 721-104/037-000 | 50         | 4  | 721-104/031-000 | 50         |
| 5   | 721-105/026-000 | 100        | 5   | 721-105/037-000 | 50         | 5  | 721-105/031-000 | 50         |
| 6   | 721-106/026-000 | 50         | 6   | 721-106/037-000 | 50         | 6  | 721-106/027-000 | 50         |
| 7   | 721-107/026-000 | 50         | 7   | 721-107/037-000 | 50         | 7  | 721-107/027-000 | 50         |
| 8   | 721-108/026-000 | 50         | 8   | 721-108/037-000 | 25         | 8  | 721-108/027-000 | 50         |
| 9   | 721-109/026-000 | 50         | 9   | 721-109/037-000 | 25         | 9  | 721-109/027-000 | 25         |
| 10  | 721-110/026-000 | 50         | 10  | 721-110/037-000 | 25         | 10   | 721-110/027-000 | 25         |
| 11  | 721-111/026-000 | 25         | 11  | 721-111/037-000 | 25         | 11   | 721-111/027-000 | 25         |
| 12  | 721-112/026-000 | 25         | 12  | 721-112/037-000 | 25         | 12   | 721-112/027-000 | 25         |
| 13  | 721-113/026-000 | 25         | 13  | 721-113/037-000 | 25         | 13   | 721-113/027-000 | 25         |
| 14  | 721-114/026-000 | 25         | 14  | 721-114/037-000 | 25         | 14   | 721-114/027-000 | 25         |
| 15  | 721-115/026-000 | 25         | 15  | 721-115/037-000 | 25         | 15   | 721-115/027-000 | 25         |
| 16  | 721-116/026-000 | 25         | 16  | 721-116/037-000 | 10         | 16   | 721-116/027-000 | 10         |
| 20  | 721-120/026-000 | 10         | 20  | 721-120/037-000 | 10         | 20   | 721-120/027-000 | 10         |
| 2-pole female connectors - one latch only |                 |            |   |                 |            | Item no. for 2- to 5-pole female connectors identical to item no. for panel mounting without reinforcing strips.       |                 |            |
|   |                 |            |   |                 |            | For cutout dimensions, see page 365, table 1.  |                 |            |



# Female Connectors MCS-MIDI

| With fixing flanges<br>for panel mounting<br>Pin spacing 5 mm / 0.197 in |             | With snap-in mounting feet<br>Pin spacing 5 mm / 0.197 in |             |
|--|-------------|---|-------------|
| 0.08 - 2.5 mm <sup>2</sup>   | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>                                | AWG 28 - 12 |
| 320 V/4 kV/2 16 A  | 300 V/15 A  | 320 V/4 kV/2 16 A   | 300 V/15 A  |



$L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$

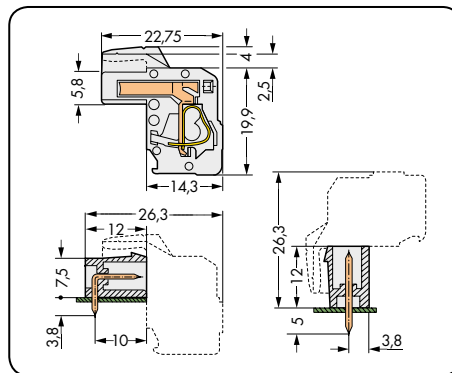
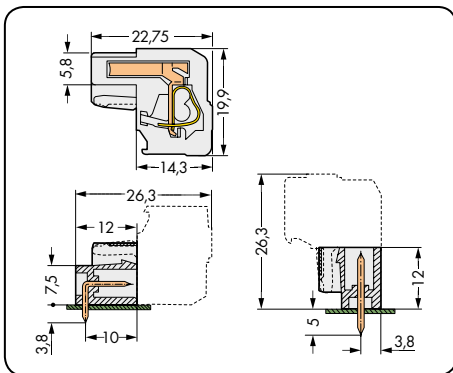
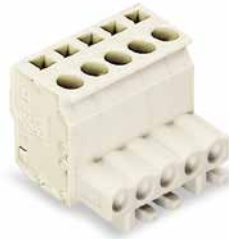
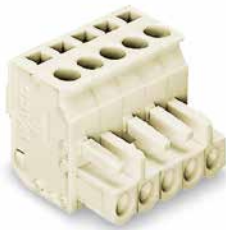
$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

| Pole No.   | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|
| Female connector with fixing flanges,<br>for panel mounting,<br>light gray |                 |            | Female connector with snap-in mounting feet,<br>for 0.6 - 1.2 mm plate thickness,<br>3.5 mm mounting hole diameter, light gray |                 |            |
| 2  | 721-102/031-000 | 100        | 2  | 721-102/008-000 | 100        |
| 3  | 721-103/031-000 | 50         | 3  | 721-103/008-000 | 100        |
| 4  | 721-104/031-000 | 50         | 4  | 721-104/008-000 | 100        |
| 5  | 721-105/031-000 | 50         | 5  | 721-105/008-000 | 100        |
| 6  | 721-106/031-000 | 50         | 6  | 721-106/008-000 | 50         |
| 7  | 721-107/031-000 | 50         | 7  | 721-107/008-000 | 50         |
| 8  | 721-108/031-000 | 50         | 8  | 721-108/008-000 | 50         |
| 9  | 721-109/031-000 | 25         | 9  | 721-109/008-000 | 50         |
| 10   | 721-110/031-000 | 25         | 10   | 721-110/008-000 | 50         |
| 11   | 721-111/031-000 | 25         | 11   | 721-111/008-000 | 25         |
| 12   | 721-112/031-000 | 25         | 12   | 721-112/008-000 | 25         |
| 13   | 721-113/031-000 | 25         | 13   | 721-113/008-000 | 25         |
| 14   | 721-114/031-000 | 25         | 14   | 721-114/008-000 | 25         |
| 15   | 721-115/031-000 | 25         | 15   | 721-115/008-000 | 25         |
| 16   | 721-116/031-000 | 10         | 16   | 721-116/008-000 | 25         |
| 20   | 721-120/031-000 | 10         | 20   | 721-120/008-000 | 10         |
| For cutout dimensions, see page 365, table 1.                              |                 |            |  |                 |            |
| 2-pole female connectors - one latch only                                  |                 |            |  |                 |            |

| Product Accessories  | Page |
|--|------|
| Mounting adapter for DIN 35 rail,<br>min. length 3 poles (209-137) | 363  |

# Female Connectors MCS-MIDI

|  |             |  |             |
|--|-------------|--|-------------|
| <b>Angled, conductor entry same direction as latches</b><br><b>Pin spacing 5 mm / 0.197 in</b> |             | <b>Angled, conductor entry opposite of latches</b><br><b>Pin spacing 5 mm / 0.197 in</b> |             |
| 0.08 - 2.5 mm <sup>2</sup>   | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>   | AWG 28 - 12 |
| 320 V/4 kV/2 14 A  | 300 V/15 A  | 320 V/4 kV/2 14 A  | 300 V/15 A  |



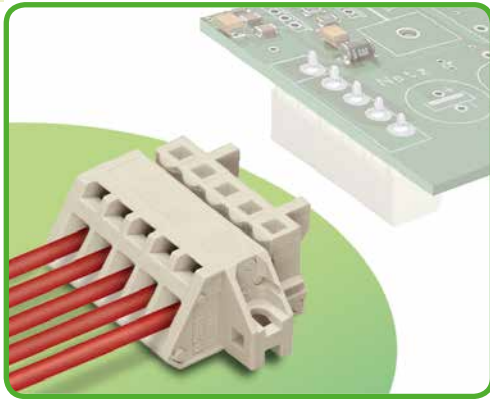
Total length = (pole no. x pin spacing) + 1.5 mm + 0.9 mm

| Pole No.  | Item No.        | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|
| <b>Angled female connector, conductor entry same direction as latches, light gray</b> |                 |            | <b>Angled female connector, conductor entry opposite of latches, light gray</b> |                 |            |
| 2   | 722-202/026-000 | 100        | 2   | 722-102/026-000 | 100        |
| 3   | 722-203/026-000 | 100        | 3   | 722-103/026-000 | 100        |
| 4   | 722-204/026-000 | 100        | 4   | 722-104/026-000 | 100        |
| 5   | 722-205/026-000 | 100        | 5   | 722-105/026-000 | 100        |
| 6   | 722-206/026-000 | 50         | 6   | 722-106/026-000 | 50         |
| 7   | 722-207/026-000 | 50         | 7   | 722-107/026-000 | 50         |
| 8   | 722-208/026-000 | 50         | 8   | 722-108/026-000 | 50         |
| 9   | 722-209/026-000 | 50         | 9   | 722-109/026-000 | 50         |
| 10  | 722-210/026-000 | 50         | 10  | 722-110/026-000 | 50         |
| 11  | 722-211/026-000 | 25         | 11  | 722-111/026-000 | 25         |
| 12  | 722-212/026-000 | 25         | 12  | 722-112/026-000 | 25         |
| 13  | 722-213/026-000 | 25         |   |                 |            |
| 14  | 722-214/026-000 | 25         | 14  | 722-114/026-000 | 25         |
| 15  | 722-215/026-000 | 25         |   |                 |            |
| 16  | 722-216/026-000 | 25         | 16  | 722-116/026-000 | 25         |
| 20  | 722-220/026-000 | 10         | 20  | 722-120/026-000 | 10         |
| 2-pole female connectors - one latch only   |                 |            |   |                 |            |

# Angled Female Connectors for Panel Mounting

## Pin Spacing 5 mm

### MCS-MIDI



- Universal connection for all conductor types
- Versions available with snap-in mounting feet or fixing flanges for panel or through-panel mounting
- Mounting adapter allows versions with snap-in mounting feet to be DIN-rail mounted
- Easy conductor termination, even when halves are mated
- 100% protected against mismating

#### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       |
|----------------------|------------------|-------|-------|
| Rating per           | IEC/EN 60664-1   |       |       |
| Overtoltage category | III              | III   | II    |
| Pollution degree     | 3                | 2     | 2     |
| Rated voltage        | 320 V            | 320 V | 630 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |
| Nominal current      | 12 A             | 12 A  | 12 A  |
| Approvals per        | UL/CSA           |       |       |
| Use group UL 1059    | B                | C     | D     |
| Rated voltage        | 300V             | -     | 300V  |
| Nominal current UL   | 15 A             | -     | 10 A  |
| Nominal current CSA  | 15 A             | -     | 10 A  |

The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

#### Conductor data:

|                               |   |                |
|-------------------------------|---|----------------|
| Connection technology         | CAGE CLAMP®   |                |
| Conductor size: solid         | 0.08 - 2.5 mm <sup>2</sup>                            |                |
| Conductor size: fine-stranded | 0.08 - 2.5 mm <sup>2</sup>                            |                |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |                |
| Conductor size: fine-stranded | 0.25 - 2.5 mm <sup>2</sup> (with uninsulated ferrule) |                |
| AWG                           | 28 - 12   | 12: THHN, THWN |
| Strip length                  | 7 - 8 mm / 0.28 - 0.31 in                             |                |

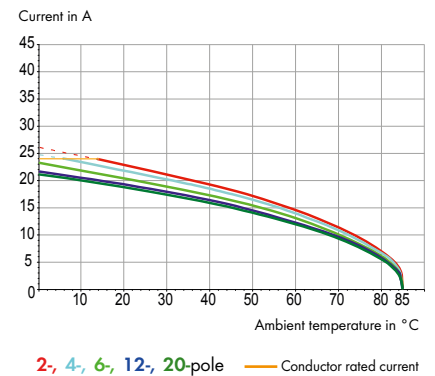
#### Material data:

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +85 °C                   |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |                                   |

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

#### Derating Curve

721-302/031-000 female connector  
with 721-162/001-000 male connector  
Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> "F-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8



#### MCS-MIDI accessories:

#### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 354 - 355 |
| Direct marking      | 350 - 352 |
| Test plug adapter   | 362       |
| Screws              | 514       |

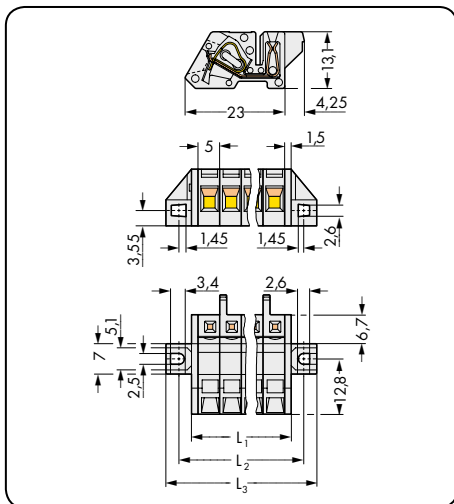
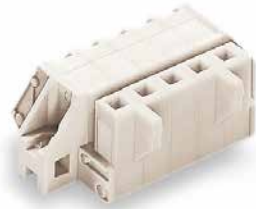
# Angled Female Connectors for Panel Mounting MCS-MIDI

CAGE CLAMP®

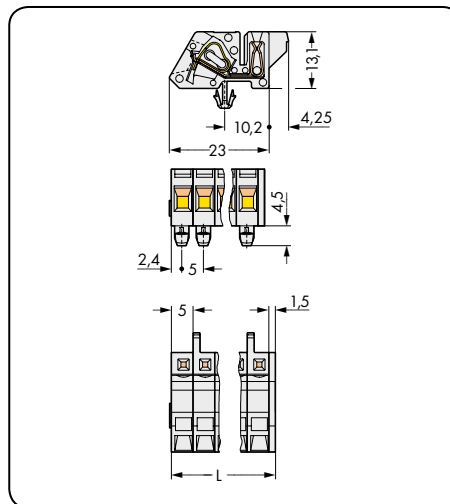
5

331

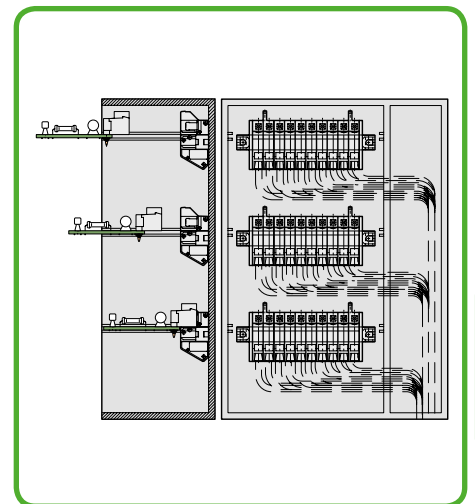
| With fixing flanges<br>Pin spacing 5 mm / 0.197 in |                            | With snap-in mounting feet<br>Pin spacing 5 mm / 0.197 in |                            | Application examples |
|--|----------------------------|---|----------------------------|----------------------|
| 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 12 A    | AWG 28 - 12<br>300 V/ 15 A | 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 12 A           | AWG 28 - 12<br>300 V/ 15 A |                      |



$L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$



$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$



Multilevel arrangement in a distributed electronic housing

| Pole No.   | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|
| <b>Angled female connector with fixing flanges, light gray</b> |                 |            | <b>Angled female connector with snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm mounting hole diameter, light gray</b> |                 |            |
| 2  | 721-302/031-000 | 100        | 2  | 721-302/008-000 | 100        |
| 3  | 721-303/031-000 | 50         | 3  | 721-303/008-000 | 50         |
| 4  | 721-304/031-000 | 50         | 4  | 721-304/008-000 | 50         |
| 5  | 721-305/031-000 | 50         | 5  | 721-305/008-000 | 50         |
| 6  | 721-306/031-000 | 50         | 6  | 721-306/008-000 | 50         |
| 7  | 721-307/031-000 | 50         | 7  | 721-307/008-000 | 50         |
| 8  | 721-308/031-000 | 50         | 8  | 721-308/008-000 | 50         |
| 9  | 721-309/031-000 | 25         | 9  | 721-309/008-000 | 50         |
| 10   | 721-310/031-000 | 25         | 10   | 721-310/008-000 | 50         |
| 11   | 721-311/031-000 | 25         | 11   | 721-311/008-000 | 25         |
| 12   | 721-312/031-000 | 25         | 12   | 721-312/008-000 | 25         |
| 13   | 721-313/031-000 | 25         | 13   | 721-313/008-000 | 25         |
| 14   | 721-314/031-000 | 25         | 14   | 721-314/008-000 | 25         |
| 15   | 721-315/031-000 | 25         | 15   | 721-315/008-000 | 25         |
| 16   | 721-316/031-000 | 10         | 16   | 721-316/008-000 | 25         |
| 20   | 721-320/031-000 | 10         | 20   | 721-320/008-000 | 10         |



Panel-mount connectors. Male connector with CAGE CLAMP® connection and strain relief plate for outgoing circuit.

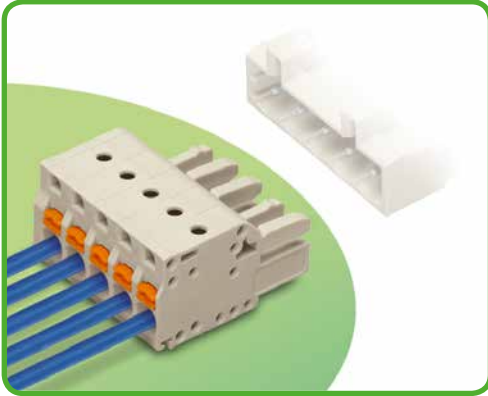


| Product Accessories   | Page |
|---|------|
| Mounting adapter for DIN 35 rail, min. length 3 poles (209-120) | 363  |

For other lengths, please contact factory.

# 5 Female Connectors with Push-Buttons Pin Spacing 5 mm MCS-MIDI

332



- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire while mated
- Simple, push-in terminations of solid and ferruled conductors
- Integrated test ports for testing parallel to conductor entry
- 100% protected against mismating
- With coding fingers

**Technical data:**

| Pin Spacing          | 5 mm<br>0.197 in |       |       |
|----------------------|------------------|-------|-------|
| Rating per           | IEC/EN 60664-1   |       |       |
| Overtoltage category | III              | III   | II    |
| Pollution degree     | 3                | 2     | 2     |
| Rated voltage        | 320 V            | 320 V | 630 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |
| Nominal current      | 16 A             | 16 A  | 16 A  |
| Approvals per        | UL/CSA           |       |       |
| Use group UL 1059    | B                | C     | D     |
| Rated voltage        | 300 V            | 150 V | 300 V |
| Nominal current UL   | 15 A             | 15 A  | 10 A  |
| Nominal current CSA  | 15 A             | 15 A  | 10 A  |

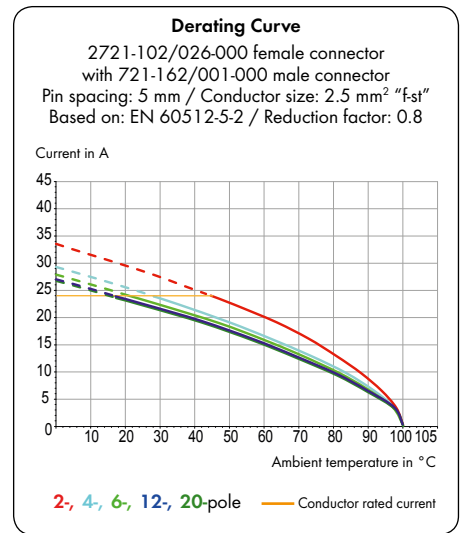
The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

|                               |   |                |
|-------------------------------|---|----------------|
| Connection technology         | CAGE CLAMP®S  |                |
| Conductor size: solid         | 0.2 - 2.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded | 0.2 - 2.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |                |
| Conductor size: fine-stranded | 0.25 - 2.5 mm <sup>2</sup> (with uninsulated ferrule) |                |
| AWG                           | 24 - 12   | 12: THHN, THWN |
| Strip length                  | 10 - 11 mm / 0.39 - 0.43 in                           |                |

**Material data:**

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +100 °C                  |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |                                   |



**MCS-MIDI accessories:**

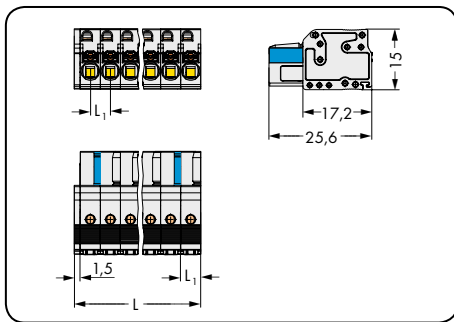
**Page:**

|                      |           |
|----------------------|-----------|
| Marking accessories  | 508 - 511 |
| Operating tools      | 354 - 355 |
| Direct marking       | 350 - 352 |
| Insulation stop      | 357       |
| Test plug adapter    | 362       |
| Test plug, Ø 2 mm    | 506       |
| Screws               | 514       |
| Strain relief plates | 358 - 359 |

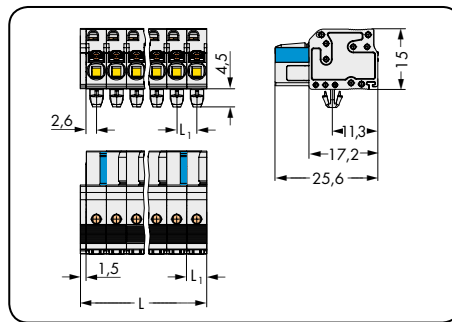
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Female Connectors with Push-Buttons MCS-MIDI

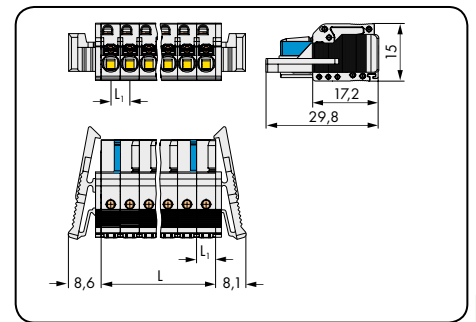
| Pin spacing 5 mm / 0.197 in                    |                           | With snap-in mounting feet<br>Pin spacing 5 mm / 0.197 in |                           | With locking levers<br>Pin spacing 5 mm / 0.197 in |                           |
|--|---------------------------|---|---------------------------|--|---------------------------|
| 0.2 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A | AWG 24 - 12<br>300 V/15 A | 0.2 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A            | AWG 24 - 12<br>300 V/15 A | 0.2 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A     | AWG 24 - 12<br>300 V/15 A |



L = (pole no. x pin spacing) + 1.5 mm  
L<sub>1</sub> = 5 mm



L = (pole no. x pin spacing) + 1.5 mm  
L<sub>1</sub> = 5 mm



L = pole no. x pin spacing  
L<sub>1</sub> = 5 mm

| Pole No.  | Item No.         | Pack. Unit | Pole No.   | Item No.         | Pack. Unit | Pole No.   | Item No.         | Pack. Unit |
|---|------------------|------------|--|------------------|------------|--|------------------|------------|
| <b>Female connector with push-buttons, light gray</b> |                  |            | <b>Female connector with push-buttons and snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm mounting hole diameter, light gray</b> |                  |            | <b>Female connector with push-buttons and locking levers, light gray</b> |                  |            |
| 2   | 2721-102/026-000 | 100        | 2  | 2721-102/008-000 | 100        | 2  | 2721-102/037-000 | 100        |
| 3   | 2721-103/026-000 | 100        | 3  | 2721-103/008-000 | 100        | 3  | 2721-103/037-000 | 50         |
| 4   | 2721-104/026-000 | 100        | 4  | 2721-104/008-000 | 100        | 4  | 2721-104/037-000 | 50         |
| 5   | 2721-105/026-000 | 100        | 5  | 2721-105/008-000 | 100        | 5  | 2721-105/037-000 | 50         |
| 6   | 2721-106/026-000 | 50         | 6  | 2721-106/008-000 | 50         | 6  | 2721-106/037-000 | 50         |
| 7   | 2721-107/026-000 | 50         | 7  | 2721-107/008-000 | 50         | 7  | 2721-107/037-000 | 50         |
| 8   | 2721-108/026-000 | 50         | 8  | 2721-108/008-000 | 50         | 8  | 2721-108/037-000 | 25         |
| 9   | 2721-109/026-000 | 50         | 9  | 2721-109/008-000 | 50         | 9  | 2721-109/037-000 | 25         |
| 10  | 2721-110/026-000 | 50         | 10   | 2721-110/008-000 | 50         | 10   | 2721-110/037-000 | 25         |
| 11  | 2721-111/026-000 | 25         | 11   | 2721-111/008-000 | 25         | 11   | 2721-111/037-000 | 25         |
| 12  | 2721-112/026-000 | 25         | 12   | 2721-112/008-000 | 25         | 12   | 2721-112/037-000 | 25         |
| 14  | 2721-114/026-000 | 25         | 14   | 2721-114/008-000 | 25         | 14   | 2721-114/037-000 | 25         |
| 16  | 2721-116/026-000 | 25         | 16   | 2721-116/008-000 | 25         | 16   | 2721-116/037-000 | 10         |
| 20  | 2721-120/026-000 | 10         | 20   | 2721-120/008-000 | 10         | 20   | 2721-120/037-000 | 10         |

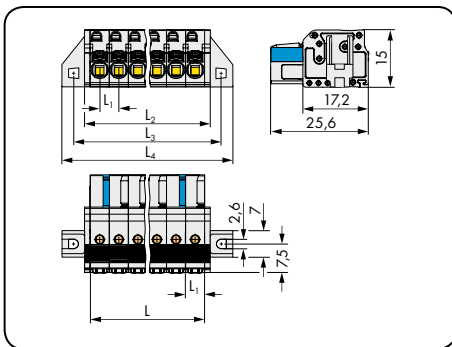
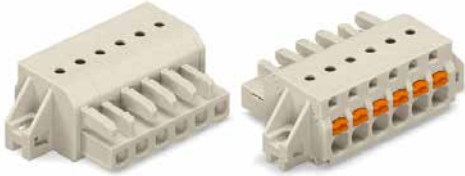
2-pole female connectors - one latch only

| Product Accessories   | Page |
|---|------|
| Mounting adapter for DIN 35 rail, min. length 3 poles (209-137) | 363  |

# 5 Female Connectors with Push-Buttons MCS-MIDI

334

|  |                           |  |
|--|---------------------------|--|
| <b>With fixing flanges</b><br><b>Pin spacing 5 mm / 0.197 in</b> |                           |  |
| 0.2 – 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A                   | AWG 24 – 12<br>300 V/15 A |  |



L = pole no. x pin spacing  
 L<sub>1</sub> = 5 mm  
 L<sub>2</sub> = L + 2.8 mm  
 L<sub>3</sub> = L + 8.8 mm  
 L<sub>4</sub> = L + 14.8 mm

| Pole No.   | Item No.         | Pack. Unit |
|--|------------------|------------|
| <b>Female connector with push-buttons and fixing flanges, light gray</b> |                  |            |
| 2  | 2721-102/031-000 | 100        |
| 3  | 2721-103/031-000 | 50         |
| 4  | 2721-104/031-000 | 50         |
| 5  | 2721-105/031-000 | 50         |
| 6  | 2721-106/031-000 | 50         |
| 7  | 2721-107/031-000 | 50         |
| 8  | 2721-108/031-000 | 50         |
| 9  | 2721-109/031-000 | 25         |
| 10   | 2721-110/031-000 | 25         |
| 12   | 2721-112/031-000 | 25         |
| 14   | 2721-114/031-000 | 25         |
| 16   | 2721-116/031-000 | 10         |
| 20   | 2721-120/031-000 | 10         |
| For cutout dimensions, see page 366, table 2.                            |                  |            |
| 2-pole female connectors - one latch only                                |                  |            |



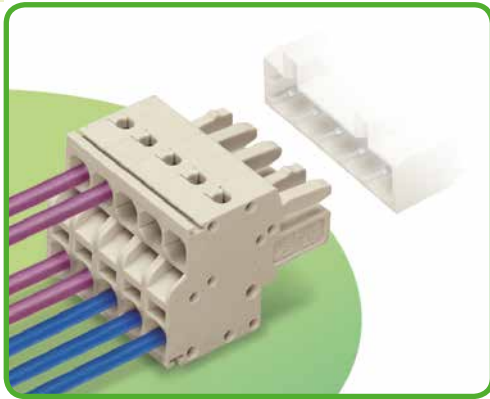


# 5 2-Conductor Female Connectors

## Pin Spacing 5 mm

### MCS-MIDI

336



- Universal connection for all conductor types
- Two conductor entries per pole
- For looping through power or data buses
- Bus connection is retained, even when unmated
- Push-in termination of solid and ferruled, fine-stranded conductors
- 100% protected against mismatching
- With coding fingers

#### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       |
|----------------------|------------------|-------|-------|
| Rating per           | IEC/EN 60664-1   |       |       |
| Overtoltage category | III              | III   | II    |
| Pollution degree     | 3                | 2     | 2     |
| Rated voltage        | 320 V            | 320 V | 630 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |
| Nominal current      | 16 A             | 16 A  | 16 A  |
| Approvals per        | UL/CSA           |       |       |
| Use group UL 1059    | B                | C     | D     |
| Rated voltage        | 300 V            | -     | 300 V |
| Nominal current UL   | 20 A             | -     | 10 A  |
| Nominal current CSA  | 15 A             | -     | 10 A  |

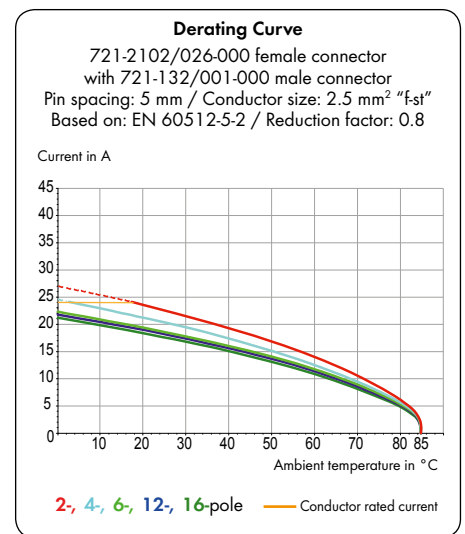
The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

#### Conductor data:

|                               |   |                |
|-------------------------------|---|----------------|
| Connection technology         | CAGE CLAMP®S  |                |
| Conductor size: solid         | 0.2 - 2.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded | 0.2 - 2.5 mm <sup>2</sup>                             |                |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |                |
| Conductor size: fine-stranded | 0.25 - 2.5 mm <sup>2</sup> (with uninsulated ferrule) |                |
| AWG                           | 24 - 12   | 12: THHN, THWN |
| Strip length                  | 9 - 10 mm / 0.35 - 0.39 in                            |                |

#### Material data:

|  |                                   |
|--|-----------------------------------|
| Material group   | I                                 |
| Insulating material  | Nylon 6.6 (PA 6.6)                |
| Flammability rating per UL 94  | V0                                |
| Lower/Upper temperature limit  | -60 °C / +85 °C                   |
| Clamping spring material   | Chrome-nickel spring steel (CrNi) |
| Contact material   | Copper alloy                      |
| Contact plating  | tin-plated                        |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                                   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |                                   |



#### MCS-MIDI accessories:

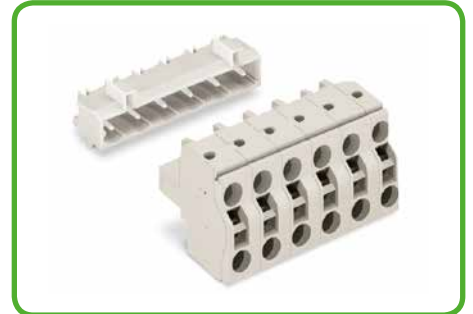
#### Page:

|                      |           |
|----------------------|-----------|
| Marking accessories  | 508 - 511 |
| Operating tools      | 354 - 355 |
| Direct marking       | 350 - 352 |
| Insulation stop      | 357       |
| Test plug adapter    | 362       |
| Test pin             | 506       |
| Strain relief plates | 358 - 359 |

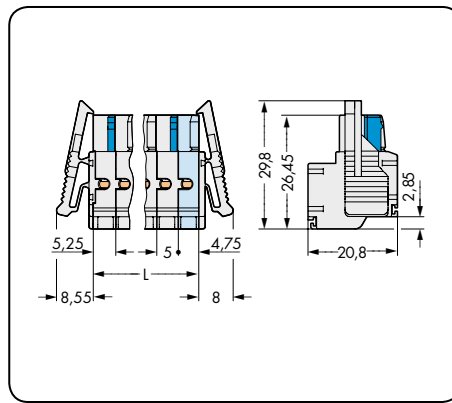
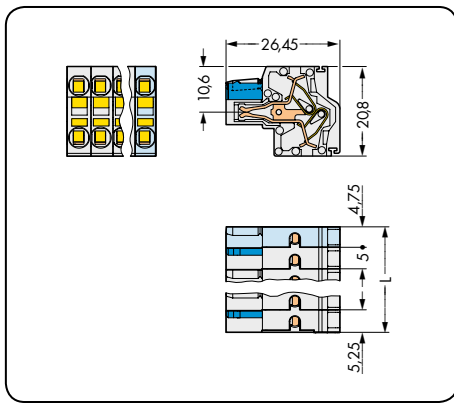
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# 2-Conductor Female Connectors MCS-MIDI

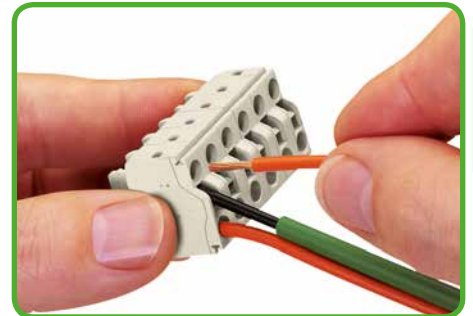
| Pin spacing 5 mm / 0.197 in                    |                           | With locking levers<br>Pin spacing 5 mm / 0.197 in |                           | Handling |
|--|---------------------------|--|---------------------------|----------|
| 0.2 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A | AWG 24 - 12<br>300 V/20 A | 0.2 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 16 A     | AWG 24 - 12<br>300 V/20 A |          |



Female connectors equipped with two CAGE CLAMP®S connections per pole allow conductors to be looped from one connector to another without interruption. Therefore, disconnecting one connector will not affect the other connectors in the circuit. These female connectors can be mated with male headers or CAGE CLAMP®-equipped male connectors, which are 100% protected against mismatching.

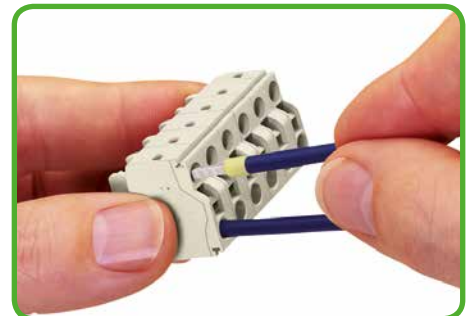


L = (pole no. - 2) x pin spacing + 10 mm



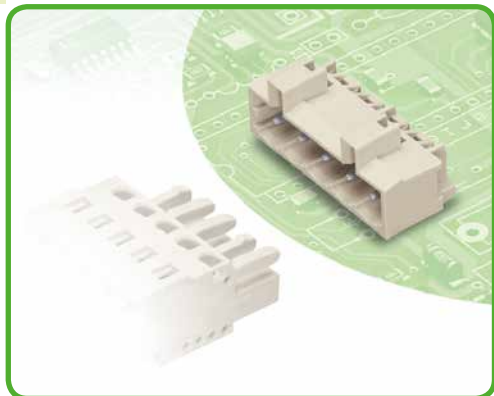
Operating CAGE CLAMP®S is easy, fast and identical to that of CAGE CLAMP®. The screwdriver is fully inserted into the operating slot, holding the CAGE CLAMP®S open. After the conductor has been inserted into the clamping unit and the screwdriver been withdrawn, the conductor is clamped safely. Solid and fine-stranded conductors < 0.5 mm<sup>2</sup> are terminated and removed using a screwdriver.

| Pole No.  | Item No.         | Pack. Unit | Pole No.  | Item No.         | Pack. Unit |
|---|------------------|------------|---|------------------|------------|
| <b>2-conductor female connector, light gray</b> |                  |            | <b>2-conductor female connector with locking levers, light gray</b> |                  |            |
| 2   | 721-2102/026-000 | 100        | 2   | 721-2102/037-000 | 100        |
| 3   | 721-2103/026-000 | 100        | 3   | 721-2103/037-000 | 50         |
| 4   | 721-2104/026-000 | 100        | 4   | 721-2104/037-000 | 50         |
| 5   | 721-2105/026-000 | 50         | 5   | 721-2105/037-000 | 50         |
| 6   | 721-2106/026-000 | 50         | 6   | 721-2106/037-000 | 50         |
| 7   | 721-2107/026-000 | 50         | 7   | 721-2107/037-000 | 50         |
| 8   | 721-2108/026-000 | 50         | 8   | 721-2108/037-000 | 25         |
| 9   | 721-2109/026-000 | 50         | 9   | 721-2109/037-000 | 25         |
| 10  | 721-2110/026-000 | 50         | 10  | 721-2110/037-000 | 25         |
| 11  | 721-2111/026-000 | 25         | 11  | 721-2111/037-000 | 25         |
| 12  | 721-2112/026-000 | 25         | 12  | 721-2112/037-000 | 25         |
| 13  | 721-2113/026-000 | 25         | 13  | 721-2113/037-000 | 25         |
| 14  | 721-2114/026-000 | 25         | 14  | 721-2114/037-000 | 25         |
| 15  | 721-2115/026-000 | 25         | 15  | 721-2115/037-000 | 25         |
| 16  | 721-2116/026-000 | 25         | 16  | 721-2116/037-000 | 10         |
| 2-pole female connectors - one latch only       |                  |            |   |                  |            |



Solid conductors ≥ 0.5 mm<sup>2</sup> and ferruled, fine-stranded conductors can be terminated by simply pushing them in. Integrated test ports allow tip contact with current bar for testing via test probes in both horizontal and vertical directions.

# Male Headers with Solder Pins and Press-In Pins Pin Spacing 5 mm MCS-MIDI



- Horizontal or vertical PCB mounting via straight or angled solder pins
- 1.2 x 1.2 mm solder pins allow nominal current up to 16 A, enhancing stability of shorter headers
- Version with press-in pins provides solder-free connection to PCB
- 100% protected against mismatching
- With coding keys

**Technical data:**

| Pin Spacing          | 5 mm/0.197 in<br>1 x 1 mm Solder Pins |       |       | 5 mm/0.197 in<br>1.2 x 1.2 mm Solder Pins |       |       | 5 mm/0.197 in<br>Press-In Technology |       |       |
|----------------------|---------------------------------------|-------|-------|---|-------|-------|--------------------------------------|-------|-------|
|                      | IEC/EN 60664-1                        |       |       | IEC/EN 60664-1                            |       |       | IEC/EN 60664-1                       |       |       |
| Rating per           | III                                   | III   | II    | III                                       | III   | II    | III                                  | III   | II    |
| Overtoltage category | 3                                     | 2     | 2     | 3   | 2     | 2     | 3                                    | 2     | 2     |
| Pollution degree     | 3                                     | 2     | 2     | 3   | 2     | 2     | 3                                    | 2     | 2     |
| Rated voltage        | 320 V                                 | 320 V | 630 V | 250 V                                     | 320 V | 630 V | 320 V                                | 320 V | 630 V |
| Rated surge voltage  | 4 kV                                  | 4 kV  | 4 kV  | 4 kV                                      | 4 kV  | 4 kV  | 4 kV                                 | 4 kV  | 4 kV  |
| Nominal current      | 12 A                                  | 12 A  | 12 A  | 16 A                                      | 16 A  | 16 A  | 8 A                                  | 8 A   | 8 A   |
| Approvals per        | UL/CSA                                |       |       | UL/CSA                                    |       |       | UL/CSA                               |       |       |
| Use group UL 1059    | B                                     | C     | D     | B   | C     | D     | B                                    | C     | D     |
| Rated voltage        | 300 V                                 | -     | 300 V | 300 V                                     | -     | 300 V | 300 V                                | -     | 300 V |
| Nominal current UL   | 10 A                                  | -     | 10 A  | 15 A                                      | -     | 10 A  | 15 A                                 | -     | 10 A  |
| Nominal current CSA  | 10 A                                  | -     | 10 A  | 15 A                                      | -     | 10 A  | 10 A                                 | -     | 10 A  |

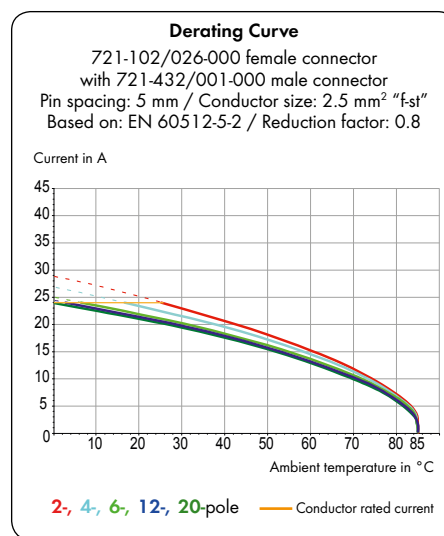
The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Solder and press-in pin data:**

|  |  |
|--|--|
| Solder pin: length/width                 | 5 mm / 1 x 1 mm (straight)                           |
| Solder pin: length/width                 | 3.8 mm / 1 x 1 mm (angled)                           |
| Solder pin: drilled hole diameter        | 1.4 <sup>+0.1</sup> mm                               |
| Solder pin: length/width                 | 5 mm / 1.2 x 1.2 mm (straight)                       |
| Solder pin: length/width                 | 3.8 mm / 1.2 x 1.2 mm (angled)                       |
| Solder pin: drilled hole diameter        | 1.7 <sup>+0.1</sup> mm                               |
| Press-in pin: length/width               | 3.2 mm/0.8 x 1.6 mm                                  |
| Press-in pin: drilled hole diameter      | 1.6 <sup>+0.025</sup> mm                             |
| Press-in pin: metal-plated hole diameter | 1.45 <sup>+0.09</sup> <sub>-0.06</sub> mm (HAL Sn)   |
| Press-in pin: metal-plated hole diameter | 1.45 <sup>+0.09</sup> <sub>-0.06</sub> mm (Chem. Sn) |

**Material data:**

|  |   |
|--|---|
| Material group   | I   |
| Insulating material  | Nylon 6.6 (PA 6.6)  |
| Flammability rating per UL 94  | V0  |
| Lower/Upper temperature limit  | -60 °C / +100 °C / Press-in pin: -40 °C / +85 °C                    |
| Contact material   | Electrolytic copper (E <sub>cu</sub> ) / Press-in pin: copper alloy |
| Contact plating  | tin-plated  |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |   |
| Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."        |   |



**MCS-MIDI accessories:**

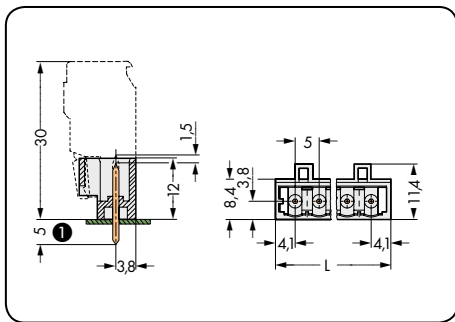
**Page:**

|                 |     |
|-----------------|-----|
| Fixing elements | 357 |
| Coding keys     | 356 |
| Screws          | 365 |
|                 |     |
|                 |     |

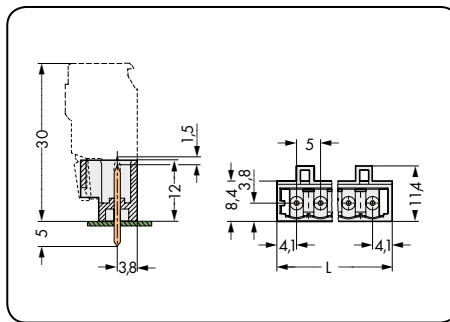
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Male Headers with Solder Pins and Press-In Pins MCS-MIDI

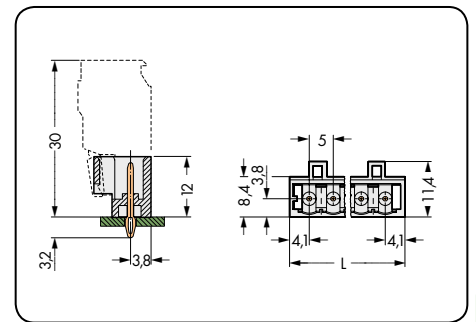
| With 1 x 1 mm straight solder pins<br>Pin spacing 5 mm / 0.197 in |            | With 1.2 x 1.2 mm straight solder pins<br>Pin spacing 5 mm / 0.197 in |            | With press-in pins<br>Pin spacing 5 mm / 0.197 in |            |
|---|------------|---|------------|---|------------|
| 320 V/4 kV/2 12 A   | 300 V/10 A | 320 V/4 kV/2 16 A   | 300 V/15 A | 320 V/4 kV/2 8 A                                  | 300 V/15 A |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$



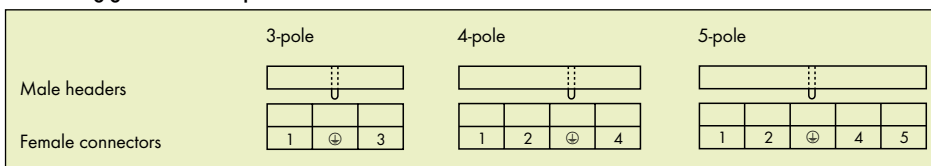
$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$

| Pole No.  | Item No.                         | Item No.                      | Pack. Unit | Pole No.  | Item No.                         | Item No.                      | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |  |
|---|----------------------------------|-------------------------------|------------|---|----------------------------------|-------------------------------|------------|--|-----------------|------------|--|
| <b>Male header with 1 x 1 mm straight solder pins, light gray</b> |                                  |                               |            | <b>Male header with 1.2 x 1.2 mm straight solder pins, light gray</b> |                                  |                               |            | <b>Male header for press-in technology*, 0.8 x 1.6 mm press-in pin, light gray</b> |                 |            |  |
|   | without preceding ground contact | with preceding ground contact |            |   | without preceding ground contact | with preceding ground contact |            |  |                 |            |  |
| 2   | 721-132/001-000                  |                               | 200        | 2   | 721-162/001-000                  |                               | 200        | 2  | 721-162/100-000 | 200        |  |
| 3   | 721-133/001-000                  | 721-133/001-040               | 200        | 3   | 721-163/001-000                  | 721-163/001-040               | 200        | 3  | 721-163/100-000 | 200        |  |
| 4   | 721-134/001-000                  | 721-134/001-040               | 200        | 4   | 721-164/001-000                  | 721-164/001-040               | 200        | 4  | 721-164/100-000 | 200        |  |
| 5   | 721-135/001-000                  | 721-135/001-040               | 200        | 5   | 721-165/001-000                  | 721-165/001-040               | 200        | 5  | 721-165/100-000 | 200        |  |
| 6   | 721-136/001-000                  |                               | 100        | 6   | 721-166/001-000                  |                               | 100        | 6  | 721-166/100-000 | 100        |  |
| 7   | 721-137/001-000                  |                               | 100        | 7   | 721-167/001-000                  |                               | 100        | 7  | 721-167/100-000 | 100        |  |
| 8   | 721-138/001-000                  |                               | 100        | 8   | 721-168/001-000                  |                               | 100        | 8  | 721-168/100-000 | 100        |  |
| 9   | 721-139/001-000                  |                               | 100        | 9   | 721-169/001-000                  |                               | 100        | 9  | 721-169/100-000 | 100        |  |
| 10  | 721-140/001-000                  |                               | 100        | 10  | 721-170/001-000                  |                               | 100        | 10   | 721-170/100-000 | 100        |  |
| 11  | 721-141/001-000                  |                               | 100        | 11  | 721-171/001-000                  |                               | 100        | 11   | 721-171/100-000 | 100        |  |
| 12  | 721-142/001-000                  |                               | 100        | 12  | 721-172/001-000                  |                               | 100        | 12   | 721-172/100-000 | 100        |  |
| 13  | 721-143/001-000                  |                               | 50         | 13  | 721-173/001-000                  |                               | 50         |  |                 |            |  |
| 14  | 721-144/001-000                  |                               | 50         | 14  | 721-174/001-000                  |                               | 50         |  |                 |            |  |
| 15  | 721-145/001-000                  |                               | 50         | 15  | 721-175/001-000                  |                               | 50         |  |                 |            |  |
| 16  | 721-146/001-000                  |                               | 50         | 16  | 721-176/001-000                  |                               | 50         |  |                 |            |  |
| 20  | 721-150/001-000                  |                               | 50         | 20  | 721-180/001-000                  |                               | 50         |  |                 |            |  |
|   |                                  |                               |            |   |                                  |                               |            | * For press-in technology, see page 340  |                 |            |  |

**Preceding ground contact position:**

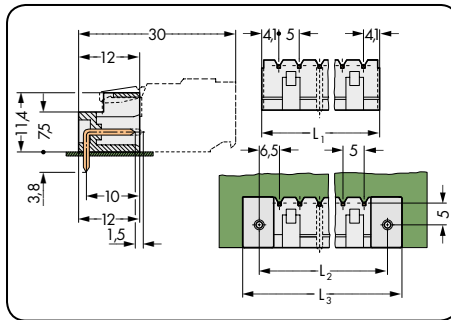
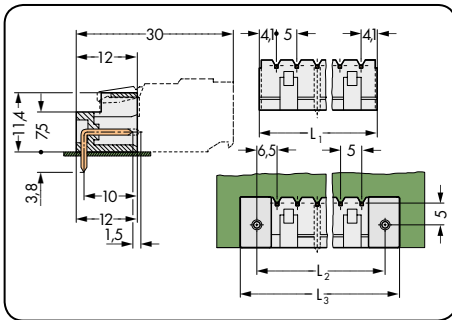


① MCS-MIDI male headers with straight solder pins are also available with 3.8 mm pin projection. Replace item no. suffix .../001-000 with .../046-000.



# Male Headers with Solder Pins MCS-MIDI

| With 1 x1 mm angled solder pins<br>Pin spacing 5 mm / 0.197 in |            | With 1.2 x 1.2 mm angled solder pins<br>Pin spacing 5 mm / 0.197 in |            | Press-in technology |
|--|------------|---|------------|---------------------|
| 320 V/4 kV/2 12 A  | 300 V/10 A | 320 V/4 kV/2 16 A   | 300 V/15 A |                     |



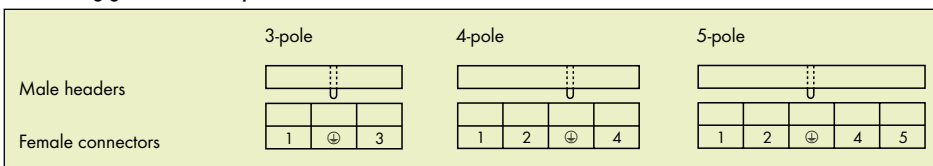
$L_1 = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_2 = L_1 + 5 \text{ mm}$   
 $L_3 = L_2 + 7.4 \text{ mm}$

### Unique Special features of WAGO press-in technology:

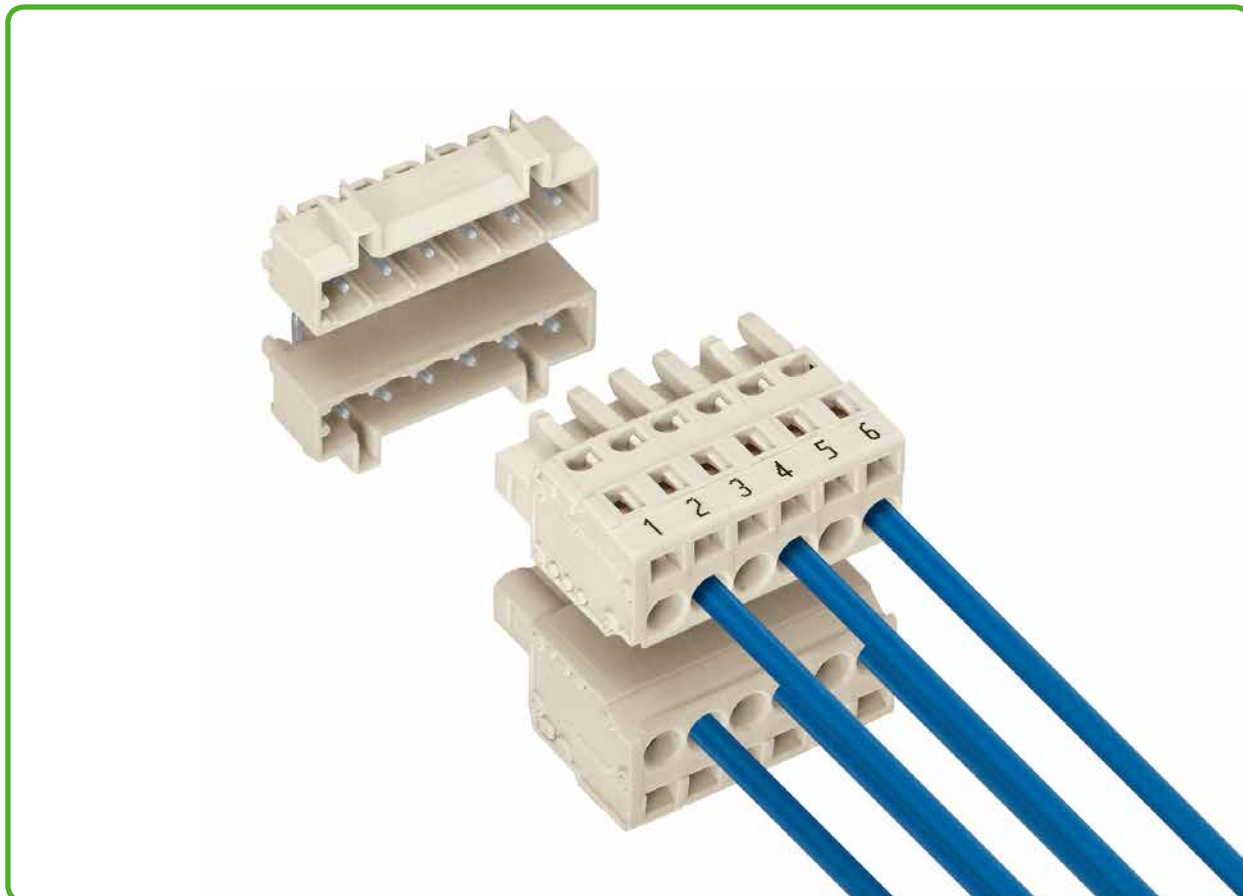
- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.09</sup><sub>-0.06</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.09</sup><sub>-0.06</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm
  - no unnecessary projection on underside of PCB
- Low press-in force required
  - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area  $\geq 1.3 \text{ mm}$
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole
  - reduces wear and tear on PCB and contact points

| Pole No.   | Item No.                         | Item No.                      | Pack. Unit | Pole No.   | Item No.                         | Item No.                      | Pack. Unit |
|--|----------------------------------|-------------------------------|------------|--|----------------------------------|-------------------------------|------------|
| Male header with 1 x 1 mm angled solder pins, light gray |                                  |                               |            | Male header with 1.2 x 1.2 mm angled solder pins, light gray |                                  |                               |            |
|  | without preceding ground contact | with preceding ground contact |            |  | without preceding ground contact | with preceding ground contact |            |
| 2  | 721-432/001-000                  |                               | 200        | 2  | 721-462/001-000                  |                               | 200        |
| 3  | 721-433/001-000                  | 721-433/001-040               | 200        | 3  | 721-463/001-000                  | 721-463/001-040               | 200        |
| 4  | 721-434/001-000                  | 721-434/001-040               | 200        | 4  | 721-464/001-000                  | 721-464/001-040               | 200        |
| 5  | 721-435/001-000                  | 721-435/001-040               | 200        | 5  | 721-465/001-000                  | 721-465/001-040               | 200        |
| 6  | 721-436/001-000                  |                               | 100        | 6  | 721-466/001-000                  |                               | 100        |
| 7  | 721-437/001-000                  |                               | 100        | 7  | 721-467/001-000                  |                               | 100        |
| 8  | 721-438/001-000                  |                               | 100        | 8  | 721-468/001-000                  |                               | 100        |
| 9  | 721-439/001-000                  |                               | 100        | 9  | 721-469/001-000                  |                               | 100        |
| 10   | 721-440/001-000                  |                               | 100        | 10   | 721-470/001-000                  |                               | 100        |
| 11   | 721-441/001-000                  |                               | 100        | 11   | 721-471/001-000                  |                               | 100        |
| 12   | 721-442/001-000                  |                               | 100        | 12   | 721-472/001-000                  |                               | 100        |
| 13   | 721-443/001-000                  |                               | 50         | 13   | 721-473/001-000                  |                               | 50         |
| 14   | 721-444/001-000                  |                               | 50         | 14   | 721-474/001-000                  |                               | 50         |
| 15   | 721-445/001-000                  |                               | 50         | 15   | 721-475/001-000                  |                               | 50         |
| 16   | 721-446/001-000                  |                               | 50         | 16   | 721-476/001-000                  |                               | 50         |
| 20   | 721-450/001-000                  |                               | 50         | 20   | 721-480/001-000                  |                               | 50         |

### Preceding ground contact position:

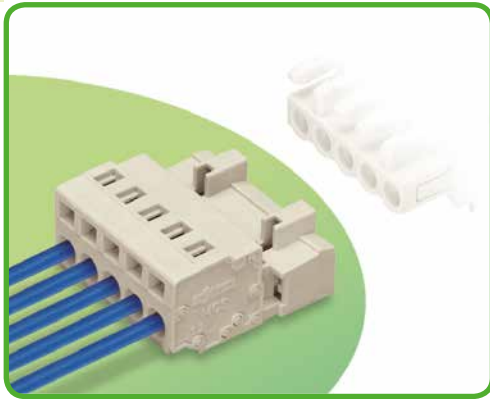


For other lengths, please contact factory.





# Male Connectors Pin Spacing 5 mm MCS-MIDI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Versions available with snap-in mounting feet or fixing flanges for panel or through-panel mounting
- Optional, preceding ground contact available for 3- to 5-pole male connectors
- 100% protected against mismatching
- With coding keys

**Technical data:**

| Pin Spacing          | 5 mm<br>0.197 in |       |       |
|----------------------|------------------|-------|-------|
| Rating per           | IEC/EN 60664-1   |       |       |
| Overtoltage category | III              | III   | II    |
| Pollution degree     | 3                | 2     | 2     |
| Rated voltage        | 320 V            | 320 V | 630 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |
| Nominal current      | 12 A             | 12 A  | 12 A  |
| Approvals per        | UL/CSA           |       |       |
| Use group UL 1059    | B                | C     | D     |
| Rated voltage        | 300 V            | -     | 300 V |
| Nominal current UL   | 15 A             | -     | 10 A  |
| Nominal current CSA  | 15 A             | -     | 10 A  |

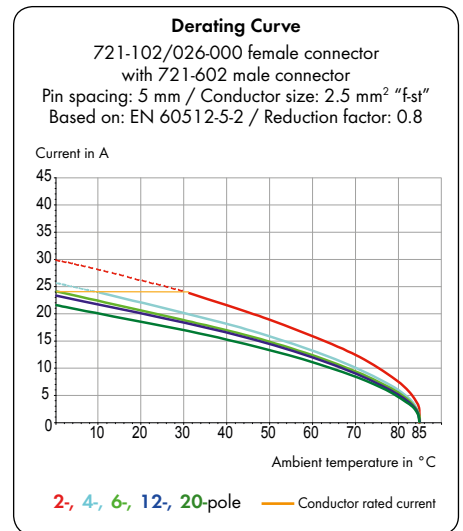
The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

|                               |                            |                            |
|-------------------------------|----------------------------|----------------------------|
| Connection technology         | CAGE CLAMP®                |                            |
| Conductor size: solid         | 0.08 - 2.5 mm <sup>2</sup> |                            |
| Conductor size: fine-stranded | 0.08 - 2.5 mm <sup>2</sup> |                            |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> | (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 2.5 mm <sup>2</sup> | (with uninsulated ferrule) |
| AWG                           | 28 - 12                    | 12: THHN, THWN             |
| Strip length                  | 8 - 9 mm / 0.31 - 0.35 in  |                            |

**Material data:**

|  |  |
|--|--|
| Material group   | I                                      |
| Insulating material  | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94  | V0                                     |
| Lower/Upper temperature limit  | -60 °C / +100 °C                       |
| Clamping spring material   | Chrome-nickel spring steel (CrNi)      |
| Contact material   | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating  | tin-plated                             |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |  |
| Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”        |  |



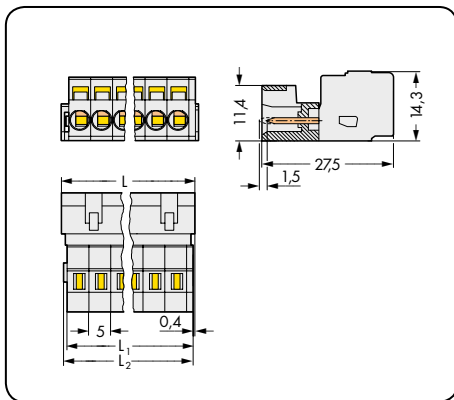
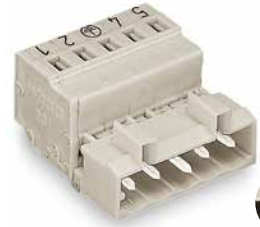
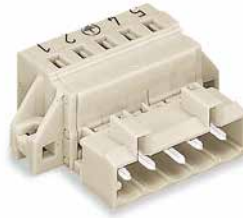
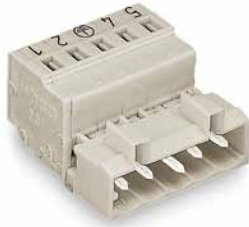
**MCS-MIDI accessories:**

**Page:**

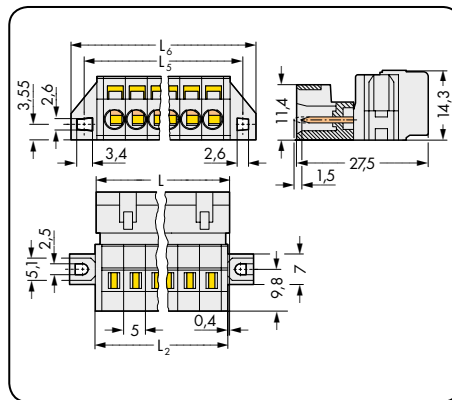
|                        |           |
|------------------------|-----------|
| Marking accessories    | 508 - 511 |
| Operating tools        | 354 - 355 |
| Direct marking         | 350 - 352 |
| Comb-style jumper bars | 364       |
| Insulation stop        | 357       |
| Coding keys            | 356       |
| Screws                 | 365       |
| Strain relief housings | 360 - 361 |
| Strain relief plates   | 358 - 359 |

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

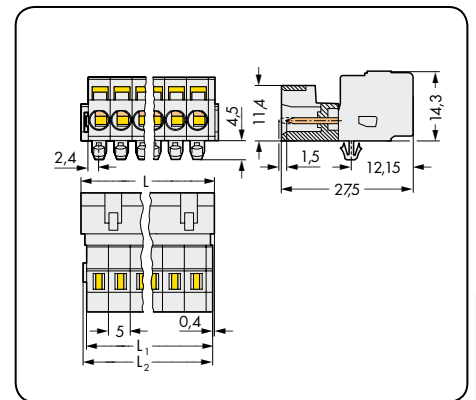
| Pin spacing 5 mm / 0.197 in |             | With fixing flanges<br>Pin spacing 5 mm / 0.197 in |             | With snap-in mounting feet<br>Pin spacing 5 mm / 0.197 in |             |
|-----------------------------|-------------|--|-------------|---|-------------|
| 0.08 - 2.5 mm <sup>2</sup>  | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>                         | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>                                | AWG 28 - 12 |
| 320 V/4 kV/2 12 A           | 300 V/15 A  | 320 V/4 kV/2 12 A                                  | 300 V/15 A  | 320 V/4 kV/2 12 A   | 300 V/15 A  |



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_1 = L - 1.7 \text{ mm}$   
 $L_2 = L - 1.2 \text{ mm}$



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_2 = L - 0.2 \text{ mm}$   
 $L_3 = L_2 + 5.8 \text{ mm}$   
 $L_6 = L_2 + 11.8 \text{ mm}$



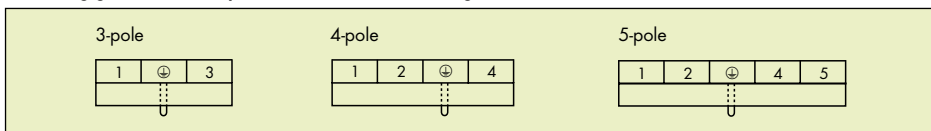
$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_1 = L - 1.7 \text{ mm}$   
 $L_2 = L - 1.2 \text{ mm}$

| Pole No.                          | Item No.                                | Item No.  | Pack. Unit | Pole No.  | Item No.                                | Item No.  | Pack. Unit | Pole No.  | Item No.                                | Item No.  | Pack. Unit |
|-----------------------------------|---|---|------------|---|---|---|------------|---|---|---|------------|
| <b>Male connector, light gray</b> |   |   |            | <b>Male connector with fixing flanges, light gray</b> |   |   |            | <b>Male connector with snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm mounting hole diameter, light gray</b> |   |   |            |
|                                   | <b>without preceding ground contact</b> | <b>with preceding ground contact and printing</b> |            |   | <b>without preceding ground contact</b> | <b>with preceding ground contact and printing</b> |            |   | <b>without preceding ground contact</b> | <b>with preceding ground contact and printing</b> |            |
| 2                                 | 721-602                                 |   | 100        | 2   | 721-602/019-000                         |   | 100        | 2   | 721-602/018-000                         |   | 100        |
| 3                                 | 721-603                                 | 721-603/000-042                                   | 100        | 3   | 721-603/019-000                         | 721-603/019-042                                   | 50         | 3   | 721-603/018-000                         | 721-603/018-042                                   | 100        |
| 4                                 | 721-604                                 | 721-604/000-042                                   | 100        | 4   | 721-604/019-000                         | 721-604/019-042                                   | 50         | 4   | 721-604/018-000                         | 721-604/018-042                                   | 100        |
| 5                                 | 721-605                                 | 721-605/000-042                                   | 50         | 5   | 721-605/019-000                         | 721-605/019-042                                   | 50         | 5   | 721-605/018-000                         | 721-605/018-042                                   | 50         |
| 6                                 | 721-606                                 |   | 50         | 6   | 721-606/019-000                         |   | 50         | 6   | 721-606/018-000                         |   | 50         |
| 7                                 | 721-607                                 |   | 50         | 7   | 721-607/019-000                         |   | 50         | 7   | 721-607/018-000                         |   | 50         |
| 8                                 | 721-608                                 |   | 50         | 8   | 721-608/019-000                         |   | 50         | 8   | 721-608/018-000                         |   | 50         |
| 9                                 | 721-609                                 |   | 50         | 9   | 721-609/019-000                         |   | 25         | 9   | 721-609/018-000                         |   | 50         |
| 10                                | 721-610                                 |   | 50         | 10  | 721-610/019-000                         |   | 25         | 10  | 721-610/018-000                         |   | 50         |
| 11                                | 721-611                                 |   | 25         | 11  | 721-611/019-000                         |   | 25         | 11  | 721-611/018-000                         |   | 25         |
| 12                                | 721-612                                 |   | 25         | 12  | 721-612/019-000                         |   | 25         | 12  | 721-612/018-000                         |   | 25         |
| 13                                | 721-613                                 |   | 25         | 13  | 721-613/019-000                         |   | 25         | 13  | 721-613/018-000                         |   | 25         |
| 14                                | 721-614                                 |   | 25         | 14  | 721-614/019-000                         |   | 25         | 14  | 721-614/018-000                         |   | 25         |
| 15                                | 721-615                                 |   | 25         | 15  | 721-615/019-000                         |   | 25         | 15  | 721-615/018-000                         |   | 25         |
| 16                                | 721-616                                 |   | 25         | 16  | 721-616/019-000                         |   | 10         | 16  | 721-616/018-000                         |   | 25         |
| 20                                | 721-620                                 |   | 10         | 20  | 721-620/019-000                         |   | 10         | 20  | 721-620/018-000                         |   | 10         |

For cutout dimensions, see page 365, table 1.

**Product Accessories** **Page**

Preceding ground contact position and on-unit markings:

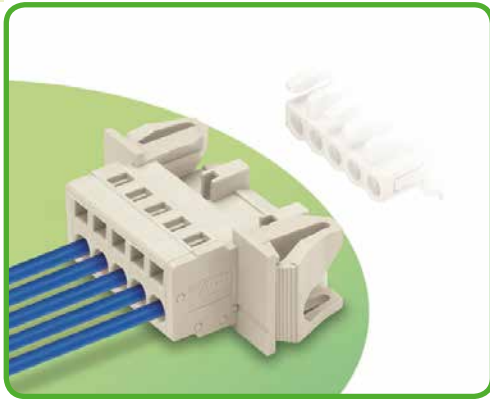


Mounting adapter for DIN 35 rail, min. length 3 poles (209-137) 363

For other lengths, please contact factory.

# 5 Male Connectors with Snap-In Flanges Pin Spacing 5 mm MCS-MIDI

344



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Versions available with snap-in flanges for through-panel mounting
- Optional, preceding ground contact available for 3- to 5-pole male connectors
- 100% protected against mismatching
- With coding keys

### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       | 7,5 mm<br>0.295 in |       |        |
|----------------------|------------------|-------|-------|--------------------|-------|--------|
|                      | IEC/EN 60664-1   |       |       | IEC/EN 60664-1     |       |        |
| Rating per           | III              | III   | II    | III                | III   | II     |
| Overtoltage category | 3                | 2     | 2     | 3                  | 2     | 2      |
| Pollution degree     | 3                | 2     | 2     | 3                  | 2     | 2      |
| Rated voltage        | 320 V            | 320 V | 630 V | 500 V              | 630 V | 1000 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  | 6 kV               | 6 kV  | 6 kV   |
| Nominal current      | 12 A             | 12 A  | 12 A  | 12 A               | 12 A  | 12 A   |
| Approvals per        | UL/CSA           |       |       | UL/CSA             |       |        |
| Use group UL 1059    | B                | C     | D     | B                  | C     | D      |
| Rated voltage        | 300 V            | -     | 300 V | 300 V              | -     | 300 V  |
| Nominal current UL   | 15 A             | -     | 10 A  | 15 A               | -     | 10 A   |
| Nominal current CSA  | 15 A             | -     | 10 A  | 15 A               | -     | 10 A   |

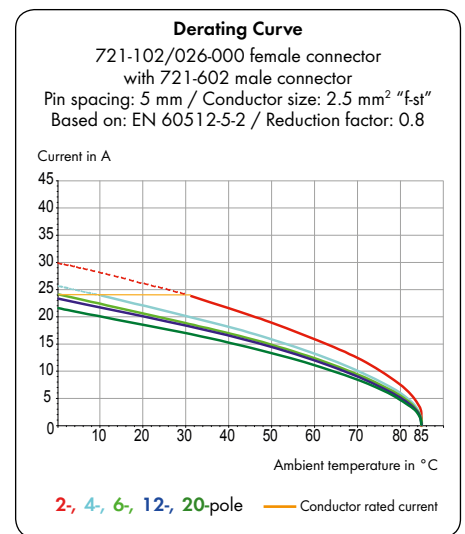
The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

### Conductor data:

|                               |   |
|-------------------------------|---|
| Connection technology         | CAGE CLAMP®   |
| Conductor size: solid         | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 2.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 28 - 12 12: THHN, THWN                                |
| Strip length                  | 8 - 9 mm / 0.31 - 0.35 in                             |

### Material data:

|  |  |
|--|--|
| Material group   | I                                      |
| Insulating material  | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94  | V0                                     |
| Lower/Upper temperature limit  | -60 °C / +100 °C                       |
| Clamping spring material   | Chrome-nickel spring steel (CrNi)      |
| Contact material   | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating  | tin-plated                             |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |  |
| Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”        |  |



### MCS-MIDI accessories:

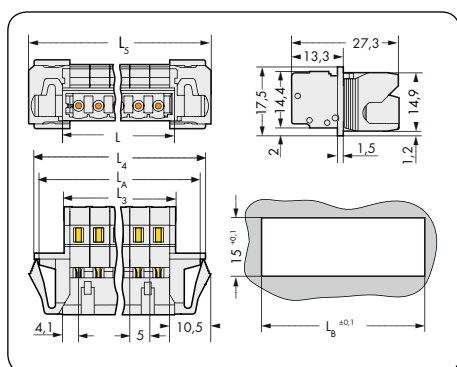
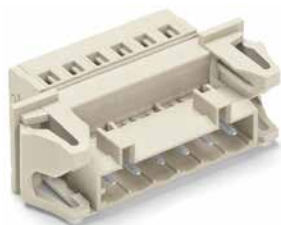
### Page:

|                        |           |
|------------------------|-----------|
| Marking accessories    | 508 - 511 |
| Operating tools        | 354 - 355 |
| Direct marking         | 350 - 352 |
| Insulation stop        | 357       |
| Coding keys            | 356       |
| Strain relief housings | 360 - 361 |
| Strain relief plates   | 358 - 359 |

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

# Male Connectors with Snap-In Flanges MCS-MIDI

|   |                           |
|---|---------------------------|
| <b>With snap-in flanges</b><br><b>Pin spacing 5 mm / 0.197 in</b> |                           |
| 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 12 A                   | AWG 28 - 12<br>300 V/15 A |



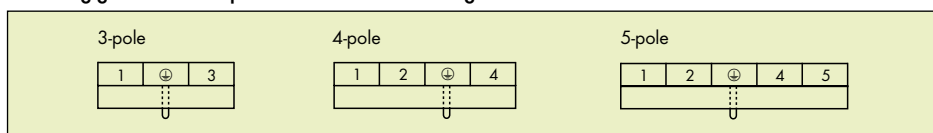
$L_1 = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_3 = L - 0.2 \text{ mm}$   
 $L_4 = L_3 + 15.2 \text{ mm}$   
 $L_5 = L_3 + 18 \text{ mm}$   
 $L_A = L_3 + 12.6 \text{ mm}$   
 $L_B = L_3 + 13.2 \text{ mm}$



Male connectors with snap-in flanges for feedthrough applications, for 0.5 - 2.5 mm plate thickness

| Pole No.   | Item No.                                | Item No.  | Pack. Unit |
|--|---|---|------------|
| <b>Male connector with snap-in flanges, light gray</b> |   |   |            |
|  | <b>without preceding ground contact</b> | <b>with preceding ground contact and printing</b> |            |
| 2  | 721-602/114-000                         | 721-603/114-042                                   | 50         |
| 3  | 721-603/114-000                         | 721-604/114-042                                   | 50         |
| 4  | 721-604/114-000                         | 721-605/114-042                                   | 50         |
| 5  | 721-605/114-000                         | 721-606/114-042                                   | 50         |
| 6  | 721-606/114-000                         |   | 50         |
| 7  | 721-607/114-000                         |   | 25         |
| 8  | 721-608/114-000                         |   | 25         |
| 9  | 721-609/114-000                         |   | 25         |
| 10   | 721-610/114-000                         |   | 25         |
| 11   | 721-611/114-000                         |   | 25         |
| 12   | 721-612/114-000                         |   | 25         |
| 13   | 721-613/114-000                         |   | 25         |
| 14   | 721-614/114-000                         |   | 25         |
| 15   | 721-615/114-000                         |   | 10         |
| 16   | 721-616/114-000                         |   | 10         |
| 20   | 721-620/114-000                         |   | 10         |

Preceding ground contact position and on-unit markings:



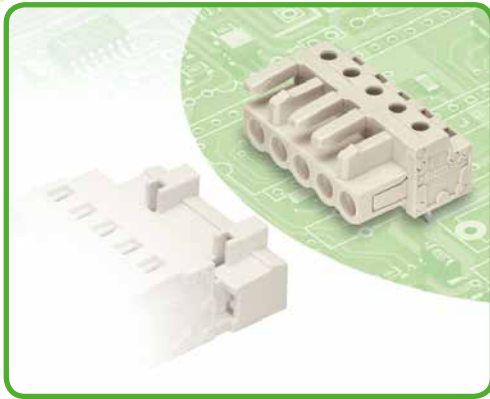
For other lengths, please contact factory.

# 5 Female Headers with Solder Pins

## Pin Spacing 5 mm

### MCS-MIDI

346



- Horizontal or vertical PCB mounting via straight or angled solder pins
- For “board-to-board” and “board-to-wire” connections
- PCB outputs are protected against accidental contact
- Easy-to-identify inputs and outputs
- 100% protected against mismatching
- With coding fingers

#### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       |
|----------------------|------------------|-------|-------|
| Rating per           | IEC/EN 60664-1   |       |       |
| Overtension category | III              | III   | II    |
| Pollution degree     | 3                | 2     | 2     |
| Rated voltage        | 320 V            | 320 V | 630 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |
| Nominal current      | 12 A             | 12 A  | 12 A  |
| Approvals per        | UL/CSA           |       |       |
| Use group UL 1059    | B                | C     | D     |
| Rated voltage        | 300 V            | -     | 300 V |
| Nominal current UL   | 15 A             | -     | 10 A  |
| Nominal current CSA  | 15 A             | -     | 10 A  |

The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

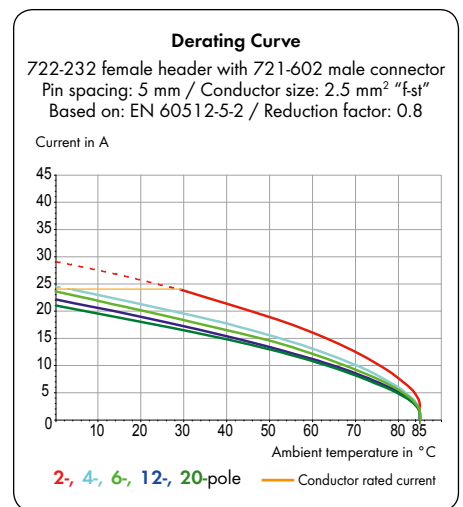
#### Solder pin data:

|                                   |                        |
|-----------------------------------|------------------------|
| Solder pin: length/width          | 5 mm / 0.6 x 1 mm      |
| Solder pin: drilled hole diameter | 1.3 <sup>+0.1</sup> mm |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |
|                                   |                        |

#### Material data:

|  |                    |
|--|--------------------|
| Material group   | I                  |
| Insulating material  | Nylon 6.6 (PA 6.6) |
| Flammability rating per UL 94  | V0                 |
| Lower/Upper temperature limit  | -60 °C / +85 °C    |
| Contact material   | Copper alloy       |
| Contact plating  | tin-plated         |
| MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces. |                    |
| Depending on the version requested, “item no. suffix . . . /010-000” is added to the “basic item no.”      |                    |

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.



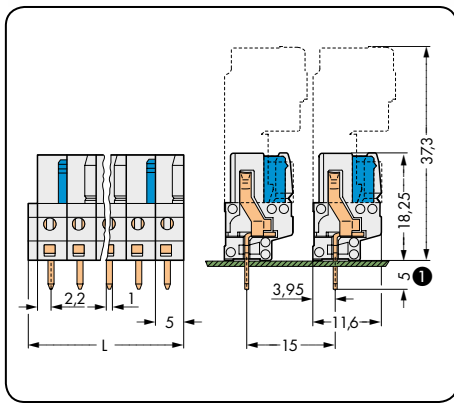
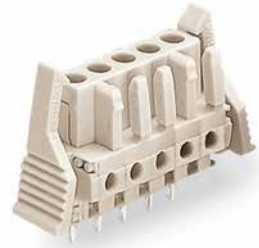
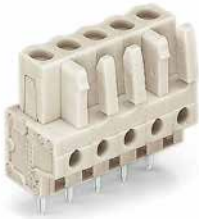
#### MCS-MIDI accessories:

#### Page:

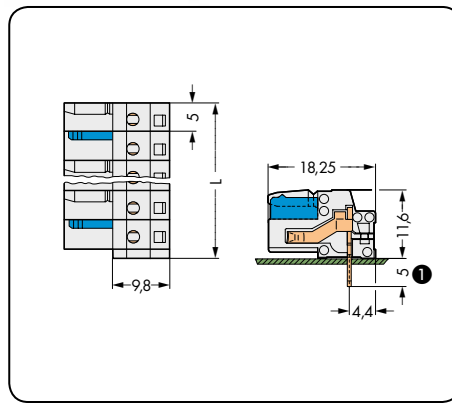
|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Test plug adapter   | 362       |
| Test plug           | 506       |
|                     |           |
|                     |           |
|                     |           |

# Female Headers with Solder Pins MCS-MIDI

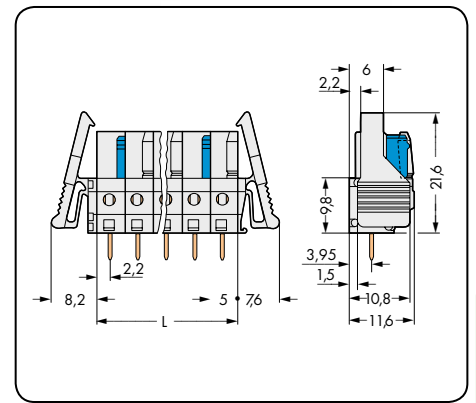
| With straight solder pins<br>Pin spacing 5 mm / 0.197 in |            | With angled solder pins<br>Pin spacing 5 mm / 0.197 in |            | With straight solder pins<br>and locking levers<br>Pin spacing 5 mm / 0.197 in |            |
|--|------------|--|------------|--|------------|
| 320 V/4 kV/2 12 A  | 300 V/15 A | 320 V/4 kV/2 12 A                                      | 300 V/15 A | 320 V/4 kV/2 12 A  | 300 V/15 A |



L = (pole no. x pin spacing) + 1.5 mm



L = (pole no. x pin spacing) + 1.5 mm



L = pole no. x pin spacing

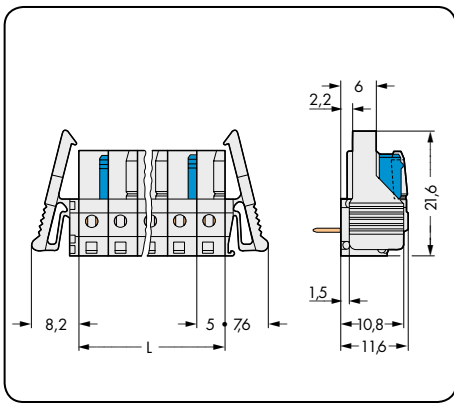
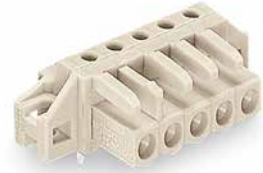
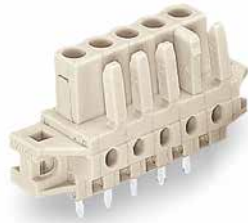
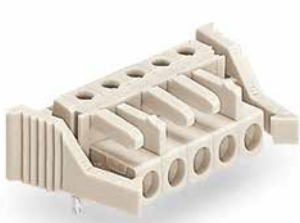
| Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|---|----------|------------|---|----------|------------|--|-----------------|------------|
| Female header with straight solder pins, light gray |          |            | Female header with angled solder pins, light gray |          |            | Female header with straight solder pins and locking levers, light gray |                 |            |
| 2   | 722-132  | 100        | 2   | 722-232  | 100        | 2  | 722-132/039-000 | 100        |
| 3   | 722-133  | 100        | 3   | 722-233  | 100        | 3  | 722-133/039-000 | 50         |
| 4   | 722-134  | 100        | 4   | 722-234  | 100        | 4  | 722-134/039-000 | 50         |
| 5   | 722-135  | 100        | 5   | 722-235  | 100        | 5  | 722-135/039-000 | 50         |
| 6   | 722-136  | 50         | 6   | 722-236  | 50         | 6  | 722-136/039-000 | 50         |
| 7   | 722-137  | 50         | 7   | 722-237  | 50         | 7  | 722-137/039-000 | 50         |
| 8   | 722-138  | 50         | 8   | 722-238  | 50         | 8  | 722-138/039-000 | 50         |
| 9   | 722-139  | 50         | 9   | 722-239  | 50         | 9  | 722-139/039-000 | 25         |
| 10  | 722-140  | 50         | 10  | 722-240  | 50         | 10   | 722-140/039-000 | 25         |
| 11  | 722-141  | 25         | 11  | 722-241  | 25         | 11   | 722-141/039-000 | 25         |
| 12  | 722-142  | 25         | 12  | 722-242  | 25         | 12   | 722-142/039-000 | 25         |
| 13  | 722-143  | 25         | 13  | 722-243  | 25         | 13   | 722-143/039-000 | 25         |
| 14  | 722-144  | 25         | 14  | 722-244  | 25         | 14   | 722-144/039-000 | 25         |
| 15  | 722-145  | 25         | 15  | 722-245  | 25         | 15   | 722-145/039-000 | 25         |
| 16  | 722-146  | 25         | 16  | 722-246  | 25         | 16   | 722-146/039-000 | 10         |
| 20  | 722-150  | 10         | 20  | 722-250  | 10         | 20   | 722-150/039-000 | 10         |
| 2-pole female headers - one latch only              |          |            |   |          |            |  |                 |            |

① MCS-MIDI female headers with solder pins are also available with 3.8 mm pin projection. Add or insert item no. suffix .../045-000.

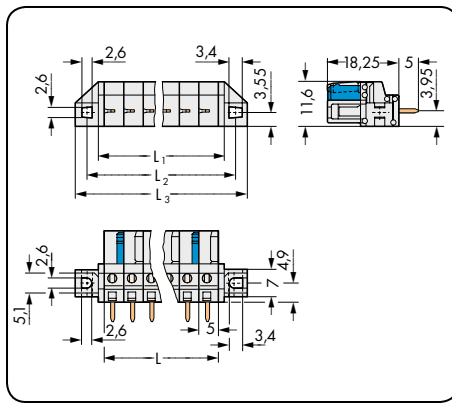
# 5 Female Headers with Solder Pins MCS-MIDI

348

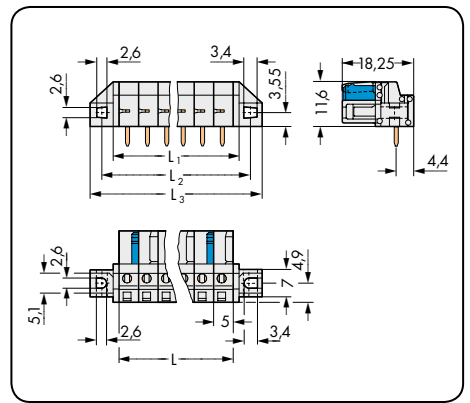
|   |            |   |            |   |            |
|---|------------|---|------------|---|------------|
| <b>With angled solder pins and locking levers</b><br><b>Pin spacing 5 mm / 0.197 in</b> |            | <b>With straight solder pins and fixing flanges</b><br><b>Pin spacing 5 mm / 0.197 in</b> |            | <b>With angled solder pins and fixing flanges</b><br><b>Pin spacing 5 mm / 0.197 in</b> |            |
| 320 V/4 kV/2 12 A   | 300 V/15 A | 320 V/4 kV/2 12 A   | 300 V/15 A | 320 V/4 kV/2 12 A   | 300 V/15 A |



L = pole no. x pin spacing



L = pole no. x pin spacing  
 $L_1 = L + 3 \text{ mm}$   
 $L_2 = L + 8.8 \text{ mm}$   
 $L_3 = L + 14.8 \text{ mm}$



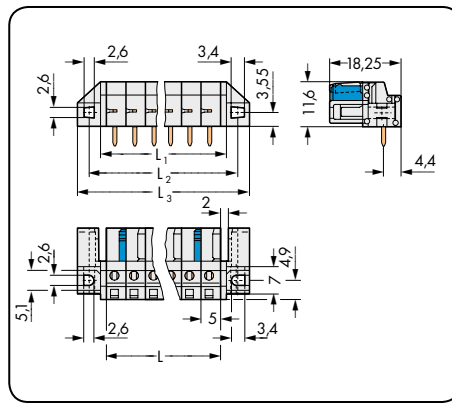
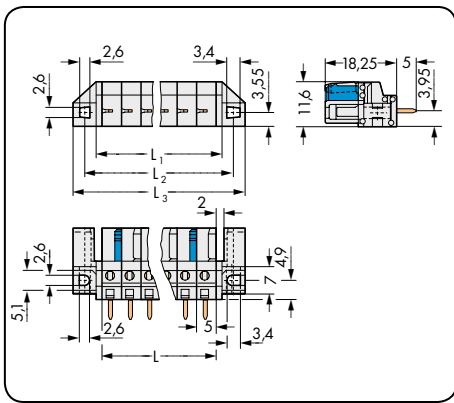
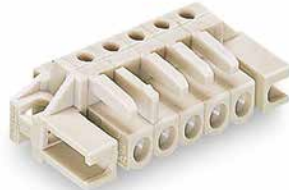
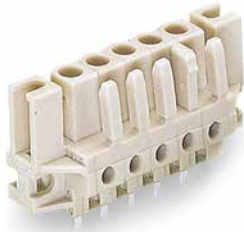
L = pole no. x pin spacing  
 $L_1 = L + 3 \text{ mm}$   
 $L_2 = L + 8.8 \text{ mm}$   
 $L_3 = L + 14.8 \text{ mm}$

| Pole No.   | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit | Pole No.   | Item No.        | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|--|-----------------|------------|
| Female header with angled solder pins and locking levers, light gray |                 |            | Female header with straight solder pins and fixing flanges, for through-panel mounting, light gray |                 |            | Female header with angled solder pins and fixing flanges, for through-panel mounting, light gray |                 |            |
| 2  | 722-232/039-000 | 100        | 2  | 722-132/031-000 | 100        | 2  | 722-232/031-000 | 100        |
| 3  | 722-233/039-000 | 50         | 3  | 722-133/031-000 | 50         | 3  | 722-233/031-000 | 50         |
| 4  | 722-234/039-000 | 50         | 4  | 722-134/031-000 | 50         | 4  | 722-234/031-000 | 50         |
| 5  | 722-235/039-000 | 50         | 5  | 722-135/031-000 | 50         | 5  | 722-235/031-000 | 50         |
| 6  | 722-236/039-000 | 50         | 6  | 722-136/031-000 | 50         | 6  | 722-236/031-000 | 50         |
| 7  | 722-237/039-000 | 50         | 7  | 722-137/031-000 | 50         | 7  | 722-237/031-000 | 50         |
| 8  | 722-238/039-000 | 50         | 8  | 722-138/031-000 | 50         | 8  | 722-238/031-000 | 50         |
| 9  | 722-239/039-000 | 25         | 9  | 722-139/031-000 | 25         | 9  | 722-239/031-000 | 25         |
| 10   | 722-240/039-000 | 25         | 10   | 722-140/031-000 | 25         | 10   | 722-240/031-000 | 25         |
| 11   | 722-241/039-000 | 25         | 11   | 722-141/031-000 | 25         | 11   | 722-241/031-000 | 25         |
| 12   | 722-242/039-000 | 25         | 12   | 722-142/031-000 | 25         | 12   | 722-242/031-000 | 25         |
| 13   | 722-243/039-000 | 25         | 13   | 722-143/031-000 | 25         | 13   | 722-243/031-000 | 25         |
| 14   | 722-244/039-000 | 25         | 14   | 722-144/031-000 | 25         | 14   | 722-244/031-000 | 25         |
| 15   | 722-245/039-000 | 25         | 15   | 722-145/031-000 | 25         | 15   | 722-245/031-000 | 25         |
| 16   | 722-246/039-000 | 10         | 16   | 722-146/031-000 | 10         | 16   | 722-246/031-000 | 10         |
| 20   | 722-250/039-000 | 10         | 20   | 722-150/031-000 | 10         | 20   | 722-250/031-000 | 10         |
| For cutout dimensions, see page 367, table 3.                        |                 |            |  |                 |            |  |                 |            |
| 2-pole female headers - one latch only                               |                 |            |  |                 |            |  |                 |            |



# Female Headers with Solder Pins MCS-MIDI

| With straight solder pins and spacers<br>Pin spacing 5 mm / 0.197 in |            | With angled solder pins and spacers<br>Pin spacing 5 mm / 0.197 in |            |
|--|------------|--|------------|
| 320 V/4 kV/2 12 A  | 300 V/15 A | 320 V/4 kV/2 12 A  | 300 V/15 A |

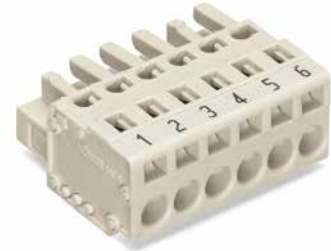


L = pole no. x pin spacing  
 $L_1 = L + 3 \text{ mm}$   
 $L_2 = L + 8.8 \text{ mm}$   
 $L_3 = L + 14.8 \text{ mm}$

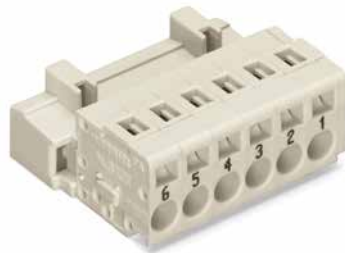
| Pole No.  | Item No.        | Pack. Unit | Pole No.  | Item No.        | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|
| Female header with straight solder pins and spacers, for flush panel mounting, light gray |                 |            | Female header with angled solder pins and spacers, for flush panel mounting, light gray |                 |            |
| 2   | 722-132/047-000 | 100        | 2   | 722-232/047-000 | 100        |
| 3   | 722-133/047-000 | 50         | 3   | 722-233/047-000 | 50         |
| 4   | 722-134/047-000 | 50         | 4   | 722-234/047-000 | 50         |
| 5   | 722-135/047-000 | 50         | 5   | 722-235/047-000 | 50         |
| 6   | 722-136/047-000 | 50         | 6   | 722-236/047-000 | 50         |
| 7   | 722-137/047-000 | 50         | 7   | 722-237/047-000 | 50         |
| 8   | 722-138/047-000 | 50         | 8   | 722-238/047-000 | 50         |
| 9   | 722-139/047-000 | 25         | 9   | 722-239/047-000 | 25         |
| 10  | 722-140/047-000 | 25         | 10  | 722-240/047-000 | 25         |
| 11  | 722-141/047-000 | 25         | 11  | 722-241/047-000 | 25         |
| 12  | 722-142/047-000 | 25         | 12  | 722-242/047-000 | 25         |
| 13  | 722-143/047-000 | 25         | 13  | 722-243/047-000 | 25         |
| 14  | 722-144/047-000 | 25         | 14  | 722-244/047-000 | 25         |
| 15  | 722-145/047-000 | 25         | 15  | 722-245/047-000 | 25         |
| 16  | 722-146/047-000 | 10         | 16  | 722-246/047-000 | 10         |
| 20  | 722-150/047-000 | 10         | 20  | 722-250/047-000 | 10         |
| For cutout dimensions, see page 367, table 3.   |                 |            |   |                 |            |
| 2-pole female headers - one latch only  |                 |            |   |                 |            |

# Accessories Marking MCS-MIDI

|   |   |   |
|---|---|---|
| <p><b>Direct marking</b></p> <p>of male and female connectors<br/>for conductor termination</p> <p>Pin spacing 5/5.08/7.5/7.62 mm</p> | <p><b>Direct marking<br/>Pole no. – 1</b></p> <p>of male connectors<br/>for conductor termination</p> <p>Pin spacing 5/5.08/7.5/7.62 mm</p> | <p><b>Direct marking<br/>1 – pole no.</b></p> <p>of female connectors<br/>for conductor termination</p> <p>Pin spacing 5/5.08/7.5/7.62 mm</p> |
|---|---|---|



|   |  |   |
|---|--|---|
| <p><b>Marking MCS-MIDI Classic and MCS-MIDI with Protection Against Mismatching</b></p>   | <p><b>Marking Perpendicular to Conductor Entry<br/>Item No. Suffix: /...-044</b></p>   | <p><b>Marking Perpendicular to Conductor Entry<br/>Item No. Suffix: /...-047</b></p>  |
| <p>Male and female connectors for conductor termination can be marked with "1 – pole no." via factory direct printing.</p> <p>Two standard marking orientations are available:</p> <ol style="list-style-type: none"> <li>1. Marking perpendicular to conductor entry</li> <li>2. Marking parallel to conductor entry</li> </ol> <p>Other custom marking options are available upon request.</p> <p>Direct marking is not suitable for MCS male headers with solder pins. WAGO recommends PCB pole marking for these headers.</p> <p>Female headers with solder pins are exposed to aggressive flux agents during wave soldering. Select direct marking procedures are available upon request for these items.</p> <p>The marking type is always defined by the second 4-digit block of the item no. suffix for items with standard colors and materials.<br/>Example: 721-106/...-xxxx<br/>xxxx = Item no. suffix for factory direct marking</p> | <p><b>Ordering examples:</b></p> <p><b>Male connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-606/000-044</b></p> <p><b>Male connector with fixing flanges,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-606/019-044</b></p> <p><b>Male connector with fixing flanges and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-606/019-044/034-000</b></p> | <p><b>Ordering examples:</b></p> <p><b>Female connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/026-047</b></p> <p><b>Female connector with locking levers,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/037-047</b></p> <p><b>Female connector with strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/026-047/034-000</b></p> <p><b>Female connector with locking levers and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/037-047/034-000</b></p> |



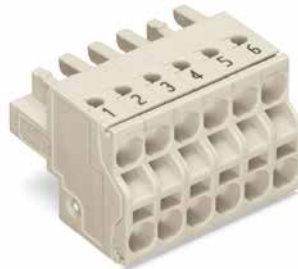
|   |   |
|---|---|
| <p><b>Marking Parallel to Conductor Entry<br/>Item No. Suffix: /...-9034</b></p>  | <p><b>Marking Parallel to Conductor Entry<br/>Item No. Suffix: /...-9037</b></p>  |
| <p><b>Ordering examples:</b></p> <p><b>Male connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-606/000-9034</b></p> <p><b>Male connector with fixing flanges,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-606/019-9034</b></p> <p><b>Male connector with fixing flanges and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-606/019-9034/034-000</b></p> | <p><b>Ordering examples:</b></p> <p><b>Female connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/026-9037</b></p> <p><b>Female connector with locking levers,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/037-9037</b></p> <p><b>Female connector with strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/026-9037/034-000</b></p> <p><b>Female connector with locking levers and strain relief plate,</b><br/>3.5 mm pin spacing, 6-pole, light gray<br/><b>721-106/037-9037/034-000</b></p> |

# Accessories

## Marking

### MCS-MIDI

|  |  |   |
|--|--|---|
| <p><b>Direct marking</b><br/><b>1 – pole no.</b></p> <p>of female connectors with push-buttons<br/>for conductor termination</p> <p>Pin spacing 5/5.08/7.5/7.62 mm</p> | <p><b>Direct marking</b><br/><b>1 – pole no.</b></p> <p>of 2-conductor female connectors<br/>for conductor termination</p> <p>Pin spacing 5/5.08/7.5/7.62 mm</p> | <p><b>Direct marking</b><br/><b>1 – pole no.</b></p> <p>of angled female connectors<br/>for conductor termination</p> <p>Pin spacing 5/5.08/7.5/7.62 mm</p> |
|--|--|---|



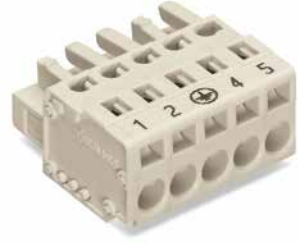
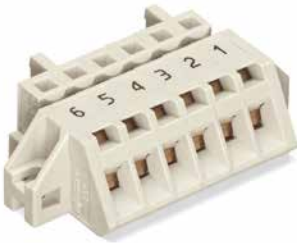
| Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /... - 047  | Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /... - 047   | Marking Perpendicular to Conductor Entry<br>Item No. Suffix: /... - 047   |
|--|---|---|
| <p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/026-047</b></p>                  | <p><b>Ordering examples:</b></p> <p><b>2-conductor female connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-2106/026-047</b></p> | <p><b>Ordering examples:</b></p> <p><b>Angled female connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>722-206/026-047</b></p> |
| <p><b>Female connector with push-buttons and locking levers,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/037-047</b></p>                                | <p><b>2-conductor female connector with locking levers,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-2106/037-047</b></p>              | <p><b>Angled female connector with strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>722-206/026-047/034-000</b></p> |
| <p><b>Female connector with push-buttons and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-106/026-0047/0134-000</b></p>                  | <p><b>2-conductor female connector with strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-2106/026-047/134-000</b></p> |   |
| <p><b>Female connector with push-buttons, locking levers and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/037-0047/0134-000</b></p> |   |   |



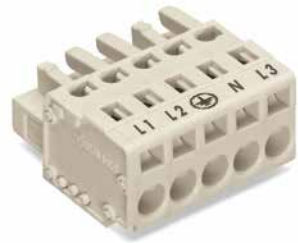
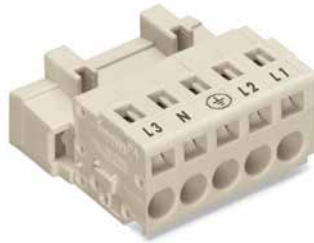
| Marking Parallel to Conductor Entry<br>Item No. Suffix: /... - 9037   | Marking Parallel to Conductor Entry<br>Item No. Suffix: /... - 9037  | Marking Parallel to Conductor Entry<br>Item No. Suffix: /... - 9037  |
|---|--|--|
| <p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/026-9037</b></p>                | <p><b>Ordering examples:</b></p> <p><b>2-conductor female connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-2106/026-9037</b></p> | <p><b>Ordering examples:</b></p> <p><b>Angled female connector,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>722-206/026-9037</b></p> |
| <p><b>Female connector with push-buttons and locking levers,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/037-9037</b></p>                              | <p><b>2-conductor female connector with locking levers,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-2106/037-9037</b></p>              | <p><b>Angled female connector with strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>722-206/026-9037/034-000</b></p> |
| <p><b>Female connector with push-buttons and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/026-9037/134-000</b></p>                 | <p><b>2-conductor female connector with strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-2106/026-9037/134-000</b></p> |  |
| <p><b>Female connector with push-buttons, locking levers and strain relief plate,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>2721-106/037-9037/134-000</b></p> |  |  |

# Accessories Marking MCS-MIDI

|   |   |   |
|---|---|---|
| <p><b>Direct marking<br/>1 – pole no.</b></p> <p>of angled female connectors<br/>for panel mounting</p> <p>Pin spacing 5/7.5 mm</p> | <p><b>Direct marking<br/>Pole assignment</b></p> <p>of 3- to 5-pole male connectors for conductor<br/>termination with preceding ground contact</p> <p>100% protected against mismatching</p> | <p><b>Direct marking<br/>Pole assignment</b></p> <p>of 3- to 5-pole female connectors for conductor<br/>termination, suitable for male connectors with<br/>preceding ground contact</p> <p>100% protected against mismatching</p> |
|---|---|---|



|   |   |   |
|---|---|---|
| <p><b>Marking Perpendicular to Conductor Entry</b><br/>Item No. Suffix: /... - 047</p>  | <p><b>Marking Perpendicular to Conductor Entry</b></p>  | <p><b>Marking Perpendicular to Conductor Entry</b></p>  |
| <p><b>Ordering examples:</b></p> <p><b>Angled female connector with fixing flanges, for panel mounting,</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-306/031-047</b></p> <p><b>Angled female connector with snap-in mounting feet for panel mounting</b><br/>5 mm pin spacing, 6-pole, gray<br/><b>721-306/008-047</b></p> | <p>721 and 723 Series male connectors in 3- to 5-pole versions are available with the following markings:</p> <p>3-pole: 3 - ⊕ - 1<br/>4-pole: 4 - ⊕ - 2 - 1<br/>5-pole: 5 - 4 - ⊕ - 2 - 1</p> <p>Item no. suffix: ... / ... -042</p> | <p>721, 2721, 722 and 723 Series female connectors in 3- to 5-pole versions, suitable for male connectors with preceding ground contact, are available with the following markings:</p> <p>3-pole: 1 - ⊕ - 3<br/>4-pole: 1 - 2 - ⊕ - 4<br/>5-pole: 1 - 2 - ⊕ - 4 - 5</p> <p>Item no. suffix: ... / ... -045</p> |
|   | <p><b>Ordering example:</b></p> <p><b>Male connector,</b><br/>5 mm pin spacing, 5-pole, light gray<br/><b>721-605/000-042</b></p>   | <p><b>Ordering example:</b></p> <p><b>Female connector,</b><br/>5 mm pin spacing, 5-pole, light gray<br/><b>721-105/026-045</b></p>   |



|  |  |   |
|--|--|---|
| <p><b>Marking Parallel to Conductor Entry</b><br/>Item No. Suffix: /... - 9037</p>   | <p><b>Marking Perpendicular to Conductor Entry</b></p>   | <p><b>Marking Perpendicular to Conductor Entry</b></p>  |
| <p><b>Ordering examples:</b></p> <p><b>Angled female connector with fixing flanges for panel mounting</b><br/>5 mm pin spacing, 6-pole, light gray<br/><b>721-306/031-9037</b></p> <p><b>Angled female connector with snap-in mounting feet, for panel mounting</b><br/>5 mm pin spacing, 6-pole, gray<br/><b>721-306/008-9037</b></p> | <p>3-pole: N - ⊕ - L 1<br/>4-pole: L 2 - ⊕ - N - L 1<br/>5-pole: L 3 - N - ⊕ - L 2 - L 1</p> <p>Item no. suffix: ... / ... -041</p>  | <p>3-pole: L 1 - ⊕ - N<br/>4-pole: L 1 - N - ⊕ - L 2<br/>5-pole: L 1 - L 2 - ⊕ - N - L 3</p> <p>Item no. suffix: ... / ... -046</p>   |
|  | <p><b>Ordering example:</b></p> <p><b>Male connector with snap-in mounting feet,</b><br/>7.5 mm pin spacing, 5-pole, light gray<br/><b>723-605/018-041</b></p>   | <p><b>Ordering example:</b></p> <p><b>Female connector,</b><br/>7.5 mm pin spacing, 5-pole, light gray<br/><b>721-202/026-046</b></p> |
|  | <p><b>“Pole no. – 1” marking with preceding ground contact</b><br/>Item no. suffix: ... / ... -043</p> <p><b>Without marking with preceding ground contact</b><br/>Item no. suffix: ... / ... -040</p> | <p><b>“1 – pole no.” marking</b><br/>Item no. suffix: ... / ... -047</p>  |



# Accessories Operating Tools MCS-MIDI

|   |   |  |
|---|---|--|
| <b>Operating tool</b><br>for male and female connectors equipped with CAGE CLAMP® | <b>Operating levers</b><br>for male and female connectors equipped with CAGE CLAMP® | <b>Operating tools</b><br>for male and female connectors equipped with CAGE CLAMP® |
|---|---|--|



| Color   | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit   | Color   | Item No. | Pack. Unit   |
|---|----------|------------|--|----------|--------------|---|----------|--------------|
| Operating tool, 5/5.08 mm and 7.5/7.62 mm pin spacing |          |            | Operating lever, 5/5.08 mm and 7.5/7.62 mm pin spacing |          |              | Operating tool, 5/5.08 mm and 7.5/7.62 mm pin spacing |          |              |
| red   | 210-250  | 1          | natural  | 231-131  | 100 (4 x 25) | natural   | 231-159  | 100 (4 x 25) |
|   |          |            | red  | 231-291  | 100 (4 x 25) | red   | 231-231  | 100 (4 x 25) |
|   |          |            |  |          |              |   |          |              |
|   |          |            |  |          |              |   |          |              |
|   |          |            |  |          |              |   |          |              |
|   |          |            |  |          |              |   |          |              |



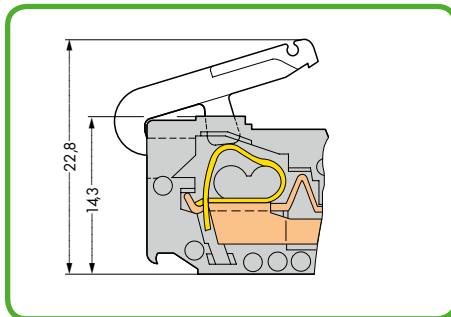
Inserting conductors via operating tool.



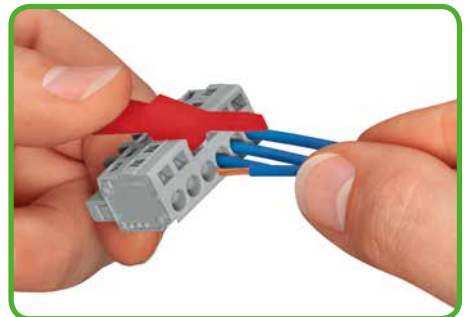
Inserting conductors via operating lever.



Inserting conductors - Operation parallel to conductor entry.



Not suitable for panel mounting with angled female connectors.



Inserting conductors - Operation perpendicular to conductor entry.

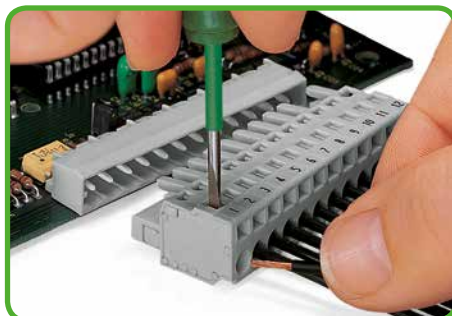


# Accessories Operating Tools MCS-MIDI

|   |  |   |
|---|--|---|
| <b>Operating tool</b><br>with partially insulated shaft<br>Type 2 | <b>Operating tool</b><br>operation parallel to conductor entry | <b>Operating tool</b><br>operation perpendicular to conductor entry |
|---|--|---|



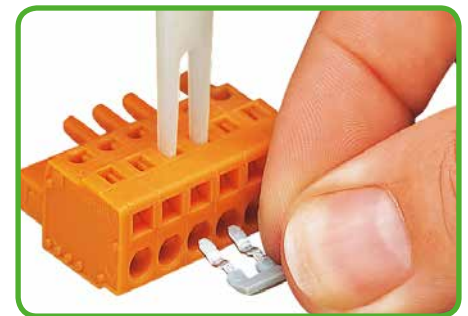
| Item No.  | Pack. Unit | Type   | Pin Spacing | Item No.       | Pack. Unit | Type  | Pin Spacing | Item No.       | Pack. Unit |
|---|------------|--|-------------|----------------|------------|---|-------------|----------------|------------|
| <b>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade, 5/5.08 mm and 7.5/7.62 mm pin spacing</b> |            | <b>Operating tool, insulated, operation parallel to conductor entry for male and female connectors equipped with CAGE CLAMP®</b><br>Also suitable for 280 Series rail-mounted terminal blocks. |             |                |            | <b>Operating tool, insulated, operation perpendicular to conductor entry for male and female connectors equipped with CAGE CLAMP®</b> |             |                |            |
| <b>210-720</b>  | 1          |  |             |                |            |   |             |                |            |
|   |            | 1-way  | 5/5.08 mm   | <b>209-130</b> | 1          | 2-way   | 5/5.08 mm   | <b>209-132</b> | 1          |
|   |            | 2-way  | 5/5.08 mm   | <b>280-432</b> | 1          |   |             |                |            |
|   |            | 3-way  | 5/5.08 mm   | <b>280-433</b> | 1          |   |             |                |            |
|   |            | 4-way  | 5/5.08 mm   | <b>280-434</b> | 1          |   |             |                |            |
|   |            | 5-way  | 5/5.08 mm   | <b>280-435</b> | 1          |   |             |                |            |
|   |            | 6-way  | 5/5.08 mm   | <b>280-436</b> | 1          |   |             |                |            |
|   |            | 7-way  | 5/5.08 mm   | <b>280-437</b> | 1          |   |             |                |            |
|   |            | 8-way  | 5/5.08 mm   | <b>280-438</b> | 1          |   |             |                |            |
|   |            | 9-way  | 5/5.08 mm   | <b>280-439</b> | 1          |   |             |                |            |
|   |            | 10-way   | 5/5.08 mm   | <b>280-440</b> | 1          |   |             |                |            |



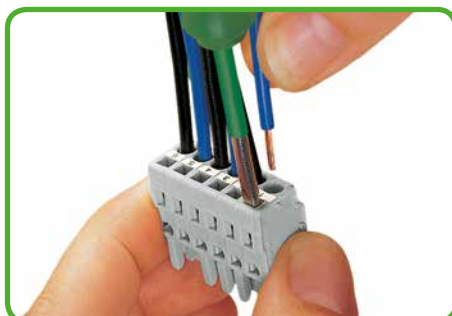
Inserting conductors via 3.5 x 0.5 mm screwdriver - Actuation perpendicular to conductor entry.



Operating tool used with 280 Series rail-mounted terminal blocks: For inserting male and female connectors with long contact pins into 280 Series rail-mounted terminal blocks (max. 10-pole for in-the-field assembly).



Operating tool for 231-902 comb-style jumper bars.



Inserting conductors via 3.5 x 0.5 mm screwdriver - Actuation parallel to conductor entry.

Operating tool used with CAGE CLAMP®-equipped male and female connectors (5/5.08 mm pin spacing): For opening up to 10 CAGE CLAMP® units simultaneously, e.g., when inserting 231-90x comb-style jumper bars. Wiring male and female connectors should be performed in a suitable mount.

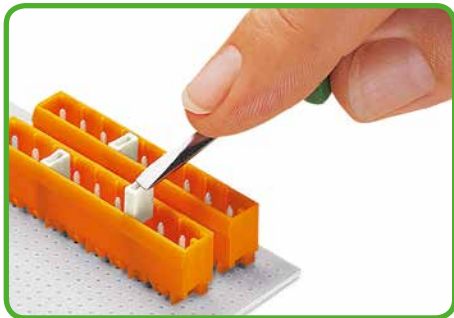


# Accessories Separators, Coding Keys and Coding Pins MCS-MIDI

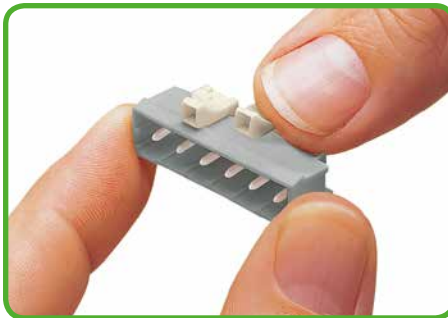
|  |  |  |
|--|--|--|
| <b>Separators for forming groups</b><br>for male headers | <b>Coding keys</b><br>for male headers | <b>Coding pins</b><br>for male headers for double-deck assembly,<br>to be snapped into lower level |
|--|--|--|



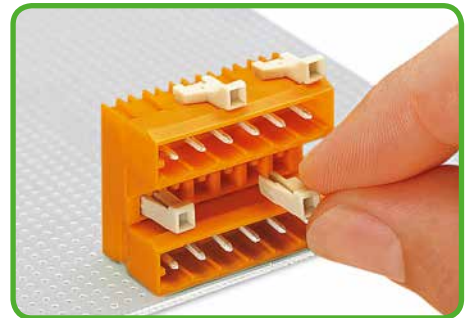
| Color   | Item No.       | Pack. Unit    | Color   | Item No.       | Pack. Unit | Color   | Item No.       | Pack. Unit |
|---|----------------|---------------|---|----------------|------------|---|----------------|------------|
| <b>Separator for headers, for formation of groups</b> |                |               | <b>Coding keys for male headers, 5/5.08 mm pin spacing</b>  |                |            | <b>Coding pin for male headers for double-deck assembly, snaps into lower level</b> |                |            |
| light gray  | <b>231-500</b> | 200 (2 x 100) | light gray  | <b>231-129</b> | 100        | light gray  | <b>231-160</b> | 100        |
|   |                |               |   |                |            |   |                |            |
|   |                |               | <b>Coding key for male headers, 7.5/7.62 mm pin spacing</b> |                |            |   |                |            |
|   |                |               | light gray  | <b>231-130</b> | 100        |   |                |            |
|   |                |               |   |                |            |   |                |            |



Separators for formation of groups are inserted directly into the MCS MIDI Classic male headers. Formation of groups using separators means that at least 1 pole is lost on the header. Female connectors with integrated end plates are available for formation of groups without loss of any poles for 5/5.08 mm pin spacing. Formation of groups without the loss of any poles is possible without using separators for 7.5/7.62 mm pin spacing.



Snap-on coding key for male headers and CAGE CLAMP<sup>®</sup>-equipped male connectors. The last pole of male and female connectors with 7.5 mm pin spacing has a width of 5 mm/0.197 in; for 7.62 mm pin spacing, the pole width is 5.08 mm/0.2 in. Always use 231-129 coding key for coding this pole.



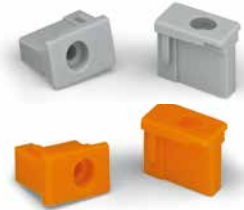
Coding lower male header in combination with male header for double-deck assembly.

# Accessories

## Lockout Caps, Insulation Stops and Fixing Elements

### MCS-MIDI

|   |   |  |
|---|---|--|
| <b>Lockout caps</b><br>for male and female connectors equipped with CAGE CLAMP® | <b>Insulation stops</b><br>for male and female connectors equipped with CAGE CLAMP® or CAGE CLAMP®S | <b>Fixing elements</b><br>for angled male headers with solder pins |
|---|---|--|



| Color              | Item No. | Pack. Unit    | Color   | Conductor Size   | Item No. | Pack. Unit                        | Color                  | Item No. | Pack. Unit |
|--------------------|----------|---------------|---|--|----------|-----------------------------------|------------------------|----------|------------|
| <b>Lockout cap</b> |          |               | <b>Insulation stop, 5/5.08 mm pin spacing</b>   |  |          | <b>Fixing element</b>             |                        |          |            |
| gray               | 231-668  | 500 (5 x 100) | white   | 0.08 - 0.2 mm <sup>2</sup> "sol."<br>0.08 - 0.14 mm <sup>2</sup> "fst" | 231-670  | 200                               | gray                   | 231-193  | 100        |
| orange             | 231-669  | 500 (5 x 100) | light gray                                      | 0.25 - 0.5 mm <sup>2</sup>   | 231-671  | 200                               | orange                 | 231-393  | 100        |
|                    |          |               | dark gray                                       | 0.75 - 1 mm <sup>2</sup>   | 231-672  | 200                               |                        |          |            |
|                    |          |               | <b>Insulation stop, 7.5/7.62 mm pin spacing</b> |  |          | <b>Screws for fixing elements</b> |                        |          |            |
|                    |          |               | white   | 0.08 - 0.2 mm <sup>2</sup> "sol."<br>0.08 - 0.14 mm <sup>2</sup> "fst" | 231-673  | 200                               | <b>Screw with nut</b>  |          |            |
|                    |          |               | light gray                                      | 0.25 - 0.5 mm <sup>2</sup>   | 231-674  | 200                               | M 2 x 12               | 231-195  | 100        |
|                    |          |               | dark gray                                       | 0.75 - 1 mm <sup>2</sup>   | 231-675  | 200                               | <b>Tapping screw</b>   |          |            |
|                    |          |               |   |  |          |                                   | B 2.2 x 13             | 231-194  | 100        |
|                    |          |               |   |  |          |                                   | Drilled hole, 1.8 mm Ø |          |            |



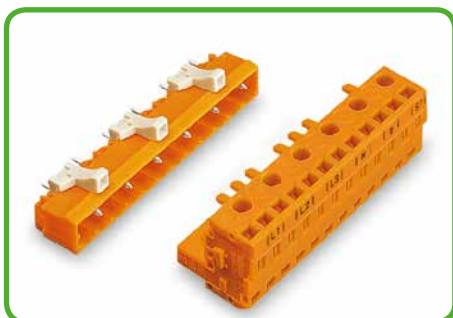
Sealing unnecessary clamping points in CAGE CLAMP®-equipped male and female connectors (e.g., when doubling the pin spacing to meet clearance and creepage distance requirements, or when higher rated voltage is required). Lockout pins are not suitable for panel-mounted, angled female connectors.



Wiring of PLC and microprocessor control systems also employs small or very small fine-stranded conductors. These conductors are highly flexible, and deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. This is common to all clamping systems currently on the market and results in time-consuming troubleshooting.



Fixing elements enhance connection reliability between male headers with angled solder pins and the PCB. This substantially reduces mechanical stress on both solder pins and joints, particularly when dealing with small lengths and frequent mating cycles.



Insulation stop for connectors reliably ensure proper termination. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splaying. This also limits the conductor entry to a defined cross sectional area – ensuring the actual conductor, not the insulation, will enter the clamping unit.

Insulation stops are available as dividable 5-pole strips for MCD MIDI male and female connectors. Insulation stop usage will not affect the conductor strip lengths for the aforementioned connectors.

Insulation stops are not suitable for panel-mounted female connectors.

10.16 mm pin spacing available upon request.

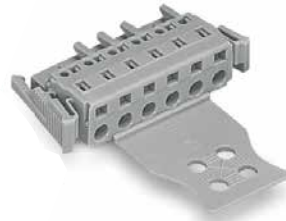
# 5 Accessories

## Strain Relief Plates (Factory-Assembled Only)

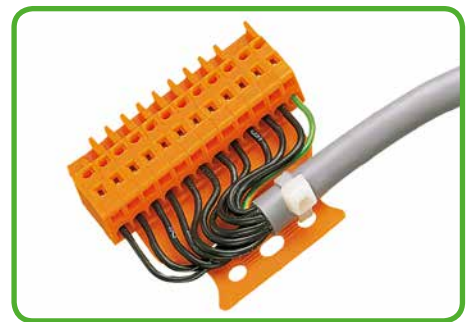
### MCS-MIDI

358

|  |  |
|--|--|
| <p><b>Strain relief plates,<br/>factory-assembled</b><br/>Pin spacing 5/5.08 mm</p> <p>for male and female connectors<br/>with CAGE CLAMP®</p> | <p><b>Strain relief plates,<br/>factory-assembled</b><br/>Pin spacing 7.5/7.62 mm</p> <p>for male and female connectors<br/>with CAGE CLAMP®</p> |
|--|--|



| Width   | Pole No. | Item No.    | Width   | Pole No. | Item No.    |
|---|----------|-------------|---|----------|-------------|
| <b>Strain relief plate, pre-assembled gray/orange</b>   |          |             | <b>Strain relief plate, pre-assembled gray/orange</b>   |          |             |
| 11.5 mm   | 2- 3     | .../032-000 | 11.5 mm   | 2        | .../032-000 |
| 20 mm   | 4- 5     | .../033-000 | 20 mm   | 3- 5     | .../033-000 |
| 30 mm   | 6- 9     | .../034-000 | 30 mm   | 6- 7     | .../034-000 |
| 50 mm   | 10-24    | .../035-000 | 50 mm   | 8-16     | .../035-000 |
| <b>Ordering example:</b>  |          |             | <b>Ordering example:</b>  |          |             |
| Male connector with strain relief plate,<br>5 mm pin spacing, 8-pole, gray:<br><b>721-608/034-000</b>           |          |             | Angled female connector with strain relief plate,<br>7.62 mm pin spacing, 5-pole, orange:<br><b>732-125/026-000/033-000</b> |          |             |
| <b>Ordering example:</b>  |          |             | <b>Ordering example:</b>  |          |             |
| Female connector with strain relief plate,<br>5 mm pin spacing, 8-pole, gray:<br><b>231-108/026-000/034-000</b> |          |             |   |          |             |



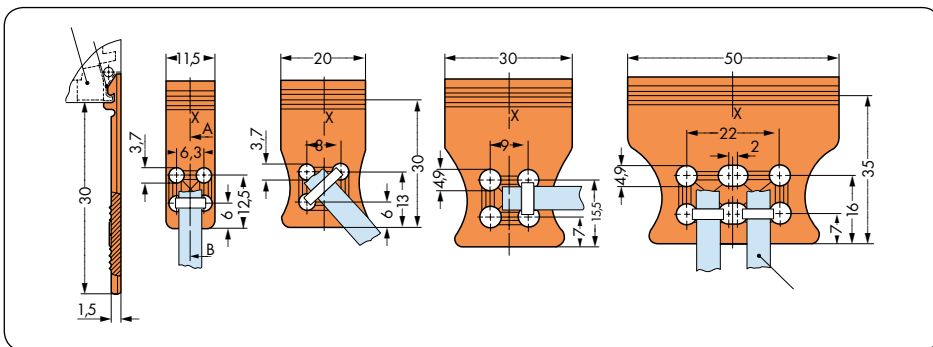
Female connector with strain relief plate, 5.08 mm pin spacing, 12-pole, orange: **231-312/026-000/035-000.**



Female connector with strain relief plate, 5 mm pin spacing, 3-pole, gray: **231-103/026-000/032-000.**

Both CAGE CLAMP®-equipped male and female connectors are supplied with pre-assembled (glued) strain relief plates. An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." of the male or female connector. Angled female connectors for panel mounting cannot be fitted with strain relief plates.

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann. The width of the cable ties must correspond to the hole dimensions indicated for the strain relief plates.



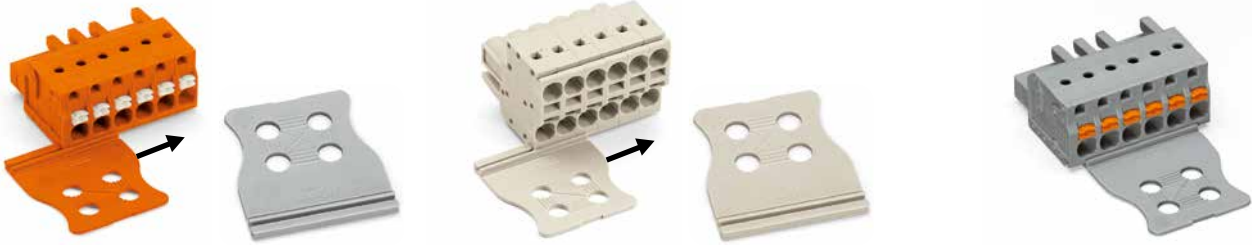
Gray strain relief plates are used for light gray 721, 722 and 723 Series CAGE CLAMP®-equipped male and female connectors.

# Accessories

## Strain Relief Plates (For In-The-Field Assembly or Factory-Assembled)

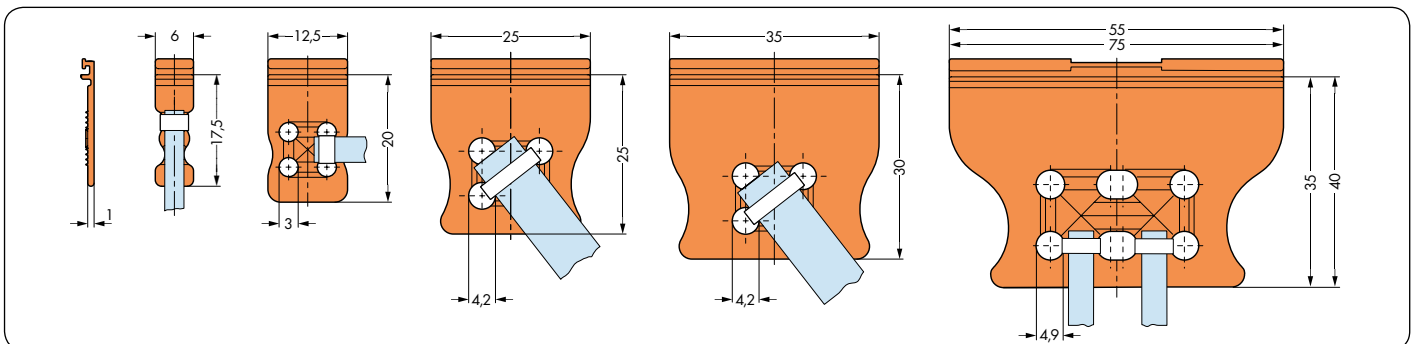
### MCS-MIDI

|  |  |   |
|--|--|---|
| <p><b>Strain relief plates for in-the-field assembly</b><br/>Pin spacing 5/5.08 mm</p> <p>for female connectors with CAGE CLAMP®S (2721, 2231 and 2-conductor 231, 721 Series)</p> | <p><b>Strain relief plates for in-the-field assembly</b><br/>Pin spacing 7.5/7.62 mm</p> <p>for female connectors with CAGE CLAMP®S (2721, 2231 and 2-conductor 231, 721 Series)</p> | <p><b>Strain relief plates, factory-assembled</b></p> <p>for female connectors with CAGE CLAMP®S (2721, 2231 and 2-conductor 231, 721 Series)</p> |
|--|--|---|



| Width                                  | Pole No. | Item No.       | Pack. Unit   | Width                                  | Pole No. | Item No.       | Pack. Unit   | Width   | Item No. Suffix |  |
|--|----------|----------------|--------------|--|----------|----------------|--------------|---|-----------------|--|
| <b>Strain relief plate, light gray</b> |          |                |              | <b>Strain relief plate, light gray</b> |          |                |              | <b>Strain relief plate, pre-assembled</b>   |                 |  |
| 6 mm                                   | 2        | <b>734-127</b> | 100 (4 x 25) | 6 mm                                   | 2- 3     | <b>734-127</b> | 100 (4 x 25) | 6 mm  | .../132-000     |  |
| 12.5 mm                                | 3- 4     | <b>734-128</b> | 100 (4 x 25) | 12.5 mm                                | 2- 3     | <b>734-128</b> | 100 (4 x 25) | 12.5 mm   | .../133-000     |  |
| 25 mm                                  | 5- 7     | <b>734-129</b> | 100 (4 x 25) | 25 mm                                  | 4- 6     | <b>734-129</b> | 100 (4 x 25) | 25 mm   | .../134-000     |  |
| 35 mm                                  | 8-11     | <b>734-126</b> | 100 (4 x 25) | 35 mm                                  | 7- 9     | <b>734-126</b> | 100 (4 x 25) | 35 mm   | .../135-000     |  |
| 55 mm                                  | 12-16    | <b>734-426</b> | 50 (2 x 25)  | 55 mm                                  | 10-12    | <b>734-426</b> | 50 (2 x 25)  | 55 mm   | .../136-000     |  |
| 75 mm                                  | 17-24    | <b>734-427</b> | 50 (2 x 25)  | 75 mm                                  | 13-16    | <b>734-427</b> | 50 (2 x 25)  | 75 mm   | .../137-000     |  |
| <b>Strain relief plate, gray</b>       |          |                |              | <b>Strain relief plate, gray</b>       |          |                |              | <b>Ordering example:</b><br>2-conductor female connector with strain relief plate, 5 mm pin spacing, 8-pole, gray:<br><b>231-2108/026-000/135-000</b>   |                 |  |
| 6 mm                                   | 2        | <b>734-327</b> | 100 (4 x 25) | 6 mm                                   | 2- 3     | <b>734-327</b> | 100 (4 x 25) | <b>Ordering example:</b><br>Female connector with push-buttons and strain relief plate, 7.5 mm pin spacing, 8-pole, gray:<br><b>2231-208/026-000/135-000</b>  |                 |  |
| 12.5 mm                                | 3- 4     | <b>734-328</b> | 100 (4 x 25) | 12.5 mm                                | 2- 3     | <b>734-328</b> | 100 (4 x 25) |   |                 |  |
| 25 mm                                  | 5- 7     | <b>734-329</b> | 100 (4 x 25) | 25 mm                                  | 4- 6     | <b>734-329</b> | 100 (4 x 25) |   |                 |  |
| 35 mm                                  | 8-11     | <b>734-326</b> | 100 (4 x 25) | 35 mm                                  | 7- 9     | <b>734-326</b> | 100 (4 x 25) |   |                 |  |
| 55 mm                                  | 12-16    | <b>734-430</b> | 50 (2 x 25)  | 55 mm                                  | 10-12    | <b>734-430</b> | 50 (2 x 25)  |   |                 |  |
| 75 mm                                  | 17-24    | <b>734-431</b> | 50 (2 x 25)  | 75 mm                                  | 13-16    | <b>734-431</b> | 50 (2 x 25)  |   |                 |  |
| <b>Strain relief plate, orange</b>     |          |                |              | <b>Strain relief plate, orange</b>     |          |                |              | CAGE CLAMP®S-equipped female connectors can be retrofitted with a strain relief plate or pre-assembled with one at the factory. An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of connector (see ordering examples). |                 |  |
| 6 mm                                   | 2        | <b>734-227</b> | 100 (4 x 25) | 6 mm                                   | 2- 3     | <b>734-227</b> | 100 (4 x 25) | The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways   |                 |  |
| 12.5 mm                                | 3- 4     | <b>734-228</b> | 100 (4 x 25) | 12.5 mm                                | 2- 3     | <b>734-228</b> | 100 (4 x 25) |   |                 |  |
| 25 mm                                  | 5- 7     | <b>734-229</b> | 100 (4 x 25) | 25 mm                                  | 4- 6     | <b>734-229</b> | 100 (4 x 25) |   |                 |  |
| 35 mm                                  | 8-11     | <b>734-226</b> | 100 (4 x 25) | 35 mm                                  | 7- 9     | <b>734-226</b> | 100 (4 x 25) |   |                 |  |
| 55 mm                                  | 12-16    | <b>734-428</b> | 50 (2 x 25)  | 55 mm                                  | 10-12    | <b>734-428</b> | 50 (2 x 25)  |   |                 |  |
| 75 mm                                  | 17-24    | <b>734-429</b> | 50 (2 x 25)  | 75 mm                                  | 13-16    | <b>734-429</b> | 50 (2 x 25)  |   |                 |  |

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann. The width of the cable ties must correspond to the hole dimensions indicated for the strain relief plates.



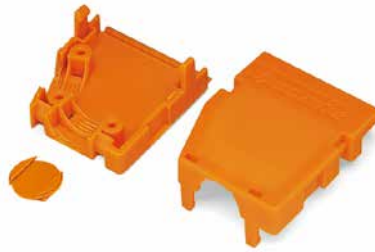
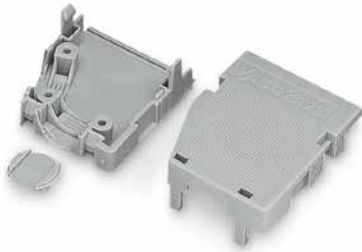


# Accessories

## Strain Relief Housings

### MCS-MIDI

|  |   |
|--|---|
| <b>Snap-on type strain relief housing</b><br><b>Pin spacing 5 mm</b><br><br>for straight and angled<br>male and female connectors<br>with CAGE CLAMP® connection | <b>Snap-on type strain relief housing</b><br><b>Pin spacing 5.08 mm</b><br><br>for straight and angled<br>male and female connectors<br>with CAGE CLAMP® connection |
|--|---|





| Pole No.   | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| <b>Snap-on type strain relief housing,</b><br>suitable for 5 mm pin spacing, gray<br>consists of strain relief support and housing |          |            | <b>Snap-on type strain relief housing,</b><br>suitable for 5.08 mm pin spacing, orange<br>consists of strain relief support and housing |          |            |
| 2  | 232-602  | 25         | 2   | 232-632  | 25         |
| 3  | 232-603  | 25         | 3   | 232-633  | 25         |
| 4  | 232-604  | 25         | 4   | 232-634  | 25         |
| 5  | 232-605  | 25         | 5   | 232-635  | 25         |
| 6  | 232-606  | 25         | 6   | 232-636  | 25         |
| 7  | 232-607  | 25         | 7   | 232-637  | 25         |
| 8  | 232-608  | 25         | 8   | 232-638  | 25         |
| 9  | 232-609  | 25         | 9   | 232-639  | 25         |
| 10   | 232-610  | 25         | 10  | 232-640  | 25         |
| 12   | 232-612  | 25         | 12  | 232-642  | 25         |
|  |          |            | 16  | 232-646  | 25         |



Snapping the cover into the unused cable outlet.

2- to 3-pole, only suitable for cable ties, 1 cable outlet (rear side), max. cable tie width 3.6 mm  
 4- to 6-pole, suitable for cable clamp, 1 cable outlet (rear side)  
 7- to 8-pole, suitable for cable clamp, 1 cable outlets (rear side) and 1 cable outlets (side), 1 cover (included)  
 9- to 16-pole, suitable for cable clamp, 1 cable outlets (rear side) and 2 cable outlets (side), 2 covers (included)

| Product Accessories  | Pole No.         | Item No. | Pack. Unit |
|--|------------------|----------|------------|
| <b>Cable clamp, for strain relief</b>  |                  |          |            |
|  | 4 to 6 poles     | 209-177  | 25         |
|  | 7 poles and more | 209-174  | 25         |
| <b>Fixing screws, for cable clamp</b>  |                  |          |            |
|  | 4 to 6 poles     | 209-176  | 50         |
|  | 7 poles and more | 209-173  | 50         |



Snapping on the strain relief housing, demonstrated with a female connector with locking levers. Cable exits laterally. Strain relief by cable tie (up to a width of 4 mm).

#### Strain Relief Housing Dimensions

| Pole No. | L <sub>4</sub> Pin Spacing |      | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | L <sub>5</sub> |
|----------|----------------------------|------|----------------|----------------|----------------|----------------|
|          | 5                          | 5.08 |                |                |                |                |
| 2        | 13                         | 13   | 59.0           | 55.5           | 58.0           | 41.5           |
| 3        | 18                         | 18   | 59.0           | 55.5           | 58.0           | 41.5           |
| 4        | 23                         | 23   | 59.0           | 55.5           | 58.0           | 41.5           |
| 5        | 28                         | 28   | 59.0           | 55.5           | 58.0           | 41.5           |
| 6        | 33                         | 33   | 59.0           | 55.5           | 58.0           | 41.5           |
| 7        | 38                         | 38   | 71.5           | 68.0           | 70.5           | 54.0           |
| 8        | 43                         | 43   | 71.5           | 68.0           | 70.5           | 54.0           |
| 9        | 48                         | 48.7 | 71.5           | 68.0           | 70.5           | 54.0           |
| 10       | 53                         | 53.8 | 71.5           | 68.0           | 70.5           | 54.0           |
| 12       | 63                         | 64   | 71.5           | 68.0           | 70.5           | 54.0           |
| 16       | 85                         | 85   | 71.5           | 68.0           | 70.5           | 54.0           |

| Max. Cable Diameter |      |
|---------------------|------|
| Pole No.            | Ø mm |
| 2                   | 6.0  |
| 3                   | 7.5  |
| 4 - 6               | 9.5  |
| 7 - 16              | 14.0 |



Snapping on a strain relief housing, demonstrated with a male connector. Cable exits lengthwise. Strain relief by cable clamp.

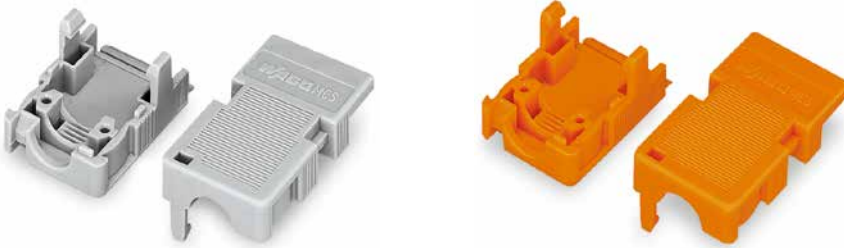
WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.  
 Gray strain relief plates are used for light gray 721, 722 and 723 Series CAGE CLAMP®-equipped male and female connectors.

# Accessories

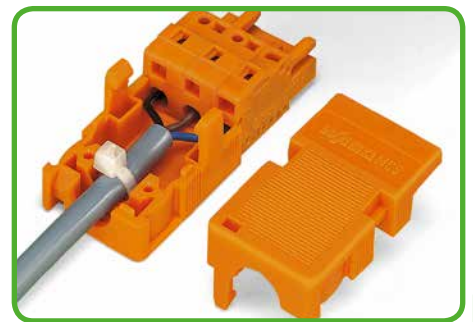
## Strain Relief Housings

### MCS-MIDI

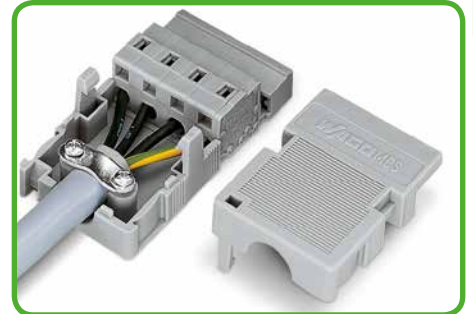
|  |   |
|--|---|
| <b>Snap-on type strain relief housing</b><br><b>Pin spacing 7.5 mm</b><br><br>for straight and angled<br>male and female connectors<br>with CAGE CLAMP® connection | <b>Snap-on type strain relief housing</b><br><b>Pin spacing 7.62 mm</b><br><br>for straight and angled<br>male and female connectors<br>with CAGE CLAMP® connection |
|--|---|



| Pole No.  | Item No. | Pack. Unit | Pole No.   | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|
| <b>Snap-on type strain relief housing,</b><br>suitable for 7.5 mm pin spacing, gray,<br>consists of strain relief support and housing |          |            | <b>Snap-on type strain relief housing,</b><br>suitable for 7.62 mm pin spacing, orange,<br>consists of strain relief support and housing |          |            |
| 2   | 232-662  | 25         | 2  | 232-682  | 25         |
| 3   | 232-663  | 25         | 3  | 232-683  | 25         |
| 4   | 232-664  | 25         | 4  | 232-684  | 25         |
| 5   | 232-665  | 25         | 5  | 232-685  | 25         |
| 7   | 232-667  | 25         | 7  | 232-687  | 25         |
| 10  | 232-670  | 25         |  |          |            |



3-pole female connector with strain relief housing.



4-pole header with strain relief housing.

| 2-pole, only suitable for cable ties, 1 cable outlet at rear, max. cable tie width 3.6 mm<br>3- and 4-pole, suitable for cable clamp, 1 cable outlet (rear side)<br>5-pole, suitable for cable clamp, 1 cable outlets (rear side) and 1 cable outlets (side), 1 cover (included)<br>7-pole, suitable for cable clamp, 1 cable outlets (rear side) and 2 cable outlets (side), 2 covers (included) |                  |          |            |
|---|------------------|----------|------------|
| Product Accessories   | Pole No.         | Item No. | Pack. Unit |
| <b>Cable clamp, for strain relief</b>   |                  |          |            |
|   | 3 and 4 poles    | 209-177  | 25         |
|   | 5 poles and more | 209-174  | 25         |
| <b>Fixing screws, for cable clamp</b>   |                  |          |            |
|   | 3 and 4 poles    | 209-176  | 50         |
|   | 5 poles and more | 209-173  | 50         |

| Strain Relief Housing Dimensions |                     | Pole No. | L <sub>4</sub> Pin Spacing |      | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | L <sub>5</sub> |
|----------------------------------|---------------------|----------|----------------------------|------|----------------|----------------|----------------|----------------|
|                                  | Max. Cable Diameter |          | 7.5                        | 7.62 |                |                |                |                |
|                                  | Pole No.            |          |                            |      |                |                |                |                |
|                                  | 2                   | 6.0      | 15.5                       | 15.5 | 59.0           | 55.5           | 58.0           | 41.5           |
|                                  | 3 - 4               | 9.5      | 23                         | 23   | 59.0           | 55.5           | 58.0           | 41.5           |
|                                  | 5 - 7               | 14.0     | 30.5                       | 30.5 | 59.0           | 55.5           | 58.0           | 41.5           |
|                                  |                     |          | 38                         | 38   | 71.5           | 68.0           | 70.5           | 54.0           |
|                                  |                     | 7        | 53                         | 53,8 | 71.5           | 68.0           | 70.5           | 54.0           |



Gray strain relief plates are used for light gray 721, 722 and 723 Series CAGE CLAMP®-equipped male and female connectors.

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.

# Accessories

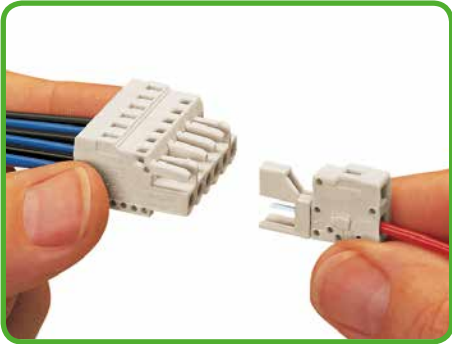
## Test Plug Adapters

### MCS-MIDI

|   |  |  |
|---|--|--|
| <p><b>Test plug adapters for female connectors</b></p> <p>0.08 - 2.5 mm<sup>2</sup>   AWG 28 - 12</p> <p>320 V/4 kV/2 12 A</p> <p> 8- 9 mm / 0.33 in</p> |  |  |
|---|--|--|



| Conductor Size  | Color      | Item No.       | Pack. Unit |
|---|------------|----------------|------------|
| <b>Test plug adapter for female connectors, 5/5.08 mm pin spacing</b>   |            |                |            |
| 0.08 - 2.5 mm <sup>2</sup>  | light gray | <b>231-661</b> | 100        |
| <b>Test plug adapter for female connectors, 7.5/7.62 mm pin spacing</b> |            |                |            |
| 0.08 - 2.5 mm <sup>2</sup>  | light gray | <b>231-662</b> | 100        |



Test plug adapter with CAGE CLAMP® connection

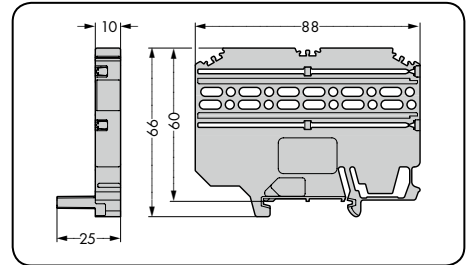


# Accessories

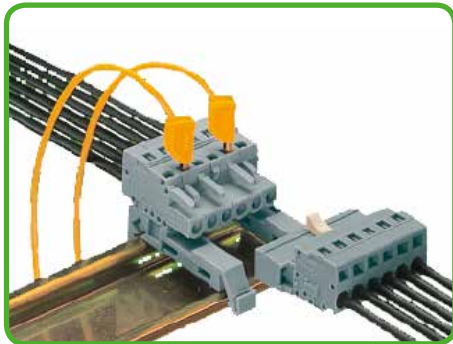
## Mounting Adapter

### MCS-MIDI

|   |   |  |
|---|---|--|
| <p><b>Mounting adapter for DIN 35 rail</b></p> <p>for male and female connectors with snap-in mounting feet</p> | <p><b>Multi mounting adapter for DIN 35 rail</b></p> <p>for male and female connectors with snap-in mounting feet</p> |  |
|---|---|--|



| Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| <p><b>Mounting adapter</b><br/>for MCS-MIDI male and female connectors with snap-in mounting feet</p>                        |          |            | <p><b>Multi mounting adapter</b><br/>for MCS-MIDI male and female connectors with snap-in mounting feet</p> |          |            |
| gray   | 209-137  | 1          | gray  | 209-148  | 25         |
| <p><b>Multi mounting adapter</b><br/>for MCS-MIDI angled female connectors with snap-in mounting feet for panel mounting</p> |          |            |   |          |            |
| gray   | 209-120  | 1          |   |          |            |



Female connector with snap-in mounting feet and 209-137 mounting adapter on DIN 35 rail.



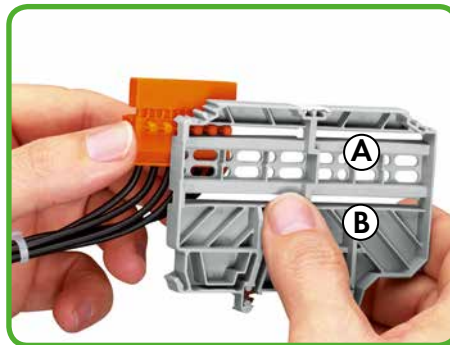
The pluggable male or female connector can also be fitted with strain relief.



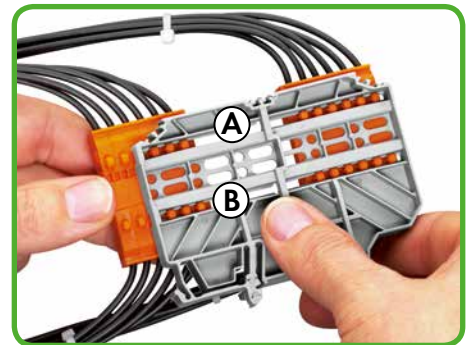
The adapter can be marked either with WSB, miniature WSB or WMB markers.



209-120 Multi Mounting Adapter on DIN 35 rail and angled female connector with snap-in mounting feet for panel mounting



If either the male or female connector is equipped with mounting feet and mounted on the adapter using its oblong holes or open grooves (A/B), but the individual counterpart is not, then the connection remains pluggable.



If a connector is pushed from the side into the open grooves (A/B) of the multi mounting adapter, the plug connection will be reliably protected from unintentional disconnection when mounted.

# Accessories

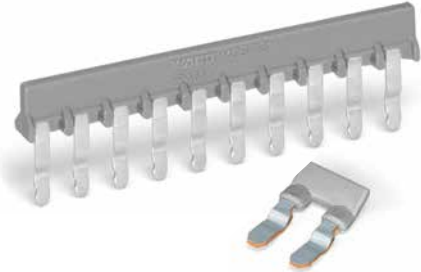
## Comb-Style Jumper Bars

### MCS-MIDI

Comb-style jumper bars  
Pin Spacing 5/5.08 mm

for male and female connectors  
with CAGE CLAMP® connection  
320 V/4 kV/2 12/16 A

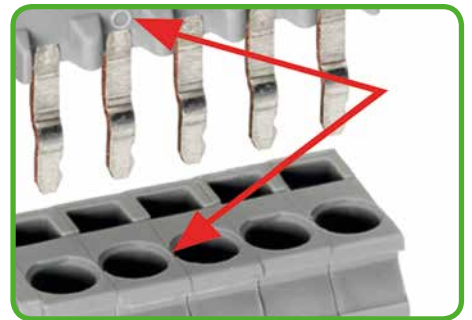
Handling



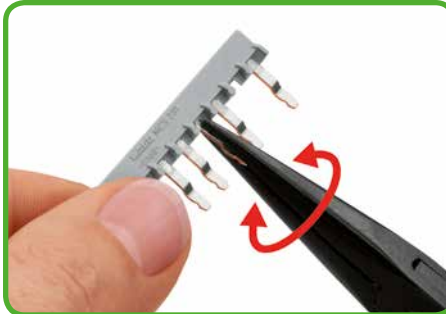
| Jumper Type  | Item No. | Pack. Unit                  |
|--|----------|-----------------------------|
| <b>Comb-style jumper bar</b> , insulated,<br>for straight and angled male and female connectors<br>with CAGE CLAMP® connection |          |                             |
| Nominal current  |          |                             |
| 2-way  | 12 A     | <b>231-902</b> 200 (8 x 25) |
| 3-way  | 16 A     | <b>231-903</b> 100 (4 x 25) |
| 5-way  | 16 A     | <b>231-905</b> 100 (4 x 25) |
| 7-way  | 16 A     | <b>231-907</b> 100 (4 x 25) |
| 10-way   | 16 A     | <b>231-910</b> 100 (4 x 25) |
| <b>Notice:</b><br>Not suitable for female connectors with<br>CAGE CLAMP®S and angled female connectors<br>for panel mounting!  |          |                             |
| Jumper bar reduces maximum conductor size to 1.5 mm <sup>2</sup>   |          |                             |



**Notice:** Insert jumper bar according to direction symbols.  
□ - Symbol shows direction to operating slot.



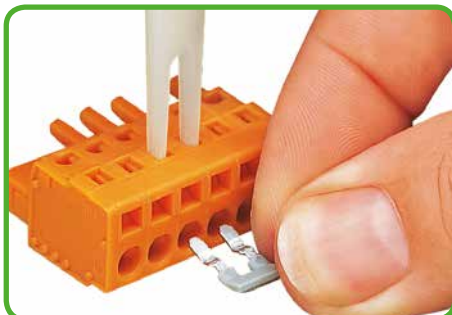
**Notice:** Insert jumper bar according to direction symbols.  
○ - Symbol shows direction to conductor entry.



Individual comb-style jumper bars are created by breaking out jumper contacts (starting with 3-way).



Insert comb-style jumper bars via multipole operating tool, with the female or male connector being supported in a suitable holding device.



Commoning a female connector with 231-902 comb-style jumper bar via 2-way operating tool.



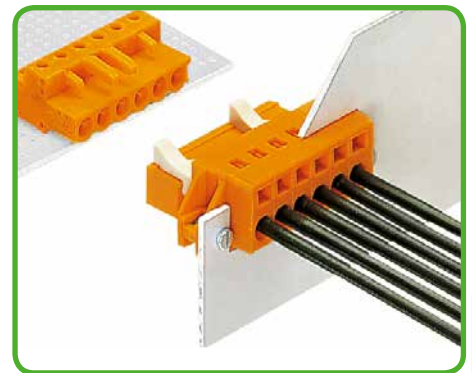
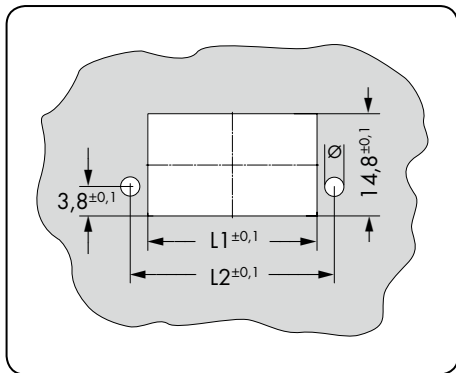
Male or female connectors can be pre-assembled with comb-style jumper bars upon request.



**Notice:** Comb-style jumper bars reduce conductor size to 1.5 mm<sup>2</sup> "s" + "fst".

# Cutout Dimensions MCS-MIDI

|  |               |
|--|---------------|
| <b>Cutout</b><br>for 231, 721, 723 and 731 Series<br>male/female connectors<br>with fixing flanges | <b>Screws</b> |
|--|---------------|



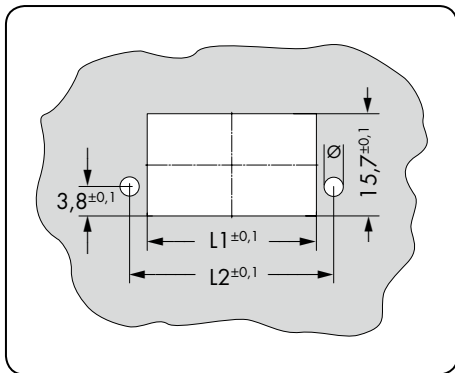
Drilled hole Ø: Depends on the type of screw used (see screws on the left).

M 2.5 x 10 screws with nuts (e.g., fixing flanges)

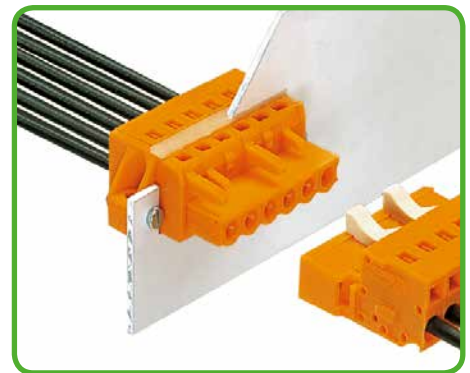
**Table 1**

| Pole No. | Pin Spacing 5 mm |       | Pin Spacing 5.08 mm |       | Pin Spacing 7.5 mm |       | Pin Spacing 7.62 mm |       | Dimensions  | Item No.       | Pack. Unit      |
|----------|------------------|-------|---------------------|-------|--------------------|-------|---------------------|-------|---|----------------|-----------------|
|          | L1               | L2    | L1                  | L2    | L1                 | L2    | L1                  | L2    |   |                |                 |
| 2        | 13.4             | 18.4  | 13.6                | 18.6  | 15.9               | 20.9  | 16.0                | 21.0  | <b>Self-tapping screws</b><br>1.8 <sup>±0.1</sup> mm mounting hole diameter |                |                 |
| 3        | 18.4             | 23.4  | 18.6                | 23.6  | 23.4               | 28.4  | 23.6                | 28.6  |   |                |                 |
| 4        | 23.4             | 28.4  | 23.7                | 28.7  | 30.9               | 35.9  | 31.3                | 36.3  |   |                |                 |
| 5        | 28.4             | 33.4  | 28.8                | 33.8  | 38.4               | 43.4  | 38.9                | 43.9  | B 2.2 x 9.5 mm  | <b>209-147</b> | 200 ( 2 x 100 ) |
| 6        | 33.5             | 38.3  | 34.0                | 38.8  | 46.0               | 50.8  | 46.6                | 51.4  | B 2.2 x 13 mm   | <b>231-194</b> | 200 ( 2 x 100 ) |
| 7        | 38.5             | 43.3  | 39.1                | 43.9  | 53.5               | 58.3  | 54.2                | 59.0  |   |                |                 |
| 8        | 43.5             | 48.3  | 44.1                | 48.9  | 61.0               | 65.8  | 61.8                | 66.6  |   |                |                 |
| 9        | 48.5             | 53.3  | 49.2                | 54.0  | 68.5               | 73.3  | 69.5                | 74.3  |   |                |                 |
| 10       | 53.5             | 58.3  | 54.3                | 59.1  | 76.0               | 80.8  | 77.1                | 81.9  | <b>Screws with nuts</b><br>2.5 <sup>±0.1</sup> mm mounting hole diameter    |                |                 |
| 11       | 58.5             | 63.3  | 59.4                | 64.2  | 83.5               | 88.3  | 84.7                | 89.5  |   |                |                 |
| 12       | 63.5             | 68.3  | 64.5                | 69.3  | 91.0               | 95.8  | 92.3                | 97.1  |   |                |                 |
| 13       | 68.6             | 73.2  | 69.6                | 74.2  | 98.6               | 103.2 | 100.0               | 104.6 |   |                |                 |
| 14       | 73.6             | 78.2  | 74.7                | 79.3  | 106.1              | 110.7 | 107.7               | 112.3 | M 2 x 12 mm   | <b>231-195</b> | 200 ( 2 x 100 ) |
| 15       | 78.6             | 83.2  | 79.8                | 84.4  | 113.6              | 118.2 | 115.3               | 119.9 |   |                |                 |
| 16       | 83.6             | 88.2  | 84.9                | 89.5  | 121.1              | 125.7 | 122.9               | 127.5 |   |                |                 |
| 17       | 88.6             | 93.2  | 90.0                | 94.6  | 128.6              | 133.2 | 130.5               | 135.1 |   |                |                 |
| 18       | 93.6             | 98.2  | 95.0                | 99.6  | 136.1              | 140.7 | 138.1               | 142.7 | <b>Screws with nuts</b><br>3.0 <sup>±0.1</sup> mm mounting hole diameter    |                |                 |
| 19       | 98.7             | 103.1 | 100.2               | 104.6 | 143.7              | 148.1 | 145.9               | 150.3 |   |                |                 |
| 20       | 103.7            | 108.1 | 105.3               | 109.7 | 151.2              | 155.6 | 153.5               | 157.9 |   |                |                 |
| 21       | 108.7            | 113.1 | 110.4               | 114.8 | 158.7              | 163.1 | 161.1               | 165.5 |   |                |                 |
| 22       | 113.7            | 118.1 | 115.5               | 119.9 | 166.2              | 170.6 | 168.7               | 173.1 | M 2.5 x 10 mm   | <b>231-295</b> | 200 ( 2 x 100 ) |
| 23       | 118.7            | 123.1 | 120.5               | 124.9 | 173.7              | 178.1 | 176.3               | 180.7 |   |                |                 |
| 24       | 123.7            | 128.1 | 125.6               | 130.0 | 181.2              | 185.6 | 184.0               | 188.4 |   |                |                 |

|   |               |
|---|---------------|
| <b>Cutout</b><br><br>for 2721 and 2231 Series<br>female connectors<br>with fixing flanges | <b>Screws</b> |
|---|---------------|



Drilled hole Ø: Depends on the type of screw used (see screws on the left).



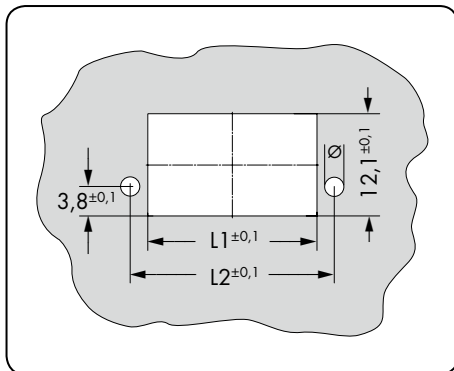
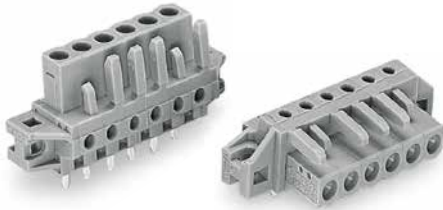
M 2.5 x 10 screws with nuts (e.g., fixing flanges)

Table 2

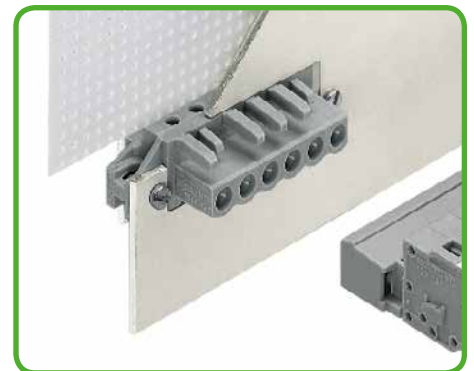
| Pole No. | Pin Spacing 5 mm |       | Pin Spacing 5.08 mm |       | Pin Spacing 7.5 mm |       | Pin Spacing 7.62 mm |       | Dimensions  | Item No.       | Pack. Unit      |
|----------|------------------|-------|---------------------|-------|--------------------|-------|---------------------|-------|---|----------------|-----------------|
|          | L1               | L2    | L1                  | L2    | L1                 | L2    | L1                  | L2    |   |                |                 |
| 2        | 13.2             | 18.4  | 13.4                | 18.6  | 15.7               | 20.9  | 15.8                | 21.0  | <b>Self-tapping screws</b><br>1.8 <sup>±0.1</sup> mm mounting hole diameter |                |                 |
| 3        | 18.2             | 23.4  | 18.4                | 23.6  | 23.2               | 28.4  | 23.4                | 28.6  |   |                |                 |
| 4        | 23.2             | 28.4  | 23.5                | 28.7  | 30.7               | 35.9  | 31.1                | 36.3  |   |                |                 |
| 5        | 28.2             | 33.4  | 28.6                | 33.8  | 38.2               | 43.4  | 38.7                | 43.9  |   |                |                 |
| 6        | 33.4             | 38.3  | 33.9                | 38.8  | 45.9               | 50.8  | 46.5                | 51.4  | B 2.2 x 9.5 mm  | <b>209-147</b> | 200 ( 2 x 100 ) |
| 7        | 38.4             | 43.3  | 39.0                | 43.9  | 53.4               | 58.3  | 54.1                | 59.0  |   |                |                 |
| 8        | 43.4             | 48.3  | 44.0                | 48.9  | 60.9               | 65.8  | 61.7                | 66.6  | B 2.2 x 13 mm   | <b>231-194</b> | 200 ( 2 x 100 ) |
| 9        | 48.4             | 53.3  | 49.1                | 54.0  | 68.4               | 73.3  | 69.4                | 74.3  |   |                |                 |
| 10       | 53.4             | 58.3  | 54.2                | 59.1  | 75.9               | 80.8  | 77.0                | 81.9  | <b>Screws with nuts</b><br>2.5 <sup>±0.1</sup> mm mounting hole diameter    |                |                 |
| 11       | 58.4             | 63.3  | 59.3                | 64.2  | 83.4               | 88.3  | 84.6                | 89.5  |   |                |                 |
| 12       | 63.4             | 68.3  | 64.4                | 69.3  | 90.9               | 95.8  | 92.2                | 97.1  |   |                |                 |
| 13       | 68.6             | 73.2  | 69.6                | 74.2  | 98.6               | 103.2 | 100.0               | 104.6 |   |                |                 |
| 14       | 73.6             | 78.2  | 74.7                | 79.3  | 106.1              | 110.7 | 107.7               | 112.3 | M 2 x 12 mm   | <b>231-195</b> | 200 ( 2 x 100 ) |
| 15       | 78.6             | 83.2  | 79.8                | 84.4  | 113.6              | 118.2 | 115.3               | 119.9 |   |                |                 |
| 16       | 83.6             | 88.2  | 84.9                | 89.5  | 121.1              | 125.7 | 122.9               | 127.5 |   |                |                 |
| 17       | 88.6             | 93.2  | 90.0                | 94.6  | 128.6              | 133.2 | 130.5               | 135.1 |   |                |                 |
| 18       | 93.6             | 98.2  | 95.0                | 99.6  | 136.1              | 140.7 | 138.1               | 142.7 | <b>Screws with nuts</b><br>3.0 <sup>±0.1</sup> mm mounting hole diameter    |                |                 |
| 19       | 98.8             | 103.1 | 100.3               | 104.6 | 143.8              | 148.1 | 146.0               | 150.3 |   |                |                 |
| 20       | 103.8            | 108.1 | 105.4               | 109.7 | 151.3              | 155.6 | 153.6               | 157.9 |   |                |                 |
| 21       | 108.8            | 113.1 | 110.5               | 114.8 | 158.8              | 163.1 | 161.2               | 165.5 |   |                |                 |
| 22       | 113.8            | 118.1 | 115.6               | 119.9 | 166.3              | 170.6 | 168.8               | 173.1 | M 2.5 x 10 mm   | <b>231-295</b> | 200 ( 2 x 100 ) |
| 23       | 118.8            | 123.1 | 120.6               | 124.9 | 173.8              | 178.1 | 176.4               | 180.7 |   |                |                 |
| 24       | 123.8            | 128.1 | 125.7               | 130.0 | 181.3              | 185.6 | 184.1               | 188.4 |   |                |                 |

# Cutout Dimensions MCS-MIDI

|  |  |               |
|--|--|---------------|
| <b>Cutout</b>  |  | <b>Screws</b> |
| for 232 and 722 Series female connectors with Solder Pins and fixing flanges |  |               |



Drilled hole Ø: Depends on the type of screw used (see screws on the left).

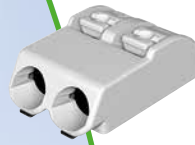


M 2.5 x 10 screws with nuts (e.g., fixing flanges)

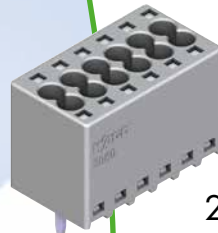
**Table 3**

| Pole No. | Pin Spacing 5 mm |       | Pin Spacing 5.08 mm |       | Pin Spacing 7.5 mm |       | Pin Spacing 7.62 mm |       | Dimensions  | Item No.       | Pack. Unit      |
|----------|------------------|-------|---------------------|-------|--------------------|-------|---------------------|-------|---|----------------|-----------------|
|          | L1               | L2    | L1                  | L2    | L1                 | L2    | L1                  | L2    |   |                |                 |
| 2        | 13.4             | 18.4  | 13.6                | 18.6  | 15.9               | 20.9  | 16.0                | 21.0  | <b>Self-tapping screws</b><br>1.8±0.1 mm mounting hole diameter |                |                 |
| 3        | 18.4             | 23.4  | 18.6                | 23.6  | 23.4               | 28.4  | 23.6                | 28.6  |   |                |                 |
| 4        | 23.4             | 28.4  | 23.7                | 28.7  | 30.9               | 35.9  | 31.3                | 36.3  |   |                |                 |
| 5        | 28.4             | 33.4  | 28.8                | 33.8  | 38.4               | 43.4  | 38.9                | 43.9  | B 2.2 x 9.5 mm  | <b>209-147</b> | 200 ( 2 x 100 ) |
| 6        | 33.5             | 38.3  | 34.0                | 38.8  | 46.0               | 50.8  | 46.6                | 51.4  | B 2.2 x 13 mm   | <b>231-194</b> | 200 ( 2 x 100 ) |
| 7        | 38.5             | 43.3  | 39.1                | 43.9  | 53.5               | 58.3  | 54.2                | 59.0  |   |                |                 |
| 8        | 43.5             | 48.3  | 44.1                | 48.9  | 61.0               | 65.8  | 61.8                | 66.6  |   |                |                 |
| 9        | 48.5             | 53.3  | 49.2                | 54.0  | 68.5               | 73.3  | 69.5                | 74.3  |   |                |                 |
| 10       | 53.5             | 58.3  | 54.3                | 59.1  | 76.0               | 80.8  | 77.1                | 81.9  | <b>Screws with nuts</b><br>2.5±0.1 mm mounting hole diameter    |                |                 |
| 11       | 58.5             | 63.3  | 59.4                | 64.2  | 83.5               | 88.3  | 84.7                | 89.5  |   |                |                 |
| 12       | 63.5             | 68.3  | 64.5                | 69.3  | 91.0               | 95.8  | 92.3                | 97.1  |   |                |                 |
| 13       | 68.6             | 73.2  | 69.6                | 74.2  | 98.6               | 103.2 | 100.0               | 104.6 |   |                |                 |
| 14       | 73.6             | 78.2  | 74.7                | 79.3  | 106.1              | 110.7 | 107.7               | 112.3 | M 2 x 12 mm   | <b>231-195</b> | 200 ( 2 x 100 ) |
| 15       | 78.6             | 83.2  | 79.8                | 84.4  | 113.6              | 118.2 | 115.3               | 119.9 |   |                |                 |
| 16       | 83.6             | 88.2  | 84.9                | 89.5  | 121.1              | 125.7 | 122.9               | 127.5 |   |                |                 |
| 17       | 88.6             | 93.2  | 90.0                | 94.6  | 128.6              | 133.2 | 130.5               | 135.1 |   |                |                 |
| 18       | 93.6             | 98.2  | 95.0                | 99.6  | 136.1              | 140.7 | 138.1               | 142.7 | <b>Screws with nuts</b><br>3.0±0.1 mm mounting hole diameter    |                |                 |
| 19       | 98.7             | 103.1 | 100.2               | 104.6 | 143.7              | 148.1 | 145.9               | 150.3 |   |                |                 |
| 20       | 103.7            | 108.1 | 105.3               | 109.7 | 151.2              | 155.6 | 153.5               | 157.9 |   |                |                 |
| 21       | 108.7            | 113.1 | 110.4               | 114.8 | 158.7              | 163.1 | 161.1               | 165.5 |   |                |                 |
| 22       | 113.7            | 118.1 | 115.5               | 119.9 | 166.2              | 170.6 | 168.7               | 173.1 | M 2.5 x 10 mm   | <b>231-295</b> | 200 ( 2 x 100 ) |
| 23       | 118.7            | 123.1 | 120.5               | 124.9 | 173.7              | 178.1 | 176.3               | 180.7 |   |                |                 |
| 24       | 123.7            | 128.1 | 125.6               | 130.0 | 181.2              | 185.6 | 184.0               | 188.4 |   |                |                 |

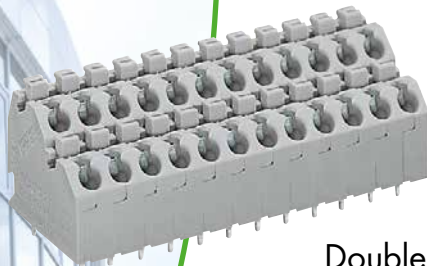




SMD Terminal Blocks  
with Push-Buttons



2-Conductor PCB Terminal  
Strips with Push-Buttons



Double-Deck PCB Terminal  
Strips with Push-Buttons



Combi PCB Terminal Blocks with  
PUSH WIRE® and FIT CLAMP®  
Connections



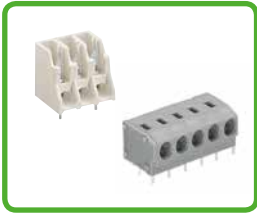
Modular PCB Terminal Blocks

# 6



**PCB Terminal Strips with Push-Buttons,  
CAGE CLAMP®S**

| Series | Pages     |
|--------|-----------|
| 2059   | 370 - 371 |
| 2060   | 372 - 381 |
| 2061   | 382 - 383 |
| 250    | 384 - 397 |
| 235    | 398 - 401 |
| 2081   | 402 - 407 |
| 805    | 408 - 413 |
| 804    | 414 - 415 |



**Modular PCB Terminal Blocks and Strips  
with Screwdriver Actuation,  
PUSH WIRE®**

|     |           |
|-----|-----------|
| 744 | 416 - 417 |
| 251 | 418 - 419 |
| 235 | 420 - 423 |
| 253 | 424 - 425 |



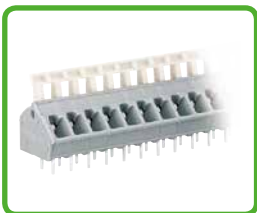
**Modular PCB Terminal Blocks and Strips  
with Push-Buttons,  
PUSH WIRE®**

|      |           |
|------|-----------|
| 2080 | 426 - 427 |
| 735  | 428 - 431 |
| 235  | 432 - 435 |



**Modular PCB Terminal Blocks and Strips  
with Screwdriver Actuation,  
CAGE CLAMP®**

|     |           |
|-----|-----------|
| 236 | 436 - 441 |
|-----|-----------|



**Modular PCB Terminal Blocks and Strips  
with Push-Buttons,  
CAGE CLAMP®**

|     |           |
|-----|-----------|
| 256 | 442 - 448 |
|-----|-----------|



## SMD Terminal Blocks, 0.34 mm<sup>2</sup> 3 mm Pin Spacing 2059 Series



- SMD terminal blocks with PUSH WIRE® connection technology
- Push-in termination of solid wires
- Easy conductor removal, e.g., via operating tool
- Just 2.7 mm high
- Side-by-side arrangement without pole loss
- Available in tape-and-reel packaging for automated assembly

### Technical data:

| Pin Spacing                    | 3 mm<br>0.118 in |        |        |
|--------------------------------|------------------|--------|--------|
| Ratings per                    | IEC/EN 60664-1   |        |        |
| Overvoltage category           | III              | III    | II     |
| Pollution degree               | 3                | 2      | 2      |
| Rated voltage                  | 63 V             | 160 V  | 320 V  |
| Rated surge voltage            | 2.5 kV           | 2.5 kV | 2.5 kV |
| Nominal current                | 3 A              | 3 A    | 3 A    |
| Approvals per                  | UL 1977          |        |        |
| Rated voltage, 1-pole          | 600 V            |        |        |
| Rated voltage, 2 or more poles | 250 V            |        |        |
| Nominal current UL             | 3 A              |        |        |

### Conductor data:

|                       |                             |
|-----------------------|-----------------------------|
| Connection technology | PUSH WIRE®                  |
| Conductor size: solid | 0.14 – 0.34 mm <sup>2</sup> |
| AWG                   | 26 – 22 "sol."              |
| Strip length          | 4 – 5.5 mm / 0.16 – 0.22 in |
| Conductor entry       | 0° to PCB                   |

### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60 °C / +105 °C                                |
| Contact material              | Copper alloy                                    |
| Contact plating               | Tin-plated                                      |

### 2059 Series accessories:

### Page:

|                 |     |
|-----------------|-----|
| Operating tools | 495 |
|                 |     |
|                 |     |
|                 |     |

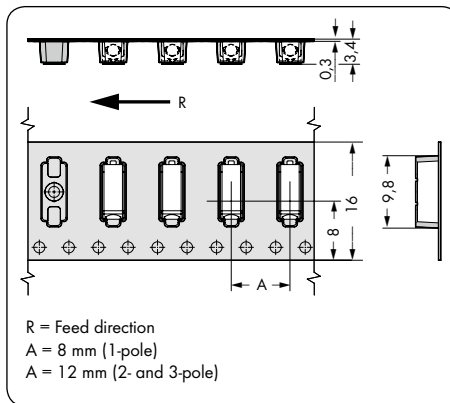
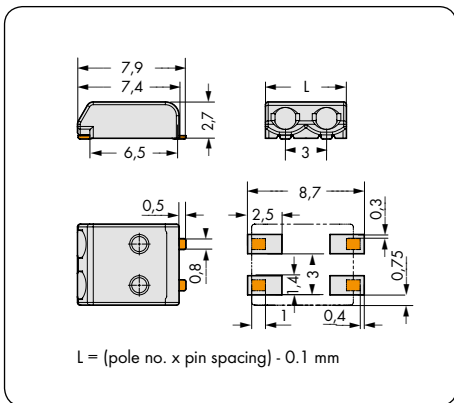
### Application note:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for SMD positioning pattern: Material thickness, 150 µm. Pattern layout identical to solder pad layout.

Pin spacing: 3 mm / 0.118 in

0.14 - 0.34 mm<sup>2</sup> "sol." | AWG 26 - 22 "sol."  
160 V/2.5 kV/2 3 A



| Pole No.   | Item No.         | Pack. Unit        |
|--|------------------|-------------------|
| <b>SMD terminal blocks in tape-and-reel packaging, white *</b> |                  |                   |
| 1  | 2059-301/998-403 | 31800 (12 x 2650) |
| 2  | 2059-302/998-403 | 21000 (12 x 1750) |
| 3  | 2059-303/998-403 | 21000 (12 x 1750) |
| Reel diameter: 330 mm  |                  |                   |



Inserting solid conductors via push-in termination.



Easy conductor removal, e.g., via 206-859 operating tool.

\* Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.

## SMD Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> 4 mm Pin Spacing 2060 Series



- SMD terminal blocks with CAGE CLAMP® S and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm high
- Available in tape-and-reel packaging for automated assembly

### Technical data:

| Pin Spacing                    | 4 mm<br>0.157 in |        |        |
|--------------------------------|------------------|--------|--------|
| Ratings per                    | IEC/EN 60664-1   |        |        |
| Overtoltage category           | III              | III    | II     |
| Pollution degree               | 3                | 2      | 2      |
| Rated voltage                  | 63 V             | 160 V  | 320 V  |
| Rated surge voltage            | 2.5 kV           | 2.5 kV | 2.5 kV |
| Nominal current                | 9 A              | 9 A    | 9 A    |
| Approvals per                  | UL 1977          |        |        |
| Rated voltage, 1-pole          | 600 V            |        |        |
| Rated voltage, 2 or more poles | 250 V            |        |        |
| Nominal current UL             | 9 A              |        |        |

### Conductor data:

|                               |  |
|-------------------------------|--|
| Connection technology         | CAGE CLAMP® S  |
| Conductor size: solid         | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 24 - 18  |
| Strip length                  | 7 - 9 mm / 0.28 - 0.35 in                              |
| Conductor entry               | 0° to PCB  |

### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60 °C / +105 °C                                |
| Contact material              | Copper alloy                                    |
| Contact plating               | Tin-plated                                      |

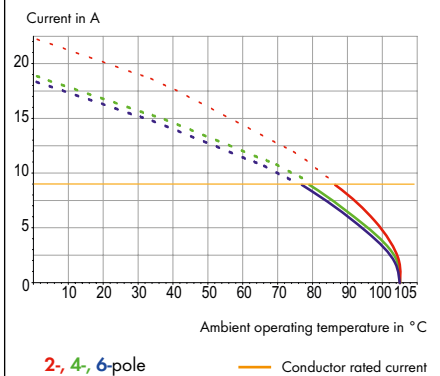
### Application note:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for SMD positioning pattern: Material thickness, 150 µm. Pattern layout identical to solder pad layout.

### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

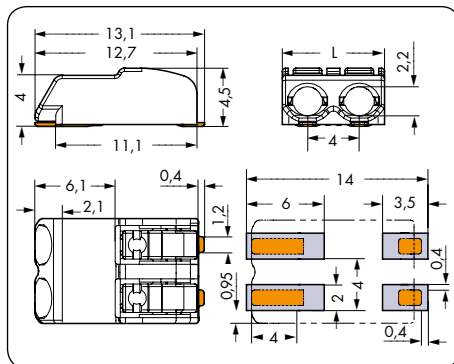


### 2060 Series accessories:

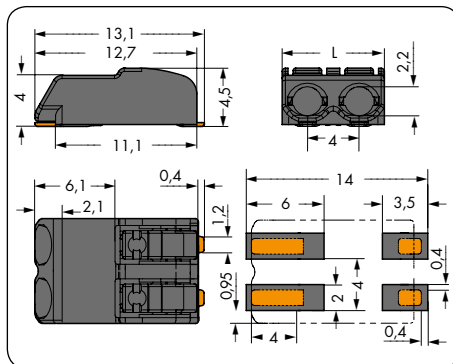
### Page:

|                 |     |
|-----------------|-----|
| Operating tools | 495 |
|                 |     |
|                 |     |
|                 |     |

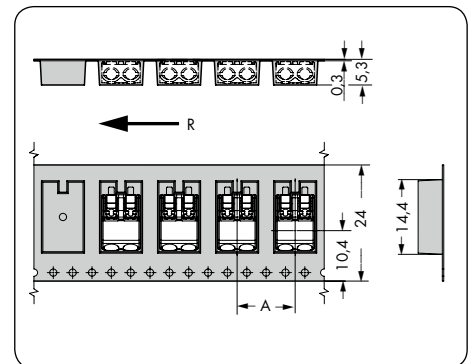
|   |  |   |  |
|---|--|---|--|
| <b>Pin spacing: 4 mm / 0.157 in</b><br><br>0.2 - 0.75 mm <sup>2</sup>   AWG 24 - 18<br>160 V/2.5 kV/2 9 A |  | <b>Pin spacing: 4 mm / 0.157 in</b><br><br>0.2 - 0.75 mm <sup>2</sup>   AWG 24 - 18<br>160 V/2.5 kV/2 9 A |  |
|---|--|---|--|



L = (pole no. x pin spacing) - 0.1 mm

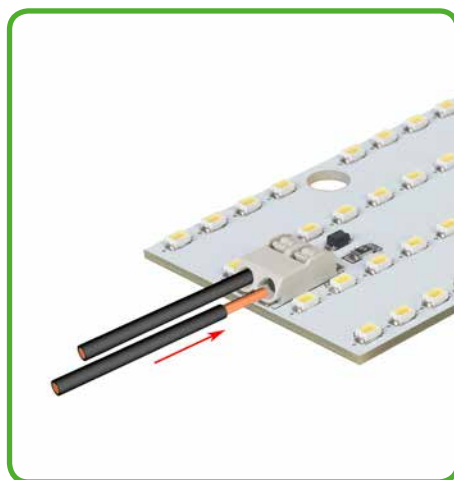


L = (pole no. x pin spacing) - 0.1 mm

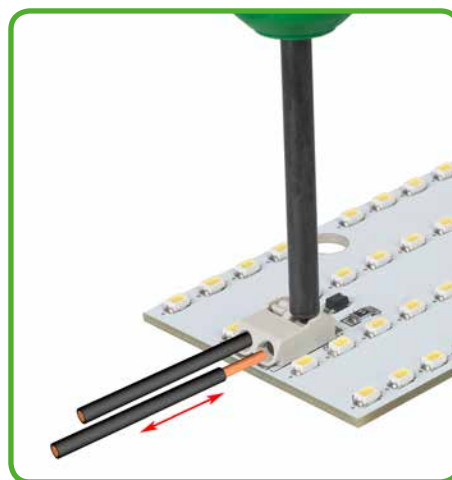


R = Feed direction  
A = (pole no. x pin spacing) + 4 mm

| Pole No.   | Item No.         | Pack. Unit       | Pole No.  | Item No.         | Pack. Unit       |
|--|------------------|------------------|---|------------------|------------------|
| SMD terminal blocks with push-buttons in tape-and-reel packaging, white* |                  |                  | SMD terminal blocks with push-buttons in tape-and-reel packaging, black |                  |                  |
| 1  | 2060-451/998-404 | 13500 (9 x 1500) | 1   | 2060-471/998-404 | 13500 (9 x 1500) |
| 2  | 2060-452/998-404 | 9000 (9 x 1000)  | 2   | 2060-472/998-404 | 9000 (9 x 1000)  |
| 3  | 2060-453/998-404 | 6750 (9 x 750)   | 3   | 2060-473/998-404 | 6750 (9 x 750)   |
| Reel diameter: 330 mm  |                  |                  | Reel diameter: 330 mm   |                  |                  |



Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).



Terminal blocks can be arranged side-by-side without loss of poles.

\* Depending on reflow soldering temperatures and times, color deviations may occur for white connectors. These deviations will have no impact on functionality.

## SMD Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> 8 mm Pin Spacing 2060 Series



- SMD terminal blocks with CAGE CLAMP® S and push-buttons
- 8 mm pin spacing version for higher rated voltages
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Height of just 4.5 mm minimizes on-board LED shadowing
- Available in tape-and-reel packaging for automated assembly

### Technical data:

| Pin Spacing          | 8 mm<br>0.314 in |       |        |
|----------------------|------------------|-------|--------|
| Ratings per          | IEC/EN 60664-1   |       |        |
| Overtoltage category | III              | III   | II     |
| Pollution degree     | 3                | 2     | 2      |
| Rated voltage        | 400 V            | 630 V | 1000 V |
| Rated surge voltage  | 6 kV             | 6 kV  | 6 kV   |
| Nominal current      | 9 A              | 9 A   | 9 A    |
| Approvals per        | UL 1977          |       |        |
| Rated voltage        | 600 V            |       |        |
| Nominal current UL   | 9 A              |       |        |

### Conductor data:

|                               |  |
|-------------------------------|--|
| Connection technology         | CAGE CLAMP® S  |
| Conductor size: solid         | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 0.34 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 24 - 18  |
| Strip length                  | 7 - 9 mm / 0.28 - 0.35 in                              |
| Conductor entry               | 0° to PCB  |

### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60 °C / +105 °C                                |
| Contact material              | Copper alloy                                    |
| Contact plating               | Tin-plated                                      |

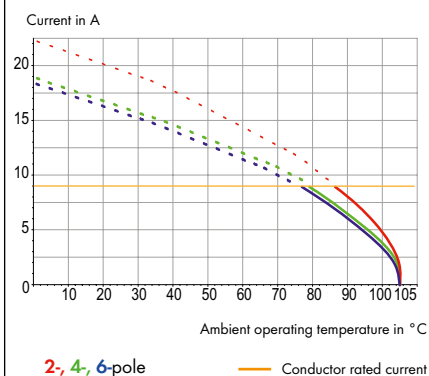
### Application note:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for SMD positioning pattern: Material thickness, 150 µm. Pattern layout identical to solder pad layout.

### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

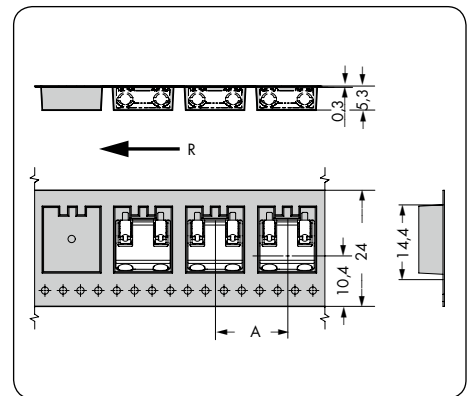
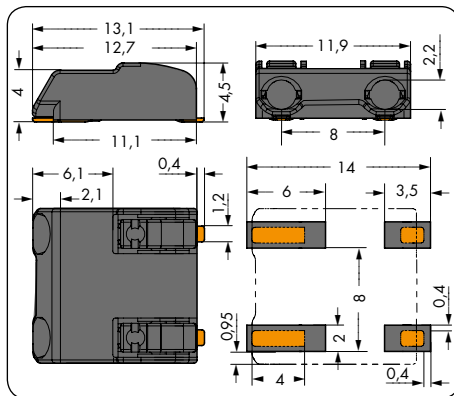
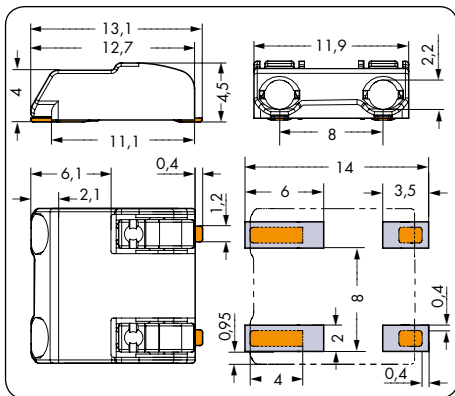


### 2060 Series accessories:

### Page:

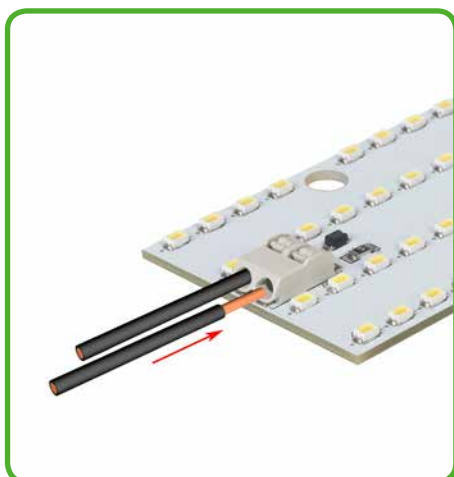
|                 |     |
|-----------------|-----|
| Operating tools | 495 |
|                 |     |
|                 |     |
|                 |     |

|   |  |   |  |
|---|--|---|--|
| <b>Pin spacing: 8 mm / 0.314 in</b><br>0.2 - 0.75 mm <sup>2</sup>   AWG 24 - 18<br>630 V/6 kV/2 9 A |  | <b>Pin spacing: 8 mm / 0.314 in</b><br>0.2 - 0.75 mm <sup>2</sup>   AWG 24 - 18<br>630 V/6 kV/2 9 A |  |
|---|--|---|--|

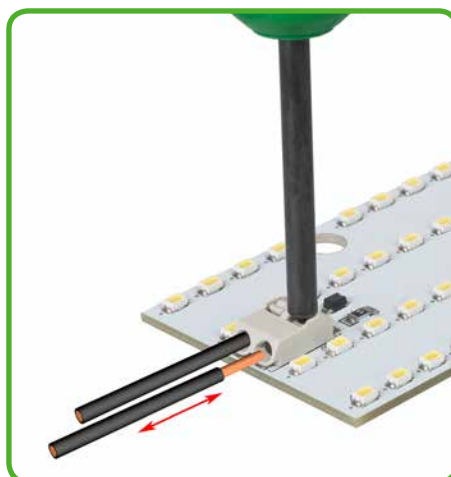


R = Feed direction  
A = 16 mm

| Pole No.   | Item No.         | Pack. Unit     | Pole No.  | Item No.         | Pack. Unit     |
|--|------------------|----------------|---|------------------|----------------|
| SMD terminal blocks with push-buttons in tape-and-reel packaging, white* |                  |                | SMD terminal blocks with push-buttons in tape-and-reel packaging, black |                  |                |
| 2  | 2060-852/998-404 | 6750 (9 x 750) | 2   | 2060-872/998-404 | 6750 (9 x 750) |
| Reel diameter: 330 mm  |                  |                | Reel diameter: 330 mm   |                  |                |



Inserting solid conductors via push-in termination. (Picture shows 2060 Series)



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

\* Depending on reflow soldering temperatures and times, color deviations may occur for white connectors. These deviations will have no impact on functionality.

## THR Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> 4 mm Pin Spacing 2060 Series



- THR terminal blocks with CAGE CLAMP® S and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm high
- Available in tape-and-reel packaging for automated assembly
- Also suitable for wave soldering

### Technical data:

| Pin Spacing          | 4 mm<br>0.157 in |        |        |  |  |
|----------------------|------------------|--------|--------|--|--|
| Ratings per          | IEC/EN 60664-1   |        |        |  |  |
| Overtoltage category | III              | III    | II     |  |  |
| Pollution degree     | 3                | 2      | 2      |  |  |
| Rated voltage        | 63 V             | 160 V  | 320 V  |  |  |
| Rated surge voltage  | 2.5 kV           | 2.5 kV | 2.5 kV |  |  |
| Nominal current      | 9 A              | 9 A    | 9 A    |  |  |

### Conductor data:

|   |  |
|---|--|
| Connection technology                   | CAGE CLAMP® S  |
| Conductor size: solid                   | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded           | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded           | 0.25 - 0.34 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded           | 0.25 - 0.34 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                                     | 24 - 18  |
| Strip length                            | 7 - 9 mm / 0.28 - 0.35 in                              |
| Conductor entry                         | 0° to PCB  |
| Solder pin: length/width                | 2.4 mm / 1.2 x 0.75 mm                                 |
| Solder pin: metal-plated hole           | 1.5 <sup>+0.1</sup> mm Ø                               |
| Outer diameter of metal-plated PCB hole | min. 2.4 mm  |

### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60 °C / +105 °C                                |
| Contact material              | Copper alloy                                    |
| Contact plating               | Tin-plated                                      |

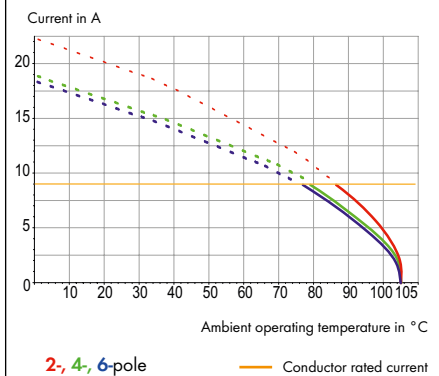
### Application note:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for SMD positioning pattern: Material thickness, 150 µm.  
The stencil hole diameter is identical to the outer diameter of the metal-plated PCB hole.

### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



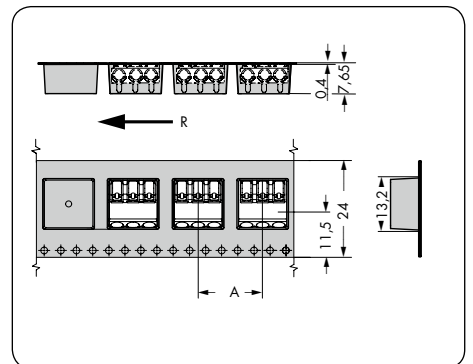
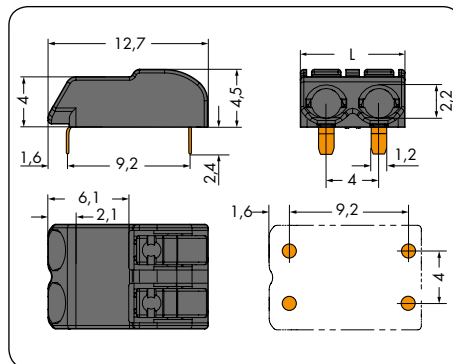
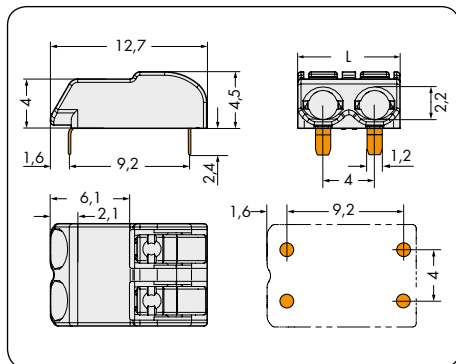
### 2060 Series accessories:

### Page:

|                 |     |
|-----------------|-----|
| Operating tools | 495 |
|                 |     |
|                 |     |



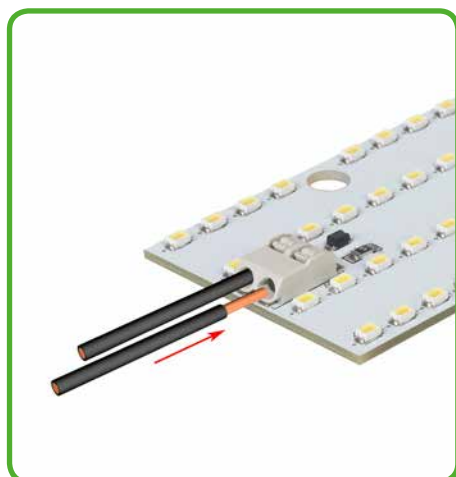
|                                     |             |                                     |             |  |
|-------------------------------------|-------------|-------------------------------------|-------------|--|
| <b>Pin spacing: 4 mm / 0.157 in</b> |             | <b>Pin spacing: 4 mm / 0.157 in</b> |             |  |
| 0.2 - 0.75 mm <sup>2</sup>          | AWG 24 - 18 | 0.2 - 0.75 mm <sup>2</sup>          | AWG 24 - 18 |  |
| 160 V/2.5 kV/2 9 A                  |             | 160 V/2.5 kV/2 9 A                  |             |  |



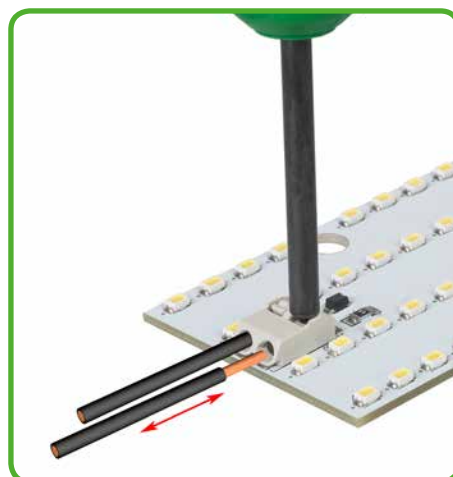
L = (pole no. x pin spacing) - 0.1 mm

R = Feed direction  
A = (pole no. x pin spacing) + 4 mm

| Pole No.  | Item No.          | Pack. Unit       | Pole No.   | Item No.          | Pack. Unit       |
|---|-------------------|------------------|--|-------------------|------------------|
| <b>THR terminal blocks with push-buttons in tape-and-reel packaging, white*</b> |                   |                  | <b>THR terminal blocks with push-buttons in tape-and-reel packaging, black</b> |                   |                  |
| 1   | 2060-1451/998-404 | 10800 (9 x 1200) | 1  | 2060-1471/998-404 | 10800 (9 x 1200) |
| 2   | 2060-1452/998-404 | 6750 (9 x 750)   | 2  | 2060-1472/998-404 | 6750 (9 x 750)   |
| 3   | 2060-1453/998-404 | 4950 (9 x 550)   | 3  | 2060-1473/998-404 | 4950 (9 x 550)   |
| Reel diameter: 330 mm   |                   |                  | Reel diameter: 330 mm  |                   |                  |



Inserting solid conductors via push-in termination.



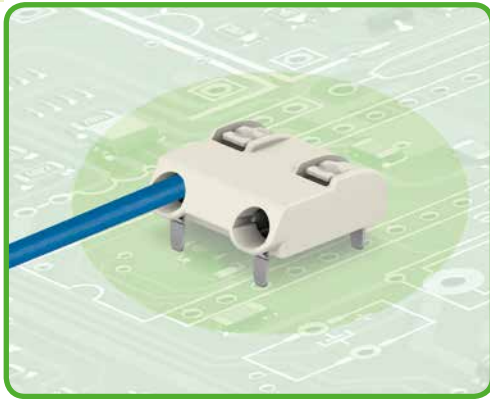
Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).



Terminal blocks can be arranged side-by-side without loss of poles.

\* Depending on reflow soldering temperatures and times, color deviations may occur for white connectors. These deviations will have no impact on functionality.

## THR Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> 8 mm Pin Spacing 2060 Series



- THR terminal blocks with CAGE CLAMP® S and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm high
- Available in tape-and-reel packaging for automated assembly
- Also suitable for wave soldering

### Technical data:

| Pin Spacing          | 8 mm<br>0.314 in |       |        |
|----------------------|------------------|-------|--------|
| Ratings per          | IEC/EN 60664-1   |       |        |
| Overtoltage category | III              | III   | II     |
| Pollution degree     | 3                | 2     | 2      |
| Rated voltage        | 400 V            | 630 V | 1000 V |
| Rated surge voltage  | 6 kV             | 6 kV  | 6 kV   |
| Nominal current      | 9 A              | 9 A   | 9 A    |

### Conductor data:

|   |  |
|---|--|
| Connection technology                   | CAGE CLAMP® S  |
| Conductor size: solid                   | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded           | 0.2 - 0.75 mm <sup>2</sup>                             |
| Conductor size: fine-stranded           | 0.25 - 0.34 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded           | 0.25 - 0.34 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                                     | 24 - 18  |
| Strip length                            | 7 - 9 mm / 0.28 - 0.35 in                              |
| Conductor entry                         | 0° to PCB  |
| Solder pin: length/width                | 2.4 mm / 1.2 x 0.75 mm                                 |
| Solder pin: metal-plated hole           | 1.5 <sup>+0.1</sup> mm Ø                               |
| Outer diameter of metal-plated PCB hole | min. 2.4 mm  |

### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60 °C / +105 °C                                |
| Contact material              | Copper alloy                                    |
| Contact plating               | Tin-plated                                      |

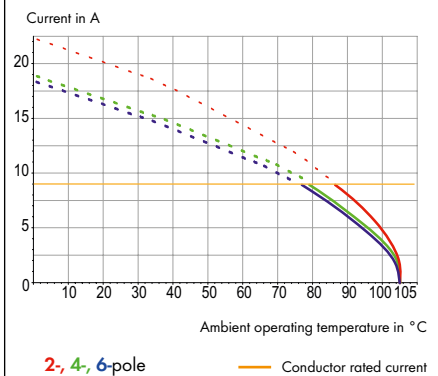
### Application note:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for SMD positioning pattern: Material thickness, 150 µm.  
The stencil hole diameter is identical to the outer diameter of the metal-plated PCB hole.

### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

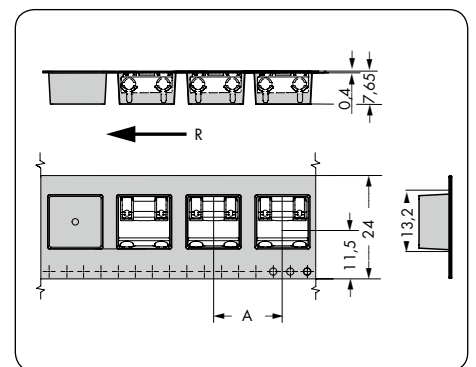
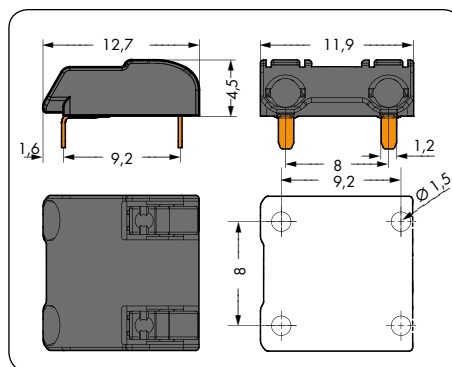
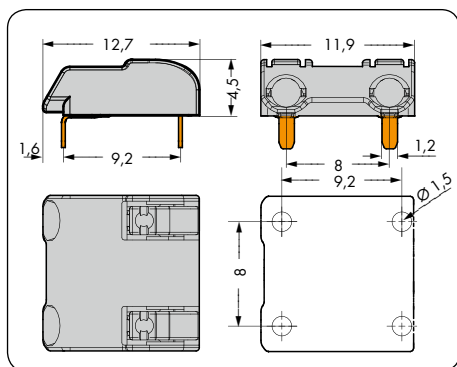


### 2060 Series accessories:

Page:

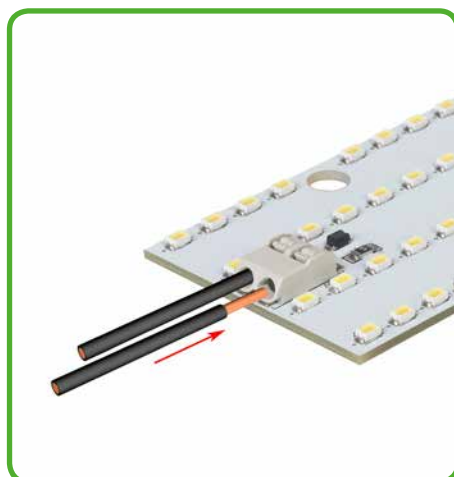
|                 |     |
|-----------------|-----|
| Operating tools | 495 |
|                 |     |
|                 |     |

|                              |             |                              |             |  |
|------------------------------|-------------|------------------------------|-------------|--|
| Pin spacing: 8 mm / 0.314 in |             | Pin spacing: 8 mm / 0.314 in |             |  |
| 0.2 - 0.75 mm <sup>2</sup>   | AWG 24 - 18 | 0.2 - 0.75 mm <sup>2</sup>   | AWG 24 - 18 |  |
| 630 V/6 kV/2 9 A             |             | 630 V/6 kV/2 9 A             |             |  |

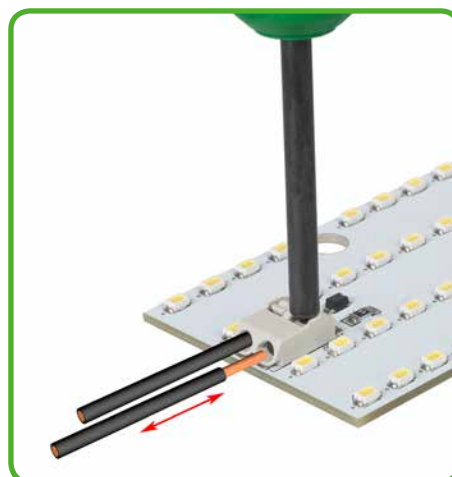


R = Feed direction  
A = 16 mm

| Pole No.   | Item No.          | Pack. Unit     | Pole No.  | Item No.          | Pack. Unit     |
|--|-------------------|----------------|---|-------------------|----------------|
| THR terminal blocks with push-buttons in tape-and-reel packaging, white* |                   |                | THR terminal blocks with push-buttons in tape-and-reel packaging, black |                   |                |
| 2  | 2060-1852/998-404 | 4950 (9 x 550) | 2   | 2060-1872/998-404 | 4950 (9 x 550) |
| Reel diameter: 330 mm  |                   |                | Reel diameter: 330 mm   |                   |                |



Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

\* Depending on reflow soldering temperatures and times, color deviations may occur for white connectors. These deviations will have no impact on functionality.

## Board-to-Board Links for SMD Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup>, 4 mm Pin Spacing 2060 Series



- Board-to-board link simplifies in-line assembly of LED modules
- Easy push-in termination and disconnection without push-button actuation

### Technical data:

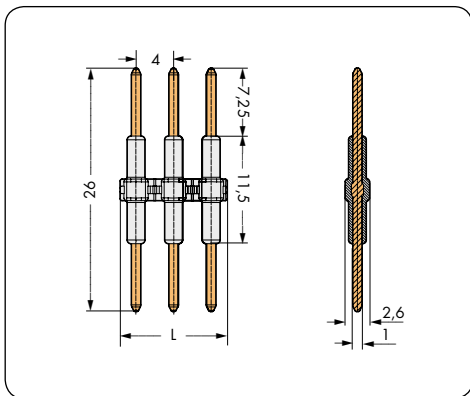
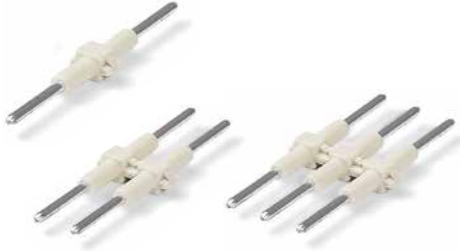
| Pin Spacing          | 4 mm<br>0.157 in |        |        |  |  |
|----------------------|------------------|--------|--------|--|--|
| Ratings per          | IEC/EN 60664-1   |        |        |  |  |
| Overtoltage category | III              | III    | II     |  |  |
| Pollution degree     | 3                | 2      | 2      |  |  |
| Rated voltage        | 63 V             | 160 V  | 320 V  |  |  |
| Rated surge voltage  | 2.5 kV           | 2.5 kV | 2.5 kV |  |  |
| Nominal current      | 9 A              | 9 A    | 9 A    |  |  |
| Approvals per        | UL/CSA           |        |        |  |  |
| Rated voltage        | 250 V            |        |        |  |  |
| Nominal current UL   | 9 A              |        |        |  |  |

### Material data:

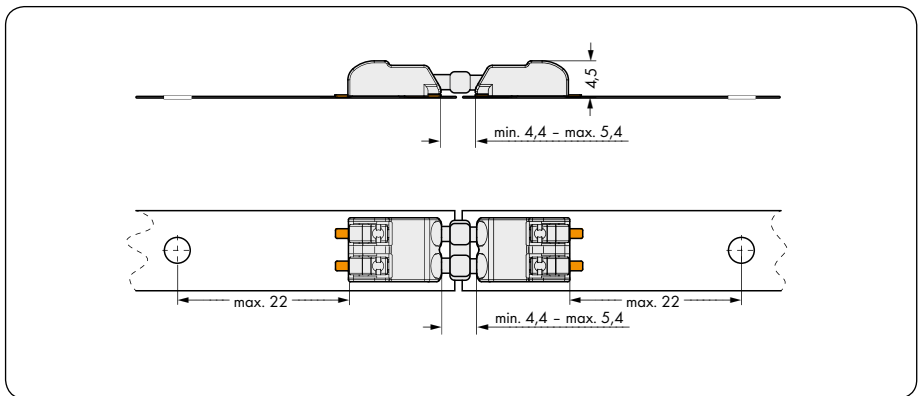
|                               |                        |
|-------------------------------|------------------------|
| Material group                | I                      |
| Insulation material           | Polyamide 6.6 (PA 6.6) |
| Flammability rating per UL 94 | V0                     |
| Lower/Upper limit temperature | -60 °C / +105 °C       |
| Contact material              | Copper alloy           |
| Contact plating               | Silver-plated          |

# Board-to-Board Links for SMD Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup>

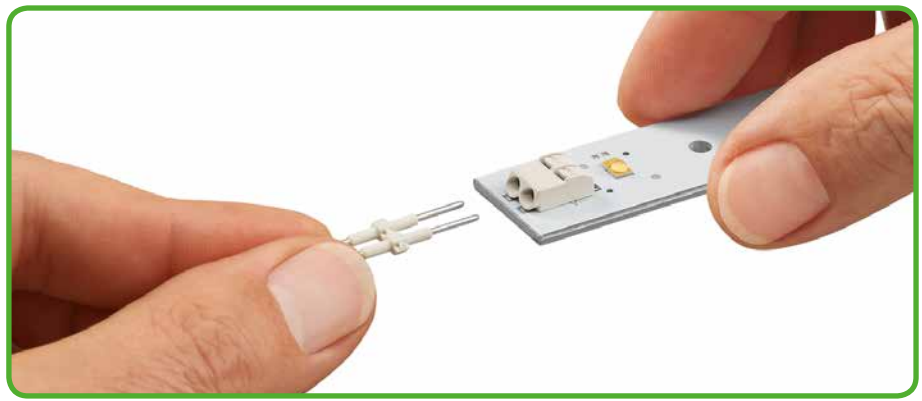
|                              |           |  |
|------------------------------|-----------|--|
| Pin spacing: 4 mm / 0.157 in |           |  |
| 160 V/2.5 kV/2 9 A           | 250 V/9 A |  |



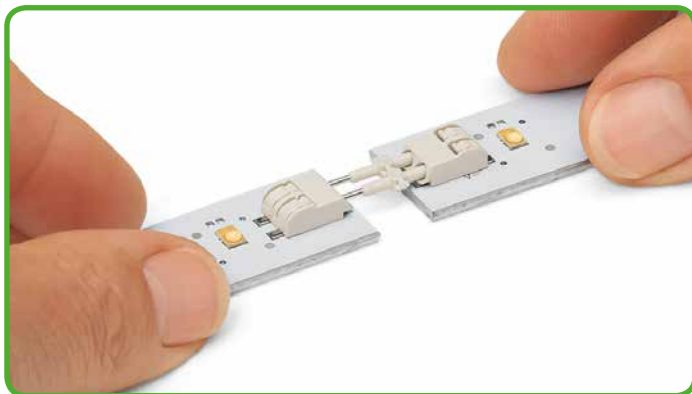
L = (pole no. x pin spacing) - 0.6 mm



| Pole No.   | Item No. | Pack. Unit |
|--|----------|------------|
| <b>Board-to-board link for SMD terminal blocks with push-buttons</b> |          |            |
| 1  | 2060-901 | 1500       |
| 2  | 2060-902 | 500        |
| 3  | 2060-903 | 375        |

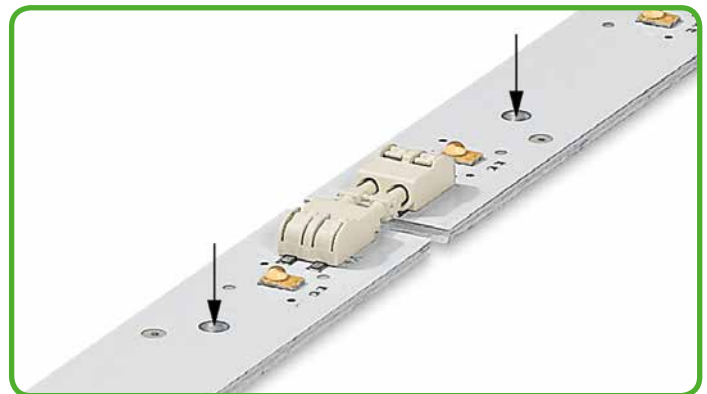


Inserting board-to-board link into terminal block.



Assembly: Place PCBs on a flat surface and insert links into terminal blocks on adjoining PCBs.

Disassembly: Pull PCBs apart. (max. 10 connections/disconnections)



The PCBs must be secured (see figure above).

# SMD Terminal Blocks with Push-Buttons, 1.5 mm<sup>2</sup> 6 mm Pin Spacing 2061 Series



- SMD terminal blocks with CAGE CLAMP® S and push-buttons
- Just 5.6 mm high
- Push-in termination of solid and ferruled conductors
- Push-buttons for easy connection and disconnection of all conductor types
- Available in tape-and-reel packaging for automated assembly

### Technical data:

| Pin Spacing                    | 6 mm / 0.24 in |        |        |
|--------------------------------|----------------|--------|--------|
| Ratings per                    | IEC/EN 60664-1 |        |        |
| Overtoltage category           | III            | III    | II     |
| Pollution degree               | 3              | 2      | 2      |
| Rated voltage                  | 250 V          | 320 V  | 630 V  |
| Rated surge voltage            | 4 kV           | 4 kV   | 4 kV   |
| Nominal current                | 17.5 A         | 17.5 A | 17.5 A |
| Approvals per                  | UL             |        |        |
| Use group UL 1059              | B              | C      | D      |
| Rated voltage, 1-pole          | 600 V          | -      | 600 V  |
| Rated voltage, 2 or more poles | 300 V          | -      | 300 V  |
| Nominal current UL             | 10 A           | -      | 10 A   |

### Conductor data:

|                               |   |
|-------------------------------|---|
| Connection technology         | CAGE CLAMP® S   |
| Conductor size: solid         | 0.5 - 1.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.5 - 1.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded | 0.5 - 0.75 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.5 - 0.75 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 20 - 16   |
| Strip length                  | 7 - 10 mm / 0.28 - 0.39 in                            |
| Conductor entry               | 0° to PCB   |

### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60°C / +105°C                                  |
| Contact material              | Copper alloy                                    |
| Contact plating               | Tin-plated                                      |

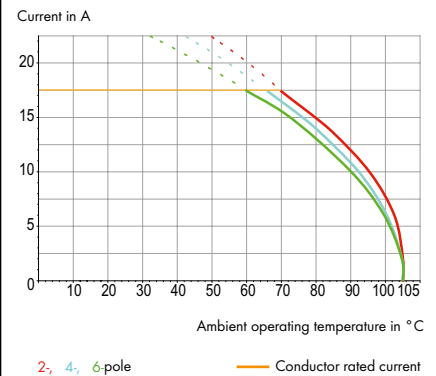
### Application note:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260°C peak temperature. Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for SMD positioning pattern: Material thickness, 150 µm. Stencil layout identical to pad layout.

### Current-Carrying Capacity Curve

Pin spacing: 6 mm / Conductor size 1.5 mm<sup>2</sup> "fst"  
Based on: EN 60512-5-2 / Reduction factor: 1

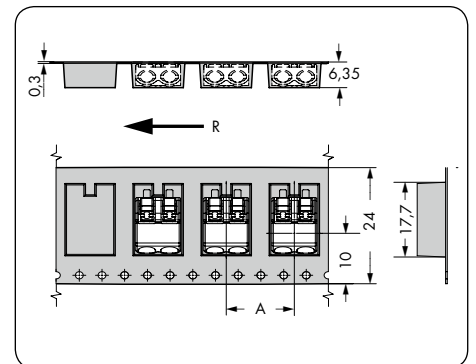
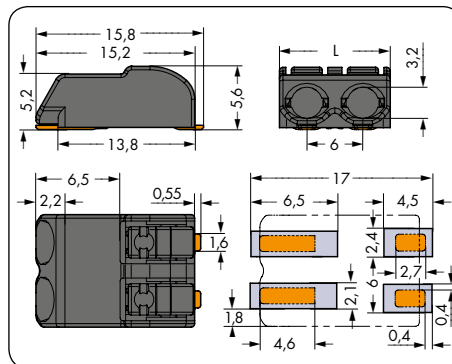
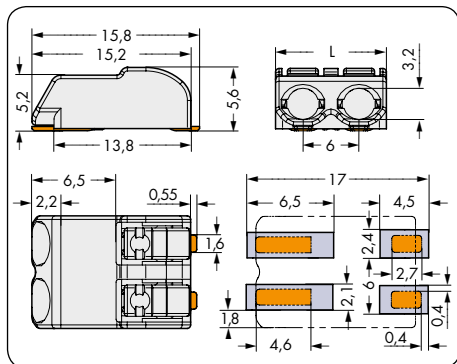


### 2061 Series accessories:

### Page:

|                 |     |
|-----------------|-----|
| Operating tools | 495 |
|                 |     |
|                 |     |

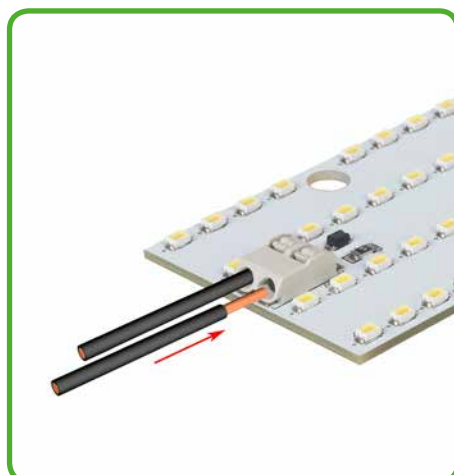
|  |  |  |  |
|--|--|--|--|
| <b>Pin spacing: 6 mm / 0.24 in</b><br><br>0.5 - 1.5 mm <sup>2</sup>   AWG 20 - 16<br>320 V/4 kV/2 17.5 A |  | <b>Pin spacing: 6 mm / 0.24 in</b><br><br>0.5 - 1.5 mm <sup>2</sup>   AWG 20 - 16<br>320 V/4 kV/2 17.5 A |  |
|--|--|--|--|



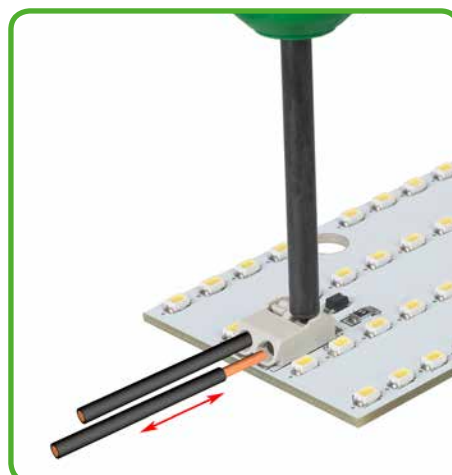
L = (pole no. x pin spacing) - 0.3 mm

R = Feed direction  
 A = 12 mm (1-pole)  
 A = 16 mm (2-pole)  
 A = 22 mm (3-pole)

| Pole No.   | Item No.         | Pack. Unit     | Pole No.  | Item No.         | Pack. Unit     |
|--|------------------|----------------|---|------------------|----------------|
| SMD terminal blocks with push-buttons in tape-and-reel packaging, white* |                  |                | SMD terminal blocks with push-buttons in tape-and-reel packaging, black |                  |                |
| 1  | 2061-601/998-404 | 8100 (9 x 900) | 1   | 2061-621/998-404 | 8100 (9 x 900) |
| 2  | 2061-602/998-404 | 6300 (9 x 700) | 2   | 2061-622/998-404 | 6300 (9 x 700) |
| 3  | 2061-603/998-404 | 4050 (9 x 450) | 3   | 2061-623/998-404 | 4050 (9 x 450) |
| Reel diameter: 330 mm  |                  |                | Reel diameter: 330 mm   |                  |                |



Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-861 operating tool).

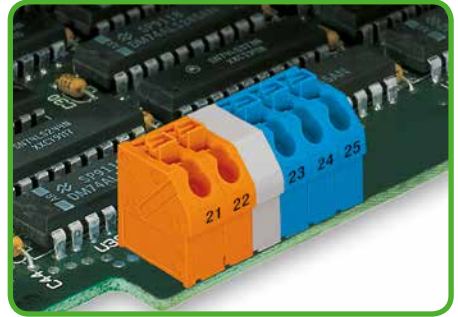
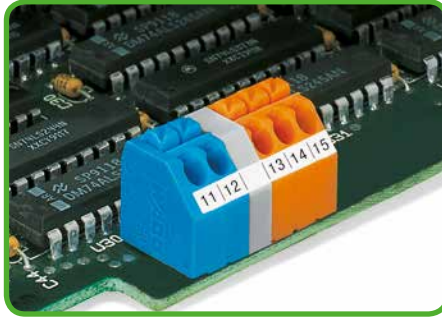
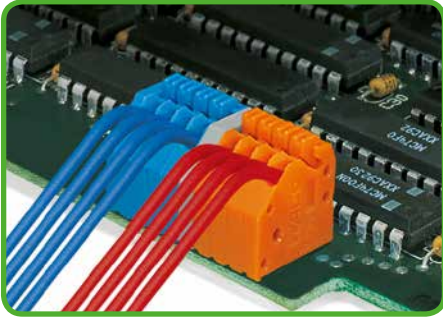
\* Depending on reflow soldering temperatures and times, color deviations may occur for white connectors. These deviations will have no impact on functionality.



# 6 System Description and Handling

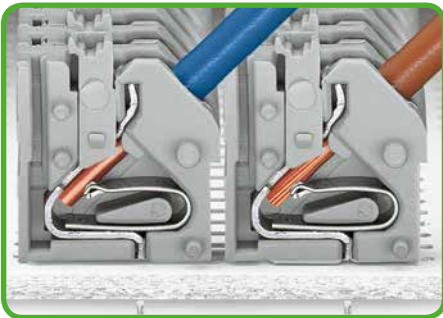
## 250 Series

384



Marking via self-adhesive strips or factory direct printing. Mixed-color terminal strips (with or without spacer) available upon request.

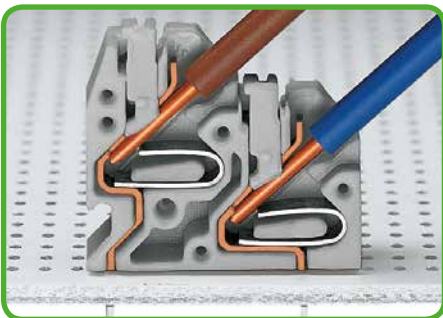
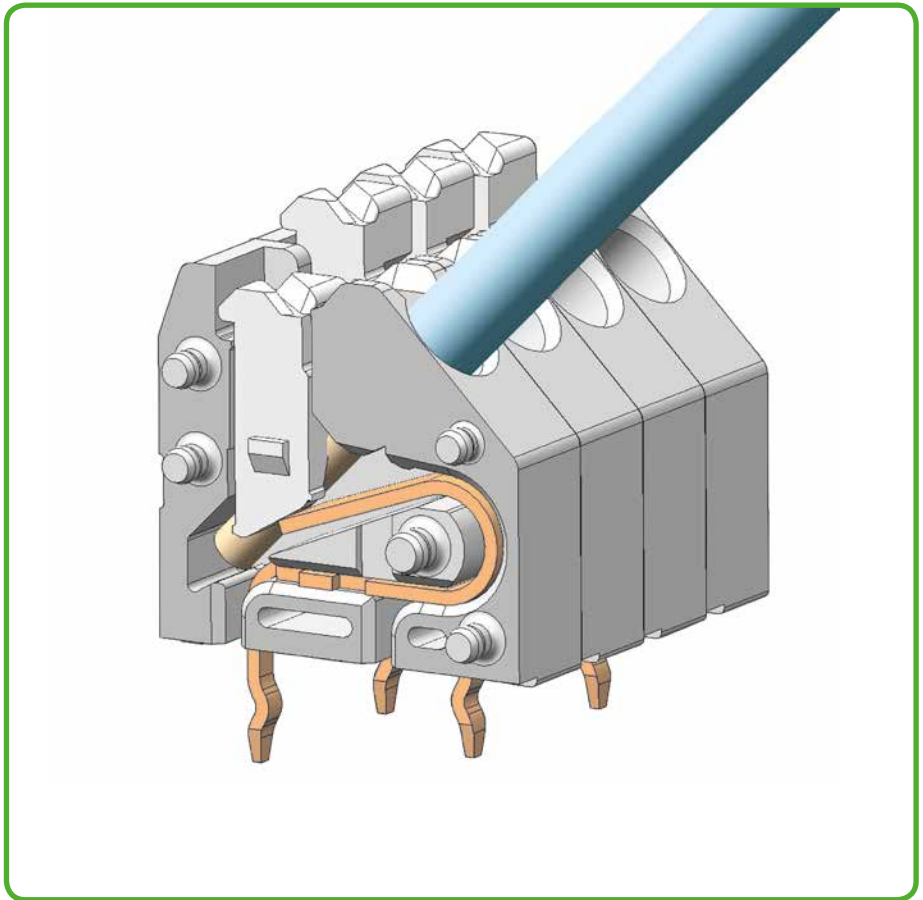
### 250 Series



Space-saving wiring, 250 Series – 5 mm pin spacing.



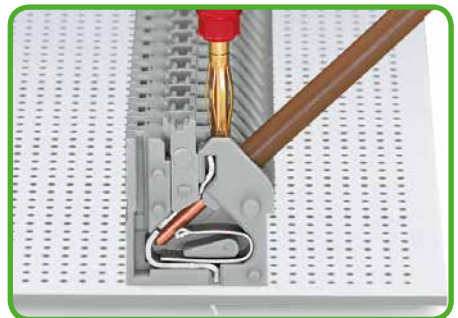
Inserting solid conductors via push-in termination. Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.



Space-saving wiring. Push-in termination of solid conductors.



Testing with 1 mm Ø test pin, on the conductor, 250 Series – 2.5 to 3.5 mm pin spacing.



Testing with 2 mm Ø test plug, touch contact with current bar, 250 Series – 5 mm pin spacing.

**CAGE CLAMP<sup>®</sup>S for 250 and 235 Series clamps the following copper conductors:\***



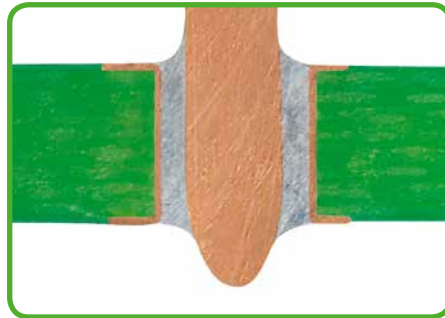
solid



fine-stranded, also with tinned single strands

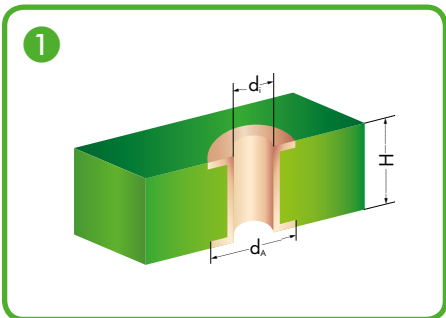
\* For aluminum conductors, see Page 507.

# THR Soldering Process (Through-Hole Reflow)

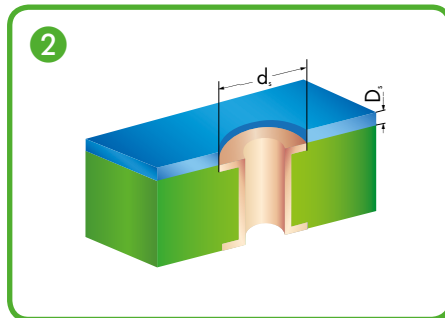


By using high-temperature resistant plastic and a streamlined pin design, the WAGO Through-Hole Reflow headers and PCB terminal blocks meet requirements for SMT process capability while maintaining necessary stability. The headers and THR PCB terminal blocks are simply pushed into the solder paste-filled PCB holes and then soldered along with the SMT components via reflow soldering. The previous wave soldering process is no longer necessary. The result is a perfect connection - both mechanically and electrically.

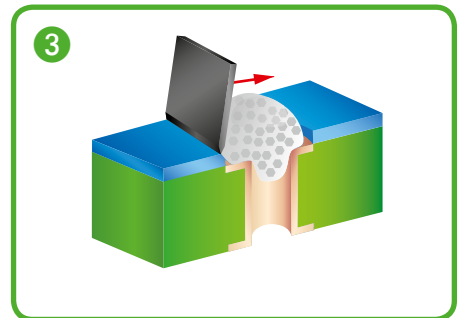
Terminal strips with additional suction pad in tape-and-reel packaging according to IEC 60286-3.



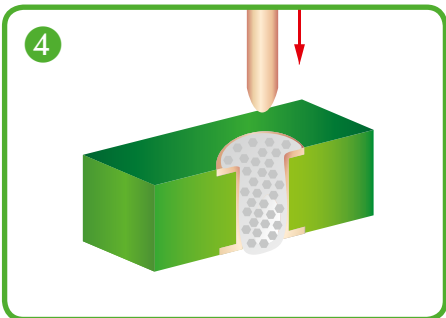
1 Metal-plated PCB hole



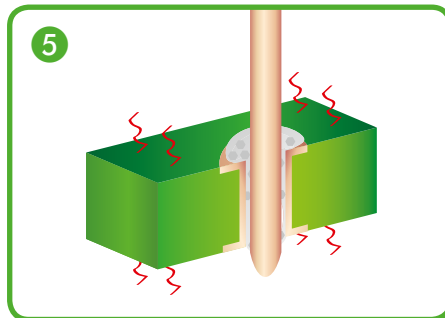
2 SMD positioning pattern



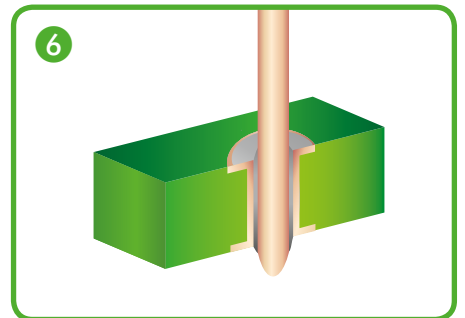
3 Application of solder paste



4 Component assembly automatic/by hand



5 Reflow soldering process



6 THR soldering joint



| Series | d <sub>i</sub> (mm) | d <sub>a</sub> (mm) | H(mm) | d <sub>s</sub> (mm) | D <sub>s</sub> (μm) | d(mm) | L(mm) |
|--------|---------------------|---------------------|-------|---------------------|---------------------|-------|-------|
| 236    | 1.1 <sup>+0.1</sup> | 2.2                 | < 2   | 2.1                 | 150                 | 0.9   | 3.6   |
| 250    | 1.1 <sup>+0.1</sup> | 2.0                 | < 2   | 1.9                 | 150                 | 0.9   | 3.6   |
| 2081   | 1.1 <sup>+0.1</sup> | 2.0                 | < 2   | 1.9                 | 150                 | 0.9   | 3.6   |

- d<sub>i</sub>: Inner diameter of metal-plated PCB hole
- d<sub>a</sub>: Outer diameter of metal-plated PCB bore hole\*
- H: PCB thickness
- d<sub>s</sub>: Pattern hole diameter
- D<sub>s</sub>: Pattern thickness
- d: Pin diagonal
- L: Pin length

\* When laying out the metal-plated bore holes, the clearance and creepage distance requirements - as specified in the equipment standards - must be considered.

WAGO recommends a temperature profile that adheres to EN 61760-1 and the use of forced convection ovens for processing THR components.



fine-stranded, tip bonded

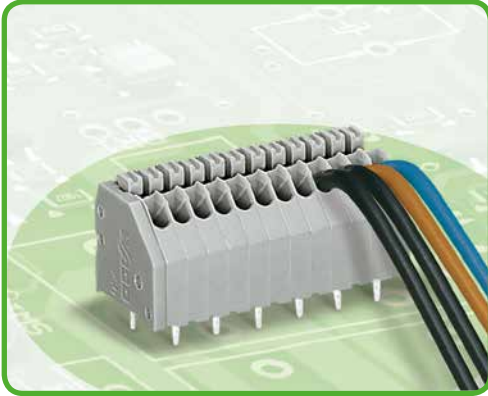


fine-stranded with ferrules (gas-tight crimped)



fine-stranded with pin-end connector (gas-tight crimped)

# PCB Terminal Strips with Push-Buttons 0.5 mm<sup>2</sup> Pin Spacing 2.5 mm, 2.54 mm 250 Series



- Compact terminal strips with push-buttons
- Push-in termination of solid conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips with spacers also available upon request

### Technical data:

| Pin Spacing          | 2.5 mm<br>0.098 in |        |        | 2.54 mm<br>0.1 in |        |        |
|----------------------|--------------------|--------|--------|-------------------|--------|--------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1    |        |        |
| Rating per           | III                | III    | II     | III               | III    | II     |
| Overtoltage category | 3                  | 2      | 2      | 3                 | 2      | 2      |
| Pollution degree     | 3                  | 2      | 2      | 3                 | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 160 V             | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 2.5 kV            | 2.5 kV | 2.5 kV |
| Nominal current      | 4 A                | 4 A    | 4 A    | 4 A               | 4 A    | 4 A    |
| Approvals per        | UL/CSA             |        |        | UL/CSA            |        |        |
| Use group UL1059     | B                  | C      | D      | B                 | C      | D      |
| Rated voltage        | 300 V              | -      | 300 V  | 300 V             | -      | 300 V  |
| Nominal current UL   | 5 A                | -      | 5 A    | 5 A               | -      | 5 A    |
| Nominal current CSA  | 2 A                | -      | 2 A    | 2 A               | -      | 2 A    |

### Conductor and solder pin data:

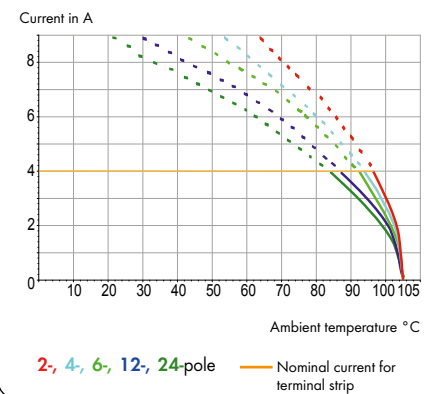
|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®S                                |
| Conductor size: solid             | 0.14 - 0.5 mm <sup>2</sup> (0.4 - 0.8 mm Ø) |
| Conductor size: fine-stranded     | 0.2 - 0.5 mm <sup>2</sup>                   |
| AWG                               | 24 - 20 (26 "sol.")                         |
| Strip length                      | 8.5 - 9.5 mm / 0.32 - 0.36 in               |
| Conductor entry angle             | 45° to PCB                                  |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.75 mm                      |
| Solder pin: drilled hole diameter | 1.1 <sup>-0.1</sup> mm                      |

### Material data:

|                               |                    |
|-------------------------------|--------------------|
| Material group                | I                  |
| Insulating material           | Nylon 6.6 (PA 6.6) |
| Temperature stability         | -60 °C to +105 °C  |
| Flammability rating per UL 94 | V0                 |
| Clamping spring material      | Copper alloy       |
| Contact plating               | Copper             |

### Current-Carrying Capacity Curve

Pin spacing: 2.5 mm / Conductor size: 0.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

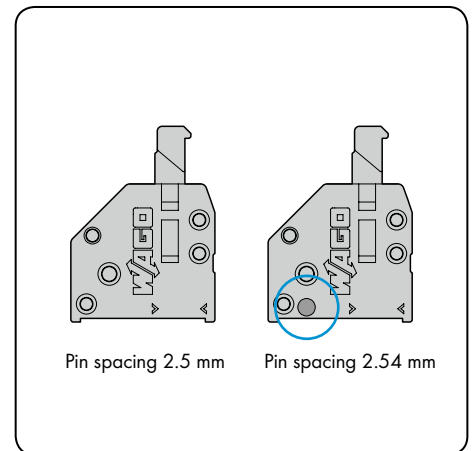
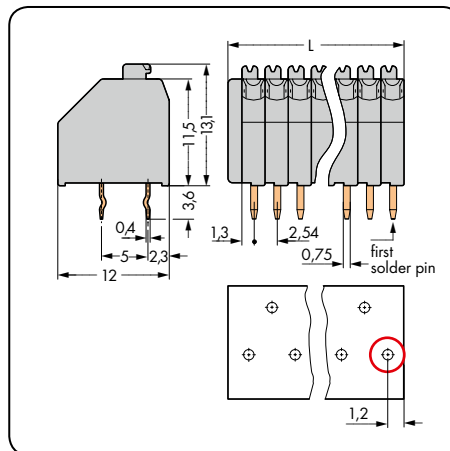
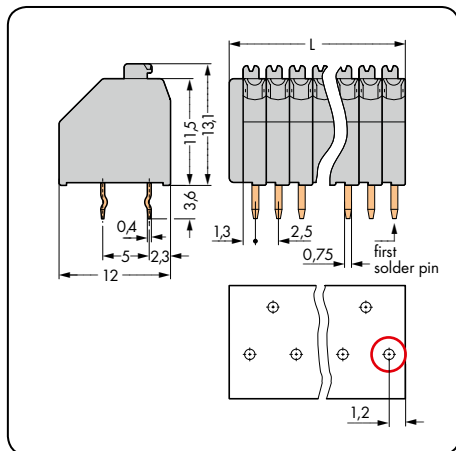


### 250 Series accessories:

### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |

| Pin spacing 2.5 mm / 0.098 in |             | Pin spacing 2.54 mm / 0.1 in |             |
|-------------------------------|-------------|------------------------------|-------------|
| 0.2 – 0.5 mm <sup>2</sup>     | AWG 24 – 20 | 0.2 – 0.5 mm <sup>2</sup>    | AWG 24 – 20 |
| 160 V/2.5 kV/2 4 A            | 300 V/5 A   | 160 V/2.5 kV/2 4 A           | 300 V/5 A   |

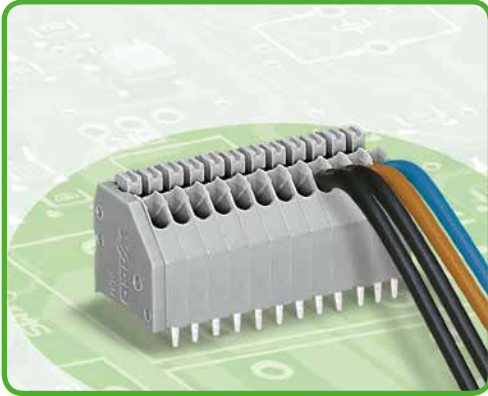


L = (pole no. x pin spacing) + 1.5 mm  
 ○ first solder pin, right front side

A groove at the back of the terminal strip helps differentiate between the two pin spacings.

| Pole No.   | Item No. | Pack. Unit    | Pole No.   | Item No. | Pack. Unit    | Color  | Item No.       | Pack. Unit |
|--|----------|---------------|--|----------|---------------|--|----------------|------------|
| Terminal strip with push-buttons<br>1 solder pin/pole, staggered, gray |          |               | Terminal strip with push-buttons<br>1 solder pin/pole, staggered, gray |          |               | Item no. suffixes for colored terminal strips:             |                |            |
| 2  | 250-402  | 720 (4 x 180) | 2  | 250-1402 | 720 (4 x 180) | ● black  | ..... /000-004 |            |
| 3  | 250-403  | 520 (4 x 130) | 3  | 250-1403 | 520 (4 x 130) | ● red  | ..... /000-005 |            |
| 4  | 250-404  | 400 (4 x 100) | 4  | 250-1404 | 400 (4 x 100) | ● blue   | ..... /000-006 |            |
| 5  | 250-405  | 340 (4 x 85)  | 5  | 250-1405 | 340 (4 x 85)  | ○ light gray   | ..... /000-009 |            |
| 6  | 250-406  | 280 (4 x 70)  | 6  | 250-1406 | 280 (4 x 70)  | ● orange   | ..... /000-012 |            |
| 7  | 250-407  | 240 (4 x 60)  | 7  | 250-1407 | 240 (4 x 60)  | ● green  | ..... /000-023 |            |
| 8  | 250-408  | 220 (4 x 55)  | 8  | 250-1408 | 200 (4 x 50)  | ● violet   | ..... /000-024 |            |
| 9  | 250-409  | 200 (4 x 50)  | 9  | 250-1409 | 180 (4 x 45)  | ○ white  | ..... /000-050 |            |
| 10   | 250-410  | 180 (4 x 45)  | 10   | 250-1410 | 160 (4 x 40)  | <b>Ordering example:</b>                                   |                |            |
| 11   | 250-411  | 160 (4 x 40)  | 11   | 250-1411 | 160 (4 x 40)  | Terminal strip, 2.5 mm pin spacing                         |                |            |
| 12   | 250-412  | 140 (4 x 35)  | 12   | 250-1412 | 140 (4 x 35)  | 8-pole, orange: <b>250-480/000-012</b>                     |                |            |
| 13   | 250-413  | 140 (4 x 35)  | 13   | 250-1413 | 120 (4 x 30)  | <b>(Production and prices depend on quantity required)</b> |                |            |
| 14   | 250-414  | 120 (4 x 30)  | 14   | 250-1414 | 120 (4 x 30)  |  |                |            |
| 15   | 250-415  | 120 (4 x 30)  | 15   | 250-1415 | 120 (4 x 30)  |  |                |            |
| 16   | 250-416  | 100 (4 x 25)  | 16   | 250-1416 | 100 (4 x 25)  |  |                |            |
| 17   | 250-417  | 100 (4 x 25)  | 17   | 250-1417 | 100 (4 x 25)  |  |                |            |
| 18   | 250-418  | 80 (4 x 20)   | 18   | 250-1418 | 100 (4 x 25)  |  |                |            |
| 19   | 250-419  | 80 (4 x 20)   | 19   | 250-1419 | 80 (4 x 20)   |  |                |            |
| 20   | 250-420  | 80 (4 x 20)   | 20   | 250-1420 | 80 (4 x 20)   |  |                |            |
| 21   | 250-421  | 80 (4 x 20)   | 21   | 250-1421 | 80 (4 x 20)   |  |                |            |
| 22   | 250-422  | 80 (4 x 20)   | 22   | 250-1422 | 80 (4 x 20)   |  |                |            |
| 23   | 250-423  | 80 (4 x 20)   | 23   | 250-1423 | 60 (4 x 15)   |  |                |            |
| 24   | 250-424  | 60 (4 x 15)   | 24   | 250-1424 | 60 (4 x 15)   |  |                |            |

## PCB Terminal Strips with Push-Buttons, 0.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side, 2.5 mm Pin Spacing 250 Series



- Compact terminal strips with push-buttons
- Version with in-line solder pins
- Simple push-in termination for solid conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips also available with spacers upon request

### Technical data:

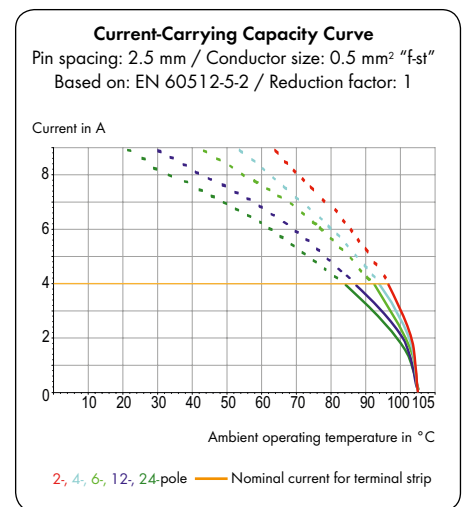
| Pin Spacing          | 2.5 mm<br>0.098 in |        |        |
|----------------------|--------------------|--------|--------|
| Ratings per          | IEC/EN 60664-1     |        |        |
| Overtoltage category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 100 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 4 A                | 4 A    | 4 A    |
| Approvals per        | UL/CSA             |        |        |
| Use group UL1059     | B                  | C      | D      |
| Rated voltage        | -                  | -      | -      |
| Nominal current UL   | -                  | -      | -      |
| Nominal current CSA  | -                  | -      | -      |

### Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP® S                               |
| Conductor size: solid             | 0.14 - 0.5 mm <sup>2</sup> (0.4 - 0.8 mm Ø) |
| Conductor size: fine-stranded     | 0.2 - 0.5 mm <sup>2</sup>                   |
| AWG                               | 24 - 20 (26 "sol.")                         |
| Strip length                      | 8.5 - 9.5 mm / 0.32 - 0.36 in               |
| Conductor entry                   | 45° to PCB                                  |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.75 mm                      |
| Solder pin: drilled hole diameter | 1.1 <sup>-0.1</sup> mm                      |

### Material data:

|                               |                        |
|-------------------------------|------------------------|
| Material group                | I                      |
| Insulation material           | Polyamide 6.6 (PA 6.6) |
| Flammability rating per UL 94 | V0                     |
| Lower/Upper limit temperature | -60 °C / +105 °C       |
| Clamping spring material      | Copper alloy           |
| Contact plating               | Copper                 |



### 250 Series accessories:

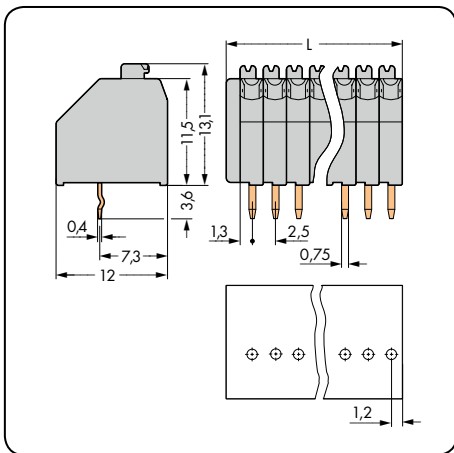
### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating Tools     | 492 - 494 |
| Test pin            | 506       |



# PCB Terminal Strips with Push-Buttons, 0.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side

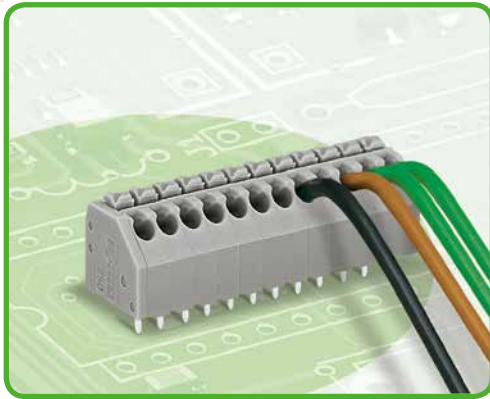
|   |             |  |  |
|---|-------------|--|--|
| <b>Pin spacing: 2.5 mm / 0.098 in</b>           |             |  |  |
| 0.2 - 0.5 mm <sup>2</sup><br>160 V/2.5 kV/2 4 A | AWG 24 - 20 |  |  |



L = (pole no. x pin spacing) + 1.5 mm

| Pole No.  | Item No. | Pack. Unit    | Color  | Item No.        | Pack. Unit |
|---|----------|---------------|--|-----------------|------------|
| <b>Terminal strip with push-buttons<br/>1 in-line solder pin/pole, front side, gray</b> |          |               | <b>Item no. suffixes for colored terminal strips:</b>      |                 |            |
| 2   | 250-302  | 720 (4 x 180) | ● black  | ...-.../000-004 |            |
| 3   | 250-303  | 520 (4 x 130) | ● red  | ...-.../000-005 |            |
| 4   | 250-304  | 400 (4 x 100) | ● blue   | ...-.../000-006 |            |
| 5   | 250-305  | 340 (4 x 85)  | ○ light gray   | ...-.../000-009 |            |
| 6   | 250-306  | 280 (4 x 70)  | ● orange   | ...-.../000-012 |            |
| 7   | 250-307  | 240 (4 x 60)  | ● green  | ...-.../000-023 |            |
| 8   | 250-308  | 220 (4 x 55)  | ● violet   | ...-.../000-024 |            |
| 9   | 250-309  | 200 (4 x 50)  | ○ white  | ...-.../000-050 |            |
| 10  | 250-310  | 180 (4 x 45)  |  |                 |            |
| 11  | 250-311  | 160 (4 x 40)  | <b>Ordering example:</b>                                   |                 |            |
| 12  | 250-312  | 140 (4 x 35)  | Terminal strip, 2.5 mm pin spacing                         |                 |            |
| 13  | 250-313  | 140 (4 x 35)  | 8-pole, orange: <b>250-308/000-012</b>                     |                 |            |
| 14  | 250-314  | 120 (4 x 30)  | <b>(Production and prices depend on quantity required)</b> |                 |            |
| 15  | 250-315  | 120 (4 x 30)  |  |                 |            |
| 16  | 250-316  | 100 (4 x 25)  |  |                 |            |
| 17  | 250-317  | 100 (4 x 25)  |  |                 |            |
| 18  | 250-318  | 80 (4 x 20)   |  |                 |            |
| 19  | 250-319  | 80 (4 x 20)   |  |                 |            |
| 20  | 250-320  | 80 (4 x 20)   |  |                 |            |
| 21  | 250-321  | 80 (4 x 20)   |  |                 |            |
| 22  | 250-322  | 80 (4 x 20)   |  |                 |            |
| 23  | 250-323  | 80 (4 x 20)   |  |                 |            |
| 24  | 250-324  | 60 (4 x 15)   |  |                 |            |

# PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 3.5 mm 250 Series



- Compact terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips with spacers also available upon request

## Technical data:

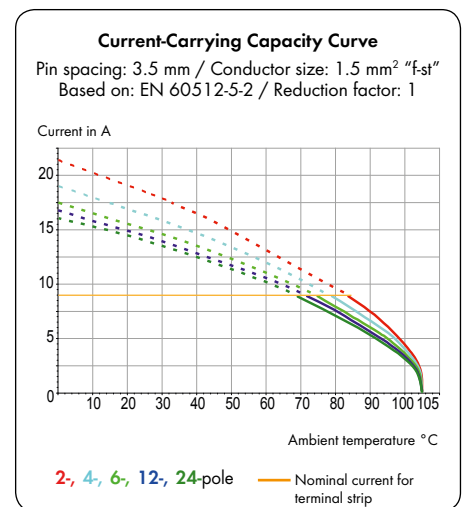
| Pin Spacing          | 1 solder pin/pole, front<br>3.5 mm / 0.138 in |        |        | 1 solder pin/pole, staggered<br>3.5 mm / 0.138 in |       |       |
|----------------------|---|--------|--------|---|-------|-------|
|                      | IEC/EN 60664-1                                |        |        | IEC/EN 60664-1                                    |       |       |
| Rating per           | IEC/EN 60664-1                                |        |        | IEC/EN 60664-1                                    |       |       |
| Overtoltage category | III   | III    | II     | III   | III   | II    |
| Pollution degree     | 3   | 2      | 2      | 3   | 2     | 2     |
| Rated voltage        | 160 V   | 160 V  | 320 V  | 250 V   | 320 V | 630 V |
| Rated surge voltage  | 2.5 kV  | 2.5 kV | 2.5 kV | 4 kV  | 4 kV  | 4 kV  |
| Nominal current      | 8 A   | 8 A    | 8 A    | 8 A   | 8 A   | 8 A   |
| Approvals per        | UL/CSA  |        |        | UL/CSA  |       |       |
| Use group UL1059     | B   | C      | D      | B   | C     | D     |
| Rated voltage        | 300 V   | -      | 300 V  | 300 V   | -     | 300 V |
| Nominal current UL   | 5 A   | -      | 5 A    | 5 A   | -     | 5 A   |
| Nominal current CSA  | 10 A  | -      | 10 A   | 10 A  | -     | 10 A  |

## Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®S  |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded     | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded     | 0.25 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 24 - 16   |
| Strip length                      | 8.5 - 9.5 mm / 0.32 - 0.36 in                       |
| Conductor entry angle             | 45° to PCB  |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.75 mm                              |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm                                |

## Material data:

|                               |                    |
|-------------------------------|--------------------|
| Material group                | I                  |
| Insulating material           | Nylon 6.6 (PA 6.6) |
| Temperature stability         | -60 °C to +105 °C  |
| Flammability rating per UL 94 | V0                 |
| Clamping spring material      | Copper alloy       |
| Contact plating               | Copper             |



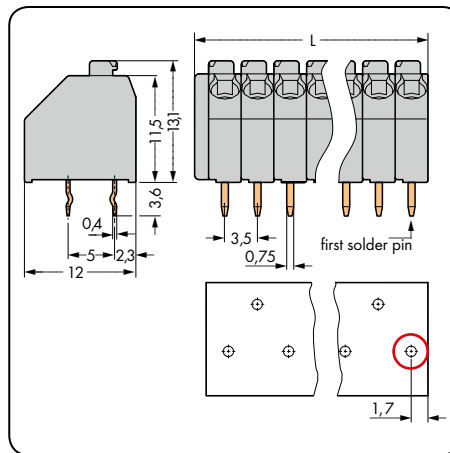
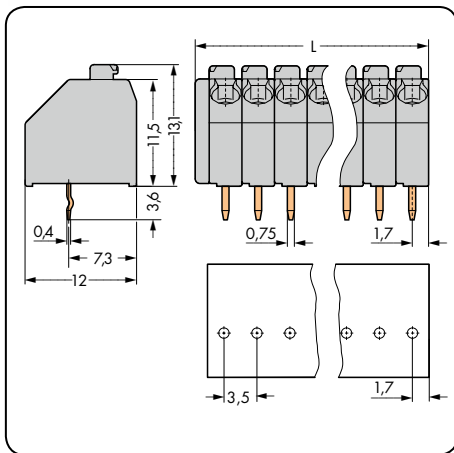
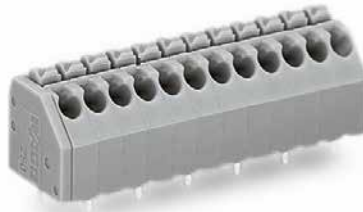
## 250 Series accessories:

## Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |



|  |             |  |             |   |
|--|-------------|--|-------------|---|
| <b>1 solder pin/pole, front</b><br>Pin spacing 3.5 mm / 0.138 in |             | <b>1 solder pin/pole, staggered</b><br>Pin spacing 3.5 mm / 0.138 in |             | <b>Item no. suffixes</b><br>for colored terminal strips |
| 0.2 - 1.5 mm <sup>2</sup>  | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>  | AWG 24 - 16 |   |
| 160 V/2.5 kV/2 8 A   | 300 V/5 A   | 320 V/4 kV/2 8 A   | 300 V/5 A   |   |



L = (pole no. x pin spacing) + 1.5 mm  
 ○ first solder pin, right front side

| Pole No.  | Item No. | Pack. Unit    | Pole No.  | Item No. | Pack. Unit    | Color  | Item No.       | Pack. Unit |
|---|----------|---------------|---|----------|---------------|--|----------------|------------|
| <b>Terminal strip with push-buttons</b><br>1 solder pin/pole, front, gray |          |               | <b>Terminal strip with push-buttons</b><br>1 solder pin/pole, staggered, gray |          |               | <b>Item no. suffixes for colored terminal strips:</b>      |                |            |
| 2   | 250-102  | 560 (4 x 140) | 2   | 250-202  | 560 (4 x 140) | ● yellow   | ..... /000-002 |            |
| 3   | 250-103  | 400 (4 x 100) | 3   | 250-203  | 400 (4 x 100) | ● light blue   | ..... /000-003 |            |
| 4   | 250-104  | 300 (4 x 75)  | 4   | 250-204  | 300 (4 x 75)  | ● black  | ..... /000-004 |            |
| 5   | 250-105  | 240 (4 x 60)  | 5   | 250-205  | 240 (4 x 60)  | ● red  | ..... /000-005 |            |
| 6   | 250-106  | 200 (4 x 50)  | 6   | 250-206  | 200 (4 x 50)  | ● blue   | ..... /000-006 |            |
| 7   | 250-107  | 180 (4 x 45)  | 7   | 250-207  | 180 (4 x 45)  | ○ light gray   | ..... /000-009 |            |
| 8   | 250-108  | 160 (4 x 40)  | 8   | 250-208  | 160 (4 x 40)  | ● orange   | ..... /000-012 |            |
| 9   | 250-109  | 140 (4 x 35)  | 9   | 250-209  | 140 (4 x 35)  | ● brown  | ..... /000-014 |            |
| 10  | 250-110  | 120 (4 x 30)  | 10  | 250-210  | 120 (4 x 30)  | ● light green  | ..... /000-017 |            |
| 11  | 250-111  | 120 (4 x 30)  | 11  | 250-211  | 120 (4 x 30)  | ● green  | ..... /000-023 |            |
| 12  | 250-112  | 100 (4 x 25)  | 12  | 250-212  | 100 (4 x 25)  | ● violet   | ..... /000-024 |            |
| 13  | 250-113  | 100 (4 x 25)  | 13  | 250-213  | 100 (4 x 25)  | ○ white  | ..... /000-050 |            |
| 14  | 250-114  | 80 (4 x 20)   | 14  | 250-214  | 80 (4 x 20)   | ● pink   | ..... /000-051 |            |
| 15  | 250-115  | 80 (4 x 20)   | 15  | 250-215  | 80 (4 x 20)   | <b>Ordering example:</b>                                   |                |            |
| 16  | 250-116  | 80 (4 x 20)   | 16  | 250-216  | 80 (4 x 20)   | Terminal strip, 3.5 mm pin spacing                         |                |            |
| 17  | 250-117  | 80 (4 x 20)   | 17  | 250-217  | 80 (4 x 20)   | 8-pole, orange: <b>250-108/000-012</b>                     |                |            |
| 18  | 250-118  | 60 (4 x 15)   | 18  | 250-218  | 60 (4 x 15)   |  |                |            |
| 19  | 250-119  | 60 (4 x 15)   | 19  | 250-219  | 60 (4 x 15)   |  |                |            |
| 20  | 250-120  | 60 (4 x 15)   | 20  | 250-220  | 60 (4 x 15)   |  |                |            |
| 21  | 250-121  | 60 (4 x 15)   | 21  | 250-221  | 60 (4 x 15)   | <b>(Production and prices depend on quantity required)</b> |                |            |
| 22  | 250-122  | 60 (4 x 15)   | 22  | 250-222  | 60 (4 x 15)   |  |                |            |
| 23  | 250-123  | 60 (4 x 15)   | 23  | 250-223  | 60 (4 x 15)   |  |                |            |
| 24  | 250-124  | 40 (4 x 10)   | 24  | 250-224  | 40 (4 x 10)   |  |                |            |

# PCB Terminal Strips with Push-Buttons 0.5 mm<sup>2</sup> and 1.5 mm<sup>2</sup>, THR (Through-Hole Reflow\*)

## Pin Spacing 2.5 mm, 3.5 mm

### 250 Series



- Cost-effective integration of high-temperature resistant THR terminal strips into SMT reflow soldering processes
- Versions with suction pads are available in tape-and-reel packaging for automated assembly
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

#### Technical data:

| Pin Spacing          | 2.5 mm<br>0.098 in |        |        | 3.5 mm<br>0.138 in |       |       |
|----------------------|--------------------|--------|--------|--------------------|-------|-------|
|                      | IEC/EN 60664-1     |        |        | IEC/EN 60664-1     |       |       |
| Rating per           |                    |        |        |                    |       |       |
| Overtoltage category | III                | III    | II     | III                | III   | II    |
| Pollution degree     | 3                  | 2      | 2      | 3                  | 2     | 2     |
| Rated voltage        | 160 V              | 160 V  | 320 V  | 250 V              | 320 V | 630 V |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV | 4 kV               | 4 kV  | 4 kV  |
| Nominal current      | 4 A                | 4 A    | 4 A    | 8 A                | 8 A   | 8 A   |
| Approvals per        | UL/CSA             |        |        | UL/CSA             |       |       |
| Use group UL1059     | B                  | C      | D      | B                  | C     | D     |
| Rated voltage        | 300 V              | -      | 300 V  | 300 V              | -     | 300 V |
| Nominal current UL   | 5 A                | -      | 5 A    | 5 A                | -     | 5 A   |
| Nominal current CSA  | 2 A                | -      | 2 A    | 10 A               | -     | 10 A  |

#### Conductor and solder pin data for 2.5 mm version:

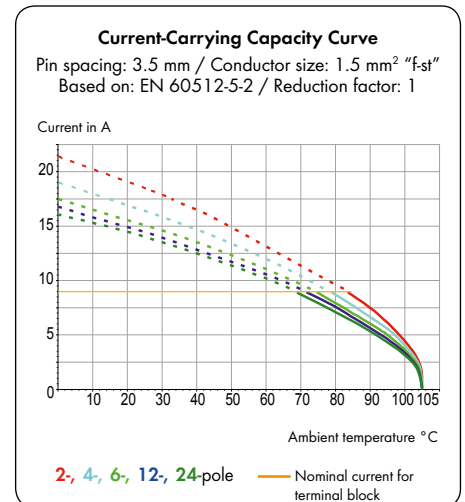
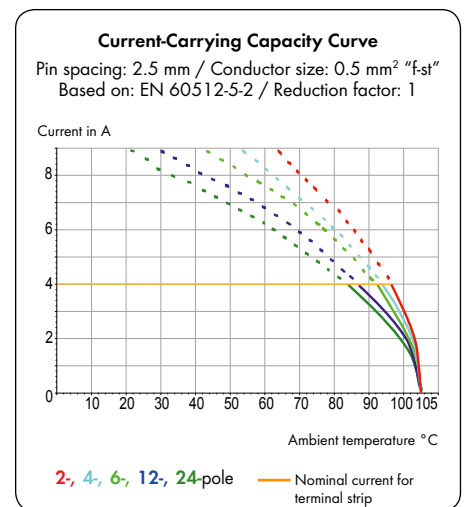
|  |   |
|--|---|
| Connection technology                  | CAGE CLAMP®S                                |
| Conductor size: solid                  | 0.14 - 0.5 mm <sup>2</sup> (0.4 - 0.8 mm Ø) |
| Conductor size: fine-stranded          | 0.2 - 0.5 mm <sup>2</sup>                   |
| AWG                                    | 24 - 20 (26 "sol.")                         |
| Strip length                           | 8.5 - 9.5 mm / 0.32 - 0.36 in               |
| Conductor entry angle                  | 45° to PCB                                  |
| Solder pin: length/width               | 3.6 mm / 0.4 x 0.75 mm                      |
| Solder pin: metal-plated hole diameter | 1 <sup>+0.1</sup> mm                        |

#### Conductor and solder pin data for 3.5 mm version:

|  |   |
|--|---|
| Connection technology                  | CAGE CLAMP®S  |
| Conductor size: solid                  | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded          | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded          | 0.25 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded          | 0.25 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                                    | 24 - 16   |
| Strip length                           | 8.5 - 9.5 mm / 0.32 - 0.36 in                       |
| Conductor entry angle                  | 45° to PCB  |
| Solder pin: length/width               | 2.4 mm / 0.4 x 0.75 mm                              |
| Solder pin: metal-plated hole diameter | 1 <sup>+0.1</sup> mm                                |

#### Material data:

|                               |                    |
|-------------------------------|--------------------|
| Material group                | III a              |
| Insulating material           | Nylon 4.6 (PA 4.6) |
| Temperature stability         | -60 °C to +115 °C  |
| Flammability rating per UL 94 | V2                 |
| Clamping spring material      | Copper alloy       |
| Contact plating               | Copper             |



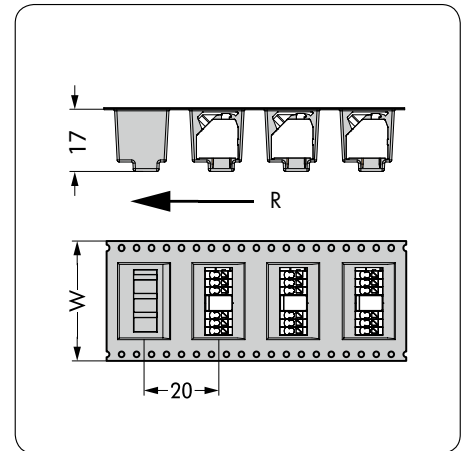
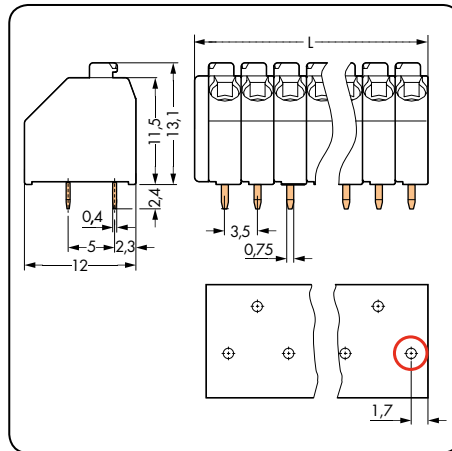
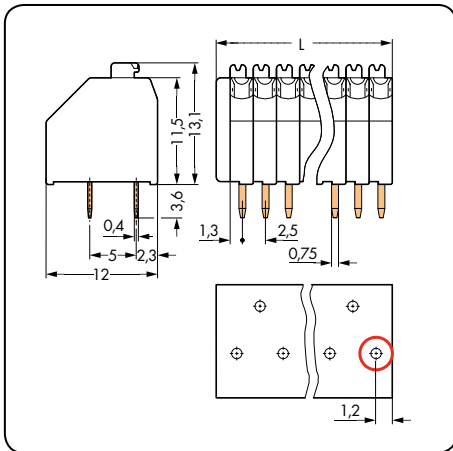
#### 250 Series accessories:

#### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |

# PCB Terminal Strips with Push-Buttons 0.5 mm<sup>2</sup> and 1.5 mm<sup>2</sup>, THR

|   |  |   |  |   |
|---|--|---|--|---|
| <b>Pin spacing 2.5 mm / 0.098 in</b><br>0.2 – 0.5 mm <sup>2</sup>   AWG 24 – 20<br>160 V/2.5 kV/2 4 A   300 V/5 A |  | <b>Pin spacing 3.5 mm / 0.138 in</b><br>0.2 – 1.5 mm <sup>2</sup>   AWG 24 – 16<br>320 V/4 kV/2 8 A   300 V/5 A |  | <b>Terminal strips in tape-and-reel packaging, 3.5 mm pin spacing</b> |
|---|--|---|--|---|

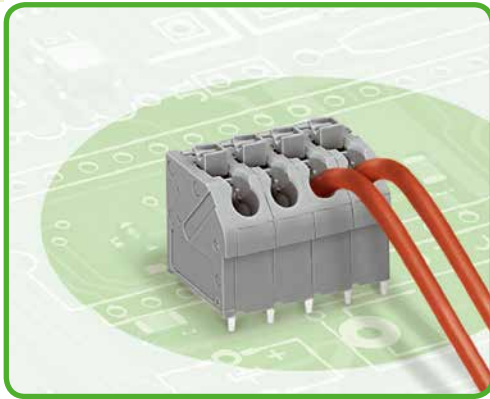


L = (pole no. x pin spacing) + 1.5 mm  
 Ⓞ first solder pin, right front side

W = Tape width  
 R = Feed direction

| Pole No.  | Item No.        | Pack. Unit    | Pole No.  | Item No.        | Pack. Unit    | Pole No.   | Item No.                | W  |
|---|-----------------|---------------|---|-----------------|---------------|--|-------------------------|----|
| Terminal strip with push-buttons, 1 solder pin/pole, staggered, black |                 |               | Terminal strip with push-buttons, 1 solder pin/pole, staggered, black |                 |               | Terminal strips with additional suction pads, in tape-and-reel packaging acc. to IEC 60286-3, 3.5 mm pin spacing |                         |    |
|   |                 |               |   |                 |               | Reel diameter: 330 mm (mm)   |                         |    |
| 2   | 250-402/350-604 | 720 (4 x 180) | 2   | 250-202/353-604 | 560 (4 x 140) | 2  | 250-202/353-604/997-404 | 24 |
| 3   | 250-403/350-604 | 520 (4 x 130) | 3   | 250-203/353-604 | 400 (4 x 100) | 3  | 250-203/353-604/997-404 | 24 |
| 4   | 250-404/350-604 | 400 (4 x 100) | 4   | 250-204/353-604 | 300 (4 x 75)  | 4  | 250-204/353-604/997-405 | 32 |
| 5   | 250-405/350-604 | 340 (4 x 85)  | 5   | 250-205/353-604 | 240 (4 x 60)  | 5  | 250-205/353-604/997-405 | 32 |
| 6   | 250-406/350-604 | 280 (4 x 70)  | 6   | 250-206/353-604 | 200 (4 x 50)  | 6  | 250-206/353-604/997-406 | 44 |
| 7   | 250-407/350-604 | 240 (4 x 60)  | 7   | 250-207/353-604 | 180 (4 x 45)  | 7  | 250-207/353-604/997-406 | 44 |
| 8   | 250-408/350-604 | 220 (4 x 55)  | 8   | 250-208/353-604 | 160 (4 x 40)  | 8  | 250-208/353-604/997-406 | 44 |
|   |                 |               |   |                 |               | 160 units/reel   |                         |    |

# PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 5 mm, 7.5 mm 250 Series



- Compact terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |        |        | 7.5 mm<br>0.295 in |        |        |
|----------------------|------------------|--------|--------|--------------------|--------|--------|
|                      | IEC/EN 60664-1   |        |        | IEC/EN 60664-1     |        |        |
| Rating per           |                  |        |        |                    |        |        |
| Overtoltage category | III              | III    | II     | III                | III    | II     |
| Pollution degree     | 3                | 2      | 2      | 3                  | 2      | 2      |
| Rated voltage        | 320 V            | 320 V  | 630 V  | 500 V              | 630 V  | 1000 V |
| Rated surge voltage  | 4 kV             | 4 kV   | 4 kV   | 6 kV               | 6 kV   | 6 kV   |
| Nominal current      | 17.5 A           | 17.5 A | 17.5 A | 17.5 A             | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA           |        |        | UL/CSA             |        |        |
| Use group UL1059     | B                | C      | D      | B                  | C      | D      |
| Rated voltage        | 300 V            | -      | 300 V  | 300 V              | -      | 300 V  |
| Nominal current UL   | 2 A              | -      | 2 A    | 2 A                | -      | 2 A    |
| Nominal current CSA  | 10 A             | -      | 10 A   | 10 A               | -      | 10 A   |

### Conductor and solder pin data:

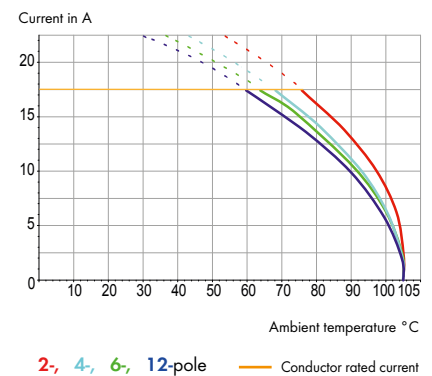
|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP®S                                       |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup>                          |
| Conductor size: fine-stranded     | 0.5 mm <sup>2</sup> (I max. 2 A)                   |
| Conductor size: fine-stranded     | 0.75 - 1.5 mm <sup>2</sup> (I max. 4 A)            |
| Conductor size: fine-stranded     | 0.5 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.5 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 20 - 16 (20 - 14 "sol.")                           |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                         |
| Conductor entry angle             | 45° to PCB   |
| Solder pin: length/width          | 4 mm / 0.5 x 0.75 mm                               |
| Solder pin: drilled hole diameter | 1.2 <sup>-0.1</sup> mm                             |

### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

### Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 1.5 mm<sup>2</sup> "sol."  
Based on: EN 60512-5-2 / Reduction factor: 1

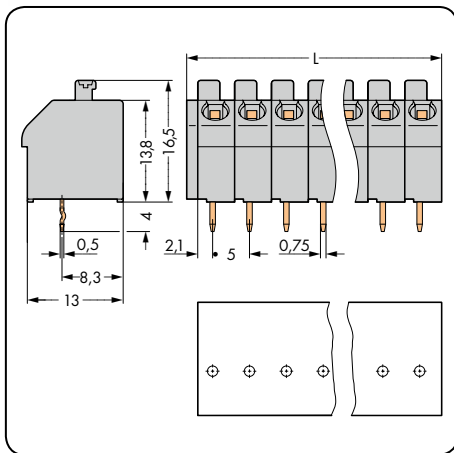


### 250 Series accessories:

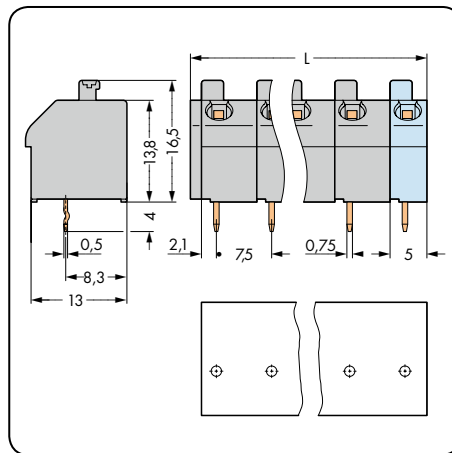
### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |
|                     |           |
|                     |           |

| Pin spacing 5 mm / 0.197 in |             | Pin spacing 7.5 mm / 0.295 in |             |
|-----------------------------|-------------|-------------------------------|-------------|
| 0.5 - 1.5 mm <sup>2</sup>   | AWG 20 - 16 | 0.5 - 1.5 mm <sup>2</sup>     | AWG 20 - 16 |
| 320 V/4 kV/2 17.5 A         | 300 V/2 A   | 630 V/6 kV/2 17.5 A           | 300 V/2 A   |



$$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$$



$$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$$

| Pole No.                                | Item No. | Pack. Unit    | Pole No.                                | Item No. | Pack. Unit   |
|---|----------|---------------|---|----------|--------------|
| <b>Terminal strip with push-buttons</b> |          |               | <b>Terminal strip with push-buttons</b> |          |              |
| <b>1 solder pin/pole, in line, gray</b> |          |               | <b>1 solder pin/pole, in line, gray</b> |          |              |
| 2                                       | 250-502  | 400 (4 x 100) | 2                                       | 250-602  | 340 (4 x 85) |
| 3                                       | 250-503  | 280 (4 x 70)  | 3                                       | 250-603  | 200 (4 x 50) |
| 4                                       | 250-504  | 220 (4 x 55)  | 4                                       | 250-604  | 160 (4 x 40) |
| 5                                       | 250-505  | 180 (4 x 45)  | 5                                       | 250-605  | 120 (4 x 30) |
| 6                                       | 250-506  | 140 (4 x 35)  | 6                                       | 250-606  | 100 (4 x 25) |
| 7                                       | 250-507  | 120 (4 x 30)  | 7                                       | 250-607  | 80 (4 x 20)  |
| 8                                       | 250-508  | 100 (4 x 25)  | 8                                       | 250-608  | 80 (4 x 20)  |
| 9                                       | 250-509  | 100 (4 x 25)  | 9                                       | 250-609  | 60 (4 x 15)  |
| 10                                      | 250-510  | 80 (4 x 20)   | 10                                      | 250-610  | 60 (4 x 15)  |
| 11                                      | 250-511  | 80 (4 x 20)   | 11                                      | 250-611  | 40 (4 x 10)  |
| 12                                      | 250-512  | 60 (4 x 15)   | 12                                      | 250-612  | 40 (4 x 10)  |
| 13                                      | 250-513  | 60 (4 x 15)   |   |          |              |
| 14                                      | 250-514  | 60 (4 x 15)   |   |          |              |
| 15                                      | 250-515  | 60 (4 x 15)   |   |          |              |
| 16                                      | 250-516  | 40 (4 x 10)   |   |          |              |

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|               |              |   |
|---------------|--------------|---|
| ● yellow      | ... /000-002 | <b>Ordering example:</b><br>Terminal strip, 5 mm pin spacing<br>8-pole, orange: 250-508/000-012 |
| ● red         | ... /000-005 |   |
| ● blue        | ... /000-006 |   |
| ○ light gray  | ... /000-009 |   |
| ● orange      | ... /000-012 |   |
| ● brown       | ... /000-014 |   |
| ● light green | ... /000-017 |   |
| ○ white       | ... /000-050 |   |

## Double-Deck PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 5 mm 250 Series



- Space-saving, double-deck terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring

### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       |  |  |
|----------------------|------------------|-------|-------|--|--|
| Rating per           | IEC/EN 60664-1   |       |       |  |  |
| Overvoltage category | III              | III   | II    |  |  |
| Pollution degree     | 3                | 2     | 2     |  |  |
| Rated voltage        | 320 V            | 320 V | 630 V |  |  |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |  |  |
| Nominal current      | 10 A             | 10 A  | 10 A  |  |  |
| Approvals per        | UL/CSA           |       |       |  |  |
| Use group UL 1059    | B                | C     | D     |  |  |
| Rated voltage        | 300 A            | -     | 300 A |  |  |
| Nominal current UL   | 10 V             | -     | 10 V  |  |  |
| Nominal current CSA  | 10 V             | -     | 10 V  |  |  |

### Conductor and solder pin data:

|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP®S                                       |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup>                          |
| Conductor size: fine-stranded     | 0.5 mm <sup>2</sup> (I max. 2 A)                   |
| Conductor size: fine-stranded     | 0.75 - 1.5 mm <sup>2</sup> (I max. 4 A)            |
| Conductor size: fine-stranded     | 0.5 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.5 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 20 - 16 (20 - 14 "sol.")                           |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                         |
| Conductor entry angle             | 45° to PCB   |
| Solder pin: length/width          | 4 mm / 0.5 x 0.75 mm                               |
| Solder pin: drilled hole diameter | 1.2 <sup>-0.1</sup> mm                             |

### Material data:

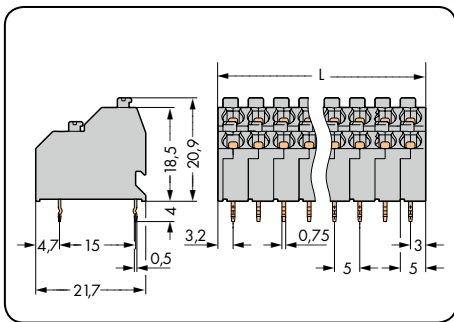
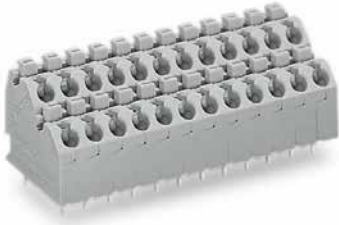
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

### 250 Series accessories:

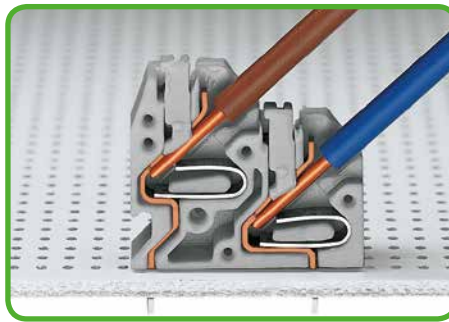
### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test plug           | 506       |
|                     |           |
|                     |           |

|  |                           |
|--|---------------------------|
| <b>Pin spacing 5 mm / 0.197 in</b>             |                           |
| 0.5 - 1.5 mm <sup>2</sup><br>320 V/4 kV/2 10 A | AWG 20 - 16<br>300 V/10 A |

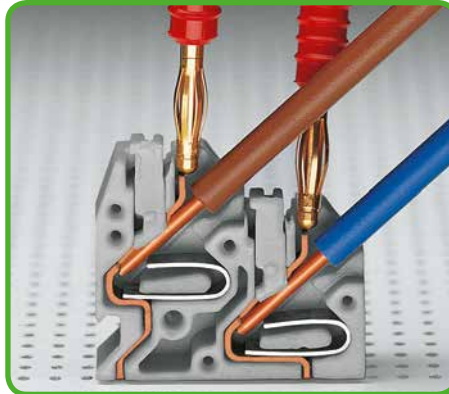


L = (pole no. x pin spacing) + 1.2 mm



Space-saving wiring  
Inserting solid conductors via push-in termination.

| Pole No.   | Item No. | Pack. Unit   |
|--|----------|--------------|
| <b>Double-deck terminal strip with push-buttons, 2 solder pins in line, gray</b> |          |              |
| 2 x 2  | 250-702  | 264 (4 x 66) |
| 3 x 2  | 250-703  | 180 (4 x 45) |
| 4 x 2  | 250-704  | 132 (4 x 33) |
| 6 x 2  | 250-706  | 84 (4 x 21)  |
| 8 x 2  | 250-708  | 72 (4 x 18)  |
| 10 x 2   | 250-710  | 48 (4 x 12)  |
| 12 x 2   | 250-712  | 48 (4 x 12)  |
| 16 x 2   | 250-716  | 36 (4 x 9)   |
| 24 x 2   | 250-724  | 24 (4 x 6)   |



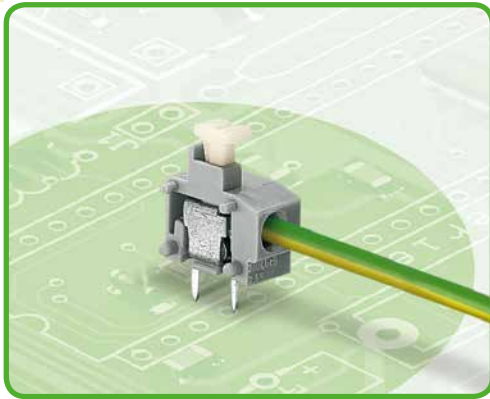
Testing with 2 mm Ø test plug, touch contact with current bar.

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|          |               |   |
|----------|---------------|---|
| ● blue   | ...../000-006 | <b>Ordering example:</b><br>Double-deck terminal strip with push-buttons<br>and test slots for test plugs, 5 mm pin spacing<br>8 x 2-pole, orange: <b>250-708/000-012</b> |
| ● orange | ...../000-012 |   |



# Modular PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Modular terminal blocks with push-buttons for custom terminal strip assemblies
- Push-in termination of solid and ferruled, fine-stranded conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slot can be found at [www.wago.com](http://www.wago.com)

## Technical data:

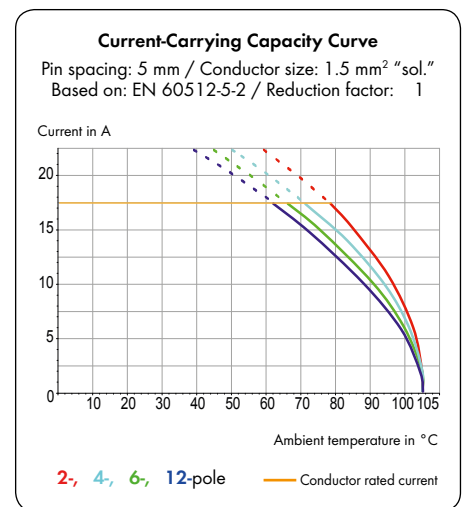
| Pin Spacing          | 5/5.08 mm<br>0.2 in |        |        | 7.5/7.62 mm<br>0.3 in |        |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|--------|--------|-----------------------|--------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |        |        | IEC/EN 60664-1        |        |        | IEC/EN 60664-1        |        |        |
| Rating per           | IEC/EN 60664-1      |        |        | IEC/EN 60664-1        |        |        | IEC/EN 60664-1        |        |        |
| Overtoltage category | III                 | III    | II     | III                   | III    | II     | III                   | III    | II     |
| Pollution degree     | 3                   | 2      | 2      | 3                     | 2      | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V  | 630 V  | 400 V                 | 630 V  | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV   | 4 kV   | 6 kV                  | 6 kV   | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 17.5 A              | 17.5 A | 17.5 A | 17.5 A                | 17.5 A | 17.5 A | 17.5 A                | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA              |        |        | UL/CSA                |        |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C      | D      | B                     | C      | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -      | 300 V  | 300 V                 | -      | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 10 A                | -      | 10 A   | 10 A                  | -      | 10 A   | 10 A                  | -      | 10 A   |
| Nominal current CSA  | 15 A                | -      | -      | 15 A                  | -      | -      | 15 A                  | -      | -      |

## Conductor and solder pin data:

|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP®S   |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                              |
| Conductor size: fine-stranded     | 0.25 - 0.5 mm <sup>2</sup> (I max. 2 A)                |
| Conductor size: fine-stranded     | 0.75 - 1.5 mm <sup>2</sup> (I max. 6 A)                |
| Conductor size: fine-stranded     | 0.25 - 0.75 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 0.75 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 20 - 14  |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                             |
| Conductor entry angle             | 0° to PCB  |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.8 mm                                  |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm                                   |

## Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper temperature limit | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

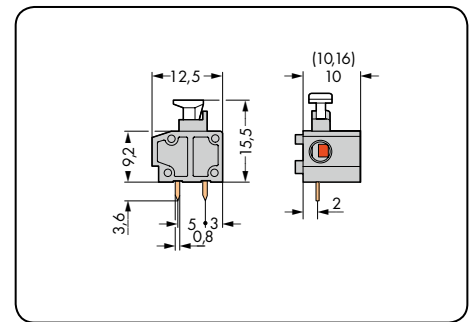
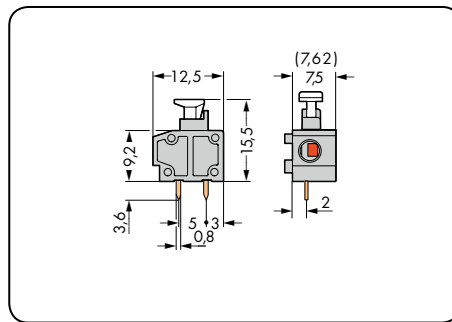
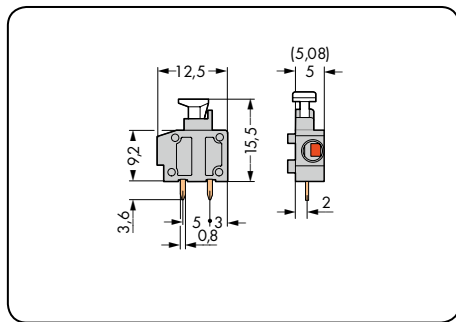


## 235 Series accessories:


## Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in                   |                           | Pin spacing 7.5/7.62 mm / 0.3 in                 |                           | Pin spacing 10/10.16 mm / 0.4 in                  |                           |
|--|---------------------------|--|---------------------------|---|---------------------------|
| 0.5 - 1.5 mm <sup>2</sup><br>320 V/4 kV/2 17.5 A | AWG 20 - 14<br>300 V/10 A | 0.5 - 1.5 mm <sup>2</sup><br>630 V/6 kV/2 17.5 A | AWG 20 - 14<br>300 V/10 A | 0.5 - 1.5 mm <sup>2</sup><br>1000 V/8 kV/2 17.5 A | AWG 20 - 14<br>300 V/10 A |



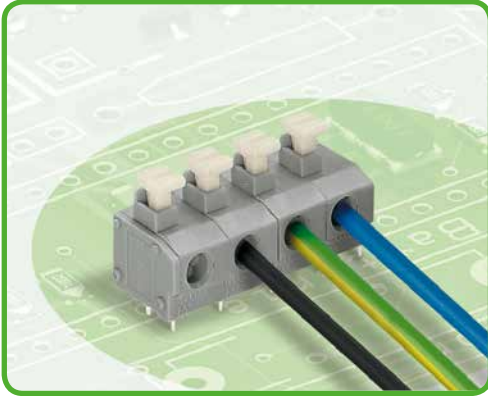
| Color  | Item No.        | Pack. Unit    | Color  | Item No.        | Pack. Unit    | Color  | Item No.        | Pack. Unit    |
|--|-----------------|---------------|--|-----------------|---------------|--|-----------------|---------------|
| <b>Modular terminal block with push-button, 2 solder pins/pole</b> |                 |               | <b>Modular terminal block with push-button, 2 solder pins/pole</b> |                 |               | <b>Modular terminal block with push-button, 2 solder pins/pole</b> |                 |               |
| gray   | 235-401/331-000 | 800 (8 x 100) | gray   | 235-501/331-000 | 600 (6 x 100) | gray   | 235-801/331-000 | 400 (4 x 100) |
| red  | 235-740/331-000 | 800 (8 x 100) | dark gray  | 235-752/331-000 | 600 (6 x 100) | dark gray  | 235-762/331-000 | 400 (4 x 100) |
| yellow   | 235-741/331-000 | 800 (8 x 100) | light gray   | 235-753/331-000 | 600 (6 x 100) | light gray   | 235-763/331-000 | 400 (4 x 100) |
| dark gray  | 235-742/331-000 | 800 (8 x 100) | blue   | 235-754/331-000 | 600 (6 x 100) | blue   | 235-764/331-000 | 400 (4 x 100) |
| light gray   | 235-743/331-000 | 800 (8 x 100) | white  | 235-755/331-000 | 600 (6 x 100) | white  | 235-765/331-000 | 400 (4 x 100) |
| blue   | 235-744/331-000 | 800 (8 x 100) | orange   | 235-756/331-000 | 600 (6 x 100) | orange   | 235-766/331-000 | 400 (4 x 100) |
| white  | 235-745/331-000 | 800 (8 x 100) | light green  | 235-757/331-000 | 600 (6 x 100) | light green  | 235-767/331-000 | 400 (4 x 100) |
| orange   | 235-746/331-000 | 800 (8 x 100) | black  | 235-758/331-000 | 600 (6 x 100) | black  | 235-768/331-000 | 400 (4 x 100) |
| light green  | 235-747/331-000 | 800 (8 x 100) |  |                 |               |  |                 |               |
| black  | 235-748/331-000 | 800 (8 x 100) |  |                 |               |  |                 |               |
| violet   | 235-749/331-000 | 800 (8 x 100) |  |                 |               |  |                 |               |
|  |                 |               | ① Suitable for Ex i applications                                   |                 |               | ① Suitable for Ex i applications                                   |                 |               |

| Accessories   | Item No. | Pack. Unit |
|---|----------|------------|
| <b>Spacer for modular terminal blocks</b><br>for doubling the pin spacing, gray     |          |            |
|  | 235-701  | 100        |

| <b>End plates for modular terminal blocks, 235 Series,</b><br>snap-on type, 1 mm/0.039 in thick |          |            |
|---|----------|------------|
| Color   | Item No. | Pack. Unit |
| gray  | 235-100  | 100        |
| dark gray   | 235-200  | 100        |
| light gray  | 235-300  | 100        |
| blue  | 235-400  | 100        |
| black   | 235-500  | 100        |
| yellow  | 235-550  | 100        |
| orange  | 235-600  | 100        |
| violet  | 235-650  | 100        |
| light green   | 235-700  | 100        |
| red   | 235-800  | 100        |
| white   | 235-850  | 100        |

For other colors, please contact factory.

# PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Terminal strips with push-buttons
- Push-in termination of solid and ferruled, fine-stranded conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slots can be found at [www.wago.com](http://www.wago.com)

**Technical data:**

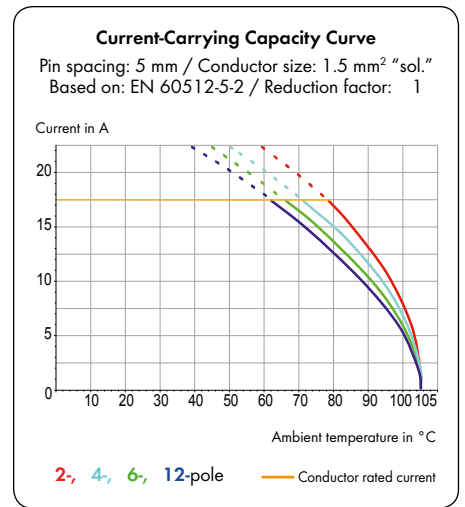
| Pin Spacing          | 5/5.08 mm<br>0.2 in |        |        | 7.5/7.62 mm<br>0.3 in |        |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|--------|--------|-----------------------|--------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |        |        | IEC/EN 60664-1        |        |        | IEC/EN 60664-1        |        |        |
| Rating per           | IEC/EN 60664-1      |        |        | IEC/EN 60664-1        |        |        | IEC/EN 60664-1        |        |        |
| Overtoltage category | III                 | III    | II     | III                   | III    | II     | III                   | III    | II     |
| Pollution degree     | 3                   | 2      | 2      | 3                     | 2      | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V  | 630 V  | 400 V                 | 630 V  | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV   | 4 kV   | 6 kV                  | 6 kV   | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 17.5 A              | 17.5 A | 17.5 A | 17.5 A                | 17.5 A | 17.5 A | 17.5 A                | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA              |        |        | UL/CSA                |        |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C      | D      | B                     | C      | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -      | 300 V  | 300 V                 | -      | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 10 A                | -      | 10 A   | 10 A                  | -      | 10 A   | 10 A                  | -      | 10 A   |
| Nominal current CSA  | 15 A                | -      | -      | 15 A                  | -      | -      | 15 A                  | -      | -      |

**Conductor and solder pin data:**

|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP®S   |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                              |
| Conductor size: fine-stranded     | 0.25 - 0.5 mm <sup>2</sup> (I max. 2 A)                |
| Conductor size: fine-stranded     | 0.75 - 1.5 mm <sup>2</sup> (I max. 6 A)                |
| Conductor size: fine-stranded     | 0.25 - 0.75 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 0.75 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 20 - 14  |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                             |
| Conductor entry angle             | 0° to PCB  |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.8 mm                                  |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm                                   |

**Material data:**

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper temperature limit | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

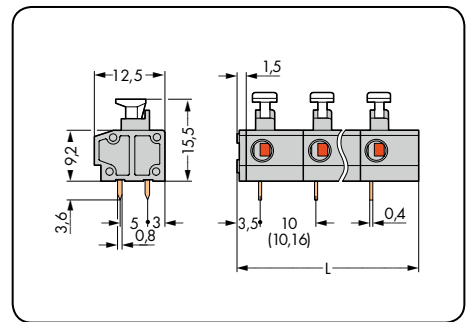
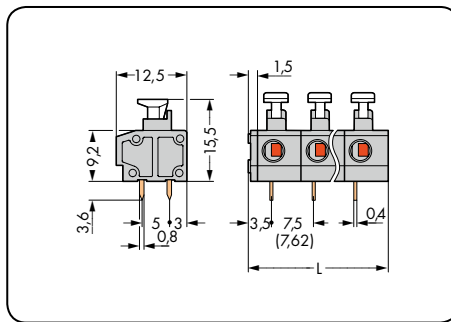
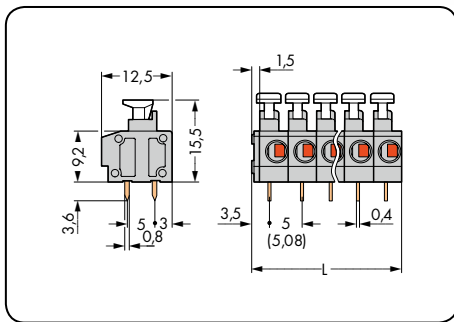
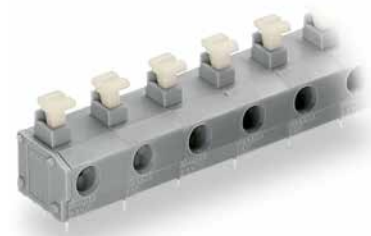
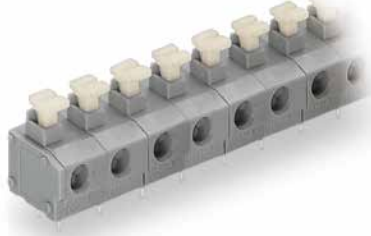
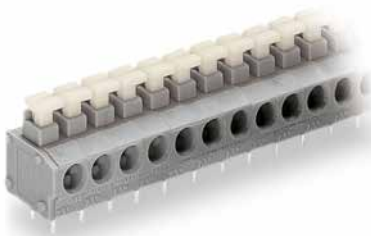


**235 Series accessories:**

**Page:**

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in |             | Pin spacing 7.5/7.62 mm / 0.3 in |             | Pin spacing 10/10.16 mm / 0.4 in |             |
|--------------------------------|-------------|----------------------------------|-------------|----------------------------------|-------------|
| 0.5 - 1.5 mm <sup>2</sup>      | AWG 20 - 14 | 0.5 - 1.5 mm <sup>2</sup>        | AWG 20 - 14 | 0.5 - 1.5 mm <sup>2</sup>        | AWG 20 - 14 |
| 320 V/4 kV/2 17.5 A            | 300 V/10 A  | 630 V/6 kV/2 17.5 A              | 300 V/10 A  | 1000 V/8 kV/2 17.5 A             | 300 V/10 A  |



L = (pole no. x pin spacing) + 1.5 mm

| Pole No.   | Item No.        | Pack. Unit    | Pole No.   | Item No.        | Pack. Unit   | Pole No.   | Item No.        | Pack. Unit   |
|--|-----------------|---------------|--|-----------------|--------------|--|-----------------|--------------|
| Terminal strip with push-buttons, 2 solder pins/pole, gray |                 |               | Terminal strip with push-buttons, 2 solder pins/pole, gray |                 |              | Terminal strip with push-buttons, 2 solder pins/pole, gray |                 |              |
| 2  | 235-402/331-000 | 420 (4 x 105) | 2  | 235-502/331-000 | 280 (4 x 70) | 2  | 235-802/331-000 | 220 (4 x 55) |
| 3  | 235-403/331-000 | 280 (4 x 70)  | 3  | 235-503/331-000 | 200 (4 x 50) | 3  | 235-803/331-000 | 140 (4 x 35) |
| 4  | 235-404/331-000 | 220 (4 x 55)  | 4  | 235-504/331-000 | 140 (4 x 35) | 4  | 235-804/331-000 | 120 (4 x 30) |
| 5  | 235-405/331-000 | 180 (4 x 45)  | 5  | 235-505/331-000 | 120 (4 x 30) | 5  | 235-805/331-000 | 80 (4 x 20)  |
| 6  | 235-406/331-000 | 140 (4 x 35)  | 6  | 235-506/331-000 | 100 (4 x 25) | 6  | 235-806/331-000 | 80 (4 x 20)  |
| 7  | 235-407/331-000 | 120 (4 x 30)  | 7  | 235-507/331-000 | 80 (4 x 20)  | 7  | 235-807/331-000 | 60 (4 x 15)  |
| 8  | 235-408/331-000 | 100 (4 x 25)  | 8  | 235-508/331-000 | 60 (4 x 15)  | 8  | 235-808/331-000 | 40 (4 x 10)  |
| 9  | 235-409/331-000 | 100 (4 x 25)  | 9  | 235-509/331-000 | 60 (4 x 15)  | 9  | 235-809/331-000 | 40 (4 x 10)  |
| 10   | 235-410/331-000 | 80 (4 x 20)   | 10   | 235-510/331-000 | 60 (4 x 15)  | 10   | 235-810/331-000 | 40 (4 x 10)  |
| 12   | 235-412/331-000 | 60 (4 x 15)   | 12   | 235-512/331-000 | 40 (4 x 10)  | 12   | 235-812/331-000 | 40 (4 x 10)  |
| 16   | 235-416/331-000 | 60 (4 x 15)   | 16   | 235-516/331-000 | 40 (4 x 10)  | 16   | 235-816/331-000 | 20 (4 x 5)   |
| 24   | 235-424/331-000 | 40 (4 x 10)   | 24   | 235-524/331-000 | 20 (4 x 5)   | 24   | 235-824/331-000 | 20 (4 x 5)   |
| 36   | 235-436/331-000 | 20 (4 x 5)    |  |                 |              |  |                 |              |
| 48   | 235-448/331-000 | 20 (4 x 5)    |  |                 |              |  |                 |              |

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|               |   |   |
|---------------|---|---|
| ● yellow      | ...-.../331-002   | <b>Ordering example:</b><br>Terminal strip with push-buttons,<br>5/5.08 mm pin spacing<br>12-pole, orange: <b>235-412/331-012</b> |
| ● black       | ...-.../331-004   |   |
| ● red         | ...-.../331-005   |   |
| ● blue        | ...-.../331-006   |   |
| ● dark gray   | ...-.../331-008   |   |
| ● light gray  | ...-.../331-009   |   |
| ● orange      | ...-.../331-012   |   |
| ● light green | ...-.../331-017   |   |
| ● violet      | ...-.../331-024   |   |
| ● white       | ...-.../331-050   |   |
| ●             | Suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing) |   |

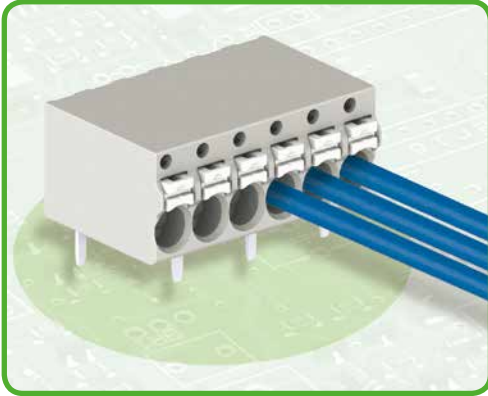


# 6 PCB Terminal Strips with Push-Buttons

## Pin Spacing 3.5 mm

### 2081 Series

402



- Compact terminal strips with push-buttons
- Simple, push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Versions available with staggered solder pins for higher voltages
- Straight and angled versions for convenient wiring in both vertical and horizontal directions

#### Technical data:

| Pin Spacing          | Solder pins in line<br>3.5 mm / 0.138 in |        |        | Solder pins staggered<br>3.5 mm / 0.138 in |        |        |
|----------------------|--|--------|--------|--|--------|--------|
|                      | IEC/EN 60664-1                           |        |        | IEC/EN 60664-1                             |        |        |
| Rating per           | III                                      | III    | II     | III  | III    | II     |
| Overvoltage category | III                                      | III    | II     | III  | III    | II     |
| Pollution degree     | 3  | 2      | 2      | 3  | 2      | 2      |
| Rated voltage        | 160 V                                    | 160 V  | 320 V  | 250 V                                      | 320 V  | 630 V  |
| Rated surge voltage  | 2.5 kV                                   | 2.5 kV | 2.5 kV | 4 kV                                       | 4 kV   | 4 kV   |
| Nominal current      | 17.5 A                                   | 17.5 A | 17.5 A | 17.5 A                                     | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA                                   |        |        | UL/CSA                                     |        |        |
| Use group UL 1059    | B  | C      | D      | B  | C      | D      |
| Rated voltage        | 300 V                                    |        | 300 V  | 300 V                                      |        | 300 V  |
| Nominal current UL   | 10 A                                     |        | 10 A   | 10 A                                       |        | 10 A   |
| Nominal current CSA  | 10 A                                     |        | 10 A   | 10 A                                       |        | 10 A   |

#### Conductor and solder pin data:

|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP <sup>®</sup> S                      |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                      |
| Conductor size: fine-stranded     | 0.2 - 1.5 mm <sup>2</sup>                      |
| Conductor size: fine-stranded     | 0.75 mm <sup>2</sup> (with insulated ferrule)  |
| Conductor size: fine-stranded     | 1.0 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 24 - 16  |
| Strip length                      | 8 - 9 mm                                       |
| Conductor entry angle             | 90° to PCB                                     |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.75 mm                         |
| Solder pin: drilled hole diameter | 1.0 <sup>+0.1</sup> mm                         |

#### Material data:

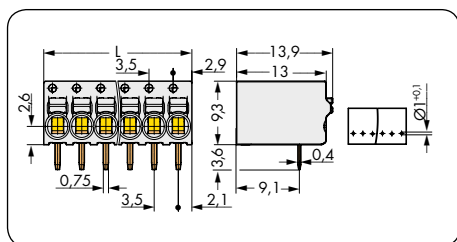
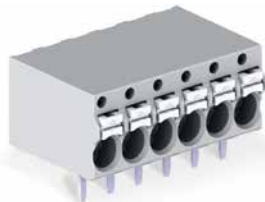
|                               |  |
|-------------------------------|--|
| Material group                | I  |
| Insulating material           | Glass fiber-reinforced polyamide 6.6 (PA 6.6 GF) |
| Temperature stability         | -60 °C to +105 °C                                |
| Flammability rating per UL 94 | V0   |
| Clamping spring material      | Chrome nickel spring steel (CrNi)                |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> )           |
| Contact plating               | tin-plated                                       |

#### 2081 Series accessories:

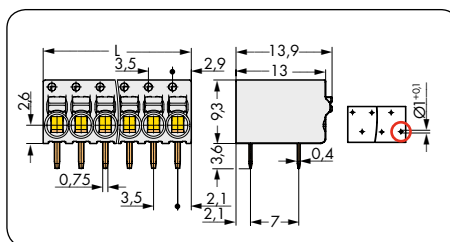
Page:

|                 |           |
|-----------------|-----------|
| Operating tools | 508 - 511 |
| Test pin        | 506       |
|                 |           |
|                 |           |

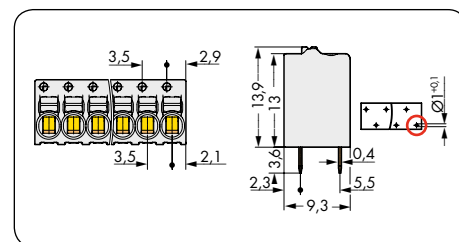
| With angled, in-line solder pins<br>Pin spacing 3.5 mm / 0.138 in |             | With angled, staggered solder pins<br>Pin spacing 3.5 mm / 0.138 in |             | With straight, staggered solder pins<br>Pin spacing 3.5 mm / 0.138 in |             |
|---|-------------|---|-------------|---|-------------|
| 0.2 - 1.5 mm <sup>2</sup>   | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>   | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>   | AWG 24 - 16 |
| 160 V/2.5 kV/2  | 17.5 A      | 320 V/4 kV/2  | 17.5 A      | 320 V/4 kV/2  | 17.5 A      |



$L = (\text{pole no.} \times \text{pin spacing}) + 0.7 \text{ mm}$

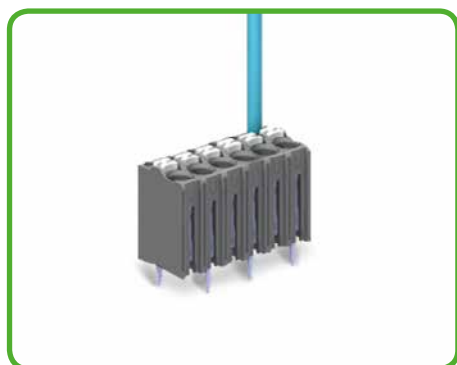


○ first solder pin, right front side



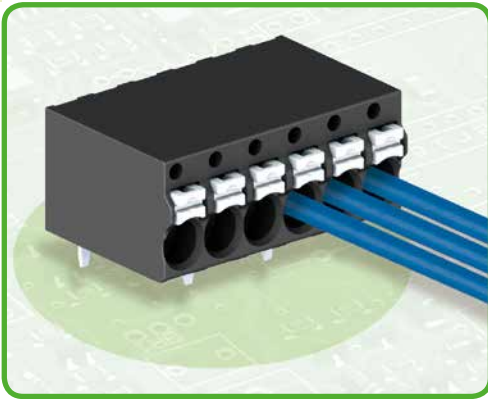
○ first solder pin, right front side

| Pole No.   | Item No.  | Pack. Unit | Pole No.   | Item No.  | Pack. Unit | Pole No.   | Item No.  | Pack. Unit |
|--|-----------|------------|--|-----------|------------|--|-----------|------------|
| Terminal strip with push-buttons, with angled, in-line solder pins, gray |           |            | Terminal strip with push-buttons, with angled, staggered solder pins, gray |           |            | Terminal strip with push-buttons, with straight, staggered solder pins, gray |           |            |
| 2  | 2081-1202 |            | 2  | 2081-1222 |            | 2  | 2081-1122 |            |
| 3  | 2081-1203 |            | 3  | 2081-1223 |            | 3  | 2081-1123 |            |
| 4  | 2081-1204 |            | 4  | 2081-1224 |            | 4  | 2081-1124 |            |
| 5  | 2081-1205 |            | 5  | 2081-1225 |            | 5  | 2081-1125 |            |
| 6  | 2081-1206 |            | 6  | 2081-1226 |            | 6  | 2081-1126 |            |
| 8  | 2081-1208 |            | 8  | 2081-1228 |            | 8  | 2081-1128 |            |
| 12   | 2081-1212 |            | 12   | 2081-1232 |            | 12   | 2081-1132 |            |



Testing with 1 mm Ø test pin.

# PCB Terminal Strips with Push-Buttons, THR (Through-Hole Reflow\*) Pin Spacing 3.5 mm 2081 Series



- Integration of high-temperature resistant THR terminal strips into SMT reflow soldering processes
- Simple, push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Versions available with staggered solder pins for higher voltages

**Technical data:**

| Pin Spacing          | Solder pins in line<br>3.5 mm / 0.138 in |        |        | Solder pins staggered<br>3.5 mm / 0.138 in |        |        |
|----------------------|--|--------|--------|--|--------|--------|
|                      | IEC/EN 60664-1                           |        |        | IEC/EN 60664-1                             |        |        |
| Rating per           | III                                      | III    | II     | III  | III    | II     |
| Overvoltage category | 3  | 2      | 2      | 3  | 2      | 2      |
| Pollution degree     | 3  | 2      | 2      | 3  | 2      | 2      |
| Rated voltage        | 160 V                                    | 160 V  | 320 V  | 250 V                                      | 320 V  | 630 V  |
| Rated surge voltage  | 2.5 kV                                   | 2.5 kV | 2.5 kV | 4 kV                                       | 4 kV   | 4 kV   |
| Nominal current      | 17.5 A                                   | 17.5 A | 17.5 A | 17.5 A                                     | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA**                                 |        |        | UL/CSA**                                   |        |        |
| Use group UL 1059    | B  | C      | D      | B  | C      | D      |
| Rated voltage        |  |        |        |  |        |        |
| Nominal current UL   |  |        |        |  |        |        |
| Nominal current CSA  |  |        |        |  |        |        |

**Conductor and solder pin data:**

|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP®S                                   |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                      |
| Conductor size: fine-stranded     | 0.2 - 1.5 mm <sup>2</sup>                      |
| Conductor size: fine-stranded     | 0.75 mm <sup>2</sup> (with insulated ferrule)  |
| Conductor size: fine-stranded     | 1.0 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 24 - 16  |
| Strip length                      | 8 - 9 mm                                       |
| Conductor entry angle             | 90° to PCB                                     |
| Solder pin: length/width          | 2.4 mm / 0.4 x 0.75 mm                         |
| Solder pin: drilled hole diameter | 1.0 <sup>+0.1</sup> mm                         |

**Material data:**

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulating material           | Glass fiber-reinforced polyphthalamide (PPA-GF) |
| Temperature stability         | -60 °C to +115 °C                               |
| Flammability rating per UL 94 | V0  |
| Clamping spring material      | Chrome nickel spring steel (CrNi)               |
| Contact material              | Electrolytic copper (E <sub>cu</sub> )          |
| Contact plating               | tin-plated                                      |

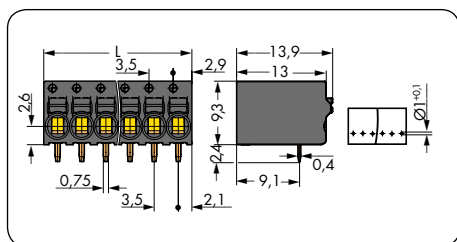
**2081 Series accessories:**

**Page:**

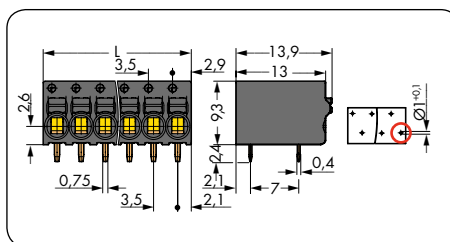
|                 |           |
|-----------------|-----------|
| Operating tools | 508 - 511 |
| Test pin        | 506       |
|                 |           |
|                 |           |



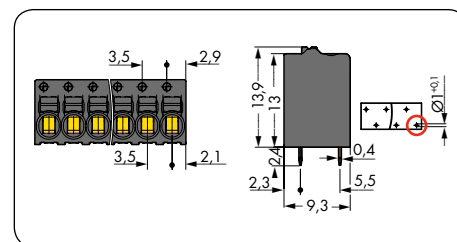
| With angled, in-line solder pins<br>Pin spacing 3.5 mm / 0.138 in |             | With angled, staggered solder pins<br>Pin spacing 3.5 mm / 0.138 in |             | With straight, staggered solder pins<br>Pin spacing 3.5 mm / 0.138 in |             |
|---|-------------|---|-------------|---|-------------|
| 0.2 - 1.5 mm <sup>2</sup>   | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>   | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>   | AWG 24 - 16 |
| 160 V/2.5 kV/2  | 17.5 A      | 320 V/4 kV/2  | 17.5 A      | 320 V/4 kV/2  | 17.5 A      |



$L = (\text{pole no.} \times \text{pin spacing}) + 0.7 \text{ mm}$



○ first solder pin, right front side



○ first solder pin, right front side

| Pole No.  | Item No.          | Pack. Unit | Pole No.  | Item No.          | Pack. Unit | Pole No.  | Item No.          | Pack. Unit |
|---|-------------------|------------|---|-------------------|------------|---|-------------------|------------|
| Terminal strip with push-buttons, with angled, in-line solder pins, black |                   |            | Terminal strip with push-buttons, with angled, staggered solder pins, black |                   |            | Terminal strip with push-buttons, with straight, staggered solder pins, black |                   |            |
| 2   | 2081-1202/200-604 |            | 2   | 2081-1222/200-604 |            | 2   | 2081-1122/200-604 |            |
| 3   | 2081-1203/200-604 |            | 3   | 2081-1223/200-604 |            | 3   | 2081-1123/200-604 |            |
| 4   | 2081-1204/200-604 |            | 4   | 2081-1224/200-604 |            | 4   | 2081-1124/200-604 |            |
| 5   | 2081-1205/200-604 |            | 5   | 2081-1225/200-604 |            | 5   | 2081-1125/200-604 |            |
| 6   | 2081-1206/200-604 |            | 6   | 2081-1226/200-604 |            | 6   | 2081-1126/200-604 |            |
| 8   | 2081-1208/200-604 |            | 8   | 2081-1228/200-604 |            | 8   | 2081-1128/200-604 |            |
| 12  | 2081-1212/200-604 |            | 12  | 2081-1232/200-604 |            | 12  | 2081-1132/200-604 |            |

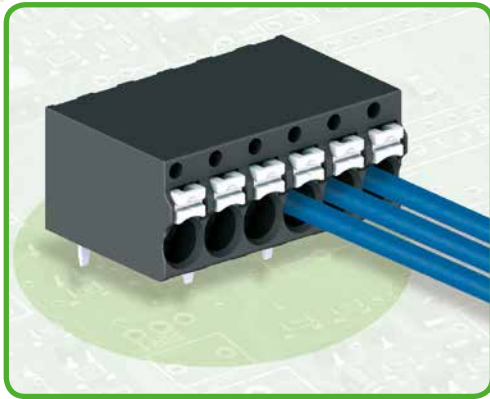


Testing with 1 mm Ø test pin.

# PCB Terminal Strips with Push-Buttons, THR (Through-Hole Reflow\*)

## 3.5 mm Pin Spacing

### 2081 Series



- Integration of high-temperature resistant THR terminal strips into SMT Reflow soldering processes
- Tape-and-reel packaging for automated assembly available on request
- Simple, push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Versions available with staggered solder pins for higher voltages

#### Technical data:

| Pin Spacing          | Solder pins, in line<br>3.5 mm / 0.138 in |        |        | Solder pins, staggered<br>3.5 mm / 0.138 in |        |        |
|----------------------|---|--------|--------|---|--------|--------|
|                      | IEC/EN 60664-1                            |        |        | IEC/EN 60664-1                              |        |        |
| Ratings per          | III                                       | III    | II     | III   | III    | II     |
| Overvoltage category | III                                       | III    | II     | III   | III    | II     |
| Pollution degree     | 3   | 2      | 2      | 3   | 2      | 2      |
| Rated voltage        | 160 V                                     | 160 V  | 320 V  | 250 V                                       | 320 V  | 630 V  |
| Rated surge voltage  | 2.5 kV                                    | 2.5 kV | 2.5 kV | 4 kV  | 4 kV   | 4 kV   |
| Nominal current      | 17.5 A                                    | 17.5 A | 17.5 A | 17.5 A                                      | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA**                                  |        |        | UL/CSA**                                    |        |        |
| Use group UL 1059    | B   | C      | D      | B   | C      | D      |
| Rated voltage        |   |        |        |   |        |        |
| Nominal current UL   |   |        |        |   |        |        |
| Nominal current CSA  |   |        |        |   |        |        |

#### Conductor and solder pin data:

|                                   |  |
|-----------------------------------|--|
| Connection technology             | CAGE CLAMP® S                                  |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                      |
| Conductor size: fine-stranded     | 0.2 - 1.5 mm <sup>2</sup>                      |
| Conductor size: fine-stranded     | 0.75 mm <sup>2</sup> (with insulated ferrule)  |
| Conductor size: fine-stranded     | 1.0 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 24 - 16  |
| Strip length                      | 8 - 9 mm                                       |
| Conductor entry                   | 90° to PCB                                     |
| Solder pin: length/width          | 2.4 mm / 0.4 x 0.75 mm                         |
| Solder pin: drilled hole diameter | 1.0 <sup>+0.1</sup> mm                         |

#### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulation material           | Glass-fiber-reinforced polyphthalamide (PPA-GF) |
| Flammability rating per UL 94 | V0  |
| Lower/Upper limit temperature | -60 °C / +105 °C                                |
| Clamping spring material      | Chrome nickel spring steel (CrNi)               |
| Contact material              | Electrolytic copper (E <sub>cu</sub> )          |
| Contact plating               | Tin-plated                                      |

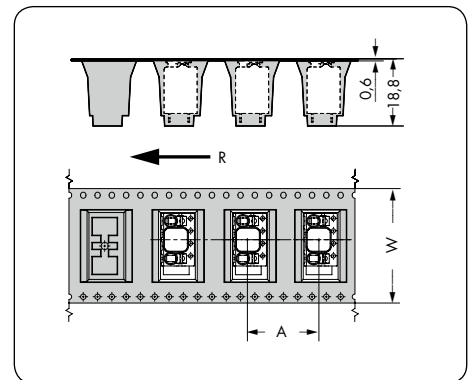
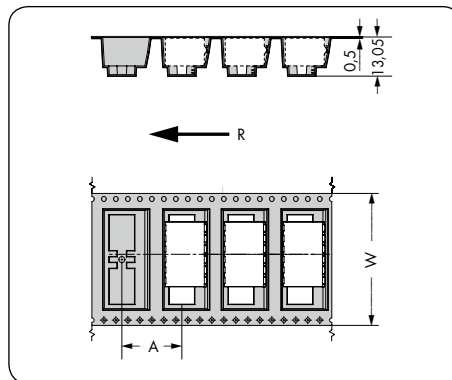
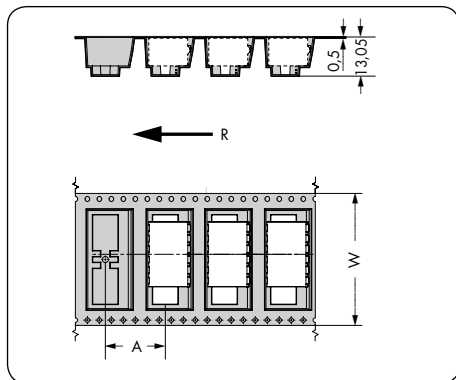
#### 2081 Series accessories:

#### Page:

|                 |           |
|-----------------|-----------|
| Operating Tools | 508 - 511 |
| Test pin        | 506       |
|                 |           |
|                 |           |

# Terminal Strips with Push-Buttons, THR Tape-and-Reel Packaging

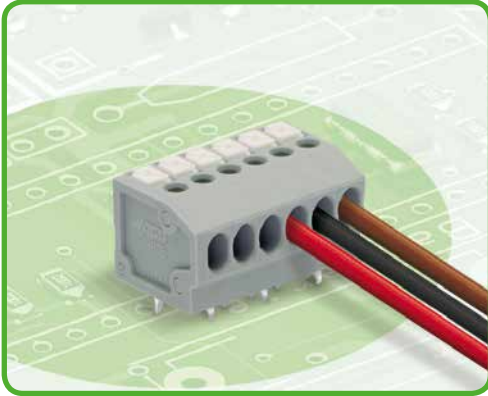
| With angled, in-line solder pins<br>Pin spacing: 3.5 mm / 0.138 in |             | With angled, staggered solder pins<br>Pin spacing: 3.5 mm / 0.138 in |             | With straight, staggered solder pins<br>Pin spacing: 3.5 mm / 0.138 in |             |
|--|-------------|--|-------------|--|-------------|
| 0.2 - 1.5 mm <sup>2</sup>  | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>  | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>  | AWG 24 - 16 |
| 160 V/2.5 kV/2   | 17.5 A      | 320 V/4 kV/2   | 17.5 A      | 320 V/4 kV/2   | 17.5 A      |



R = Feed direction  
A = 20 mm

| Pole No.  | Item No.                  | W  | Pole No.  | Item No.                  | W  | Pole No.  | Item No.                  | W  |
|---|---------------------------|----|---|---------------------------|----|---|---------------------------|----|
| Terminal strip with push-buttons, with angled, in-line solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                           |    | Terminal strip with push-buttons, with angled, staggered solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                           |    | Terminal strip with push-buttons, with angled, staggered solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black |                           |    |
| 3   | 2081-1203/200-604/997-404 | 24 | 3   | 2081-1223/200-604/997-404 | 24 | 3   | 2081-1123/200-604/997-405 | 32 |
| 4   | 2081-1204/200-604/997-404 | 24 | 4   | 2081-1224/200-604/997-404 | 24 | 4   | 2081-1124/200-604/997-405 | 32 |
| 5   | 2081-1205/200-604/997-406 | 44 | 5   | 2081-1225/200-604/997-406 | 44 | 5   | 2081-1125/200-604/997-405 | 32 |
| 6   | 2081-1206/200-604/997-406 | 44 | 6   | 2081-1226/200-604/997-406 | 44 |   |                           |    |
| 8   | 2081-1208/200-604/997-406 | 44 | 8   | 2081-1228/200-604/997-406 | 44 |   |                           |    |
| Reel diameter: 330 mm, 230 pieces per reel  |                           |    | Reel diameter: 330 mm, 230 pieces per reel  |                           |    | Reel diameter: 330 mm, 150 pieces per reel  |                           |    |

# PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 3.5 mm 805 Series



- Terminal strips with push-button actuated CAGE CLAMP®S
- Push-in termination of solid and ferruled, fine-stranded conductors
- Push-buttons that close flush with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation
- Versions with/without test slots and spacers
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

**Technical data:**

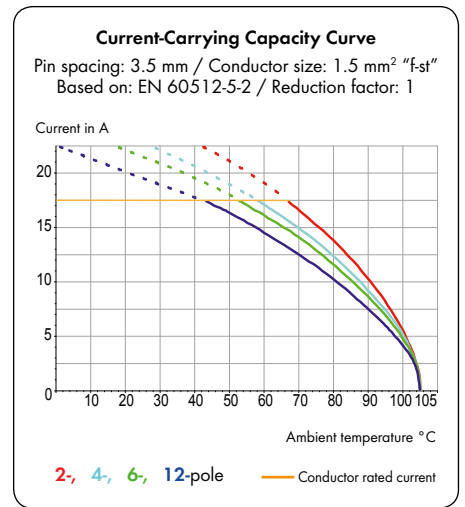
| Pin Spacing          | 3.5 mm<br>0.138 in |        |        |
|----------------------|--------------------|--------|--------|
| Rating per           | IEC/EN 60664-1     |        |        |
| Overtension category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 320 V              | 320 V  | 630 V  |
| Rated surge voltage  | 4 kV               | 4 kV   | 4 kV   |
| Nominal current      | 17.5 A             | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | 300 V              | 150 V  | 300 V  |
| Nominal current UL   | 10 A               | 10 A   | 10 A   |
| Nominal current CSA  | -                  | -      | -      |

**Conductor and solder pin data:**

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®S  |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded     | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded     | 0.25 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 24 - 16   |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                          |
| Conductor entry angle             | 0° to PCB   |
| Solder pin: length/width          | 3.2 mm / 0.75 x 0.75 mm                             |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                              |

**Material data:**

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

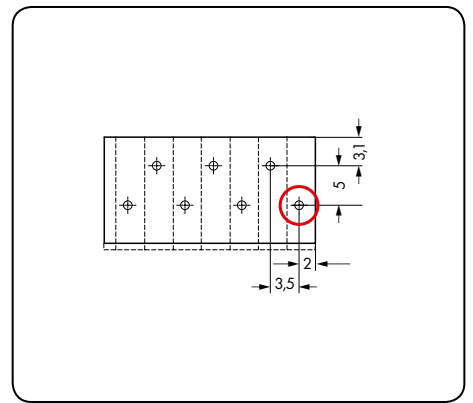
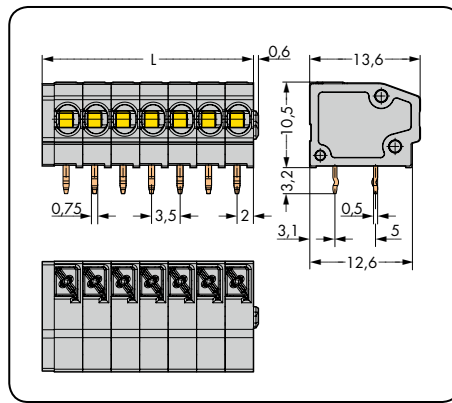
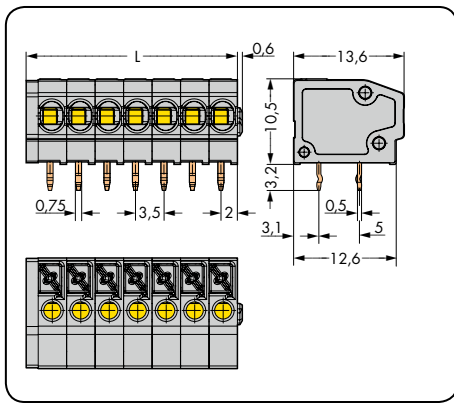


**805 Series accessories:**

**Page:**

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test plugs          | 506       |

| With test slots<br>Pin spacing 3.5 mm / 0.138 in |             | Pin spacing 3.5 mm / 0.138 in |             |
|--|-------------|-------------------------------|-------------|
| 0.2 - 1.5 mm <sup>2</sup>                        | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>     | AWG 24 - 16 |
| 320 V/4 kV/2 17.5 A                              | 300 V/10 A  | 320 V/4 kV/2 17.5 A           | 300 V/10 A  |



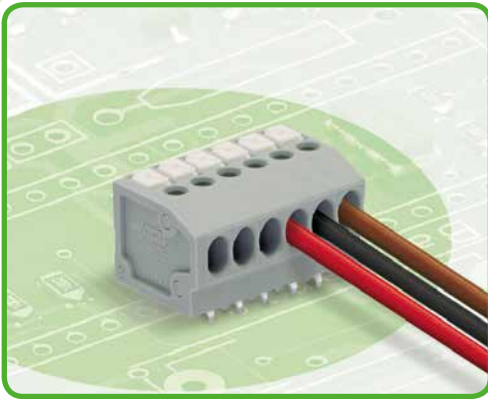
L = (pole no. x pin spacing) + 1.5 mm  
 ○ first solder pin, right front side

| Pole No.  | Item No. | Pack. Unit    | Pole No.                                      | Item No. | Pack. Unit    |
|---|----------|---------------|---|----------|---------------|
| <b>Terminal strip with push-buttons and test slots for 2 mm Ø test plug, gray</b> |          |               | <b>Terminal strip with push-buttons, gray</b> |          |               |
| 2   | 805-102  | 600 (4 x 150) | 2   | 805-302  | 600 (4 x 150) |
| 3   | 805-103  | 420 (4 x 105) | 3   | 805-303  | 420 (4 x 105) |
| 4   | 805-104  | 300 (4 x 75)  | 4   | 805-304  | 300 (4 x 75)  |
| 5   | 805-105  | 260 (4 x 65)  | 5   | 805-305  | 260 (4 x 65)  |
| 6   | 805-106  | 220 (4 x 55)  | 6   | 805-306  | 220 (4 x 55)  |
| 7   | 805-107  | 180 (4 x 45)  | 7   | 805-307  | 180 (4 x 45)  |
| 8   | 805-108  | 160 (4 x 40)  | 8   | 805-308  | 160 (4 x 40)  |
| 9   | 805-109  | 140 (4 x 35)  | 9   | 805-309  | 140 (4 x 35)  |
| 10  | 805-110  | 120 (4 x 30)  | 10  | 805-310  | 120 (4 x 30)  |
| 11  | 805-111  | 100 (4 x 25)  | 11  | 805-311  | 100 (4 x 25)  |
| 12  | 805-112  | 100 (4 x 25)  | 12  | 805-312  | 100 (4 x 25)  |
| 13  | 805-113  | 100 (4 x 25)  | 13  | 805-313  | 100 (4 x 25)  |
| 14  | 805-114  | 100 (4 x 25)  | 14  | 805-314  | 100 (4 x 25)  |
| 15  | 805-115  | 80 (4 x 20)   | 15  | 805-315  | 80 (4 x 20)   |
| 16  | 805-116  | 80 (4 x 20)   | 16  | 805-316  | 80 (4 x 20)   |
| 17  | 805-117  | 80 (4 x 20)   | 17  | 805-317  | 80 (4 x 20)   |
| 18  | 805-118  | 60 (4 x 15)   | 18  | 805-318  | 60 (4 x 15)   |
| 19  | 805-119  | 60 (4 x 15)   | 19  | 805-319  | 60 (4 x 15)   |
| 20  | 805-120  | 60 (4 x 15)   | 20  | 805-320  | 60 (4 x 15)   |
| 21  | 805-121  | 60 (4 x 15)   | 21  | 805-321  | 60 (4 x 15)   |
| 22  | 805-122  | 60 (4 x 15)   | 22  | 805-322  | 60 (4 x 15)   |
| 23  | 805-123  | 60 (4 x 15)   | 23  | 805-323  | 60 (4 x 15)   |
| 24  | 805-124  | 40 (4 x 10)   | 24  | 805-324  | 40 (4 x 10)   |

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|          |             |  |
|----------|-------------|--|
| ● blue   | .../000-006 | <b>Ordering example:</b>   |
| ● orange | .../000-012 | Terminal strip, 3.5 mm pin spacing, 6-pole, blue: <b>805-106/000-006</b> |

# PCB Terminal Strips with Push-Buttons, 1.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side, 3.5 mm Pin Spacing 805 Series



- Terminal strips with push-button actuated CAGE CLAMP® S
- Version with in-line solder pins
- Simple, push-in terminations of solid and ferruled conductors
- Push-buttons that close flush with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation
- Versions with/without test slots and spacers
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

## Technical data:

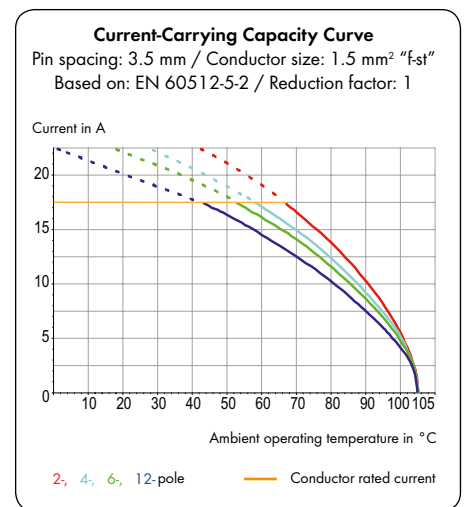
| Pin Spacing          | 3.5 mm<br>0.138 in |        |        |
|----------------------|--------------------|--------|--------|
| Ratings per          | IEC/EN 60664-1     |        |        |
| Overtoltage category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 17.5 A             | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | -                  | -      | -      |
| Nominal current UL   | -                  | -      | -      |
| Nominal current CSA  | -                  | -      | -      |

## Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP® S                                       |
| Conductor size: solid             | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded     | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded     | 0.25 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 24 - 16   |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                          |
| Conductor entry                   | 0° to PCB   |
| Solder pin: length/width          | 3.2 mm / 0.5 x 0.75 mm                              |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                              |

## Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulation material           | Polyamide 6.6 (PA 6.6)                 |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper limit temperature | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | Tin-plated                             |



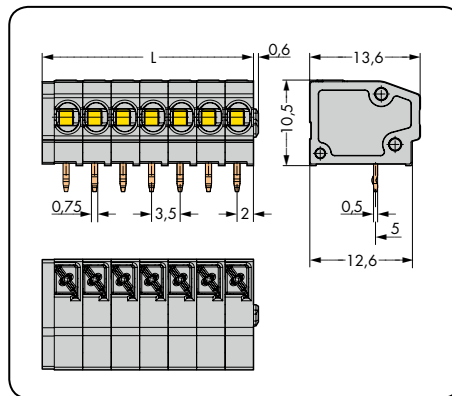
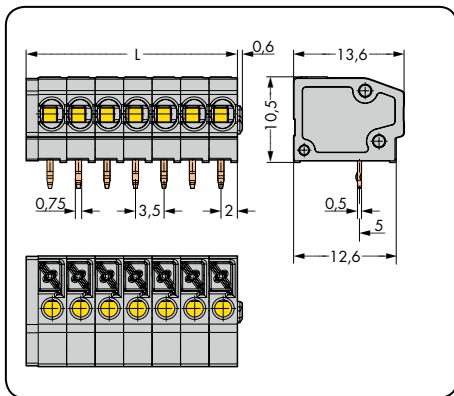
## 805 Series accessories:

## Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating Tools     | 492 - 494 |
| Test plug           | 506       |
|                     |           |
|                     |           |

# PCB Terminal Strips with Push-Buttons, 1.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side

|   |             |                                       |             |
|---|-------------|---------------------------------------|-------------|
| <b>With test slots</b><br><b>Pin spacing: 3.5 mm / 0.138 in</b> |             | <b>Pin spacing: 3.5 mm / 0.138 in</b> |             |
| 0.2 - 1.5 mm <sup>2</sup>                                       | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>             | AWG 24 - 16 |
| 320 V/4 kV/2 17.5 A   | 300 V/10 A  | 320 V/4 kV/2 17.5 A                   | 300 V/10 A  |



L = (pole no. x pin spacing) + 1.5 mm

| Pole No.   | Item No. | Pack. Unit    | Pole No.  | Item No. | Pack. Unit    |
|--|----------|---------------|---|----------|---------------|
| Terminal strip with push-buttons, 1 in-line solder pin/pole, front side, test slots for 2 mm Ø test plug, gray |          |               | Terminal strip with push-buttons, 1 in-line solder pin/pole, front side, gray |          |               |
| 2  | 805-152  | 600 (4 x 150) | 2   | 805-352  | 600 (4 x 150) |
| 3  | 805-153  | 420 (4 x 105) | 3   | 805-353  | 420 (4 x 105) |
| 4  | 805-154  | 320 (4 x 80)  | 4   | 805-354  | 300 (4 x 75)  |
| 5  | 805-155  | 260 (4 x 65)  | 5   | 805-355  | 260 (4 x 65)  |
| 6  | 805-156  | 220 (4 x 55)  | 6   | 805-356  | 220 (4 x 55)  |
| 7  | 805-157  | 180 (4 x 45)  | 7   | 805-357  | 180 (4 x 45)  |
| 8  | 805-158  | 160 (4 x 40)  | 8   | 805-358  | 160 (4 x 40)  |
| 9  | 805-159  | 140 (4 x 35)  | 9   | 805-359  | 140 (4 x 35)  |
| 10   | 805-160  | 120 (4 x 30)  | 10  | 805-350  | 120 (4 x 30)  |
| 11   | 805-161  | 100 (4 x 25)  | 11  | 805-361  | 100 (4 x 25)  |
| 12   | 805-162  | 100 (4 x 25)  | 12  | 805-362  | 100 (4 x 25)  |
| 13   | 805-163  | 100 (4 x 25)  | 13  | 805-363  | 100 (4 x 25)  |
| 14   | 805-164  | 100 (4 x 25)  | 14  | 805-364  | 100 (4 x 25)  |
| 15   | 805-165  | 80 (4 x 20)   | 15  | 805-365  | 80 (4 x 20)   |
| 16   | 805-166  | 80 (4 x 20)   | 16  | 805-366  | 80 (4 x 20)   |
| 17   | 805-167  | 80 (4 x 20)   | 17  | 805-367  | 80 (4 x 20)   |
| 18   | 805-168  | 60 (4 x 15)   | 18  | 805-368  | 60 (4 x 15)   |
| 19   | 805-169  | 60 (4 x 15)   | 19  | 805-369  | 60 (4 x 15)   |
| 20   | 805-170  | 60 (4 x 15)   | 20  | 805-370  | 60 (4 x 15)   |
| 21   | 805-171  | 60 (4 x 15)   | 21  | 805-371  | 60 (4 x 15)   |
| 22   | 805-172  | 60 (4 x 15)   | 22  | 805-372  | 60 (4 x 15)   |
| 23   | 805-173  | 60 (4 x 15)   | 23  | 805-373  | 60 (4 x 15)   |
| 24   | 805-174  | 40 (4 x 10)   | 24  | 805-374  | 40 (4 x 10)   |

Item no. suffixes for colored terminal strips (production and prices depend on quantity required):

|        |             |  |
|--------|-------------|--|
| blue   | .../000-006 | <b>Ordering example:</b>   |
| orange | .../000-012 | Terminal strip, 3.5 mm pin spacing, 6-pole, blue: <b>805-356/000-006</b> |

Please contact factory for other lengths, colors, direct printing, or mixed-color terminal strips.



## THR\* Terminal Strips with Push-Buttons, 1.5 mm<sup>2</sup> 3.5 mm Pin Spacing 805 Series



- THR terminal strips with push-button actuated CAGE CLAMP® S
- Simple, push-in terminations of solid and ferruled conductors
- Push-buttons that close flush with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation

### Technical data:

| Pin Spacing          | 3.5 mm<br>0.138 in |        |        |
|----------------------|--------------------|--------|--------|
| Ratings per          | IEC/EN 60664-1     |        |        |
| Overtoltage category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 200 V              | 320 V  | 320 V  |
| Rated surge voltage  | 4 kV               | 4 kV   | 4 kV   |
| Nominal current      | 17.5 A             | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | -                  | -      | -      |
| Nominal current UL   | -                  | -      | -      |
| Nominal current CSA  | -                  | -      | -      |

### Conductor and solder pin data:

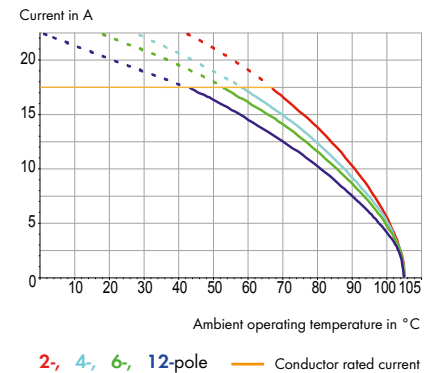
|                               |   |
|-------------------------------|---|
| Connection technology         | CAGE CLAMP® S                                       |
| Conductor size: solid         | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded | 0.2 - 1.5 mm <sup>2</sup>                           |
| Conductor size: fine-stranded | 0.25 - 1 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 1 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 24 - 16   |
| Strip length                  | 9 - 10 mm / 0.35 - 0.39 in                          |
| Conductor entry               | 0° to PCB   |
| Solder pin: length/width      | 2.2 mm / 0.5 x 0.75 mm                              |
| Solder pin: metal-plated hole | 1.1 <sup>+0.1</sup> mm Ø                            |

### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | III a                                  |
| Insulation material           | Polyamide 4.6 (PA 4.6)                 |
| Flammability rating per UL 94 | V2                                     |
| Lower/Upper limit temperature | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | Tin-plated                             |

### Current-Carrying Capacity Curve

Pin spacing: 3.5 mm / Conductor size: 1.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

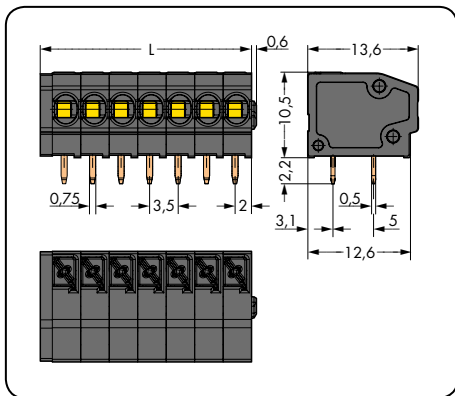


### 805 Series accessories:

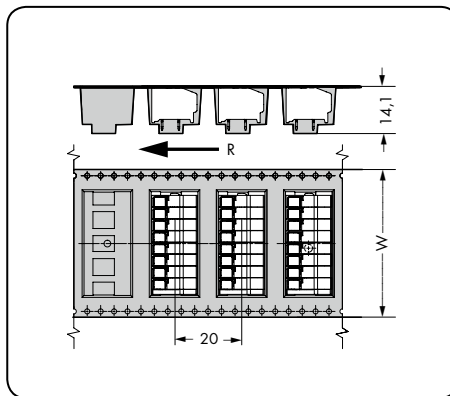
### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating Tools     | 492 - 494 |
| Test plug           | 506       |
|                     |           |
|                     |           |

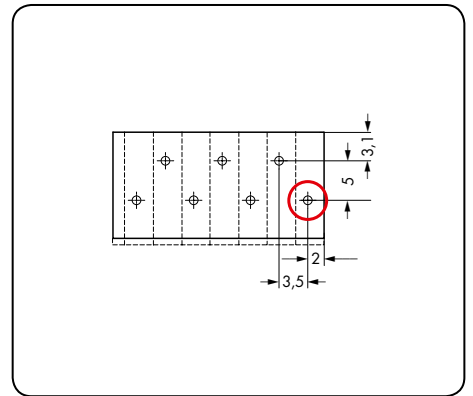
|                                       |             |  |             |
|---------------------------------------|-------------|--|-------------|
| <b>Pin spacing: 3.5 mm / 0.138 in</b> |             | <b>Terminal strips in tape-and-reel packaging</b><br><b>Pin spacing: 3.5 mm / 0.138 in</b> |             |
| 0.2 - 1.5 mm <sup>2</sup>             | AWG 24 - 16 | 0.2 - 1.5 mm <sup>2</sup>  | AWG 24 - 16 |
| 320 V/4 kV/2 17.5 A                   | 300 V/10 A  | 320 V/4 kV/2 17.5 A  | 300 V/10 A  |



L = (pole no. x pin spacing) + 1.5 mm

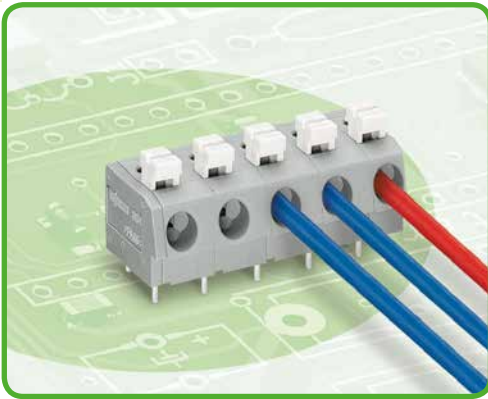


R = Feed direction  
W = Tape width



| Pole No.                                    | Item No.        | PU/SPU        | Pole No.  | Item No.                | W    |
|---|-----------------|---------------|---|-------------------------|------|
| THR terminal strip with push-buttons, black |                 |               | THR terminal strip with push-buttons, in tape-and-reel packaging acc. to IEC 60286-3, black |                         |      |
|   |                 |               |   |                         | (mm) |
| 2   | 805-302/200-604 | 600 (4 x 150) | 2   | 805-302/200-604/997-404 | 24   |
| 3   | 805-303/200-604 | 420 (4 x 105) | 3   | 805-303/200-604/997-404 | 24   |
| 4   | 805-304/200-604 | 300 (4 x 75)  | 4   | 805-304/200-604/997-405 | 32   |
| 5   | 805-305/200-604 | 260 (4 x 65)  | 5   | 805-305/200-604/997-405 | 32   |
| 6   | 805-306/200-604 | 220 (4 x 55)  | 6   | 805-306/200-604/997-406 | 44   |
| 7   | 805-307/200-604 | 180 (4 x 45)  | 7   | 805-307/200-604/997-406 | 44   |
| 8   | 805-308/200-604 | 160 (4 x 40)  | 8   | 805-308/200-604/997-406 | 44   |
| Reel diameter: 330 mm, 160 pieces per reel  |                 |               |   |                         |      |

## PCB Terminal Strips with Push-Buttons 2.5 mm<sup>2</sup> Pin Spacing 5 mm, 7.5 mm 804 Series



- Terminal strips with push-button actuated CAGE CLAMP®S
- Push-in termination of solid and ferruled, fine-stranded conductors
- A large conductor entry accommodates conductors with a cross section up to AWG 12 with an insulation diameter up to 4.2 mm
- Terminal strips with spacers to increase pin spacing
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       | 7.5 mm<br>0.295 in |       |       |
|----------------------|------------------|-------|-------|--------------------|-------|-------|
|                      | IEC/EN 60664-1   |       |       | IEC/EN 60664-1     |       |       |
| Rating per           |                  |       |       |                    |       |       |
| Overvoltage category | III              | III   | II    | III                | III   | II    |
| Pollution degree     | 3                | 2     | 2     | 3                  | 2     | 2     |
| Rated voltage        | 250 V            | 320 V | 630 V | 320 V              | 320 V | 630 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  | 4 kV               | 4 kV  | 4 kV  |
| Nominal current      | 24 A             | 24 A  | 24 A  | 24 A               | 24 A  | 24 A  |
| Approvals per        | UL/CSA           |       |       | UL/CSA             |       |       |
| Use group UL1059     | B                | C     | D     | B                  | C     | D     |
| Rated voltage        | 300 V            | -     | 300 V | 300 V              | -     | 300 V |
| Nominal current UL   | 10 A             | -     | 10 A  | 10 A               | -     | 10 A  |
| Nominal current CSA  | 10 A             | -     | 10 A  | 10 A               | -     | 10 A  |

### Conductor and solder pin data:

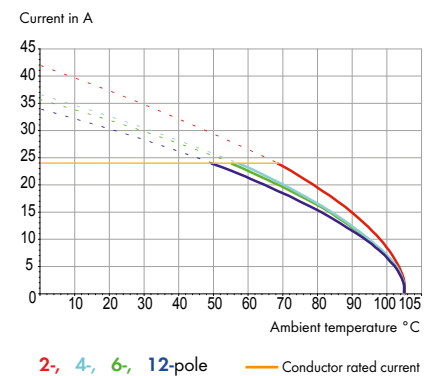
|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®S  |
| Conductor size: solid             | 0.25 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.25 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 2.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 22 - 12   |
| Strip length                      | 10 - 11 mm / 0.39 - 0.43 in                           |
| Conductor entry angle             | 0° to PCB   |
| Solder pin: length/width          | 3.6 mm / 0.8 x 0.6 mm                                 |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                                |

### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

### Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

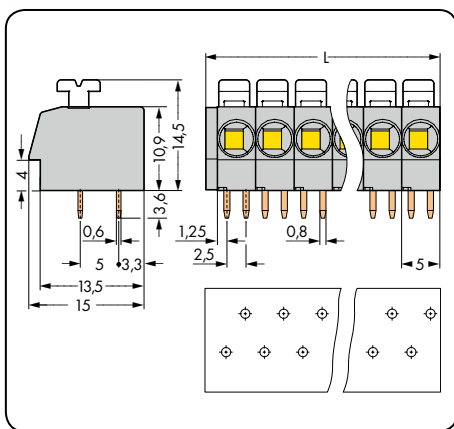
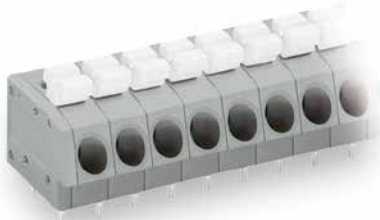


### 804 Series accessories:

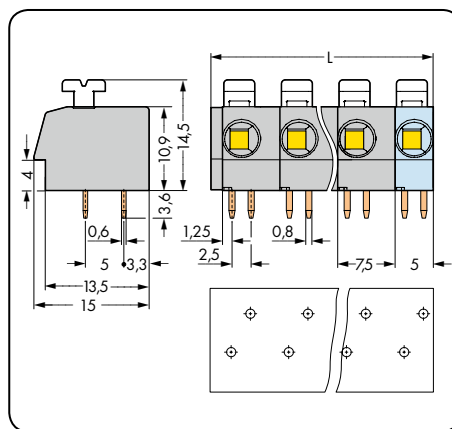
### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |

| Pin spacing 5 mm / 0.197 in |             | Pin spacing 7.5 mm / 0.295 in |             |
|-----------------------------|-------------|-------------------------------|-------------|
| 0.25 - 2.5 mm <sup>2</sup>  | AWG 20 - 12 | 0.25 - 2.5 mm <sup>2</sup>    | AWG 20 - 12 |
| 320 V/4 kV/2 24 A           | 300 V/10 A  | 320 V/4 kV/2 24 A             | 300 V/10 A  |



$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$

| Pole No.  | Item No. | Pack. Unit    | Pole No.  | Item No. | Pack. Unit   |
|---|----------|---------------|---|----------|--------------|
| <b>Terminal strip with push-buttons<br/>2 solder pins/pole, staggered, gray</b> |          |               | <b>Terminal strip with push-buttons<br/>2 solder pins/pole, staggered, gray</b> |          |              |
| 2   | 804-102  | 420 (4 x 105) | 2   | 804-302  | 340 (4 x 85) |
| 3   | 804-103  | 300 (4 x 74)  | 3   | 804-303  | 220 (4 x 55) |
| 4   | 804-104  | 220 (4 x 55)  | 4   | 804-304  | 160 (4 x 40) |
| 5   | 804-105  | 180 (4 x 45)  | 5   | 804-305  | 120 (4 x 30) |
| 6   | 804-106  | 140 (4 x 35)  | 6   | 804-306  | 100 (4 x 25) |
| 7   | 804-107  | 120 (4 x 30)  | 7   | 804-307  | 80 (4 x 20)  |
| 8   | 804-108  | 100 (4 x 25)  | 8   | 804-308  | 80 (4 x 20)  |
| 9   | 804-109  | 100 (4 x 25)  | 9   | 804-309  | 60 (4 x 15)  |
| 10  | 804-110  | 80 (4 x 20)   | 10  | 804-310  | 60 (4 x 15)  |
| 11  | 804-111  | 80 (4 x 20)   | 11  | 804-311  | 60 (4 x 15)  |
| 12  | 804-112  | 80 (4 x 20)   | 12  | 804-312  | 40 (4 x 10)  |
| 13  | 804-113  | 60 (4 x 15)   |   |          |              |
| 14  | 804-114  | 60 (4 x 15)   |   |          |              |
| 15  | 804-115  | 60 (4 x 15)   |   |          |              |
| 16  | 804-116  | 60 (4 x 15)   |   |          |              |

**Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)**

|               |                                |  |
|---------------|--------------------------------|--|
| ● red         | ...../000-005                  | <b>Ordering example:</b><br>Terminal strip, 5 mm pin spacing<br>8-pole, orange: <b>804-108/000-012</b> |
| ● blue        | ...../000-006                  |  |
| ● orange      | ...../000-012                  |  |
| ● light green | ...../000-017                  |  |
| ● pink        | ...../000-051                  |  |
| ●             | Suitable for Ex i applications |  |

## PCB Terminal Blocks 1.5 mm<sup>2</sup> Pin Spacing 3.5 mm 744 Series



- Terminal blocks with PUSH WIRE® connection
- Push-in termination of solid conductors – low insertion forces
- Just 6.4 mm high
- Conductor removal via disconnection tool or by twist & pull

### Technical data:

| Pin Spacing          | 3.5 mm<br>0.138 in |       |       |
|----------------------|--------------------|-------|-------|
| Rating per           | IEC/EN 60664-1     |       |       |
| Overvoltage category | III                | III   | II    |
| Pollution degree     | 3                  | 2     | 2     |
| Rated voltage        | 320 V              | 320 V | 630 V |
| Rated surge voltage  | 4 kV               | 4 kV  | 4 kV  |
| Nominal current      | 2 A                | 2 A   | 2 A   |
| Approvals per        | UL/CSA             |       |       |
| Use group UL1059     | B                  | C     | D     |
| Rated voltage        | 300 V              | -     | 300 V |
| Nominal current UL   | 2 A                | -     | 2 A   |
| Nominal current CSA  | -                  | -     | -     |

### Conductor and solder pin data:

|                                   |                           |
|-----------------------------------|---------------------------|
| Connection technology             | PUSH WIRE®                |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup> |
| AWG                               | 20 - 16 "sol."            |
| Strip length                      | 8 - 9 mm / 0.31 - 0.35 in |
| Conductor entry angle             | 0° to PCB                 |
| Solder pin: length/width          | 3.5 mm / 0.35 x 0.9 mm    |
| Solder pin: drilled hole diameter | 1.1 <sup>±0.1</sup> mm    |

### Material data:

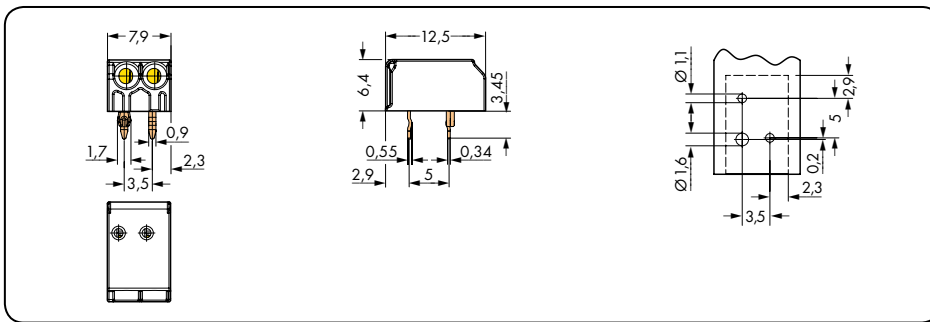
|                               |  |
|-------------------------------|--|
| Material group                | I  |
| Insulating material           | Nylon 6.6 (PA 6.6)                               |
| Temperature stability         | -60 °C to +105 °C                                |
| Flammability rating per UL 94 | V0   |
| Clamping spring material      | Chrome-nickel spring steel (CrNi), copper-plated |
| Contact plating               | tin-plated                                       |

### 744 Series accessories:

### Page:

|                    |     |
|--------------------|-----|
| Disconnection tool | 498 |
|                    |     |
|                    |     |
|                    |     |

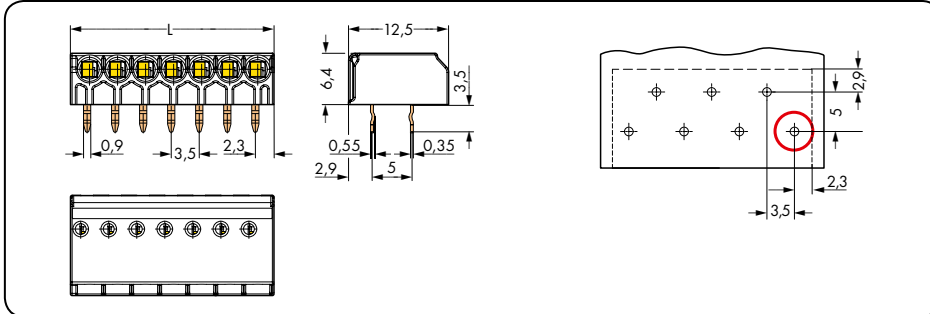
|                                      |                    |
|--------------------------------------|--------------------|
| <b>Pin spacing 3.5 mm / 0.138 in</b> |                    |
| 0.5 – 1.5 mm <sup>2</sup> "sol."     | AWG 20 – 16 "sol." |
| 320 V/4 kV/2 2 A                     | 300 V/2 A          |



2-pole, with additional anti-rotatin pin



Inserting solid conductor via push-in termination.



For 3 poles and more, L = (pole no. x pin spacing) + 0.9 mm  
 ○ first solder pin, right front side



Removing conductor via 1.0 mm Ø disconnection tool.

| Pole No.  | Item No. | Pack. Unit |
|---|----------|------------|
| <b>Terminal block with disconnecting slots, white</b> |          |            |
| 2   | 744-292  | 1000       |
| 3   | 744-203  | 1000       |
| 4   | 744-204  | 800        |
| 6   | 744-206  | 500        |
| 7   | 744-207  | 300        |
| 8   | 744-208  | 300        |
| 10  | 744-210  | 200        |

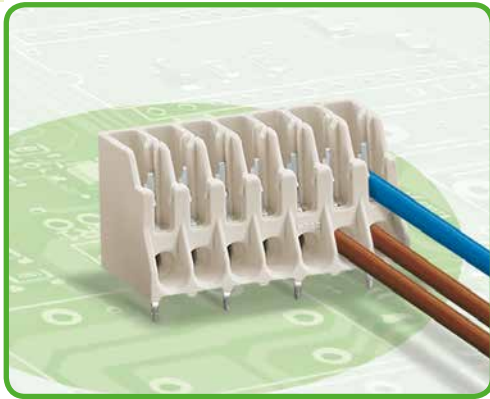
**Item no. suffixes for colored terminal blocks:**

|   |             |
|---|-------------|
| gray                                    | .../000-007 |
| orange                                  | .../000-012 |
| <b>Ordering example:</b>                |             |
| Terminal block, 3.5 mm pin spacing      |             |
| 10-pole, orange: <b>744-210/000-012</b> |             |

# Combi PCB Terminal Blocks with PUSH WIRE® and FIT CLAMP® Connections

## Pin Spacing 3.5 mm

### 251 Series



- Compact Combi PCB terminal blocks are ideal for automated wiring in the lighting industry
- Low conductor insertion forces
- PUSH WIRE® and FIT CLAMP® connections suitable for automated wiring systems

#### Technical data:

#### "251 high" version:

#### "251 mini" version:

| Pin Spacing          | 3.5 mm/0.138 in<br>0.5 - 1.5 mm <sup>2</sup> "sol." |       |       | 3.5 mm/0.138 in<br>0.5 - 1 mm <sup>2</sup> "sol." |       |       |
|----------------------|---|-------|-------|---|-------|-------|
|                      | IEC/EN 60664-1                                      |       |       | IEC/EN 60664-1                                    |       |       |
| Rating per           | IEC/EN 60664-1                                      |       |       | IEC/EN 60664-1                                    |       |       |
| Overtoltage category | III   | III   | II    | III   | III   | II    |
| Pollution degree     | 3   | 2     | 2     | 3   | 2     | 2     |
| Rated voltage        | 250 V   | 320 V | 630 V | 320 V   | 320 V | 630 V |
| Rated surge voltage  | 4 kV  | 4 kV  | 4 kV  | 4 kV  | 4 kV  | 4 kV  |
| Nominal current      | 2 A   | 2 A   | 2 A   | 6 A   | 6 A   | 6 A   |
| Approvals per        | UL/CSA  |       |       | UL/CSA  |       |       |
| Use group UL1059     | B   | C     | D     | B   | C     | D     |
| Rated voltage        | -   | -     | -     | 300 V   | -     | 300 V |
| Nominal current UL   | -   | -     | -     | 4 A   | -     | 4 A   |
| Nominal current CSA  | -   | -     | -     | -   | -     | -     |

#### Conductor and solder pin data for "251 high" version:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | <b>PUSH WIRE®</b>                             |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup>                     |
| AWG                               | 20 - 16 "sol."                                |
| Strip length                      | 7.5 - 8.5 mm / 0.29 - 0.32 in                 |
| Conductor entry angle             | 0° to PCB                                     |
| Connection technology             | <b>FIT CLAMP®</b> (IDC connection)            |
| Conductor size: solid             | 0.5 mm <sup>2</sup> (PVC insulation, simple)  |
| Conductor size: fine-stranded     | 0.75 mm <sup>2</sup> (PVC insulation, simple) |
| Solder pin: length/width          | 3.6 mm / 0.75 x 0.5 mm                        |
| Solder pin: drilled hole diameter | 1.2 <sup>0.1</sup> mm                         |

#### Conductor and solder pin data for "251 mini" version:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | <b>PUSH WIRE®</b>   |
| Conductor size: solid             | 0.5 - 1 mm <sup>2</sup> Max. 2.5 mm insulation diameter for 1 mm <sup>2</sup> "sol." conductors |
| AWG                               | 20 - 18 "sol."  |
| Strip length                      | 8 - 9 mm / 0.31 - 0.35 in   |
| Conductor entry angle             | 0° to PCB   |
| Connection technology             | <b>FIT CLAMP®</b> (IDC connection)  |
| Conductor size: solid             | 0.5 mm <sup>2</sup> (PVC insulation, simple)  |
| Conductor size: fine-stranded     | 0.75 mm <sup>2</sup> (PVC insulation, simple)   |
| Solder pin: length/width          | 3.2 mm / 0.75 x 0.5 mm  |
| Solder pin: drilled hole diameter | 1.1 <sup>0.1</sup> mm   |

#### Material data:

|                               |   |
|-------------------------------|---|
| Material group                | I   |
| Insulating material           | Nylon 6.6 (PA 6.6)                                      |
| Temperature stability         | -60 °C to +105 °C                                       |
| Flammability rating per UL 94 | V0  |
| Clamping spring material      | Chrome-nickel spring steel (CrNi) (for "251 mini" only) |
| Contact material              | Copper alloy  |
| Contact plating               | tin-plated  |

#### 251 Series accessories:

#### Page:

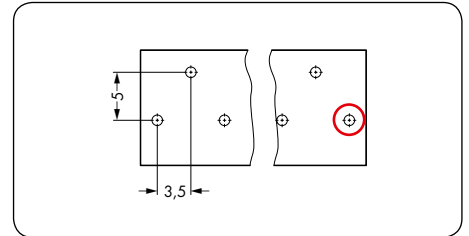
|                 |     |
|-----------------|-----|
| Operating tool  | 493 |
| Disconnect tool | 498 |
|                 |     |
|                 |     |
|                 |     |



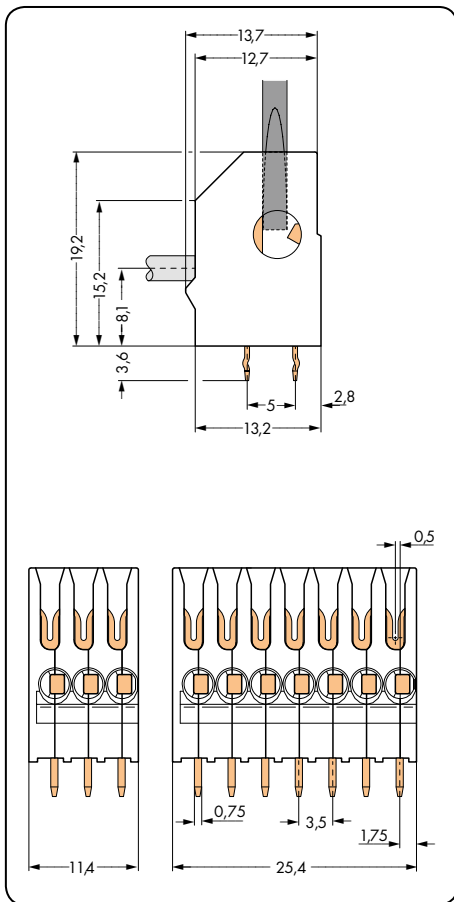
# Combi PCB Terminal Blocks with PUSH WIRE® and FIT CLAMP® Connections

FIT CLAMP®  
PUSH WIRE®

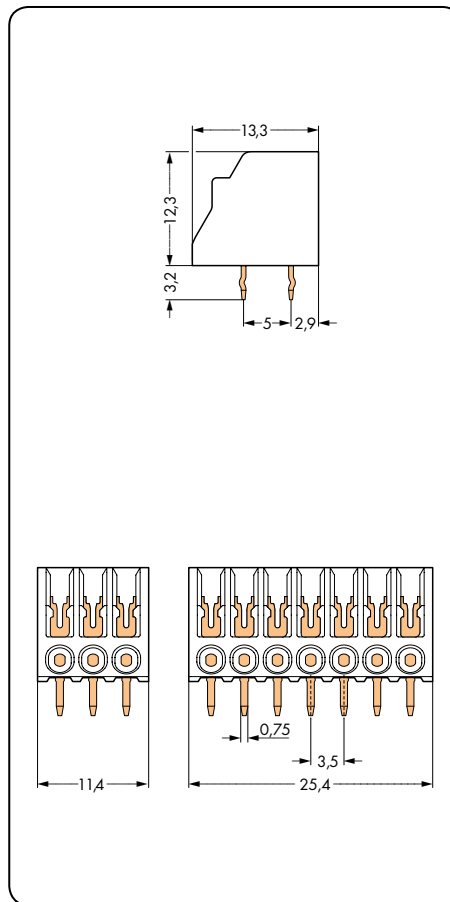
| "251 high" version<br>Pin spacing 3.5 mm / 0.138 in |                    | "251 mini" version<br>Pin spacing 3.5 mm / 0.138 in |                    | Handling |
|---|--------------------|---|--------------------|----------|
| 0.5 – 1.5 mm <sup>2</sup> "sol."                    | AWG 20 – 16 "sol." | 0.5 – 1 mm <sup>2</sup> "sol."                      | AWG 20 – 18 "sol." |          |
| 320 V/4 kV/2 A                                      |                    | 320 V/4 kV/2 A                                      | 300 V/4 A          |          |



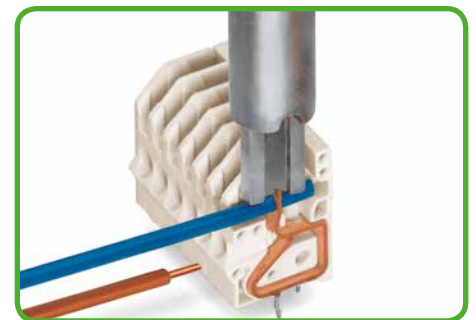
○ Starting point (first solder pin), right front side



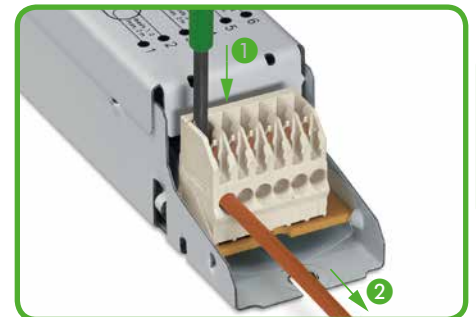
L = (pole no. x pin spacing) + 0.9 mm



L = (pole no. x pin spacing) + 0.9 mm



Conductor termination – "251 high" and "251 mini"  
PUSH WIRE® = Simply push in conductor.  
FIT CLAMP® (IDC) = Insert conductor via 206-831 operating tool.



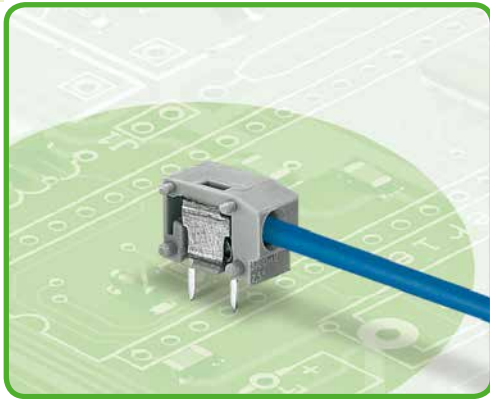
Conductor removal – "251 high"  
PUSH WIRE®: Open spring via 2.5 x 0.4 mm screwdriver and pull out conductor.  
FIT CLAMP® (IDC): Pull up vertically on conductor to remove it (10 x reconnection possible when used properly. Before re-using, cut off old contact point from conductor)



Conductor removal – "251 mini"  
PUSH WIRE®: Twist conductor and pull out, or fully insert 206-830 disconnection tool over the conductor and pull it out.  
FIT CLAMP® (IDC): Pull up vertically on conductor to remove it (10 x reconnection possible when used properly. Before re-using, cut off old contact point from conductor)

| Pole No.  | Item No. | Pack. Unit    | Pole No.  | Item No. | Pack. Unit    |
|---|----------|---------------|---|----------|---------------|
| Combi PCB terminal block with PUSH WIRE® and IDC connections, white |          |               | Combi PCB terminal block with PUSH WIRE® (max. 2.5 mm insulation diameter for 1 mm <sup>2</sup> "sol." conductors) and IDC connections, white |          |               |
| 2   | 251-102  | 600 (4 x 150) | 3   | 251-303  | 420 (4 x 105) |
| 3   | 251-103  | 420 (4 x 105) | 4   | 251-304  | 320 (4 x 80)  |
| 4   | 251-104  | 320 (4 x 80)  | 6   | 251-306  | 200 (4 x 50)  |
| 5   | 251-105  | 260 (4 x 65)  | 7   | 251-307  | 180 (4 x 45)  |
| 6   | 251-106  | 220 (4 x 55)  | 8   | 251-308  | 160 (4 x 40)  |
| 7   | 251-107  | 180 (4 x 45)  | 10  | 251-310  | 120 (4 x 30)  |

# Modular PCB Terminal Blocks 2.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Low-profile modular terminal blocks with screwdriver-actuated PUSH WIRE® termination for custom terminal strip assemblies
- Push-in termination of solid conductors
- Double solder pins for high mechanical stability
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slots can be found at [www.wago.com](http://www.wago.com)

## Technical data:

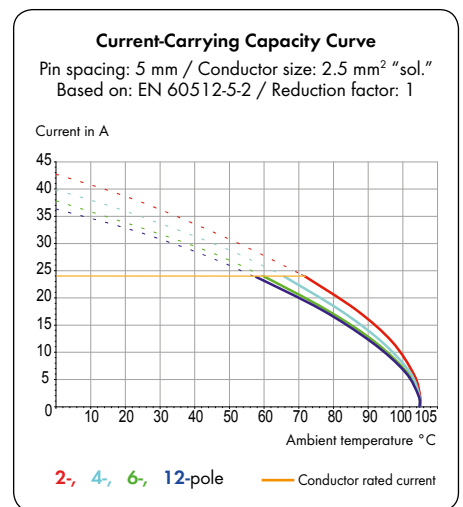
| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Rating per           | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Overtoltage category | III                 | III   | II    | III                   | III   | II     | III                   | III    | II     |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 400 V                 | 630 V | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 24 A                | 24 A  | 24 A  | 24 A                  | 24 A  | 24 A   | 24 A                  | 24 A   | 24 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 10 A                | -     | 10 A  | 10 A                  | -     | 10 A   | 10 A                  | -      | 10 A   |
| Nominal current CSA  | 15 A                | -     | -     | 15 A                  | -     | -      | 15 A                  | -      | -      |

## Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | PUSH WIRE®  |
| Conductor size: solid             | 0.5 - 2.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 20 - 14 "sol."  |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                            |
| Conductor entry angle             | 0° to PCB   |
| Solder pin: length/width          | 3.6 mm / 0.8 x 0.4 mm                                 |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm                                  |

## Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

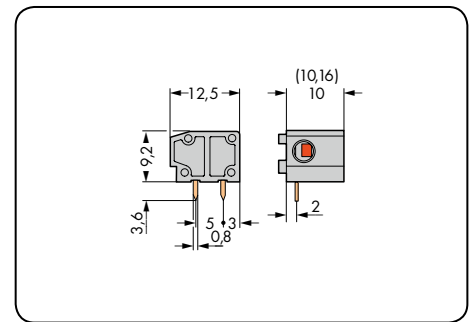
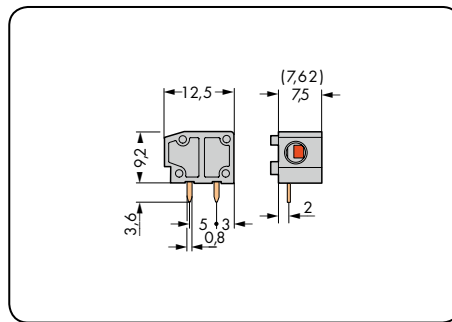
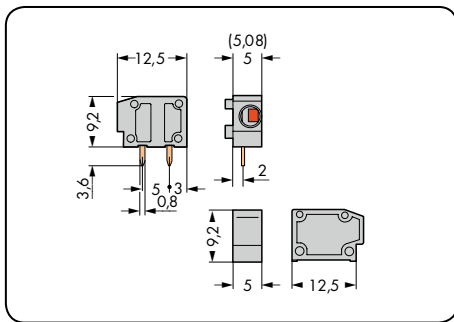


## 235 Series accessories:


Page:


|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in   |                    | Pin spacing 7.5/7.62 mm / 0.3 in |                    | Pin spacing 10/10.16 mm / 0.4 in |                    |
|----------------------------------|--------------------|----------------------------------|--------------------|----------------------------------|--------------------|
| 0.5 – 2.5 mm <sup>2</sup> "sol." | AWG 20 – 14 "sol." | 0.5 – 2.5 mm <sup>2</sup> "sol." | AWG 20 – 14 "sol." | 0.5 – 2.5 mm <sup>2</sup> "sol." | AWG 20 – 14 "sol." |
| 320 V/4 kV/2 24 A                | 300 V/10 A         | 630 V/6 kV/2 24 A                | 300 V/10 A         | 1000 V/8 kV/2 24 A               | 300 V/10 A         |

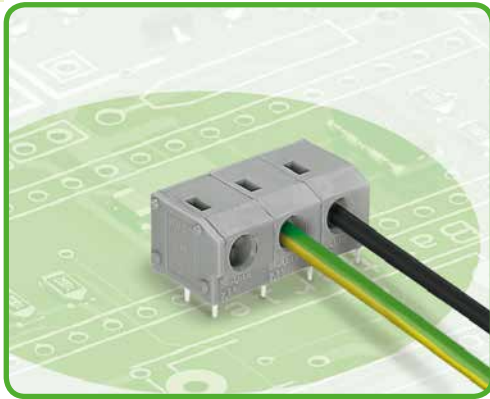


| Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    |
|---|----------|---------------|---|----------|---------------|---|----------|---------------|
| <b>Modular terminal block, 2 solder pins/pole</b> |          |               | <b>Modular terminal block, 2 solder pins/pole</b> |          |               | <b>Modular terminal block, 2 solder pins/pole</b> |          |               |
| gray  | 235-401  | 800 (8 x 100) | gray  | 235-501  | 600 (6 x 100) | gray  | 235-801  | 400 (4 x 100) |
| dark gray   | 235-742  | 800 (8 x 100) | dark gray   | 235-752  | 600 (6 x 100) | dark gray   | 235-762  | 400 (4 x 100) |
| light gray  | 235-743  | 800 (8 x 100) | light gray  | 235-753  | 600 (6 x 100) | light gray  | 235-763  | 400 (4 x 100) |
| blue  | 235-744  | 800 (8 x 100) | blue  | 235-754  | 600 (6 x 100) | blue  | 235-764  | 400 (4 x 100) |
| orange  | 235-746  | 800 (8 x 100) | orange  | 235-756  | 600 (6 x 100) | orange  | 235-766  | 400 (4 x 100) |
| light green                                       | 235-747  | 800 (8 x 100) | light green                                       | 235-757  | 600 (6 x 100) | light green                                       | 235-767  | 400 (4 x 100) |
|   |          |               | ① Suitable for Ex i applications                  |          |               | ① Suitable for Ex i applications                  |          |               |

| Product Accessories   | Item No. | Pack. Unit |
|---|----------|------------|
| Spacer for modular terminal blocks for doubling the pin spacing, gray               |          |            |
|  | 235-701  | 100        |

| End plates for modular terminal blocks, 235 Series, snap-on type, 1 mm/0.039 in thick | Color       | Item No. | Pack. Unit |
|---|-------------|----------|------------|
|    | gray        | 235-100  | 100        |
|   | dark gray   | 235-200  | 100        |
|   | light gray  | 235-300  | 100        |
|   | blue        | 235-400  | 100        |
|   | black       | 235-500  | 100        |
|   | yellow      | 235-550  | 100        |
|   | orange      | 235-600  | 100        |
|   | violet      | 235-650  | 100        |
|   | light green | 235-700  | 100        |
|   | red         | 235-800  | 100        |
|   | white       | 235-850  | 100        |

# PCB Terminal Strips 2.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Low-profile terminal strips with screwdriver-actuated PUSH WIRE® termination
- Push-in termination of solid conductors
- Double solder pins for high mechanical stability
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slots can be found at [www.wago.com](http://www.wago.com)

## Technical data:

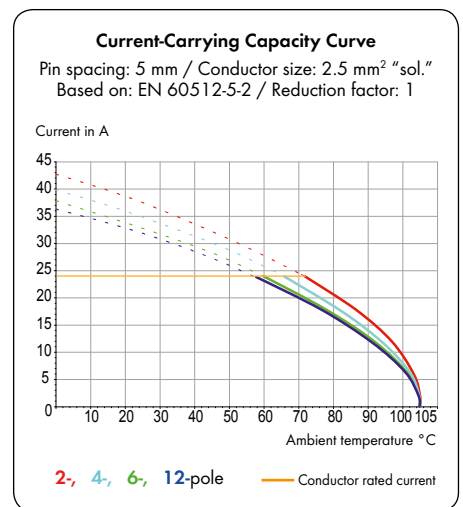
| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Rating per           | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Overtoltage category | III                 | III   | II    | III                   | III   | II     | III                   | III    | II     |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 400 V                 | 630 V | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 24 A                | 24 A  | 24 A  | 24 A                  | 24 A  | 24 A   | 24 A                  | 24 A   | 24 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 10 A                | -     | 10 A  | 10 A                  | -     | 10 A   | 10 A                  | -      | 10 A   |
| Nominal current CSA  | 15 A                | -     | -     | 15 A                  | -     | -      | 15 A                  | -      | -      |

## Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | PUSH WIRE®  |
| Conductor size: solid             | 0.5 - 2.5 mm <sup>2</sup>                             |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 20 - 14 "sol."  |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in                            |
| Conductor entry angle             | 0° to PCB   |
| Solder pin: length/width          | 3.6 mm / 0.8 x 0.4 mm                                 |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm                                  |

## Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

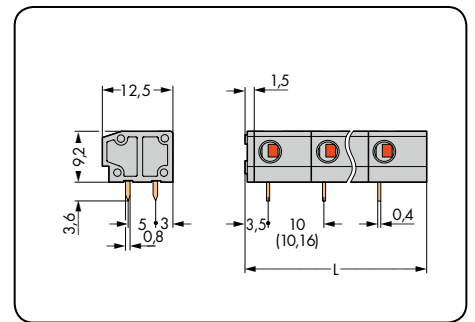
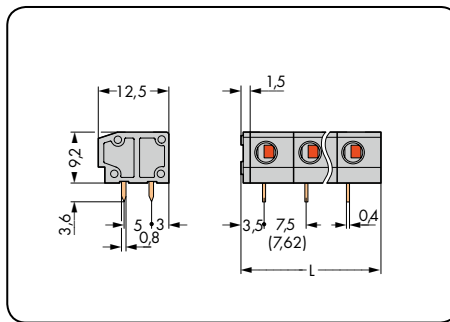
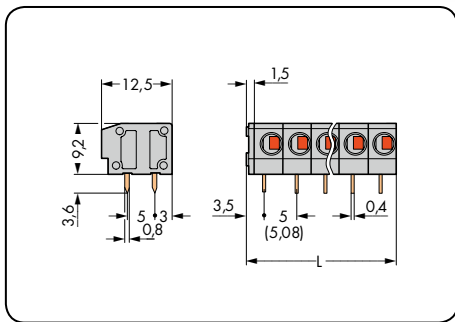
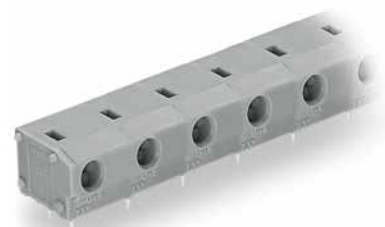
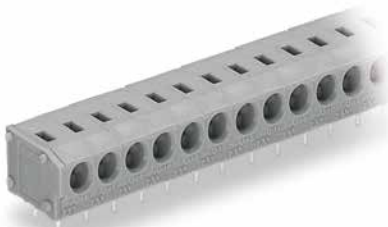


## 235 Series accessories:

Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in   |                    | Pin spacing 7.5/7.62 mm / 0.3 in |                    | Pin spacing 10/10.16 mm / 0.4 in |                    |
|----------------------------------|--------------------|----------------------------------|--------------------|----------------------------------|--------------------|
| 0.5 – 2.5 mm <sup>2</sup> "sol." | AWG 20 – 14 "sol." | 0.5 – 2.5 mm <sup>2</sup> "sol." | AWG 20 – 14 "sol." | 0.5 – 2.5 mm <sup>2</sup> "sol." | AWG 20 – 14 "sol." |
| 320 V/4 kV/2 24 A                | 300 V/10 A         | 630 V/6 kV/2 24 A                | 300 V/10 A         | 1000 V/8 kV/2 24 A               | 300 V/10 A         |



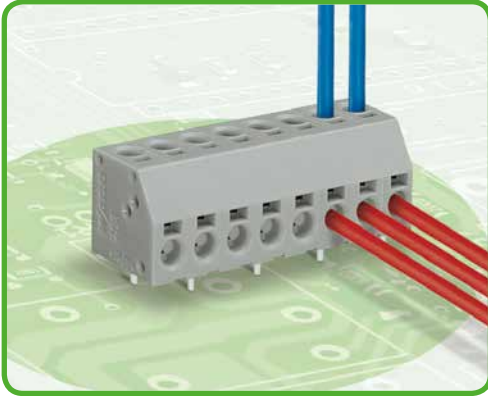
L = (pole no. x pin spacing) + 1.5 mm

| Pole No.  | Item No. | Pack. Unit    | Pole No.  | Item No. | Pack. Unit   | Pole No.  | Item No. | Pack. Unit   |
|---|----------|---------------|---|----------|--------------|---|----------|--------------|
| <b>Terminal strip, 2 solder pins/pole, gray</b> |          |               | <b>Terminal strip, 2 solder pins/pole, gray</b> |          |              | <b>Terminal strip, 2 solder pins/pole, gray</b> |          |              |
| 2   | 235-402  | 420 (4 x 105) | 2   | 235-502  | 280 (4 x 70) | 2   | 235-802  | 220 (4 x 55) |
| 3   | 235-403  | 280 (4 x 70)  | 3   | 235-503  | 200 (4 x 50) | 3   | 235-803  | 140 (4 x 35) |
| 4   | 235-404  | 220 (4 x 55)  | 4   | 235-504  | 140 (4 x 35) | 4   | 235-804  | 120 (4 x 30) |
| 5   | 235-405  | 180 (4 x 45)  | 5   | 235-505  | 120 (4 x 30) | 5   | 235-805  | 80 (4 x 20)  |
| 6   | 235-406  | 140 (4 x 35)  | 6   | 235-506  | 100 (4 x 25) | 6   | 235-806  | 80 (4 x 20)  |
| 7   | 235-407  | 120 (4 x 30)  | 7   | 235-507  | 80 (4 x 20)  | 7   | 235-807  | 60 (4 x 15)  |
| 8   | 235-408  | 100 (4 x 25)  | 8   | 235-508  | 60 (4 x 15)  | 8   | 235-808  | 40 (4 x 10)  |
| 9   | 235-409  | 100 (4 x 25)  | 9   | 235-509  | 60 (4 x 15)  | 9   | 235-809  | 40 (4 x 10)  |
| 10  | 235-410  | 80 (4 x 20)   | 10  | 235-510  | 60 (4 x 15)  | 10  | 235-810  | 40 (4 x 10)  |
| 12  | 235-412  | 60 (4 x 15)   | 12  | 235-512  | 40 (4 x 10)  | 12  | 235-812  | 40 (4 x 10)  |
| 16  | 235-416  | 60 (4 x 15)   | 16  | 235-516  | 40 (4 x 10)  | 16  | 235-816  | 20 (4 x 5)   |
| 24  | 235-424  | 40 (4 x 10)   | 24  | 235-524  | 20 (4 x 5)   | 24  | 235-824  | 20 (4 x 5)   |
| 36  | 235-436  | 20 (4 x 5)    |   |          |              |   |          |              |
| 48  | 235-448  | 20 (4 x 5)    |   |          |              |   |          |              |

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|   |              |  |
|---|--------------|--|
| ① blue  | ... /000-006 | <b>Ordering example:</b><br>Terminal strip, 7.5/7.62 mm pin spacing<br>16-pole, blue: <b>235-516/000-006</b> |
| ● dark gray   | ... /000-008 |  |
| ○ light gray  | ... /000-009 |  |
| ● orange  | ... /000-012 |  |
| ● light green   | ... /000-017 |  |
| ① Suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing) |              |  |

## 2-Conductor PCB Terminal Strips 1.5 mm<sup>2</sup> Pin Spacing 5 mm 253 Series



- Terminal strips with screwdriver-actuated PUSH WIRE® termination
- Double-conductor connection provides top-entry (vertical) and/or side-entry (horizontal) wiring
- Push-in termination of solid conductors
- Double-conductor connection for supply and potential distribution

### Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |        |        |
|----------------------|------------------|--------|--------|
| Rating per           | IEC/EN 60664-1   |        |        |
| Overtoltage category | III              | III    | II     |
| Pollution degree     | 3                | 2      | 2      |
| Rated voltage        | 320 V            | 320 V  | 630 V  |
| Rated surge voltage  | 4 kV             | 4 kV   | 4 kV   |
| Nominal current      | 17.5 A           | 17.5 A | 17.5 A |
| Approvals per        | UL/CSA           |        |        |
| Use group UL1059     | B                | C      | D      |
| Rated voltage        | 300 V            | -      | 300 V  |
| Nominal current UL   | 2 A              | -      | 2 A    |
| Nominal current CSA  | 2 A              | -      | 2 A    |

### Conductor and solder pin data:

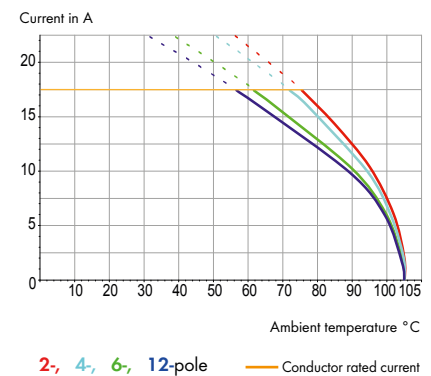
|                                   |  |
|-----------------------------------|--|
| Connection technology             | PUSH WIRE®   |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup>                              |
| AWG                               | 20 - 16 "sol."   |
| Strip length                      | 8.5 - 9.5 mm / 0.32 - 0.36 in (for single-side wiring) |
| Strip length                      | 7 - 8 mm / 0.28 - 0.31 in (for wiring on both sides)   |
| Conductor entry angle             | 0° and 90° to PCB                                      |
| Solder pin: length/width          | 3,6 mm / 0,5 x 0,8 mm                                  |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                                 |

### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

### Current-Carrying Capacity Curve: Conductor - Solder Pin

Pin spacing: 5 mm / Conductor size: 1.5 mm<sup>2</sup> "sol."  
Based on: EN 60512-5-2 / Reduction factor: 1



### 253 Series accessories:

### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |



# 2-Conductor PCB Terminal Strips 1.5 mm<sup>2</sup>

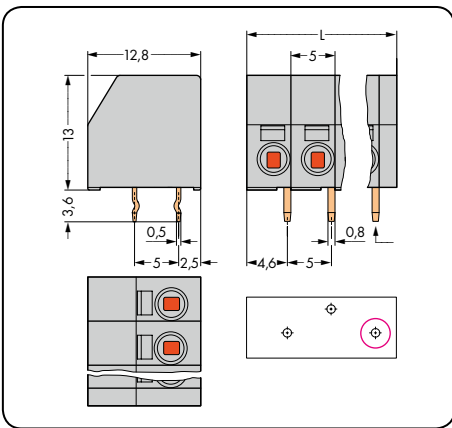
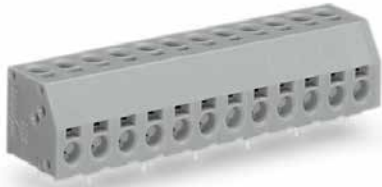
PUSH WIRE®

6

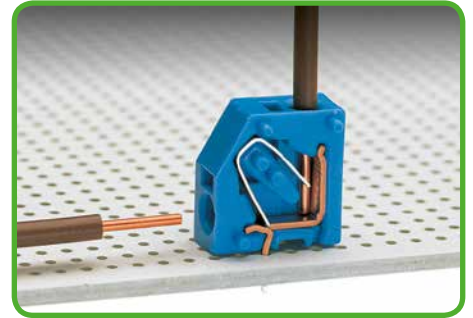
425

Pin spacing 5 mm / 0.197 in

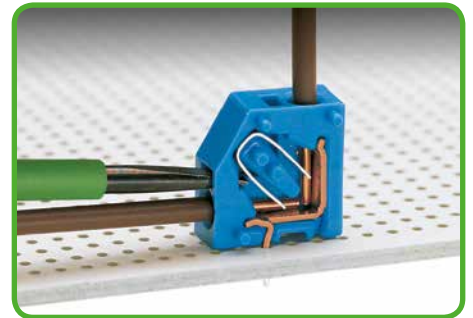
0.5 – 1.5 mm<sup>2</sup> "sol." | AWG 20 – 16 "sol."  
 320 V/4 kV/2 17.5 A | 300 V/2 A



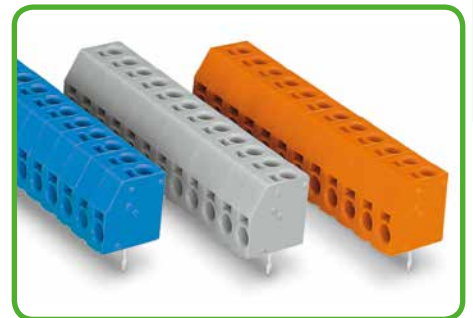
L = (pole no. x pin spacing) + 2 mm  
 ○ first solder pin, right front side



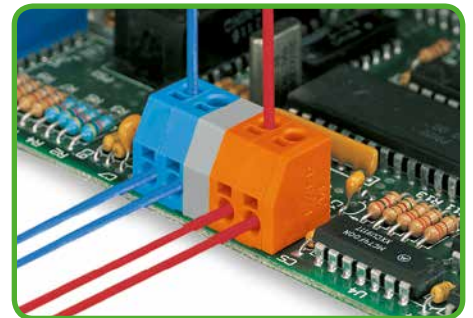
Simply push solid conductor in until it hits backstop.



Remove conductor via 2.5 mm screwdriver.



Insulating housings available in different colors.



Terminal strip insulating housings with or without spacer mixed in different colors upon request.

| Pole No.  | Item No. | Pack. Unit    |
|---|----------|---------------|
| <b>2-conductor terminal strip,<br/>1 solder pin/pole, staggered, gray</b> |          |               |
| 2   | 253-102  | 400 (4 x 100) |
| 3   | 253-103  | 280 (4 x 70)  |
| 4   | 253-104  | 220 (4 x 55)  |
| 5   | 253-105  | 160 (4 x 40)  |
| 6   | 253-106  | 140 (4 x 35)  |
| 7   | 253-107  | 120 (4 x 30)  |
| 8   | 253-108  | 100 (4 x 25)  |
| 9   | 253-109  | 100 (4 x 25)  |
| 10  | 253-110  | 80 (4 x 20)   |
| 11  | 253-111  | 80 (4 x 20)   |
| 12  | 253-112  | 60 (4 x 15)   |
| 13  | 253-113  | 60 (4 x 15)   |
| 14  | 253-114  | 60 (4 x 15)   |
| 15  | 253-115  | 60 (4 x 15)   |
| 16  | 253-116  | 40 (4 x 10)   |

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|               |              |  |
|---------------|--------------|--|
| ● yellow      | ... /000-002 | <b>Ordering example:</b><br>Terminal strip, 5 mm pin spacing, 8-pole, orange,<br>1 solder pin staggered: 253-108/000-012 |
| ● black       | ... /000-004 |  |
| ● red         | ... /000-005 |  |
| ● blue        | ... /000-006 |  |
| ○ light gray  | ... /000-009 |  |
| ● orange      | ... /000-012 |  |
| ● light green | ... /000-017 |  |
| ● violet      | ... /000-024 |  |
| ○ white       | ... /000-050 |  |

Please contact factory for other lengths, colors, mixed-color terminal strips, or direct marking.



## 2-Conductor PCB Terminal Strips with Push-Buttons

### Pin Spacing 2.5 mm

### 2080 Series



- Compact terminal strips with PUSH WIRE® connection for solid conductors
- Each termination unit features an integrated push-button
- Double-conductor connection for commoning signals

#### Technical data:

| Pin Spacing          | 2.5 mm<br>0.098 in |        |        |
|----------------------|--------------------|--------|--------|
| Rating per           | IEC/EN 60664-1     |        |        |
| Overvoltage category | III                | III    | II     |
| Pollution degree     | 3                  | 2      | 2      |
| Rated voltage        | 160 V              | 160 V  | 320 V  |
| Rated surge voltage  | 2.5 kV             | 2.5 kV | 2.5 kV |
| Nominal current      | 2 A                | 2 A    | 2 A    |
| Approvals per        | UL/CSA             |        |        |
| Use group UL 1059    | B                  | C      | D      |
| Rated voltage        | -                  | -      | -      |
| Nominal current UL   | -                  | -      | *      |
| Nominal current CSA  | -                  | -      | -      |

#### Conductor and solder pin data:

|                                   |                           |
|-----------------------------------|---------------------------|
| Connection technology             | PUSH WIRE®                |
| Conductor size: solid             | 0.2 - 0.5 mm <sup>2</sup> |
| AWG                               | 24 - 20 "sol."            |
| Strip length                      | 6 - 7 mm / 0.24 - 0.28 in |
| Conductor entry angle             | 90° to PCB                |
| Solder pin: length/width          | 3.4 mm / 0.5 x 0.8 mm     |
| Solder pin: drilled hole diameter | 1.1 <sup>-0.1</sup> mm    |

#### Material data:

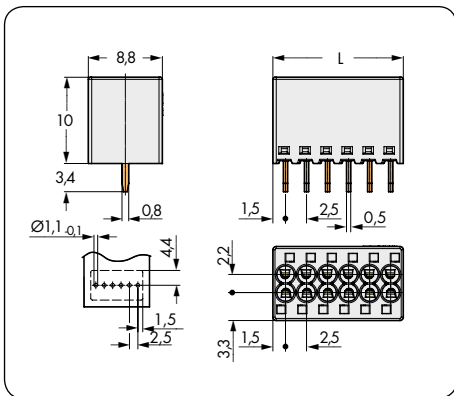
|                               |  |
|-------------------------------|--|
| Material group                | I  |
| Insulating material           | Glass fiber-reinforced polyamide 6.6 (PA 6.6-GF) |
| Temperature stability         | -60 °C to +105 °C                                |
| Flammability rating per UL 94 | V0   |
| Clamping spring material      | Chrome nickel spring steel (CrNi)                |
| Contact material              | Electrolytic copper (E <sub>cu</sub> )           |
| Contact plating               | tin-plated                                       |

#### 2080 Series accessories:

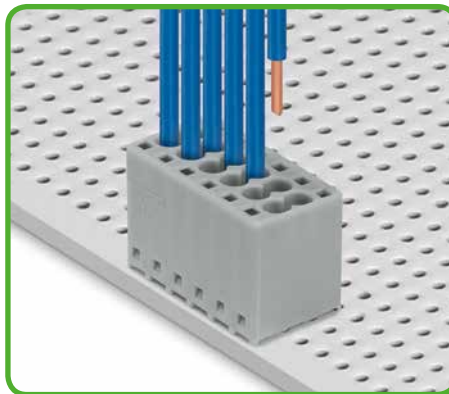
#### Page:

|                          |     |
|--------------------------|-----|
| Operating tool (206-880) | 494 |
|                          |     |
|                          |     |
|                          |     |

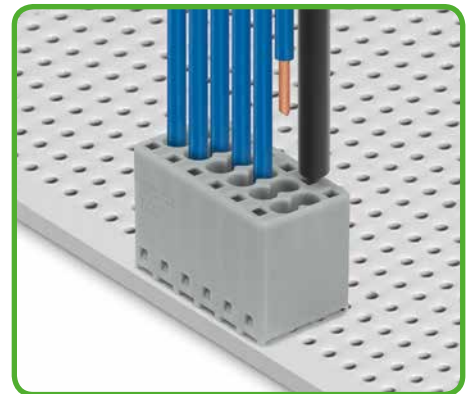
|   |  |  |
|---|--|--|
| <p><b>Pin spacing 2.5 mm / 0.098 in</b></p> <p>0.2 - 0.5 mm<sup>2</sup> "sol."   AWG 24 - 20 "sol."</p> <p>160 V/2.5 kV/2 2 A</p> |  |  |
|---|--|--|



$L = (\text{pole no.} \times \text{pin spacing}) + 0.4 \text{ mm}$



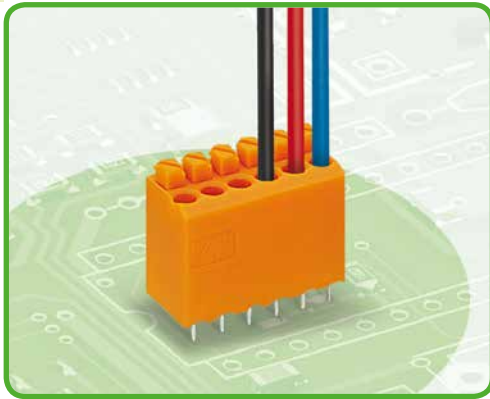
Inserting solid conductor via push-in termination.



Removing conductor via push-button and 1 mm Ø operating tool (206-880).

| Pole No.   | Item No. | Pack. Unit |
|--|----------|------------|
| 2-conductor terminal strip with push-buttons, gray |          |            |
| 4  | 2080-504 |            |
| 6  | 2080-506 |            |
|  |          |            |
|  |          |            |

# Compact PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 3.81 mm 735 Series



- Compact terminal blocks with push-buttons and PUSH WIRE® connection
- Top-of-unit, push-button actuation and conductor termination save space on the PCB
- Push-in termination of solid conductors
- Pin center spacing can be maintained in a terminal block assembly

### Technical data\*:

| Pin Spacing          | 3.81 mm<br>0.15 in |       |       |
|----------------------|--------------------|-------|-------|
| Rating per           | IEC/EN 60664-1     |       |       |
| Overvoltage category | III                | III   | II    |
| Pollution degree     | 3                  | 2     | 2     |
| Rated voltage        | 250 V              | 320 V | 630 V |
| Rated surge voltage  | 4 kV               | 4 kV  | 4 kV  |
| Nominal current      | 10 A               | 10 A  | 10 A  |
| Approvals per        | UL/CSA             |       |       |
| Use group UL1059     | B                  | C     | D     |
| Rated voltage        | 300 V              | -     | 300 V |
| Nominal current UL   | 10 A               | -     | 10 A  |
| Nominal current CSA  | 10 A               | -     | 10 A  |

### Conductor and solder pin data:

|                                   |                           |
|-----------------------------------|---------------------------|
| Connection technology             | PUSH WIRE®                |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup> |
| AWG                               | 20 - 16 "sol."            |
| Strip length                      | 8 - 9 mm / 0.31 - 0.35 in |
| Conductor entry angle             | 90° to PCB                |
| Solder pin: length/width          | 3.5 mm / 0.4 x 0.9 mm     |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm      |

### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

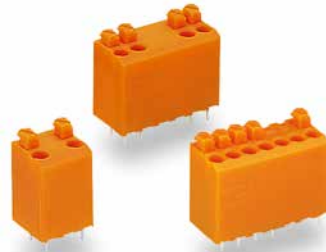
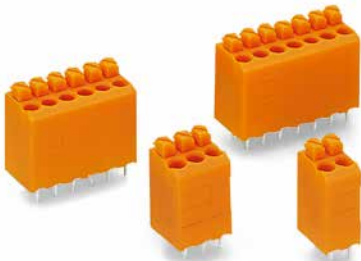
### 735 Series accessories:

### Page:

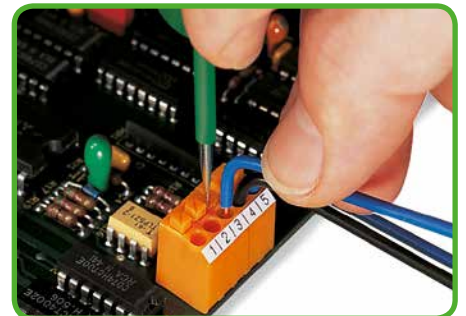
|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |

\*For versions with staggered solder pins allowing increased clearances and creepage distances, please contact factory.

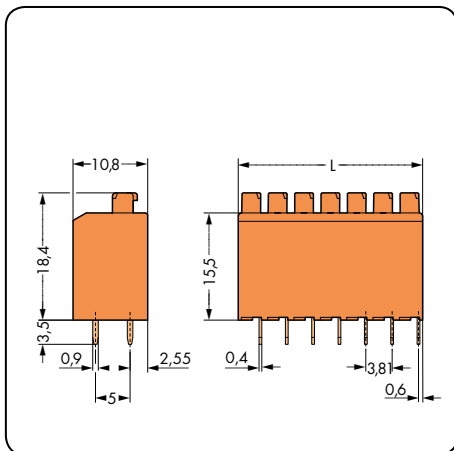
| Pin spacing 3.81 mm / 0.15 in    |                    | With spacers, 1 x and 2 x pin spacing<br>Pin spacing 3.81 mm / 0.15 in |                    |
|----------------------------------|--------------------|--|--------------------|
| 0.5 - 1.5 mm <sup>2</sup> "sol." | AWG 20 - 16 "sol." | 0.5 - 1.5 mm <sup>2</sup> "sol."                                       | AWG 20 - 16 "sol." |
| 320 V/4 kV/2 10 A                | 300 V/10 A         | 320 V/4 kV/2 10 A  | 300 V/10 A         |



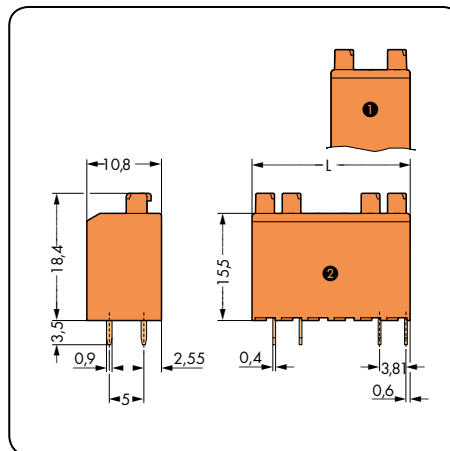
Wiring is simplified by pushing conductors into unit.



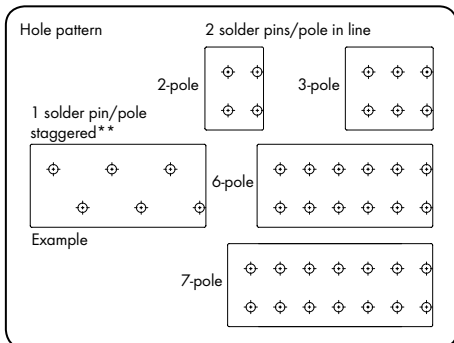
Removing conductor via push-button.



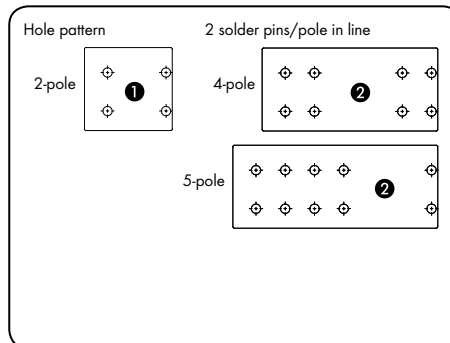
L for 2-pole 7.62 mm, L for 3-pole 11.43 mm  
L for 6-pole 22.86 mm, L for 7-pole 26.67 mm



L for 2-pole 11.43 mm, L for 4-pole 22.86 mm  
L for 5-pole 26.67 mm



\*\* For versions with staggered solder pins that increase clearances and creepage distances, please contact factory.



1 Spacer of same width as 1 x pin spacing  
2 Spacer of same width as 2 x pin spacing



Pin center spacing can be maintained in an assembly.

| Pole No.   | Item No. | Pack. Unit    | Pole No.  | Item No.        | Pack. Unit    |
|--|----------|---------------|---|-----------------|---------------|
| Compact terminal block with push-buttons, 2 solder pins/pole in line, orange |          |               | Compact terminal block with push-buttons and spacer, 2 solder pins/pole in line, orange |                 |               |
| - high version -   |          |               | - high version -  |                 |               |
| 2  | 735-122  | 660 (4 x 165) | 2   | 735-123/001-000 | 440 (4 x 110) |
| 3  | 735-123  | 440 (4 x 110) | 4   | 735-126/001-000 | 220 (4 x 55)  |
| 6  | 735-126  | 220 (4 x 55)  | 5   | 735-127/001-000 | 180 (4 x 45)  |
| 7  | 735-127  | 180 (4 x 45)  |   |                 |               |



Testing with 1 mm Ø test pin.

# Compact PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing 5 mm 735 Series



- Compact terminal blocks with push-buttons and PUSH WIRE® connection
- Top-of-unit, push-button actuation and conductor termination save space on the PCB
- Push-in termination of solid conductors
- Pin center spacing can be maintained in a terminal block assembly

## Technical data:

| Pin Spacing          | 5 mm<br>0.197 in |       |       |  |  |
|----------------------|------------------|-------|-------|--|--|
| Rating per           | IEC/EN 60664-1   |       |       |  |  |
| Overtoltage category | III              | III   | II    |  |  |
| Pollution degree     | 3                | 2     | 2     |  |  |
| Rated voltage        | 320 V            | 320 V | 630 V |  |  |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |  |  |
| Nominal current      | 10 A             | 10 A  | 10 A  |  |  |
| Approvals per        | UL/CSA           |       |       |  |  |
| Use group UL1059     | B                | C     | D     |  |  |
| Rated voltage        | 300 V            | -     | 300 V |  |  |
| Nominal current UL   | 10 A             | -     | 10 A  |  |  |
| Nominal current CSA  | 10 A             | -     | 10 A  |  |  |

## Conductor and solder pin data:

|                                   |                           |
|-----------------------------------|---------------------------|
| Connection technology             | PUSH WIRE®                |
| Conductor size: solid             | 0.5 - 1.5 mm <sup>2</sup> |
| AWG                               | 20 - 16 "sol."            |
| Strip length                      | 8 - 9 mm / 0.31 - 0.35 in |
| Conductor entry angle             | 90° to PCB                |
| Solder pin: length/width          | 3.5 mm / 0.4 x 0.9 mm     |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm      |
|                                   |                           |
|                                   |                           |

## Material data:

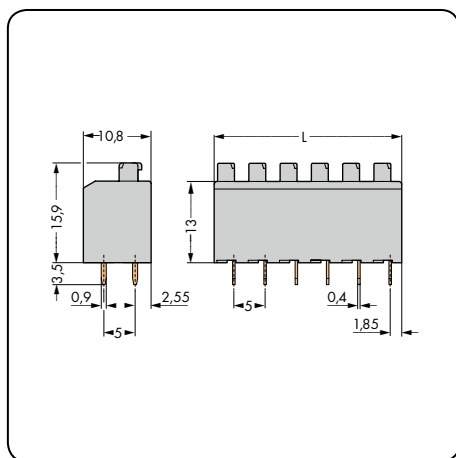
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

## 735 Series accessories:

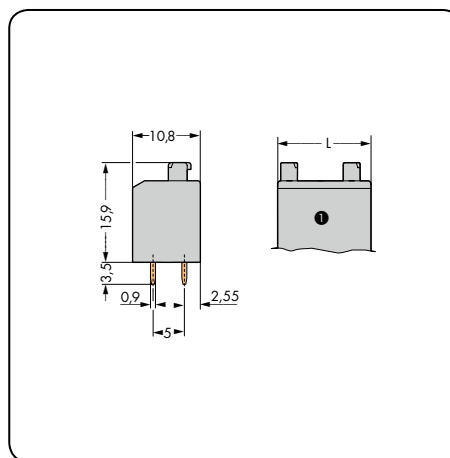
## Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
| Test pin            | 506       |
|                     |           |
|                     |           |

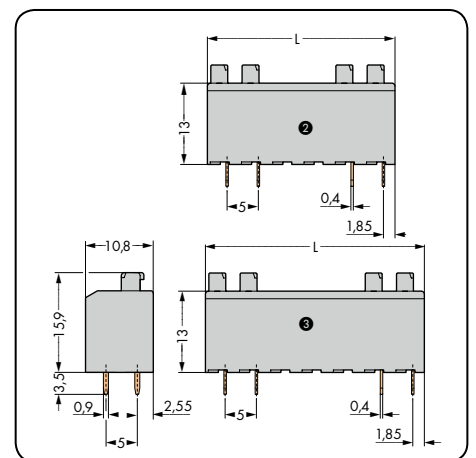
| Pin spacing 5 mm / 0.197 in      |                    | With spacer, 1 x pin spacing<br>Pin spacing 5 mm / 0.197 in |                    | With spacer, 2 and 3 x pin spacing<br>Pin spacing 5 mm / 0.197 in |                    |
|----------------------------------|--------------------|---|--------------------|---|--------------------|
| 0.5 - 1.5 mm <sup>2</sup> "sol." | AWG 20 - 16 "sol." | 0.5 - 1.5 mm <sup>2</sup> "sol."                            | AWG 20 - 16 "sol." | 0.5 - 1.5 mm <sup>2</sup> "sol."                                  | AWG 20 - 16 "sol." |
| 320 V/4 kV/2 10 A                | 300 V/10 A         | 320 V/4 kV/2 10 A   | 300 V/10 A         | 320 V/4 kV/2 10 A   | 300 V/10 A         |



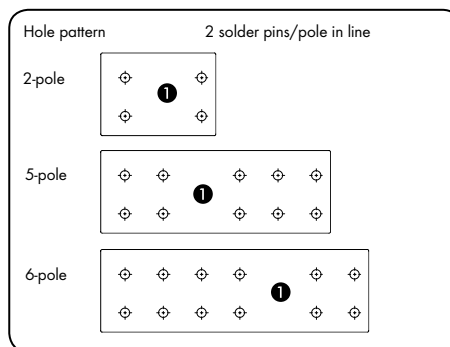
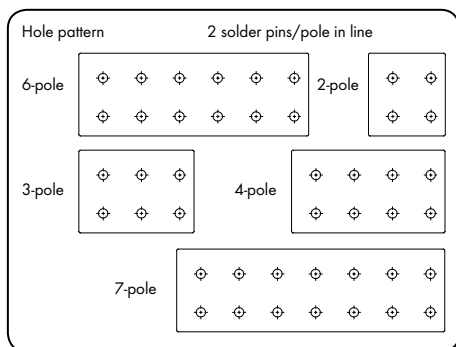
L for 2-pole 10 mm, L for 3-pole 15 mm  
L for 4-pole 20 mm, L for 6-pole 30 mm  
L for 7-pole 35 mm



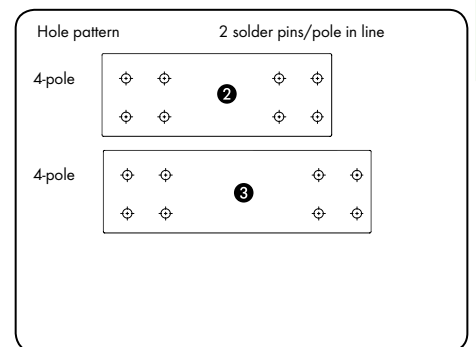
L for 2-pole/① x pin spacing 15 mm  
L for 5-pole/① x pin spacing 30 mm  
L for 6-pole/① x pin spacing 35 mm



L for 4-pole/② x pin spacing 30 mm  
L with 4-pole/③ x pin spacing 35 mm



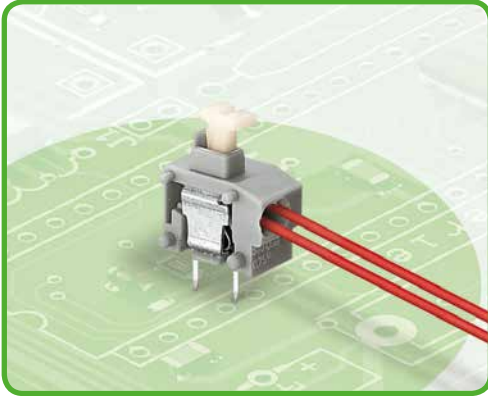
① Spacer of same width as 1 x pin spacing



② Spacer of same width as 2 x pin spacing  
③ Spacer of same width as 3 x pin spacing

| Pole No.  | Item No. | Pack. Unit    | Pole No.   | Item No.        | Pack. Unit   | Pole No.   | Item No.        | Pack. Unit   |
|---|----------|---------------|--|-----------------|--------------|--|-----------------|--------------|
| Compact terminal block with push-buttons,<br>2 solder pins/pole in line,<br>low version, gray |          |               | Compact terminal block with push-buttons<br>and spacer for 1 x pin spacing,<br>2 solder pins/pole in line, low version, gray |                 |              | Compact terminal block with push-buttons<br>and spacer for 2 x pin spacing,<br>2 solder pins/pole in line, low version, gray |                 |              |
| 2   | 735-302  | 500 (4 x 125) | 2  | 735-303/001-000 | 320 (4 x 80) | 4  | 735-306/001-000 | 160 (4 x 40) |
| 3   | 735-303  | 320 (4 x 80)  |  |                 |              |  |                 |              |
| 4   | 735-304  | 240 (4 x 60)  |  |                 |              |  |                 |              |
| 6   | 735-306  | 160 (4 x 40)  | 5  | 735-306/003-000 | 160 (4 x 40) | Compact terminal block with push-buttons<br>and spacer for 3 x pin spacing,<br>2 solder pins/pole in line, low version, gray |                 |              |
| 7   | 735-307  | 140 (4 x 35)  | 6  | 735-307/001-000 | 140 (4 x 35) | 4  | 735-307/002-000 | 140 (4 x 35) |

## 2-Conductor, Modular PCB Terminal Blocks with Push-Buttons 0.75 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Modular terminal blocks with push-buttons and PUSH WIRE® connection, for custom terminal strip assemblies
- Double-conductor connection for commoning signals
- Push-in termination of solid conductors
- Easy conductor removal via push-button
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slot can be found at [www.wago.com](http://www.wago.com)

### Technical data:

| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Rating per           | III                 | III   | II    | III                   | III   | II     | III                   | III    | II     |
| Overtoltage category | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 400 V                 | 630 V | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 10 A                | 10 A  | 10 A  | 10 A                  | 10 A  | 10 A   | 10 A                  | 10 A   | 10 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 10 A                | -     | 10 A  | 10 A                  | -     | 10 A   | 10 A                  | -      | 10 A   |
| Nominal current CSA  | 10 A                | -     | -     | 10 A                  | -     | -      | 10 A                  | -      | -      |

### Conductor and solder pin data:

|                                   |                                |
|-----------------------------------|--------------------------------|
| Connection technology             | PUSH WIRE®                     |
| Conductor size: solid             | 2 x 0.2 - 0.75 mm <sup>2</sup> |
| AWG                               | 2 x 24 - 18 "sol."             |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in     |
| Conductor entry angle             | 0° to PCB                      |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.8 mm          |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm           |
|                                   |                                |
|                                   |                                |

### Material data:

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper temperature limit | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

### 235 Series accessories:

### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |



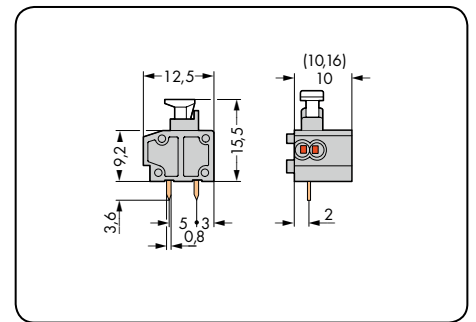
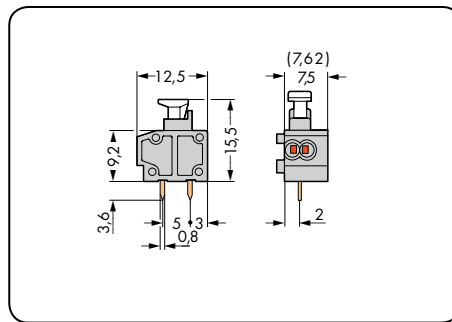
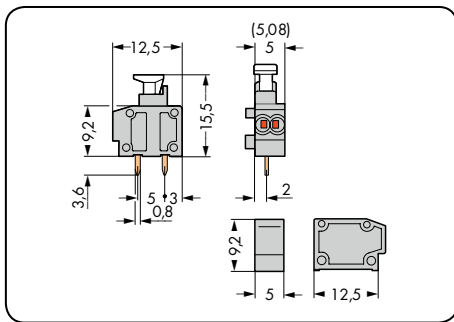
# 2-Conductor, Modular PCB Terminal Blocks with Push-Buttons 0.75 mm<sup>2</sup>

PUSH WIRE®


6


433

| Pin spacing 5/5.08 mm / 0.2 in         |                        | Pin spacing 7.5/7.62 mm / 0.3 in       |                        | Pin spacing 10/10.16 mm / 0.4 in       |                        |
|--|------------------------|--|------------------------|--|------------------------|
| 2 x 0.25 - 0.75 mm <sup>2</sup> "sol." | 2 x AWG 24 - 18 "sol." | 2 x 0.25 - 0.75 mm <sup>2</sup> "sol." | 2 x AWG 24 - 18 "sol." | 2 x 0.25 - 0.75 mm <sup>2</sup> "sol." | 2 x AWG 24 - 18 "sol." |
| 320 V/4 kV/2 10 A                      | 300 V/10 A             | 630 V/6 kV/2 10 A                      | 300 V/10 A             | 1000 V/8 kV/2 10 A                     | 300 V/10 A             |



| Color  | Item No.        | Pack. Unit    | Color  | Item No.        | Pack. Unit    | Color  | Item No.        | Pack. Unit    |
|--|-----------------|---------------|--|-----------------|---------------|--|-----------------|---------------|
| <b>2-conductor modular terminal block with push-button, 2 solder pins/pole</b> |                 |               | <b>2-conductor modular terminal block with push-button, 2 solder pins/pole</b> |                 |               | <b>2-conductor modular terminal block with push-button, 2 solder pins/pole</b> |                 |               |
| gray   | 235-711/331-000 | 800 (8 x 100) | gray   | 235-551/331-000 | 600 (6 x 100) | gray   | 235-851/331-000 | 400 (4 x 100) |
| dark gray  | 235-712/331-000 | 800 (8 x 100) | dark gray  | 235-722/331-000 | 600 (6 x 100) | dark gray  | 235-732/331-000 | 400 (4 x 100) |
| light gray   | 235-713/331-000 | 800 (8 x 100) | light gray   | 235-723/331-000 | 600 (6 x 100) | light gray   | 235-733/331-000 | 400 (4 x 100) |
| blue   | 235-714/331-000 | 800 (8 x 100) | blue   | 235-724/331-000 | 600 (6 x 100) | blue   | 235-734/331-000 | 400 (4 x 100) |
| orange   | 235-716/331-000 | 800 (8 x 100) | orange   | 235-726/331-000 | 600 (6 x 100) | orange   | 235-736/331-000 | 400 (4 x 100) |
| light green  | 235-717/331-000 | 800 (8 x 100) | light green  | 235-727/331-000 | 600 (6 x 100) | light green  | 235-737/331-000 | 400 (4 x 100) |
|  |                 |               | ① Suitable for Ex i applications   |                 |               | ① Suitable for Ex i applications   |                 |               |

| Accessories   | Item No. | Pack. Unit |
|---|----------|------------|
| <b>Spacer for modular terminal blocks</b><br>for doubling the pin spacing, gray     |          |            |
|  | 235-701  | 100        |

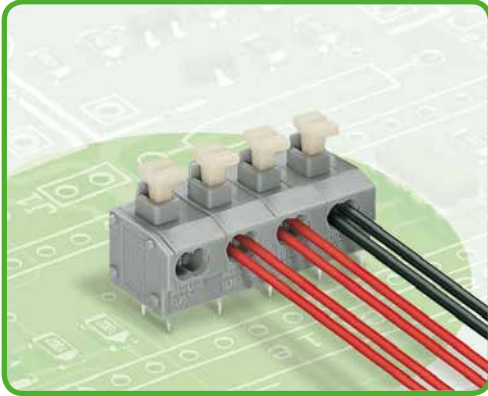
| End plates for 235 Series,<br>snap-on type, 1 mm/0.039 in thick                     | Color       | Item No. | Pack. Unit |
|---|-------------|----------|------------|
|  | gray        | 235-100  | 100        |
|   | dark gray   | 235-200  | 100        |
|   | light gray  | 235-300  | 100        |
|   | blue        | 235-400  | 100        |
|   | orange      | 235-600  | 100        |
|   | light green | 235-700  | 100        |

For other colors, please contact factory.

WAGO®

6

## 2-Conductor PCB Terminal Strips with Push-Buttons 0.75 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Terminal strips with push-buttons and PUSH WIRE® connection
- Double-conductor connection for commoning signals
- Push-in termination of solid conductors
- Easy conductor removal via push-button
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Versions with test slots can be found at [www.wago.com](http://www.wago.com)

### Technical data:

| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Rating per           | III                 | III   | II    | III                   | III   | II     | III                   | III    | II     |
| Overtoltage category | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 400 V                 | 630 V | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 10 A                | 10 A  | 10 A  | 10 A                  | 10 A  | 10 A   | 10 A                  | 10 A   | 10 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 10 A                | -     | 10 A  | 10 A                  | -     | 10 A   | 10 A                  | -      | 10 A   |
| Nominal current CSA  | 10 A                | -     | -     | 10 A                  | -     | -      | 10 A                  | -      | -      |

### Conductor and solder pin data:

|                                   |                                |
|-----------------------------------|--------------------------------|
| Connection technology             | PUSH WIRE®                     |
| Conductor size: solid             | 2 x 0.2 - 0.75 mm <sup>2</sup> |
| AWG                               | 2 x 24 - 18 "sol."             |
| Strip length                      | 9 - 10 mm / 0.35 - 0.39 in     |
| Conductor entry angle             | 0° to PCB                      |
| Solder pin: length/width          | 3.6 mm / 0.4 x 0.8 mm          |
| Solder pin: drilled hole diameter | 1 <sup>+0.1</sup> mm           |
|                                   |                                |
|                                   |                                |

### Material data:

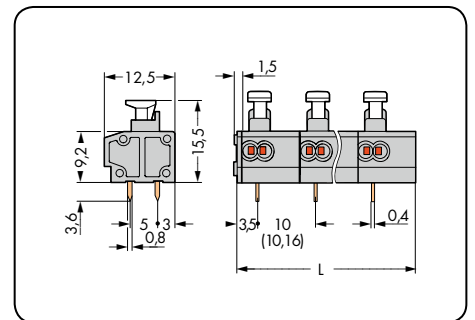
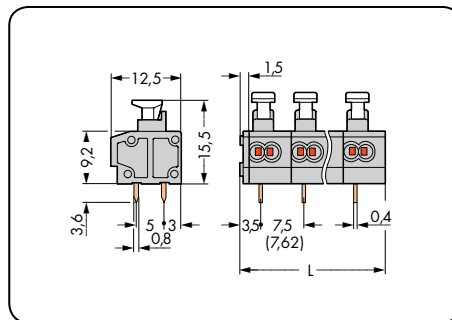
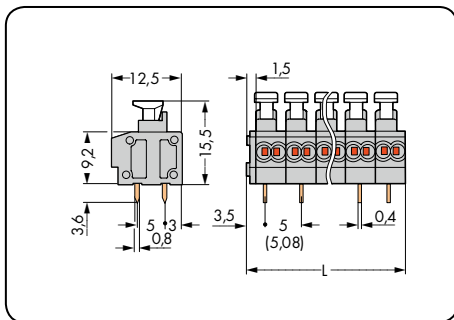
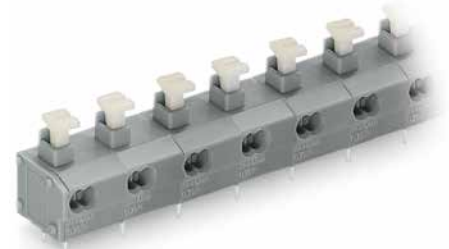
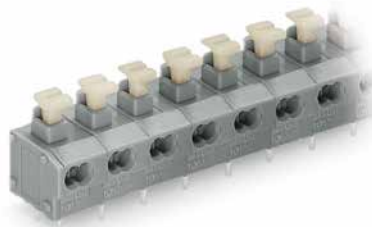
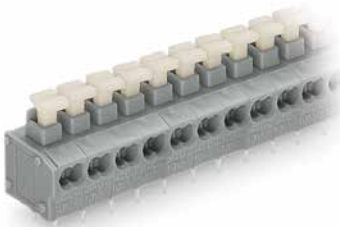
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper temperature limit | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

### 235 Series accessories:

### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in         |                        | Pin spacing 7.5/7.62 mm / 0.3 in       |                        | Pin spacing 10/10.16 mm / 0.4 in       |                        |
|--|------------------------|--|------------------------|--|------------------------|
| 2 x 0.25 – 0.75 mm <sup>2</sup> "sol." | 2 x AWG 24 – 18 "sol." | 2 x 0.25 – 0.75 mm <sup>2</sup> "sol." | 2 x AWG 24 – 18 "sol." | 2 x 0.25 – 0.75 mm <sup>2</sup> "sol." | 2 x AWG 24 – 18 "sol." |
| 320 V/4 kV/2 10 A                      | 300 V/10 A             | 630 V/6 kV/2 10 A                      | 300 V/10 A             | 1000 V/8 kV/2 10 A                     | 300 V/10 A             |



Adjust pin spacing by pulling on the end blocks so that they expand to satisfy the hole centers required.  
L = (pole no. x pin spacing) + 1.5 mm

| Pole No.  | Item No.        | Pack. Unit    | Pole No.  | Item No.        | Pack. Unit   | Pole No.  | Item No.        | Pack. Unit   |
|---|-----------------|---------------|---|-----------------|--------------|---|-----------------|--------------|
| <b>2-conductor terminal strip with push-buttons, 2 solder pins/pole, gray</b> |                 |               | <b>2-conductor terminal strip with push-buttons, 2 solder pins/pole, gray</b> |                 |              | <b>2-conductor terminal strip with push-buttons, 2 solder pins/pole, gray</b> |                 |              |
| 2   | 235-452/331-000 | 420 (4 x 105) | 2   | 235-552/331-000 | 280 (4 x 70) | 2   | 235-852/331-000 | 220 (4 x 55) |
| 3   | 235-453/331-000 | 280 (4 x 70)  | 3   | 235-553/331-000 | 200 (4 x 50) | 3   | 235-853/331-000 | 140 (4 x 35) |
| 4   | 235-454/331-000 | 220 (4 x 55)  | 4   | 235-554/331-000 | 140 (4 x 35) | 4   | 235-854/331-000 | 120 (4 x 30) |
| 5   | 235-455/331-000 | 180 (4 x 45)  | 5   | 235-555/331-000 | 120 (4 x 30) | 5   | 235-855/331-000 | 80 (4 x 20)  |
| 6   | 235-456/331-000 | 140 (4 x 35)  | 6   | 235-556/331-000 | 100 (4 x 25) | 6   | 235-856/331-000 | 80 (4 x 20)  |
| 7   | 235-457/331-000 | 120 (4 x 30)  | 7   | 235-557/331-000 | 80 (4 x 20)  | 7   | 235-857/331-000 | 60 (4 x 15)  |
| 8   | 235-458/331-000 | 100 (4 x 25)  | 8   | 235-558/331-000 | 80 (4 x 20)  | 8   | 235-858/331-000 | 40 (4 x 10)  |
| 9   | 235-459/331-000 | 100 (4 x 25)  | 9   | 235-559/331-000 | 60 (4 x 15)  | 9   | 235-859/331-000 | 40 (4 x 10)  |
| 10  | 235-460/331-000 | 80 (4 x 20)   | 10  | 235-560/331-000 | 60 (4 x 15)  | 10  | 235-860/331-000 | 40 (4 x 10)  |
| 12  | 235-462/331-000 | 80 (4 x 20)   | 12  | 235-562/331-000 | 40 (4 x 10)  | 12  | 235-862/331-000 | 40 (4 x 10)  |
| 16  | 235-466/331-000 | 60 (4 x 15)   | 16  | 235-566/331-000 | 40 (4 x 10)  | 16  | 235-866/331-000 | 20 (4 x 5)   |
| 24  | 235-474/331-000 | 40 (4 x 10)   | 24  | 235-574/331-000 | 20 (4 x 5)   | 24  | 235-874/331-000 | 20 (4 x 5)   |
| 36  | 235-486/331-000 | 20 (4 x 5)    |   |                 |              |   |                 |              |
| 48  | 235-498/331-000 | 20 (4 x 5)    |   |                 |              |   |                 |              |


Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

|   |                 |  |
|---|-----------------|--|
| ① blue  | .../.../331-006 | <b>Ordering example:</b><br>2-conductor terminal strip, 7.5/7.62 mm pin spacing<br>16-pole, blue: <b>235-566/331-006</b> |
| ● dark gray   | .../.../331-008 |  |
| ○ light gray  | .../.../331-009 |  |
| ● orange  | .../.../331-012 |  |
| ● light green   | .../.../331-017 |  |
| ① Suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing) |                 |  |



## Modular PCB Terminal Blocks 2.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 236 Series



- Modular terminal blocks with CAGE CLAMP® connection, screwdriver actuation parallel or perpendicular to conductor entry
-  versions with Ex e (increased safety) approval
- For custom terminal strip assemblies
- Operating tools for factory wiring
- 45° conductor entry angle provides a wide variety of applications and wiring options
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart

### Technical data:

| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Rating per           | III III II          |       |       | III III II            |       |        | III III II            |        |        |
| Overtoltage category | III III II          |       |       | III III II            |       |        | III III II            |        |        |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 400 V                 | 630 V | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 24 A                | 24 A  | 24 A  | 24 A                  | 24 A  | 24 A   | 24 A                  | 24 A   | 24 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 15 A                | -     | 10 A  | 15 A                  | -     | 10 A   | 15 A                  | -      | 10 A   |
| Nominal current CSA  | 15 A                | -     | 10 A  | 15 A                  | -     | 10 A   | 15 A                  | -      | 10 A   |

### Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®   |
| Conductor size: solid             | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 28 - 12 (12: THHN, THWN)                              |
| Strip length                      | 5 - 6 mm / 0.20 - 0.24 in                             |
| Conductor entry angle             | 45° to PCB  |
| Solder pin: length/width          | 4 (3.6; 5.5) mm / 0.7 x 0.7 mm                        |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                                |

### Material data:

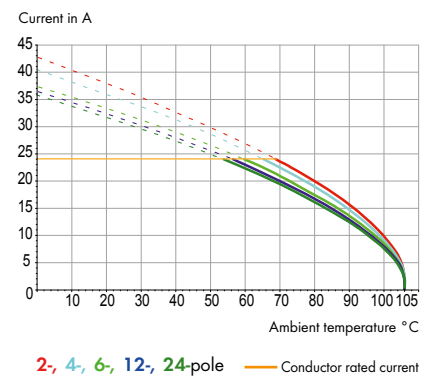
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

### Technical data for Ex e II () versions:

| Pin Spacing     | 5/5.08 mm<br>0.2 in      | 7.5/7.62 mm<br>0.3 in | 10/10.16 mm<br>0.4 in |
|-----------------|--------------------------|-----------------------|-----------------------|
| Rating per      | ATEX: PTB 06 ATEX 1061 U |                       | IECEX: PTB 06.0042 U  |
| Rated voltage   | 176 V                    | 275 V                 | 440 V                 |
| Nominal current | 16 A                     | 16 A                  | 16 A                  |

### Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

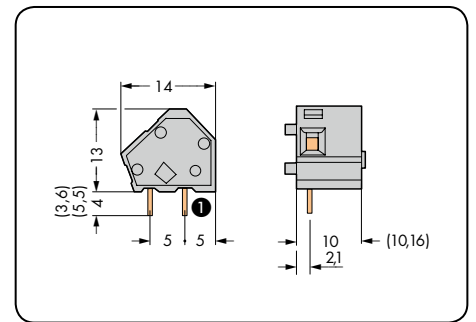
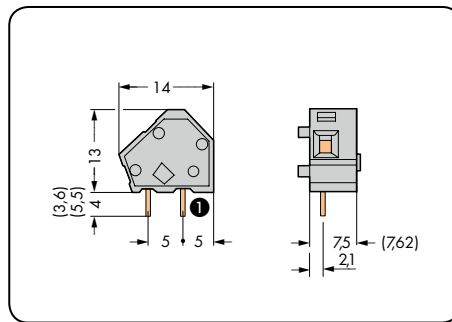
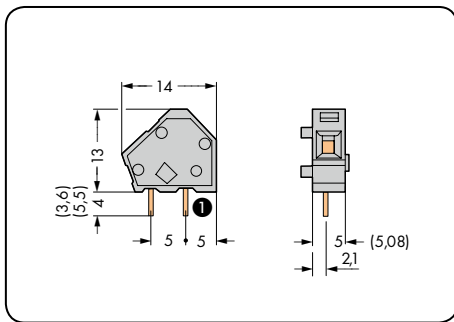


### 236 Series accessories:

### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in                  |                           | Pin spacing 7.5/7.62 mm / 0.3 in                |                           | Pin spacing 10/10.16 mm / 0.4 in                 |                           |
|---|---------------------------|---|---------------------------|--|---------------------------|
| 0.08 – 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 – 12<br>300 V/10 A | 0.08 – 2.5 mm <sup>2</sup><br>630 V/6 kV/2 24 A | AWG 28 – 12<br>300 V/10 A | 0.08 – 2.5 mm <sup>2</sup><br>1000 V/8 kV/2 24 A | AWG 28 – 12<br>300 V/10 A |



① Solder pin position for modular terminal block with one solder pin (rear side)


| Color   | Item No.        | Item No.           | Pack. Unit    | Color                            | Item No.        | Item No.           | Pack. Unit    | Color                            | Item No.        | Item No.           | Pack. Unit    |
|---|-----------------|--------------------|---------------|----------------------------------|-----------------|--------------------|---------------|----------------------------------|-----------------|--------------------|---------------|
| <b>Modular terminal block</b>   |                 |                    |               | <b>Modular terminal block</b>    |                 |                    |               | <b>Modular terminal block</b>    |                 |                    |               |
| 1 solder pin/pole   |                 | 2 solder pins/pole |               | 1 solder pin/pole                |                 | 2 solder pins/pole |               | 1 solder pin/pole                |                 | 2 solder pins/pole |               |
| gray  | 236-101         | 236-401            | 600 (6 x 100) | gray                             | 236-201         | 236-501            | 400 (4 x 100) | gray                             | 236-301         | 236-601            | 300 (3 x 100) |
| red   | 236-710         | 236-740            | 600 (6 x 100) | dark gray                        | 236-722         | 236-752            | 400 (4 x 100) | dark gray                        | 236-732         | 236-762            | 300 (3 x 100) |
| yellow  | 236-711         | 236-741            | 600 (6 x 100) | light gray                       | 236-723         | 236-753            | 400 (4 x 100) | light gray                       | 236-733         | 236-763            | 300 (3 x 100) |
| dark gray   | 236-712         | 236-742            | 600 (6 x 100) | ① blue                           | 236-724         | 236-754            | 400 (4 x 100) | ① blue                           | 236-734         | 236-764            | 300 (3 x 100) |
| light gray  | 236-713         | 236-743            | 600 (6 x 100) | green                            | 236-725         | 236-755            | 400 (4 x 100) | green                            | 236-735         | 236-765            | 300 (3 x 100) |
| blue  | 236-714         | 236-744            | 600 (6 x 100) | orange                           | 236-726         | 236-756            | 400 (4 x 100) | orange                           | 236-736         | 236-766            | 300 (3 x 100) |
| green   | 236-715         | 236-745            | 600 (6 x 100) | light green                      | 236-727         | 236-757            | 400 (4 x 100) | light green                      | 236-737         | 236-767            | 300 (3 x 100) |
| orange  | 236-716         | 236-746            | 600 (6 x 100) | black                            | 236-855         | 236-852            | 400 (4 x 100) | black                            | 236-856         | 236-853            | 300 (3 x 100) |
| light green   | 236-717         | 236-747            | 600 (6 x 100) | brown                            | 236-885         | 236-882            | 400 (4 x 100) |                                  |                 |                    |               |
| purple  | 236-894         | 236-891            | 600 (6 x 100) |                                  |                 |                    |               |                                  |                 |                    |               |
| black   | 236-854         | 236-851            | 600 (6 x 100) |                                  |                 |                    |               |                                  |                 |                    |               |
| brown   | 236-884         | 236-881            | 600 (6 x 100) |                                  |                 |                    |               |                                  |                 |                    |               |
| ○ Ex e ll   | 236-743/999-950 |                    |               | ○ Ex e ll                        | 236-753/999-950 |                    |               | ○ Ex e ll                        | 236-763/999-950 |                    |               |
|   |                 |                    |               | ① Suitable for Ex i applications |                 |                    |               | ① Suitable for Ex i applications |                 |                    |               |
| Item no. suffix for 2 solder pins/pole with 3.6 mm long solder pins: . . . . . /334-000 |                 |                    |               |                                  |                 |                    |               |                                  |                 |                    |               |
| Item no. suffix for 2 solder pins/pole with 5.5 mm long solder pins: . . . . . /332-000 |                 |                    |               |                                  |                 |                    |               |                                  |                 |                    |               |

| End plates for 236 Series,<br>snap-on type,<br>1 mm/0.039 in thick | Color       | Item No. | Pack. Unit |
|--|-------------|----------|------------|
|  | gray        | 236-100  | 100        |
|  | dark gray   | 236-200  | 100        |
|  | light gray  | 236-300  | 100        |
|  | blue        | 236-400  | 100        |
|  | green       | 236-500  | 100        |
|  | orange      | 236-600  | 100        |
|  | light green | 236-700  | 100        |
|  | red         | 236-800  | 100        |
| black  | 236-850     | 100      |            |

For other colors, please contact factory.

# PCB Terminal Strips 2.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 236 Series



- Terminal strips with CAGE CLAMP® connection, screwdriver actuation parallel or perpendicular to conductor entry
-  versions with Ex e (increased safety) approval
- Mixed-color terminal strips from factory
- Operating tools for factory wiring
- 45° conductor entry angle provides a wide variety of applications and wiring options
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart

### Technical data:

| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |        | 10/10.16 mm<br>0.4 in |        |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|--------|-----------------------|--------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |        | IEC/EN 60664-1        |        |        |
| Rating per           | III III II          |       |       | III III II            |       |        | III III II            |        |        |
| Overtoltage category | III III II          |       |       | III III II            |       |        | III III II            |        |        |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2      | 3                     | 2      | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 400 V                 | 630 V | 1000 V | 630 V                 | 1000 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   | 8 kV                  | 8 kV   | 8 kV   |
| Nominal current      | 24 A                | 24 A  | 24 A  | 24 A                  | 24 A  | 24 A   | 24 A                  | 24 A   | 24 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |        | UL/CSA                |        |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D      | B                     | C      | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V  | 300 V                 | -      | 300 V  |
| Nominal current UL   | 15 A                | -     | 10 A  | 15 A                  | -     | 10 A   | 15 A                  | -      | 10 A   |
| Nominal current CSA  | 15 A                | -     | 10 A  | 15 A                  | -     | 10 A   | 15 A                  | -      | 10 A   |

### Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®   |
| Conductor size: solid             | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 28 - 12 (12: THHN, THWN)                              |
| Strip length                      | 5 - 6 mm / 0.20 - 0.24 in                             |
| Conductor entry angle             | 45° to PCB  |
| Solder pin: length/width          | 4 (3.6; 5.5) mm / 0.7 x 0.7 mm                        |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                                |

### Material data:

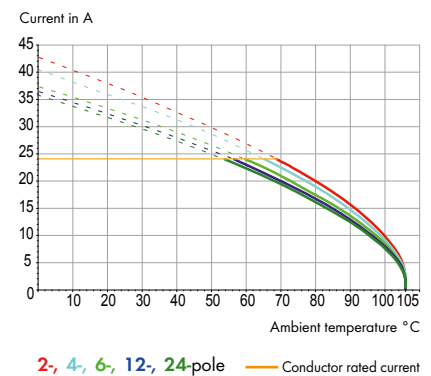
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper temperature limit | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

### Technical data for Ex e II () versions:

| Pin Spacing     | 5/5.08 mm<br>0.2 in                           | 7.5/7.62 mm<br>0.3 in | 10/10.16 mm<br>0.4 in |
|-----------------|---|-----------------------|-----------------------|
| Rating per      | ATEX: PTB 06 ATEX 1061 U IECEx: PTB 06.0042 U |                       |                       |
| Rated voltage   | 176 V   | 275 V                 | 440 V                 |
| Nominal current | 16 A  | 16 A                  | 16 A                  |

### Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



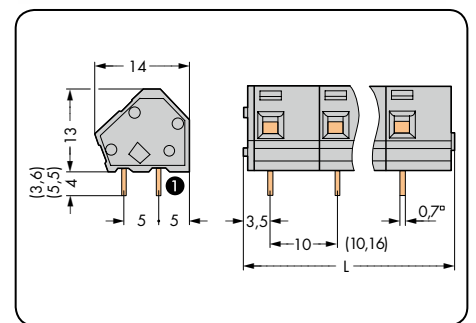
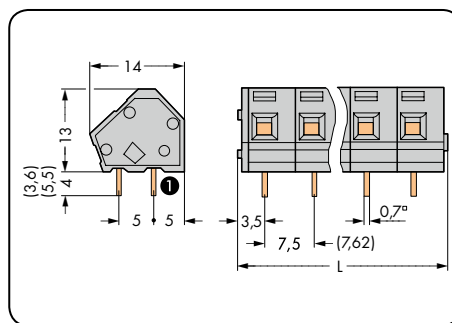
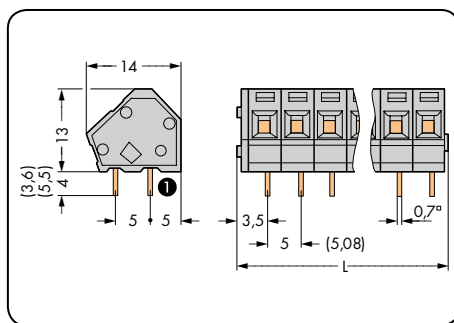
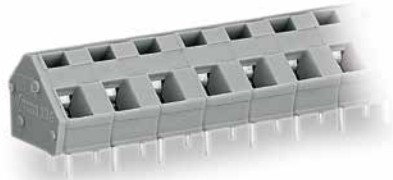
### 236 Series accessories:

### Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |



| Pin spacing 5/5.08 mm / 0.2 in                  |                           | Pin spacing 7.5/7.62 mm / 0.3 in                |                           | Pin spacing 10/10.16 mm / 0.4 in                 |                           |
|---|---------------------------|---|---------------------------|--|---------------------------|
| 0.08 – 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 – 12<br>300 V/10 A | 0.08 – 2.5 mm <sup>2</sup><br>630 V/6 kV/2 24 A | AWG 28 – 12<br>300 V/10 A | 0.08 – 2.5 mm <sup>2</sup><br>1000 V/8 kV/2 24 A | AWG 28 – 12<br>300 V/10 A |



L = (pole no. x pin spacing) + 2.3 mm

① Solder pin position for modular terminal block with 1 solder pin (rear side)

| Pole No.  | Item No. | Item No.                  | Pack. Unit    | Pole No.  | Item No. | Item No.                  | Pack. Unit   | Pole No.  | Item No. | Item No.                  | Pack. Unit   |
|---|----------|---------------------------|---------------|---|----------|---------------------------|--------------|---|----------|---------------------------|--------------|
| <b>Terminal strip, 2 solder pins/pole, gray</b>   |          |                           |               | <b>Terminal strip, 2 solder pins/pole, gray</b> |          |                           |              | <b>Terminal strip, 2 solder pins/pole, gray</b> |          |                           |              |
| <b>1 solder pin/pole</b>  |          | <b>2 solder pins/pole</b> |               | <b>1 solder pin/pole</b>                        |          | <b>2 solder pins/pole</b> |              | <b>1 solder pin/pole</b>                        |          | <b>2 solder pins/pole</b> |              |
| 2   | 236-102  | 236-402                   | 420 (4 x 105) | 2   | 236-202  | 236-502                   | 280 (4 x 70) | 2   | 236-302  | 236-602                   | 200 (4 x 50) |
| 3   | 236-103  | 236-403                   | 280 (4 x 70)  | 3   | 236-203  | 236-503                   | 200 (4 x 50) | 3   | 236-303  | 236-603                   | 140 (4 x 35) |
| 4   | 236-104  | 236-404                   | 220 (4 x 55)  | 4   | 236-204  | 236-504                   | 140 (4 x 35) | 4   | 236-304  | 236-604                   | 100 (4 x 25) |
| 6   | 236-106  | 236-406                   | 140 (4 x 35)  | 6   | 236-206  | 236-506                   | 100 (4 x 25) | 6   | 236-306  | 236-606                   | 80 (4 x 20)  |
| 8   | 236-108  | 236-408                   | 100 (4 x 25)  | 8   | 236-208  | 236-508                   | 80 (4 x 20)  | 8   | 236-308  | 236-608                   | 60 (4 x 15)  |
| 12  | 236-112  | 236-412                   | 80 (4 x 20)   | 12  | 236-212  | 236-512                   | 40 (4 x 10)  | 12  | 236-312  | 236-612                   | 40 (4 x 10)  |
| 16  | 236-116  | 236-416                   | 60 (4 x 15)   | 16  | 236-216  | 236-516                   | 40 (4 x 10)  | 16  | 236-316  | 236-616                   | 20 (4 x 5)   |
| 24  | 236-124  | 236-424                   | 40 (4 x 10)   | 24  | 236-224  | 236-524                   | 20 (4 x 5)   | 24  | 236-324  | 236-624                   | 20 (4 x 5)   |
| 36  | 236-136  | 236-436                   | 20 (4 x 5)    |   |          |                           |              |   |          |                           |              |
| 48  | 236-148  | 236-448                   | 20 (4 x 5)    |   |          |                           |              |   |          |                           |              |
| Item no. suffix for 2 solder pins/pole with 3.6 mm long solder pins: . . . . . /334-000 |          |                           |               |   |          |                           |              |   |          |                           |              |
| Item no. suffix for 2 solder pins/pole with 5.5 mm long solder pins: . . . . . /332-000 |          |                           |               |   |          |                           |              |   |          |                           |              |

Item no. suffixes for Ex e II and Ex i applications:

- Ex e II . . . . . /000-009/999-950 (Ex e II only for PCB Terminal Strips with 2 solder pins/pole)
- ① Ex i . . . . . /000-006 (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)

Ordering example:

Terminal strip, 10/10.16 mm pin spacing, 8-pole, Ex e II: **236-608/000-009/999-950**

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

- black . . . . . /000-004
- ① blue . . . . . /000-006
- dark gray . . . . . /000-008
- light gray . . . . . /000-009
- orange . . . . . /000-012
- light green . . . . . /000-017
- green . . . . . /000-023

Ordering example:

Terminal strip, 5/5.08 mm pin spacing, 2 solder pins/pole 8-pole, orange: **236-408/000-012**

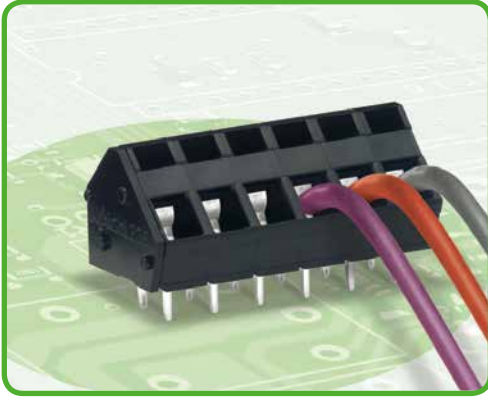




# PCB Terminal Strips 2.5 mm<sup>2</sup>, THR (Through-Hole Reflow\*)

## Pin Spacing 5 mm

### 236 Series



- Terminal strips made of high-temperature resistant plastic are suitable for SMT reflow soldering
- Tape-and-reel packaging
- Double solder pins for high mechanical stability

**Technical data:**

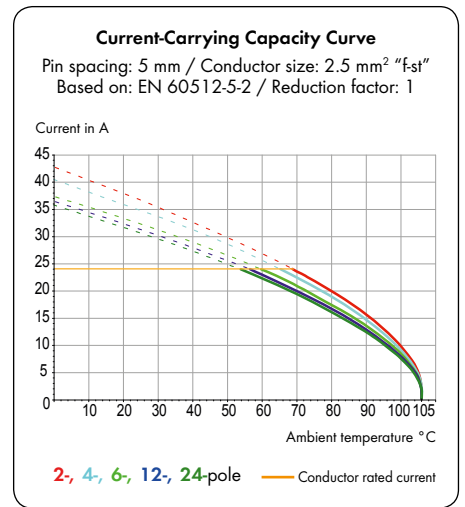
| Pin Spacing          | 5 mm<br>0.197 in |       |       |
|----------------------|------------------|-------|-------|
| Rating per           | IEC/EN 60664-1   |       |       |
| Overtoltage category | III              | III   | II    |
| Pollution degree     | 3                | 2     | 2     |
| Rated voltage        | 200 V            | 320 V | 320 V |
| Rated surge voltage  | 4 kV             | 4 kV  | 4 kV  |
| Nominal current      | 24 A             | 24 A  | 24 A  |
| Approvals per        | UL/CSA           |       |       |
| Use group UL 1059    | B                | C     | D     |
| Rated voltage        | 300 V            | -     | 300 V |
| Nominal current UL   | 15 A             | -     | 10 A  |
| Nominal current CSA  | 15 A             | -     | 10 A  |

**Conductor and solder pin data:**

|                               |   |
|-------------------------------|---|
| Connection technology         | CAGE CLAMP®   |
| Conductor size: solid         | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                           | 28 - 12 (12: THHN, THWN)                              |
| Strip length                  | 5 - 6 mm / 0.20 - 0.24 in                             |
| Conductor entry angle         | 45° to PCB  |
| Solder pin: length/width      | 3.6 mm / 0.7 x 0.7 mm                                 |
| Solder pin: metal plated hole | 1.1 <sup>+0.1</sup> mm Ø                              |

**Material data:**

|                               |  |
|-------------------------------|--|
| Material group                | III b                                  |
| Insulating material           | Nylon 4.6 (PA 4.6)                     |
| Flammability rating per UL 94 | V2                                     |
| Lower/Upper temperature limit | -60 °C / +115 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating               | tin-plated                             |

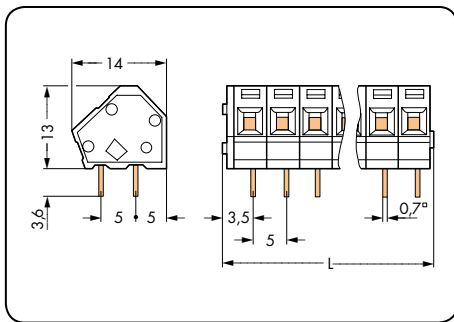
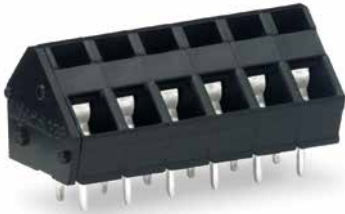


**236 Series accessories:**

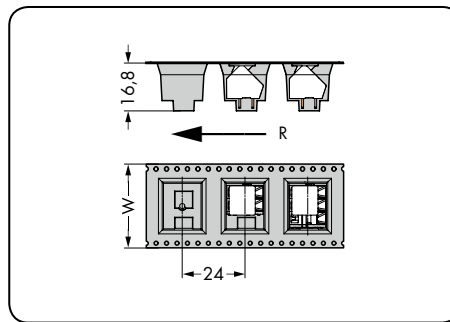
**Page:**

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5 mm / 0.197 in                     |                           | Terminal strips in tape-and-reel packaging<br>Pin spacing 5 mm / 0.197 in |                           |
|---|---------------------------|---|---------------------------|
| 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 - 12<br>300 V/10 A | 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A                           | AWG 28 - 12<br>300 V/10 A |



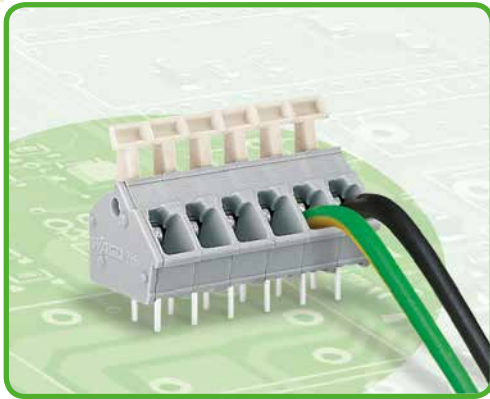
L = (pole no. x pin spacing) + 2.3 mm




W = Tape width  
R = Feed direction

| Pole No.  | Item No.        | Pack. Unit    | Pole No.   | Item No.                | W  |
|---|-----------------|---------------|--|-------------------------|----|
| Terminal strip, THR,<br>2 solder pins/pole, black |                 |               | Terminal strips with additional suction pad in<br>tape-and-reel packaging acc. to IEC 60286-3, black<br>(mm) |                         |    |
| 2   | 236-402/334-604 | 420 (4 x 105) | 2  | 236-402/334-604/997-405 | 32 |
| 3   | 236-403/334-604 | 280 (4 x 70)  | 3  | 236-403/334-604/997-405 | 32 |
| 4   | 236-404/334-604 | 220 (4 x 55)  | 4  | 236-404/334-604/997-406 | 44 |
| 5   | 236-405/334-604 | 180 (4 x 45)  | 5  | 236-405/334-604/997-406 | 44 |
| 6   | 236-406/334-604 | 140 (4 x 35)  | 6  | 236-406/334-604/997-406 | 44 |
| Reel diameter: 330 mm, 120 pieces per reel        |                 |               |  |                         |    |

# Modular PCB Terminal Blocks and Strips with Push-Buttons 2.5 mm<sup>2</sup> Pin Spacing 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 256 Series



- Modular terminal blocks and terminal strips with push-button actuated CAGE CLAMP® termination
-  version with Ex e (increased safety) approval
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

## Technical data:

| Pin Spacing          | 5/5.08 mm<br>0.197/0.2 in |       |       | 7.5/7.62 mm<br>0.295/0.3 in |       |       | 10/10.16 mm<br>0.394/0.4 in |       |        |
|----------------------|---------------------------|-------|-------|-----------------------------|-------|-------|-----------------------------|-------|--------|
| Rating per           | IEC/EN 60664-1            |       |       | IEC/EN 60664-1              |       |       | IEC/EN 60664-1              |       |        |
| Overtoltage category | III                       | III   | II    | III                         | III   | II    | III                         | III   | II     |
| Pollution degree     | 3                         | 2     | 2     | 3                           | 2     | 2     | 3                           | 2     | 2      |
| Rated voltage        | 250 V                     | 320 V | 630 V | 320 V                       | 320 V | 630 V | 500 V                       | 630 V | 1000 V |
| Rated surge voltage  | 4 kV                      | 4 kV  | 4 kV  | 4 kV                        | 4 kV  | 4 kV  | 6 kV                        | 6 kV  | 6 kV   |
| Nominal current      | 24 A                      | 24 A  | 24 A  | 24 A                        | 24 A  | 24 A  | 24 A                        | 24 A  | 24 A   |
| Approvals per        | UL/CSA                    |       |       | UL/CSA                      |       |       | UL/CSA                      |       |        |
| Use group UL 1059    | B                         | C     | D     | B                           | C     | D     | B                           | C     | D      |
| Rated voltage        | 300 V                     | -     | 300 V | 300 V                       | -     | 300 V | 300 V                       | -     | 300 V  |
| Nominal current UL   | 15 A                      | -     | 10 A  | 15 A                        | -     | 10 A  | 15 A                        | -     | 10 A   |
| Nominal current CSA  | 15 A                      | -     | 10 A  | 15 A                        | -     | 10 A  | 15 A                        | -     | 10 A   |

## Conductor and solder pin data:

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®   |
| Conductor size: solid             | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 28 - 12 (12: THHN, THWN)                              |
| Strip length                      | 5 - 6 mm / 0.20 - 0.24 in                             |
| Conductor entry angle             | 45° to PCB  |
| Solder pin: length/width          | 4 (5.5) mm / 0.7 x 0.7 mm                             |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                                |

## Material data:

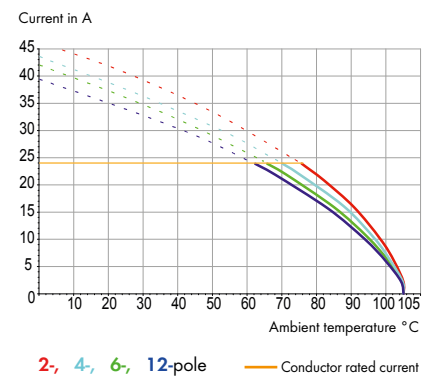
|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulating material           | Nylon 6.6 (PA 6.6)                     |
| Temperature stability         | -60 °C to +105 °C                      |
| Flammability rating per UL 94 | V0                                     |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | tin-plated                             |

## Technical data for Ex e II () versions:

| Pin Spacing     | 5/5.08 mm<br>0.197/0.2 in                           | 7.5/7.62 mm<br>0.295/0.3 in | 10/10.16 mm<br>0.394/0.4 in |
|-----------------|---|-----------------------------|-----------------------------|
| Rating per      | ATEX: PTB 06 ATEX 1061 U IECEx: IECEx PTB 06.0042 U |                             |                             |
| Rated voltage   | 176 V   | 275 V                       | 352 V                       |
| Nominal current | 16 A  | 16 A                        | 16 A                        |

## Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

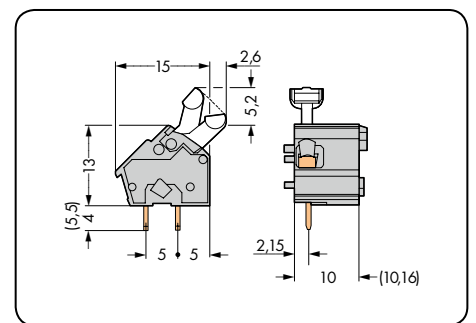
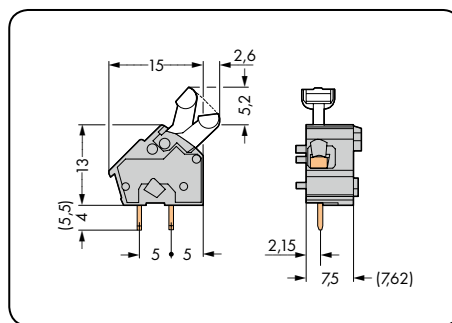
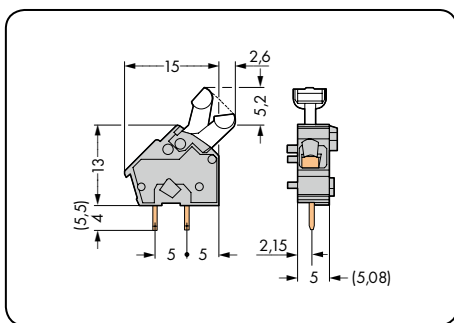


## 256 Series accessories:

## Page:

|                     |           |
|---------------------|-----------|
| Marking accessories | 508 - 511 |
| Operating tools     | 492 - 494 |
|                     |           |
|                     |           |

| Pin spacing 5/5.08 mm / 0.2 in                  |                           | Pin spacing 7.5/7.62 mm / 0.3 in                |                           | Pin spacing 10/10.16 mm / 0.4 in                |                           |
|---|---------------------------|---|---------------------------|---|---------------------------|
| 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 - 12<br>300 V/10 A | 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 - 12<br>300 V/10 A | 0.08 - 2.5 mm <sup>2</sup><br>630 V/6 kV/2 24 A | AWG 28 - 12<br>300 V/10 A |

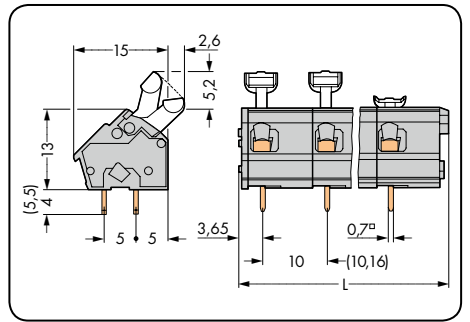
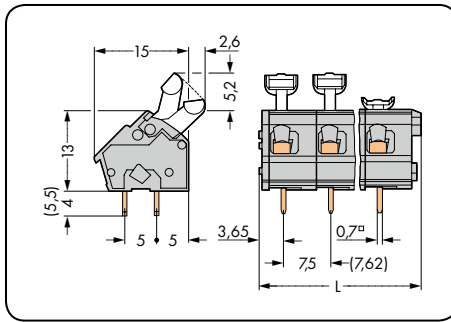
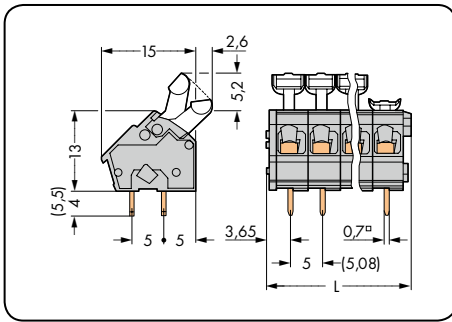
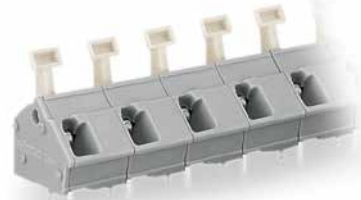


| Color   | Item No.        | Pack. Unit    | Color  | Item No.        | Pack. Unit    | Color  | Item No.                         | Pack. Unit    |  |
|---|-----------------|---------------|--|-----------------|---------------|--|----------------------------------|---------------|--|
| <b>Modular terminal block with push-button, 2 solder pins/pole</b>                                  |                 |               | <b>Modular terminal block with push-button, 2 solder pins/pole</b> |                 |               | <b>Modular terminal block with push-button, 2 solder pins/pole</b> |                                  |               |  |
| gray  | 256-401         | 600 (6 x 100) | gray   | 256-501         | 400 (4 x 100) | gray   | 256-601                          | 300 (3 x 100) |  |
| red   | 256-740         | 600 (6 x 100) | red  | 256-750         | 400 (4 x 100) | red  | 256-760                          | 300 (3 x 100) |  |
| dark gray   | 256-742         | 600 (6 x 100) | dark gray  | 256-752         | 400 (4 x 100) | dark gray  | 256-762                          | 300 (3 x 100) |  |
| light gray  | 256-743         | 600 (6 x 100) | light gray   | 256-753         | 400 (4 x 100) | light gray   | 256-763                          | 300 (3 x 100) |  |
| blue  | 256-744         | 600 (6 x 100) | blue   | 256-754         | 400 (4 x 100) | blue   | 256-764                          | 300 (3 x 100) |  |
| orange  | 256-746         | 600 (6 x 100) | orange   | 256-756         | 400 (4 x 100) | orange   | 256-766                          | 300 (3 x 100) |  |
| light green   | 256-747         | 600 (6 x 100) | light green  | 256-757         | 400 (4 x 100) | light green  | 256-767                          | 300 (3 x 100) |  |
| ○ Ex e II   | 256-743/999-950 |               | ○ Ex e II  | 256-753/999-950 |               | ○ Ex e II  | 256-763/999-950                  |               |  |
|   |                 |               | ⓘ Suitable for Ex i applications                                   |                 |               |  | ⓘ Suitable for Ex i applications |               |  |
| <b>Item no. suffix for modular terminal blocks with 5.5 mm long solder pins: . . . . . /332-000</b> |                 |               |  |                 |               |  |                                  |               |  |

| End plates for 256 Series,<br>snap-on type,<br>1 mm/0.039 in thick |  | Color       | Item No. | Pack. Unit |
|--|--|-------------|----------|------------|
|  |  | gray        | 256-100  | 100        |
|  |  | dark gray   | 256-200  | 100        |
|  |  | light gray  | 256-300  | 100        |
|  |  | blue        | 256-400  | 100        |
|  |  | red         | 256-500  | 100        |
|  |  | orange      | 256-600  | 100        |
|  |  | light green | 256-700  | 100        |
|  |  | black       | 256-800  | 100        |

# PCB Terminal Strips with Push-Buttons 2.5 mm<sup>2</sup>

| Pin spacing 5/5.08 mm / 0.2 in |             | Pin spacing 7.5/7.62 mm / 0.3 in |             | Pin spacing 10/10.16 mm / 0.4 in |             |
|--------------------------------|-------------|----------------------------------|-------------|----------------------------------|-------------|
| 0.08 – 2.5 mm <sup>2</sup>     | AWG 28 – 12 | 0.08 – 2.5 mm <sup>2</sup>       | AWG 28 – 12 | 0.08 – 2.5 mm <sup>2</sup>       | AWG 28 – 12 |
| 320 V/4 kV/2 24 A              | 300 V/10 A  | 320 V/4 kV/2 24 A                | 300 V/10 A  | 630 V/6 kV/2 24 A                | 300 V/10 A  |



$L = (\text{pole no.} \times \text{pin spacing}) + 2.9 \text{ mm}$

| Pole No.   | Item No. | Pack. Unit    | Pole No.   | Item No. | Pack. Unit   | Pole No.   | Item No. | Pack. Unit   |
|--|----------|---------------|--|----------|--------------|--|----------|--------------|
| Terminal strip with push-buttons, 2 solder pins/pole, gray                           |          |               | Terminal strip with push-buttons, 2 solder pins/pole, gray |          |              | Terminal strip with push-buttons, 2 solder pins/pole, gray |          |              |
| 2  | 256-402  | 400 (4 x 100) | 2  | 256-502  | 280 (4 x 70) | 2  | 256-602  | 200 (4 x 50) |
| 3  | 256-403  | 280 (4 x 70)  | 3  | 256-503  | 180 (4 x 45) | 3  | 256-603  | 140 (4 x 35) |
| 4  | 256-404  | 200 (4 x 50)  | 4  | 256-504  | 140 (4 x 35) | 4  | 256-604  | 100 (4 x 25) |
| 5  | 256-405  | 160 (4 x 40)  | 5  | 256-505  | 120 (4 x 30) | 5  | 256-605  | 80 (4 x 20)  |
| 6  | 256-406  | 140 (4 x 35)  | 6  | 256-506  | 100 (4 x 25) | 6  | 256-606  | 60 (4 x 15)  |
| 7  | 256-407  | 120 (4 x 30)  | 7  | 256-507  | 80 (4 x 20)  | 7  | 256-607  | 60 (4 x 15)  |
| 8  | 256-408  | 100 (4 x 25)  | 8  | 256-508  | 60 (4 x 15)  | 8  | 256-608  | 60 (4 x 15)  |
| 9  | 256-409  | 100 (4 x 25)  | 9  | 256-509  | 60 (4 x 15)  | 9  | 256-609  | 40 (4 x 10)  |
| 10   | 256-410  | 80 (4 x 20)   | 10   | 256-510  | 60 (4 x 15)  | 10   | 256-610  | 40 (4 x 10)  |
| 12   | 256-412  | 60 (4 x 15)   | 12   | 256-512  | 40 (4 x 10)  | 12   | 256-612  | 40 (4 x 10)  |
| 16   | 256-416  | 60 (4 x 15)   | 16   | 256-516  | 40 (4 x 10)  | 16   | 256-616  | 20 (4 x 5)   |
| 24   | 256-424  | 40 (4 x 10)   | 24   | 256-524  | 20 (4 x 5)   | 24   | 256-624  | 20 (4 x 5)   |
| 36   | 256-436  | 20 (4 x 5)    |  |          |              |  |          |              |
| 48   | 256-448  | 20 (4 x 5)    |  |          |              |  |          |              |
| Item no. suffix for terminal strips with 5.5 mm long solder pins: . . . . . /332-000 |          |               |  |          |              |  |          |              |

**Item no. suffixes for Ex e II and Ex i applications:**

- Ex e II . . . . . /000-009/999-950
- Ex i . . . . . /000-006 (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)

**Ordering example:**

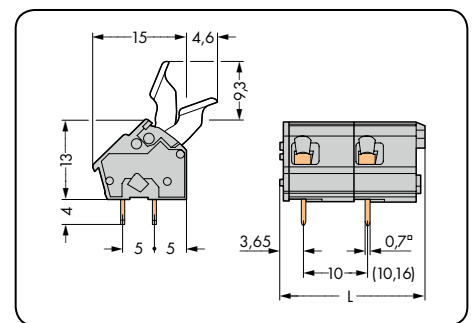
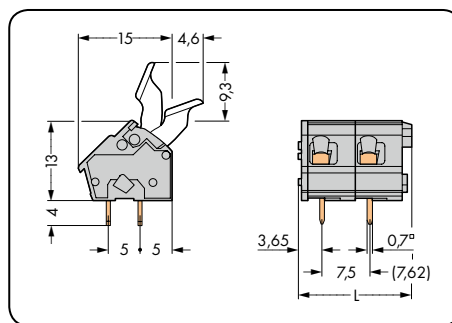
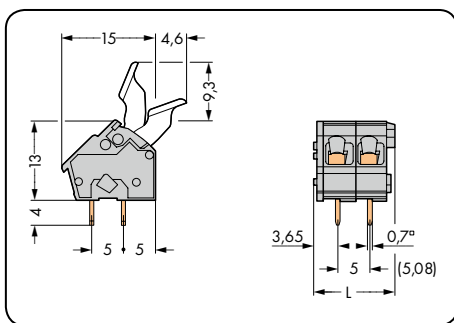
Terminal strip, 10/10.16 mm pin spacing, 10-pole, Ex e II: **256-610/000-009/999-950**

**Item no. suffixes for colored terminal strips:**

- red . . . . . /000-005
  - blue . . . . . /000-006
  - dark gray . . . . . /000-008
  - light gray . . . . . /000-009
  - orange . . . . . /000-012
  - light green . . . . . /000-017
- Ordering example:**  
Terminal strip, 5/5.08 mm pin spacing, 8-pole, orange: **256-408/000-012**



| Pin spacing 5/5.08 mm / 0.2 in |             | Pin spacing 7.5/7.62 mm / 0.3 in |             | Pin spacing 10/10.16 mm / 0.4 in |             |
|--------------------------------|-------------|----------------------------------|-------------|----------------------------------|-------------|
| 0.08 - 2.5 mm <sup>2</sup>     | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>       | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>       | AWG 28 - 12 |
| 320 V/4 kV/2 24 A              | 300 V/10 A  | 320 V/4 kV/2 24 A                | 300 V/10 A  | 630 V/6 kV/2 24 A                | 300 V/10 A  |



L = (pole no. x pin spacing) + 2.9 mm

| Pole No.   | Item No.        | Pack. Unit    | Pole No.  | Item No.        | Pack. Unit   | Pole No.  | Item No.        | Pack. Unit   |
|--|-----------------|---------------|---|-----------------|--------------|---|-----------------|--------------|
| <b>Terminal strip with finger-operated levers, 2 solder pins/pole, gray</b>  |                 |               | <b>Terminal strip with finger-operated levers, 2 solder pins/pole, gray</b> |                 |              | <b>Terminal strip with finger-operated levers, 2 solder pins/pole, gray</b> |                 |              |
| 2  | 256-402/333-000 | 400 (4 x 100) | 2   | 256-502/333-000 | 280 (4 x 70) | 2   | 256-602/333-000 | 200 (4 x 50) |
| 3  | 256-403/333-000 | 280 (4 x 70)  | 3   | 256-503/333-000 | 180 (4 x 45) | 3   | 256-603/333-000 | 140 (4 x 35) |
| 4  | 256-404/333-000 | 200 (4 x 50)  | 4   | 256-504/333-000 | 140 (4 x 35) | 4   | 256-604/333-000 | 100 (4 x 25) |
| 5  | 256-405/333-000 | 160 (4 x 40)  | 5   | 256-505/333-000 | 120 (4 x 30) | 5   | 256-605/333-000 | 80 (4 x 20)  |
| 6  | 256-406/333-000 | 140 (4 x 35)  | 6   | 256-506/333-000 | 100 (4 x 25) | 6   | 256-606/333-000 | 60 (4 x 15)  |
| 7  | 256-407/333-000 | 120 (4 x 30)  | 7   | 256-507/333-000 | 80 (4 x 20)  | 7   | 256-607/333-000 | 60 (4 x 15)  |
| 8  | 256-408/333-000 | 100 (4 x 25)  | 8   | 256-508/333-000 | 60 (4 x 15)  | 8   | 256-608/333-000 | 60 (4 x 15)  |
| 9  | 256-409/333-000 | 100 (4 x 25)  | 9   | 256-509/333-000 | 60 (4 x 15)  | 9   | 256-609/333-000 | 40 (4 x 10)  |
| 10   | 256-410/333-000 | 80 (4 x 20)   | 10  | 256-510/333-000 | 60 (4 x 15)  | 10  | 256-610/333-000 | 40 (4 x 10)  |
| 12   | 256-412/333-000 | 60 (4 x 15)   | 12  | 256-512/333-000 | 40 (4 x 10)  | 12  | 256-612/333-000 | 40 (4 x 10)  |
| 16   | 256-416/333-000 | 60 (4 x 15)   | 16  | 256-516/333-000 | 40 (4 x 10)  | 16  | 256-616/333-000 | 20 (4 x 5)   |
| 24   | 256-424/333-000 | 40 (4 x 10)   | 24  | 256-524/333-000 | 20 (4 x 5)   | 24  | 256-624/333-000 | 20 (4 x 5)   |
| <b>Note:</b>   |                 |               |   |                 |              |   |                 |              |
| For lengths greater than 3 poles (5/5.08 mm pin spacing), finger lever operation for the center levers may not be possible due to finger size/spacing limitations. |                 |               |   |                 |              |   |                 |              |

Item no. suffixes for Ex e II and Ex i applications:

|           |  |  |
|-----------|--|--|
| ○ Ex e II | ...../333-009/999-950                            | <b>Ordering example:</b><br>Terminal strip, 10/10.16 mm pin spacing,<br>10-pole, Ex e II: <b>256-610/333-009/999-950</b> |
| ● Ex i    | ...../333-006 (only for 10/10.16 mm pin spacing) |  |

Item no. suffixes for colored terminal strips:

|               |               |  |
|---------------|---------------|--|
| ● red         | ...../333-005 | <b>Ordering example:</b><br>Terminal strip, 5/5.08 mm pin spacing,<br>2-pole, orange: <b>256-402/333-012</b> |
| ● blue        | ...../333-006 |  |
| ● dark gray   | ...../333-008 |  |
| ○ light gray  | ...../333-009 |  |
| ● orange      | ...../333-012 |  |
| ● light green | ...../333-017 |  |



# Modular PCB Terminal Blocks and Strips with Angled Push-Buttons, 2.5 mm<sup>2</sup> 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm Pin Spacing

## 256 Series



- Modular terminal blocks and terminal strips with push-button actuated CAGE CLAMP®
- New version with angled push-buttons for easy top-of-unit actuation
- Set to metric or inch pin spacing by compressing terminal strips together or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

**Technical data:**

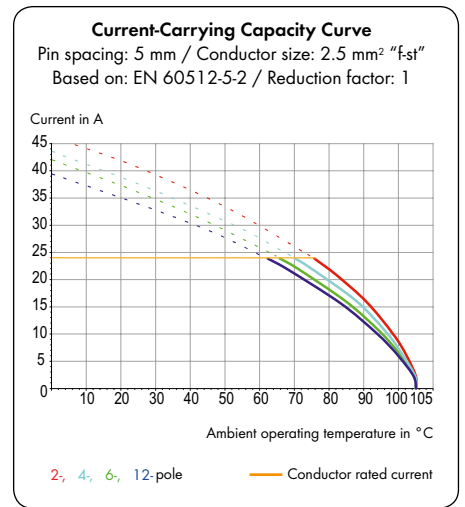
| Pin Spacing          | 5/5.08 mm<br>0.2 in |       |       | 7.5/7.62 mm<br>0.3 in |       |       | 10/10.16 mm<br>0.4 in |       |        |
|----------------------|---------------------|-------|-------|-----------------------|-------|-------|-----------------------|-------|--------|
|                      | IEC/EN 60664-1      |       |       | IEC/EN 60664-1        |       |       | IEC/EN 60664-1        |       |        |
| Ratings per          |                     |       |       |                       |       |       |                       |       |        |
| Overtoltage category | III                 | III   | II    | III                   | III   | II    | III                   | III   | II     |
| Pollution degree     | 3                   | 2     | 2     | 3                     | 2     | 2     | 3                     | 2     | 2      |
| Rated voltage        | 250 V               | 320 V | 630 V | 320 V                 | 320 V | 630 V | 500 V                 | 630 V | 1000 V |
| Rated surge voltage  | 4 kV                | 4 kV  | 4 kV  | 4 kV                  | 4 kV  | 4 kV  | 6 kV                  | 6 kV  | 6 kV   |
| Nominal current      | 24 A                | 24 A  | 24 A  | 24 A                  | 24 A  | 24 A  | 24 A                  | 24 A  | 24 A   |
| Approvals per        | UL/CSA              |       |       | UL/CSA                |       |       | UL/CSA                |       |        |
| Use group UL 1059    | B                   | C     | D     | B                     | C     | D     | B                     | C     | D      |
| Rated voltage        | 300 V               | -     | 300 V | 300 V                 | -     | 300 V | 300 V                 | -     | 300 V  |
| Nominal current UL   | 15 A                | -     | 10 A  | 15 A                  | -     | 10 A  | 15 A                  | -     | 10 A   |
| Nominal current CSA  | 15 A                | -     | 10 A  | 15 A                  | -     | 10 A  | 15 A                  | -     | 10 A   |

**Conductor and solder pin data:**

|                                   |   |
|-----------------------------------|---|
| Connection technology             | CAGE CLAMP®   |
| Conductor size: solid             | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.08 - 2.5 mm <sup>2</sup>                            |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)   |
| Conductor size: fine-stranded     | 0.25 - 1.5 mm <sup>2</sup> (with uninsulated ferrule) |
| AWG                               | 28 - 12 (12: THHN, THWN)                              |
| Strip length                      | 5 - 6 mm / 0.20 - 0.24 in                             |
| Conductor entry                   | 45° to PCB  |
| Solder pin: length/width          | 4 mm / 0.7 x 0.7 mm                                   |
| Solder pin: drilled hole diameter | 1.1 <sup>+0.1</sup> mm                                |

**Material data:**

|                               |  |
|-------------------------------|--|
| Material group                | I                                      |
| Insulation material           | Polyamide 6.6 (PA 6.6)                 |
| Flammability rating per UL 94 | V0                                     |
| Lower/Upper limit temperature | -60 °C / +105 °C                       |
| Clamping spring material      | Chrome-nickel spring steel (CrNi)      |
| Contact material              | Electrolytic copper (E <sub>cu</sub> ) |
| Contact plating               | Tin-plated                             |



**256 Series accessories:**

**Page:**

|                              |           |
|------------------------------|-----------|
| Marking accessories          | 508 - 511 |
| Operating Tools              | 492 - 494 |
| Commoning strips (Volume 2)  | 67 - 69   |
| Test plug adapter (Volume 2) | 196       |



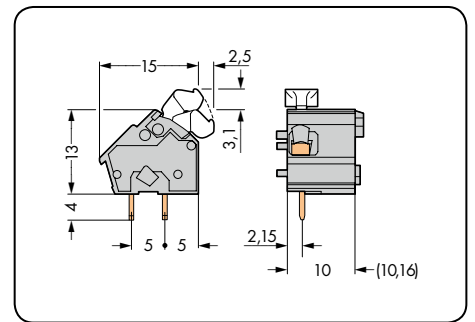
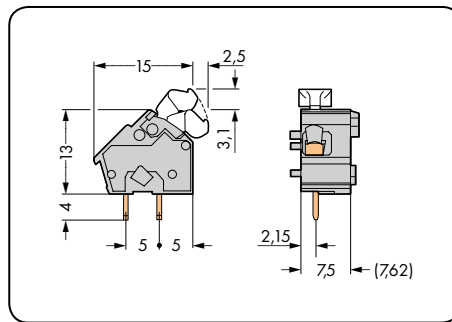
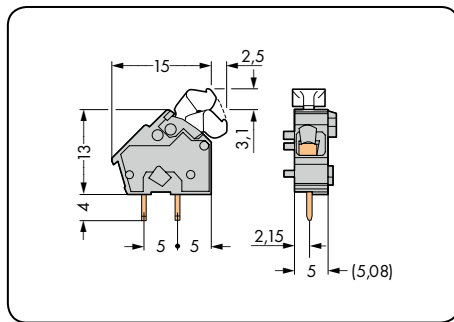
# Modular Terminal Blocks with Angled Push-Buttons, 2.5 mm<sup>2</sup>

CAGE CLAMP®

6

447

| Pin spacing: 5/5.08 mm / 0.2 in                 |                           | Pin spacing: 7.5/7.62 mm / 0.3 in               |                           | Pin spacing: 10/10.16 mm / 0.4 in               |                           |
|---|---------------------------|---|---------------------------|---|---------------------------|
| 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 - 12<br>300 V/10 A | 0.08 - 2.5 mm <sup>2</sup><br>320 V/4 kV/2 24 A | AWG 28 - 12<br>300 V/10 A | 0.08 - 2.5 mm <sup>2</sup><br>630 V/6 kV/2 24 A | AWG 28 - 12<br>300 V/10 A |



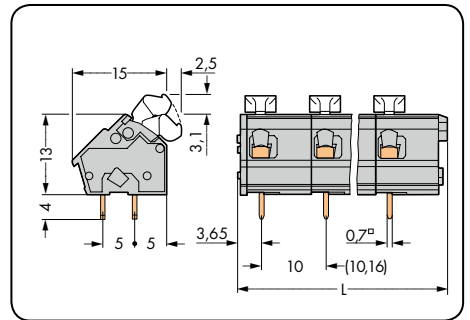
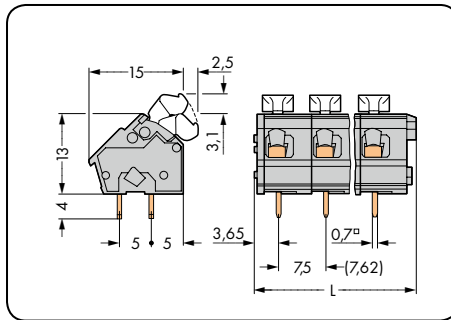
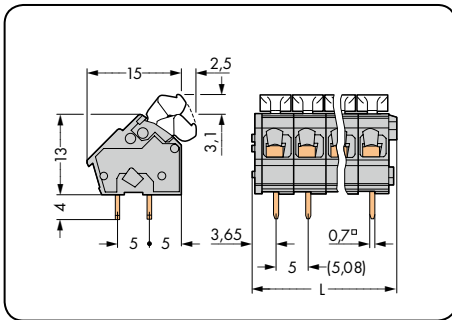
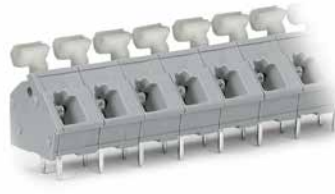
| Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    |
|---|----------|---------------|---|----------|---------------|---|----------|---------------|
| <b>Modular terminal block with angled push-button, 2 solder pins/pole</b> |          |               | <b>Modular terminal block with angled push-button, 2 solder pins/pole</b> |          |               | <b>Modular terminal block with angled push-button, 2 solder pins/pole</b> |          |               |
| gray  | 256-461  | 600 (6 x 100) | gray  | 256-561  | 400 (4 x 100) | gray  | 256-661  | 300 (3 x 100) |
| red   | 256-840  | 600 (6 x 100) | red   | 256-850  | 400 (4 x 100) | red   | 256-860  | 300 (3 x 100) |
| dark gray   | 256-842  | 600 (6 x 100) | dark gray   | 256-852  | 400 (4 x 100) | dark gray   | 256-862  | 300 (3 x 100) |
| light gray  | 256-843  | 600 (6 x 100) | light gray  | 256-853  | 400 (4 x 100) | light gray  | 256-863  | 300 (3 x 100) |
| blue  | 256-844  | 600 (6 x 100) | blue  | 256-854  | 400 (4 x 100) | blue  | 256-864  | 300 (3 x 100) |
| orange  | 256-846  | 600 (6 x 100) | orange  | 256-856  | 400 (4 x 100) | orange  | 256-866  | 300 (3 x 100) |
| light green   | 256-847  | 600 (6 x 100) | light green   | 256-857  | 400 (4 x 100) | light green   | 256-867  | 300 (3 x 100) |

| <b>End plates for 256 Series</b>      |  | Color       | Item No. | Pack. Unit |
|---------------------------------------|--|-------------|----------|------------|
| snap-on type, 1 mm/<br>0.039 in thick |  | gray        | 256-100  | 100        |
|                                       |  | dark gray   | 256-200  | 100        |
|                                       |  | light gray  | 256-300  | 100        |
|                                       |  | blue        | 256-400  | 100        |
|                                       |  | red         | 256-500  | 100        |
|                                       |  | orange      | 256-600  | 100        |
|                                       |  | light green | 256-700  | 100        |
|                                       |  | black       | 256-800  | 100        |



# PCB Terminal Strips with Angled Push-Buttons, 2.5 mm<sup>2</sup>

| Pin spacing: 5/5.08 mm / 0.2 in |             | Pin spacing: 7.5/7.62 mm / 0.3 in |             | Pin spacing: 10/10.16 mm / 0.4 in |             |
|---------------------------------|-------------|-----------------------------------|-------------|-----------------------------------|-------------|
| 0.08 - 2.5 mm <sup>2</sup>      | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>        | AWG 28 - 12 | 0.08 - 2.5 mm <sup>2</sup>        | AWG 28 - 12 |
| 320 V/4 kV/2 24 A               | 300 V/10 A  | 320 V/4 kV/2 24 A                 | 300 V/10 A  | 630 V/6 kV/2 24 A                 | 300 V/10 A  |



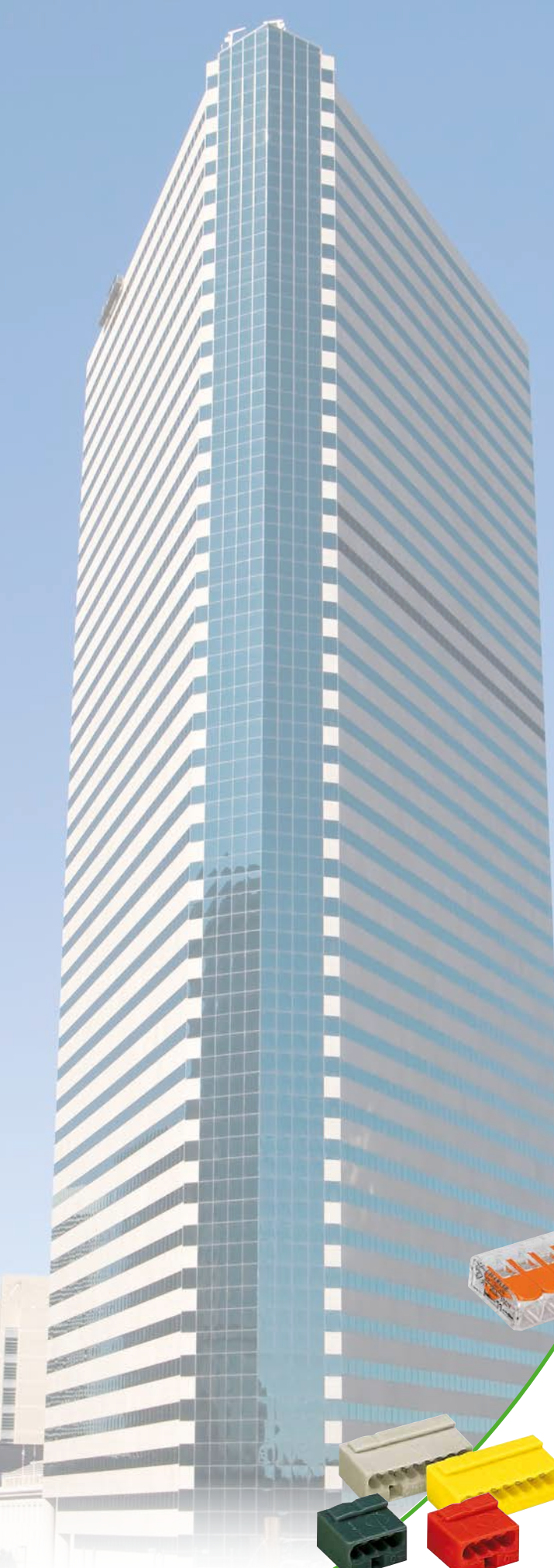
$L = (\text{pole no.} \times \text{pin spacing}) + 2.9 \text{ mm}$

| Pole No.  | Item No.        | Pack. Unit    | Pole No.  | Item No.        | Pack. Unit   | Pole No.  | Item No.        | Pack. Unit   |
|---|-----------------|---------------|---|-----------------|--------------|---|-----------------|--------------|
| Terminal strip with angled push-buttons, 2 solder pins/pole, gray |                 |               | Terminal strip with angled push-buttons, 2 solder pins/pole, gray |                 |              | Terminal strip with angled push-buttons, 2 solder pins/pole, gray |                 |              |
| 2   | 256-402/334-000 | 400 (4 x 100) | 2   | 256-502/334-000 | 280 (4 x 70) | 2   | 256-602/334-000 | 200 (4 x 50) |
| 3   | 256-403/334-000 | 280 (4 x 70)  | 3   | 256-503/334-000 | 180 (4 x 45) | 3   | 256-603/334-000 | 140 (4 x 35) |
| 4   | 256-404/334-000 | 200 (4 x 50)  | 4   | 256-504/334-000 | 140 (4 x 35) | 4   | 256-604/334-000 | 100 (4 x 25) |
| 5   | 256-405/334-000 | 160 (4 x 40)  | 5   | 256-505/334-000 | 120 (4 x 30) | 5   | 256-605/334-000 | 80 (4 x 20)  |
| 6   | 256-406/334-000 | 140 (4 x 35)  | 6   | 256-506/334-000 | 100 (4 x 25) | 6   | 256-606/334-000 | 60 (4 x 15)  |
| 7   | 256-407/334-000 | 120 (4 x 30)  | 7   | 256-507/334-000 | 80 (4 x 20)  | 7   | 256-607/334-000 | 60 (4 x 15)  |
| 8   | 256-408/334-000 | 100 (4 x 25)  | 8   | 256-508/334-000 | 60 (4 x 15)  | 8   | 256-608/334-000 | 60 (4 x 15)  |
| 9   | 256-409/334-000 | 100 (4 x 25)  | 9   | 256-509/334-000 | 60 (4 x 15)  | 9   | 256-609/334-000 | 40 (4 x 10)  |
| 10  | 256-410/334-000 | 80 (4 x 20)   | 10  | 256-510/334-000 | 60 (4 x 15)  | 10  | 256-610/334-000 | 40 (4 x 10)  |
| 12  | 256-412/334-000 | 60 (4 x 15)   | 12  | 256-512/334-000 | 40 (4 x 10)  | 12  | 256-612/334-000 | 40 (4 x 10)  |
| 16  | 256-416/334-000 | 60 (4 x 15)   | 16  | 256-516/334-000 | 40 (4 x 10)  | 16  | 256-616/334-000 | 20 (4 x 5)   |
| 24  | 256-424/334-000 | 40 (4 x 10)   | 24  | 256-524/334-000 | 20 (4 x 5)   | 24  | 256-624/334-000 | 20 (4 x 5)   |
| 36  | 256-436/334-000 | 20 (4 x 5)    |   |                 |              |   |                 |              |
| 48  | 256-448/334-000 | 20 (4 x 5)    |   |                 |              |   |                 |              |

Item no. suffixes for colored terminal strips (production and prices depend on quantity required):

|               |               |   |
|---------------|---------------|---|
| ● red         | ...../000-005 | <b>Ordering example:</b><br>Terminal strip, 5/5.08 mm pin spacing<br>8-pole, orange: <b>256-408/334-012</b> |
| ● blue        | ...../000-006 |   |
| ● dark gray   | ...../000-008 |   |
| ○ light gray  | ...../000-009 |   |
| ● orange      | ...../000-012 |   |
| ● light green | ...../000-017 |   |





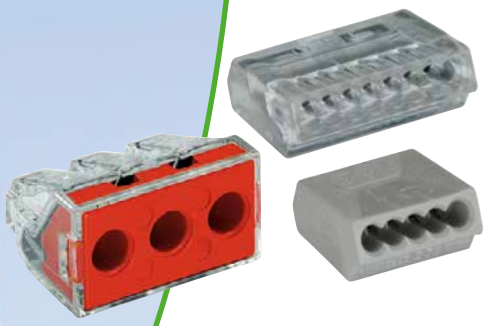
Lighting and "Service" Connectors



COMPACT PUSH WIRE®  
Connectors for Junction  
Boxes



PUSH WIRE®  
Connectors for  
Junction Boxes



Splicing Connectors for all  
Conductor Types



MICRO PUSH WIRE®  
Connectors for Junction Boxes



# 7



**Lighting Connectors**  
224 Series

452 - 453



**COMPACT PUSH WIRE® Connectors for Junction Boxes**  
2273 Series

454 - 455



**PUSH WIRE® Connectors for Junction Boxes**  
273 und 773 Series

456 - 460



**Ex PUSH WIRE® Connectors for Junction Boxes**  
773 Series

461



**Splicing Connectors for all Conductor Types**  
221 and 222 Series

462 - 465



**MICRO PUSH WIRE® Connectors for Junction Boxes**  
243 Series

466 - 467



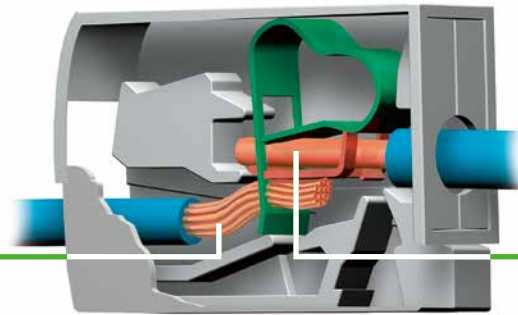
**Vario-T-BOXX and Variobox**

468

# WAGO Lighting Connectors – Two Connection Technologies in One Connector

Lighting side:  
**CAGE CLAMP®**

Installation side:  
**PUSH WIRE®**



CAGE CLAMP® clamps the following copper conductors:\*



solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded with ferrule (gastight crimped)

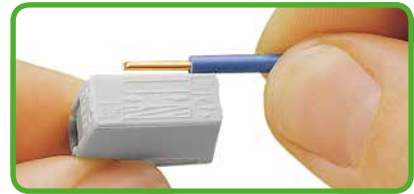


fine-stranded, with pin terminal (gastight crimped)

PUSH WIRE® terminates the following copper conductors:\*



solid



### Stripping

Strip conductor to 9 - 11 mm/0.39 in.



### Connection

Press button fully and insert conductor into **square** entry.



### Connection

Insert solid conductor into the **round** entry and push until it hits backstop.



### Removal

Press button and withdraw conductor on the side with the **square** opening.



### Removal

Hold conductor and alternately twist left and right while pulling the connector.

- The ideal connection between "solid" and "fine-stranded" conductors
- Also with double entries for looping solid conductors
- Tool-free termination



### Testing

via separate test ports.

\* For aluminum conductors, see notes on page 507.

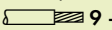
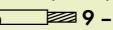



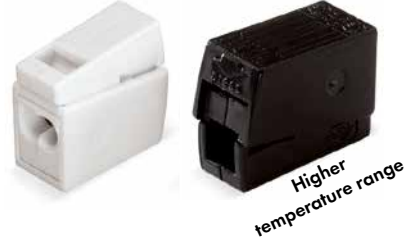
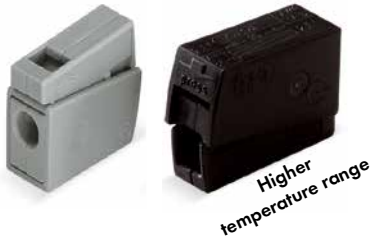
# Lighting and "Service" Connectors 224 Series

CAGE CLAMP®  
PUSH WIRE®

7

453

|   |   |   |
|---|---|---|
| <b>Installation side</b><br>1 - 2.5 mm <sup>2</sup> "s"<br>AWG 14 - 12<br><b>Lighting side</b><br>0.5 - 2.5 mm <sup>2</sup> "s+f-st"<br>400 V/4 kV/2; 24 A<br>300 V, 20 A <sup>Ⓢ</sup><br> 9 - 11 mm / 0.39 in | <b>Installation side</b><br>1 - 2.5 mm <sup>2</sup> "s"<br>AWG 14 - 12<br><b>Lighting side</b><br>0.5 - 2.5 mm <sup>2</sup> "s+f-st"<br>400 V/4 kV/2; 24 A<br>300 V, 20 A <sup>Ⓢ</sup><br> 9 - 11 mm / 0.39 in | 0.5 - 2.5 mm <sup>2</sup> "s+f-st" AWG 20 - 16<br>400 V/4 kV/2 300 V, 20 A <sup>Ⓢ</sup><br>I <sub>N</sub> 24 A<br> 9 - 11 mm / 0.39 in |
|---|---|---|



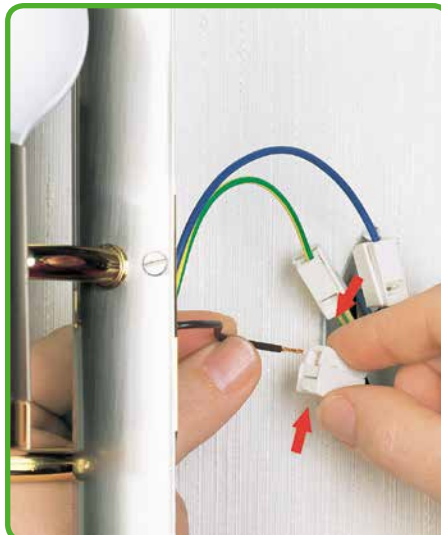
| Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit | Color                      | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|----------------------------|----------|------------|
| <b>Lighting connector,</b><br>standard version,<br>continuous service temperature 105 °C |          |            | <b>2-conductor lighting connector,</b><br>standard version,<br>continuous service temperature 105 °C |          |            | <b>"Service" connector</b> |          |            |
| ● gray   | 224-101  | 1000       | ○ white  | 224-112  | 1000       | ● gray                     | 224-201  | 50         |
| version for increased continuous service temperature of 120 °C                           |          |            | version for increased continuous service temperature of 120 °C                                       |          |            |                            |          |            |
| ● black  | 224-104  | 100        | ● black  | 224-114  | 100        |                            |          |            |

The WAGO lighting connectors ideally connect solid conductors with fine-stranded conductors. Due to their testing and approval as isolated connecting (splicing) terminals per VDE 0606, the 224 Series lighting connectors can also be used in other applications requiring a connection between solid and fine-stranded conductors.

For example, 224 Series connects:

- Blinds, sliding shutters or awning motors
- Window or bathroom fans
- Circulation pumps
- Furnace control systems
- Electrical devices via permanent flexible cables

- ⓘ In grounded power lines  
 400 V = rated voltage  
 4kV = rated surge voltage  
 2 = pollution degree



Approvals are available online at: [www.wago.com](http://www.wago.com)

WAGO®

7



# COMPACT PUSH WIRE® Junction Box Connectors for Solid Conductors 2273 Series



### Stripping

Strip solid conductor to 11 mm (see marking).



### Connection

Insert stripped solid conductor until it hits backstop.



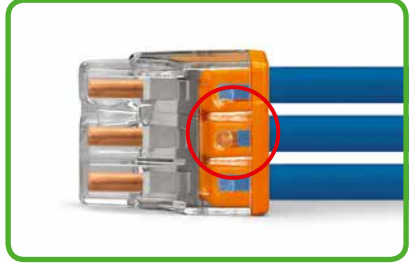
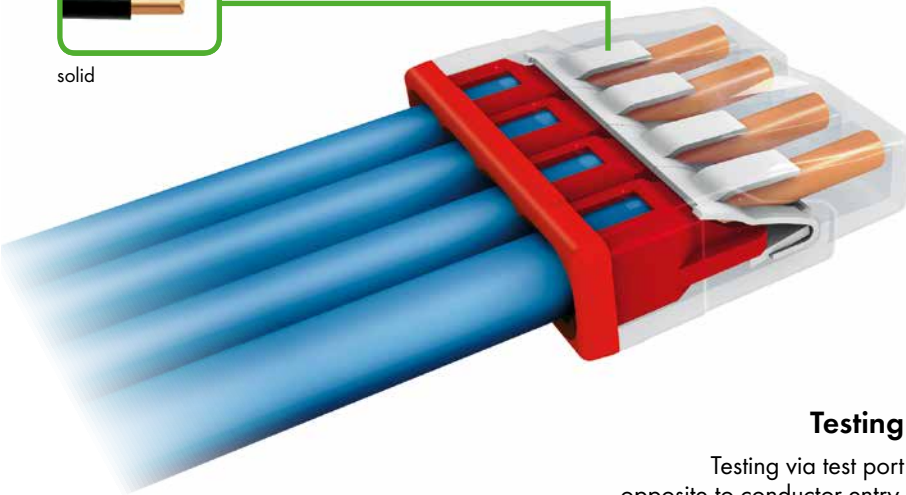
### Removal

Hold conductor and alternately twist left and right, while slightly pulling the connector.

PUSH WIRE® terminates the following copper conductors: \*



solid



### Visual wiring inspection

The transparent housing shows if conductors are fully inserted; within the colored base, a clear port shows if the conductor's strip length is correct. Conductors are correctly stripped if the clear port shows no bare conductor on the unprinted connector side. Picture above shows center conductor with exceeded strip length.

### Testing

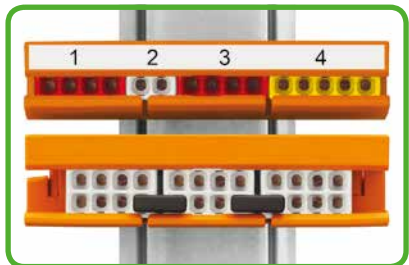
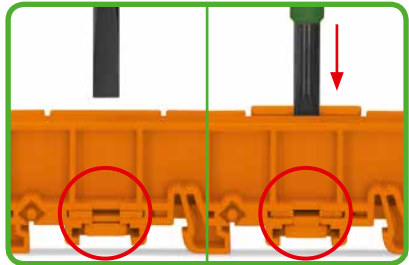
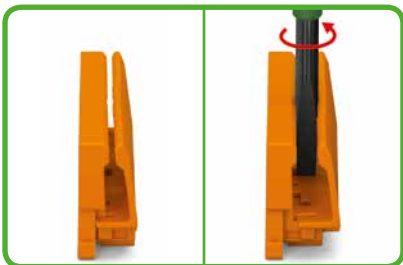
Testing via test port opposite to conductor entry.



- Convenient wiring via extremely compact design
- Conductor sizes: 0.5-2.5 mm<sup>2</sup> (AWG 18-14)
- Any combination of conductor sizes is possible
- PUSH WIRE® terminates solid copper conductors ("s")
- Push-in termination of up to 8 solid conductors




### Mounting carrier

The mounting carrier is suitable for both connector profiles. To adjust the mounting carrier, unlock the latch via 5.5 mm operating tool (see picture, right) and move the clamping slide to the required width by rotating the tool (see picture, below). In the mounting carrier, connectors may be commoned in longitudinal direction using 862-482 jumpers. Please note that jumpers cannot be removed.



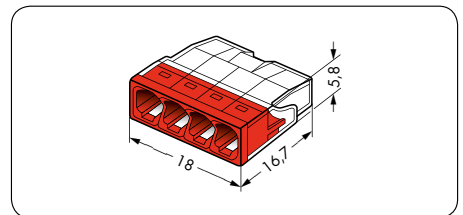
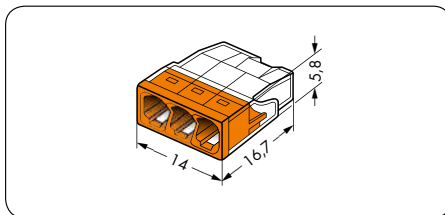
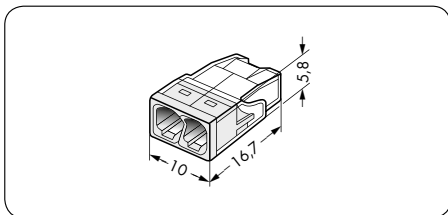
\* For aluminum conductors, see notes on page 507.



# COMPACT PUSH WIRE® Junction Box Connectors and Mounting Carrier 2273 Series

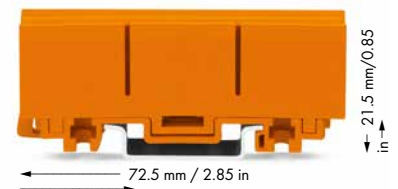
|  |                            |   |                            |  |                            |
|--|----------------------------|---|----------------------------|--|----------------------------|
| <p>2 x 0.5 – 2.5 mm<sup>2</sup> "s"<br/>450 V/4 kV/2*<br/>I<sub>N</sub> 24 A</p>  11 mm / 0.43 in | <p>2 x AWG 18 – 14 "s"</p> | <p>3 x 0.5 – 2. mm<sup>2</sup> "s"<br/>450 V/4 kV/2*<br/>I<sub>N</sub> 24 A</p>  11 mm / 0.43 in | <p>3 x AWG 18 – 14 "s"</p> | <p>4 x 0.5 – 2.5 mm<sup>2</sup> "s"<br/>450 V/4 kV/2*<br/>I<sub>N</sub> 24 A</p>  11 mm / 0.43 in | <p>4 x AWG 18 – 14 "s"</p> |
|--|----------------------------|---|----------------------------|--|----------------------------|



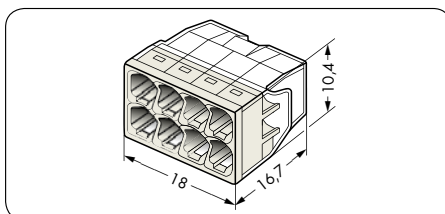
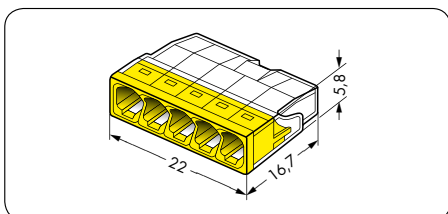
| Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    |
|---|----------|---------------|---|----------|---------------|---|----------|---------------|
| COMPACT PUSH WIRE® connector for junction boxes, 2-conductor connector, transparent housing |          |               | COMPACT PUSH WIRE® connector for junction boxes, 3-conductor connector, transparent housing |          |               | COMPACT PUSH WIRE® connector for junction boxes, 4-conductor connector, transparent housing |          |               |
| ○ white   | 2273-202 | 1000 (10x100) | ● orange  | 2273-203 | 1000 (10x100) | ● red   | 2273-204 | 1000 (10x100) |



|  |                            |  |                            |   |
|--|----------------------------|--|----------------------------|---|
| <p>5 x 0.5 – 2.5 mm<sup>2</sup> "s"<br/>450 V/4 kV/2*<br/>I<sub>N</sub> 24 A</p>  11 mm / 0.43 in | <p>5 x AWG 18 – 14 "s"</p> | <p>3 x 0.5 – 2.5 mm<sup>2</sup> "s"<br/>450 V/4 kV/2*<br/>I<sub>N</sub> 24 A</p>  11 mm / 0.43 in | <p>8 x AWG 18 – 14 "s"</p> | <p><b>Mounting carrier for 2273 Series</b></p> <p>Carrier width 14/18.5 mm / 0.55/0.72 in</p> |
|--|----------------------------|--|----------------------------|---|



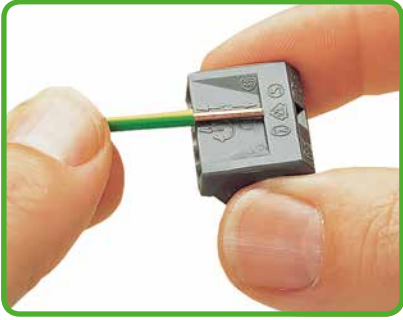
| Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit  | Color   | Item No. | Pack. Unit |
|---|----------|---------------|---|----------|-------------|---|----------|------------|
| COMPACT PUSH WIRE® connector for junction boxes, 5-conductor connector, transparent housing |          |               | COMPACT PUSH WIRE® connector for junction boxes, 8-conductor connector, transparent housing |          |             | Mounting carrier, for single- and double-row 2273 Series connectors |          |            |
| ● yellow  | 2273-205 | 1000 (10x100) | ○ light gray  | 2273-208 | 500 (10x50) | ● orange  | 2273-500 | 50 (5x10)  |



|   |
|---|
| <p>Self-adhesive marker strips, plain, height of marker strip: 5mm, 48 self-adhesive strips per card</p> <p>white 210-334 1</p> |
|---|

Approvals are available online at: [www.wago.com](http://www.wago.com)  
\* In grounded power lines

# MICRO PUSH WIRE® Junction Box Connectors for Solid Conductors 273 Series



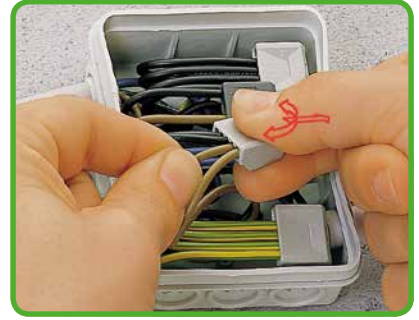
### Stripping

Strip solid conductor to 10 - 13 mm (0.39 - 0.51 in).



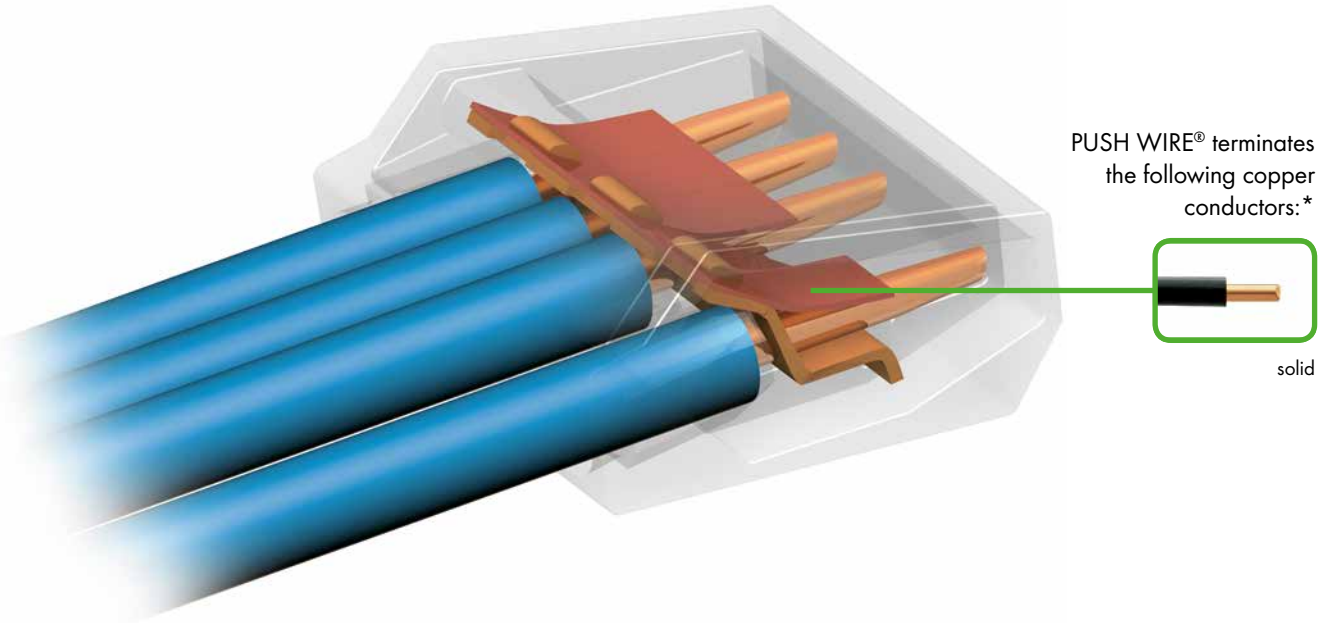
### Connection

Push stripped solid conductors in up to the backstop.



### Removal

Hold conductor and twist alternately left and right while pulling the connector.



PUSH WIRE® terminates the following copper conductors:\*



solid



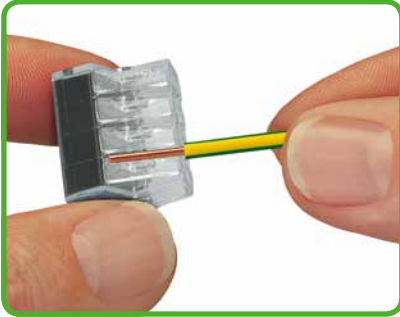
### Testing

- The "classic" connector for electrical installation applications over the past 35 years – proven in billions of applications worldwide
- Push-in termination of up to 8 solid conductors.
- PUSH WIRE® terminates solid copper conductors ("s")
- Conductor sizes:  
0.75 - 4 mm<sup>2</sup> (AWG 18 - 10)

\* For aluminum conductors, see notes on page 507.



## PUSH WIRE® Junction Box Connectors for Solid and Stranded Conductors 773 Series



### Stripping

Strip solid and stranded conductors to 10 - 13 mm (0.39 - 0.51 in).



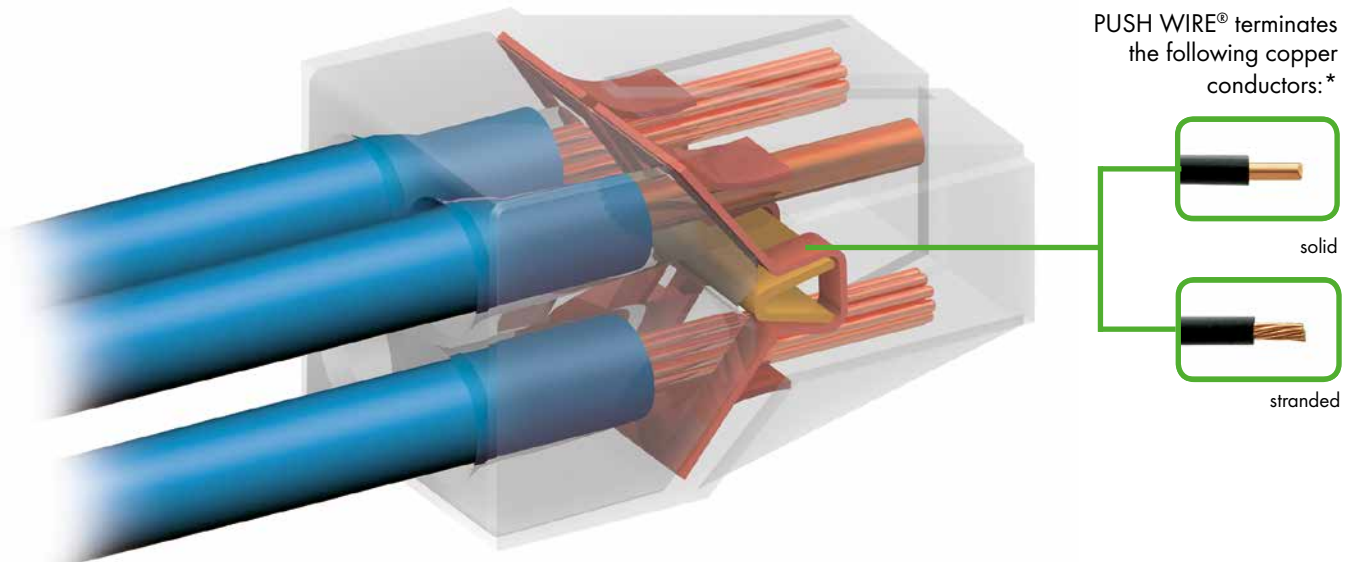
### Connection

Push stripped solid or stranded conductors in up to the backstop.



### Removal

Hold conductor and twist alternately left and right while pulling the connector. Stranded conductors must not be reconnected after removal.






### Testing

- Push-in termination of up to 8 solid or stranded conductors
- Easy-to-use connector carrier for DIN 35 rail or screw mounting
- PUSH WIRE® terminates solid or stranded copper conductors ("s+st")
- Conductor sizes up to max. 6 mm<sup>2</sup> (AWG 10)

\* For aluminum conductors, see notes on page 507.

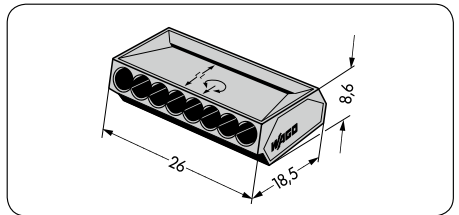
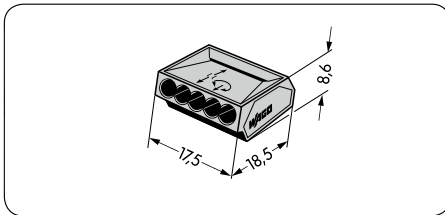
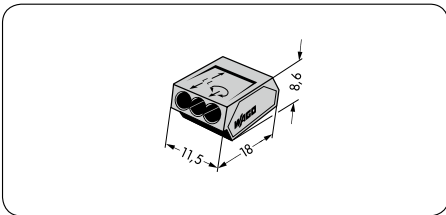
# 7 PUSH WIRE® Junction Box Connectors 273 Series




458

|   |  |  |
|---|--|--|
| <p>3 x 0.75 - 1.5 mm<sup>2</sup> "s" ①   3 x AWG 18 - 16 "s"<br/>400 V / 4 kV / 2*   600 V, 10 A ④<br/>I<sub>N</sub> 18 A</p>  10 - 13 mm / 0.45 in | <p>5 x 0.75 - 1.5 mm<sup>2</sup> "s" ①   5 x AWG 18 - 16 "s"<br/>400 V / 4 kV / 2*   600 V, 10 A ④<br/>I<sub>N</sub> 18 A</p>  10 - 13 mm / 0.45 in | <p>8 x 0.75 - 1.5 mm<sup>2</sup> "s" ①   8 x AWG 18 - 16 "s"<br/>400 V / 4 kV / 2*   600 V, 10 A ④<br/>I<sub>N</sub> 18 A</p>  10 - 13 mm / 0.45 in |
|---|--|--|



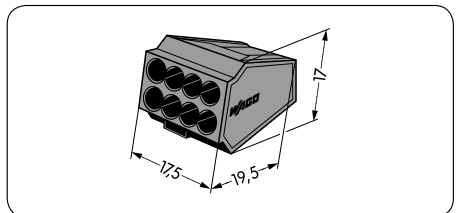
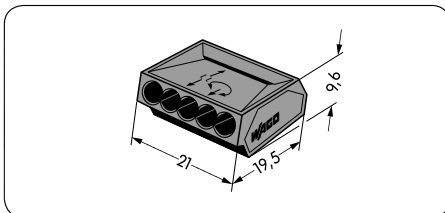
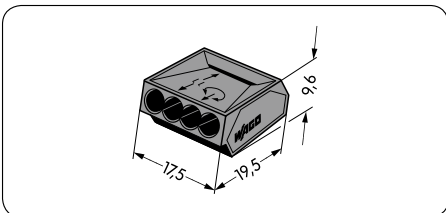
| Color  | Item No.       | Pack. Unit    | Color  | Item No.       | Pack. Unit    | Color  | Item No.       | Pack. Unit  |
|--|----------------|---------------|--|----------------|---------------|--|----------------|-------------|
| <b>PUSH WIRE® connector for junction boxes,</b><br>4-conductor connector |                |               | <b>PUSH WIRE® connector for junction boxes,</b><br>5-conductor connector |                |               | <b>PUSH WIRE® connector for junction boxes,</b><br>8-conductor connector |                |             |
| ● gray   | <b>273-100</b> | 1000 (10x100) | ● gray   | <b>273-101</b> | 1000 (10x100) | ● gray   | <b>273-108</b> | 500 (10x50) |
| ○ transparent  | <b>273-153</b> | 1000 (10x100) | ○ transparent  | <b>273-155</b> | 1000 (10x100) | ○ transparent  | <b>273-158</b> | 500 (10x50) |



|  |   |   |
|--|---|---|
| <p>4 x 1 - 2.5 mm<sup>2</sup> "s" ②   4 x AWG 18 - 12 "s"<br/>400 V / 4 kV / 2*   600 V, 20 A ④<br/>I<sub>N</sub> 24 A</p>  10 - 13 mm / 0.45 in | <p>5 x 1 - 2.5 mm<sup>2</sup> "s" ②   5 x AWG 18 - 12 "s"<br/>400 V / 4 kV / 2*   600 V, 20 A ④<br/>I<sub>N</sub> 24 A</p>  12 - 13 mm / 0.45 in | <p>8 x 1 - 2.5 mm<sup>2</sup> "s+st" ②   8 x AWG 18 - 12 "s+st"<br/>400 V / 4 kV / 2*   600 V, 20 A ④<br/>I<sub>N</sub> 24 A</p>  10 - 13 mm / 0.45 in |
|--|---|---|



| Color  | Item No.       | Pack. Unit    | Color  | Item No.       | Pack. Unit    | Color  | Item No.       | Pack. Unit  |
|--|----------------|---------------|--|----------------|---------------|--|----------------|-------------|
| <b>PUSH WIRE® connector for junction boxes,</b><br>4-conductor connector |                |               | <b>PUSH WIRE® connector for junction boxes,</b><br>5-conductor connector |                |               | <b>PUSH WIRE® connector for junction boxes,</b><br>8-conductor connector |                |             |
| ● dark gray  | <b>273-102</b> | 1000 (10x100) | ● dark gray  | <b>273-105</b> | 1000 (10x100) | ● dark gray  | <b>273-103</b> | 500 (10x50) |
| ○ transparent  | <b>273-254</b> | 1000 (10x100) | ○ transparent  | <b>273-255</b> | 500 (10x50)   | ○ transparent  | <b>273-258</b> | 500 (10x50) |



Approvals are available online at: [www.wago.com](http://www.wago.com)

\* In grounded power lines ① When using conductors of exclusively the same diameter, 0.5 mm<sup>2</sup>/AWG 20 cross section is also possible.

# PUSH WIRE® Junction Box Connectors

## Mounting Carrier for DIN 35 Rail or Screw Mounting

### 273 Series

PUSH WIRE®

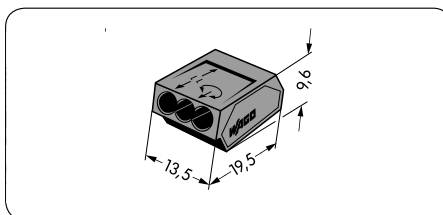
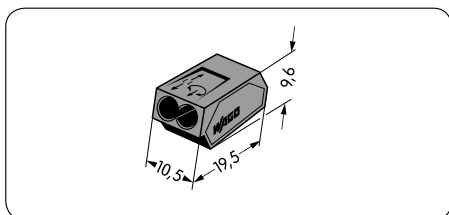
7

459

|  |  |  |
|--|--|--|
| <p>2 x 1 - 2.5 mm<sup>2</sup> "s" ②   2 x AWG 18 - 12 "s"<br/>400 V / 4 kV / 2*   600 V, 20 A ④<br/>I<sub>N</sub> 24 A</p> <p>10 - 13 mm / 0.45 in</p> | <p>3 x 1 - 2.5 mm<sup>2</sup> "s" ②   3 x AWG 18 - 12 "s"<br/>400 V / 4 kV / 2*   600 V, 20 A ④<br/>I<sub>N</sub> 24 A</p> <p>10 - 13 mm / 0.45 in</p> | <p>Mounting carrier<br/>for 273 Series</p> <p>Carrier width: 18 mm / 0.71 in</p> |
|--|--|--|



| Color  | Item No. | Pack. Unit    | Color  | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit |
|--|----------|---------------|--|----------|---------------|---|----------|------------|
| PUSH WIRE® connector for junction boxes, 2-conductor connector |          |               | PUSH WIRE® connector for junction boxes, 4-conductor connector |          |               | Mounting carrier 273-150 50 (5x10)                                |          |            |
| ● dark gray  | 273-112  | 1000 (10x100) | ● dark gray  | 273-104  | 1000 (10x100) | for single-row 273 Series connectors, 1.5 and 2.5 mm <sup>2</sup> |          |            |
| ○ transparent  | 273-252  | 1000 (10x100) | ○ transparent  | 273-253  | 1000 (10x100) | Marking strips, 48 strips per card                                |          |            |
|  |          |               |  |          |               | plain   | 210-334  | 1 card     |



FIXED IN POSITION - DIN 35 rail mounting



FIXED IN POSITION - screw mounting

|  |
|--|
| <p>3 x 1.5 - 4 mm<sup>2</sup> "s"   3 x AWG 14 - 10 "s"<br/>400 V / 4 kV / 2*   600 V, 30 A ④<br/>I<sub>N</sub> 32 A</p> <p>12 - 15 mm / 0.53 in</p> |
|--|



Before using the carrier, snap off cover and use as end plate.



Snapping carrier onto DIN rail.

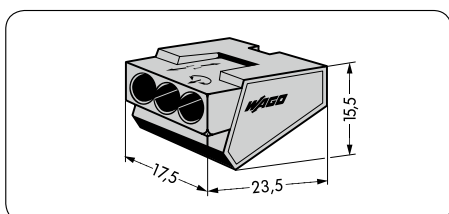
#### PUSH WIRE® connectors in distribution boxes

When performing changes or expansions in junction boxes, there is often the problem that conductors must be extended or additional clamping points are required. Individual PUSH WIRE® connectors (e.g., 222, 243, 273 and 773 Series) are approved as interconnect components for building wiring according to EN 60998. Application standards for building installation (e.g., parts 510 and 520 from DIN VDE 0100) also place the following requirements on junction box connectors:

- They must be arranged so that operation, inspection, maintenance and access to the removable connectors is made easy.
- It must be possible to test them.
- Conductors connected from outside must be clearly and permanently assigned to their associated circuits.

These requirements cannot be met with PUSH WIRE® connectors alone. In combination with WAGO mounting carriers, the PUSH WIRE® connectors clearly meet these requirements, so that there is no more difference to rail-mount terminal blocks. Using PUSH WIRE® connectors with mounting carriers in junction boxes has proved to be accepted by testing authorities.

| Color   | Item No. | Pack. Unit  |
|---|----------|-------------|
| PUSH WIRE® connector for junction boxes, 3-conductor connectors |          |             |
| ● gray  | 273-403  | 500 (10x50) |
| ○ transparent   | 273-453  | 500 (10x50) |





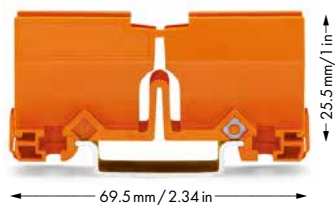
Approvals are available online at: [www.wago.com](http://www.wago.com)

② When using conductors of exclusively the same diameter, 0.75 mm<sup>2</sup>/AWG 18 cross section is also possible.

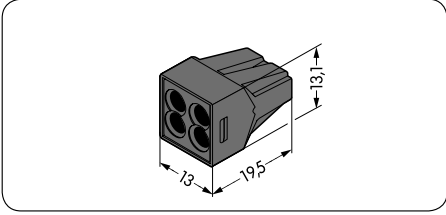
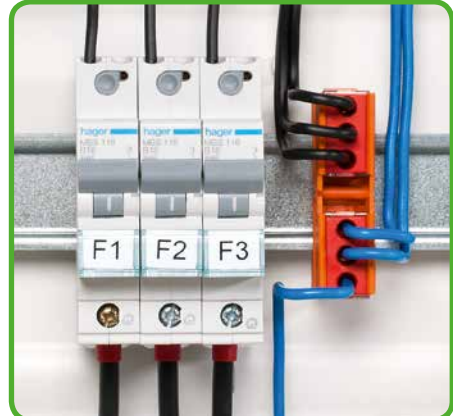
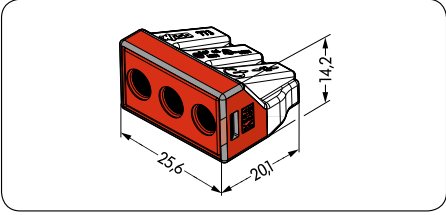
7

# PUSH WIRE® Junction Box Connectors Mounting Carrier for DIN 35 Rail or Screw Mounting 773 Series

|  |   |  |   |   |
|--|---|--|---|---|
| <p>3 x 2.5 – 6 mm<sup>2</sup> "s+st"<br/>400 V/4 kV/2*<br/>I<sub>N</sub> 41 A</p>  <p>12 – 13 mm / 0.53 in</p> | <p>3 x AWG 14 – 10 "s+st"<br/>600 V, 30 A</p> | <p>Mounting carrier<br/>for 773 Series</p> <p>Carrier width: 18 mm / 0.71 in</p> | <p>4 x 0.75 – 2.5 mm<sup>2</sup> "s"<br/>4 x 1.5 – 2.5 mm<sup>2</sup> "st"<br/>400 V/4 kV/2**<br/>I<sub>N</sub> 24 A</p>  <p>12 mm / 0.47 in</p> | <p>4 x AWG 18 – 12 "s"<br/>4 x AWG 16 – 12 "st"<br/>600 V, 20 A ©</p> |
|--|---|--|---|---|



| Color   | Item No.       | Pack. Unit  | Item No.   | Pack. Unit     | Color   | Item No. | Pack. Unit     |               |
|---|----------------|-------------|--|----------------|---|----------|----------------|---------------|
| <b>PUSH WIRE® connector for junction boxes,</b><br>3-conductor connector, transparent housing |                |             | <b>Mounting carrier 773-332</b><br>for all 773 Series connectors |                | <b>PUSH WIRE® connector for junction boxes,</b><br>4-conductor connector, max. continuous operating temperature: 150 °C |          |                |               |
| ● red   | <b>773-173</b> | 500 (10x50) | ● plain  | <b>210-334</b> | 1 card  | ● black  | <b>773-514</b> | 1000 (10x100) |



A mounting carrier (see accessories) is suitable for applications where the connectors must be marked and fixed in position. The carrier fits up to two connectors on DIN 35 carrier rails or screw mounting on level surfaces.

Using this PUSH WIRE® connector, a large range of wiring applications can be realized in distribution or junction boxes, for example. To mention just a few: potential multiplication of an 6 mm<sup>2</sup>/AWG 10 conductor in a junction box, changing from or to 6 mm<sup>2</sup>/AWG 10 conductor size.





# Ex PUSH WIRE® Junction Box Connectors Mounting Carrier for DIN 35 Rail or Screw Mounting 773 Series

PUSH WIRE®

7

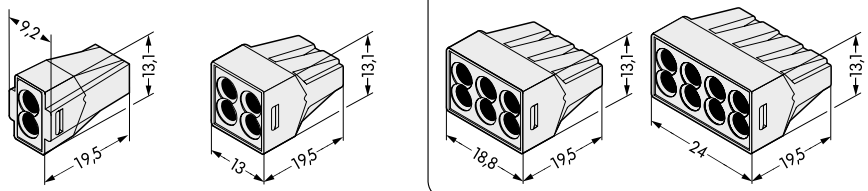
461

|   |  |   |  |  |
|---|--|---|--|--|
| 0,75 - 2.5 mm <sup>2</sup> "s"  | AWG 18 - 12 "s"<br>AWG 16 - 12 "st"<br>600 V, 20 A ① | 0,75 - 2.5 mm <sup>2</sup> "s"  | AWG 18 - 12 "s"<br>AWG 16 - 12 "st"<br>600 V, 20 A ① | Mounting carrier<br>for PUSH WIRE® junction box connectors<br><br>Carrier width: 18 mm / 0.71 in |
| 550 V**<br>I <sub>N</sub> 24 A  |  | 550 V**<br>I <sub>N</sub> 24 A  |  |  |
|  12 mm / 0.47 in |  |  12 mm / 0.47 in |  |  |

To be used only in conjunction with 773-331 Mounting Carrier.



| Color   | Item No. | Pack. Unit    | Color   | Item No. | Pack. Unit    | Item No.         | Pack. Unit |           |
|---|----------|---------------|---|----------|---------------|------------------|------------|-----------|
| PUSH WIRE® connector for junction boxes, light gray |          |               | PUSH WIRE® connector for junction boxes, light gray |          |               | Mounting carrier |            |           |
| ○ 2-cond. connector                                 | 773-492  | 1000 (10x100) | ○ 6-cond. connector                                 | 773-496  | 1000 (10x100) | light gray       | 773-331    | 50 (5x10) |
| ○ 4-cond. connector                                 | 773-494  | 1000 (10x100) | ○ 8-cond. connector                                 | 773-498  | 1000 (10x100) | Marking strips   |            |           |
|   |          |               |   |          |               | plain            | 210-334    | 1 card    |



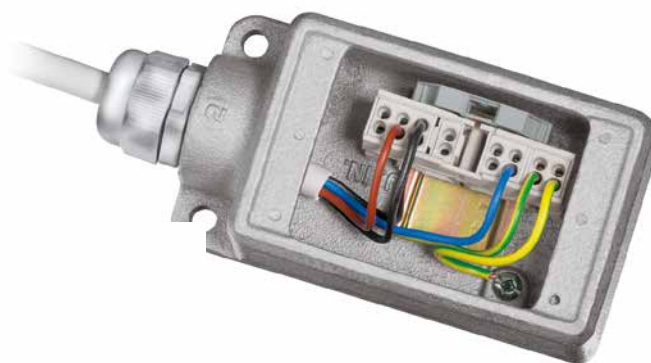
① 300 V/20 A or 600 V/5 A for more than 1 connector per mounting side

## Ex-e PUSH WIRE® connector for junction boxes

For their 2-, 4-, 6- and 8-conductor PUSH WIRE® 773 Series connectors, WAGO has been granted the worldwide first Ex-e approvals in compliance with both the EC 94/9-ATEX directive and the American UL Aex standard.

In most countries, these approvals allow for use in gas environments, zones 1 and 2 as well as zones 21 and 22 dust environments.

WAGO Ex PUSH WIRE® connectors for distribution and junction boxes as well as control and operating systems for use in hazardous areas offer the following advantages over traditional connectors:



- Time and cost-saving PUSH WIRE® connection
- Vibration-proof, maintenance-free connections
- 100 % touch-proof
- Mounting carriers available for "fixed in position" applications
- One single carrier equipped with 2-, 4-, 6- and 8-conductor connectors can hold up to 16 clamping units according to user requirements, which offers material and cost saving advantages.
- Available as OEM products for manufacturers and suppliers of enclosures and distribution boxes used in potentially explosive areas.

Manufacturer and supplier addresses for completely populated Ex junction boxes are available upon request (junction boxes are not supplied by WAGO Kontakttechnik GmbH & Co KG).

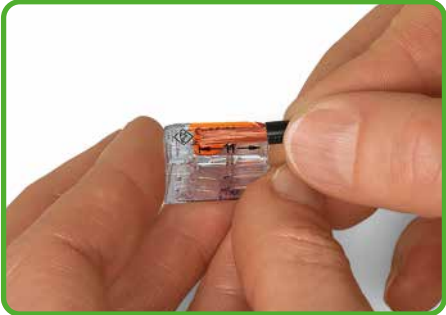
\* Approvals are available online at: [www.wago.com](http://www.wago.com)  
\*\* 275 V at a distance < 10 mm to parts of other potentials

7

# COMPACT Splicing Connectors for All Conductor Types, 221 Series



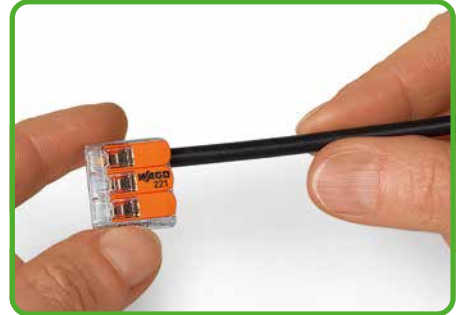
## - Description and Handling -



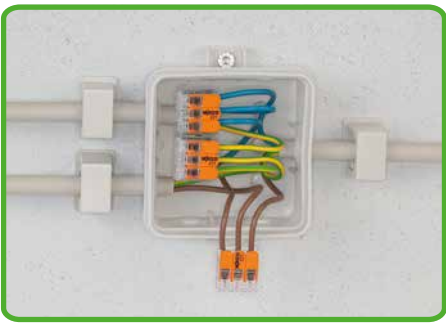
Strip conductor to 11 mm / 0.43 in.



Termination: Open clamping unit using the lever and insert conductor.



Then lower lever to close the clamp.



Wiring fine-stranded conductors in a junction box.



Individual design of low-voltage lighting systems.



Lighting distribution in ceiling canopy



Pendant light connection in suspended ceilings

**CAGE CLAMP®**  
clamps the following  
copper conductors:\*

- solid
- stranded

fine-stranded,  
also with tinned  
single strands

fine-stranded,  
tip-bonded

\* For aluminum conductors, see notes on page 507.

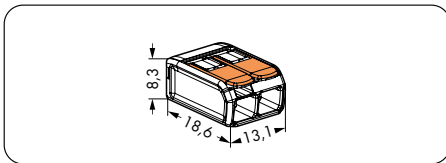
# COMPACT Splicing Connectors for All Conductor Types 221 Series

|   |             |   |             |
|---|-------------|---|-------------|
| 0.2 - 4 mm <sup>2</sup> "s+f-st"<br>0.14 - 4 mm <sup>2</sup> "f-st"<br>450 V/4 kV/2 ①<br>I <sub>N</sub> 32 A<br>11 mm / 0.43 in ② | AWG 24 - 12 | 0.2 - 4 mm <sup>2</sup> "s+f-st"<br>0.14 - 4 mm <sup>2</sup> "f-st"<br>450 V/4 kV/2 ①<br>I <sub>N</sub> 32 A<br>11 mm / 0.43 in ② | AWG 24 - 12 |
|---|-------------|---|-------------|

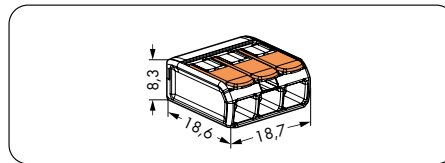


- ① in grounded power lines  
450 V = rated voltage  
4 kV = rated surge voltage  
2 = pollution degree  
(also see Full Line Catalog, Volume 1, Section 14)
- ② Strip length, see packaging or instructions.

| Item No.  | Pack. Unit    | Item No.  | Pack. Unit  |
|---|---------------|---|-------------|
| COMPACT splicing connector for all conductor types, 2-conductor connector, with levers, max. continuous service temperature 105°C |               | COMPACT splicing connector for all conductor types, 3-conductor connector, with levers, max. continuous service temperature 105°C |             |
| 221-412   | 1000 (10x100) | 221-413   | 500 (10x50) |



Dimensions in mm



Dimensions in mm

### COMPACT splicing connectors

Tool-free connection of up to 5 stripped fine-stranded conductors from 0.14 to 4 mm<sup>2</sup>/AWG 24 - 12, solid or stranded conductors from 0.2 to 4 mm<sup>2</sup>/AWG 24 - 12.

### This is how it works:

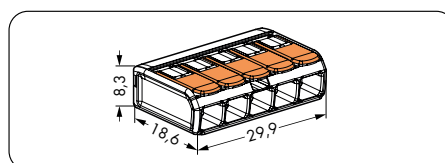
Open the clamping point using one of the orange operating levers until the lever is in vertical position. The conductor can now be inserted, then the lever can be returned to its rest position, flush with the connector housing.

### The safety:

The specially designed rest position of the lever reliably prevents accidental unclamping of a connected conductor. Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC and UL.



| Item No.  | Pack. Unit  |
|---|-------------|
| COMPACT splicing connector for all conductor types, 5-conductor connector, with levers, max. continuous service temperature 105°C |             |
| 221-415   | 400 (10x40) |



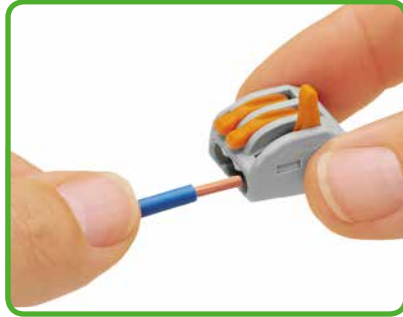
Dimensions in mm

# COMPACT Splicing Connectors for All Conductor Types with Lever-Actuated CAGE CLAMP® Connection



### Stripping

Strip conductor to 9 - 10 mm/0.37 in.



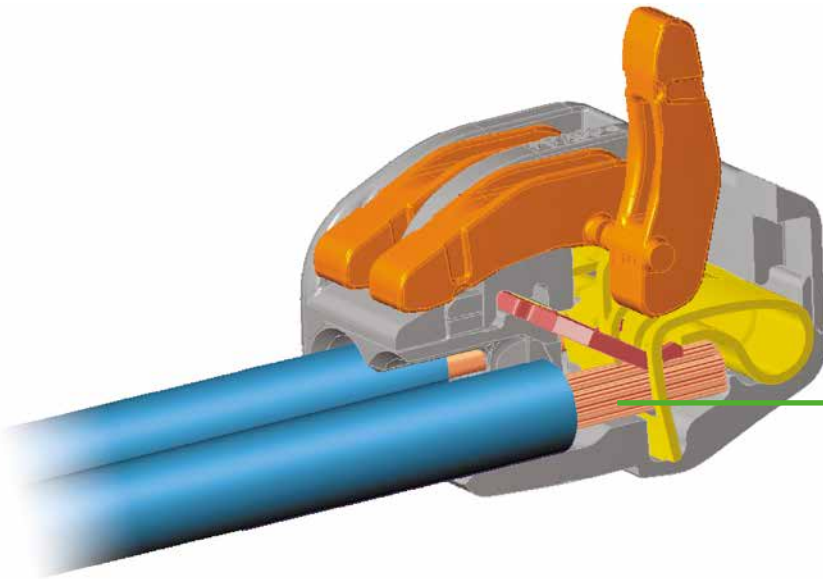
### Connection

Open clamping unit and insert conductor.




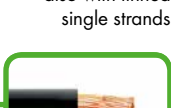
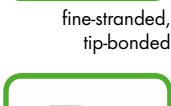
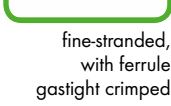


### Connection

Then, lower lever to close the clamp.



CAGE CLAMP® clamps the following copper conductors:\*

-  solid
-  stranded
-  fine-stranded, also with tinned single strands
-  fine-stranded, tip-bonded
-  fine-stranded, with ferrule gastight crimped
-  fine-stranded, with pin terminal gastight crimped



Wiring fine-stranded conductors in a junction box.



Testing

\* For aluminum conductors, see notes on page 507.





# COMPACT Splicing Connectors for All Conductor Types 222 Series

CAGE CLAMP®

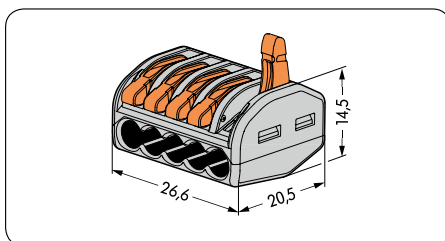
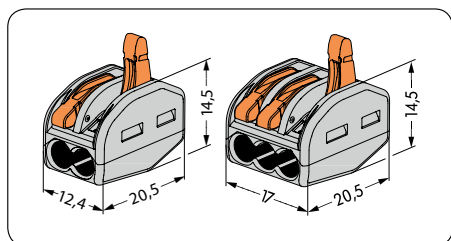
7

465

|  |   |   |                              |   |
|--|---|---|------------------------------|---|
| 2 x 0.08 – 4 mm <sup>2</sup> "f-st"<br>3 x 0.08 – 4 mm <sup>2</sup> "f-st"<br>2.5 mm <sup>2</sup> "s+f-st"<br>400 V/4 kV/2 ①<br>I <sub>N</sub> 32 A<br> 9 – 10 mm / 0.37 in | AWG 28 – 12<br>AWG 28 – 12<br>600 V, 20 A ② | 5 x 0.08 – 4 mm <sup>2</sup> "f-st"<br>2.5 mm <sup>2</sup> "s+f-st"<br>400 V/4 kV/2 ①<br>I <sub>N</sub> 32 A<br> 9 – 10 mm / 0.37 in | AWG 28 – 12<br>600 V, 20 A ② | Mounting carrier,<br>strain relief plate and<br>angled DIN-rail adapter<br>for 222 Series COMPACT splicing connectors |
|--|---|---|------------------------------|---|



| Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|---|----------|------------|
| <b>COMPACT splicing connector for all conductor types,</b><br>2-conductor connector,<br>with levers<br>● gray <b>222-412</b> 1000 (10x100)<br>Max. continuous operating temperature: 85 °C |          |            | <b>COMPACT splicing connector for all conductor types,</b><br>5-conductor connector,<br>with levers<br>● gray <b>222-415</b> 400 (10x40)<br>Max. continuous operating temperature: 85 °C |          |            | <b>Mounting carrier ②,</b><br>for 2, 3 and 5-conductor 222 Series connectors<br>orange <b>222-500</b> 50 (5x10) |          |            |
| 3-conductor connector,<br>with levers<br>● gray <b>222-413</b> 500 (10x50)<br>Max. continuous operating temperature: 85 °C   |          |            |  |          |            | <b>Strain relief plate ③, for mounting carrier</b><br>orange <b>222-505</b> 50 (5x10)                           |          |            |
|  |          |            |  |          |            | <b>Angled DIN-rail adapter ④, DIN 35 rail mounting</b><br>gray <b>222-510</b> 50 (5x10)                         |          |            |
|  |          |            |  |          |            | <b>Self-adhesive marking strips, plain</b><br>white <b>210-334</b> 1 card                                       |          |            |

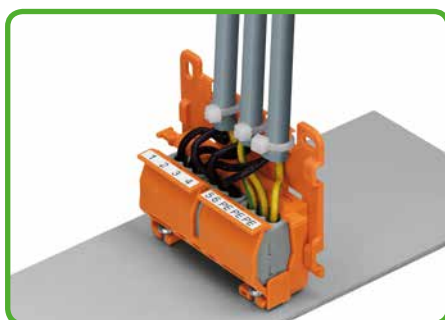


- ① In grounded power lines  
 400 V = rated voltage  
 4kV = rated surge voltage  
 2 = pollution degree

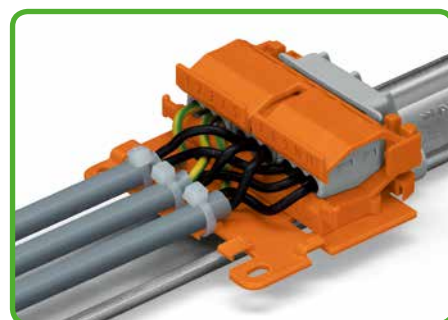
7



Strain relief by cable tie on the carrier, transverse to the connector's wiring direction. Molded marking of clamping units

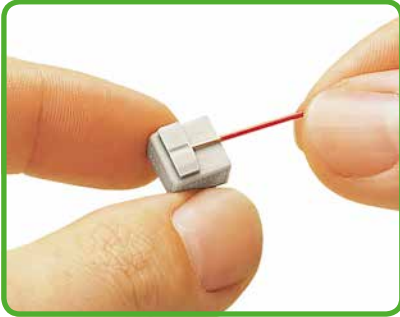


Mounting carrier with strain relief plate mounted vertically on a plate. Round cable fixed via strain relief lug.



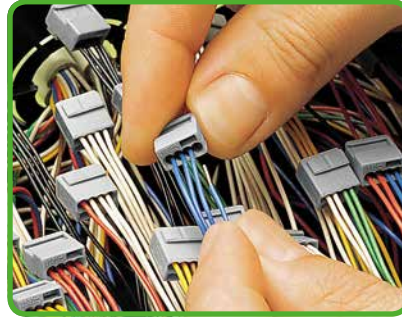
Horizontal mounting with strain relief plate on DIN 35 rail using angled DIN-rail adapter

## MICRO PUSH WIRE® Junction Box Connectors for Solid Conductors



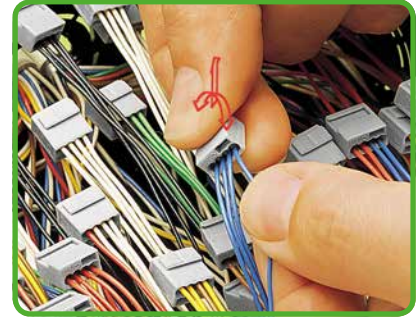
### Stripping

Strip solid conductor to 5 – 6 mm/0.22 in.



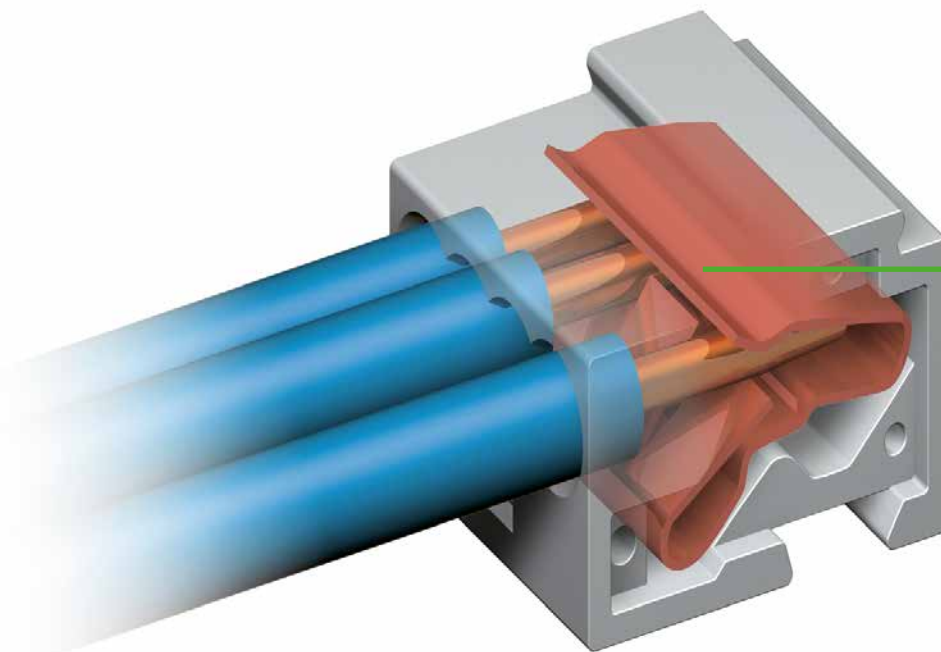
### Connection

Push stripped solid conductors in up to the backstop.



### Removal

Hold conductor and twist alternately left and right while pulling the connector.



PUSH WIRE® terminates the following copper conductors:



solid



### Testing



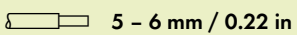
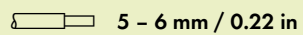
- Proven millions of times over as 4- and 8-conductor junction box connectors
- MICRO PUSH WIRE® junction box connectors for low-current installations
- Directly push in 8 solid conductors – no twisting
- Easy-to-use connector carrier for DIN 35 rail or screw mounting
- Cross-section range: 0.6 – 0.8 mm Ø

# MICRO PUSH WIRE® Junction Box Connectors 243 Series

PUSH WIRE®

7

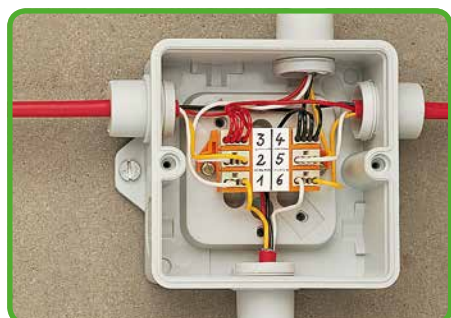
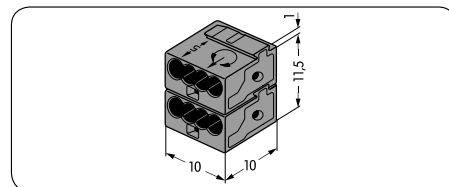
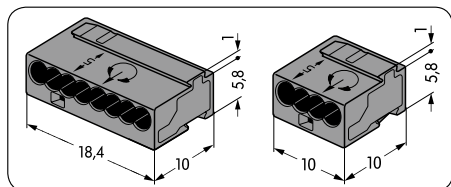
467

|   |  |                         |   |  |
|---|--|-------------------------|---|--|
| <p>0.6 – 0.8 mm Ø "s"<br/>100 V/1.5 kV/2<br/>I<sub>N</sub> 6 A</p>                | <p>AWG 22 – 20 "s"<br/>125 V, 7 A <br/>150 V, 7 A </p> | <p>Mounting carrier</p> | <p>4 x 0.6 – 0.8 mm Ø "s"<br/>100 V =<br/>I<sub>N</sub> 6 A</p>                     |  |
|  |  |                         |  |  |

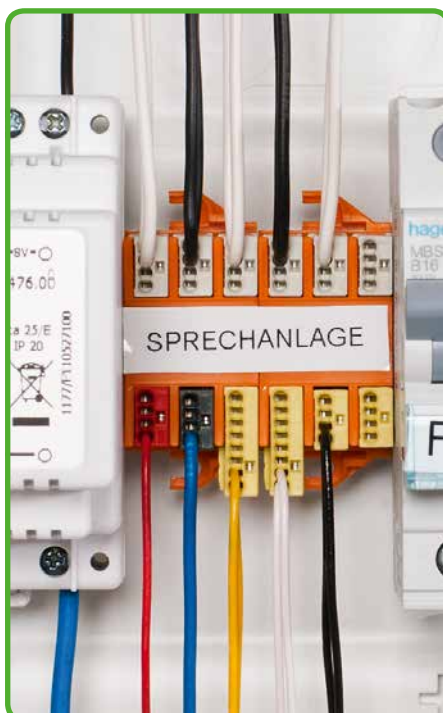
KNX EIB



| Color                        | Item No. | Pack. Unit    | Item No.                                     | Pack. Unit | Color                  | Item No.   | Pack. Unit |
|------------------------------|----------|---------------|--|------------|------------------------|--|------------|
| <b>4-conductor connector</b> |          |               | <b>Mounting carrier,</b>                     |            | <b>Connector strip</b> |  |            |
| ● dark gray                  | 243-204  | 1000 (10x100) | for 4- and 8-conductor 243 Series connectors |            | ● dark gray            | 243-211  | 50         |
| ● red                        | 243-804  | 1000 (10x100) | orange, 4 connectors                         | 243-112    | 50 (5x10)              | ● assembled with red connector                                   |            |
| ○ light gray                 | 243-304  | 1000 (10x100) | orange, 6 connectors                         | 243-113    | 50 (5x10)              | <b>Additional version equipped with the same dovetail joints</b> |            |
| ● yellow                     | 243-504  | 1000 (10x100) | <b>Marking strips (3 strips per card)</b>    |            | ○ light gray           | 243-212  | 50         |
| <b>8-conductor connector</b> |          |               | 243-110                                      |            | 1 card                 | ● assembled with yellow connector                                |            |
| ● dark gray                  | 243-208  | 500 (10x50)   | <b>Fiber-tip pen</b>                         |            | 210-110                | 1  |            |
| ● red                        | 243-808  | 500 (10x50)   |  |            |                        |  |            |
| ○ light gray                 | 243-308  | 500 (10x50)   |  |            |                        |  |            |
| ● yellow                     | 243-508  | 500 (10x50)   |  |            |                        |  |            |



Typical application in a terminal box for burglar alarm  
- screw mount



Example of residential (home) communication application



Power supply **KNX EIB**



Example of residential door bell application  
- mounted on DIN 35 rail



Switch interface **KNX EIB**

Approvals are available online at: [www.wago.com](http://www.wago.com)

\* When using conductors of exclusively the same diameter, 0.5 mm/AWG 24 or 1.0 mm/AWG 18 diameters are also possible.

WAGO®

7

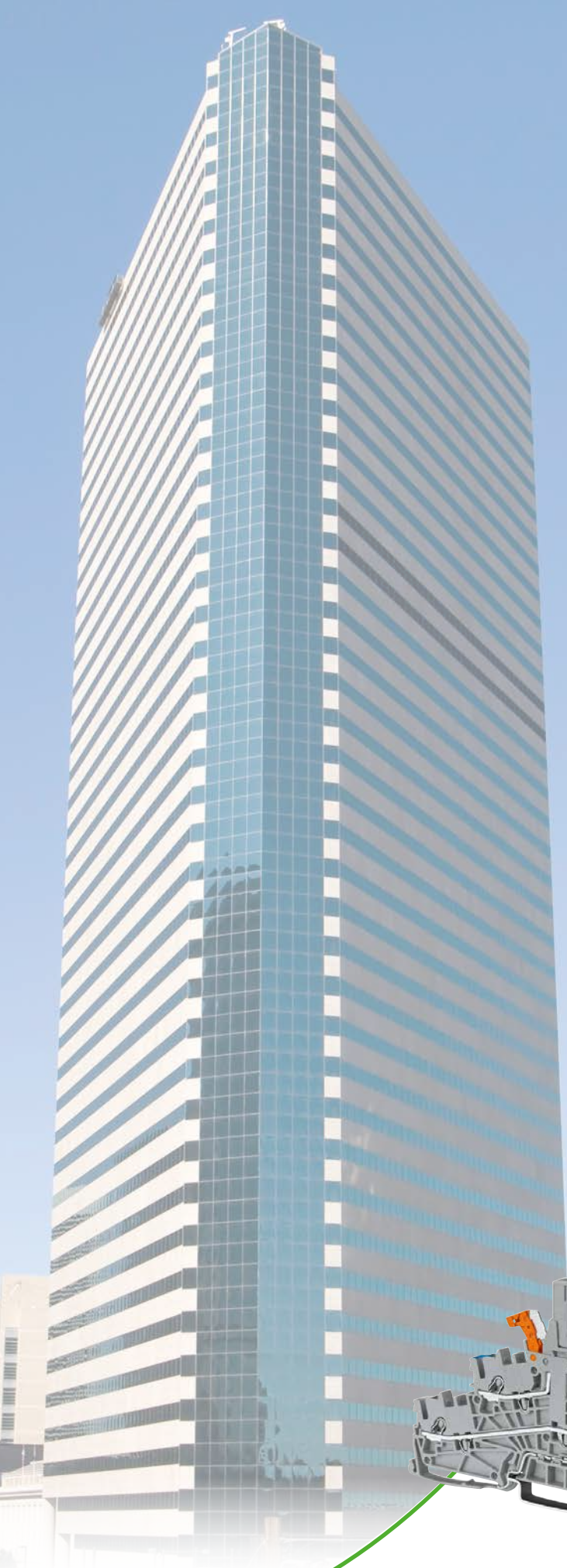


|  |   |   |
|--|---|---|
|  | <b>Vario-T-BOXX</b><br><br>High-quality Sortimo® plastic case containing a selection of WAGO installation connectors<br><br>Dimensions: 440 x 350 x 80 mm | <b>Variobox</b><br><br>Indestructible Sortimo® metal case containing a selection of WAGO installation connectors<br><br>Dimensions: 440 x 330 x 66 mm |
|--|---|---|

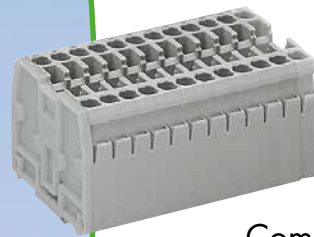


| Description   | Item No.  | Pack. Unit | Item No.  | Pack. Unit |
|---|---|------------|---|------------|
| <b>Vario-T-BOXX, Variobox</b>   | <b>Vario-T-BOXX</b>                                     |            | <b>Variobox</b>   |            |
|   | 887-910   | 1          | 887-911   | 1          |
| High-quality Sortimo® cases contain a selection of WAGO connectors for all applications in electrical building installations. | <b>Contains:</b>  |            | <b>Contains:</b>  |            |
|   | <b>COMPACT PUSH WIRE® connectors for junction boxes</b> |            | <b>COMPACT PUSH WIRE® connectors for junction boxes</b> |            |
|   | 2 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-202</b>           | 100        | 2 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-202</b>           | 100        |
|   | 3 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-203</b>           | 100        | 3 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-203</b>           | 100        |
|   | 5 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-205</b>           | 100        | 5 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-205</b>           | 100        |
|   | 8 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-208</b>           | 50         | 8 x 0.5 - 2.5 mm <sup>2</sup> <b>2273-208</b>           | 50         |
|   | <b>Compact splicing connectors</b>                      |            | <b>Compact splicing connectors</b>                      |            |
|   | 3 x 0.08 - 4 mm <sup>2</sup> <b>222-413</b>             | 50         | 3 x 0.08 - 4 mm <sup>2</sup> <b>222-413</b>             | 50         |
|   | 5 x 0.08 - 4 mm <sup>2</sup> <b>222-415</b>             | 40         | 5 x 0.08 - 4 mm <sup>2</sup> <b>222-415</b>             | 40         |
|   | <b>Lighting connectors</b>                              |            | <b>Lighting connectors</b>                              |            |
|   | 1 - 2.5 mm <sup>2</sup> <b>224-101</b>                  | 100        | 1 - 2.5 mm <sup>2</sup> <b>224-101</b>                  | 100        |
|   | <b>MICRO PUSH WIRE® connectors for junction boxes</b>   |            | <b>MICRO PUSH WIRE® connectors for junction boxes</b>   |            |
|   | dark gray   |            | dark gray   |            |
|   | 4 x 0.6 - 0.8 mm Ø <b>243-204</b>                       | 100        | 4 x 0.6 - 0.8 mm Ø <b>243-204</b>                       | 100        |
|   | red   |            | red   |            |
|   | 4 x 0.6 - 0.8 mm Ø <b>243-804</b>                       | 100        | 4 x 0.6 - 0.8 mm Ø <b>243-804</b>                       | 100        |
|   | dark gray   |            | dark gray   |            |
|   | 8 x 0.6 - 0.8 mm Ø <b>243-208</b>                       | 50         | 8 x 0.6 - 0.8 mm Ø <b>243-208</b>                       | 50         |
|   | <b>Mounting carrier</b>                                 |            | <b>Mounting carrier</b>                                 |            |
|   | for 6 connectors <b>243-113</b>                         | 10         | for 6 connectors <b>243-113</b>                         | 10         |

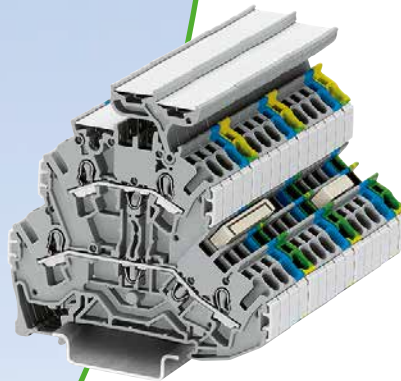




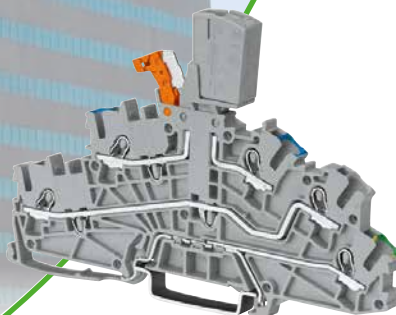
Terminal Strips  
for Panel Mounting



Compact Terminal Strips



**TOPJOB®**  
2002 Series



**TOPJOB®**  
2003 Series

## 8



**Terminal Strips for Panel Mounting,  
Side-Entry Wiring**  
260, 261 and 262 Series

472 - 474



**Terminal Strips for Panel Mounting,  
Front-Entry Wiring**  
264 Series

476 - 477



**Compact Terminal Strips**  
869 Series

478 - 481



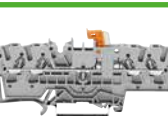
**TOPJOB®**  
**Through/Ground Conductor and Ex Terminal Blocks**  
2002 Series

482 - 483



**TOPJOB®**  
**Double-Deck Terminal Blocks 2.5 mm<sup>2</sup>**  
2002 Series

484 - 485



**TOPJOB®**  
**Disconnect/Test and Fuse Terminal Blocks, 4-Conductor,**  
2002 Series

486

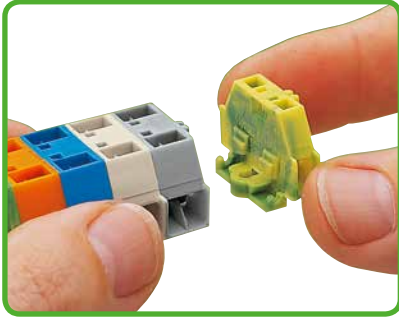


**TOPJOB®**  
**Multilevel Installation Terminal Blocks**  
2003 Series

488 - 489



## WAGO Terminal Strips for Panel Mounting, Side-Entry Wiring



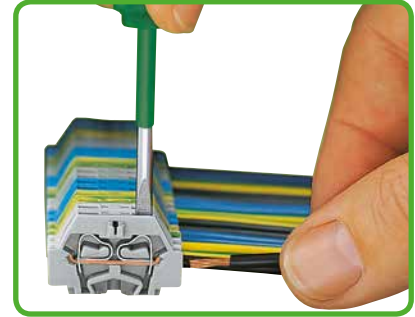
### Snapping

modular terminal blocks into terminal strips.



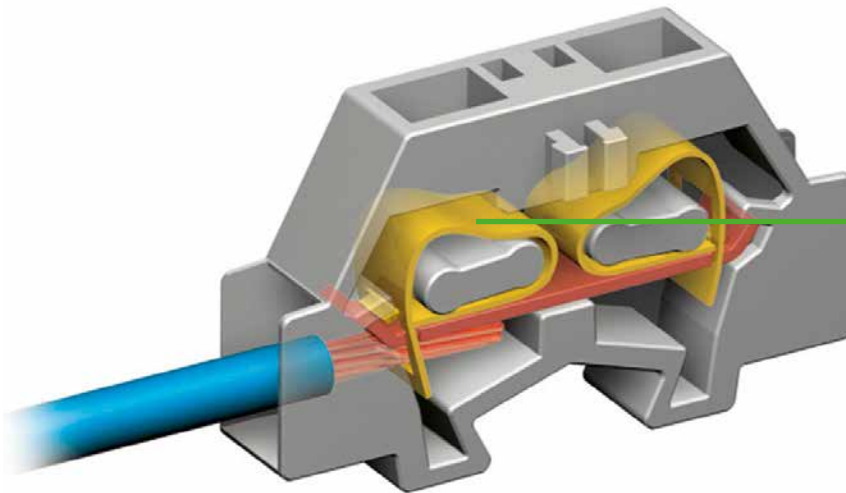
### Assembling

an end plate.

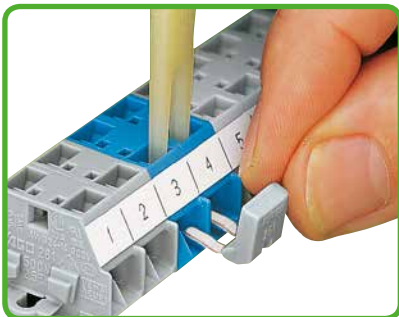
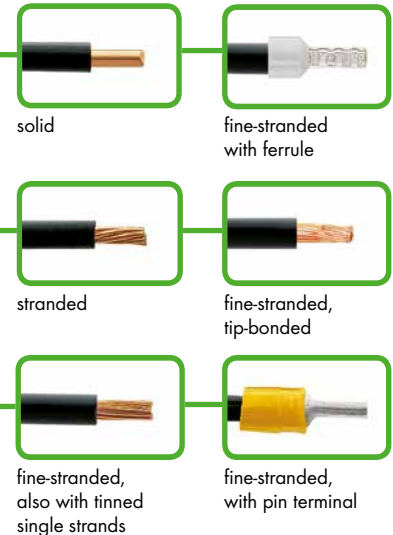


### Conductor termination

### 260 to 262 Series



CAGE CLAMP® clamps the following copper conductors:\*











### Commoning

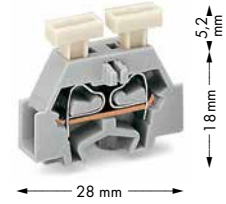
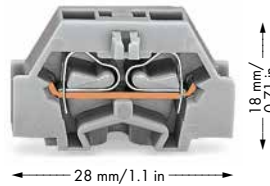
with comb-style jumper bar.

### Mounting options

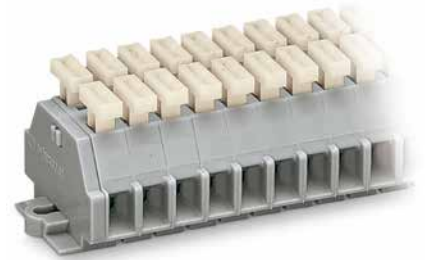
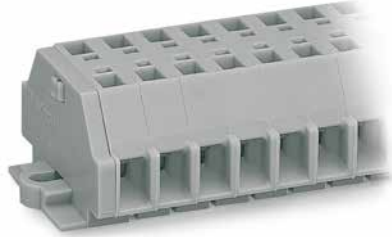
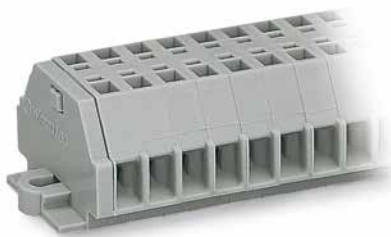
- Space-saving alternative
- Small, compact and strong features
- Depending on the application:  
Front- or side-entry wiring
- 2- and 4-conductor terminal blocks with or without push-buttons

# Modular Terminal Blocks and Terminal Strips 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup> 260 and 261 Series

|   |  |  |  |  |   |
|---|--|--|--|--|---|
| <b>0.08 – 1.5 mm<sup>2</sup></b><br>400 V/6 kV/3<br>I <sub>N</sub> 18 A<br>2-conductor terminal block width: 5 mm / 0.197 in<br>4-conductor terminal block width: 8 mm / 0.315 in<br> 8 – 9 mm / 0.33 in | <b>AWG 28 – 16</b><br>300 V, 10 A <br>300 V, 15 A  | <b>0.08 – 2.5 mm<sup>2</sup></b><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>2-conductor terminal block width: 6 mm / 0.236 in<br>4-conductor terminal block width: 10 mm / 0.394 in<br> 8 – 9 mm / 0.33 in | <b>AWG 28 – 14</b><br>300/600 V, 10 A <br>300/600 V, 15 A  | <b>0.08 – 2.5 mm<sup>2</sup></b><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>2-conductor terminal block width: 6 mm / 0.236 in<br> 8 – 9 mm / 0.33 in | <b>AWG 28 – 14</b><br>300/600 V, 15/5 A  |
|---|--|--|--|--|---|



| Color        | Item No. |         | Pack. Unit | Color        | Item No. |         | Pack. Unit | Color   | Item No.        | Pack. Unit |
|--------------|----------|---------|------------|--------------|----------|---------|------------|---|-----------------|------------|
|              | 2-Cond.  | 4-Cond. |            |              | 2-Cond.  | 4-Cond. |            | 2-conductor terminal block, with push-buttons on both sides |                 |            |
| gray         | 260-301  | 260-331 | 300 (6x50) | gray         | 261-301  | 261-331 | 200 (4x50) | gray  | 261-301/341-000 | 200 (4x50) |
| light gray   | 260-303  | 260-333 | 300 (6x50) | light gray   | 261-303  | 261-333 | 200 (4x50) | light gray  | 261-303/341-000 | 200 (4x50) |
| blue         | 260-304  | 260-334 | 300 (6x50) | blue         | 261-304  | 261-334 | 200 (4x50) | blue  | 261-304/341-000 | 200 (4x50) |
| orange       | 260-306  | 260-336 | 300 (6x50) | orange       | 261-306  | 261-336 | 200 (4x50) | orange  | 261-306/341-000 | 200 (4x50) |
| green-yellow | 260-307  | 260-337 | 300 (6x50) | green-yellow | 261-307  | 261-337 | 200 (4x50) | green-yellow  | 261-307/341-000 | 200 (4x50) |



| Pole No.             | Item No. |         | Pack. Unit | Pole No.             | Item No. |         | Pack. Unit | Pole No.             | Item No.        | Pack. Unit |
|----------------------|----------|---------|------------|----------------------|----------|---------|------------|----------------------|-----------------|------------|
|                      | 2-Cond.  | 4-Cond. |            |                      | 2-Cond.  | 4-Cond. |            |                      |                 |            |
| Terminal strip, gray |          |         |            | Terminal strip, gray |          |         |            | Terminal strip, gray |                 |            |
| 2                    | 260-102  | 260-202 | 100        | 2                    | 261-102  | 261-202 | 100        | 2                    | 261-102/341-000 | 100        |
| 3                    | 260-103  | 260-203 | 100        | 3                    | 261-103  | 261-203 | 100        | 3                    | 261-103/341-000 | 100        |
| :                    | :        | :       |            | :                    | :        | :       |            | :                    | :               |            |
| 12                   | 260-112  | 260-212 | 25         | 12                   | 261-112  | 261-212 | 25         | 12                   | 261-112/341-000 | 25         |

These terminal strips for 10 and 20 twin wires are ideal for most wiring applications in signal, alarm and telephone installations.

These terminal strips are designed for both standard junction boxes for telephone installations as well as flush-mount junction boxes (e.g., 150 x 150 x 65 mm or 235 x 205 x 65 mm).

The terminal strips can be expanded using the above-listed modular terminal blocks.



For end plates, see page 474.






|                       | Item No. | Pack. Unit |
|-----------------------|----------|------------|
| <b>Terminal strip</b> |          |            |
| for 10 twin wires     | 260-410  | 25         |
| for 20 twin wires     | 260-420  | 25         |

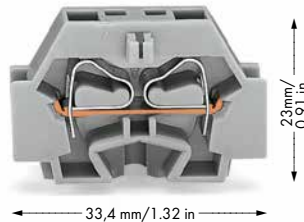
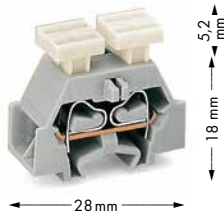
For approval listings and user guide, see pages 528 – 531.

# Modular Terminal Blocks and Terminal Strips 2.5 mm<sup>2</sup> and 4 mm<sup>2</sup> 261 and 262 Series

**0.08 – 2.5 mm<sup>2</sup>** | AWG 28 – 14  
 500 V/6 kV/3 | 300/600 V, 15/5 A   
 I<sub>N</sub> 18 A  
 2-conductor terminal block width: 5 mm / 0.197 in  
 4-conductor terminal block width: 8 mm / 0.315 in  
 8 – 9 mm / 0.33 in

**0.08 – 4 mm<sup>2</sup>** | AWG 28 – 12  
 630 V/8 kV/3 | 300/600 V, 20/5 A   
 I<sub>N</sub> 24/32 A | 300/600 V, 25/5 A   
 2-conductor terminal block width: 7 mm / 0.276 in  
 4-conductor terminal block width: 12 mm / 0.472 in  
 9 – 10 mm / 0.37 in

### Accessories



### End plate, gray

|                |                |            |
|----------------|----------------|------------|
| for 260 Series | <b>260-361</b> | 100 (2x50) |
| for 261 Series | <b>261-361</b> | 100 (2x50) |
| for 262 Series | <b>262-361</b> | 50         |

### Comb-style jumper bar, insulated



| Series         | I <sub>N</sub> | Reduced Cross Sect.         | Pack. Unit |
|----------------|----------------|-----------------------------|------------|
| <b>260-402</b> | 10 A           | 1 mm <sup>2</sup>           | 25 pcs     |
| <b>261-402</b> | 16 A           | 1.5 mm <sup>2</sup> /AWG 16 | 25 pcs     |
| <b>262-402</b> | 16 A           | 2.5 mm <sup>2</sup> /AWG 14 | 25 pcs     |

### Operating tool, insulated,



|                           |                |   |
|---------------------------|----------------|---|
| for comb-style jumper bar | <b>209-132</b> | 1 |
|---------------------------|----------------|---|

### Mounting foot,



|                 |                |    |
|-----------------|----------------|----|
| for DIN 35 rail | <b>209-123</b> | 25 |
|-----------------|----------------|----|

### Marking strips, computer marked,

40 strips (self-adhesive),  
per card 1 card

### For 260 Series





| Print- ing | Quan- tity | 5mm term. block    | Quan- tity | 8mm term. block    |
|------------|------------|--------------------|------------|--------------------|
|            |            | <b>210-333/...</b> |            | <b>210-333/...</b> |
| Pin spac   | -          | .../500-001        | -          | .../800-001        |
| 1...50     | 20         | .../500-021        |            |                    |
| 1...40     |            |                    | 20         | .../500-209        |
| L1         | 1440       | .../500-074        | 880        | .../800-074        |
| L2         | 1440       | .../500-075        | 880        | .../800-075        |
| L3         | 1440       | .../500-076        | 880        | .../800-076        |
| N          | 1440       | .../500-077        | 880        | .../800-077        |
| Ground     | 1440       | .../500-078        | 880        | .../800-078        |

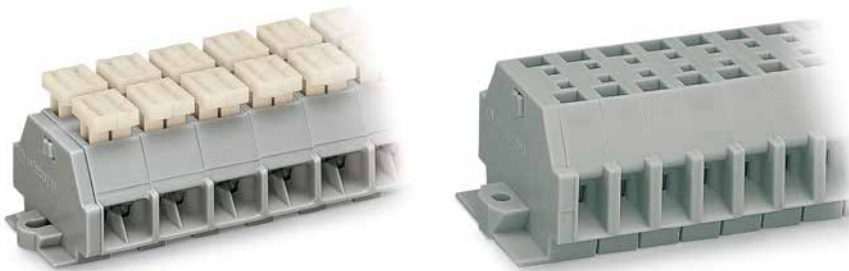
### For 261 Series







| Print- ing | Quan- tity | 6mm term. block    | Quan- tity | 10mm term. block   |
|------------|------------|--------------------|------------|--------------------|
|            |            | <b>210-333/...</b> |            | <b>210-333/...</b> |
| Pin spac   | -          | .../600-001        | -          | .../1000-001       |
| 1...50     | 20         | .../600-021        |            |                    |
| 1...36     |            |                    | 20         | .../1000-208       |
| L1         | 1200       | .../600-074        | 720        | .../1000-074       |
| L2         | 1200       | .../600-075        | 720        | .../1000-075       |
| L3         | 1200       | .../600-076        | 720        | .../1000-076       |
| N          | 1200       | .../600-077        | 720        | .../1000-077       |
| Ground     | 1200       | .../600-078        | 720        | .../1000-078       |

### For 262 Series

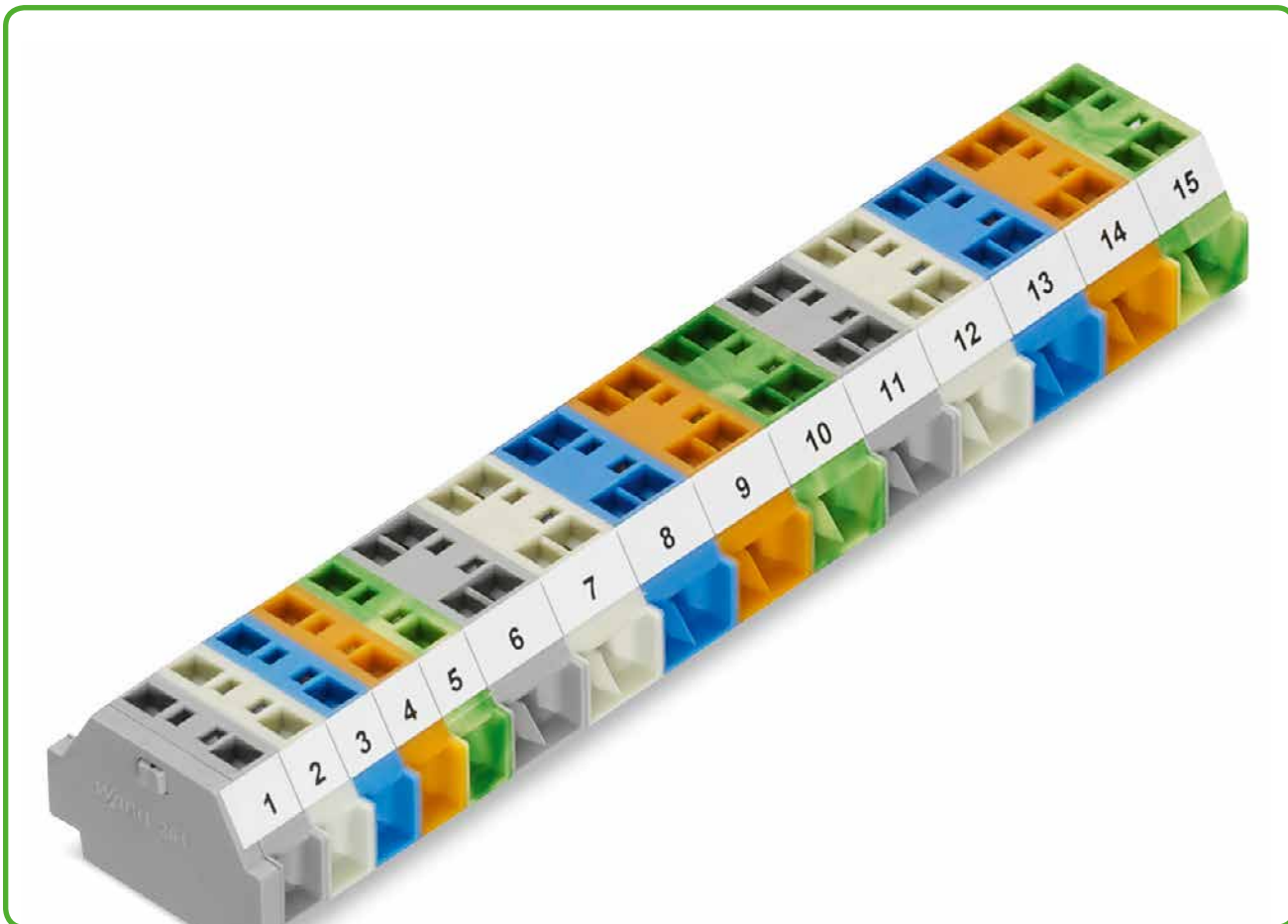
| Print- ing | Quan- tity | 7mm term. block    | Quan- tity | 12mm term. block   |
|------------|------------|--------------------|------------|--------------------|
|            |            | <b>210-333/...</b> |            | <b>210-333/...</b> |
| Pin spac   | -          | .../700-001        | -          | .../1200-001       |
| 1...50     | 20         | .../700-021        |            |                    |
| 1...24     |            |                    | 20         | .../1200-203       |
| L1         | 1200       | .../700-074        | 720        | .../1200-074       |
| L2         | 1200       | .../700-075        | 720        | .../1200-075       |
| L3         | 1200       | .../700-076        | 720        | .../1200-076       |
| N          | 1200       | .../700-077        | 720        | .../1200-077       |
| Ground     | 1200       | .../700-078        | 720        | .../1200-078       |

| Color  | Item No.     | Pack. Unit     | Color          | Item No.   |         | Pack. Unit |
|--|--------------|----------------|----------------|------------|---------|------------|
|  |              |                |                | 2-Cond.    | 4-Cond. |            |
| <b>4-conductor terminal block, with push-buttons on both sides</b>               |              |                |                |            |         |            |
|  | gray         | <b>262-301</b> | <b>262-331</b> | 100 (2x50) |         |            |
|  | blue         | <b>262-304</b> | <b>262-334</b> | 100 (2x50) |         |            |
|  | orange       | <b>262-306</b> | <b>262-336</b> | 100 (2x50) |         |            |
|  | green-yellow | <b>262-307</b> | <b>262-337</b> | 100 (2x50) |         |            |

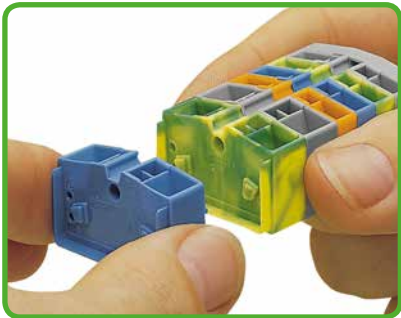


| Pole No.   | Item No. | Pack. Unit             | Pole No. | Item No.  |         | Pack. Unit     |                |     |
|--|----------|------------------------|----------|---|---------|----------------|----------------|-----|
|  |          |                        |          | 2-Cond.   | 4-Cond. |                |                |     |
| <b>Terminal strips, gray,</b>  |          |                        |          |   |         |                |                |     |
|  | 2        | <b>261-202/342-000</b> | 100      |  | 2       | <b>262-102</b> | <b>262-202</b> | 100 |
|  | 3        | <b>261-203/342-000</b> | 100      |  | 3       | <b>262-103</b> | <b>262-203</b> | 100 |
| :  | :        | :                      | :        | :   | :       | :              | :              | :   |
|  | 12       | <b>261-212/342-000</b> | 25       |  | 12      | <b>262-112</b> | <b>262-212</b> | 25  |



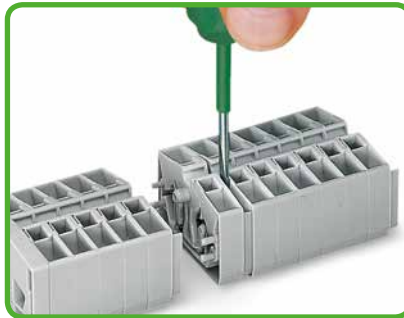


# WAGO Terminal Strips for Panel Mounting, Front-Entry Wiring



### Snapping

modular terminal blocks into terminal strips.

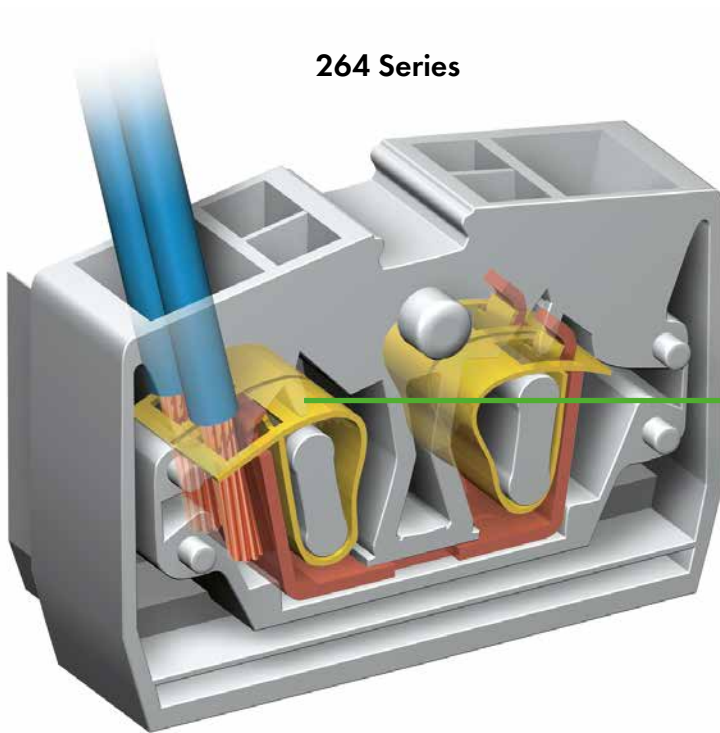


### Removing

a block from the terminal strip.

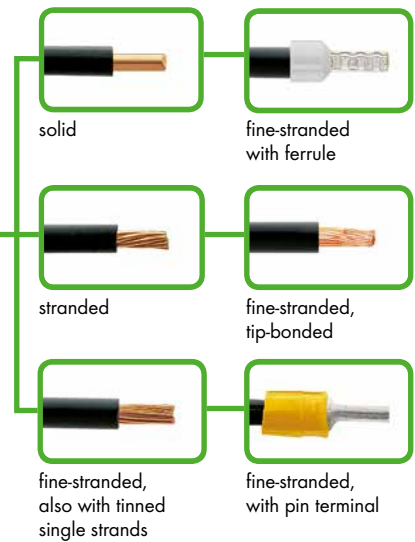


### Conductor termination



## 264 Series

CAGE CLAMP® clamps the following copper conductors:\*



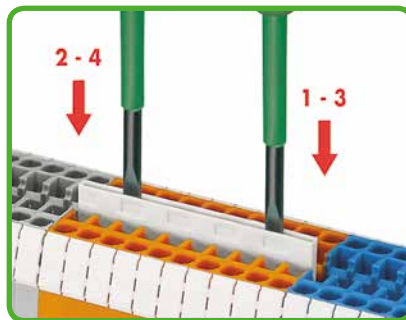
## 264 Series



### Commoning

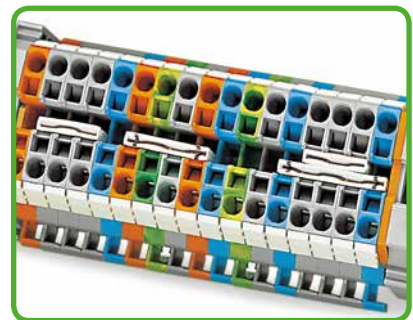
with 264 Series comb-style jumper bar.

## 869 Series



### Push-in type jumper bar

When using multi-pole bars, push alternately on right and then left side, successively until fully inserted.









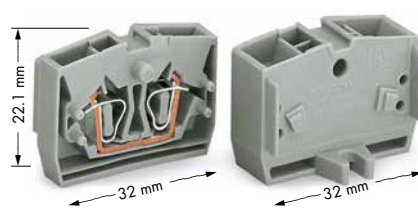
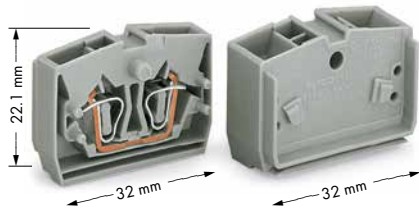
### Two parallel jumper slots

\* For aluminum conductors, see notes on page 507.

# Terminal Strips with Fixing Flanges 2.5 mm<sup>2</sup> 264 Series

CAGE CLAMP®

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| <b>0.08 – 2.5 mm<sup>2</sup></b><br>800 V/8 kV/3<br>I <sub>N</sub> 24 A<br>2-conductor terminal block width: 6 mm / 0.236 in<br>4-conductor terminal block width: 10 mm / 0.394 in<br> 8 – 9 mm / 0.33 in | <b>AWG 28 – 12*</b><br>600 V, 20 A  | <b>0.08 – 2.5 mm<sup>2</sup></b><br>800 V/8 kV/3<br>I <sub>N</sub> 24 A<br>2-conductor terminal block width: 6 mm / 0.236 in<br>4-conductor terminal block width: 10 mm / 0.394 in<br> 8 – 9 mm / 0.33 in | <b>AWG 28 – 12*</b><br>600 V, 20 A  | <b>0.08 – 2.5 mm<sup>2</sup></b><br>800 V/8 kV/3<br>I <sub>N</sub> 24 A<br>2-conductor terminal block width: 6 mm / 0.236 in<br>4-conductor terminal block width: 10 mm / 0.394 in<br> 8 – 9 mm / 0.33 in | <b>2 x AWG 28 – 12*</b><br>600 V, 20 A  |
|--|--|--|--|--|--|



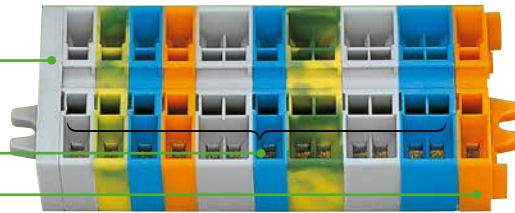
| Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit | Color Pole No.  | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|---|----------|------------|
| <b>2-conductor center terminal block,</b><br>6 mm wide  |          |            | <b>2-conductor end terminal block with fixing flange,</b><br>6 mm wide  |          |            | <b>2-conductor terminal strips with fixing flanges,</b><br>gray |          |            |
| gray  | 264-321  | 100        | gray  | 264-301  | 100        | 2   | 264-102  | 100        |
| blue  | 264-324  | 100        | blue  | 264-304  | 100        | 3   | 264-103  | 100        |
| orange  | 264-326  | 100        | orange  | 264-306  | 100        | 4   | 264-104  | 100        |
| green-yellow  | 264-327  | 100        | green-yellow  | 264-307  | 100        | 5   | 264-105  | 100        |
| <b>4-conductor center terminal block,</b><br>10 mm wide |          |            | <b>4-conductor end terminal block with fixing flange,</b><br>10 mm wide |          |            | 6   | 264-106  | 50         |
| gray  | 264-351  | 100        | gray  | 264-331  | 100        | 7   | 264-107  | 50         |
| blue  | 264-354  | 100        | blue  | 264-334  | 100        | 8   | 264-108  | 50         |
| orange  | 264-356  | 100        | orange  | 264-336  | 100        | 9   | 264-109  | 50         |
| green-yellow  | 264-357  | 100        | green-yellow  | 264-337  | 100        | 10  | 264-110  | 25         |
|   |          |            |   |          |            | 11  | 264-111  | 25         |
|   |          |            |   |          |            | 12  | 264-112  | 25         |
|   |          |            |   |          |            | <b>4-conductor terminal strips with fixing flanges,</b><br>gray |          |            |
|   |          |            |   |          |            | 2   | 264-202  | 100        |
|   |          |            |   |          |            | 3   | 264-203  | 100        |
|   |          |            |   |          |            | 4   | 264-204  | 100        |
|   |          |            |   |          |            | 5   | 264-205  | 100        |
|   |          |            |   |          |            | 6   | 264-206  | 50         |
|   |          |            |   |          |            | 7   | 264-207  | 50         |
|   |          |            |   |          |            | 8   | 264-208  | 50         |
|   |          |            |   |          |            | 9   | 264-209  | 50         |
|   |          |            |   |          |            | 10  | 264-210  | 25         |
|   |          |            |   |          |            | 11  | 264-211  | 25         |
|   |          |            |   |          |            | 12  | 264-212  | 25         |






Terminal strip with fixing flanges:

End plate with fixing flange

Center terminal blocks

End terminal block with fixing flange  
for screw or similar mounting types,  
3.2 mm Ø mounting holes



| Accessories, 264 Series (For miniature WSB markers, see section 9)  |  |  |   |  |  |  |  |  |  |  |  |
|---|--|--|---|--|--|--|--|--|--|--|--|
| <b>End plate with fixing flange</b><br> gray <b>264-361</b> 25<br>orange <b>264-364</b> 25 |  |  | <b>Comb-style jumper bar, insulated, I<sub>N</sub> 16 A</b><br> <b>264-402</b> 200 (8x25)<br>reduces maximum conductor size to 1.5 mm <sup>2</sup> /AWG 16 |  |  | <b>Modular test plugs</b> Width: 6 mm<br> <b>249-136</b> 100 (4x25)<br>Width: 10 mm<br><b>249-139</b> 100 (4x25)          |  |  |  |  |  |
|   |  |  | <b>Operating tool, insulated,</b><br> for comb-style jumper bar<br><b>280-432</b> 1  |  |  | <b>Test plug, with 500 mm cable</b><br> 2 mm Ø, red <b>210-136</b> 50 (5x10)<br>2.3 mm Ø, yellow <b>210-137</b> 50 (5x10) |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |
|   |  |  |   |  |  |  |  |  |  |  |  |

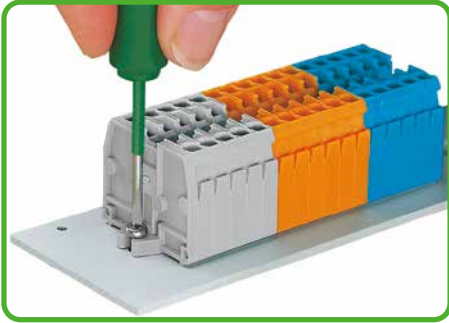
For approval listings and user guide, see pages 528 to 531.  
\* AWG 12: THHN, THWN



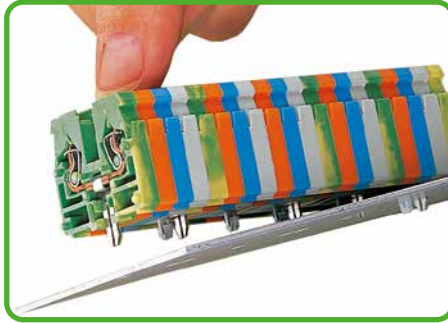
# 8 Compact Terminal Strips, 869 Series

478

## - Description and Handling - Mounting



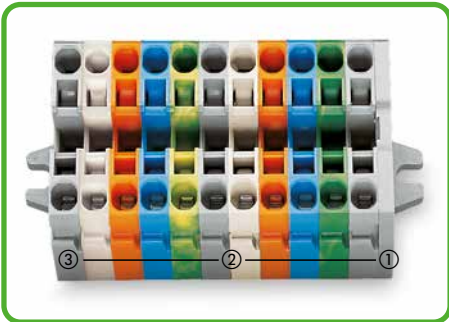
Terminal strip with fixing flanges, screw mount.



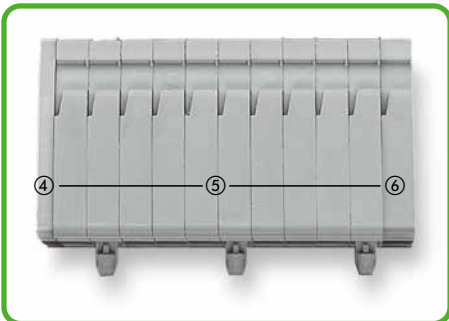
Terminal strip with snap-in mounting feet, mounting in holes



Terminal strip with snap-in mounting feet, assembly onto aluminum rail



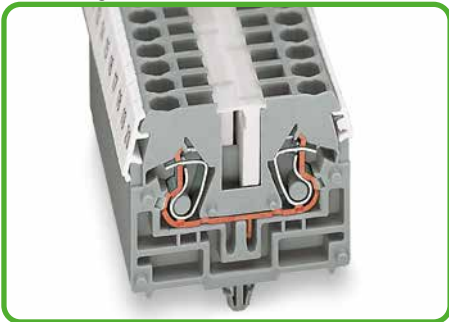
Terminal strip with fixing flanges, consisting of:  
End plate with fixing flange ①  
Center terminal blocks ②  
End terminal block with fixing flange ③



Terminal strip with mounting feet, consisting of:  
End plate ④  
Center term. blocks with/without snap-in mounting feet ⑤  
End term. block with/without snap-in mounting foot ⑥



## Marking



WMB Multi or miniature WSB marking system

## Commoning



Push jumper bars down firmly until fully inserted. When using multi-pole bars, push alternately on right and then left side, successively until installed.

### CAGE CLAMP® clamps the following copper conductors:\*

- solid
- stranded

fine-stranded, also with tinned single strands

fine-stranded, tip-bonded

fine-stranded with ferrule ❶ (gastight crimped)

fine-stranded, with pin terminal (gastight crimped)

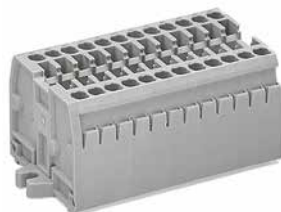
\* For aluminum conductors, see notes on page 507.

❶ With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

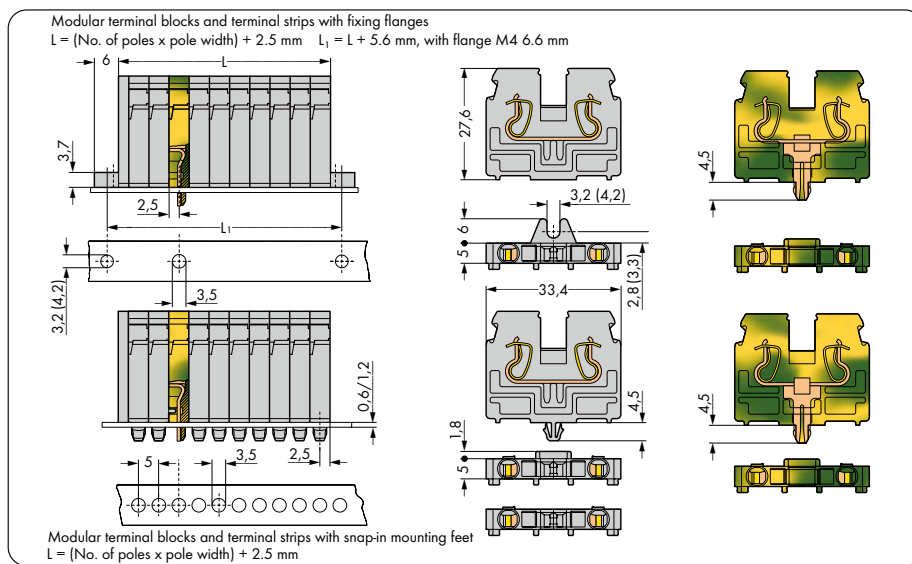


# Compact Terminal Strips 2.5 mm<sup>2</sup> (4 mm<sup>2</sup> "f-st") with Fixing Flanges or Snap-in Mounting Feet 869 Series

|   |                             |   |                             |   |                             |
|---|-----------------------------|---|-----------------------------|---|-----------------------------|
| 0.08 – 2.5 (4 "f-st") mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>Pole width: 5 mm / 0.197 in<br>6 – 7 mm / 0.26 in | AWG 28 – 12<br>300 V, 20 A: | 0.08 – 2.5 (4 "f-st") mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>Pole width: 5 mm / 0.197 in<br>6 – 7 mm / 0.26 in | AWG 28 – 12<br>300 V, 20 A: | 0.08 – 2.5 (4 "f-st") mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>Pole width: 5 mm / 0.197 in<br>6 – 7 mm / 0.26 in | AWG 28 – 12<br>300 V, 20 A: |
|---|-----------------------------|---|-----------------------------|---|-----------------------------|



| Pole No.  | Item No. | Pack. Unit | Pole No.  | Item No. | Pack. Unit | Pole No.   | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|--|----------|------------|
| Compact terminal strip with M3 fixing flanges, for screw or similar mounting types, 3.2 mm mounting hole diameter, gray |          |            | Compact terminal strip with M4 fixing flanges, for screw or similar mounting types, 4.2 mm mounting hole diameter, gray |          |            | Compact terminal strip with snap-in mounting feet, for 0.6 – 1.2 mm plate thickness, 3.5 <sup>+0.1</sup> mm mounting hole diameter, gray |          |            |
| 2   | 869-102  | 100        | 2   | 869-202  | 100        | 2  | 869-152  | 100        |
| 3   | 869-103  | 100        | 3   | 869-203  | 100        | 3  | 869-153  | 100        |
| 4   | 869-104  | 100        | 4   | 869-204  | 100        | 4  | 869-154  | 100        |
| 5   | 869-105  | 100        | 5   | 869-205  | 100        | 5  | 869-155  | 100        |
| 6   | 869-106  | 50         | 6   | 869-206  | 50         | 6  | 869-156  | 50         |
| 7   | 869-107  | 50         | 7   | 869-207  | 50         | 7  | 869-157  | 50         |
| 8   | 869-108  | 50         | 8   | 869-208  | 50         | 8  | 869-158  | 50         |
| 9   | 869-109  | 50         | 9   | 869-209  | 50         | 9  | 869-159  | 50         |
| 10  | 869-110  | 50         | 10  | 869-210  | 25         | 10   | 869-160  | 25         |
| 11  | 869-111  | 25         | 11  | 869-211  | 25         | 11   | 869-161  | 25         |
| 12  | 869-112  | 25         | 12  | 869-212  | 25         | 12   | 869-162  | 25         |
| light gray  |          |            | light gray  |          |            | light gray   |          |            |
| 2   | 869-132  | 100        | 2   | 869-232  | 100        | 2  | 869-182  | 100        |
| 3   | 869-133  | 100        | 3   | 869-233  | 100        | 3  | 869-183  | 100        |
| 4   | 869-134  | 100        | 4   | 869-234  | 100        | 4  | 869-184  | 100        |
| 5   | 869-135  | 100        | 5   | 869-235  | 100        | 5  | 869-185  | 100        |
| 6   | 869-136  | 50         | 6   | 869-236  | 50         | 6  | 869-186  | 50         |
| 7   | 869-137  | 50         | 7   | 869-237  | 50         | 7  | 869-187  | 50         |
| 8   | 869-138  | 50         | 8   | 869-238  | 50         | 8  | 869-188  | 50         |
| 9   | 869-139  | 50         | 9   | 869-239  | 50         | 9  | 869-189  | 50         |
| 10  | 869-140  | 25         | 10  | 869-240  | 25         | 10   | 869-190  | 25         |
| 11  | 869-141  | 25         | 11  | 869-241  | 25         | 11   | 869-191  | 25         |
| 12  | 869-142  | 25         | 12  | 869-242  | 25         | 12   | 869-192  | 25         |



1 For longer strips and/or assemblies of different colors, please contact factory.

Item no. suffix for gray terminal strips in:

blue .../000-006 2

green-yellow .../000-016







869-102 to 869-112

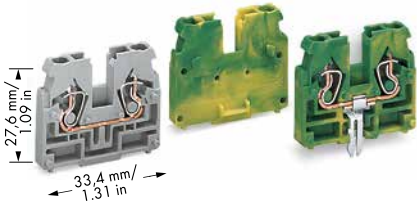
869-202 to 869-212



869-152 to 869-162

2 Terminal blocks with blue insulation are suitable for Ex i applications.

# Modular Terminal Blocks 2.5 mm<sup>2</sup> (4 mm<sup>2</sup> "f-st") with Fixing Flanges or Snap-in Mounting Feet 869 Series




|  |  |   |  |   |  |
|--|--|---|--|---|--|
| 0.08 – 2.5 (4 "f-st") mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>Terminal block width: 5 mm / 0.197 in<br> 6 – 7 mm / 0.26 in | AWG 28 – 12<br>300 V, 20 A  | 0.08 – 2.5 (4 "f-st") mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>Terminal block width: 5 mm / 0.197 in<br> 6 – 7 mm / 0.26 in | AWG 28 – 12<br>300 V, 20 A  | 0.08 – 2.5 (4 "f-st") mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A<br>Terminal block width: 5 mm / 0.197 in<br> 6 – 7 mm / 0.26 in | AWG 28 – 12<br>300 V, 20 A  |
|--|--|---|--|---|--|





| Color  | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|--|----------|------------|
| <b>Center terminal block without snap-in mounting foot, required between end plate and end terminal block for terminal strips with fixing flanges</b>  |          |            | <b>End terminal block with M3 fixing flange, for screw or similar mounting types, 3.2 mm mounting hole diameter</b> |          |            | <b>End terminal block with snap-in mounting foot, for 0.6 – 1.2 mm plate thickness, 3.5<sup>+0.1</sup> mm mounting hole diameter</b> |          |            |
| ● gray   | 869-321  | 100        | ● gray  | 869-301  | 100        | ● gray   | 869-331  | 100        |
| ● blue   | 869-324  | 100        | ● blue  | 869-304  | 100        | ● blue   | 869-334  | 100        |
| ● orange   | 869-326  | 100        | ● green-yellow  | 869-307  | 100        | ● green-yellow   | 869-337  | 100        |
| ● green-yellow   | 869-327  | 100        | ○ light gray  | 869-309  | 100        | ○ light gray   | 869-339  | 100        |
| ○ light gray   | 869-329  | 100        |   |          |            |  |          |            |
| <b>Centre terminal block with with direct ground contact, 3.5<sup>+0.1</sup> mm drilled hole diameter, Notice: This terminal block cannot be commoned!</b>                                     |          |            | <b>End terminal block with M4 fixing flange, for screw or similar mounting types, 4.2 mm Ø mounting hole</b>        |          |            | <b>End terminal block without snap-in mounting foot, for 0.6 – 1.0 mm plate thickness</b>  |          |            |
| ● green-yellow   | 869-328  | 100        | ● gray  | 869-351  | 100        | ● gray   | 869-341  | 100        |
|  |          |            | ● blue  | 869-354  | 100        | ● blue   | 869-344  | 100        |
|  |          |            | ● green-yellow  | 869-357  | 100        | ● green-yellow   | 869-347  | 100        |
|  |          |            | ○ light gray  | 869-359  | 100        | ○ light gray   | 869-349  | 100        |
| <b>Accessories, Item-Specific</b>  |          |            |   |          |            |  |          |            |
| <b>Aluminum carrier rail,</b><br>1000 mm long, 18 mm wide,<br>7 mm high<br> <b>210-154</b> 1              |          |            |   |          |            |  |          |            |
| <b>Plastic end stop, with WSB marker slot, for 210-154 aluminum rail, 6 mm wide</b><br> <b>209-122</b> 25 |          |            |   |          |            |  |          |            |

## Accessories, 869 Series

Appropriate marking systems: WMB/Miniature WSB  
(see Section 9)

| End plate with M3 fixing flange   | End plate with M4 fixing flange,  | End plate, for terminal blocks with snap-in mounting foot,  |
|---|---|---|
| 2.5 mm thick<br><br>gray <b>869-385</b> 100 (4x25)<br>blue <b>869-388</b> 100 (4x25)<br>green-yellow <b>869-389</b> 100 (4x25)<br>light gray <b>869-387</b> 100 (4x25) | 2.5 mm thick<br><br>gray <b>869-395</b> 100 (4x25)<br>blue <b>869-398</b> 100 (4x25)<br>green-yellow <b>869-399</b> 100 (4x25)<br>light gray <b>869-397</b> 100 (4x25)   | 2.5 mm thick<br><br>gray <b>869-375</b> 100 (4x25)<br>blue <b>869-378</b> 100 (4x25)<br>green-yellow <b>869-379</b> 100 (4x25)<br>light gray <b>869-377</b> 100 (4x25)   |
| <b>Insulation stop,</b><br>5 pcs/strip,<br>0.08 – 0.2 mm <sup>2</sup> "s" (0.14 mm <sup>2</sup> "f-st")<br>white <b>280-470</b> 200 (8x25)  | <b>Push-in type jumper bar, insulated,</b><br>I <sub>N</sub> 18 A,<br>light gray<br>2-pole <b>870-402</b> 200 (8x25)<br>3-pole <b>870-403</b> 200 (8x25)<br>4-pole <b>870-404</b> 200 (8x25)<br>5-pole <b>870-405</b> 100 (4x25)<br>6-pole <b>870-406</b> 100 (4x25)<br>7-pole <b>870-407</b> 100 (4x25)<br>8-pole <b>870-408</b> 100 (4x25)<br>9-pole <b>870-409</b> 100 (4x25)<br>10-pole <b>870-410</b> 100 (4x25) | <b>Push-in type jumper bar, insulated,</b><br>I <sub>N</sub> 18 A,<br>light gray<br>from 1 to 3 <b>870-433</b> 200 (8x25)<br>from 1 to 4 <b>870-434</b> 200 (8x25)<br>from 1 to 5 <b>870-435</b> 100 (4x25)<br>from 1 to 6 <b>870-436</b> 100 (4x25)<br>from 1 to 7 <b>870-437</b> 100 (4x25)<br>from 1 to 8 <b>870-438</b> 100 (4x25)<br>from 1 to 9 <b>870-439</b> 100 (4x25)<br>from 1 to 10 <b>870-440</b> 100 (4x25) |
| <b>Insulation stop,</b><br>5 pcs/strip,<br>0.25 – 0.5 mm <sup>2</sup><br>light gray <b>280-471</b> 200 (8x25)   |   |   |
| <b>Insulation stop,</b><br>5 pcs/strip,<br>0.75 – 1 mm <sup>2</sup><br>dark gray <b>280-472</b> 200 (8x25)  |   |   |








|  |  |
|--|--|
| 0.08 – 2.5 (4 “f-st”) mm <sup>2</sup><br>500 V/6 kV/3<br>I <sub>N</sub> 24 A                         | AWG 28 – 12<br>300 V, 20 A  |
| Terminal block width: 5 mm / 0.197 in  |  |
|  6 – 7 mm / 0.26 in |  |



**Terminal strips with fixing flanges M3 or M4,** for screw or mounting types, mounting holes 3.2 mm Ø, flange M3 4.2 mm Ø, flange M4



- 1 Max. insulation diameter: 4.4 mm
- 2 500 V = rated voltage  
6 kV = rated surge voltage  
3 = pollution degree
- 3 Strip length, see packaging or instructions.
- 4 Suitable for Ex i applications

| Color  | Item No. | Pack. Unit |
|--|----------|------------|
| <b>Center terminal block with snap-in mounting foot,</b> for 0.6 – 1.2 mm plate thickness, 3.5 <sup>+0.1</sup> mm mounting hole diameter |          |            |
|   | 869-311  | 100        |
|   | 869-314  | 100        |
|    | 869-316  | 100        |
|   | 869-317  | 100        |
|   | 869-319  | 100        |



**Terminal strips with snap-in mounting feet,** for 0.6 – 1.2 mm plate thickness, 3.5<sup>+0.1</sup> mm mounting hole diameter









Insert insulation stop into conductor entry holes of terminal strip.

Wiring PLC and microprocessor control systems also employs small or very small fine-stranded conductors. These small conductors are highly flexible, and they deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. Common to all terminal block types currently offered, this problem creates unnecessary downtime for troubleshooting.

The solution: an insulation stop for compact terminal blocks. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splicing. This also limits the conductor entry to a defined cross sectional area – ensuring the actual conductor, not the insulation, will enter the clamping unit.

The insulation stop is available as dividable 5-pole strip for the 869 Series terminal strips.

Insulation stop usage will not affect the conductor strip lengths for the aforementioned terminal strips.

| <b>Accessories, Item-Specific</b>  |  |            |
|--|--|------------|
| <b>Aluminum carrier rail,</b>  |  |            |
|       | 1000 mm long, 18 mm wide,<br>7 mm high |            |
|  | <b>210-154</b>                         | 1          |
| <b>Plastic end stop, with WSB marker slot,</b> for 210-154 aluminum rail, 6 mm wide      |  |            |
|       |  |            |
|  | <b>209-122</b>                         | 25         |
| <b>Marking strip, plain,</b>   |  |            |
|       | 7.5 wide,<br>1 m long<br>translucent   |            |
|  | <b>709-196</b>                         | 1          |
| <b>Protective warning marker,</b> with high-voltage symbol, black, for 5 terminal blocks |  |            |
|       | yellow                                 |            |
|  | <b>280-405</b>                         | 100 (4x25) |
| <b>Group marker carrier,</b> fits into the jumper slot of the current bars               |  |            |
|       | gray                                   |            |
|  | <b>870-184</b>                         | 50 (2x25)  |
| <b>Test plug,</b> with 500 mm cable, 2 mm Ø  |  |            |
|       | red                                    |            |
|  | <b>210-136</b>                         | 50         |

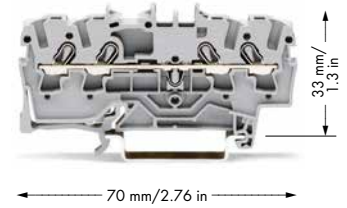
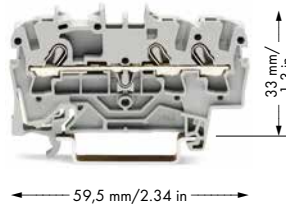
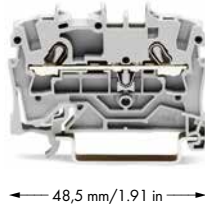


Protective warning marker, with black high-voltage symbols, Item No. 280-405

# TOPJOB® S Through/Ground Conductor and Ex Terminal Blocks 2.5 (4) mm<sup>2</sup> 2002 Series

|   |   |   |
|---|---|---|
| <p>0.25 – 2.5 (4) mm<sup>2</sup> ①   AWG 22 – 12<br/>800 V/8 kV/3   600 V, 20 A    600 V, 20 A </p> <p>Terminal block width: 5.2 mm / 0.205 in<br/> 10 – 12 mm / 0.43 in</p> <p>② Approvals</p> | <p>0.25 – 2.5 (4) mm<sup>2</sup> ①   AWG 22 – 12<br/>800 V/8 kV/3   600 V, 20 A    600 V, 20 A </p> <p>Terminal block width: 5.2 mm / 0.205 in<br/> 10 – 12 mm / 0.43 in</p> <p>② Approvals</p> | <p>0.25 – 2.5 (4) mm<sup>2</sup> ①   AWG 22 – 12<br/>800 V/8 kV/3   600 V, 20 A    600 V, 20 A </p> <p>Terminal block width: 5.2 mm / 0.205 in<br/> 10 – 12 mm / 0.43 in</p> <p>② Approvals</p> |
|---|---|---|

① Conductor sizes: 0.25 – 4 mm<sup>2</sup> "s+f-st"; Push-in conductor sizes: 0.75 – 4 mm<sup>2</sup> "s" and 0.75 – 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



| Color   | Item No.  | Pack. Unit | Color   | Item No.  | Pack. Unit | Color   | Item No.  | Pack. Unit |
|---|-----------|------------|---|-----------|------------|---|-----------|------------|
| <b>2-conductor through terminal block</b>           |           |            | <b>3-conductor through terminal block</b>           |           |            | <b>4-conductor through terminal block</b>           |           |            |
| gray  | 2002-1201 | 100        | gray  | 2002-1301 | 100        | gray  | 2002-1401 | 100        |
| blue  | 2002-1204 | 100        | blue  | 2002-1304 | 100        | blue  | 2002-1404 | 100        |
| orange  | 2002-1202 | 100        | orange  | 2002-1302 | 100        | orange  | 2002-1402 | 100        |
| red   | 2002-1203 | 100        | red   | 2002-1303 | 100        | red   | 2002-1403 | 100        |
| black   | 2002-1205 | 100        | black   | 2002-1305 | 100        | black   | 2002-1405 | 100        |
| yellow  | 2002-1206 | 100        | yellow  | 2002-1306 | 100        | yellow  | 2002-1406 | 100        |
| <b>2-conductor ground terminal block</b>            |           |            | <b>3-conductor ground terminal block</b>            |           |            | <b>4-conductor ground terminal block</b>            |           |            |
| green-yellow  | 2002-1207 | 100        | green-yellow  | 2002-1307 | 100        | green-yellow  | 2002-1407 | 100        |
| <b>Other terminal blocks with the same profile:</b> |           |            | <b>Other terminal blocks with the same profile:</b> |           |            | <b>Other terminal blocks with the same profile:</b> |           |            |
| Diode 2002-1211/1000-411                            |           |            | Diode 2002-1311/1000-411                            |           |            | Diode 2002-1411/1000-411                            |           |            |
|   |           |            | LED 2002-1321/1000-434                              |           |            | Diode 2002-1411/1000-434                            |           |            |
|   |           |            |   |           |            | Double-potential 2002-1441                          |           |            |







## Accessories, Item-Specific

|   |   |   |
|---|---|---|
| <p><b>End and intermediate plate</b>, 0.8 mm thick</p> orange 2002-1292 100 (4x25)<br>gray 2002-1291 100 (4x25) | <p><b>End and intermediate plate</b>, 0.8 mm thick</p> orange 2002-1392 100 (4x25)<br>gray 2002-1391 100 (4x25) | <p><b>End and intermediate plate</b>, 0.8 mm thick</p> orange 2002-1492 100 (4x25)<br>gray 2002-1491 100 (4x25) |
| <p><b>Separator</b>, oversized, 0.8 mm thick</p> orange 2002-1294 100 (4x25)<br>gray 2002-1293 100 (4x25)       | <p><b>Separator</b>, oversized, 0.8 mm thick</p> orange 2002-1394 100 (4x25)<br>gray 2002-1393 100 (4x25)       | <p><b>Separator</b>, oversized, 0.8 mm thick</p> orange 2002-1494 100 (4x25)<br>gray 2002-1493 100 (4x25)       |

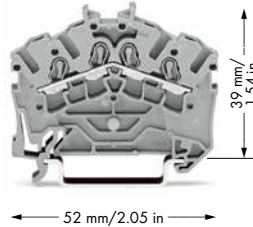
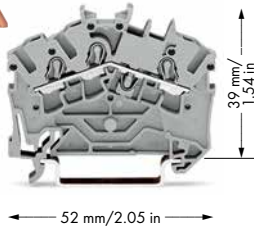
## Accessories, 2002 Series Appropriate marking systems: WMB/Marking Strips/WMB Inline/Mini-WSB (see Section 9)









|   |   |   |
|---|---|---|
| <p><b>Push-in type jumper bar</b>, insulated, I<sub>N</sub> 25 A, light gray</p> <ul style="list-style-type: none"> <li>2-pole 2002-402 200 (8x25)</li> <li>3-pole 2002-403 200 (8x25)</li> <li>4-pole 2002-404 200 (8x25)</li> <li>: :</li> <li>10-pole 2002-410 100 (4x25)</li> </ul> | <p><b>Push-in type jumper bar</b>, insulated, I<sub>N</sub> 25 A, light gray</p> <ul style="list-style-type: none"> <li>1 - 3 2002-433 200 (8x25)</li> <li>1 - 4 2002-434 200 (8x25)</li> <li>1 - 5 2002-435 100 (4x25)</li> <li>: :</li> <li>1 - 10 2002-440 100 (4x25)</li> </ul> | <p><b>Staggered jumper</b>, insulated, I<sub>N</sub> 25 A, light gray</p> <ul style="list-style-type: none"> <li>2-pole 2002-472 100 (4x25)</li> <li>3-pole 2002-473 100 (4x25)</li> <li>4-pole 2002-474 100 (4x25)</li> <li>: :</li> <li>12-pole 2002-482 50 (2x25)</li> </ul> |
| <p><b>Adjacent jumper for continuous commoning</b>, insulated, I<sub>N</sub> 25 A</p> <ul style="list-style-type: none"> <li>light gray 2002-400 100 (4x25)</li> </ul>  | <p><b>Protective warning marker</b>, with high-voltage symbols, for 5 terminal blocks</p> yellow 2002-115 100 (4x25)  | <p><b>TOPJOB® S connector</b>, modular, for jumper contact slot</p> gray 2002-511 100 (4x25)  |
| <p><b>Insulation stop</b>, 5 pcs/strip 200 strips</p> <ul style="list-style-type: none"> <li>light gray 2002-171 0.25–0.5 mm<sup>2</sup></li> <li>dark gray 2002-172 0.75–1 mm<sup>2</sup></li> </ul>   | <p>● Suitable for Ex i applications<br/>  Suitable for Ex e II applications<br/>           550 V, 22 A</p>  | <p><b>Spacer module</b></p> gray 2002-549 100 (4x25)  |
| <p><b>Marking strip</b>, plain, 11 mm wide, 50 m roll</p> white 2009-110 1  |   | <p><b>Operating tool with partially insulated shaft</b>, type 2, (3.5 x 0.5) mm blade</p> 210-720 1   |
| <p><b>Insulated ferrules</b>, extra long, for TOPJOB® S terminal blocks, see Full Line Catalog, Volume 1</p>  |   |   |

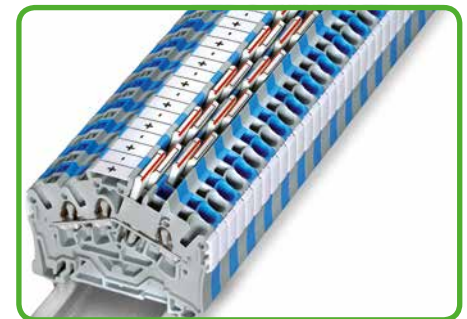
# Through/Ground and Ex Terminal Blocks 2.5 (4) mm<sup>2</sup>, Angled Type 2002 Series

|  |   |  |   |
|--|---|--|---|
| 0.25 – 2.5 (4) mm <sup>2</sup> ①<br>800 V/8 kV/3<br>I <sub>N</sub> 24 A (32 A)<br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in<br>② Approvals | AWG 22 – 12<br>600 V, 20 A <br>600 V, 20 A  | 0.25 – 2.5 (4) mm <sup>2</sup> ①<br>800 V/8 kV/3<br>I <sub>N</sub> 24 A (32 A)<br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in<br>② Approvals | AWG 22 – 12<br>600 V, 20 A <br>600 V, 20 A  |
|--|---|--|---|

① Conductor sizes: 0.25 – 4 mm<sup>2</sup> "s+fst";  
 Push-in conductor sizes: 0.75 – 4 mm<sup>2</sup> "s" and  
 0.75 – 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



| Color   | Item No.  | Pack. Unit | Color   | Item No.  | Pack. Unit |
|---|-----------|------------|---|-----------|------------|
| <b>3-conductor through terminal block</b>   |           |            | <b>4-conductor through terminal block</b>   |           |            |
| gray           | 2002-6301 | 100        | gray           | 2002-6401 | 100        |
| blue           | 2002-6304 | 100        | blue           | 2002-6404 | 100        |
| orange         | 2002-6302 | 100        | orange         | 2002-6402 | 100        |
| Additional colors pending   |           |            | Additional colors pending   |           |            |
| <b>3-conductor ground terminal block</b>  |           |            | <b>4-conductor ground terminal block</b>  |           |            |
| green-yellow  | 2002-6307 | 100        | green-yellow  | 2002-6407 | 100        |
| <b>Notice: These terminal blocks cannot be commoned with push-in type jumper bars!</b>          |           |            |   |           |            |



### 3- and 4-conductor terminal blocks



The TOPJOB® S rail-mounted terminal blocks have a 35-degree conductor entry angle permitting a very small bend radius and an extremely short wiring distance to the cable duct. For applications in switchgear and control cabinets using the LSC wiring system from Lütze, e.g., these terminal blocks are a space- and cost-saving solution. This allows the cable duct to be placed very close to the terminal blocks, keeping its height relatively low.

### Product features:

- CAGE CLAMP® S connection for all conductor types, with the additional benefit of solid and ferruled conductors being simply pushed in
- Vibration-proof, fast, maintenance-free
- 3-conductor through and ground conductor terminal blocks equipped with a dual jumper slot
- 4-conductor terminal blocks permit potential multiplication – no additional jumpers or terminal blocks needed
- 3- and 4-conductor terminal blocks have **the same dimensions**











An end plate must be applied when changing from a 3-conductor terminal block to a 4-conductor terminal block and vice versa.

### Accessories, Item-Specific



|   |   |
|---|---|
| <b>End and intermediate plate, 0.8 mm thick</b><br> orange 2002-6392 100 (4x25)<br>gray 2002-6391 100 (4x25) | <b>End and intermediate plate, 0.8 mm thick</b><br> orange 2002-6392 100 (4x25)<br>gray 2002-6391 100 (4x25) |
|---|---|

### Accessories, 2002 Series

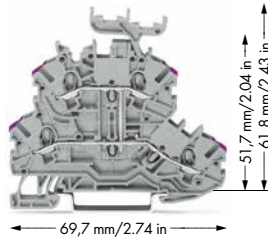
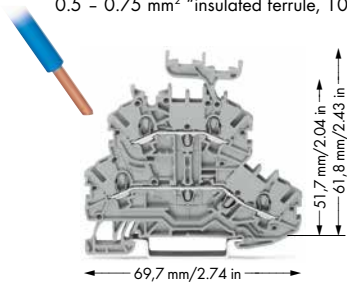
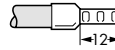
Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Mini-WSB** (see section 9)

|  |  |
|--|--|
| <b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b><br> 2-pole 2002-402 200 (8x25)<br>3-pole 2002-403 200 (8x25)<br>4-pole 2002-404 200 (8x25)<br>5-pole 2002-405 100 (4x25)<br>:<br>:<br>10-pole 2002-410 100 (4x25) |  |
| <b>Push-in type jumper bars, light gray, insulated, I<sub>N</sub> 25 A</b><br> 1 - 3 2002-433 200 (8x25)<br>1 - 4 2002-434 200 (8x25)<br>1 - 5 2002-435 100 (4x25)<br>:<br>:<br>1 - 10 2002-440 100 (4x25)                                  | <b>Insulated ferrules, extra long,</b><br> for TOPJOB® S terminal blocks,<br>see Full Line Catalog, Volume 1  |
| <b>Staggered jumper, insulated, I<sub>N</sub> 25 A, light gray</b><br> 2-pole 2002-472 100 (4x25)<br>3-pole 2002-473 100 (4x25)<br>4-pole 2002-474 100 (4x25)<br>5-pole 2002-475 50 (2x25)<br>:<br>:<br>12-pole 2002-482 50 (2x25)          | <b>Insulation stop, 5 pcs/strip</b> 200 strips<br> light gray 2002-171 0.25-0.5 mm <sup>2</sup><br>dark gray 2002-172 0.75-1 mm <sup>2</sup>                  |
| <b>TOPJOB® S connector, modular,</b><br> for jumper contact slot<br>gray 2002-511 100 (4x25)  | <b>Protective warning marker, with high-voltage symbol,</b><br> for 5 terminal blocks<br>yellow 2002-115 100 (4x25)   |
| <b>Spacer module</b><br>gray 2002-549 100 (4x25)   | <b>Test plug adapter, for test plug 4 mm Ø</b><br> gray 2009-174 100 (4x25)<br><b>Testing tap, max. 2.5 mm<sup>2</sup>/AWG 14</b><br>gray 2009-182 100 (4x25) |
| <b>Operating tool with partially insulated shaft,</b><br> type 2, (3.5 x 0.5) mm blade<br>210-720 1   | <b>Banana plugs, only for safety extra-low voltage (42 V)</b><br> black 215-211 50<br>red 215-212 50<br>blue 215-711 50                                       |
|  | ● Suitable for Ex i applications<br>☒ Suitable for Ex e II applications<br>550 V, 22 A   |

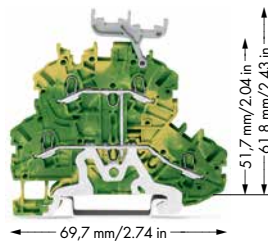
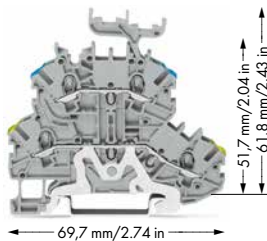
# TOPJOB® Double-Deck Terminal Blocks 1.5 mm<sup>2</sup> 2000 Series

|   |  |                             |
|---|--|-----------------------------|
| 0.14 – 1 (1.5) mm <sup>2</sup> ①   AWG 24 – 16<br>500 V/6 kV/3<br>I <sub>N</sub> 13.5 A (18 A)  | 0.14 – 1 (1.5) mm <sup>2</sup> ①   AWG 24 – 16<br>500 V/6 kV/3<br>I <sub>N</sub> 13.5 A (18 A)   | End and intermediate plates |
| Terminal block width: 3.5 mm / 0.138 in<br> 9 – 11 mm / 0.39 in | Terminal block width: 3.5 mm / 0.138 in<br> 9 – 11 mm / 0.39 in |                             |

① Conductor sizes: 0.14 – 1.5 mm<sup>2</sup> "s+f-st";  
Push-in conductor sizes: 0.5 – 1.5 mm<sup>2</sup> "s" and  
0.5 – 0.75 mm<sup>2</sup> "insulated ferrule, 10 mm"





| Item No.  | Item No.  | Pack. Unit   | Item No.  | Item No.  | Pack. Unit   |
|---|-----------|--------------|---|-----------|--------------|
| <b>Through/through terminal block, gray housing</b> |           |              | <b>4-conductor through terminal block, internal commoning, gray housing, conductor entry position colored in violet</b> |           |              |
| Marker carrier with                                 |           |              | Marker carrier with   |           |              |
| ● L/L   | 2000-2231 | 2000-2201 50 | ● L   | 2000-2238 | 2000-2208 50 |
| ● N/L   | 2000-2232 | 2000-2202 50 |   |           |              |
| ● L/N   | 2000-2233 | 2000-2203 50 |   |           |              |
| <b>Blue housing</b>                                 |           |              | <b>4-conductor through terminal block, internal commoning, blue housing, conductor entry position colored in violet</b> |           |              |
| ● N/N   | 2000-2234 | 2000-2204 50 | ● N   | 2000-2239 | 2000-2209 50 |








| Item No.   | Item No.  | Pack. Unit   | Item No.   | Item No.  | Pack. Unit   |
|--|-----------|--------------|--|-----------|--------------|
| <b>Ground conductor/through terminal block, gray housing</b> |           |              | <b>4-conductor ground terminal block, internal commoning, green-yellow housing</b> |           |              |
| Marker carrier with  |           |              | Marker carrier with  |           |              |
| ● PE/N   | 2000-2247 | 2000-2217 50 | ● PE   | 2000-2237 | 2000-2207 50 |
| ● PE/L   | 2000-2257 | 2000-2227 50 |  |           |              |

### Accessories, Item-Specific



|   |   |
|---|---|
| <b>End and intermediate plate, 0.7 mm thick</b>   | <b>End and intermediate plate, 0.7 mm thick</b>   |
|  orange 2000-2292 100 (4x25) |  orange 2000-2292 100 (4x25) |
| gray 2000-2291 100 (4x25)   | gray 2000-2291 100 (4x25)   |

### Accessories, 2002 Series

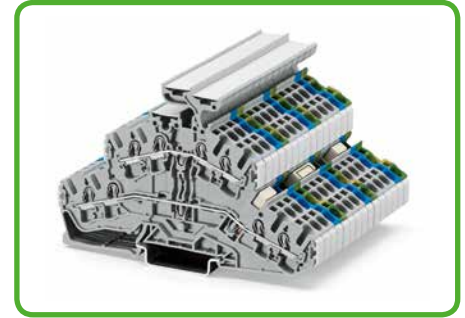
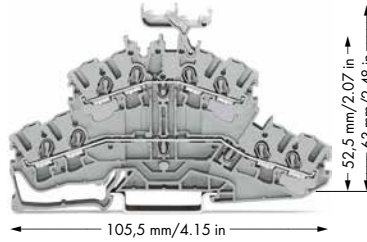
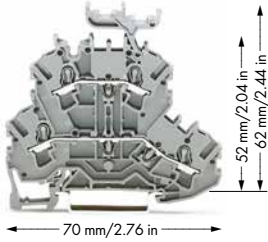
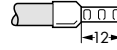
Appropriate marking systems: **WMB/Marking Strips** (see Section 9)

|  |   |   |
|--|---|---|
| <b>Push-in type jumper bar, insulated, I<sub>N</sub> 14 A, light gray</b>                                      | <b>Push-in type jumper bar, insulated, I<sub>N</sub> 14 A, light gray</b>                                     | <b>Star point jumper, insulated, I<sub>N</sub> = I<sub>N</sub> terminal block, light gray</b>                           |
|  2-way 2000-402 200 (8x25)  |  1 - 3 2000-433 200 (8x25) |  1-3-5 2000-405/011-000 100 (4x25) |
| 3-way 2000-403 200 (8x25)  | 1 - 4 2000-434 200 (8x25)   |   |
| 4-way 2000-404 200 (8x25)  | 1 - 5 2000-435 100 (4x25)   |   |
| 5-way 2000-405 100 (4x25)  | : :   |   |
| : :  | 1 - 10 2000-440 100 (4x25)  |   |
| 10-way 2000-410 100 (4x25)   |   |   |
| <b>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</b>                              | ● Ex e II approvals (pending)   | <b>Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade</b>                                      |
|  yellow 2000-115 100 (4x25) |   |  210-719 1                         |

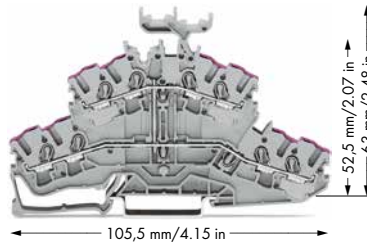
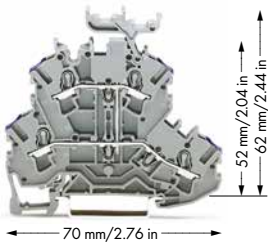




|   |   |                                    |
|---|---|------------------------------------|
| <p>0.25 – 2.5 (4) mm<sup>2</sup> ①   AWG 22 – 12<br/>800 V/8 kV/3<br/>I<sub>N</sub> 24 A (28 A)</p> <p>Terminal block width: 5.2 mm / 0.205 in<br/> 10 – 12 mm / 0.43 in</p> | <p>0.25 – 2.5 (4) mm<sup>2</sup> ①   AWG 22 – 12<br/>800 V/8 kV/3<br/>I<sub>N</sub> 24 A (28 A)</p> <p>Terminal block width: 5.2 mm / 0.205 in<br/> 10 – 12 mm / 0.43 in</p> | <p>End and intermediate plates</p> |
|---|---|------------------------------------|

① Conductor sizes: 0.25 – 4 mm<sup>2</sup> "s+f-st";  
Push-in conductor sizes: 0.75 – 4 mm<sup>2</sup> "s" and  
0.75 – 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"






| Item No.  | Item No. | Pack. Unit | Item No.  | Item No. | Pack. Unit | Accessories, 2002 Series  |
|---|----------|------------|---|----------|------------|---|
| <p><b>2-cond. double-deck terminal block, for DIN 35 rail</b><br/>Through/through terminal block,<br/>gray housing</p>  |          |            | <p><b>4-cond. double-deck terminal block, for DIN 35 rail</b><br/>Through/through terminal block,<br/>gray housing</p>  |          |            | <p><b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>2-way <b>2002-402</b> 200 (8x25)<br/>3-way <b>2002-403</b> 200 (8x25)<br/>4-way <b>2002-404</b> 200 (8x25)<br/>5-way <b>2002-405</b> 100 (4x25)<br/>:<br/>:<br/>10-way <b>2002-410</b> 100 (4x25)</p> |
| <p>Marker carrier with                      without</p> <p>● L/L <b>2002-2231</b> <b>2002-2201</b> 50<br/>● N/L <b>2002-2232</b> <b>2002-2202</b> 50<br/>● L/N <b>2002-2233</b> <b>2002-2203</b> 50</p> <p>Blue housing</p> <p>● N/N <b>2002-2234</b> <b>2002-2204</b> 50</p> |          |            | <p>Marker carrier with                      without</p> <p>● L/L <b>2002-2431</b> <b>2002-2401</b> 50<br/>● N/L <b>2002-2432</b> <b>2002-2402</b> 50<br/>● L/N <b>2002-2433</b> <b>2002-2403</b> 50</p> <p>Blue housing</p> <p>● N/N <b>2002-2434</b> <b>2002-2404</b> 50</p> |          |            |   |
| <p><b>Ground conductor/through terminal block,</b><br/>gray housing</p> <p>● PE/N <b>2002-2247</b> <b>2002-2217</b> 50<br/>● PE/L <b>2002-2257</b> <b>2002-2227</b> 50</p>  |          |            | <p><b>Ground conductor/through terminal block,</b><br/>gray housing</p> <p>● PE/N <b>2002-2447</b> <b>2002-2417</b> 50<br/>● PE/L <b>2002-2457</b> <b>2002-2427</b> 50</p>  |          |            | <p><b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>1 - 3 <b>2002-433</b> 200 (8x25)<br/>1 - 4 <b>2002-434</b> 200 (8x25)<br/>1 - 5 <b>2002-435</b> 100 (4x25)<br/>:<br/>:<br/>1 - 10 <b>2002-440</b> 100 (4x25)</p>                                      |

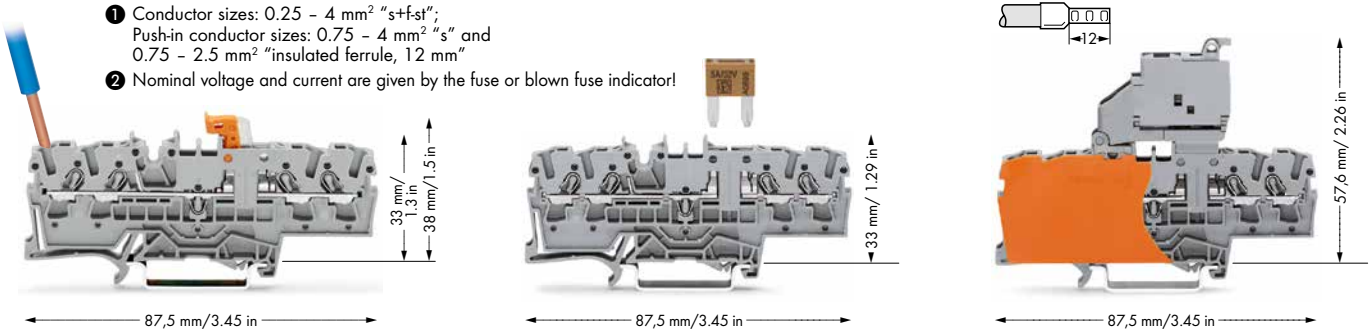


| Item No.  | Item No. | Pack. Unit | Item No.  | Item No. | Pack. Unit | Accessories, 2002 Series  |
|---|----------|------------|---|----------|------------|---|
| <p><b>4-cond. double-deck terminal block, for DIN 35 rail</b><br/>Through terminal block, internal commoning,<br/>gray housing, conductor entry position colored in violet</p>  |          |            | <p><b>8-cond. double-deck terminal block, for DIN 35 rail</b><br/>Through terminal block, internal commoning,<br/>gray housing, conductor entry position colored in violet</p>  |          |            | <p><b>Staggered jumper, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>2-way <b>2002-472</b> 100 (4x25)<br/>3-way <b>2002-473</b> 100 (4x25)<br/>4-way <b>2002-474</b> 100 (4x25)<br/>5-way <b>2002-475</b> 50 (2x25)<br/>:<br/>:<br/>12-way <b>2002-482</b> 50 (2x25)</p>  |
| <p>Marker carrier with                      without</p> <p>● L <b>2002-2238</b> <b>2002-2208</b> 50</p>   |          |            | <p>Marker carrier with                      without</p> <p>● L <b>2002-2438</b> <b>2002-2408</b> 50</p>   |          |            |   |
| <p><b>4-conductor through terminal block, internal commoning,</b><br/>blue housing, conductor entry position colored in violet</p> <p>● N <b>2002-2239</b> <b>2002-2209</b> 50</p>  |          |            | <p><b>Through terminal block, internal commoning,</b><br/>blue housing, conductor entry position colored violet</p> <p>● N <b>2002-2439</b> <b>2002-2409</b> 50</p>   |          |            | <p><b>TOPJOB®S connector, modular,</b><br/>for jumper contact slot<br/>gray <b>2002-511</b> 100 (4x25)</p>  |
| <p><b>4-cond. double-deck terminal block, for DIN 35 rail</b><br/><b>Ground conductor terminal block, internal commoning,</b><br/>green-yellow housing</p> <p>● PE <b>2002-2237</b> <b>2002-2207</b> 50</p>               |          |            | <p><b>4-cond. double-deck terminal block, for DIN 35 rail</b><br/><b>Ground conductor terminal block, internal commoning,</b><br/>green-yellow housing</p> <p>● PE <b>2002-2437</b> <b>2002-2407</b> 50</p>               |          |            |   |
| <p><b>Accessories, Item-Specific</b>      Appropriate marking systems: <b>WMB/Marking Strips</b> (see Section 9)</p>  |          |            |   |          |            | <p><b>Spacer module</b></p> <p>gray <b>2002-549</b> 100 (4x25)</p>  |
| <p><b>End and intermediate plate, 0.8 mm thick</b></p> <p> orange <b>2002-2292</b> 100 (4x25)<br/>gray <b>2002-2291</b> 100 (4x25)</p> |          |            | <p><b>End and intermediate plate, 0.8 mm thick</b></p> <p> orange <b>2002-2492</b> 100 (4x25)<br/>gray <b>2002-2491</b> 100 (4x25)</p> |          |            |   |
| <p>● Suitable for Ex i applications<br/>⊗ Ex e II approvals (pending)</p>   |          |            |   |          |            | <p><b>Protective warning marker, with high-voltage symbol,</b><br/>for 5 terminal blocks<br/>yellow <b>2002-115</b> 100 (4x25)</p> <p><b>Operating tool with partially insulated shaft,</b><br/>type 2, (3.5 x 0.5) mm blade<br/><b>210-720</b> 1</p> <p><b>Marking strips, plain</b></p> <p>11 mm wide,<br/>50m roll<br/>white <b>2009-110</b> 1</p> <p><b>Insulated ferrules, extra long,</b><br/>for TOPJOB®S terminal blocks,<br/>see Full Line Catalog, Volume 1</p> |

# TOPJOB® Disconnect/Test and Fuse Terminal Blocks, 4-Conductor 2002 Series



|   |  |  |
|---|--|--|
| <b>0.25 – 2.5 (4) mm<sup>2</sup> ①</b>   AWG 22 – 12<br>400 V/6 kV/3<br>I <sub>N</sub> 16 A<br><br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in | <b>0.25 – 2.5 (4) mm<sup>2</sup> ①</b>   AWG 22 – 12<br>400 V/6 kV/3<br>I <sub>N</sub> 10 A ②<br><br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in | <b>0.25 – 2.5 (4) mm<sup>2</sup> ①</b>   AWG 22 – 12<br>400 V/6 kV/3<br>I <sub>N</sub> 10 A ②<br><br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in |
|---|--|--|

- ① Conductor sizes: 0.25 – 4 mm<sup>2</sup> "s+st"; Push-in conductor sizes: 0.75 – 4 mm<sup>2</sup> "s" and 0.75 – 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"
- ② Nominal voltage and current are given by the fuse or blown fuse indicator!





















| Color   | Item No.  | Pack. Unit | Color  | Item No.  | Pack. Unit | Item No.   | Pack. Unit            |                       |
|---|-----------|------------|--|-----------|------------|--|-----------------------|-----------------------|
| <b>4-conductor disconnect/test terminal block</b>       |           |            | <b>4-conductor fuse terminal block,</b>                |           |            | <b>4-conductor fuse terminal block with end plate,</b> |                       |                       |
| gray  | 2002-1871 | 50         | for blade-style fuses acc. to DIN 72581-3f,            |           |            | with blown fuse indication by LED, gray                |                       |                       |
| blue  | 2002-1874 | 50         | ISO 8820-3   |           |            | 12 – 30 V ≈  | 2002-1811/1000-541 50 |                       |
| orange  | 2002-1872 | 50         | gray   | 2002-1881 | 50         | 30 – 65 V ≈  | 2002-1811/1000-542 50 |                       |
| <b>4-conductor through terminal block, same profile</b> |           |            | - Individual arrangement: 10 A                         |           |            | 120 V ≈  |                       | 2002-1811/1000-867 50 |
| gray  | 2002-1801 | 50         | - Block arrangement: 5 A                               |           |            | 230 V ≈  |                       | 2002-1811/1000-836 50 |
| blue  | 2002-1804 | 50         | Protection against direct contact must be observed for |           |            | <b>4-conductor fuse terminal block with end plate,</b> |                       |                       |
| orange  | 2002-1802 | 50         | 42 V and higher voltages!                              |           |            | without blown fuse indication                          |                       |                       |
|   |           |            |  |           |            | gray   | 2002-1811 50          |                       |

### Accessories, Item-Specific

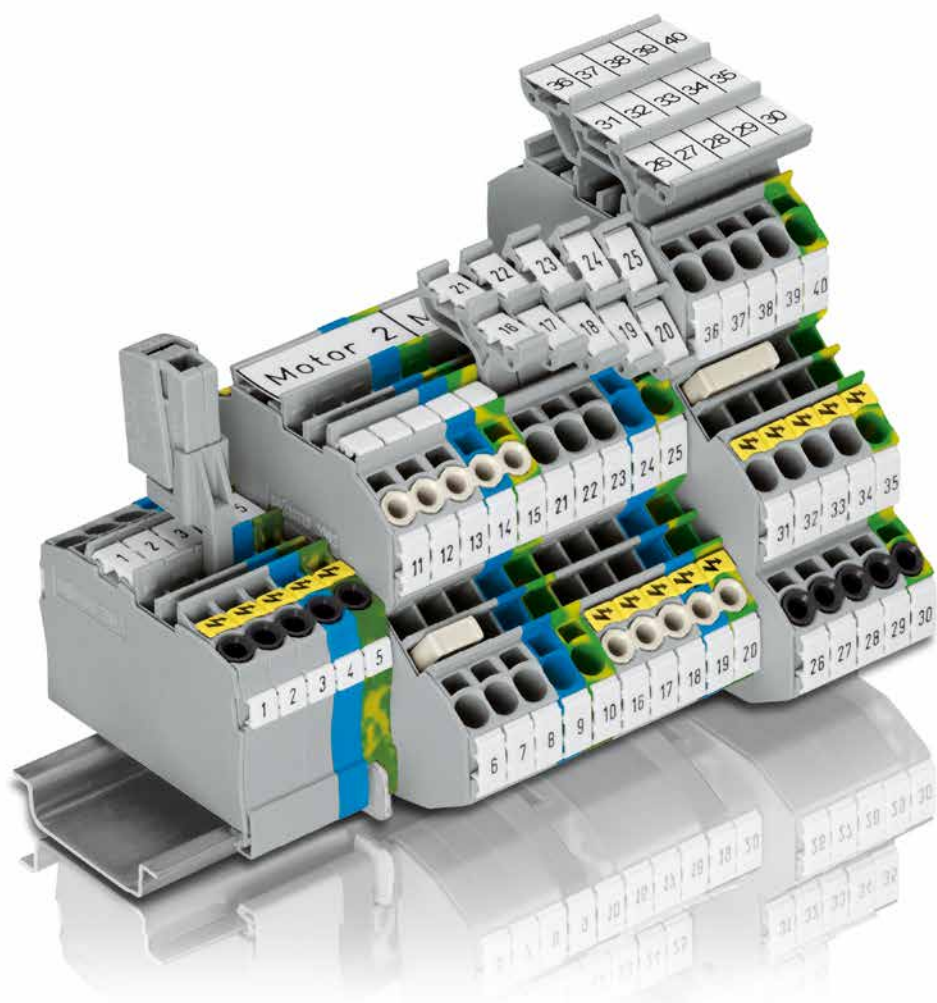
|  |   |
|--|---|
| <b>End and intermediate plate, 1 mm thick</b><br> orange 2002-1892 100 (4x25)<br>gray 2002-1891 100 (4x25) | <b>End and intermediate plate, 1 mm thick</b><br> orange 2002-1892 100 (4x25)<br>gray 2002-1891 100 (4x25) |
|--|---|

### Accessories, 2002 Series




Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Mini-WSB** (see Section 9)

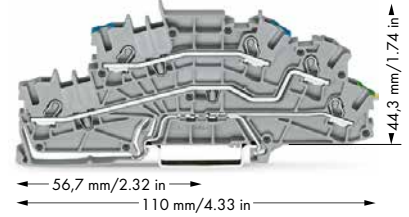
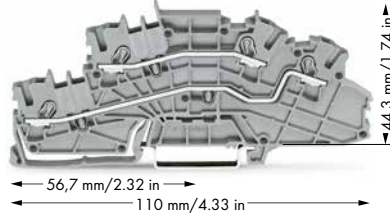
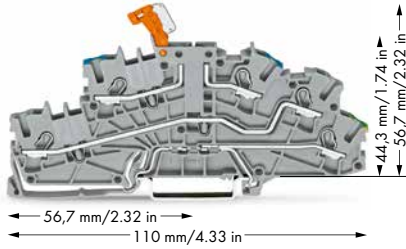
|   |  |   |
|---|--|---|
| <b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b><br> 2-way 2002-402 200 (8x25)<br>3-way 2002-403 200 (8x25)<br>4-way 2002-404 200 (8x25)<br>5-way 2002-405 100 (4x25)<br>:<br>:<br>10-way 2002-410 100 (4x25)                                      | <b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b><br> 1 - 3 2002-433 200 (8x25)<br>1 - 4 2002-434 200 (8x25)<br>1 - 5 2002-435 100 (4x25)<br>:<br>:<br>1 - 10 2002-440 100 (4x25) | <b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b><br> 2-way 2004-402 200 (8x25)<br>3-way 2004-403 200 (8x25)<br>4-way 2004-404 200 (8x25)<br>5-way 2004-405 100 (4x25)<br>:<br>:<br>10-way 2004-410 100 (4x25) |
| <b>For step-down jumpers, see page 31.</b><br><b>Staggered jumper, light gray, insulated, I<sub>N</sub> 25 A</b><br> 2-way 2002-472 100 (4x25)<br>3-way 2002-473 100 (4x25)<br>4-way 2002-474 100 (4x25)<br>5-way 2002-475 50 (2x25)<br>:<br>:<br>12-way 2002-482 50 (2x25) | <b>Disconnect plug for fuse terminal blocks, suitable</b><br> when using the fuse terminal block as a disconnect terminal block<br>orange 2002-401 100 (4x25)   | <b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b><br> 1 - 3 2004-433 200 (8x25)<br>1 - 4 2004-434 200 (8x25)<br>1 - 5 2004-435 100 (4x25)<br>:<br>:<br>1 - 10 2004-440 100 (4x25)                              |
| <b>Insulation stop, 5 pcs/strip</b> 200 strips<br> light gray 2002-171 0.25–0.5 mm <sup>2</sup><br>dark gray 2002-172 0.75–1 mm <sup>2</sup>  | <b>TOPJOB®S connector, modular,</b><br> for jumper contact slot<br>gray 2002-511 100 (4x25)   | <b>Insulation stop, 5 pcs/strip</b> 200 strips<br> light gray 2002-171 0.25–0.5 mm <sup>2</sup><br>dark gray 2002-172 0.75–1 mm <sup>2</sup>   |
| <b>Test plug adapter, for test plug 4 mm Ø</b><br> 2009-174 100 (4x25)<br><b>Testing tap, for max. 2.5 mm<sup>2</sup>/AWG 14</b><br> 2009-182 100 (4x25)                                  | <b>Spacer module</b><br> gray 2002-549 100 (4x25)   | <b>Insulated ferrules, extra long,</b><br> for TOPJOB®S terminal blocks,<br>see Full Line Catalog, Volume 1  |
| <b>Test plug, with 500 mm cable, 2 mm Ø</b><br> red 210-136 50 (5x10)   | <b>WMB Multi marking system,</b><br> 10 strips with 10 markers per card,<br>stretchable 5 – 5.2 mm<br>plain 793-5501 50 (10x5)  | <b>Operating tool with partially insulated shaft,</b><br> type 2, (3.5 x 0.5) mm blade<br>210-720 1  |
| <b>Double-deck marker carrier,</b><br> pivoting<br>gray 2002-121 50 (2x25)  | ● Approval for Ex i applications (pending)<br>ⓧ Approval for Ex e II applications (pending)  | <b>End plate for fuse terminal blocks, 2 mm thick</b><br> orange 2002-992 100 (4x25)<br>gray 2002-991 100 (4x25)   |





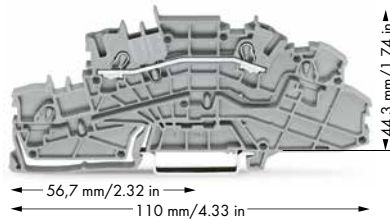
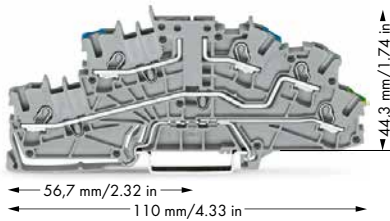




# TOPJOB® Multilevel Installation Terminal Blocks 2.5 (4) mm<sup>2</sup> 2003 Series

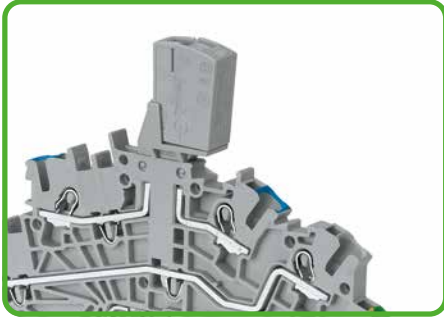
|  |   |   |
|--|---|---|
| <b>0.25 – 2.5 (4) mm<sup>2</sup> ①</b>   AWG 22 – 12<br>250 V/4 kV/3; 20 A (25 A) ② ③<br>400 V/6 kV/3; 20 A (25 A) ② ④<br><br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in ⑤ | <b>0.25 – 2.5 (4) mm<sup>2</sup> ①</b>   AWG 22 – 12<br>400 V/6 kV/3 ②<br>I <sub>N</sub> 24 A (28 A)<br><br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in ⑤ | <b>0.25 – 2.5 (4) mm<sup>2</sup> ①</b>   AWG 22 – 12<br>250 V/4 kV/3; 24 A (28 A) ② ③<br>400 V/6 kV/3; 24 A (28 A) ② ④<br><br>Terminal block width: 5.2 mm / 0.205 in<br> 10 – 12 mm / 0.43 in ⑤ |
|--|---|---|



| Item No.  | Pack. Unit               | Item No.  | Pack. Unit          | Item No.  | Pack. Unit          |
|---|--------------------------|---|---------------------|---|---------------------|
| <b>Multilevel installation terminal block, with movable knife disconnect, gray</b>  |                          | <b>Multilevel installation terminal block, gray</b> |                     | <b>Multilevel installation terminal block, gray</b> |                     |
| ● NT/L/PE   | <b>2003-6641</b> 50      | ● L/L   | <b>2003-6642</b> 50 | ● N/L/PE  | <b>2003-6646</b> 50 |
| <b>Accessories, Item-Specific</b>   |                          | ● N/L   | <b>2003-6649</b> 50 | ● L/L/PE  | <b>2003-6645</b> 50 |
| <b>Test plug adapter N / L, for vertical test slot, gray</b>                        |                          |   |                     |   |                     |
|  | 2-pole <b>2003-499</b> 1 |   |                     |   |                     |
| <b>Test plug adapter N, for vertical test slot, gray</b>                            |                          |   |                     |   |                     |
|  | 1-pole <b>2003-500</b> 1 |   |                     |   |                     |



| Item No.   | Pack. Unit               | Item No.  | Pack. Unit          |
|--|--------------------------|---|---------------------|
| <b>Multilevel installation terminal block, carrier terminal block without knife disconnect, gray</b> |                          | <b>Multilevel installation terminal block, gray</b> |                     |
| ● N/L/PE   | <b>2003-6640</b> 50      | ● L   | <b>2003-6650</b> 50 |
|  |                          | ● N   | <b>2003-6651</b> 50 |
| Black upper-deck, brown middle-deck, green-yellow lower-deck printing                                |                          |   |                     |
| ●  | <b>2003-6643</b> 50      |   |                     |
| <b>Accessories, Item-Specific</b>  |                          |   |                     |
| <b>Test plug adapter N / L, for vertical test slot, gray</b>   |                          |   |                     |
|                   | 2-pole <b>2003-499</b> 1 |   |                     |
| <b>Test plug adapter N, for vertical test slot, gray</b>   |                          |   |                     |
|                   | 1-pole <b>2003-500</b> 1 |   |                     |



2003-6640 Multilevel Installation Terminal Block with 2003-499 N/L Test Plug Adapter for insulation resistance measurement with connected N and L potentials



2003-6640 Multilevel Installation Terminal Block with 2003-500 N Test Plug Adapter for insulation resistance measurement of N potential

- ❶ Conductor sizes: 0.25 mm<sup>2</sup> - 4 mm<sup>2</sup> "s + f-st";  
Push-in conductor sizes: 0.75 mm<sup>2</sup> - 4 mm<sup>2</sup> "s" and 0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> "insulated ferrules, 12 mm"
- ❷ 250 V/  
400 V = rated voltage  
4 kV/  
6 kV = rated surge voltage  
3 = pollution degree  
(see Full Line Catalog, Volume 1, Section 14)
- ❸ 250 V/4 kV potential-ground
- ❹ 400 V/6 kV potential-potential
- ❺ Strip length, see packaging or instructions.

## Accessories for Multilevel Installation Terminal Blocks
















Push-in type jumper bars and staggered jumpers, see 2002 Series



2003-6641 Multilevel Installation Terminal Block with 2003-499 N/L Test Plug Adapter for insulation resistance measurement with connected N and L potentials



2003-6641 Multilevel Installation Terminal Block with 2003-500 N Test Plug Adapter for insulation resistance measurement of N potential

|   |  |
|---|--|
| <b>End and intermediate plate,</b><br>0.8 mm thick<br> gray <b>2003-6692</b> 100 (4x25)  | <b>Insulation stop,</b><br>5 pcs/strip,<br>0.25 - 0.5 mm <sup>2</sup><br> light gray <b>2002-171</b> 200 (8x25)   |
| <b>Adjacent jumper for continuous commoning, insulated,</b><br> I <sub>N</sub> 25 A,<br>light gray<br>2-pole <b>2002-400</b> 100 (4x25)  | <b>Insulation stop,</b><br>5 pcs/strip,<br>0.75 - 1 mm <sup>2</sup><br> dark gray <b>2002-172</b> 200 (8x25)  |
| <b>Busbar carrier,</b><br> not suitable as end stop,<br>for DIN 35 rail,<br>1.5 mm thick<br>blue <b>2009-304</b> 100 (4x25)  | <b>Staggered jumper,</b><br>insulated,<br> I <sub>N</sub> 25 A,<br>light gray<br>2-pole <b>2002-472</b> 100 (4x25)<br>3-pole <b>2002-473</b> 100 (4x25)<br>4-pole <b>2002-474</b> 100 (4x25)<br>5-pole <b>2002-475</b> 50 (2x25)<br>6-pole <b>2002-476</b> 50 (2x25)<br>7-pole <b>2002-477</b> 50 (2x25)<br>8-pole <b>2002-478</b> 50 (2x25)<br>9-pole <b>2002-479</b> 50 (2x25)<br>10-pole <b>2002-480</b> 50 (2x25)<br>11-pole <b>2002-481</b> 50 (2x25)<br>12-pole <b>2002-482</b> 50 (2x25) |
| <b>Busbar carrier,</b><br> can replace end bracket, with detachable<br>separator plate,<br>for DIN 35 rail,<br>7.5 mm thick<br>blue <b>2009-305</b> 25   | <b>Push-in type wire jumper,</b><br>insulated,<br> I <sub>N</sub> 16 A,<br>wire size 1.5 mm <sup>2</sup><br>L = 60 mm <b>2009-412</b> 100 (10x10)<br>L = 110 mm <b>2009-414</b> 100 (10x10)<br>L = 250 mm <b>2009-416</b> 100 (10x10)   |
| <b>Push-in type jumper bar, insulated,</b><br> I <sub>N</sub> 25 A,<br>light gray<br>2-pole <b>2002-402</b> 200 (8x25)<br>3-pole <b>2002-403</b> 200 (8x25)<br>4-pole <b>2002-404</b> 200 (8x25)<br>5-pole <b>2002-405</b> 100 (4x25)<br>6-pole <b>2002-406</b> 100 (4x25)<br>7-pole <b>2002-407</b> 100 (4x25)<br>8-pole <b>2002-408</b> 100 (4x25)<br>9-pole <b>2002-409</b> 100 (4x25)<br>10-pole <b>2002-410</b> 100 (4x25)    | <b>WMB Multi marking system,</b><br> 10 strips with 10 markers per card,<br>stretchable 5 - 5.2 mm<br>plain <b>793-5501</b> 5   |
| <b>Push-in type jumper bar, insulated,</b><br> I <sub>N</sub> 25 A,<br>light gray<br>from 1 to 3 <b>2002-433</b> 200 (8x25)<br>from 1 to 4 <b>2002-434</b> 200 (8x25)<br>from 1 to 5 <b>2002-435</b> 100 (4x25)<br>from 1 to 6 <b>2002-436</b> 100 (4x25)<br>from 1 to 7 <b>2002-437</b> 100 (4x25)<br>from 1 to 8 <b>2002-438</b> 100 (4x25)<br>from 1 to 9 <b>2002-439</b> 100 (4x25)<br>from 1 to 10 <b>2002-440</b> 100 (4x25) | <b>WMB Inline, plain,</b><br>stretchable 5 - 5.2 mm,<br> 1,500 WMB markers, 5 mm, on roll<br>white <b>2009-115</b> 1  |
| <b>Operating tool,</b><br> 3.5 mm and 2.5 mm blades,<br>for TOPJOB® S installation terminal blocks<br><b>2009-309</b> 50   | <b>Marking strip, plain,</b><br> 11 mm wide,<br>50 m roll<br>white <b>2009-110</b> 1  |
|   | <b>Operating tool,</b><br> 3.5 mm and 5.5 mm blades,<br>for TOPJOB® S installation terminal blocks<br><b>2009-310</b> 50  |



# 9



Operating Tools  
 Operating Tools **WINSTA**®  
 Disconnection Tools

492 - 495  
 496 - 497  
 498



Cable Strippers  
 Wire Strippers

500  
 501



Cable Cutters  
 Crimping Tools

502  
 502 - 503



Test and Measurement Tools

504 - 505



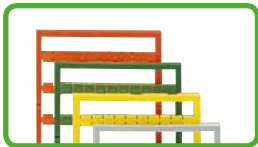
Test Plugs  
 Test Pin

506  
 506



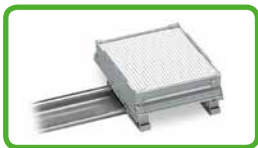
“Alu-Plus” Contact Paste

507



Marking Accessories

508 - 511



DIN-Rail Mount PCB Carriers

512 - 513



Screws  
 Carrier Rails  
 Pin Terminals

514  
 514  
 515



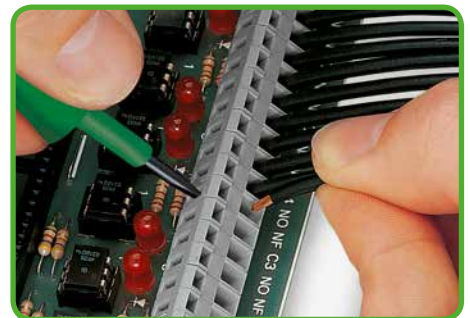
|   |  |   |
|---|--|---|
| <p><b>Operating tools</b></p> <p>with partially insulated shaft<br/>Type 1, 2 and 3</p> | <p><b>Operating tools</b></p> <p>with partially insulated shaft<br/>Type 1, 2 and 3 in set</p> | <p><b>Operating tools</b></p> <p>with partially insulated shaft<br/>Type 1 and 2, short</p> |
|---|--|---|



| Item No.  | Pack. Unit | Item No.  | Pack. Unit | Item No.   | Pack. Unit |
|---|------------|---|------------|--|------------|
| <p><b>Operating tool, type 1, (2.5 x 0.4) mm blade,</b> with partially insulated shaft, suitable for 218, 233, 234, 235, 250, 253, 730, 733, 734, 735, 739, 713, 714, 805 and 2734 Series</p>   | 1          | <p><b>Set of operating tools</b><br/>Type 1, (2.5 x 0.4) mm blade<br/>Type 2, (3.5 x 0.5) mm blade<br/>Type 3, (5.5 x 0.8) mm blade</p> | 1          | <p><b>Operating tool, type 1, short, (2.5 x 0.4) mm straight blade,</b> with partially insulated shaft, suitable for 218, 233, 234, 235, 250, 253, 730, 733, 734, 735, 739, 713, 714, 805, and 2734 Series</p>   | 1          |
| <b>210-719</b>  |            | <b>210-722</b>  |            | <b>210-647</b>   |            |
| <p><b>Operating tool, type 2, (3.5 x 0.5) mm blade,</b> with partially insulated shaft, suitable for 226, 231, 232, 235, 236, 237, 246, 250, 254, 255, 256, 257, 721, 722, 723, 731, 732, 733, 735, 736, 737, 738, 739, 740, 741, 742, 745, 804, 805, 806, 816, 2231, and 2721 Series</p> | 1          |   |            | <p><b>Operating tool, type 2, short, (3.5 x 0.5) mm straight blade,</b> with partially insulated shaft, suitable for 226, 231, 232, 235, 236, 237, 246, 250, 254, 255, 256, 257, 721, 722, 723, 731, 732, 733, 735, 736, 737, 738, 739, 740, 741, 742, 745, 804, 805, 806, 816, 2231 and 2721 Series</p> | 1          |
| <b>210-720</b>  |            |   |            | <b>210-657</b>   |            |
| <p><b>Operating tool, type 3, (5.5 x 0.8) mm blade,</b> with partially insulated shaft, suitable for 745, 746 and 831 Series</p>  | 1          |   |            | <p><b>Operating tool, type 1, short, (2.5 x 0.4) mm angled blade,</b> with partially insulated shaft, suitable for 218, 233, 234, 235, 250, 253, 730, 733, 734, 735, 739, 713, 714, 805, and 2734 Series</p>   | 1          |
| <b>210-721</b>  |            |   |            | <b>210-648</b>   |            |
|   |            |   |            | <p><b>Operating tool, type 2, short, (3.5 x 0.5) mm angled blade,</b> with partially insulated shaft, suitable for 226, 231, 232, 235, 236, 237, 246, 250, 254, 255, 256, 257, 721, 722, 723, 731, 732, 733, 735, 736, 737, 738, 739, 740, 741, 742, 745, 804, 805, 806, 816, 2231 and 2721 Series</p>   | 1          |
|   |            |   |            | <b>210-658</b>   |            |



The blade dimensions of the above-listed operating tools are ideal for operating both PCB terminal blocks and MCS connectors.



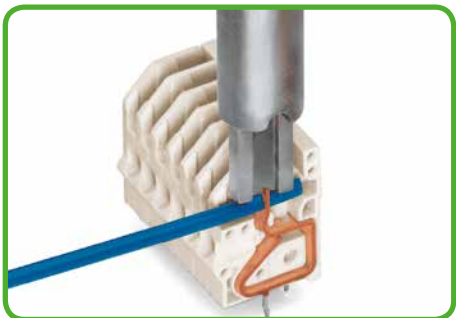
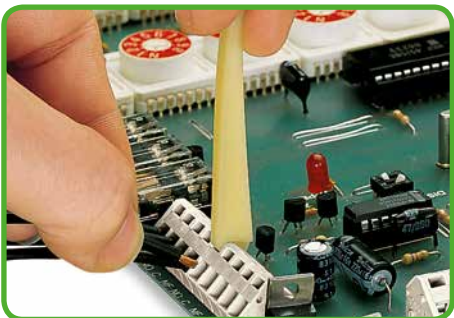
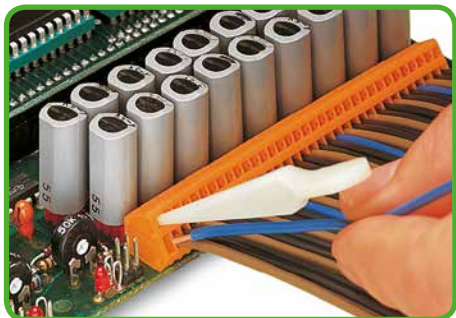
The above-listed operating tools with blade dimensions to DIN 5264 are ideal for operating PCB terminal blocks.



|  |  |  |
|--|--|--|
| <b>Operating tools</b><br><br>for factory wiring<br>of PCB terminal strips | <b>Operating tools</b><br><br>for factory wiring<br>of PCB terminal strips | <b>Connection tool</b><br><br>for IDC contacts |
|--|--|--|



| Item No.  | Pack. Unit     | Item No.  | Pack. Unit | Item No.  | Pack. Unit |
|---|----------------|---|------------|---|------------|
| <b>Operating tool,</b><br>suitable for 233, 733 and 2060 Series |                | <b>Operating tool,</b><br>suitable for 236 Series |            | <b>Connection tool,</b> suitable for<br>IDC termination of 251 Series |            |
| partially insulated, green                                      | <b>233-335</b> | 1   | insulated  | <b>236-332</b>  | 1          |
| insulated, white  | <b>233-332</b> | 25  | metal      | <b>236-335</b>  | 1          |
| insulated, yellow   | <b>233-331</b> | 25  |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |
|   |                |   |            |   |            |

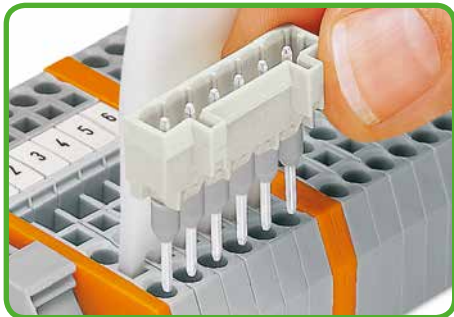


Compared with standard screwdrivers, these operating tools are far more convenient for wiring PCB terminal strips at factory.

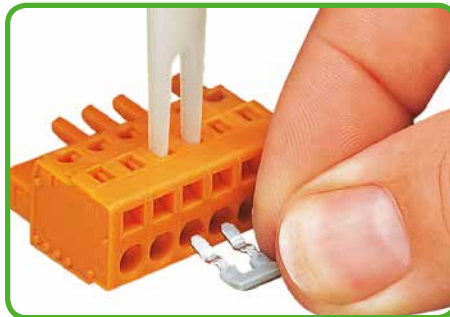
|   |   |                       |
|---|---|-----------------------|
| <b>Operating tools</b><br>Operation parallel to conductor entry | <b>Operating tool</b><br>Operation perpendicular to conductor entry | <b>Operating tool</b> |
|---|---|-----------------------|



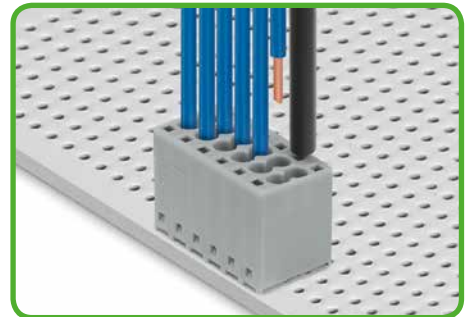
| Item No.   | Pack. Unit     | Item No.   | Pack. Unit | Item No.   | Pack. Unit |
|--|----------------|--|------------|--|------------|
| <b>Multipole operating tool</b> , insulated, 5/5.08 mm pin spacing, operation parallel to conductor entry, suitable for male and female connectors with CAGE CLAMP®, also suitable for 280 Series rail-mounted terminal blocks |                | <b>Operating tool</b> , insulated, 5/5.08 mm pin spacing, operation perpendicular to conductor entry, suitable for male and female connectors with CAGE CLAMP® |            | <b>Operating tool</b> , suitable for 2080 Series |            |
| 1-pole   | <b>209-130</b> | 1  | 2-pole     | <b>209-132</b>                                   | 1          |
| 2-pole   | <b>280-432</b> | 1  |            |  |            |
| 3-pole   | <b>280-433</b> | 1  |            |  |            |
| 4-pole   | <b>280-434</b> | 1  |            |  |            |
| 5-pole   | <b>280-435</b> | 1  |            |  |            |
| 6-pole   | <b>280-436</b> | 1  |            |  |            |
| 7-pole   | <b>280-437</b> | 1  |            |  |            |
| 8-pole   | <b>280-438</b> | 1  |            |  |            |
| 9-pole   | <b>280-439</b> | 1  |            |  |            |
| 10-pole  | <b>280-440</b> | 1  |            |  |            |
|  |                |  |            | <b>206-880</b>                                   | 1          |



Inserting a male connector with long contact pins into a front-entry rail-mounted terminal block via 6-pole operating tool.



Commoning a female connector with 231-902 comb-style jumper bar via 2-pole operating tool.

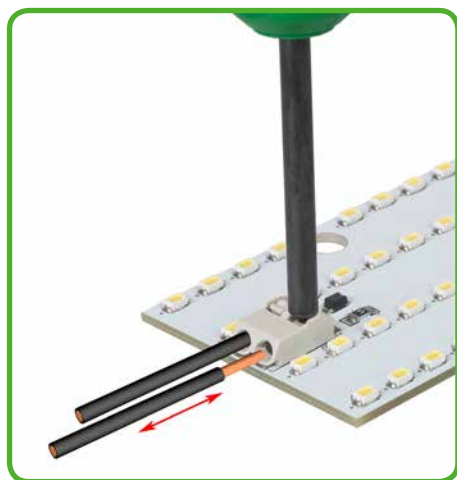


Conductor removal (2080 Series) - via push-button and 1 mm Ø operating tool (206-880).

|                        |                                      |  |
|------------------------|--------------------------------------|--|
| <b>Operating tools</b> | <b>Operating tools<br/>insulated</b> |  |
|------------------------|--------------------------------------|--|



| Item No.  | Pack. Unit     | Item No.   | Pack. Unit      |                               |
|---|----------------|--|-----------------|-------------------------------|
| <b>Operating tool,</b><br>suitable for 2059, 2060 and 2061 Series |                | <b>Operating tool, insulated,</b><br>suitable for 2059, 2060 and 2061 Series |                 |                               |
| for 2059 Series   | <b>206-859</b> | 5  | for 2059 Series | <b>2059-189</b> 600 (12 x 50) |
| for 2060 Series   | <b>206-860</b> | 5  | for 2060 Series | <b>2060-189</b> 300 (6 x 50)  |
| for 2061 Series   | <b>206-861</b> | 5  | for 2061 Series | <b>2061-189</b> 300 (6 x 50)  |



Inserting/removing fine-stranded conductors by lightly pressing on push-button.



Inserting/removing fine-stranded conductors by lightly pressing on push-button.

|  |  |  |
|--|--|--|
| <p>Operating tool for<br/>2-pole WINSTA® MINI connectors</p> | <p>Operating tool for<br/>3-pole WINSTA® MINI connectors</p> | <p>Operating tool for<br/>4-pole WINSTA® MINI connectors</p> |
|--|--|--|



| Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit | Color   | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|---|----------|------------|
| <p><b>Operating tool, 2-pole,</b><br/>for WINSTA® MINI connectors, 890 Series</p> |          |            | <p><b>Operating tool, 3-pole,</b><br/>for WINSTA® MINI connectors, 890 Series</p> |          |            | <p><b>Operating tool, 4-pole,</b><br/>for WINSTA® MINI connectors, 890 Series</p> |          |            |
| green   | 890-382  | 1          | green   | 890-383  | 1          | green   | 890-384  | 1          |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |
|   |          |            |   |          |            |   |          |            |

# Operating Tool, 5-Pole, 890 Series

## Operating Tool, 2- and 3-Pole, 770 Series

|  |  |  |
|--|--|--|
| Operating tool for<br>5-pole WINSTA® MINI connectors | Operating tool for<br>2-pole WINSTA® MIDI connectors | Operating tool for<br>3-pole WINSTA® MIDI connectors |
|--|--|--|



| Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit | Color  | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|--|----------|------------|
| Operating tool, 5-pole,<br>for WINSTA® MINI connectors, 890 Series |          |            | Operating tool, 2-pole,<br>for WINSTA® MIDI connectors, 770 Series |          |            | Operating tool, 3-pole,<br>for WINSTA® MIDI connectors, 770 Series |          |            |
| green  | 890-385  | 1          | green  | 770-382  | 1          | green  | 770-383  | 1          |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |
|  |          |            |  |          |            |  |          |            |

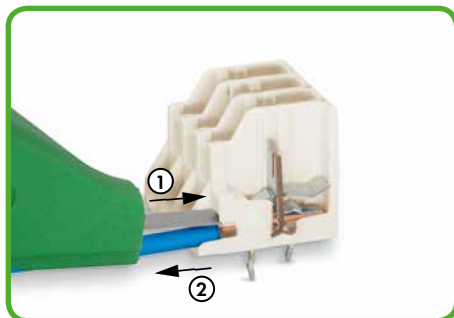
Disconnection tool,  
for removing conductors  
from PUSH WIRE® connections

Disconnection tool,  
for removing conductors  
from PUSH WIRE® connections

Disconnection tool,  
for removing conductors  
from PUSH WIRE® connections



| Item No.   | Pack. Unit | Item No.                                    | Pack. Unit | Item No.                                    | Pack. Unit |
|--|------------|---|------------|---|------------|
| Disconnection tool, with two replacement blades in the handle, suitable for 251 Series, "mini" version |            | Disconnection tool, suitable for 744 Series |            | Disconnection tool, suitable for 294 Series |            |
| 206-830  | 1          | 206-840                                     | 1          | 206-294                                     | 1          |
|  |            |   |            |   |            |
|  |            |   |            |   |            |
|  |            |   |            |   |            |
|  |            |   |            |   |            |
|  |            |   |            |   |            |
|  |            |   |            |   |            |
|  |            |   |            |   |            |



Removing a conductor by sliding disconnection tool over the conductor (1) and pulling it out (2).



Removing a conductor by inserting disconnection tool into the operating slot and pulling it out.



Conductor removal: Slide disconnection tool beneath the conductor and pull conductor out.



Two replacement blades in the handle.







# Cable Strippers

|  |   |
|--|---|
| <b>Cable stripper for round cables</b><br>2.5 - 11 mm / 0.1 - 0.43 in. Ø | <b>Cable stripper for round cables</b><br>4.5 - 45 mm / 0.18 - 1.77 in. Ø |
|--|---|



| Item No.   | Pack. Unit | Item No.  | Pack. Unit |
|--|------------|---|------------|
| <b>Cable stripper</b> , for round cables with 2.5 - 11 mm outer diameter                   |            | <b>Cable stripper</b> , for round cables with 4.5 - 45 mm outer diameter                    |            |
| 206-171  | 1          | 206-174   | 1          |
| <b>Item-Specific Accessories</b>   |            | <b>Item-Specific Accessories</b>  |            |
| <b>Replacement blade</b> , for 2.5 - 11 mm Ø   |            | <b>Replacement blade</b> , for 4.5 - 45 mm Ø  |            |
|  206-170 | 1          |  206-173 | 1          |

**206-171 Cable Stripper:**

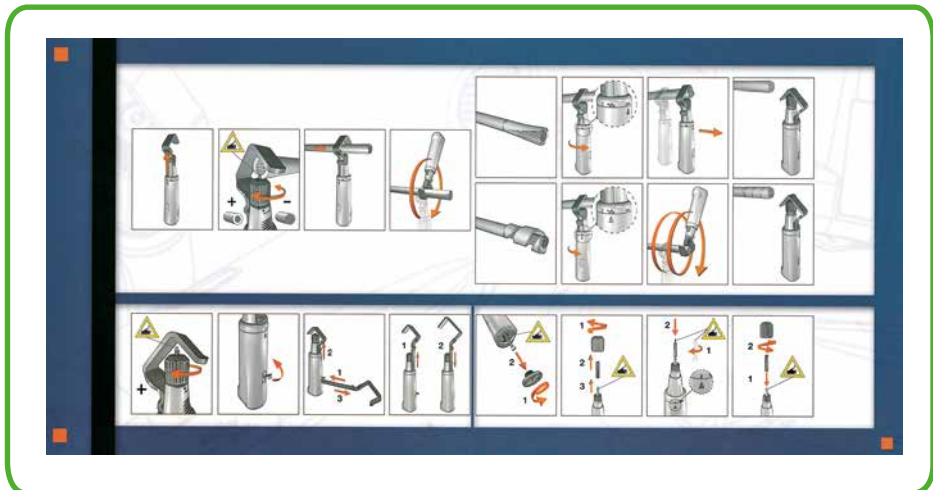
- 10-position adjustment wheel ensures repeatable stripping results
- Fine adjustability via 10-position blade cutting depth adjustment
- Strips the sheath from multi-core and fiber optic cables up to 11 mm/0.43 inch diameter
- Safe and easy to use through closed stripping cavity

**206-174 Cable Stripper:**

- Safe and easy to use: Three locking positions for circular, longitudinal and spiral cuts
- High cable stripping capacity of up to 45 mm/1.77 inch diameter
- Well balanced, ergonomic design features rests for thumb, index and pinky fingers to ease raising of the cable retention hook
- Replacement blades can be stored within the tool body



Operating instructions for 206-171 Cable Stripper






Operating instructions for 206-174 Cable Stripper



# Wire Strippers

|  |   |
|--|---|
| <p><b>"Quickstrip" 10 wire stripper</b></p> <p>0.02 mm<sup>2</sup> - 10 mm<sup>2</sup> "f-st" (AWG 34 - 8)</p> | <p><b>"Quickstrip 16" wire stripper</b></p> <p>4 mm<sup>2</sup> - 16 mm<sup>2</sup></p> |
|--|---|



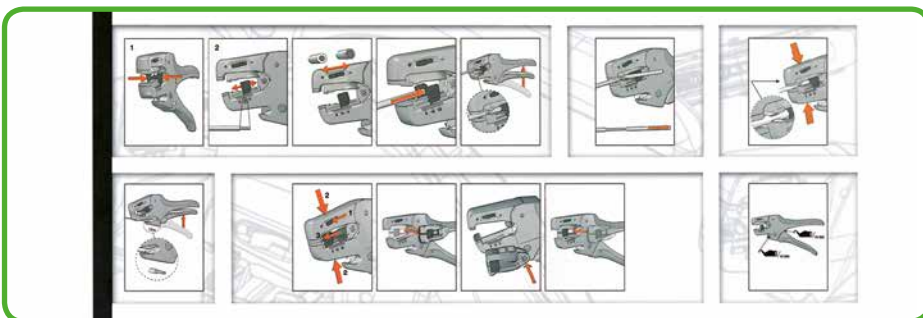
| Item No.  | Pack. Unit | Item No.   | Pack. Unit |
|---|------------|--|------------|
| <p><b>"Quickstrip 10" wire stripper,</b><br/>0.02 - 10 mm<sup>2</sup> "f-st" (6 mm<sup>2</sup> "sol.")<br/>Wire cutter up to 10 mm<sup>2</sup> "f-st" (1.5 mm<sup>2</sup> "sol.")</p> |            | <p><b>"Quickstrip 16" wire stripper,</b><br/>4 - 16 mm<sup>2</sup><br/>Wire cutter up to 10 mm<sup>2</sup> "f-st" (1.5 mm<sup>2</sup> "sol.")</p>  |            |
| 206-124   | 1          | 206-125  | 1          |
| <b>Product Accessories</b>  |            | <b>Product Accessories</b>   |            |
| <p><b>"Standard" blade cassette, 0.02 - 10 mm<sup>2</sup></b></p>                                  |            | <p><b>"Standard" blade cassette, 4 - 16 mm<sup>2</sup></b></p>  |            |
| 206-126   | 1          | 206-128  | 1          |
| <p><b>"V" blade cassette,</b></p>    |            |  |            |
| 0.1 - 4 mm <sup>2</sup> for PTFE  |            |  |            |
| 206-127   | 1          |  |            |



Cutting a conductor.



Stripping a conductor.



Handling instructions are included.

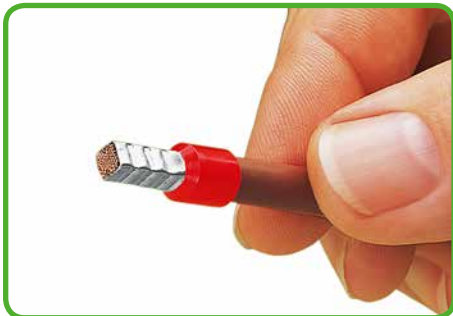
|   |   |   |
|---|---|---|
| <b>Cable cutter acc. to VDE</b><br>up to 35 mm <sup>2</sup> / AWG 2 | <b>"Variocrimp 4" crimping tool</b><br>0.25 - 4 mm <sup>2</sup> / AWG 22 - 12 | <b>"Variocrimp 16" crimping tool</b><br>6 mm <sup>2</sup> - 16 mm <sup>2</sup> / AWG 10 - 6 |
|---|---|---|



| Item No.   | Pack. Unit | Item No.  | Pack. Unit | Item No.   | Pack. Unit |
|--|------------|---|------------|--|------------|
| <b>Cable cutter,</b><br>for copper and aluminum cables up to 35 mm <sup>2</sup> /AWG 2 |            | <b>"Variocrimp 4" crimping tool,</b><br>for insulated and uninsulated ferrules,<br>crimping range of 0.25 - 4 mm <sup>2</sup> |            | <b>"Variocrimp 16" crimping tool,</b><br>for insulated and uninsulated ferrules,<br>crimping range of 6 - 16 mm <sup>2</sup> |            |
| 206-118  | 1          | 206-204   | 1          | 206-216  | 1          |



Cutting



A perfect gastight crimp, both electrically and mechanically reliable.

**Application notes:**

- With "Variocrimp 4," the built-in crimping pressure control automatically adjusts crimping force to the conductor cross section used
- With "Variocrimp 16," it is necessary to select the wire gauge on the tool before crimping
- Only one crimping station is needed to handle the specified conductor size range
- Uniform compact crimping from all four sides for high conductor retention
- No need to center the conductor into the ferrule
- Conductor and ferrule insertion possible from both sides (for left- and right-handers)
- Built-in ratchet mechanism ensures gastight crimp connection
- Crimping tools open automatically after crimping operation is complete
- Comfortable handles for operator

**What is a "gas-tight" connection?**

In a gas-tight connection, the conductor and the ferrule are compressed together, eliminating all spaces. Under normal atmospheric conditions, neither a liquid nor a gaseous medium can penetrate into the crimped connection.

Oxidation between crimped single conductors is prevented, ruling out nearly any increase in the crimped connection resistance. In some exceptional cases, minute, isolated spaces may be present. These can be considered to be closed off on account of the twisted wires, however.

Inadequate crimping can allow the conductor to be pulled out of the connection. Hollow spaces also remain in which oxidation can form. Oxidation leads to an increase in contact resistance.

Elevated resistance is detrimental for signal transmission, as the signal flow is damped (weakened), and for power transmission, as power loss and, hence a temperature increase due to contact (risk of fire) can result.

Crimping tools with built-in ratchets are recommended, such as the **WAGO Variocrimp** tools. These tools only open after the crimping process has been fully completed. Space-saving crimping from all four sides is ideal for spring clamp termination.

Cross section data for ferruled conductors indicated for WAGO products is based on this crimping method.

# Crimping Tools

|   |  |
|---|--|
| <b>Crimping tool 25</b><br>10 mm <sup>2</sup> , 16 mm <sup>2</sup> , 25 mm <sup>2</sup> / AWG 8, 6, 4 | <b>Crimping tool 50</b><br>35 mm <sup>2</sup> and 50 mm <sup>2</sup> / AWG 2 and 1 |
|---|--|



| Item No.  | Pack. Unit | Item No.   | Pack. Unit |
|---|------------|--|------------|
| <b>Crimping tool 25,</b><br>for insulated and uninsulated ferrules,<br>crimping range of 10 mm <sup>2</sup> , 16 mm <sup>2</sup> and 25 mm <sup>2</sup> |            | <b>Crimping tool 50,</b><br>for insulated and uninsulated ferrules,<br>crimping range of 35 mm <sup>2</sup> and 50 mm <sup>2</sup> |            |
| 206-225   | 1          | 206-250  | 1          |



Insert ferruled conductor into crimping station.



Squeeze handles until ratchet mechanism is released.

**Application notes:**

- Improved crimping for higher conductor retention
- Conductor and ferrule insertion possible from both sides (for left- and right-handers)
- Built-in ratchet mechanism ensures gastight crimp connection
- Crimping tools open automatically after crimping operation is complete
- Comfortable handles for operator



## Voltage tester

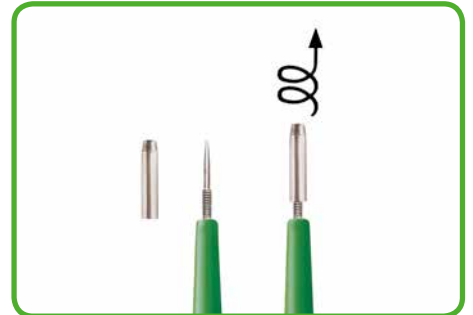
Profi-LCD+

## Voltage tester

Profi-LED+



| Item No.  | Pack. Unit | Item No.  | Pack. Unit |
|---|------------|---|------------|
| <b>Profi-LCD+,</b><br>2-pole voltage tester with LCD display,<br>removable test probes, 4 mm Ø<br>Measuring range: 6 – 1000 V AC/DC<br>Protection class: IP65<br>Resistance measurement: up to 2000 Ω |            | <b>Profi-LED+,</b><br>2-pole voltage tester with LED display,<br>removable test probes, 4 mm Ø<br>Measuring range: 6 – 1000 V AC/DC<br>Protection class: IP65<br>Resistance measurement: up to 2000 Ω |            |
| <b>206-807</b>  | 1          | <b>206-806</b>  | 1          |
| <b>Item-Specific Accessories</b>  |            | <b>Item-Specific Accessories</b>  |            |
| Replacement test probes, 4 mm Ø (2 pcs)   |            | Replacement test probes, 4 mm Ø (2 pcs)   |            |
|  <b>206-808</b>  | 1          |  <b>206-808</b>  | 1          |

**Additional Profi LCD+ features:**

- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO and CEE sockets
- LED torch lamp function
- Automatic backlight
- Auto power-off function
- CAT IV 1000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)

**Additional Profi LED+ features:**

- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO and CEE sockets
- LED torch lamp function
- CAT IV 1000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)


**Profi-LCD+ and Profi-LED+:**

- Improved socket contact via 4 mm Ø test probes
- Removable test probes for small test ports (suitable for all WAGO terminal blocks)



|   |  |                                      |
|---|--|--------------------------------------|
| <b>Digital multimeter</b><br><br>Multi-Tester | <b>Digital clamp meter</b><br><br>Amp-Tester | <b>Voltage tester</b><br><br>TESTBOY |
|---|--|--------------------------------------|



| Item No.   | Pack. Unit | Item No.   | Pack. Unit | Item No.   | Pack. Unit |
|--|------------|--|------------|--|------------|
| <b>Multi-Tester,</b><br>digital multimeter with non-contact voltage tester,<br>with bag<br>Measuring range: 600 V AC/DC, 10 A AC/DC<br>Resistance measurement: up to 20 MΩ |            | <b>Amp-Tester,</b><br>digital clamp meter,<br>true RMS measurement, with bag<br>Measuring range: 0.01 - 200 A AC/DC, up to 400 Hz<br>(sinus)<br>Protection class: IP44 |            | <b>TESTBOY,</b><br>non-contact voltage tester,<br>with integrated flashlight<br>Voltage range: 12 - 1000 VAC |            |
| 206-810  | 1          | 206-815  | 1          | 206-804  | 1          |
| <b>Item-Specific Accessories</b>   |            |  |            |  |            |
| Replacement test leads, red/black  |            |  |            |  |            |
|   |            | 206-811  | 1          |  |            |



**Additional Multi-Tester features:**

- Contact-less voltage test AC >100 V (optical and acoustical)
- Resistance measurement up to 20 MΩ
- Acoustical continuity test
- Diode test
- Data hold function
- Auto power-off function
- LED torch lamp function
- CAT IV 600 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)



**Additional Amp-Tester features:**

- AC and DC current measurement
- True RMS measurement
- Data hold function
- Maximum jaw opening: 21 mm Ø
- Compact design for measuring in tight spaces
- Resolution: 0.01 A at 40 A
- Resolution: 0.1 A at 200 A
- Sampling rate: 3 times per second
- Auto power-off function
- CAT III 300 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)



A device that will reliably detect AC voltage in cables, sockets, fuses, switches, outlets, etc.

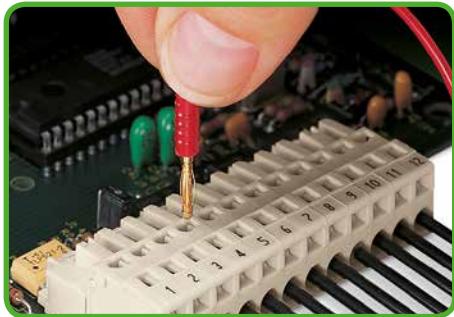
The voltage tester detects:

- Live conductors
- Cable breaks
- Blown fuses
- Defective switches
- Defective lamps

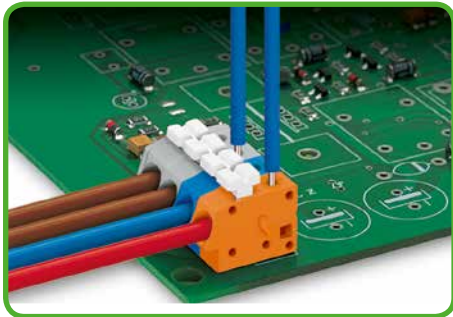
|                   |                 |  |
|-------------------|-----------------|--|
| <b>Test plugs</b> | <b>Test pin</b> |  |
|-------------------|-----------------|--|



| Item No.  | Pack. Unit | Item No.   | Pack. Unit |
|---|------------|--|------------|
| <b>Test plug, 2 mm Ø, 500 mm cable length</b>   |            | <b>Test pin, 1 mm Ø, with solder connection for test cable</b> |            |
| red   | 210-136    | 50   | 735-500    |
|   |            |  | 1          |
| <b>Test plug, 2.3 mm Ø, 500 mm cable length</b> |            |  |            |
| yellow  | 210-137    | 50   |            |



Testing with 2 mm Ø test plug.



Testing with 1 mm Ø test pin, tip contact.

## "Alu-Plus" contact paste



| Item No.   | Pack. Unit |
|--|------------|
| "Alu-Plus" syringe, contains 20 ml "Alu-Plus" contact paste for reliable connection of solid aluminum conductors* up to 4 mm <sup>2</sup> /AWG 12 in WAGO spring-clamp terminal blocks |            |
| 249-130  | 20 (4 x 5) |
| Use "Alu-Plus" contact paste when terminating solid aluminum conductors in WAGO spring-clamp terminal blocks.  |            |

\*Aluminum conductors according to IEC 61545, Class B, "Alloy 1370" with a tensile strength of 90 - 180 N/mm<sup>2</sup> and a tensile strain of 1 - 4%.

WAGO "Alu-Plus" contact paste also allows WAGO spring-clamp terminal blocks to be reliably terminated with solid aluminum conductors up to 4 mm<sup>2</sup>/AWG 12.

### "Alu-Plus" Contact Paste:

- Prevents fresh oxidation at the clamping point
- Prevents electrolytic corrosion between aluminum and copper conductors.
- Provides long-term protection against corrosion

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned and then immediately be inserted into the clamping units filled with WAGO "Alu-Plus" contact paste.

It is, of course, also possible to apply WAGO "Alu-Plus" additionally on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:

2.5 mm<sup>2</sup> / AWG 14 = 16 A,  
4 mm<sup>2</sup> / AWG 12 = 22 A



**WAGO PUSH WIRE® connectors**  
Push nozzle of the "Alu-Plus" syringe into the center conductor entry hole of the WAGO PUSH WIRE® connector.



Press plunger until "Alu-Plus" is visible in the other holes.



**WAGO lighting connectors**  
Push nozzle of the "Alu-Plus" syringe first into the circular and then into the square conductor entry hole of the WAGO lighting connector.



Press plunger down until the "Alu-Plus" has filled both holes.



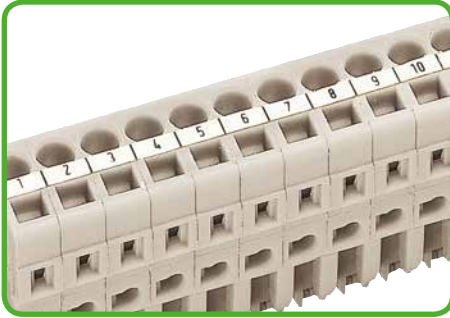
**WAGO rail-mount terminal blocks (only up to 4 mm<sup>2</sup>/AWG 12)**  
For each conductor entry: Insert nozzle of the "Alu-Plus" syringe in every open conductor entry hole (one after the other).



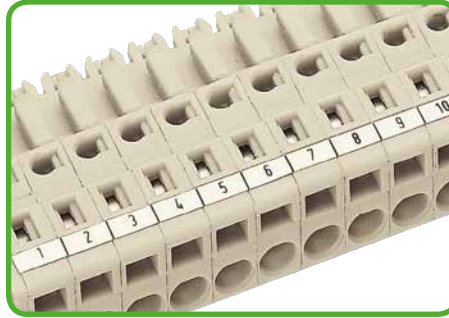
Press plunger down until "Alu-Plus" has filled each of these holes.

Self-adhesive marking strips on DIN A4 card

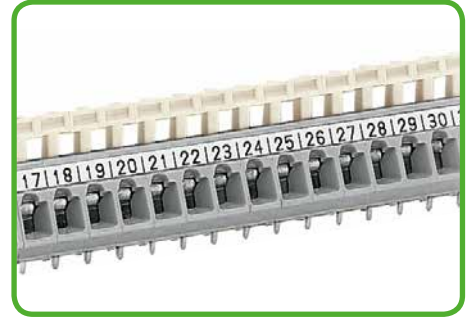
Pin spacing: 2.5 mm, 2.54 mm, 3.5 mm, 3.81 mm, 3.96 mm, 4 mm, 5 mm



MCS marking parallel to conductor entry



MCS marking perpendicular to conductor entry



Marking - PCB terminal blocks (256 Series)

**Pin Spacing: 2.5 mm/0.098 in**

|   | Marking           | Item No.               | Pack. Unit   |
|---|-------------------|------------------------|--|
| suitable for <b>MCS-MICRO</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series:<br><b>218 233 234 250</b> | 1 - 16 ( 400 x )  | <b>210-331/250-202</b> | <b>Marking strip height: 2.3 mm</b><br>1 card / 100 strips |
|   | 17 - 32 ( 400 x ) | <b>210-331/250-204</b> | 1 card / 100 strips  |
|   | 33 - 48 ( 400 x ) | <b>210-331/250-206</b> | 1 card / 100 strips  |
|   | 1 - 48 ( 400 x )  | <b>210-331/250-207</b> | 1 card / 100 strips  |

**Pin Spacing: 2.54 mm/0.1 in**

|  | Marking           | Item No.               | Pack. Unit   |
|--|-------------------|------------------------|--|
| suitable for Series:<br><b>218 233 234 250</b> | 1 - 16 ( 400 x )  | <b>210-331/254-202</b> | <b>Marking strip height: 2.3 mm</b><br>1 card / 100 strips |
|  | 17 - 32 ( 400 x ) | <b>210-331/254-204</b> | 1 card / 100 strips  |
|  | 33 - 48 ( 400 x ) | <b>210-331/254-206</b> | 1 card / 100 strips  |
|  | 1 - 48 ( 100 x )  | <b>210-331/254-207</b> | 1 card / 100 strips  |

**Pin Spacing: 3.5 mm/0.138 in**

|  | Marking           | Item No.               | Pack. Unit  |
|--|-------------------|------------------------|---|
| suitable for <b>MCS-MINI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series:<br><b>250 252 739 805</b> | 1 - 16 ( 240 x )  | <b>210-332/350-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|  | 17 - 32 ( 240 x ) | <b>210-332/350-204</b> | 1 card / 80 strips                                      |
|  | 33 - 48 ( 240 x ) | <b>210-332/350-206</b> | 1 card / 80 strips                                      |

**Pin Spacing: 3.81 mm/0.15 in**

|  | Marking           | Item No.               | Pack. Unit  |
|--|-------------------|------------------------|---|
| suitable for Series:<br><b>235 734 735 739</b> | 1 - 16 ( 160 x )  | <b>210-332/381-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|  | 17 - 32 ( 160 x ) | <b>210-332/381-204</b> | 1 card / 80 strips                                      |
|  | 33 - 48 ( 160 x ) | <b>210-332/381-206</b> | 1 card / 80 strips                                      |
|  | 1 - 32 ( 80 x )   | <b>210-332/381-205</b> | 1 card / 80 strips                                      |

**Pin Spacing: 3.96 mm/0.156 in**

|                                | Marking           | Item No.               | Pack. Unit  |
|--------------------------------|-------------------|------------------------|---|
| suitable for <b>235 Series</b> | 1 - 16 ( 160 x )  | <b>210-332/396-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|                                | 17 - 32 ( 160 x ) | <b>210-332/396-204</b> | 1 card / 80 strips                                      |
|                                | 33 - 48 ( 160 x ) | <b>210-332/396-206</b> | 1 card / 80 strips                                      |
|                                | 1 - 32 ( 80 x )   | <b>210-332/396-205</b> | 1 card / 80 strips                                      |

**Pin Spacing: 4 mm/0.157 in**

|                                | Marking           | Item No.               | Pack. Unit  |
|--------------------------------|-------------------|------------------------|---|
| suitable for <b>235 Series</b> | 1 - 16 ( 160 x )  | <b>210-332/400-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|                                | 17 - 32 ( 160 x ) | <b>210-332/400-204</b> | 1 card / 80 strips                                      |
|                                | 33 - 48 ( 160 x ) | <b>210-332/400-206</b> | 1 card / 80 strips                                      |
|                                | 1 - 32 ( 80 x )   | <b>210-332/400-205</b> | 1 card / 80 strips                                      |

**Pin Spacing: 5 mm/0.197 in**

|  | Marking           | Item No.               | Pack. Unit   |
|--|-------------------|------------------------|--|
| suitable for <b>MCS-MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series:<br><b>235 236 250 253 254 255 256 257 736 737 738 739 740 741 745 806 816</b> | 1 - 16 ( 160 x )  | <b>210-332/500-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips    |
|  | 17 - 32 ( 160 x ) | <b>210-332/500-204</b> | 1 card / 80 strips   |
|  | 33 - 48 ( 160 x ) | <b>210-332/500-206</b> | 1 card / 80 strips   |
|  | 1 - 32 ( 80 x )   | <b>210-332/500-205</b> | 1 card / 80 strips   |
| suitable for <b>MCS-MIDI</b> male and female connectors with <b>CAGE CLAMP®</b> connection (parallel to conductor entry) and <b>804 Series</b>   | 1 - 12 ( 300 x )  | <b>210-331/500-103</b> | <b>Marking strip height: 2.3 mm</b><br>1 card / 100 strips |
|  | 13 - 24 ( 300 x ) | <b>210-331/500-104</b> | 1 card / 100 strips  |

## Self-adhesive marking strips on DIN A4 card

Pin spacing: 5.08 mm, 5.75 mm, 7 mm, 7.5 mm, 7.62 mm, 10 mm, 10.16 mm

| Pin Spacing: 5.08 mm/0.2 in  | Marking           | Item No.               | Pack. Unit   |
|--|-------------------|------------------------|--|
| suitable for <b>MCS-MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series:<br><b>235 236 254 255 256 257</b><br><b>736 737 738 739 741</b> | 1 - 16 ( 160 x )  | <b>210-332/508-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips    |
|  | 17 - 32 ( 160 x ) | <b>210-332/508-204</b> | 1 card / 80 strips   |
|  | 33 - 48 ( 160 x ) | <b>210-332/508-206</b> | 1 card / 80 strips   |
|  | 1 - 32 ( 80 x )   | <b>210-332/508-205</b> | 1 card / 80 strips   |
| suitable for <b>MCS-MIDI</b> male and female connectors with CAGE CLAMP® connection (parallel to conductor entry)  | 1 - 12 ( 200 x )  | <b>210-331/508-103</b> | <b>Marking strip height: 2.3 mm</b><br>1 card / 100 strips |
|  | 13 - 24 ( 200 x ) | <b>210-331/508-104</b> | 1 card / 100 strips  |

| Pin Spacing: 5.75 mm/0.226 in  | Marking          | Item No.               | Pack. Unit  |
|--------------------------------|------------------|------------------------|---|
| suitable for <b>243</b> Series | 1 - 12 ( 160 x ) | <b>210-332/575-103</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |

| Pin Spacing: 7 mm              | Marking          | Item No.               | Pack. Unit  |
|--------------------------------|------------------|------------------------|---|
| suitable for <b>826</b> Series | 1 - 12 ( 160 x ) | <b>210-332/700-103</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|                                | 12 - 1 ( 160 x ) | <b>210-332/700-102</b> | 1 card / 80 strips                                      |

| Pin Spacing: 7.5 mm/0.295 in   | Marking          | Item No.               | Pack. Unit   |
|--|------------------|------------------------|--|
| suitable for <b>MCS-MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series:<br><b>235 236 239 250 254 255</b><br><b>256 257 736 737 739 741 746 745</b> | 1 - 20 ( 80 x )  | <b>210-332/750-020</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips    |
|  |                  |                        |  |
| suitable for <b>MCS-MIDI</b> male and female connectors with CAGE CLAMP® connection (parallel to conductor entry) and <b>804</b> Series  | 1 - 16 ( 100 x ) | <b>210-331/750-202</b> | <b>Marking strip height: 2.3 mm</b><br>1 card / 100 strips |

| Pin Spacing: 7.62 mm/0.3 in  | Marking          | Item No.               | Pack. Unit   |
|--|------------------|------------------------|--|
| suitable for <b>MCS-MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series:<br><b>235 236 254 255 256</b><br><b>257 736 737 739 741</b> | 1 - 20 ( 80 x )  | <b>210-332/762-020</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips    |
|  |                  |                        |  |
| suitable for <b>MCS-MIDI</b> male and female connectors with CAGE CLAMP® connection (parallel to conductor entry)  | 1 - 16 ( 100 x ) | <b>210-331/762-202</b> | <b>Marking strip height: 2.3 mm</b><br>1 card / 100 strips |
| suitable for <b>MCS-MAXI</b> male and female connectors  | 1 - 16 ( 100 x ) | <b>210-334/762-202</b> | <b>Marking strip height: 5 mm</b><br>1 card / 48 strips    |

| Pin Spacing: 10 mm/0.394 in  | Marking          | Item No.                | Pack. Unit  |
|--|------------------|-------------------------|---|
| suitable for Series:<br><b>235 236 254 255 256 257</b><br><b>736 737 741 745</b> | 1 - 16 ( 80 x )  | <b>210-332/1000-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|  | 17 - 32 ( 80 x ) | <b>210-332/1000-204</b> | 1 card / 80 strips                                      |
|  | 33 - 48 ( 80 x ) | <b>210-332/1000-206</b> | 1 card / 80 strips                                      |

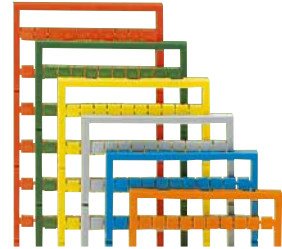
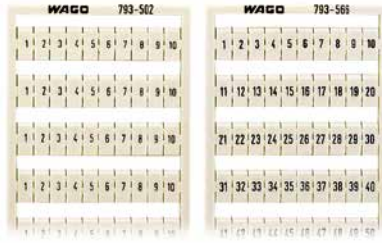
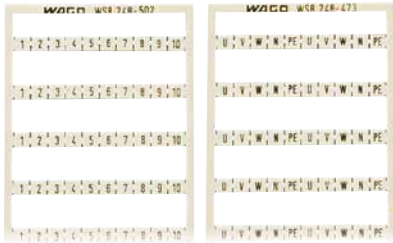
| Pin Spacing: 10.16 mm/0.4 in   | Marking          | Item No.                | Pack. Unit  |
|--|------------------|-------------------------|---|
| suitable for Series:<br><b>235 236 254 255 256 257</b><br><b>736 737 741</b> | 1 - 16 ( 80 x )  | <b>210-332/1016-202</b> | <b>Marking strip height: 3 mm</b><br>1 card / 80 strips |
|  | 17 - 32 ( 80 x ) | <b>210-332/1016-204</b> | 1 card / 80 strips                                      |
|  | 33 - 48 ( 80 x ) | <b>210-332/1016-206</b> | 1 card / 80 strips                                      |

| Available for all pin spacing dimensions:   | Marking Strip Height | Item No.                | Pack. Unit          |
|---|----------------------|-------------------------|---------------------|
| plain   | 2.3 mm               | <b>210-331</b>          | 1 card / 100 strips |
|   | 3 mm                 | <b>210-332</b>          | 1 card / 80 strips  |
|   | 5 mm                 | <b>210-334</b>          | 1 card / 48 strips  |
| Only separators printed (xxxx = pin spacing)<br>Ordering example: 5.08 mm pin spacing, 3 mm height: <b>210-332/0508-001</b> | 2.3 mm               | <b>210-331/xxxx-001</b> | 1 card / 100 strips |
|   | 3 mm                 | <b>210-332/xxxx-001</b> | 1 card / 80 strips  |
|   | 5 mm                 | <b>210-334/xxxx-001</b> | 1 card / 48 strips  |

\* Plain marking cards can be printed using WAGO smart SCRIPT. WAGO smartSCRIPT is part of the WAGO ProServe® Software. You can download this software free of charge at [www.wago.com](http://www.wago.com).



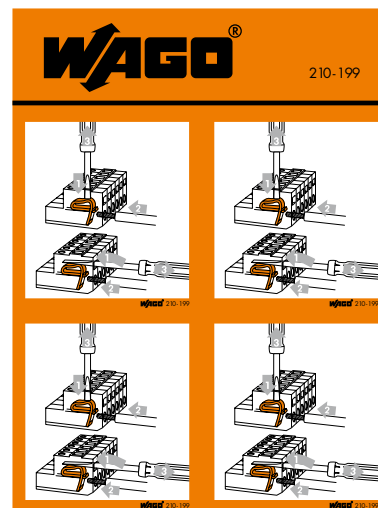
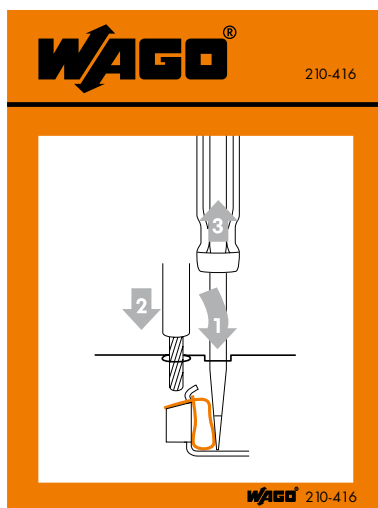
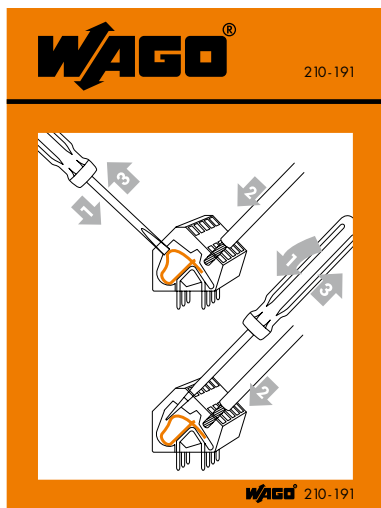
|   |   |                                       |
|---|---|---------------------------------------|
| <b>Horizontal marking</b><br>Consecutive numbers/letters each strip | <b>Horizontal marking</b><br>Consecutive numbers each strip | <b>Horizontal marking</b><br>In color |
|---|---|---------------------------------------|



| Marking per card  | Item No.       | Pack. Unit | Marking per card  | Item No.       | Pack. Unit | Color   | Item No.    | Pack. Unit |
|---|----------------|------------|---|----------------|------------|---|-------------|------------|
| <b>Mini-WSB marker card,</b><br>e.g., for 745 and 831 Series<br>10 strips with 10 makers per card |                |            | <b>WMB marker card,</b><br>e.g., for 745 Series (4 mm <sup>2</sup> /10 mm pin spacing)<br>and 831 Series<br>10 strips with 10 makers per card |                |            | <b>Item no. suffixes for colored maker cards:</b><br>e.g., for 745 and 831 Series<br>10 strips with 10 makers per card        |             |            |
| 1 - 10 (10x)  | <b>248-502</b> | 5 cards    | 1 - 10 (10x)  | <b>793-502</b> | 5 cards    | yellow  | .../000-002 |            |
| 11 - 20 (10x)   | <b>248-503</b> | 5 cards    | 11 - 20 (10x)   | <b>793-503</b> | 5 cards    | red   | .../000-005 |            |
| 21 - 30 (10x)   | <b>248-504</b> | 5 cards    | 21 - 30 (10x)   | <b>793-504</b> | 5 cards    | blue  | .../000-006 |            |
| 31 - 40 (10x)   | <b>248-505</b> | 5 cards    | 31 - 40 (10x)   | <b>793-505</b> | 5 cards    | gray  | .../000-007 |            |
| 41 - 50 (10x)   | <b>248-506</b> | 5 cards    | 41 - 50 (10x)   | <b>793-506</b> | 5 cards    | orange  | .../000-012 |            |
| 51 - 60 (10x)   | <b>248-569</b> | 5 cards    | 51 - 60 (10x)   | <b>793-569</b> | 5 cards    | light green   | .../000-017 |            |
| 61 - 70 (10x)   | <b>248-570</b> | 5 cards    | 61 - 70 (10x)   | <b>793-570</b> | 5 cards    | green   | .../000-023 |            |
| 71 - 80 (10x)   | <b>248-571</b> | 5 cards    | 71 - 80 (10x)   | <b>793-571</b> | 5 cards    | violet  | .../000-024 |            |
| 81 - 90 (10x)   | <b>248-572</b> | 5 cards    | 81 - 90 (10x)   | <b>793-572</b> | 5 cards    |   |             |            |
| 91 - 100 (10x)  | <b>248-573</b> | 5 cards    | 91 - 100 (10x)  | <b>793-573</b> | 5 cards    |   |             |            |
|   |                |            |   |                |            | <b>Ordering example: Mini-WSB</b><br>Marking on yellow card, 41 - 50,<br><b>248-506/000-002</b>                               |             |            |
| 1 - 50 (2x)   | <b>248-566</b> | 5 cards    | 1 - 50 (2x)   | <b>793-566</b> | 5 cards    |   |             |            |
| 51 - 100 (2x)   | <b>248-507</b> | 5 cards    | 51 - 100 (2x)   | <b>793-507</b> | 5 cards    |   |             |            |
| 101 - 150 (2x)  | <b>248-508</b> | 5 cards    | 101 - 150 (2x)  | <b>793-508</b> | 5 cards    |   |             |            |
| 151 - 200 (2x)  | <b>248-509</b> | 5 cards    | 151 - 200 (2x)  | <b>793-509</b> | 5 cards    |   |             |            |
| 201 - 300 (2x)  | <b>248-510</b> | 5 cards    | 201 - 300 (2x)  | <b>793-510</b> | 5 cards    |   |             |            |
| 301 - 400 (2x)  | <b>248-511</b> | 5 cards    | 301 - 400 (2x)  | <b>793-511</b> | 5 cards    |   |             |            |
| 401 - 500 (2x)  | <b>248-512</b> | 5 cards    | 401 - 500 (2x)  | <b>793-512</b> | 5 cards    |   |             |            |
| 501 - 600 (2x)  | <b>248-513</b> | 5 cards    | 501 - 600 (2x)  | <b>793-513</b> | 5 cards    |   |             |            |
| 601 - 700 (2x)  | <b>248-514</b> | 5 cards    | 601 - 700 (2x)  | <b>793-514</b> | 5 cards    |   |             |            |
| 701 - 800 (2x)  | <b>248-515</b> | 5 cards    | 701 - 800 (2x)  | <b>793-515</b> | 5 cards    |   |             |            |
| 801 - 900 (2x)  | <b>248-516</b> | 5 cards    | 801 - 900 (2x)  | <b>793-516</b> | 5 cards    |   |             |            |
| 901 - 1000 (2x)   | <b>248-517</b> | 5 cards    | 901 - 1000 (2x)   | <b>793-517</b> | 5 cards    |   |             |            |
| 1 - 9, ; (10x)  | <b>248-565</b> | 5 cards    | 1 - 9, ; (10x)  | <b>793-565</b> | 5 cards    |   |             |            |
|   |                |            |   |                |            |   |             |            |
| U, V, W, N, PE, U, V, W, N, PE; (10x)   | <b>248-474</b> | 5 cards    |   |                |            |   |             |            |
| L1, L2, L3, N, PE, L1, L2, L3, N, PE; (10x)   | <b>248-472</b> | 5 cards    |   |                |            |   |             |            |
| plain, for self-marking   | <b>248-501</b> | 5 cards    | plain, for self-marking   | <b>793-501</b> | 5 cards    |   |             |            |
|   |                |            |   |                |            |   |             |            |
| <b>Felt-tip pen, for permanent marking</b>  |                |            | <b>210-110</b>  |                |            | <b>Note:</b><br>Please note that colored marker cards are normally on longer delivery and more expensive than standard cards. |             |            |

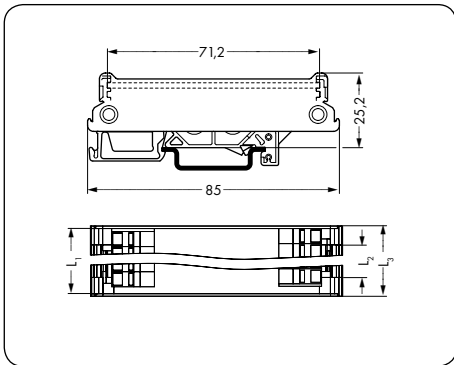
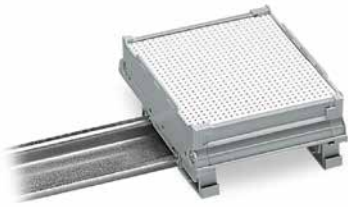


|   |  |   |
|---|--|---|
| <p><b>Operating stickers</b></p> <p>for PCB terminal blocks with<br/>CAGE CLAMP® connection</p> | <p><b>Operating sticker</b></p> <p>for CAGE CLAMP® connection,<br/>universal</p> | <p><b>Operating sticker</b></p> <p>für MCS connectors</p> |
|---|--|---|

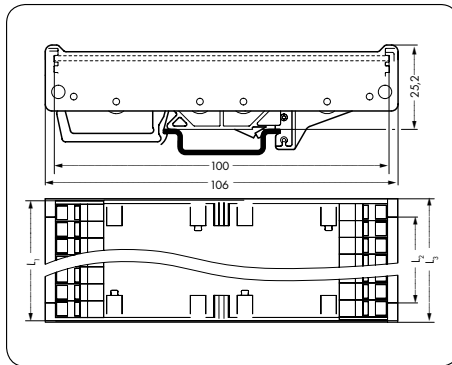


| Series   | Item No.       | Pack. Unit | Item No.   | Pack. Unit | Item No.       | Pack. Unit   |  |  |
|--|----------------|------------|--|------------|----------------|--|--|--|
| <b>Operating stickers for PCB terminal blocks</b><br>Size: 60 mm x 63 mm |                |            | <b>Operating sticker for CAGE CLAMP®, universal</b><br>Size: 60 mm x 63 mm |            |                | <b>Operating sticker for MCS with CAGE CLAMP®</b><br>Size: (30 x 30) mm x 4 mm |  |  |
| 236  | <b>210-191</b> | 100        | <b>210-416</b>   | 100        | <b>210-199</b> | 100  |  |  |
| 736, 737 and 738   | <b>210-406</b> | 100        |  |            |                |  |  |  |

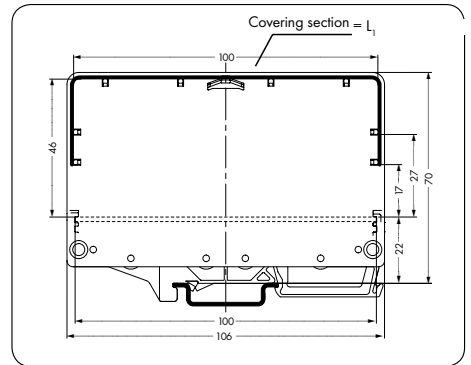
|   |   |  |
|---|---|--|
| <b>DIN-rail mount PCB carrier</b><br>Size 1 | <b>DIN-rail mount PCB carrier</b><br>Size 2 | <b>DIN-rail mount PCB carrier</b><br>Size 2<br>with cover and end plates |
|---|---|--|



$L_1$  = PCB length  
 $L_2 = L_1 - 11$  mm ( $L_2$  = Carrier base length)  
 $L_3 = L_1 + 2$  mm

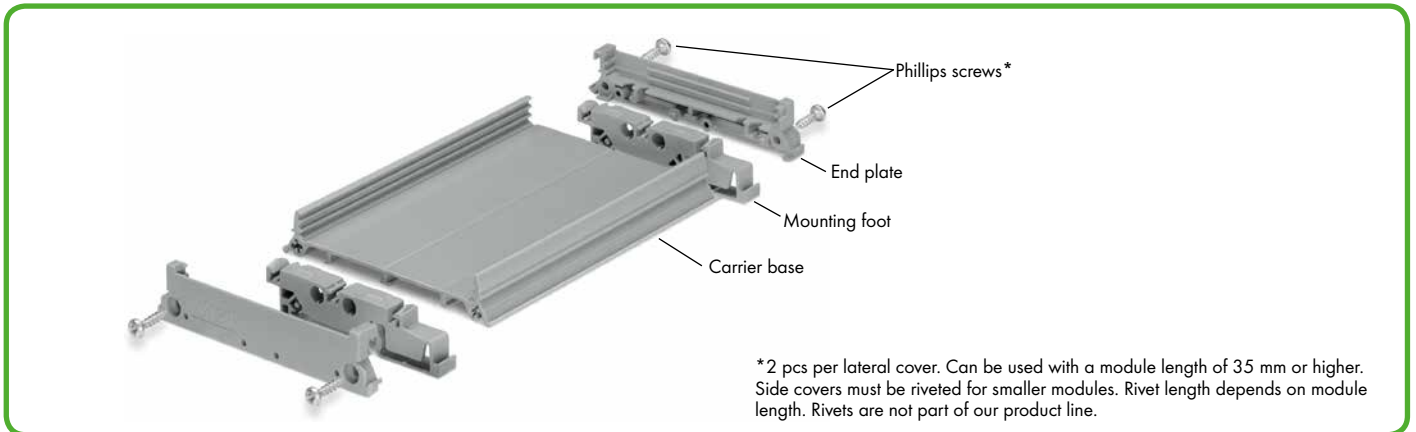


$L_1$  = PCB/Cover length  
 $L_2 = L_1 - 15.8$  mm ( $L_2$  = Carrier base length)  
 $L_3 = L_1 + 2$  mm



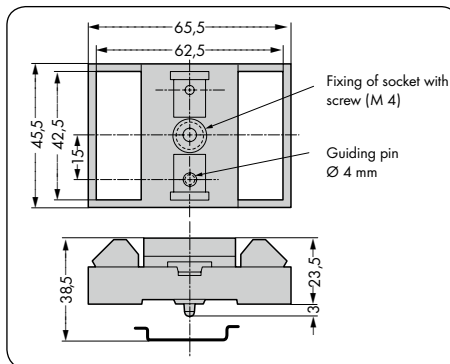
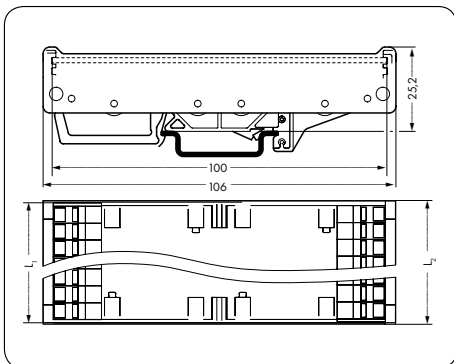
| Item No.                                      | Length         | Pack. Unit | Item No.                                      | Length | Pack. Unit | Item No.   | Length | Pack. Unit |
|---|----------------|------------|---|--------|------------|--|--------|------------|
| <b>DIN-rail mount PCB carrier, size 1</b>     |                |            | <b>DIN-rail mount PCB carrier, size 2</b>     |        |            | <b>DIN-rail mount PCB carrier, size 2 with cover</b> |        |            |
| End plate, size 1                             |                |            | End plate, size 2                             |        |            | End plate, size 2                                    |        |            |
| <b>288-601</b>                                |                | 1          | <b>288-621</b>                                |        | 1          | <b>288-626</b>                                       |        | 1          |
| Mounting foot for DIN 35 rail                 |                |            | Mounting foot for DIN 35 rail                 |        |            | Cover, size 2  |        |            |
| <b>288-602</b>                                |                | 1          | <b>288-622</b>                                |        | 1          | <b>288-627</b>                                       | 1 m    | 1          |
| Carrier base, size 1                          |                |            | Carrier base, size 2                          |        |            |  |        |            |
| <b>288-600</b>                                | 1 m            | 1          | <b>288-620</b>                                | 1 m    | 1          |  |        |            |
| Phillips screw 2.9 x 13*                      |                |            | Phillips screw 2.9 x 13*                      |        |            |  |        |            |
| <b>210-533</b>                                |                | 25         | <b>210-533</b>                                |        | 25         |  |        |            |
| Marking strips 7.5 x 0.5 mm                   |                |            |   |        |            |  |        |            |
| translucent                                   | <b>709-196</b> | 1 m        |   |        |            |  |        |            |
| white   | <b>709-198</b> | 1 m        |   |        |            |  |        |            |
| PCB is not included in the scope of delivery. |                |            | PCB is not included in the scope of delivery. |        |            | PCB is not included in the scope of delivery.        |        |            |

Minimum PCB length without carrier base, size 1:  $L_1 = 11$  mm, size 2:  $L_1 = 15.8$  mm  
 Free space between base and PCB bottom side: 5 mm  
 PCB tolerances: 1.5 mm  $\pm$  0.2 mm (thickness),  $\pm$  0.2 mm (length/width); -0.1/+0.3 for milling contours



\*2 pcs per lateral cover. Can be used with a module length of 35 mm or higher. Side covers must be riveted for smaller modules. Rivet length depends on module length. Rivets are not part of our product line.

|  |  |  |
|--|--|--|
| <p><b>DIN-rail mount PCB carrier, complete assembly</b></p> <p>for 100 x 160 mm PCBs</p> | <p><b>DIN-rail mount PCB carrier</b></p> |  |
|--|--|--|



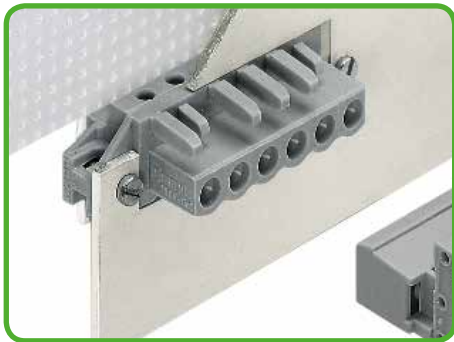
L<sub>1</sub> = 160 mm (PCB length)  
 L<sub>2</sub> = 162 mm

| Item No.   | Pack. Unit | Item No.   | Pack. Unit |
|--|------------|--|------------|
| <b>DIN-rail mount PCB carrier, suitable for "Eurocard" PCBs (100 x 160 mm)</b> |            | <b>DIN-rail mount PCB carrier, for screw fixing or DIN-rail mounting via snap-fit type universal mounting feet, suitable for 42.5 x 62.5 mm PCBs</b> |            |
| <b>288-003</b>   | 1          | <b>288-001</b>   | 1          |
|  |            | Universal mounting foot, snap-fit type, suitable for DIN 15, 32 and 35 rails   |            |
|  |            | <b>288-002</b>   | 10         |
| PCB is not included in the scope of delivery.                                  |            | PCB is not included in the scope of delivery.  |            |

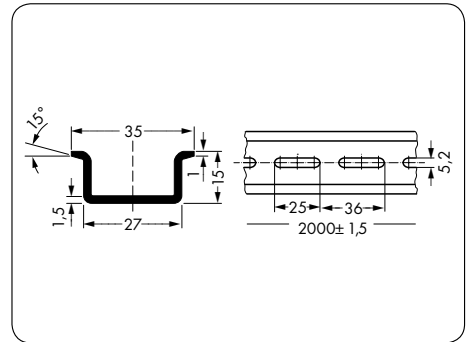
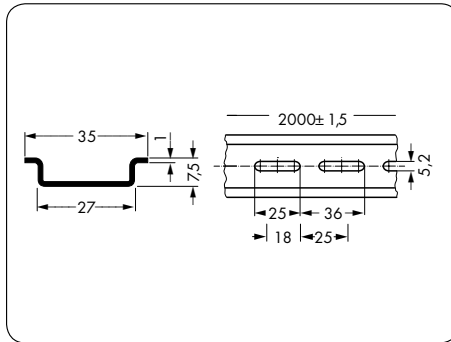
|               |   |  |
|---------------|---|--|
| <b>Screws</b> | <b>Steel carrier rails 35 x 7.5 mm</b><br>to EN 60715 | <b>Steel carrier rails 35 x 15 mm</b><br>to EN 60715 |
|---------------|---|--|



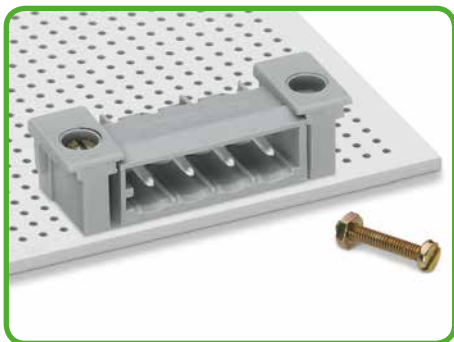
| Dimensions  | Item No.       | Pack. Unit    | Item No.  | Pack. Unit               | Item No.  | Pack. Unit               |
|---|----------------|---------------|---|--------------------------|---|--------------------------|
| <b>Tapping screws,</b><br>for 1.8 mm mounting hole diameter             |                |               | <b>Steel carrier rail, I<sub>N</sub> 76 A</b><br>(based on 1 m length)<br>35 x 7.5 mm, 1 mm thick, 2 m long |                          | <b>Steel carrier rail, I<sub>N</sub> 125 A</b><br>(based on 1 m length)<br>35 x 15 mm, 1.5 mm thick, 2 m long |                          |
| B 2.2 x 9.5 mm  | <b>209-147</b> | 200 (2 x 100) | unslotted   | <b>210-113</b> 10 (10x1) | unslotted   | <b>210-114</b> 10 (10x1) |
| B 2.2 x 13 mm   | <b>231-194</b> | 200 (2 x 100) | Hole width: 25 mm; hole spacing: 36 mm<br>slotted   | <b>210-112</b> 10 (10x1) | Hole width: 25 mm; hole spacing: 36 mm<br>slotted   | <b>210-197</b> 10 (10x1) |
| <b>Screws with nuts,</b><br>e.g., for fixing elements or fixing flanges |                |               | Hole width 18 mm; hole spacing 25 mm<br>slotted   | <b>210-115</b> 10 (10x1) |   |                          |
| M 2 x 12 mm   | <b>231-195</b> | 200 (2 x 100) |   |                          |   |                          |
| M 2.5 x 10 mm   | <b>231-295</b> | 200 (2 x 100) |   |                          |   |                          |



M 2.5 x 10 screws with nuts (e.g., for fixing flanges)



For the entire range of WAGO carrier rails, refer to Full Line Catalog, Volume 1, Rail-Mounted Terminal Block Systems, or go to [www.wago.com](http://www.wago.com)



M 2 x 12 screws with nuts (e.g., for fixing elements)

# Pin Terminals, Crimping Tool

|  |   |                                 |
|--|---|---------------------------------|
| Insulated pin terminals, copper alloy, tin-plated, for 271, 272 Series | Insulated pin terminals, copper alloy, tin-plated, for 293 Series | Crimping tool for pin terminals |
|--|---|---------------------------------|



| Cross Section mm <sup>2</sup>  | AWG   | Color | Strip Length mm   | I <sub>N</sub> A | L    | L1  | D mm | D1  | D2  | Item No. | Pack. Unit | Item No.   | Pack. Unit |
|--|-------|-------|-------------------|------------------|------|-----|------|-----|-----|----------|------------|--|------------|
| Insulated pin terminal, for 271, 272 Series (white terminal block side only) |       |       |                   |                  |      |     |      |     |     |          |            | Crimping tool for pin terminals, crimping range of 0.5 - 2.5 mm <sup>2</sup> |            |
| 0.5/0.75   | 20/18 | green | 4 <sup>+0.5</sup> | 6/8              | 19.2 | 7.5 | 1.27 | 3   | 4.7 | 209-151  | 100        | 210-176  | 1          |
| 1/1.5  | 18/16 | white | 4 <sup>+0.5</sup> | 10/16            | 19.2 | 7.5 | 1.73 | 3   | 4.7 | 209-164  | 100        |  |            |
| 2.5  | 14    | blue  | 5 <sup>+0.5</sup> | 20               | 18.2 | 7.5 | 2.3  | 3.8 | 5.5 | 209-157  | 100        |  |            |



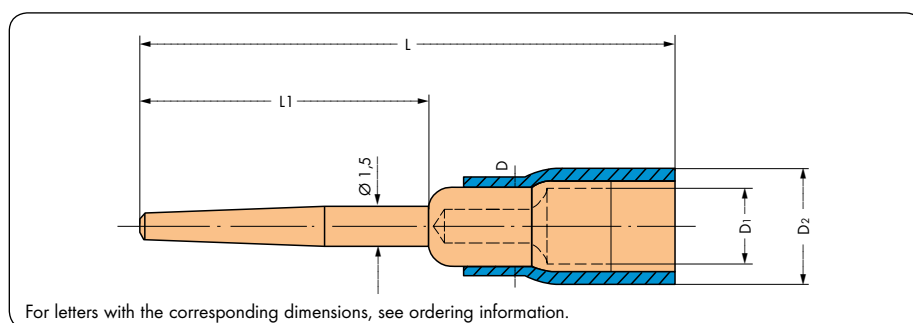
Push the pin terminal onto the conductor.

| Cross Section mm <sup>2</sup>   | AWG   | Color | Strip Length mm   | I <sub>N</sub> A | L    | L1   | D mm | D1  | D2  | Item No. | Pack. Unit |
|---|-------|-------|-------------------|------------------|------|------|------|-----|-----|----------|------------|
| Insulated pin terminal, for 293 Series (white terminal block side only) |       |       |                   |                  |      |      |      |     |     |          |            |
| 0.5/0.75  | 20/18 | green | 4 <sup>+0.5</sup> | 6/8              | 23.8 | 12.2 | 1.27 | 3   | 4.7 | 209-160  | 100        |
| 1/1.5   | 18/16 | white | 4 <sup>+0.5</sup> | 10/16            | 23.8 | 12.2 | 1.73 | 3   | 4.7 | 209-161  | 100        |
| 2.5   | 14    | blue  | 5 <sup>+0.5</sup> | 20               | 23.2 | 12.2 | 2.3  | 3.8 | 5.5 | 209-162  | 100        |



Insert conductor with pin terminal into crimping position and hold it securely while crimping.

## Dimensions



Squeeze the crimping tool beyond the lock-in position, then remove the conductor with crimped pin terminal.





# 10



|  |           |
|--|-----------|
| <b>Electrical Engineering Laboratory</b>                       | 518 - 519 |
| <b>Technical Explanations and Abbreviations</b>                | 520       |
| <b>CE Marking and EC Directives</b>                            | 521 - 523 |
| <b>Material Specification</b>                                  | 524 - 525 |
| <b>Current-Carrying Capacity, IP Ratings, Pollution degree</b> | 526 - 527 |
| <b>International Certification Organizations - Overview</b>    | 528 - 529 |
| <b>Approvals - User Guide</b>                                  | 530 - 531 |
| <b>Item Number Index</b>                                       | 532 - 543 |
| <b>WAGO Worldwide - Companies and Representatives -</b>        | 544 - 545 |

## Electrical Engineering Laboratory: Product Safety for Our Customers

The WAGO laboratory in Minden is an “accredited test lab for electrical and mechanical tests on terminal blocks and connectors, as well as for environment simulations.”

Accreditation, as ISO/IEC 17011:2004 defines, is a third party-attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.

Accreditation, according to DIN EN ISO/IEC 17025, is granted by the Deutsche Akkreditierungsstelle GmbH DAKkS (German Accreditation Office GmbH DAKkS). This national accreditation office, which was established by the German Federal Ministry for Economics and Technology (BMWi), certifies that our test laboratory is officially recognized as possessing the necessary expertise to conduct defined tests and types of tests independently and objectively.

Through obtaining the accreditation, the following objectives were achieved:

- Customer requirements
- Workflow optimization
- Clearly defined processes
- Clear organization and structure
- Greater transparency
- Consistent, high-quality laboratory testing
- Maximum traceability
- Traceable measurement results
- Sustainable quality awareness



• Visitor center



• Conductor retention force testing

• High-voltage test



• Vibration- and shock-resistance testing



Deutsche  
Gesellschaft für  
Akkreditierung mbH



**Deutsche Gesellschaft für Akkreditierung mbH**

Unterzeichner der Multilateralen Abkommen von  
EA und ILAC zur gegenseitigen Anerkennung

vertreten im

# Deutschen Akkreditierungsrat



## Akkreditierung

Die **DGA Deutsche Gesellschaft für Akkreditierung mbH** bestätigt hiermit, dass das  
Prüflaboratorium

**WAGO Kontakttechnik GmbH & Co. KG**  
Hansastraße 27  
D-32423 Minden / Germany

die Kompetenz nach DIN EN ISO/IEC 17025 besitzt, Prüfungen in den Bereichen

**Elektrische und mechanische Prüfungen an Klemmen und Steckverbinder  
sowie Umweltsimulation**

auszuführen. Die Anlage ist Bestandteil der Urkunde und besteht aus 6 Seiten.

Die Akkreditierung ist gültig vom **2009-12-22** bis **2014-12-21**.





DAR- Registriernummer: **DGA-PL-302/09-00**

Frankfurt, 2009-12-22

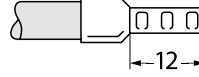
Dipl.-Ing. (FH) Ralf Egner  
Leiter der Abteilung Elektrotechnik/IT

Mitglied in EA, ILAC, IAF

Siehe Hinweise auf der Rückseite

|   |  |   |                                       |
|---|--|---|---------------------------------------|
| <p><b>0.25 - 2.5 (4) mm<sup>2</sup> ①</b><br/>                 800 V/8 kV/3<br/>                 I<sub>N</sub> 24 A<br/>                 Terminal block width 5.2 mm / 0.205 in<br/>  10 - 12 mm / 0.43 in<br/>                 ② Approvals</p> | <p>AWG 22 - 12<br/>                 600 V, 20 A <br/>                 600 V, 20 A </p> | <p><b>Pin spacing 5 mm / 0.197 in</b><br/>                 0.5 - 2.5 mm<sup>2</sup> "s+f-st"   AWG 20 - 12 "sol.+f-st"<br/>                 250 V/4 kV/3, 16 A   300 V, 10 A<br/>                 500 V/4 kV/2, 16 A<br/>  10 - 11 mm / 0.41 in<br/>                 ② Approvals</p> | <p><b>Connection technologies</b></p> |
|---|--|---|---------------------------------------|

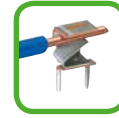
② Conductor sizes: 0.25 - 4 mm<sup>2</sup> "s+f-st";  
 Push-in conductor sizes: 0.75 - 4 mm<sup>2</sup> "s" and  
 0.75 - 2.5 mm<sup>2</sup> "insulated ferrule, 1.2 mm"  
 (Length on ferrule is ONLY related to metallic part)



**CAGE CLAMP®**



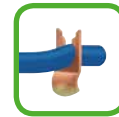
**CAGE CLAMP®S**



**PUSH WIRE®**



**POWER CAGE CLAMP®**



**FIT CLAMP®**

**Pin spacing 5 mm/0.197 in:** Terminal block pin spacing (e.g., for PCB terminal blocks and *MULTI CONNECTION SYSTEM*)


**0.25 - 2.5 (4) mm<sup>2</sup> / AWG 22 - 12:** Min. - max. conductor size, ferrules reduce cross section to 2.5 mm<sup>2</sup>/AWG 14 (see ①)


**800 V/250 V/500 V:** Rated voltage (see Full Line Catalog 1, Section 15)

**8 kV/4 kV:** Rated surge voltage (see Full Line Catalog 1, Section 15)

**3/2:** Degree of pollution (see Full Line Catalog 1, Section 15)


**I<sub>N</sub> 24 A/16 A:** Maximum current


**600 V, 20 A **: Voltage and current values according to UL approval

**600 V, 20 A **: Voltage and current values according to CSA approval

**300 V, 10 A:** Voltage and current values according to applied UL and CSA approvals

**Terminal block width 5.2 mm/0.205 in:** Width of modular terminal blocks (e.g., rail-mounted terminal blocks)

 **10 - 12 mm / 0.43 in:** Strip length (here, fine-stranded conductor)

 **10 - 11 mm / 0.41 in:** Strip length (here, solid conductor)

② Approvals (Current approvals are available online at: [www.wago.com](http://www.wago.com))

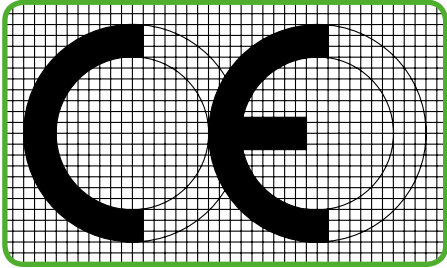
|                             |  |   |
|-----------------------------|--|---|
| <p><b>Abbreviations</b></p> | <p><b>"sol.":</b> solid conductor</p> <p><b>"f-st":</b> fine-stranded conductor</p> <p><b>"sol.+f-st":</b> solid and fine-stranded conductors</p> <p><b>AWG:</b> American Wire Gauge</p> | <p><b>I<sub>N</sub> 32 A:</b> Nominal current 32 A (e.g., for jumpers)</p> <p><b>WSB:</b> WAGO Quick marking system</p> <p><b>WCB:</b> WAGO Combi marking system</p> <p><b>WMB:</b> WAGO Multi marking system</p> |
|-----------------------------|--|---|



## CE Marking and EC Directives

### CE Conformity Marking:

The CE conformity marking consists of the characters "CE" with the following script:



Communauté Européenne  
(European Community)

EC directives are legally binding specifications for the European Community. Their goal is aligning legal and administrative specifications in the various EC member countries, in order to prevent trading hindrances arising from different national specifications.

In order to launch a product on the market, it must comply with the relevant directives. Several directives may apply for one single product, for example EMC and low voltage directives.

For WAGO products the following EC directives apply:

2006/95/EC  
– Low Voltage Directive

This directive covers electrical equipment designed for use with a voltage rating between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current.

This directive applies to products such as rail-mounted terminal blocks, terminal blocks, modular terminal blocks, terminal strips, etc. which comply with the specifications of the coordinated European standards and their specific parts (e.g., EN 60947 for rail-mounted terminal blocks and EN 60998 for terminal blocks).

The CE conformity marking must be applied to all electrical equipment, or, should this not be possible, to the smallest packing unit. With the CE marking, manufacturers attest conformity of their products to relevant directives.

In addition to the CE marking, the manufacturer provides an EC "Declaration of Conformity" for the product. The manufacturer must retain this declaration of conformity and present it on request to a national surveillance authority.

2004/108/EC  
– EMC Directive

This directive applies to any apparatuses, equipment and systems containing electric or electronic components. The BAPT (Bundesamt für Post und Telekommunikation / Federal Office for Post and Telecommunications) is authorized to draw a distinction between elementary and complex components. Elementary components such as resistors, transformers, ICs, relays, etc. are not provided with marking. For complex components, such as electro-motors, electronic cards, thermostats, etc., the EMC directives apply only if these components are sold directly to the end user.

All products subject to the application range of the EMC directive must display the CE marking on their housing. This marking proves conformity with the corresponding standards.

2006/42/EC  
– Machinery Directive

This directive applies to "complete" machines or equipment.

The manufacturers of machines or equipment are, however, obliged to use components which meet the corresponding EC directives (e.g., low voltage or EMC directives).

Fulfillment and conformity with these directives is required for the free exchange of goods within Europe.

94/9/EC Ex Protection Directive, ATEX 100a  
Explosion-proof devices.  
General technical information on electrical equipment used in hazardous environments.

In particular, the following standards apply to the design and application of the terminal blocks and connectors contained in this catalog:

- |   |   |  |
|---|---|--|
| IEC 60364-1<br>VDE 0100-100<br>/.. Erection of power installations with nominal voltages up to 1000 V<br>- Fundamental principles, assessment of general characteristics, definitions | IEC 60079-7<br>EN 60079-7<br>VDE 0170 Part 6<br>/ Electrical apparatus for potentially explosive atmospheres<br>- Increased safety "e"  | IEC 61439-1<br>EN 61439-1<br>VDE 0660 Part 600<br>/ Low-voltage switchgear and control-gear assemblies - General Rules   |
| EN 50110-1<br>VDE 0105 Part 1<br>/ Operation of electrical installations  | IEC 60079-11<br>EN 60079-11<br>VDE 0170 Part 7<br>/ Electrical apparatus for potentially explosive atmospheres<br>- Intrinsic safety "i"  | IEC 60439-3<br>EN 60439-3<br>VDE 0660 Part 504<br>/- Particular requirements for low-voltage switchgear and control gear assemblies intended to be installed in places where unskilled persons have access<br>- Distribution boards  |
| IEC 61140<br>EN 61140<br>VDE 0140 Part 1<br>/ Protection against electric shock<br>- Common aspects for installation and equipment  | IEC 60079-14<br>EN 60079-14<br>VDE 0165 Part 1<br>/ Erection of electrical installations in hazardous areas   | IEC 61643-1<br>EN 61643-11<br>VDE 0675 Part 6-11<br>/ Surge protective devices connected to low-voltage power distribution systems,<br>- Performance requirements and testing methods  |
| VDE 0100-482<br>HD 384.4.482S1<br>/Erection of power installations with nominal voltages up to 1000 V<br>Fire protection for special risks or hazards                                 | IEC 60079-15<br>EN 60079-15<br>VDE 0170 Part 16<br>/ Electrical apparatus for potentially explosive atmospheres<br>- Type of protection "n"   | IEC 60335-1<br>EN 60335-1<br>VDE 0700 Part 1<br>/ Safety of household and similar electrical appliances<br>- General requirements  |
| VDE 0100 Part 710<br>/- Requirements for special installations or locations Part 710: Medically used areas  | IEC 60038<br>HD 472 S1<br>VDE 0175<br>/ IEC standard voltages   | IEC 60598-1<br>EN 60598-1<br>VDE 0711 Part 1<br>/ Lighting fixtures<br>- General requirements and tests  |
| VDE 0100-718<br>/- Requirements for special installations or locations<br>Part: 718: Institutional facilities   | DIN VDE 0298 Part 4<br>/ Application of cables and flexible cords in power installations<br>- Recommended values for current carrying capacities of cables for fixed installation in and on buildings and for flexible cables | IEC 60715<br>EN 60715<br>/- Standardized carrier rails for mechanical attachment of electrical devices in switchgear units   |
| IEC 60664-1<br>EN 60664-1<br>VDE 0110 Part 1<br>/ Insulation coordination for equipment within low-voltage systems<br>- Fundamental principles, requirements and tests                | IEC 60112<br>EN 60112<br>VDE 0303 Part 11<br>/ Method for determining the comparative and the proof tracking indices of solid insulating materials  | IEC 60999-1<br>EN 60999-1<br>VDE 0609 Part 1<br>/ Connecting devices -Electrical copper conductors- Safety requirements for screw-type and screwless-type clamping units<br>- General requirements and particular requirements for clamping units for conductors from 0.2 mm <sup>2</sup> up to 35 mm <sup>2</sup> |
| IEC 60204-1<br>EN 60204-1<br>VDE 0113 Part 1<br>/ Safety of machinery<br>- General requirements   | IEC 60529<br>EN 60529<br>VDE 0470 Part 1<br>/ Degrees of protection provided by enclosures (IP Code)<br>- Testing equipment and testing method  |  |
| IEC 60079-0<br>EN 60079-0<br>VDE 0170 Part 1<br>/ Electrical apparatus for potentially explosive atmospheres<br>- General requirements  |   |  |



- IEC 60999-2  
EN 60999-2  
VDE 0609 Part 101  
/- General requirements and particular requirements for clamping units for conductors from 35 mm<sup>2</sup> up to 300 mm<sup>2</sup> (included)
- IEC 60998-1  
EN 60998-1  
VDE 0613 Part 1  
/ Connecting devices for low-voltage circuits for household and similar purposes  
- General requirements
- IEC 60998-2-1  
EN 60998-2-1  
VDE 0613 Part 2-1  
/- Special requirements for connecting devices as standalone devices with screw-type terminals
- IEC 60998-2-2  
EN 60998-2-2  
VDE 0613 Part 2-2  
/- Special requirements for connecting devices as standalone devices with screwless-type terminals
- IEC 60998-2-3  
EN 60998-2-3  
VDE 0613 Part 2-3  
/- Special requirements for connecting devices as standalone devices with insulation piercing clamping units
- IEC 60947-1  
EN 60947-1  
VDE 0660 Part 100  
/ Low-voltage switchgear and control gear  
- General rules
- IEC 60947-7-1  
EN 60947-7-1  
VDE 0611 Part 1  
/- Ancillary equipment, Terminal blocks for copper conductors
- IEC 60947-7-2  
EN 60947-7-2  
VDE 0611 Part 3  
/- Ancillary equipment; Ground (earth) conductor terminal blocks
- DIN VDE 0611 Part 4  
/ Rail-mounted terminal blocks for connection of copper conductors;  
- Multi-level distribution rail-mounted terminal blocks up to 6 mm<sup>2</sup>
- IEC 60947-7-3  
EN 60947-7-3  
VDE 0611 Part 6  
/- Ancillary equipment; Safety requirements for fuse terminal blocks
- IEC 61984  
EN 61984  
VDE 0627  
/ Connectors - Safety requirements and tests
- IEC 60512-1  
EN 60512-1  
/ Connectors for electronic equipment – Tests and measurements  
- General
- IEC 60320-1  
EN 60320-1  
VDE 0625 Part 1  
/ Appliance couplers for household and similar general purposes  
- General requirements
- IEC 60352-1  
EN 60352-1  
/ Solderless connections;  
Wrapped connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-2  
EN 60352-2  
/ Solderless connections;  
Solderless crimped connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-3  
EN 60352-3  
/ Solderless connections;  
Solderless accessible insulation displacement connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-4  
EN 60352-4  
/ Solderless connections;  
Solderless non-accessible insulation displacement connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-5  
EN 60352-5  
/ Solderless connections;  
Solderless press-in connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-6  
EN 60352-6  
/ Solderless connections;  
Insulation piercing connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-7  
EN 60352-7  
/ Solderless connections;  
Spring clamp connections  
- General requirements,  
Test methods and practical guidance

**Nylon (PA 6.6)**

WAGO uses a modified nylon that is **free** of halogens, chlorinated hydrocarbons, silicone, asbestos, cadmium and formaldehyde.

This material does not corrode, is difficult to ignite, self-extinguishing (VO rating to UL 94) and is temperature-stabilized, allowing long-term temperature resistance up to 105°C (221°F).

Long-term thermal stability refers to UL "Mechanical Impact RTI" (Relative Temperature Index) and guarantees adequate safety margin in terms of electrical and mechanical insulation properties. The short-term upper temperature limit is 200°C (392°F).

The same philosophy also forms the basis for data relevant to the lower temperature limit.

Insulating material can be handled at temperatures as low as -35°C (-31°F) without damage. After installation and wiring, WAGO products can even be used at temperatures down to -60°C (-76°F).

Environmental humidity (up to 2.5 % on average) is absorbed chemically, achieving optimum elasticity and fracture safety.

In practical use, basic stabilization provides sufficient protections against damage by ozone or ultraviolet light for long-term use. Resistance against adverse climate conditions is excellent and nylon has proven itself in tropical applications.

Insulating parts produced from nylon are resistant to termites. The material does not provide oxygen or other biogenic elements to microorganisms. The presence of anaerobic earth bacteria, mold, fungus and enzymes does not result in degradation of the material. Resistance to fuels, most oils and greases, as well as the most common cleaning agents (e.g., alcohol, Freon, Frigen, carbon tetrachloride) is excellent. Acid resistance depends on the acid type and concentration. More details are available upon request.

WAGO only accepts deliveries of granular insulation material against certificates of conformity and after select material tests.

**Nylon 4.6 (PA 4.6)**

In comparison with nylon 6.6, nylon 4.6 features a much higher dimensional stability under heat. Long-term temperature resistance under RTI impact mechanical stress is 115°C (239°F). Long-term heat resistance after 10,000 hours is 140°C (284°F). Short-time upper temperature limit is 280°C (536°F) for nylon 4.6 used by WAGO.

For more information, see table.

Glass fiber-reinforced nylon (PA-GF) Thanks to its excellent strength properties, its high thermal stability and dimensional stability, glass fiber-reinforced nylon is well-suited for applications requiring not only outstanding mechanical properties, but also excellent electrical properties and high fire protection requirements. The

material's outstanding tracking resistance permits short creepage distances. The halogen and heavy-metal-free fire protection equipment allows a flammability category of VO with extremely thin walls.

**Polyphthalamide (PPA-GF)**

The glass fiber-reinforced, high-performance nylon PPA-GF is predestined for high-temperature applications, thanks to the material's high level of thermal dimensional stability, its low dependence on ambient conditions and its excellent strength properties. The material's outstanding tracking resistance permits short creepage distances to be implemented in miniature components. The halogen and heavy-metal-free fire protection equipment allows a flammability category of VO with extremely thin walls. PPA-GF absorbs considerably less moisture from the surroundings and is therefore very well-suited for THR applications.

**Contact Materials**

Hard and extra-hard electrolytic copper ( $E_{Cu}$ ) as well as extra-hard copper alloys are standard materials used for the current-carrying parts of all WAGO products.

This material combines excellent conductivity and good chemical resistance without the risk of stress-induced cracking.

## Contact Plating

The special tin layer, which is the standard layer for all current-carrying parts in WAGO products, ensures perfect long-term protection against corrosive substances. Furthermore, these layers provide a gas-tight contact that ensures a durable transition resistance.

At the clamping unit, the conductor is embedded into the soft tin layer via high contact pressure. This protects the contact area against corrosion.

The thick tin layer also ensures good solderability of the solder pins for both PCB terminal blocks and connectors.

## Clamping Spring Material

All WAGO clamping springs are made of high-quality, accurately tested austenitic chrome nickel steel (CrNi) with high tensile strength, which boasts proven corrosion resistance through long-term usage.

It is resistant to salt sea air, city pollutants and industrial emissions (e.g., sulfur dioxide, hydrogen sulphide).

At room temperatures of approximately 20 °C (68 °F), the material is resistant to salt solutions up to 30 % and dilute phosphoric acids up to 30 %.

Even after decades of use, no galvanic corrosion between the chrome nickel spring steel (in connection with the contact materials used by WAGO) and the connected copper conductors has been detected.

The relaxation of the material as a function of time and surrounding temperatures up to 105 °C (221 °F) can be ignored. Samples loaded with 500 N/mm<sup>2</sup> at a temperature of 250 °C showed a relaxation of only 1.5 %.

In certain product lines, the clamping springs are thermally treated at temperatures between 350 (662 °F) and 420 °C (788 °F) after production.

This treatment reduces internal stress due to the material's mechanical deformation, which may result in a slight brown discoloration of the spring surface.

WAGO only accepts deliveries of chrome nickel spring steel against certificates of conformity and after select material tests.

## Insulating Materials

WAGO primarily uses polyamide (PA 6.6 and PA 4.6) as carriers of current-conducting parts and polycarbonate (PC) as insulating material (see table). These materials have proven their value in WAGO products for more than 40 years and are approved by the responsible test authorities.

**Table: Standard Insulating Materials**

| Material   | PA 6.6                | PA 6.6 - GF           | PPA - GF              | PA 4.6                |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Flammability<br>UL 94 flammability test ratings                              | V0                    | V0                    | V0                    | V2                    |
| Glow-wire test acc. to<br>IEC 60695-2-12 GWFI<br>IEC 60695-2-13 GWIT         | 960 °C<br>775 °C      | 960 °C<br>750 °C      | 960 °C<br>725 °C      | 750 °C<br>725 °C      |
| CTI, Comparative Tracking Index (CTI) to IEC 60112                           | 600 V                 | 550 V                 | 600 V                 | 375 V                 |
| RTI impact to UL 746B  | 105 °C                | 100 °C                | 115 °C                | 115 °C                |
| Temperature resistance under HDT/B to ISO 75<br>(at 0.45 MPa bending stress) | 215 °C                | 235 °C                | 285 °C                | 280 °C                |
| Surface resistivity to IEC 60093   | 10 <sup>12</sup> Ω    | 10 <sup>12</sup> Ω    | 10 <sup>15</sup> Ω    | 10 <sup>13</sup> Ω    |
| Specific through resistance acc. to<br>IEC 60093                             | 10 <sup>15</sup> Ω/cm | 10 <sup>15</sup> Ω/cm | 10 <sup>13</sup> Ω/cm | 10 <sup>13</sup> Ω/cm |
| Dielectric strength to IEC 60243-1   | 30 kV/mm              | 40 kV/mm              | 26 kV/mm              | 25 kV/mm              |

### Current Carrying Capacity for Carrier Rails as Ground Conductor Busbars

**Table A.1 – Maximum short-time withstand current capacities assigned to carrier rails and thermal rated current of a GN (Ground-Neutral) busbar**

| Rail profile                      | Material              | Equivalent Electrolytic copper cross section<br>mm <sup>2</sup> | Short-time current withstand capacity<br>1 s<br>kA | Thermal rated current of a GN busbar<br>A |
|-----------------------------------|-----------------------|---|--|---|
| DIN rail<br>IEC 60715/TH 15 – 5.5 | Steel <sup>b</sup>    | 10  | 1.2  | –   |
|                                   | Copper <sup>a</sup>   | 25  | 3.0  | 101                                       |
|                                   | Aluminum <sup>a</sup> | 16  | 1.92   | 76  |
| DIN rail<br>IEC 60715/TH 35 – 7.5 | Steel <sup>b</sup>    | 16  | 1.92   | –   |
|                                   | Copper <sup>a</sup>   | 50  | 6.0  | 150                                       |
|                                   | Aluminum <sup>a</sup> | 35  | 4.2  | 125                                       |
| DIN rail<br>IEC 60715/TH 35 – 15  | Steel <sup>b</sup>    | 50  | 6.0  | –   |
|                                   | Copper <sup>a</sup>   | 150   | 18.0   | 309                                       |
|                                   | Aluminum <sup>a</sup> | 95  | 11.4   | 232                                       |

<sup>a</sup> Copper and aluminum alloys selected by the rail-mount terminal block manufacturer for compliance with the listed values.  
<sup>b</sup> Ground conductor busbars made of steel shall not be used as GN conductor.  
(EN 60947-7-2/VDE 0611, part 3, section 7.1.7)

## IP Ratings

### IP Ratings for Electrical Equipment to IEC/EN 60529

| Alphanumeric nomenclature for type of protection |   |   |  |
|--|---|---|--|
| Code letters<br>IP                               | Protection against touch and solid objects or water             | IP (Ingress Protection)   |  |
| First digit<br>0 to 6                            | Indicates degrees of protection against touch or solid objects. | If indicating the degree of protection requires only one digit, the other (second) digit must be substituted for with an X. |  |
| Second digit<br>0 to 8                           |   |   |  |
| First digit:                                     |   | Second digit:   |  |
| IPOX   | No protection against touch, or solid objects                   | IPX0  | No protection against water                      |
| IP1X   | Protected against solid objects > 50 mm                         | IPX1  | Protected against vertically falling water       |
| IP2X   | Protection against solid objects > 12 mm (e.g. finger)          | IPX2  | Protected against dripping water - 15° angle     |
| IP3X   | Protected against solid objects > 2.5 mm                        | IPX3  | Protected against water spray                    |
| IP4X   | Protected against solid objects > 1 mm                          | IPX4  | Protection against water splash                  |
| IP5X   | Dust-protected (limited ingress, no harmful deposits)           | IPX5  | Protected against water jet, e.g., from a nozzle |
| IP6X   | Dust-tight (totally protected against dust)                     | IPX6  | Protected against flooding                       |
|  |   | IPX7  | Protected against temporary immersion            |
|  |   | IPX8  | Protected against continuous immersion           |



| IP vs. NEMA |        |
|-------------|--------|
| IP Code     | NEMA   |
| 10          | 1      |
| 11          | 2      |
| 54          | 3      |
| 14          | 3R     |
| 54          | 3S     |
| 55          | 4&4X   |
| 52          | 5      |
| 67          | 6&6P   |
| 52          | 12&12K |
| 54          | 13     |

## Pollution degree















Pollution factors are all solid, liquid or gaseous foreign matter which may reduce the dielectric strength or the specific surface resistance. Factors are divided into 4 classes based on expected environmental conditions:

|                     |  | Examples of pollution degrees for assigned areas:  |
|---------------------|--|--|
| Pollution degree 1: | No pollution, or only dry, non-conductive pollution occurs. The pollution has no influence.                            | Open, unprotected insulated equipment in air-conditioned or clean, dry rooms.  |
| Pollution degree 2: | Only non-conductive pollution occurs; occasional, temporary conductivity caused by condensation can also be expected.  | Open, unprotected insulated equipment in occupied areas, shops, laboratories, mechanical workshops and medical rooms.              |
| Pollution degree 3: | Conductive pollution occurs, or dry, non-conductive pollution occurs which will become conductive due to condensation. | Open, unprotected insulated equipment in industrial, business and farming areas, e.g., unheated rooms, workshops and boiler rooms. |
| Pollution degree 4: | The pollution generates persistent conductivity caused by conductive dust, rain or wet conditions.                     | Open, unprotected insulated equipment for outdoor use.   |

## International Certification Organizations – Overview

|   | Abbreviation for online search |   | Abbreviation for online search |
|---|--------------------------------|---|--------------------------------|
|  <b>Underwriters Laboratories USA</b><br><a href="http://www.ul.com">http://www.ul.com</a>  | UL                             |  <b>Danmarks Elektriske Materielkontrol Dänemark</b><br><a href="http://www.demko.dk">http://www.demko.dk</a>  | <b>DEMKO</b>                   |
|  <b>Underwriters Laboratories USA</b><br><a href="http://www.ul.com">http://www.ul.com</a>  | UL                             | <b>CENELEC CERTIFICATION AGREEMENT</b>  |                                |
|  <b>Underwriters Laboratories USA</b><br><a href="http://www.ul.com">http://www.ul.com</a>  | cURus                          |  <b>CCA</b> <b>Danmarks Elektriske Materielkontrol Dänemark</b><br><a href="http://www.cenelec.org">http://www.cenelec.org</a>   | <b>CCA Zul.-Nr. mit DK</b>     |
|  <b>Underwriters Laboratories USA</b><br><a href="http://www.ul.com">http://www.ul.com</a>  | cULus                          |  <b>SETI – FEMKO Sähkötarkastuskeskus Elinspektionscentralen Finnland</b><br><a href="http://www.seti.fi">http://www.seti.fi</a>   |                                |
|  <b>Canadian Standards Association Kanada</b><br><a href="http://www.csa.ca">http://www.csa.ca</a>  | CSA                            |  <b>Sähkötarkastuskeskus Elinspektionscentralen Finnland</b><br><a href="http://www.fimko.com">http://www.fimko.com</a>  | <b>FIMKO</b>                   |
|  <b>VDE-Gutachten mit Fertigungsüberwachung Bundesrepublik Deutschland</b><br><a href="http://www.vde.de/vde/html/e/home.htm">http://www.vde.de/vde/html/e/home.htm</a> | VDE                            | <b>SABS</b> <b>South African Bureau of Standards Süd-Afrika</b><br><a href="http://www.sabs.co.za">http://www.sabs.co.za</a>  | <b>SABS</b>                    |
|  <b>VDE – Deutscher Verband für Elektrotechnik Bundesrepublik Deutschland</b><br><a href="http://www.vde.de">http://www.vde.de</a>                                    |                                |  <b>RosTest Russland</b><br><a href="http://www.rostest.ru">http://www.rostest.ru</a>  | <b>ROSTEST</b>                 |
| <b>VDE</b> <b>VDE – Prüfbericht Bundesrepublik Deutschland</b>  |                                |  <b>Departamentul Moldovastandard Moldawien</b><br><a href="http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm">http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm</a> | <b>CSM</b>                     |
|  <b>Österreichischer Verband für Elektrotechnik Österreich</b><br><a href="http://www.ove.at">http://www.ove.at</a>   | ÖVE                            |  <b>Certificate of Registration Großbritannien</b><br><a href="http://www.astacertification.com">http://www.astacertification.com</a>  | <b>ASTA</b>                    |
|  <b>Schweizerischer Elektrotechnischer Verein Schweiz</b><br><a href="http://www.sev.ch/">http://www.sev.ch/</a>  | SEV                            |  <b>Rheinisch-Westfälischer Technischer Überwachungsverein e.V. Bundesrepublik Deutschland</b><br><a href="http://www.rwtuv.de">http://www.rwtuv.de</a>  | <b>RWTÜV</b>                   |
|  <b>N.V. tot Keuring van Elektrotechnische Materialen Niederlande</b><br><a href="http://www.kema.nl">http://www.kema.nl</a>  | KEMA                           |  <b>Elektrotechnick ý v ýskumn ý a projektov ý ústav Tschechien</b><br><a href="http://www.ezu.cz">http://www.ezu.cz</a>   | <b>EZU</b>                     |
| <b>CENELEC CERTIFICATION AGREEMENT</b>  |                                |  <b>Stowarzyszenie Elektrykow Polskich Polen</b><br><a href="http://www.bbj.pl">http://www.bbj.pl</a>  | <b>BBJ</b>                     |
|  <b>N.V. tot Keuring van Elektrotechnische Materialen Niederlande</b><br><a href="http://www.cenelec.org">http://www.cenelec.org</a>                                  | CCA Zul.-Nr. mit NL            |  <b>Stowarzyszenie Elektrykow Polskich Polen</b><br><a href="http://www.sep.com.pl">http://www.sep.com.pl</a>  | <b>SEP</b>                     |
|  <b>Norges Elektriske Materialkontroll Norwegen</b><br><a href="http://express.nemko.com">http://express.nemko.com</a>  | NEMKO                          |   |                                |
|  <b>Svenska Elektriska Materielkontrollanstalten AB Schweden</b><br><a href="http://www.semko.com">http://www.semko.com</a>   | SEMKO                          |   |                                |

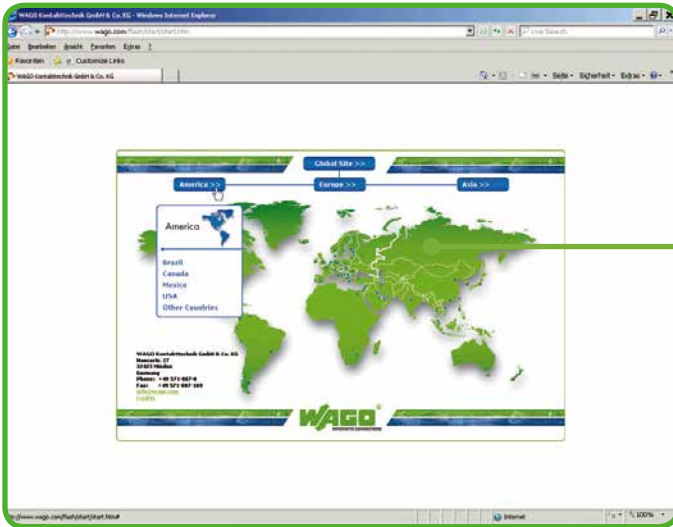


|   | Abbreviation for online search |   | Abbreviation for online search  |                      |
|---|--------------------------------|---|---|----------------------|
| <b>CNET</b> Centre National d'Etudes des Télécommunications<br>Frankreich<br><a href="http://www.lannion.cnet.fr">http://www.lannion.cnet.fr</a>  | <b>CNET</b>                    | <br>Ex   | <b>Robbanásbiztos Villamos Berendezések Ungarn</b><br><a href="http://www.bki.hu">http://www.bki.hu</a>                                     | <b>BKI</b>           |
| <b>LCIE</b> Laboratoire Central des Industries Electriques<br>Frankreich<br><a href="http://www.lcie.fr">http://www.lcie.fr</a>   | <b>LCIE</b>                    | <b>CB</b>   | <b>CB – TEST CERTIFICATE Indien</b><br><a href="http://www.ul-europe.com">http://www.ul-europe.com</a>                                      | <b>CB</b>            |
|  <b>Fyzikálne Technick ý Zkusební Ústav, Ostrava-Radvanice Tschechien</b><br><a href="http://www.ftzu.cz">http://www.ftzu.cz</a>   | <b>FTZU</b>                    | <b>CB</b>   | <b>CB – TEST CERTIFICATE China</b><br><a href="http://www.ul-europe.com">http://www.ul-europe.com</a>                                       | <b>CB</b>            |
|   |                                |          | <b>UL-International Demko A/S Dänemark</b><br><a href="http://www.ul-europe.com">http://www.ul-europe.com</a>                               | <b>ENEC</b>          |
| <b>Shipbuilding approvals</b>   |                                | <b>Ex approvals</b>   |   |                      |
|  <b>Germanischer Lloyd Bundesrepublik Deutschland</b><br><a href="http://www.gl-group.com">http://www.gl-group.com</a>           | <b>GL</b>                      |        | <b>Physikalisch Technische Bundesanstalt Bundesrepublik Deutschland Ex e II</b><br><a href="http://www.ptb.de">http://www.ptb.de</a>        | <b>PTB</b>           |
| <b>BV</b> Bureau Veritas<br>Frankreich<br><a href="http://www.bureauveritas.fr">http://www.bureauveritas.fr</a>   | <b>BV</b>                      |        | <b>Underwriters Laboratories USA</b><br><a href="http://www.ul.com">http://www.ul.com</a>   | <b>cURus-EX</b>      |
|  <b>Lloyd's Register of Shipping Großbritannien</b><br><a href="http://www.lloydsregister.com">http://www.lloydsregister.com</a> | <b>LR</b>                      |        | <b>N.V. tot Keuring van Elektrotechnische Materialen Niederlande</b><br><a href="http://www.kemaquality.com">http://www.kemaquality.com</a> | <b>KEMA-EX</b>       |
|  <b>NV – Det Norske Veritas Norwegen</b><br><a href="http://www.dnv.com">http://www.dnv.com</a>                                  | <b>DNV</b>                     | <b>GOSENERGO-Ex</b>   | <b>GOSENERGONADZOR Russland</b>   | <b>GOSENER GO-EX</b> |
|  <b>Russian Maritime Register of Shipping GUS</b><br><a href="http://www.rs-head.spb.ru">http://www.rs-head.spb.ru</a>           | <b>RMR</b>                     |        | <b>Fyzikálne Technick ý Zkusební Ústav, Ostrava-Radvanice Tschechien</b><br><a href="http://www.ftzu.cz">http://www.ftzu.cz</a>             | <b>FTZU</b>          |
|  <b>Polski Rejestr Statków Polen</b><br><a href="http://www.prs.pl">http://www.prs.pl</a>  | <b>PRS</b>                     | <br>Ex | <b>Robbanásbiztos Villamos Berendezések Ungarn</b><br><a href="http://www.bki.hu">http://www.bki.hu</a>                                     | <b>BKI-EX</b>        |
|  <b>Korean Register of Shipping Korea</b><br><a href="http://www.krs.co.kr">http://www.krs.co.kr</a>                             | <b>KR</b>                      | <b>ABS</b>  |   |                      |
| <b>ABS</b> American Bureau of Shipping<br>USA<br><a href="http://www.eagle.org">http://www.eagle.org</a>  | <b>ABS</b>                     |   |   |                      |

# Approvals – User Guide

Please find updated approvals at [www.wago.com](http://www.wago.com)

## • 1: Select "Country" ①



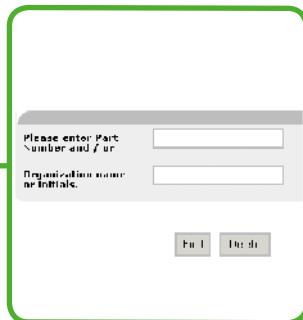
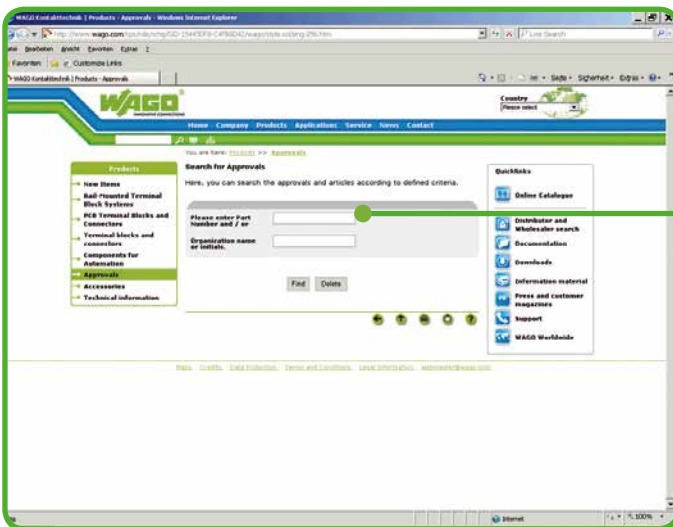
E.g., United Kingdom

## • 2: Select "Products"



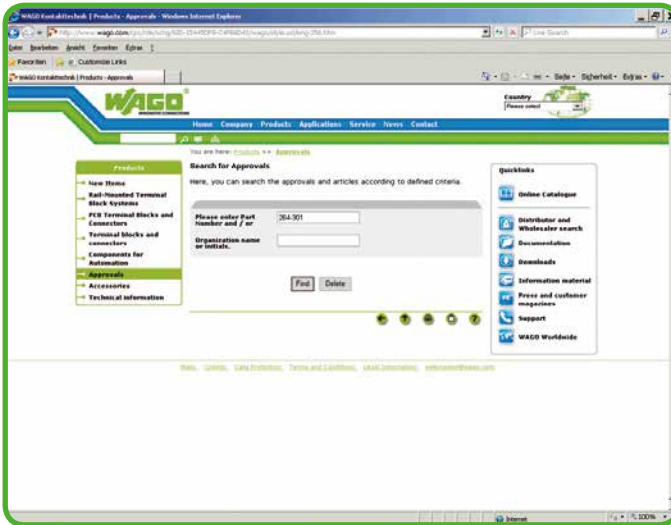
Select "Approvals"

## • 3: "Search for Approvals"



Here, you can search the approvals and items according to defined criteria.

① Step 1 is only required if the country has not been detected automatically.



#### • 4: Entry Options

a) Item number;  
e.g., 264-301

b) Certification agency;  
e.g., "UL"

c) Certification agency and  
item number range;  
e.g., "280 - 6" and "UR"

| Part Number | Organization | Approval No.      | Voltage<br>[ V ] | Current<br>[ A ] | Wire Size<br>[ mm <sup>2</sup> ] |
|-------------|--------------|-------------------|------------------|------------------|----------------------------------|
| 264-301     | ABS          | 04-HG476174/1-PDA | 800              | 24               | 2,5                              |
| 264-301     | BV           | 07436/C0          |                  |                  | 0,08-2,5                         |
| 264-301     | CCA          | NL6511            | 800              | 24               | 2,5                              |
| 264-301     | CSA          | 18677-23          | 600              | 20               | 26-12                            |
| 264-301     | DNV          | E-9215            | 800              | 24               | 2,5                              |
| 264-301     | GL           | 17295-00HH        | 800              | 24               | 2,5                              |
| 264-301     | KR           | HMB05880-EL002    | 800              | 24               |                                  |
| 264-301     | LR           | 92/20242(E5)      | 800              | 24               | 2,5                              |
| 264-301     | RMR          | 11130002          | 800              | 24               | 2,5                              |
| 264-301     | UR           | E45172            | 600/600          | 20/20            | 28-12                            |

Search Result a)  
Item Number:

*All approvals related to that product will be displayed.*

| Part Number | Organization | Approval No. | Voltage<br>[ V ] | Current<br>[ A ] | Wire Size<br>[ mm <sup>2</sup> ] |
|-------------|--------------|--------------|------------------|------------------|----------------------------------|
| 222-412     | UL           | E69654       | 600              | 20               | 28-12"s"/str"                    |
| 222-413     | UL           | E69654       | 600              | 20               | 28-12"s"/str"                    |
| 222-415     | UL           | E69654       | 600              | 20               | 28-12"s"/str"                    |
| 224-101     | UL           | E69654       | 300              | 20               | 14-12"s"/20-16"s"/str"           |
| 224-104     | UL           | E69654       | 300              | 20               | 14-12"s"/20-16"s"/str"           |
| 224-112     | UL           | E69654       | 300              | 20               | 18-16"s"/20-16"s"/str"           |
| 224-114     | UL           | E69654       | 300              | 20               | 18-16"s"/20-16"s"/str"           |
| 224-201     | UL           | E69654       | 300              | 20               | 20-16                            |
| 273-100     | UL           | E69654       | 600              | 20               | 20-16"s"                         |
| 273-101     | UL           | E69654       | 600              | 20               | 20-16"s"                         |

Search result b)  
Certification agency:

*All products approved by that agency will be displayed.*

| Part Number | Organization | Approval No. | Voltage<br>[ V ] | Current<br>[ A ] | Wire Size<br>[ mm <sup>2</sup> ] |
|-------------|--------------|--------------|------------------|------------------|----------------------------------|
| 280-601     | UR           | E45172       | 600/600          | 20/20            | 28-12                            |
| 280-602     | UR           | E45172       | 600/600          | 20/20            | 28-12                            |
| 280-603     | UR           | E45172       | 600/600          | 20/30            | 28-12                            |
| 280-604     | UR           | E45172       | 300/300          | 15/15            | 28-12                            |
| 280-606     | UR           | E45172       | 300/300          | 10/10            | 28-12                            |
| 280-607     | UR           | E45172       |                  |                  | 28-12                            |
| 280-610     | UR           | E45172       | 300/300          | 10/10            | 28-12                            |
| 280-612     | UR           | E45172       | 300/300          | 15/15            | 28-12                            |
| 280-616     | UR           | E45172       | 300/300          | 10/10            | 28-12                            |
| 280-621     | UR           | E45172       | 300/300          | 15/15            | 28-12                            |

Search result c)  
Certification agency and item numbers:

*The whole range of products approved by that agency will be displayed.*

| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>206 Series</b> |      | <b>210 Series</b> |      | <b>222 Series</b> |      | <b>235 Series</b> |      |
| 206-118           | 502  | 210-331/762-202   | 519  | 222-412           | 465  | 235-400           | 399  |
| 206-124           | 501  | 210-332/350-202   | 508  | 222-413           | 465  | 235-401           | 421  |
|                   |      | 210-332/350-204   | 508  | 222-415           | 465  | 235-401/331-000   | 399  |
| 206-128           |      | 210-332/350-206   | 508  |                   |      | 235-402           | 423  |
| 206-170           | 500  | 210-332/381-202   | 508  | 222-500           | 465  |                   |      |
| 206-171           | 500  | 210-332/381-204   | 508  | 222-505           | 465  | 235-410           |      |
| 206-173           | 500  | 210-332/381-205   | 508  | 222-510           | 465  | 235-402/331-000   | 401  |
| 206-174           | 500  | 210-332/381-206   | 508  |                   |      |                   |      |
|                   |      | 210-332/396-202   | 508  | <b>224 Series</b> |      | 235-410/331-000   |      |
| 206-204           | 502  | 210-332/396-204   | 508  | 224-101           | 453  | 235-412           | 423  |
| 206-216           | 502  | 210-332/396-205   | 508  | 224-104           | 453  | 235-412/331-000   | 401  |
| 206-225           | 503  | 210-332/396-206   | 508  | 224-112           | 453  | 235-416           | 423  |
| 206-250           | 503  | 210-332/400-202   | 508  | 224-114           | 453  | 235-416/331-000   | 401  |
| 206-294           | 498  | 210-332/400-204   | 508  |                   |      | 235-424           | 423  |
|                   |      | 210-332/400-205   | 508  | 224-201           | 453  | 235-424/331-000   | 401  |
| 206-804           | 505  | 210-332/400-206   | 508  |                   |      | 235-436           | 423  |
| 206-806           | 504  | 210-332/500-001   | 508  |                   |      | 235-436/331-000   | 401  |
|                   |      | 210-332/500-104   | 508  | <b>231 Series</b> |      | 235-448           | 423  |
| 206-808           |      | 210-332/500-202   | 508  | 231-129           | 356  | 235-448/331-000   | 401  |
| 206-810           | 505  | 210-332/500-204   | 508  | 231-130           | 356  | 235-452/331-000   | 435  |
| 206-811           | 505  | 210-332/500-205   | 508  | 231-131           | 354  |                   |      |
| 206-815           | 505  | 210-332/500-206   | 508  | 231-159           | 354  | 235-460/331-000   |      |
| 206-830           | 498  | 210-332/508-001   | 509  | 231-160           | 356  | 235-462/331-000   | 435  |
| 206-831           | 493  | 210-332/508-202   | 509  | 231-160           | 356  | 235-466/331-000   | 435  |
| 206-840           | 498  | 210-332/508-204   | 509  | 231-193           | 357  | 235-474/331-000   | 435  |
| 206-859           | 495  | 210-332/508-205   | 509  | 231-194           | 514  | 235-486/331-000   | 435  |
| 206-860           | 495  | 210-332/508-206   | 509  | 231-195           | 514  | 235-498/331-000   | 435  |
| 206-861           | 495  | 210-332/575-103   | 509  |                   |      | 235-500           | 399  |
| 206-880           | 494  | 210-332/700-001   | 509  | 231-231           | 354  | 235-501           | 421  |
|                   |      | 210-332/700-102   | 509  | 231-291           | 354  | 235-501/331-000   | 399  |
| <b>209 Series</b> |      | 210-332/700-103   | 509  | 231-295           | 514  | 235-502           | 423  |
| 209-120           | 363  | 210-332/750-001   | 509  | 231-500           | 356  |                   |      |
| 209-122           | 480  | 210-332/750-020   | 509  |                   |      | 235-510           |      |
| 209-123           | 474  | 210-332/762-001   | 509  | 231-661           | 362  | 235-502/331-000   | 401  |
| 209-130           | 494  | 210-332/762-020   | 509  | 231-662           | 362  |                   |      |
| 209-132           | 494  | 210-332/1000-001  | 509  | 231-668           | 357  | 235-510/331-000   |      |
| 209-137           | 363  | 210-332/1000-202  | 509  |                   |      | 235-512           | 423  |
| 209-147           | 514  | 210-332/1000-204  | 509  | 231-675           |      | 235-512/331-000   | 401  |
| 209-148           | 363  | 210-332/1000-206  | 509  |                   |      | 235-516           | 423  |
| 209-151           | 515  | 210-332/1016-001  | 509  | 231-902           | 364  | 235-516/331-000   | 401  |
| 209-157           | 515  | 210-332/1016-202  | 509  | 231-903           | 364  | 235-524           | 423  |
| 209-160           | 515  | 210-332/1016-204  | 509  | 231-905           | 364  | 235-524/331-000   | 401  |
| 209-161           | 515  | 210-332/1016-206  | 509  | 231-907           | 364  | 235-550           | 431  |
| 209-162           | 515  | 210-333           | 54   | 231-910           | 364  | 235-551/331-000   | 433  |
| 209-164           | 515  | 210-333/500-...   | 474  |                   |      | 235-552/331-000   | 435  |
| 209-172           | 318  | 210-333/600-...   | 474  | <b>232 Series</b> |      |                   |      |
| 209-173           | 360  | 210-333/700-...   | 474  | 232-602           | 360  | 235-560/331-000   |      |
| 209-174           | 360  | 210-333/800-...   | 474  |                   |      | 235-562/331-000   | 435  |
| 209-176           | 360  | 210-333/1000-...  | 474  | 232-610           |      | 235-566/331-000   | 435  |
| 209-177           | 318  | 210-333/1200-...  | 474  | 232-612           | 360  | 235-574/331-000   | 435  |
|                   |      | 210-334           | 455  | 232-632           | 360  |                   |      |
|                   |      | 210-334/0762-0202 | 519  |                   |      | 235-600           | 399  |
|                   |      |                   |      | 232-640           |      | 235-650           | 399  |
| <b>210 Series</b> |      | 210-406           | 511  | 232-642           | 360  | 235-700           | 399  |
| 210-110           | 28   | 210-416           | 511  | 232-646           | 360  | 235-701           | 399  |
| 210-112           | 514  | 210-533           | 512  | 232-662           | 361  | 235-711/331-000   | 433  |
|                   |      |                   |      | 232-662           |      |                   |      |
| 210-115           |      | 210-647           | 492  |                   |      | 235-714/331-000   |      |
| 210-136           | 506  | 210-648           | 492  | 232-665           |      | 235-716/331-000   | 433  |
| 210-137           | 506  | 210-657           | 492  | 232-667           | 361  | 235-717/331-000   | 433  |
| 210-154           | 480  | 210-658           | 492  | 232-670           | 361  | 235-722/331-000   | 433  |
| 210-176           | 515  |                   |      | 232-682           |      |                   |      |
| 210-191           | 511  | 210-719           | 492  |                   |      | 235-724/331-000   |      |
| 210-197           | 514  | 210-720           | 492  | 232-685           |      | 235-726/331-000   | 433  |
| 210-199           | 511  | 210-721           | 492  | 232-687           | 361  | 235-727/331-000   | 433  |
|                   |      | 210-722           | 492  |                   |      | 235-732/331-000   | 433  |
| 210-250           | 316  |                   |      | <b>233 Series</b> |      |                   |      |
| 210-251           | 316  |                   |      | 233-331           | 493  | 235-734/331-000   |      |
|                   |      | <b>215 Series</b> |      | 233-332           | 493  | 235-736/331-000   | 433  |
| 210-331/250-202   | 508  | 215-311           | 483  | 233-335           | 493  | 235-737/331-000   | 433  |
| 210-331/250-204   | 508  | 215-312           | 483  |                   |      | 235-740/331-000   | 399  |
| 210-331/250-206   | 508  | 215-711           | 483  | <b>235 Series</b> |      |                   |      |
| 210-331/250-207   | 508  |                   |      | 235-100           | 399  | 235-742           | 421  |
| 210-331/254-202   | 508  | <b>221 Series</b> |      | 235-200           | 399  |                   |      |
| 210-331/254-204   | 508  | 221-412           | 463  |                   |      | 235-744           |      |
| 210-331/254-206   | 508  | 221-413           | 463  | 235-300           | 399  | 235-746           | 421  |
| 210-331/254-207   | 508  | 221-415           | 463  |                   |      | 235-747           | 421  |
| 210-331/500-103   | 508  |                   |      |                   |      |                   |      |
| 210-331/508-103   | 509  |                   |      |                   |      |                   |      |
| 210-331/508-104   | 509  |                   |      |                   |      |                   |      |
| 210-331/750-202   | 509  |                   |      |                   |      |                   |      |

| Item No.          | Page | Item No.                | Page | Item No.                | Page | Item No.          | Page |
|-------------------|------|-------------------------|------|-------------------------|------|-------------------|------|
| <b>235 Series</b> |      | <b>236 Series</b>       |      | <b>243 Series</b>       |      | <b>250 Series</b> |      |
| 235-752           | 421  | 236-402                 | 439  | 243-110                 | 467  | 250-1402          | 387  |
|                   |      | 236-402/334-604         | 441  | 243-112                 | 467  |                   |      |
| 235-754           |      | 236-402/334-604/997-405 | 441  | 243-113                 | 467  | 250-1424          |      |
| 235-752/331-000   | 399  | 236-403                 | 439  |                         |      |                   |      |
|                   |      | 236-403/334-604         | 441  | 243-204                 | 467  | <b>251 Series</b> |      |
| 235-758/331-000   |      | 236-403/334-604/997-405 | 441  | 243-208                 | 467  | 251-102           | 419  |
| 235-756           | 421  | 236-404                 | 439  | 243-211                 | 467  |                   |      |
| 235-757           | 421  | 236-404/334-604         | 441  | 243-212                 | 467  | 251-107           |      |
| 235-762           | 421  | 236-404/334-604/997-405 | 441  |                         |      |                   |      |
|                   |      | 236-405/334-604         | 441  | 243-304                 | 467  | 251-303           | 419  |
| 235-764           |      | 236-405/334-604/997-405 | 441  | 243-308                 | 467  | 251-304           | 419  |
| 235-762/331-000   | 399  | 236-406                 | 439  | 243-504                 | 467  | 251-306           | 419  |
|                   |      | 236-406/334-604         | 441  | 243-508                 | 467  |                   |      |
| 235-768/331-000   |      | 236-406/334-604/997-405 | 441  | 243-804                 | 467  | 251-308           |      |
| 235-766           | 421  | 236-408                 | 439  | 243-808                 | 467  | 251-310           | 419  |
| 235-767           | 421  | 236-412                 | 439  |                         |      |                   |      |
|                   |      | 236-416                 | 439  | <b>248 Series</b>       |      | <b>253 Series</b> |      |
| 235-800           | 399  | 236-424                 | 439  | 248-472                 | 510  | 253-102           | 425  |
| 235-801           | 421  | 236-436                 | 439  | 248-474                 | 510  |                   |      |
| 235-801/331-000   | 399  | 236-448                 | 439  |                         |      | 253-116           |      |
| 235-802           | 423  |                         |      | 248-501                 | 510  |                   |      |
|                   |      | 236-500                 | 437  |                         |      | <b>256 Series</b> |      |
| 235-810           |      | 236-501                 | 437  | 248-506                 |      | 256-100           | 443  |
| 235-802/331-000   | 401  | 236-502                 | 439  | 248-566                 | 510  | 256-200           | 443  |
|                   |      |                         |      | 248-569                 | 510  | 256-300           | 443  |
| 235-810/331-000   |      | 236-504                 |      |                         |      |                   |      |
| 235-812           | 423  | 236-506                 | 439  | 248-573                 |      | 256-400           | 443  |
| 235-812/331-000   | 401  | 236-508                 | 439  |                         |      | 256-401           | 443  |
| 235-816           | 423  | 236-512                 | 439  | <b>249 Series</b>       |      | 256-402           | 444  |
| 235-816/331-000   | 401  | 236-516                 | 439  | 249-100                 | 28   |                   |      |
| 235-824           | 423  | 236-524                 | 439  | 249-130                 | 507  | 256-410           |      |
| 235-824/331-000   | 401  |                         |      | 249-136                 | 477  | 256-402/333-000   | 445  |
| 235-850           | 399  | 236-600                 | 437  | 249-139                 | 477  |                   |      |
| 235-851/331-000   | 433  | 236-601                 | 437  |                         |      | 256-410/333-000   |      |
| 235-852/331-000   | 435  | 236-602                 | 439  | <b>250 Series</b>       |      | 256-402/334-000   | 448  |
|                   |      |                         |      | 250-102                 | 391  |                   |      |
| 235-860/331-100   |      | 236-604                 |      |                         |      | 256-410/334-000   |      |
| 235-862/331-000   | 435  | 236-606                 | 439  | 250-124                 |      | 256-412           | 444  |
| 235-866/331-000   | 435  | 236-608                 | 439  | 250-202                 | 391  | 256-412/333-000   | 445  |
| 235-874/331-000   | 435  | 236-612                 | 439  |                         |      | 256-412/334-000   | 448  |
|                   |      | 236-616                 | 439  | 250-224                 |      | 256-416           | 444  |
|                   |      | 236-624                 | 439  | 250-202/353-604         | 393  | 256-416/333-000   | 445  |
| <b>236 Series</b> |      |                         |      | 250-208/353-604         |      | 256-416/334-000   | 448  |
| 236-100           | 437  | 236-700                 | 437  |                         |      | 256-424           | 444  |
| 236-101           | 437  | 236-710                 | 437  | 250-208/353-604         |      | 256-424/333-000   | 445  |
| 236-102           | 439  |                         |      | 250-202/353-604/997-404 | 393  | 256-424/334-000   | 448  |
|                   |      | 236-717                 |      |                         |      | 256-436           | 444  |
| 236-104           |      | 236-722                 | 437  | 250-208/353-604/997-406 |      | 256-448           | 444  |
| 236-106           | 439  |                         |      |                         |      | 256-461           | 447  |
| 236-108           | 439  | 236-727                 |      | 250-302                 | 389  |                   |      |
| 236-112           | 439  | 236-732                 | 437  |                         |      | 256-500           | 443  |
| 236-116           | 439  |                         |      | 250-324                 |      | 256-501           | 443  |
| 236-124           | 439  | 236-737                 |      |                         |      | 256-502           | 444  |
| 236-136           | 439  | 236-740                 | 437  | 250-402                 | 387  |                   |      |
| 236-148           | 439  |                         |      |                         |      | 256-510           |      |
| 236-200           | 437  | 236-747                 |      | 250-424                 |      | 256-502/333-000   | 445  |
| 236-201           | 437  | 236-743/999-950         | 437  | 250-402/350-604         | 393  |                   |      |
| 236-202           | 439  | 236-752                 | 437  |                         |      | 256-510/333-000   |      |
|                   |      |                         |      | 250-408/350-604         |      | 256-502/334-000   | 448  |
| 236-204           |      | 236-757                 |      |                         |      |                   |      |
| 236-206           | 439  | 236-753/999-950         | 437  | 250-502                 | 395  | 256-510/334-000   |      |
| 236-208           | 439  | 236-762                 | 437  |                         |      | 256-512           | 444  |
| 236-212           | 439  |                         |      | 250-516                 |      | 256-512/333-000   | 445  |
| 236-216           | 439  | 236-767                 |      | 250-602                 | 395  | 256-512/334-000   | 448  |
| 236-224           | 439  | 236-763/999-950         | 437  |                         |      | 256-516           | 444  |
|                   |      |                         |      | 250-612                 |      | 256-516/333-000   | 445  |
| 236-300           | 437  | 236-800                 | 437  | 250-702                 | 397  | 256-516/334-000   | 448  |
| 236-301           | 437  | 236-850                 | 437  |                         |      | 256-524           | 444  |
| 236-302           | 439  | 236-851                 | 437  | 250-704                 |      | 256-524/333-000   | 445  |
|                   |      | 236-852                 | 437  | 250-706                 | 397  | 256-524/334-000   | 448  |
| 236-304           |      | 236-853                 | 437  | 250-708                 | 397  | 256-561           | 447  |
| 236-306           | 439  | 236-854                 | 437  | 250-710                 | 397  |                   |      |
| 236-308           | 439  | 236-855                 | 437  | 250-712                 | 397  | 256-600           | 443  |
| 236-312           | 439  | 236-856                 | 437  | 250-716                 | 397  | 256-601           | 443  |
| 236-316           | 439  | 236-881                 | 437  | 250-724                 | 397  | 256-602           | 444  |
| 236-324           | 439  | 236-882                 | 437  |                         |      |                   |      |
| 236-332           | 493  | 236-884                 | 437  |                         |      | 256-610           |      |
| 236-335           | 493  | 236-885                 | 437  |                         |      |                   |      |
|                   |      | 236-891                 | 437  |                         |      |                   |      |
| 236-400           | 437  | 236-894                 | 437  |                         |      |                   |      |
| 236-401           | 437  |                         |      |                         |      |                   |      |



| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>256 Series</b> |      | <b>261 Series</b> |      | <b>264 Series</b> |      | <b>272 Series</b> |      |
| 256-602/333-000   | 445  | 261-102           | 473  | 264-364           | 477  | 272-105/1...-000  | 28   |
|                   |      |                   |      | 264-368           | 477  | 272-105/2...-000  | 28   |
| 256-610/333-000   |      | 261-112           |      | 264-369           | 477  | 272-112           | 28   |
| 256-602/334-000   | 448  | 261-102/341-000   | 473  |                   |      | 272-122           | 31   |
|                   |      |                   |      | 264-402           | 477  | 272-122/001-000   | 30   |
| 256-610/334-000   |      | 261-112/341-000   |      |                   |      | 272-131           | 31   |
| 256-612           | 444  |                   |      | <b>267 Series</b> |      |                   |      |
| 256-612/333-000   | 445  | 261-202           | 473  | 267-101           | 252  | 272-135           |      |
| 256-612/334-000   | 448  |                   |      | 267-109           | 252  | 272-133/1...-000  | 31   |
| 256-616           | 444  | 261-212           |      | 267-110           | 252  | 272-133/2...-000  | 31   |
| 256-616/333-000   | 445  | 261-202/342-000   | 474  | 267-113           | 248  | 272-134/1...-000  | 31   |
| 256-616/334-000   | 448  |                   |      | 267-114           | 248  | 272-134/2...-000  | 31   |
| 256-624           | 444  | 261-212/342-000   |      | 267-115           | 248  | 272-135/1...-000  | 31   |
| 256-624/333-000   | 445  |                   |      | 267-119           | 248  | 272-135/2...-000  | 31   |
| 256-624/334-000   | 448  | 261-301           | 473  | 267-120           | 252  | 272-142           | 31   |
| 256-661           | 447  | 261-301/341-000   | 473  | 267-123           | 248  | 272-301           | 29   |
|                   |      | 261-303           | 473  | 267-124           | 248  |                   |      |
| 256-700           | 443  | 261-303/341-000   | 473  | 267-125           | 248  | 272-305           |      |
| 256-740           | 443  | 261-304           | 473  | 267-140           | 247  | 272-303/1...-000  | 29   |
|                   |      | 261-304/341-000   | 473  | 267-141           | 247  | 272-303/2...-000  | 29   |
| 256-744           |      | 261-306           | 473  | 267-143           | 247  | 272-304/1...-000  | 29   |
| 256-743/999-950   | 443  | 261-306/341-000   | 473  | 267-163           | 251  | 272-304/2...-000  | 29   |
| 256-746           | 443  | 261-307           | 473  |                   |      | 272-305/1...-000  | 29   |
| 256-747           | 443  | 261-307/341-000   | 473  | 267-167           |      | 272-305/2...-000  | 29   |
| 256-750           | 443  | 261-331           | 473  | 267-173           | 251  | 272-312           | 29   |
|                   |      | 261-331/342-000   | 474  |                   |      |                   |      |
| 256-754           |      | 261-333           | 473  | 267-177           |      | 272-402/272-488   | 262  |
| 256-753/999-950   | 443  | 261-333/342-000   | 474  |                   |      | 272-403/272-486   | 261  |
| 256-756           | 443  | 261-334           | 473  | 267-223           | 251  | 272-403/272-489   | 262  |
| 256-757           | 443  | 261-334/342-000   | 474  |                   |      | 272-403/272-496   | 261  |
| 256-760           | 443  | 261-336           | 473  | 267-227           |      | 272-404/272-490   | 262  |
|                   |      | 261-336/342-000   | 474  |                   |      | 272-405/272-491   | 262  |
| 256-764           |      | 261-337           | 473  | 267-232           | 252  | 272-405/272-514   | 261  |
| 256-736/999-950   | 443  | 261-337/342-000   | 474  |                   |      | 272-413/272-419   | 260  |
| 256-766           | 443  |                   |      | 267-234           |      | 272-413/272-489   | 260  |
| 256-767           | 443  | <b>262 Series</b> |      | 267-303           | 249  | 272-415/272-491   | 260  |
|                   |      | 262-102           | 474  | 267-304           | 249  | 272-452           | 262  |
| 256-800           | 443  |                   |      | 267-305           | 249  | 272-453/272-469   | 260  |
| 256-840           | 447  | 262-112           |      | 267-313           | 249  | 272-455/272-485   | 262  |
| 256-842           | 447  |                   |      | 267-314           | 249  | 272-492           | 262  |
| 256-843           | 447  | 262-202           | 474  | 267-315           | 249  | 272-493           | 262  |
| 256-844           | 447  |                   |      | 267-324           | 250  | 272-494           | 262  |
| 256-846           | 447  | 261-212           |      | 267-328           | 250  | 272-495           | 262  |
| 256-847           | 447  |                   |      |                   |      | 272-497           | 262  |
| 256-850           | 447  | 262-301           | 474  | 267-412           | 250  | 272-498           | 260  |
| 256-852           | 447  | 262-304           | 474  | 267-422           | 250  | 272-498           | 262  |
| 256-853           | 447  | 262-306           | 474  | 267-435           | 250  |                   |      |
| 256-854           | 447  | 262-307           | 474  | 267-437           | 250  | 272-516           | 262  |
| 256-856           | 447  | 262-331           | 474  |                   |      | 272-517           | 262  |
| 256-857           | 447  | 262-334           | 474  | 267-501           | 253  | 272-536           | 262  |
| 256-860           | 447  | 262-336           | 474  | 267-502           | 253  | 272-537           | 262  |
| 256-862           | 447  | 262-337           | 474  | 267-506           | 253  | 272-581           | 30   |
| 256-863           | 447  |                   |      | 267-507           | 253  |                   |      |
| 256-864           | 447  | <b>264 Series</b> |      | 267-510           | 253  | 272-585           |      |
| 256-866           | 447  | 264-102           | 477  | 267-516           | 253  | 272-583/1...-000  | 30   |
| 256-867           | 447  |                   |      | 267-518           | 253  | 272-583/2...-000  | 30   |
| <b>260 Series</b> |      | 264-112           |      | 267-519           | 253  | 272-584/1...-000  | 30   |
| 260-102           | 473  |                   |      | 267-520           | 253  | 272-584/2...-000  | 30   |
|                   |      | 264-202           | 477  | 267-521           | 253  | 272-585/1...-000  | 30   |
| 260-112           |      |                   |      |                   |      | 272-585/2...-000  | 30   |
|                   |      | 264-212           |      | <b>271 Series</b> |      | 272-592           | 30   |
| 260-202           | 473  |                   |      | 271-120           | 28   | 272-681           | 30   |
|                   |      | 264-301           | 477  |                   |      |                   |      |
| 260-212           |      | 264-304           | 477  | 271-702           | 28   | 272-685           |      |
|                   |      | 264-306           | 477  | 271-711           | 28   | 272-683/1...-000  | 30   |
| 260-301           | 473  | 264-307           | 477  | 271-712           | 28   | 272-683/2...-000  | 30   |
| 260-303           | 473  | 264-321           | 477  |                   |      | 272-684/1...-000  | 30   |
| 260-304           | 473  | 264-324           | 477  | <b>272 Series</b> |      | 272-684/2...-000  | 30   |
| 260-306           | 473  | 264-326           | 477  | 272-101           | 28   | 272-685/1...-000  | 30   |
| 260-307           | 473  | 264-327           | 477  |                   |      | 272-685/2...-000  | 30   |
| 260-331           | 473  | 264-331           | 477  |                   |      | 272-692           | 30   |
| 260-333           | 473  | 264-334           | 477  | 272-105           |      |                   |      |
| 260-334           | 473  | 264-336           | 477  | 272-102/001-000   | 29   | <b>273 Series</b> |      |
| 260-336           | 473  | 264-337           | 477  |                   |      | 273-100           | 458  |
| 260-337           | 473  | 264-351           | 477  | 272-105/001-000   |      |                   |      |
| 260-361           | 473  | 264-354           | 477  | 272-103/1...-000  | 28   | 273-103           |      |
|                   |      | 264-356           | 477  | 272-103/2...-000  | 28   |                   |      |
| 260-410           | 473  | 264-357           | 477  | 272-104/1...-000  | 28   | 273-104           | 459  |
| 260-420           | 473  | 264-361           | 477  | 272-104/2...-000  | 28   | 273-105           | 458  |



| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>273 Series</b> |      | <b>294 Series</b> |      | <b>294 Series</b> |      | <b>721 Series</b> |      |
| 273-108           | 458  | 294-4035          | 22   | 294-5225          | 23   | 721-120/008-000   | 328  |
| 273-112           | 459  | 294-4042          | 17   | 294-5235          | 23   | 721-120/026-000   | 327  |
| 273-150           | 459  | 294-4043          | 18   | 294-5253          | 19   | 721-120/027-000   | 327  |
| 273-153           | 458  | 294-4044          | 20   | 294-5255          | 23   | 721-120/031-000   | 328  |
| 273-155           | 458  | 294-4045          | 22   | 294-5275          | 23   | 721-120/037-000   | 327  |
| 273-158           | 458  | 294-4052          | 17   |                   |      | 721-132/001-000   | 339  |
|                   |      | 294-4053          | 18   | 294-5313          | 19   |                   |      |
| 273-252           | 459  | 294-4055          | 22   | 294-5314          | 21   | 721-146/001-000   |      |
| 273-253           | 459  | 294-4072          | 17   | 294-5315          | 23   | 721-133/001-040   | 339  |
| 273-254           | 458  | 294-4075          | 22   | 294-5323          | 19   |                   |      |
| 273-255           | 458  |                   |      | 294-5324          | 21   | 721-135/001-040   |      |
| 273-258           | 458  | 294-4213          | 19   | 294-5325          | 23   | 721-150/001-000   | 339  |
|                   |      | 294-4214          | 21   | 294-5335          | 23   | 721-162/001-000   | 339  |
|                   |      | 294-4215          | 23   | 294-5353          | 19   |                   |      |
| <b>277 Series</b> |      | 294-4223          | 19   | 294-5355          | 23   | 721-172/001-000   |      |
| 277-121           | 257  | 294-4224          | 21   | 294-5375          | 23   | 721-162/100-000   | 339  |
|                   |      | 294-4225          | 23   |                   |      |                   |      |
| 277-128           |      | 294-4235          | 23   | 294-5413          | 18   | 721-172/100-000   |      |
| 277-131           | 257  | 294-4253          | 19   | 294-5414          | 20   | 721-163/001-040   | 339  |
|                   |      | 294-4255          | 23   | 294-5415          | 22   |                   |      |
|                   |      | 294-4275          | 23   | 294-5423          | 18   | 721-165/001-040   |      |
| <b>280 Series</b> |      |                   |      | 294-5424          | 20   | 721-180/001-000   | 339  |
| 280-432           | 494  | 294-4313          | 19   | 294-5425          | 22   |                   |      |
|                   |      | 294-4314          | 21   | 294-5435          | 22   | 721-242/001-000   |      |
| 280-440           |      | 294-4315          | 23   | 294-5453          | 18   |                   |      |
| 280-470           | 492  | 294-4323          | 19   | 294-5455          | 22   | 721-302/008-000   | 331  |
|                   |      | 294-4324          | 21   | 294-5475          | 22   |                   |      |
| 280-472           |      | 294-4325          | 23   |                   |      | 721-316/008-000   |      |
|                   |      | 294-4335          | 23   | 294-8013          | 46   | 721-302/031-000   | 331  |
|                   |      | 294-4353          | 19   | 294-8022          | 45   |                   |      |
| <b>282 Series</b> |      | 294-4355          | 23   | 294-8024          | 48   | 721-316/031-000   |      |
| 282-451           | 194  | 294-4375          | 23   | 294-8015          | 50   | 721-320/008-000   | 331  |
|                   |      |                   |      | 294-8025          | 50   | 721-320/031-000   | 331  |
|                   |      |                   |      | 294-8035          | 50   |                   |      |
| <b>288 Series</b> |      | 294-4413          | 18   |                   |      | 721-432/001-000   | 340  |
| 288-001           | 513  | 294-4414          | 20   | 294-8113          | 46   |                   |      |
|                   |      | 294-4415          | 22   | 294-8124          | 48   | 721-446/001-000   |      |
| 288-002           |      | 294-4423          | 18   | 294-8115          | 50   | 721-433/001-040   | 340  |
|                   |      | 294-4424          | 20   | 294-8125          | 50   |                   |      |
| 288-600           | 512  | 294-4425          | 22   | 294-8135          | 50   | 721-435/001-040   |      |
|                   |      | 294-4435          | 22   |                   |      | 721-450/001-000   | 340  |
| 288-602           |      | 294-4453          | 18   | 294-8213          | 47   | 721-462/001-000   | 340  |
| 288-602           | 512  | 294-4455          | 22   | 294-8215          | 51   |                   |      |
| 288-620           |      | 294-4475          | 22   | 294-8224          | 49   | 721-476/001-000   |      |
|                   |      |                   |      | 294-8225          | 51   |                   |      |
| 288-622           |      | 294-5002          | 17   | 294-8235          | 51   | 721-463/001-040   | 340  |
| 288-626           | 512  | 294-5003          | 18   |                   |      |                   |      |
| 288-627           | 512  | 294-5004          | 20   | 294-8313          | 47   | 721-465/001-040   |      |
|                   |      | 294-5005          | 22   | 294-8315          | 51   | 721-480/001-000   | 340  |
|                   |      | 294-5012          | 17   | 294-8324          | 49   |                   |      |
| <b>293 Series</b> |      | 294-5013          | 18   | 294-8325          | 51   | 721-602           | 343  |
| 293-219           | 36   | 294-5014          | 20   | 294-8335          | 51   |                   |      |
| 293-220           | 36   | 294-5015          | 22   |                   |      | 721-616           |      |
| 293-221           | 37   | 294-5022          | 17   | 294-8413          | 46   | 721-602/018-000   | 343  |
| 293-222           | 37   | 294-5023          | 18   | 294-8415          | 50   |                   |      |
| 293-225           | 36   | 294-5024          | 20   | 294-8424          | 48   | 721-616/018-000   |      |
| 293-228           | 37   | 294-5025          | 22   | 294-8425          | 50   | 721-602/019-000   | 343  |
| 293-230           | 37   | 294-5032          | 17   | 294-8435          | 50   |                   |      |
| 293-325           | 36   | 294-5035          | 22   |                   |      | 721-616/019-000   |      |
|                   |      | 294-5042          | 17   | <b>709 Series</b> |      | 721-602/114-000   | 345  |
|                   |      | 294-5043          | 18   | 709-196           | 512  |                   |      |
| <b>294 Series</b> |      | 294-5044          | 20   | 709-198           | 512  | 721-616/114-000   |      |
| 294-199           | 25   | 294-5045          | 22   |                   |      | 721-603/000-042   | 343  |
|                   |      | 294-5052          | 17   | <b>721 Series</b> |      |                   |      |
| 294-363           | 25   | 294-5053          | 18   | 721-102/008-000   | 328  | 721-605/000-042   |      |
| 294-383           | 25   | 294-5055          | 22   |                   |      | 721-603/018-042   | 343  |
|                   |      | 294-5072          | 17   | 721-102/026-000   | 327  |                   |      |
|                   |      | 294-5075          | 22   |                   |      | 721-605/019-042   |      |
| 294-4002          | 17   |                   |      | 721-116/008-000   |      | 721-603/114-042   | 345  |
| 294-4003          | 18   | 294-5113          | 18   | 721-102/031-000   | 328  |                   |      |
| 294-4004          | 20   | 294-5114          | 20   |                   |      | 721-605/114-042   |      |
| 294-4005          | 22   | 294-5123          | 18   | 721-116/031-000   | 327  | 721-620           | 343  |
| 294-4006          | 24   | 294-5124          | 20   | 721-102/037-000   | 327  | 721-620/018-000   | 343  |
| 294-4007          | 24   | 294-5153          | 18   |                   |      | 721-620/019-000   | 343  |
| 294-4012          | 17   | 294-5155          | 22   | 721-116/027-000   | 327  | 721-620/114-000   | 345  |
| 294-4013          | 18   | 294-5175          | 22   |                   |      |                   |      |
| 294-4014          | 20   |                   |      | 721-106/027-000   | 327  |                   |      |
| 294-4015          | 22   | 294-5213          | 19   |                   |      |                   |      |
| 294-4022          | 17   | 294-5214          | 21   | 721-116/027-000   |      |                   |      |
| 294-4023          | 18   | 294-5215          | 23   |                   |      |                   |      |
| 294-4024          | 20   | 294-5223          | 19   | 721-116/027-000   |      |                   |      |
| 294-4025          | 22   | 294-5224          | 21   |                   |      |                   |      |
| 294-4032          | 17   |                   |      |                   |      |                   |      |

| Item No.          | Page | Item No.                | Page | Item No.                | Page | Item No.                | Page |
|-------------------|------|-------------------------|------|-------------------------|------|-------------------------|------|
| <b>721 Series</b> |      | <b>733 Series</b>       |      | <b>734 Series</b>       |      | <b>734 Series</b>       |      |
| 721-2102/026-000  | 337  | 733-332/105-604         | 275  | 734-148                 | 295  | 734-235/105-604/997-407 | 305  |
|                   |      |                         |      | 734-148/108-000         | 296  |                         |      |
| 721-2116/026-000  |      | 733-340/105-604         |      | 734-150                 | 295  | 734-236/105-604/997-407 |      |
| 721-2102/037-000  | 337  | 733-332/105-604/997-446 | 275  | 734-150/108-000         | 296  | 734-238                 | 299  |
|                   |      |                         |      | 734-154                 | 295  |                         |      |
| 721-2116/037-000  |      | 733-340/105-604/997-446 |      | 734-154/108-000         | 296  | 734-240                 |      |
|                   |      | 733-342                 | 273  | 734-159                 | 317  | 734-238/100-000         | 300  |
|                   |      | 733-342/100-000         | 273  | 734-162                 | 295  |                         |      |
| <b>722 Series</b> |      | 733-342/105-604         | 275  |                         |      | 734-240/100-000         |      |
| 722-102/026-000   | 329  | 733-342/105-604/997-446 | 275  | 734-174                 |      | 734-238/105-604         | 304  |
|                   |      | 733-362                 | 273  | 734-162/105-604         | 304  | 734-238/105-604/997-407 | 305  |
| 722-112/026-000   |      |                         |      |                         |      | 734-240/105-604         | 304  |
| 722-114/026-000   | 329  | 733-370                 |      | 734-172/105-604         |      | 734-240/105-604/997-407 | 305  |
| 722-116/026-000   | 329  | 733-362/105-604         | 276  | 734-162/105-604/997-405 | 304  | 734-242                 | 299  |
| 722-120/026-000   | 329  |                         |      |                         |      | 734-242/100-000         | 300  |
| 722-132           | 347  | 733-370/105-604         |      | 734-165/105-604/997-405 |      | 734-242/105-604         | 304  |
|                   |      | 733-362/105-604/997-446 | 276  | 734-162/108-000         | 296  | 734-242/105-604/997-408 | 305  |
| 722-146           |      |                         |      |                         |      | 734-244                 | 299  |
| 722-132/031-000   | 348  | 733-370/105-604/998-446 |      | 734-174/108-000         |      | 734-246                 | 299  |
|                   |      | 733-372                 | 273  | 734-166/105-604/997-407 | 304  | 734-248                 | 299  |
| 722-146/031-000   |      | 733-372/105-604         | 276  |                         |      |                         |      |
|                   |      | 733-372/105-604/997-446 | 276  | 734-172/105-604/997-407 |      | 734-250                 |      |
| 722-132/039-000   | 347  |                         |      | 734-174/105-604         | 304  | 734-262                 | 299  |
|                   |      | <b>734 Series</b>       |      | 734-174/105-604/997-408 | 304  |                         |      |
| 722-146/039-000   |      | 734-102                 | 287  | 734-176                 | 295  | 734-266                 |      |
| 722-132/047-000   | 349  |                         |      | 734-176/105-604         | 304  | 734-262/105-604         | 303  |
|                   |      | 734-114                 |      | 734-176/105-604/997-408 | 304  |                         |      |
| 722-146/047-000   |      | 734-102/008-000         | 288  | 734-176/108-000         | 296  | 734-266/105-604         |      |
| 722-150           | 347  |                         |      | 734-178                 | 295  | 734-262/105-604/997-405 | 305  |
| 722-150/031-000   | 348  | 734-114/008-000         | 288  | 734-178/108-000         | 296  |                         |      |
| 722-150/039-000   | 347  | 734-102/037-000         | 287  | 734-180                 | 295  | 734-264/105-604/997-405 |      |
| 722-150/047-000   |      |                         |      | 734-180/108-000         | 296  | 734-265/105-604/997-407 | 305  |
|                   |      | 734-114/037-000         | 287  | 734-184                 | 295  | 734-266/105-604/997-407 | 305  |
| 722-202/026-000   | 329  | 734-102/107-000         | 287  | 734-184/108-000         | 296  | 734-268                 | 299  |
|                   |      |                         |      | 734-190                 | 316  |                         |      |
| 722-216/026-000   |      | 734-114/107-000         | 287  | 734-191                 | 316  | 734-270                 |      |
| 722-220/026-000   | 329  | 734-116                 | 287  | 734-202                 | 288  | 734-268/105-604         | 305  |
| 722-232           | 347  | 734-116/008-000         | 288  |                         |      | 734-268/105-604/997-407 | 305  |
|                   |      | 734-116/037-000         | 287  | 734-210                 |      | 734-270/105-604         | 305  |
| 722-246           |      | 734-116/107-000         | 287  | 734-202/008-000         | 289  | 734-270/105-604/997-407 | 305  |
| 722-232/031-000   | 348  |                         |      |                         |      | 734-272                 | 299  |
|                   |      | 734-118                 | 287  | 734-210/008-000         |      | 734-272/105-604         | 305  |
| 722-246/031-000   |      | 734-118/008-000         | 288  | 734-202/037-000         | 288  | 734-272/105-604/997-408 | 305  |
| 722-232/039-000   | 348  | 734-118/107-000         | 287  |                         |      | 734-274                 | 299  |
|                   |      | 734-118/037-000         | 287  | 734-210/037-000         |      | 734-276                 | 299  |
| 722-246/039-000   |      | 734-120                 | 287  | 734-212                 | 288  | 734-278                 | 299  |
| 722-232/047-000   | 349  | 734-120/037-000         | 287  | 734-212/008-000         | 289  |                         |      |
|                   |      | 734-120/008-000         | 288  | 734-212/037-000         | 288  | 734-280                 |      |
| 722-246/047-000   |      | 734-120/107-000         | 287  | 734-214                 | 288  |                         |      |
| 722-250           | 347  | 734-124                 | 287  | 734-214/008-000         | 289  | 734-302                 | 307  |
| 722-250/031-000   | 348  | 734-124/037-000         | 287  | 734-214/037-000         | 288  |                         |      |
| 722-250/039-000   | 348  | 734-124/008-000         | 288  | 734-216                 | 288  | 734-314                 |      |
| 722-250/047-000   | 349  | 734-124/107-000         | 287  | 734-216/008-000         | 289  | 734-302/018-000         | 308  |
|                   |      | 734-127                 | 282  | 734-216/037-000         | 288  |                         |      |
| <b>733 Series</b> |      |                         |      | 734-218                 | 288  | 734-314/018-000         |      |
| 733-102           | 271  | 734-129                 |      | 734-218/008-000         | 289  |                         |      |
|                   |      | 734-130                 | 317  | 734-218/037-000         | 288  | 734-302/019-000         | 307  |
| 733-110           |      | 734-132                 | 295  |                         |      |                         |      |
| 733-102/037-000   | 271  |                         |      | 734-219                 | 288  | 734-314/019-000         |      |
|                   |      | 734-144                 |      | 734-219/008-000         | 289  | 734-302/109-000         | 307  |
| 733-110/037-000   |      | 734-132/100-000         | 297  | 734-219/037-000         | 288  |                         |      |
| 733-112           | 271  |                         |      | 734-220                 | 288  | 734-314/109-000         |      |
| 733-112/037-000   | 271  | 734-142/100-000         |      | 734-220/008-000         | 289  | 734-316                 | 307  |
| 733-130           | 280  | 734-132/105-604         | 303  | 734-220/037-000         | 288  | 734-316/018-000         | 308  |
| 733-191           | 280  |                         |      | 734-226                 | 319  | 734-316/019-000         | 307  |
|                   |      | 734-142/105-604         |      |                         |      | 734-316/109-000         | 307  |
| 733-202           | 279  | 734-132/105-604/997-405 | 303  | 734-229                 |      | 734-318                 | 307  |
|                   |      |                         |      | 734-230                 | 316  | 734-318/018-000         | 308  |
| 733-210           |      | 734-135/105-604/997-405 |      | 734-231                 | 316  | 734-318/019-000         | 307  |
| 733-212           | 279  | 734-132/108-000         | 296  | 734-232                 | 299  | 734-318/109-000         | 307  |
|                   |      |                         |      |                         |      | 734-320                 | 307  |
| 733-330           | 281  | 734-144/108-000         |      | 734-236                 |      | 734-320/018-000         | 308  |
| 733-331           | 281  | 734-136/105-604/997-407 | 303  | 734-232/100-000         | 300  | 734-320/019-000         | 307  |
| 733-332           | 273  |                         |      |                         |      | 734-320/109-000         | 307  |
|                   |      | 734-142/105-604/997-407 |      | 734-236/100-000         |      | 734-324                 | 307  |
| 733-340           |      | 734-144/105-604         | 303  | 734-232/105-604         | 304  | 734-324/018-000         | 308  |
| 733-332/100-000   | 273  | 734-144/105-604/997-408 | 303  |                         |      | 734-324/019-000         | 307  |
|                   |      | 734-146                 | 295  | 734-236/105-604         |      | 734-324/109-000         | 307  |
| 733-340           |      | 734-146/105-604         | 303  | 734-232/105-604/997-405 | 305  |                         |      |
| 733-340/100-000   |      | 734-146/105-604/997-408 | 303  |                         |      | 734-234/105-604/997-405 |      |
|                   |      | 734-146/108-000         | 296  |                         |      |                         |      |

| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>734 Series</b> |      | <b>734 Series</b> |      | <b>735 Series</b> |      | <b>770 Series</b> |      |
| 734-326           | 359  | 734-478           | 313  | 735-127           | 429  | 770-244/062-000   | 214  |
|                   |      | 734-478/037-000   | 313  | 735-127/001-000   | 429  | 770-244/064-000   | 214  |
| 734-329           |      | 734-480           | 313  |                   |      | 770-245           | 222  |
| 734-332           | 308  | 734-480/037-000   | 313  | 735-302           | 431  | 770-245/060-000   | 222  |
|                   |      | 734-484           | 313  |                   |      | 770-245/062-000   | 222  |
| 734-336           |      | 734-484/037-000   | 313  | 735-304           |      | 770-245/064-000   | 222  |
| 734-332/018-000   | 309  |                   |      | 735-303/001-000   | 431  | 770-252           | 201  |
|                   |      | 734-502           | 314  | 735-306           | 431  | 770-252/060-000   | 201  |
| 734-336/018-000   |      |                   |      | 735-306/001-000   | 431  | 770-253           | 206  |
| 734-332/019-000   | 308  | 734-506           |      | 735-306/003-000   | 431  | 770-253/060-000   | 206  |
|                   |      | 734-502/037-000   | 315  | 735-307           | 431  | 770-253/062-000   | 206  |
| 734-336/019-000   |      |                   |      | 735-307/001-000   | 431  | 770-254           | 214  |
| 734-338           | 308  | 734-506           |      | 735-307/002-000   | 431  | 770-254/060-000   | 214  |
|                   |      | 734-508           | 314  |                   |      | 770-254/062-000   | 214  |
| 734-340           |      |                   |      | 735-500           | 506  | 770-254/064-000   | 214  |
| 734-338/018-000   | 309  | 734-510           |      |                   |      | 770-255           | 222  |
|                   |      | 734-508/037-000   | 315  |                   |      | 770-255/060-000   | 222  |
| 734-340/018-000   |      |                   |      | <b>744 Series</b> |      | 770-255/062-000   | 222  |
| 734-338/019-000   | 308  | 734-510/037-000   |      | 744-202           | 417  | 770-255/064-000   | 222  |
|                   |      | 734-512           | 314  | 744-203           | 417  | 770-262           | 201  |
| 734-340/019-000   |      | 734-512/037-000   | 315  | 744-204           | 417  | 770-263           | 206  |
| 734-342           | 308  | 734-514           | 314  | 744-206           | 417  | 770-263/071-000   | 206  |
| 734-342/019-000   | 308  | 734-514/037-000   | 315  | 744-207           | 417  | 770-263/073-000   | 206  |
| 734-342/018-000   | 309  | 734-516           | 314  | 744-210           | 417  | 770-264           | 214  |
| 734-344           | 308  | 734-516/037-000   | 315  |                   |      | 770-264/071-000   | 214  |
| 734-344/018-000   | 309  | 734-520           | 314  | <b>750 Series</b> |      | 770-264/072-000   | 214  |
| 734-344/019-000   | 308  | 734-520/037-000   | 315  | 750-653/003-000   | 194  | 770-264/073-000   | 212  |
| 734-346           | 308  | 734-532           | 313  |                   |      | 770-265           | 222  |
| 734-346/018-000   | 309  |                   |      | <b>770 Series</b> |      | 770-265/073-000   | 222  |
| 734-346/019-000   | 308  | 734-544           |      | 770-101           | 118  | 770-272           | 201  |
| 734-348           | 308  | 734-532/037-000   | 314  | 770-102/041-000   | 118  | 770-273           | 206  |
| 734-348/018-000   | 309  |                   |      | 770-103           | 130  | 770-273/071-000   | 206  |
| 734-348/019-000   | 308  | 734-544/037-000   |      | 770-104           | 158  | 770-273/073-000   | 206  |
| 734-349           | 308  | 734-546           | 313  | 770-105           | 170  | 770-274           | 214  |
| 734-349/018-000   | 309  | 734-546/037-000   | 314  | 770-104           | 158  | 770-274/071-000   | 214  |
| 734-349/019-000   | 308  | 734-548           | 313  | 770-105           | 170  | 770-274/072-000   | 214  |
| 734-350           | 308  | 734-548/037-000   | 314  | 770-111           | 118  | 770-274/073-000   | 214  |
| 734-350/018-000   | 309  | 734-550           | 313  | 770-112/041-000   | 118  | 770-275           | 222  |
| 734-350/019-000   | 308  | 734-550/037-000   | 314  | 770-113           | 130  | 770-275/073-000   | 222  |
| 734-362           | 311  | 734-554           | 313  | 770-113/147-000   | 145  | 770-282           | 201  |
|                   |      | 734-554/037-000   | 314  | 770-114           | 158  | 770-282/080-000   | 201  |
| 734-372           |      | 734-562           | 314  | 770-115           | 170  | 770-282/082-000   | 201  |
| 734-362/008-000   | 311  |                   |      | 770-121           | 118  | 770-283           | 206  |
|                   |      | 734-566           |      | 770-122/041-000   | 118  | 770-283/081-000   | 206  |
| 734-372/008-000   |      | 734-562/037-000   | 315  | 770-123           | 130  | 770-283/082-000   | 206  |
| 734-362/037-000   | 311  |                   |      | 770-124           | 158  | 770-284           | 214  |
|                   |      | 734-566/037-000   |      | 770-125           | 170  | 770-284/081-000   | 214  |
| 734-372/037-000   |      | 734-568           | 314  | 770-131           | 118  | 770-285           | 222  |
|                   |      |                   |      | 770-132/041-000   | 118  | 770-285/080-000   | 222  |
| 734-400           | 317  | 734-570           |      | 770-133           | 130  | 770-285/082-000   | 222  |
| 734-402           | 298  | 734-568/037-000   | 315  | 770-134           | 158  | 770-292           | 201  |
|                   |      |                   |      | 770-135           | 170  | 770-292/080-000   | 201  |
| 734-410           |      | 734-570/037-000   |      | 770-140           | 135  | 770-292/082-000   | 201  |
| 734-402/001-000   | 298  | 734-572           | 314  |                   |      | 770-293           | 206  |
|                   |      | 734-572/037-000   | 315  | 770-201           | 116  | 770-293/081-000   | 206  |
| 734-410/001-000   |      | 734-574           | 314  | 770-202           | 119  | 770-293/082-000   | 206  |
| 734-412           | 298  | 734-574/037-000   | 315  | 770-203           | 131  | 770-294           | 214  |
| 734-412/001-000   | 298  | 734-576           | 314  | 770-204           | 159  | 770-294/081-000   | 214  |
| 734-420           | 320  | 734-576/037-000   | 315  | 770-205           | 171  | 770-295           | 222  |
| 734-426           | 319  | 734-580           | 314  | 770-212           | 119  | 770-295/080-000   | 222  |
| 734-427           | 359  | 734-580/037-000   | 315  | 770-213           | 131  | 770-295/082-000   | 222  |
| 734-428           | 319  |                   |      | 770-213/002-000   | 136  |                   |      |
| 734-429           | 359  | 734-602           | 318  | 770-214           | 159  | 770-305           | 172  |
| 734-430           | 359  |                   |      | 770-215           | 171  | 770-315           | 172  |
| 734-431           | 359  | 734-612           |      | 770-221           | 116  | 770-317           | 121  |
| 734-432           | 301  | 734-632           | 318  | 770-222           | 119  | 770-318           | 135  |
|                   |      |                   |      | 770-223           | 131  | 770-320           | 177  |
| 734-440           |      | 734-636           |      | 770-224           | 159  | 770-321           | 177  |
| 734-432/001-000   | 302  | 734-638           | 318  | 770-225           | 171  | 770-325           | 172  |
|                   |      |                   |      | 770-232           | 119  | 770-335           | 172  |
| 734-440/001-000   |      | 734-640           |      | 770-233           | 131  | 770-337           | 121  |
| 734-442           | 301  | 734-642           | 318  | 770-233/002-000   | 136  | 770-338           | 135  |
| 734-442/001-000   | 302  | 734-671           | 317  | 770-234           | 159  | 770-340           | 177  |
| 734-462           | 313  |                   |      | 770-235           | 171  | 770-341           | 177  |
|                   |      | <b>735 Series</b> |      | 770-242           | 201  | 770-360           | 116  |
| 734-474           |      | 735-122           | 429  | 770-242/060-000   | 201  | 770-382           | 497  |
| 734-462/037-000   | 313  | 735-123           | 429  | 770-243           | 206  | 770-383           | 497  |
|                   |      | 735-123/001-000   | 429  | 770-243/060-000   | 206  |                   |      |
| 734-474/037-000   |      | 735-126           | 429  | 770-243/062-000   | 206  | 770-401           | 116  |
| 734-476           | 313  | 735-126/001-000   | 429  | 770-244           | 214  | 770-405           | 173  |
| 734-476/037-000   | 313  |                   |      | 770-244/060-000   | 214  | 770-408           | 137  |

| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>770 Series</b> |      | <b>770 Series</b> |      | <b>770 Series</b> |      | <b>770 Series</b> |      |
| 770-415           | 173  | 770-655           | 181  | 770-755/064-000   | 223  | 770-874/011-000   | 217  |
| 770-418           | 137  | 770-656           | 140  | 770-763           | 207  | 770-875           | 224  |
| 770-425           | 173  | 770-657           | 142  | 770-763/071-000   | 207  | 770-875/011-000   | 225  |
| 770-428           | 137  | 770-658           | 142  | 770-763/073-000   | 207  | 770-883           | 208  |
| 770-435           | 173  | 770-659           | 182  | 770-764           | 215  | 770-883/011-000   | 209  |
| 770-438           | 137  | 770-661           | 184  | 770-764/071-000   | 215  | 770-884           | 216  |
| 770-450           | 130  | 770-665           | 140  | 770-764/072-000   | 215  | 770-884/011-000   | 217  |
|                   |      | 770-667           | 140  | 770-764/073-000   | 215  | 770-885           | 224  |
| 770-502/041-000   | 120  | 770-670           | 140  | 770-765           | 223  | 770-885/011-000   | 225  |
| 770-502/042-000   | 120  | 770-671           | 180  | 770-765/073-000   | 223  | 770-893           | 208  |
| 770-503           | 132  | 770-672           | 180  | 770-773           | 207  | 770-893/011-000   | 209  |
| 770-503/021-000   | 133  | 770-673           | 141  | 770-773/071-000   | 207  | 770-894           | 216  |
| 770-503/023-000   | 132  | 770-674           | 167  | 770-773/073-000   | 207  | 770-894/011-000   | 217  |
| 770-503/032-000   | 133  | 770-675           | 182  | 770-774           | 215  | 770-895           | 224  |
| 770-503/035-000   | 133  | 770-676           | 166  | 770-774/071-000   | 215  | 770-895/011-000   | 225  |
| 770-503/038-000   | 155  | 770-677           | 166  | 770-774/072-000   | 215  |                   |      |
| 770-512/041-000   | 120  | 770-681/100-000   | 195  | 770-774/073-000   | 215  | 770-901           | 181  |
| 770-512/042-000   | 120  | 770-681/104-000   | 195  | 770-775           | 223  | 770-902           | 181  |
| 770-513           | 132  | 770-681/106-000   | 195  | 770-775/073-000   | 223  | 770-903           | 181  |
| 770-504           | 160  | 770-681/107-000   | 195  | 770-783           | 207  | 770-907           | 142  |
| 770-504/023-000   | 160  | 770-681/109-000   | 195  | 770-783/081-000   | 207  | 770-909           | 182  |
| 770-505           | 174  | 770-681/110-000   | 195  | 770-783/082-000   | 207  | 770-911           | 181  |
| 770-505/021-000   | 175  | 770-681/111-000   | 195  | 770-784           | 215  | 770-912           | 181  |
| 770-505/023-000   | 174  | 770-681/112-000   | 195  | 770-784/081-000   | 215  | 770-913           | 181  |
| 770-506/029-000   | 196  | 770-682/138-000   | 195  | 770-785           | 223  | 770-921           | 180  |
| 770-507/047-000   | 197  | 770-683           | 141  | 770-785/080-000   | 223  | 770-922           | 180  |
| 770-513/021-000   | 133  | 770-684           | 141  | 770-785/082-000   | 223  | 770-934           | 141  |
| 770-513/023-000   | 132  | 770-685           | 141  | 770-793           | 207  | 770-936           | 141  |
| 770-513/032-000   | 133  | 770-686           | 141  | 770-793/081-000   | 207  | 770-940           | 183  |
| 770-513/035-000   | 133  | 770-687           | 144  | 770-793/082-000   | 207  | 770-944           | 167  |
| 770-513/038-000   | 155  | 770-688           | 144  | 770-794           | 215  | 770-945           | 167  |
| 770-514           | 160  | 770-690           | 183  | 770-794/081-000   | 215  | 770-951           | 181  |
| 770-514/023-000   | 160  | 770-693           | 103  | 770-795           | 223  | 770-952           | 181  |
| 770-515           | 174  | 770-694           | 162  | 770-795/080-000   | 223  | 770-953           | 181  |
| 770-515/021-000   | 175  | 770-695           | 176  | 770-795/082-000   | 223  | 770-967           | 210  |
| 770-515/023-000   | 174  |                   |      |                   |      | 770-970           | 210  |
| 770-516/029-000   | 196  | 770-703           | 134  | 770-803           | 138  | 770-992           | 182  |
| 770-517/047-000   | 197  | 770-703/009-000   | 134  | 770-803/011-000   | 139  | 770-993           | 182  |
| 770-523           | 132  | 770-704           | 162  | 770-804           | 164  | 770-994           | 167  |
|                   |      | 770-704/009-000   | 162  | 770-804/011-000   | 165  | 770-995           | 167  |
| 770-601           | 141  | 770-705           | 176  | 770-805           | 178  |                   |      |
| 770-603           | 141  | 770-705/009-000   | 176  | 770-805/011-000   | 179  | 770-1102          | 119  |
| 770-605           | 181  | 770-713           | 135  | 770-813           | 138  | 770-1105          | 171  |
| 770-606           | 140  | 770-713/007-000   | 135  | 770-813/011-000   | 139  | 770-1112          | 119  |
| 770-607           | 142  | 770-714           | 163  | 770-814           | 164  | 770-1115          | 171  |
| 770-608           | 142  | 770-714/007-000   | 163  | 770-814/011-000   | 165  | 770-1162          | 119  |
| 770-609           | 182  | 770-715           | 177  | 770-815           | 178  | 770-1165          | 171  |
| 770-611           | 184  | 770-715/007-000   | 177  | 770-815/011-000   | 179  | 770-1172          | 119  |
| 770-615           | 140  | 770-723           | 134  | 770-823           | 138  | 770-1175          | 171  |
| 770-617           | 180  | 770-723/009-000   | 134  | 770-823/011-000   | 139  |                   |      |
| 770-618           | 182  | 770-724           | 162  | 770-824           | 164  | 770-1305          | 171  |
| 770-619           | 181  | 770-724/009-000   | 162  | 770-824/011-000   | 165  | 770-1315          | 171  |
| 770-620           | 180  | 770-725           | 176  | 770-825           | 178  | 770-1324          | 159  |
| 770-621           | 180  | 770-725/009-000   | 176  | 770-825/011-000   | 179  | 770-1325          | 171  |
| 770-622           | 180  | 770-733           | 135  | 770-833           | 138  | 770-1334          | 159  |
| 770-623           | 141  | 770-733/007-000   | 135  | 770-833/011-000   | 139  | 770-1335          | 171  |
| 770-624           | 167  | 770-734           | 163  | 770-834           | 164  | 770-1343          | 131  |
| 770-625           | 182  | 770-734/007-000   | 163  | 770-834/011-000   | 165  | 770-1353          | 131  |
| 770-626           | 166  | 770-735           | 177  | 770-835           | 178  | 770-1363          | 131  |
| 770-627           | 166  | 770-735/007-000   | 177  | 770-835/011-000   | 179  | 770-1373          | 131  |
| 770-629/130-000   | 194  | 770-743           | 207  | 770-843           | 208  | 770-1373/146-000  | 145  |
| 770-631/100-000   | 195  | 770-743/060-000   | 207  | 770-843/011-000   | 209  | 770-1373/147-000  | 145  |
| 770-631/104-000   | 195  | 770-743/062-000   | 207  | 770-844           | 216  | 770-1373/148-000  | 145  |
| 770-631/106-000   | 195  | 770-744           | 215  | 770-844/011-000   | 217  | 770-1373/149-000  | 145  |
| 770-631/107-000   | 195  | 770-744/060-000   | 215  | 770-845           | 224  |                   |      |
| 770-631/109-000   | 195  | 770-744/062-000   | 215  | 770-845/011-000   | 225  | 770-1601          | 203  |
| 770-631/110-000   | 195  | 770-744/064-000   | 215  | 770-853           | 208  | 770-1602          | 203  |
| 770-631/111-000   | 195  | 770-745           | 223  | 770-853/011-000   | 209  | 770-1603          | 203  |
| 770-631/112-000   | 195  | 770-745/060-000   | 223  | 770-854           | 216  | 770-1606          | 123  |
| 770-632/138-000   | 195  | 770-745/062-000   | 223  | 770-854/011-000   | 217  | 770-1612          | 210  |
| 770-633           | 141  | 770-745/064-000   | 223  | 770-855           | 224  | 770-1613          | 210  |
| 770-634           | 141  | 770-753           | 207  | 770-855/011-000   | 225  | 770-1615          | 123  |
| 770-635           | 141  | 770-753/060-000   | 207  | 770-863           | 208  | 770-1626          | 123  |
| 770-636           | 141  | 770-753/062-000   | 207  | 770-863/011-000   | 209  | 770-1627          | 123  |
| 770-637           | 144  | 770-754           | 215  | 770-864           | 216  | 770-1631          | 218  |
| 770-638           | 144  | 770-754/060-000   | 215  | 770-864/011-000   | 217  | 770-1632          | 218  |
| 770-640           | 183  | 770-754/062-000   | 215  | 770-865           | 224  | 770-1633          | 218  |
| 770-643           | 103  | 770-754/064-000   | 215  | 770-865/011-000   | 225  | 770-1634          | 123  |
| 770-644           | 162  | 770-755           | 223  | 770-873           | 208  | 770-1636          | 123  |
| 770-645           | 176  | 770-755/060-000   | 223  | 770-873/011-000   | 209  | 770-1641          | 226  |
| 770-653           | 141  | 770-755/062-000   | 223  | 770-874           | 216  | 770-1642          | 226  |

| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>770 Series</b> |      | <b>771 Series</b> |      | <b>771 Series</b> |      | <b>771 Series</b> |      |
| 770-1643          | 226  | 771-5001/100-000  |      | 771-8985/206-..3  | 188  | 771-8995/106-...  | 228  |
| 770-1651          | 203  | 771-5001/106-000  | 146  | 771-8985/206-..4  | 188  | 771-8995/107-...  | 229  |
| 770-1652          | 203  | 771-5001/107-000  | 146  | 771-8985/207-..3  | 192  | 771-8995/116-...  | 228  |
| 770-1653          | 203  |                   |      | 771-8985/207-..4  | 192  | 771-8995/117-...  | 229  |
| 770-1656          | 123  | 771-6993/006-...  | 156  | 771-8985/216-..3  | 188  |                   |      |
| 770-1661          | 210  | 771-6993/007-...  | 157  | 771-8985/216-..4  | 188  | 771-8995/206-...  | 228  |
| 770-1662          | 210  | 771-6993/016-...  | 156  | 771-8985/217-..3  | 192  | 771-8995/207-...  | 229  |
| 770-1663          | 210  | 771-6993/017-...  | 157  | 771-8985/217-..4  | 192  | 771-8995/216-...  | 228  |
| 770-1665          | 123  |                   |      |                   |      | 771-8995/217-...  | 229  |
| 770-1681          | 218  | 771-6993/106-...  | 156  | 771-8992/006-..1  | 125  |                   |      |
| 770-1682          | 218  | 771-6993/107-...  | 157  | 771-8992/006-..2  | 125  | 771-9973/006-..1  | 149  |
| 770-1683          | 218  | 771-6993/116-...  | 156  | 771-8992/006-..3  | 204  | 771-9973/006-..2  | 149  |
| 770-1684          | 123  | 771-6993/117-...  | 157  | 771-8992/006-..5  | 204  | 771-9973/006-..5  | 150  |
| 770-1686          | 123  |                   |      | 771-8992/006-..7  | 204  | 771-9973/007-...  | 153  |
|                   |      | 771-6993/206-...  | 156  | 771-8992/007-..1  | 128  | 771-9973/016-..1  | 149  |
| 770-1701          | 203  | 771-6993/207-...  | 157  | 771-8992/007-..2  | 128  | 771-9973/016-..2  | 149  |
| 770-1702          | 203  | 771-6993/216-...  | 156  | 771-8992/007-..3  | 205  | 771-9973/016-..5  | 150  |
| 770-1703          | 203  | 771-6993/217-...  | 157  | 771-8992/007-..5  | 205  | 771-9973/017-...  | 153  |
| 770-1712          | 210  |                   |      | 771-8992/007-..7  | 205  |                   |      |
| 770-1713          | 210  | 771-8965/007-...  | 185  | 771-8992/016-...  | 125  | 771-9973/106-...  | 149  |
| 770-1714          | 211  | 771-8965/017-...  | 185  | 771-8992/017-...  | 128  | 771-9973/107-...  | 153  |
| 770-1715          | 211  | 771-8965/107-...  | 185  |                   |      | 771-9973/116-...  | 149  |
| 770-1716          | 211  | 771-8965/117-...  | 185  | 771-8992/106-..1  | 125  | 771-9973/117-...  | 153  |
| 770-1731          | 218  |                   |      | 771-8992/106-..2  | 125  |                   |      |
| 770-1732          | 218  | 771-8982/005-...  | 124  | 771-8992/106-..3  | 204  | 771-9973/206-..1  | 149  |
| 770-1733          | 218  | 771-8982/006-..1  | 126  | 771-8992/106-..5  | 204  | 771-9973/206-..2  | 149  |
| 770-1734          | 219  | 771-8982/006-..2  | 126  | 771-8992/106-..7  | 204  | 771-9973/206-..4  | 150  |
| 770-1735          | 219  | 771-8982/006-..3  | 127  | 771-8992/107-..1  | 128  | 771-9973/206-..5  | 150  |
| 770-1736          | 219  | 771-8982/006-..4  | 127  | 771-8992/107-..2  | 128  | 771-9973/207-...  | 153  |
| 770-1741          | 226  | 771-8982/007-...  | 129  | 771-8992/107-..3  | 205  | 771-9973/216-...  | 149  |
| 770-1742          | 226  | 771-8982/015-...  | 124  | 771-8992/107-..5  | 205  | 771-9973/217-...  | 153  |
| 770-1743          | 226  | 771-8982/016-..1  | 126  | 771-8992/107-..7  | 205  |                   |      |
| 770-1744          | 226  | 771-8982/016-..2  | 126  | 771-8992/116-...  | 125  | 771-9975/006-...  | 189  |
| 770-1745          | 226  | 771-8982/016-..3  | 127  | 771-8992/117-...  | 128  | 771-9975/007-...  | 193  |
| 770-1746          | 226  | 771-8982/016-..4  | 127  |                   |      | 771-9975/016-...  | 189  |
| 770-1751          | 203  | 771-8982/017-...  | 129  | 771-8992/206-..1  | 125  | 771-9975/017-...  | 193  |
| 770-1752          | 203  |                   |      | 771-8992/206-..2  | 125  |                   |      |
| 770-1753          | 203  | 771-8982/105-...  | 124  | 771-8992/206-..3  | 204  | 771-9975/106-...  | 189  |
| 770-1761          | 210  | 771-8982/106-..1  | 126  | 771-8992/206-..5  | 204  | 771-9975/107-...  | 193  |
| 770-1762          | 210  | 771-8982/106-..2  | 126  | 771-8992/206-..7  | 204  | 771-9975/116-...  | 189  |
| 770-1763          | 210  | 771-8982/106-..3  | 127  | 771-8992/207-..1  | 128  | 771-9975/117-...  | 193  |
| 770-1781          | 218  | 771-8982/106-..4  | 127  | 771-8992/207-..2  | 128  |                   |      |
| 770-1782          | 218  | 771-8982/107-...  | 129  | 771-8992/207-..3  | 205  | 771-9975/206-...  | 189  |
| 770-1783          | 218  | 771-8982/115-...  | 124  | 771-8992/207-..5  | 205  | 771-9975/207-...  | 193  |
| 770-2105          | 176  | 771-8982/116-..1  | 126  | 771-8992/207-..7  | 205  | 771-9975/216-...  | 189  |
| 770-2115          | 177  | 771-8982/116-..2  | 126  | 771-8992/216-...  | 125  | 771-9975/217-...  | 193  |
|                   |      | 771-8982/116-..3  | 127  | 771-8992/217-...  | 128  |                   |      |
| 770-2303          | 134  | 771-8982/116-..4  | 127  |                   |      | 771-9985/006-..1  | 187  |
| 770-2305          | 176  | 771-8982/117-...  | 129  | 771-8993/007-..3  | 213  | 771-9985/006-..2  | 187  |
| 770-2313          | 135  |                   |      | 771-8993/007-..5  | 213  | 771-9985/007-..1  | 191  |
| 770-2313/007-000  | 135  | 771-8982/205-...  | 124  | 771-8993/007-..7  | 213  | 771-9985/007-..2  | 191  |
| 770-2324          | 162  | 771-8982/206-..1  | 126  |                   |      | 771-9985/016-...  | 187  |
| 770-2325          | 176  | 771-8982/206-..2  | 126  | 771-8993/107-..3  | 213  | 771-9985/017-...  | 191  |
| 770-2334          | 163  | 771-8982/206-..3  | 127  | 771-8993/107-..5  | 213  |                   |      |
| 770-2334/007-000  | 163  | 771-8982/206-..4  | 127  | 771-8993/107-..7  | 213  | 771-9985/106-..1  | 187  |
| 770-2335          | 177  | 771-8982/207-...  | 129  |                   |      | 771-9985/106-..2  | 187  |
| 770-2335/007-000  | 177  | 771-8982/215-...  | 124  | 771-8993/207-..3  | 213  | 771-9985/107-..1  | 191  |
| 770-2343          | 134  | 771-8982/216-..1  | 126  | 771-8993/207-..5  | 213  | 771-9985/107-..2  | 191  |
| 770-2353          | 135  | 771-8982/216-..2  | 126  | 771-8993/207-..7  | 213  | 771-9985/116-...  | 187  |
| 770-2363          | 134  | 771-8982/216-..3  | 127  |                   |      | 771-9985/117-...  | 191  |
|                   |      | 771-8982/216-..4  | 127  | 771-8993/1004-051 | 151  |                   |      |
| 770-3105          | 178  | 771-8982/217-...  | 129  |                   |      | 771-9985/206-..1  | 187  |
| 770-3105/011-000  | 179  |                   |      | 771-8994/006-...  | 220  | 771-9985/206-..2  | 187  |
| 770-3115          | 178  | 771-8985/006-..3  | 188  | 771-8994/007-...  | 221  | 771-9985/207-..1  | 191  |
| 770-3115/011-000  | 179  | 771-8985/006-..4  | 188  | 771-8994/016-...  | 220  | 771-9985/207-..2  | 191  |
|                   |      | 771-8985/007-..3  | 192  | 771-8994/017-...  | 221  | 771-9985/216-...  | 187  |
| 770-5001/100-000  | 194  | 771-8985/007-..4  | 192  |                   |      | 771-9985/217-...  | 191  |
|                   |      | 771-8985/016-..3  | 188  | 771-8994/106-...  | 220  |                   |      |
| 770-6223          | 56   | 771-8985/016-..4  | 188  | 771-8994/107-...  | 221  | 771-9993/006-..1  | 148  |
| 770-6224          | 57   | 771-8985/017-..3  | 192  | 771-8994/116-...  | 220  | 771-9993/006-..2  | 148  |
| 770-6225          | 57   | 771-8985/017-..4  | 192  | 771-8994/117-...  | 221  | 771-9993/006-..3  | 212  |
| 770-6229          | 53   |                   |      |                   |      | 771-9993/006-..5  | 212  |
|                   |      | 771-8985/106-..3  | 188  | 771-8994/206-...  | 220  | 771-9993/006-..7  | 212  |
| 770-7102          | 56   | 771-8985/106-..4  | 188  | 771-8994/207-...  | 221  | 771-9993/007-..1  | 152  |
| 770-7105          | 57   | 771-8985/107-..3  | 192  | 771-8994/216-...  | 220  | 771-9993/007-..2  | 152  |
|                   |      | 771-8985/107-..4  | 192  | 771-8994/217-...  | 221  | 771-9993/016-...  | 148  |
| 770-7502          | 56   | 771-8985/116-..3  | 188  |                   |      | 771-9993/017-...  | 152  |
| 770-7505          | 57   | 771-8985/116-..4  | 188  | 771-8995/006-...  | 228  |                   |      |
|                   |      | 771-8985/117-..3  | 192  | 771-8995/007-...  | 229  | 771-9993/106-..1  | 148  |
|                   |      | 771-8985/117-..4  | 192  | 771-8995/016-...  | 228  | 771-9993/106-..2  | 148  |
|                   |      |                   |      | 771-8995/017-...  | 229  | 771-9993/106-..3  | 212  |

| Item No.          | Page | Item No.                | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------------|------|-------------------|------|-------------------|------|
| <b>771 Series</b> |      | <b>804 Series</b>       |      | <b>869 Series</b> |      | <b>890 Series</b> |      |
| 771-9993/106-...5 | 212  | 804-102                 | 415  | 869-328           | 480  | 890-244/064-000   | 106  |
| 771-9993/106-...7 | 212  |                         |      | 869-329           | 480  | 890-245           | 110  |
| 771-9993/107-...1 | 152  | 804-116                 |      | 869-351           | 480  | 890-245/060-000   | 110  |
| 771-9993/107-...2 | 152  |                         |      | 869-354           | 480  | 890-245/062-000   | 110  |
| 771-9993/116-...  | 148  | 804-302                 | 415  | 869-357           | 480  | 890-252           | 95   |
| 771-9993/117-...  | 152  |                         |      | 869-359           | 480  | 890-222/060-000   | 95   |
|                   |      | 804-312                 |      | 869-385           | 480  | 890-253           | 100  |
| 771-9993/206-...1 | 148  |                         |      | 869-387           | 480  | 890-253/060-000   | 100  |
| 771-9993/206-...2 | 148  | <b>805 Series</b>       |      | 869-388           | 480  | 890-253/062-000   | 100  |
| 771-9993/206-...3 | 212  | 805-102                 | 409  | 869-389           | 480  | 890-254           | 106  |
| 771-9993/206-...5 | 212  |                         |      | 869-395           | 480  | 890-254/060-000   | 106  |
| 771-9993/206-...7 | 212  | 805-124                 |      | 869-397           | 480  | 890-254/062-000   | 106  |
| 771-9993/207-...1 | 152  |                         |      | 869-398           | 480  | 890-254/064-000   | 106  |
| 771-9993/207-...2 | 152  | 805-152                 | 411  | 869-399           | 480  | 890-255           | 110  |
| 771-9993/216-...  | 148  |                         |      |                   |      | 890-255/060-000   | 110  |
| 771-9993/217-...  | 152  | 805-174                 |      | <b>870 Series</b> |      | 890-255/062-000   | 110  |
|                   |      |                         |      | 870-184           | 481  | 890-262           | 95   |
| 771-9993/306-...  | 151  | 805-302                 | 409  |                   |      | 890-263           | 100  |
| 771-9993/406-...  | 151  |                         |      | 870-402           | 480  | 890-263/071-000   | 100  |
| 771-9993/805-...  | 151  | 805-324                 |      |                   |      | 890-263/073-000   | 100  |
|                   |      |                         |      | 870-410           |      | 890-264           | 106  |
| 771-9994/006-...  | 168  | 805-302/200-604         | 413  | 870-433           | 480  | 890-264/071-000   | 106  |
| 771-9994/016-...  | 168  |                         |      |                   |      | 890-264/072-000   | 106  |
|                   |      | 805-308/200-604         |      | 870-440           |      | 890-264/073-000   | 106  |
| 771-9994/106-...  | 168  |                         |      |                   |      | 890-265           | 110  |
| 771-9994/116-...  | 168  | 805-302/200-604/997-404 | 413  |                   |      | 890-265/073-000   | 110  |
|                   |      | 805-303/200-604/997-404 | 413  | <b>873 Series</b> |      | 890-272           | 95   |
| 771-9994/206-...  | 168  | 805-304/200-604/997-405 | 413  | 873-902           | 264  | 890-273           | 100  |
| 771-9994/216-...  | 168  | 805-305/200-604/997-405 | 413  | 873-903           | 264  | 890-273/071-000   | 100  |
|                   |      | 805-306/200-604/997-406 | 413  | 873-903           | 264  | 890-273/073-000   | 100  |
| 771-9995/006-...1 | 186  | 805-307/200-604/997-406 | 413  | 873-953           | 265  | 890-274           | 106  |
| 771-9995/006-...2 | 186  | 805-308/200-604/997-406 | 413  |                   |      | 890-274/071-000   | 106  |
| 771-9995/007-...1 | 190  |                         |      | <b>887 Series</b> |      | 890-274/072-000   | 106  |
| 771-9995/007-...2 | 190  | 805-352                 | 411  | 887-910           | 468  | 890-274/073-000   | 106  |
| 771-9995/016-...  | 186  |                         |      | 887-911           | 468  | 890-275           | 110  |
| 771-9995/017-...  | 190  | 805-374                 |      |                   |      | 890-275/073-000   | 110  |
|                   |      |                         |      | <b>890 Series</b> |      | 890-282           | 95   |
| 771-9995/106-...1 | 186  | <b>862 Series</b>       |      | 890-102           | 64   | 890-282/080-000   | 95   |
| 771-9995/106-...2 | 186  | 862-...2                | 34   | 890-103           | 72   | 890-282/082-000   | 95   |
| 771-9995/107-...1 | 190  | 862-...3                | 34   | 890-104           | 78   | 890-283           | 100  |
| 771-9995/107-...2 | 190  | 862-...4                | 35   | 890-105           | 84   | 890-283/081-000   | 100  |
|                   |      | 862-...5                | 35   | 890-111           | 64   | 890-283/082-000   | 100  |
| 771-9995/116-...  | 186  |                         |      | 890-112           | 64   | 890-284           | 106  |
| 771-9995/117-...  | 190  | <b>869 Series</b>       |      | 890-113           | 72   | 890-284/081-000   | 106  |
|                   |      | 869-102                 | 479  | 890-114           | 78   | 890-285           | 110  |
| 771-9995/206-...1 | 186  |                         |      | 890-115           | 84   | 890-285/080-000   | 110  |
| 771-9995/206-...2 | 186  | 869-112                 |      | 890-122           | 64   | 890-285/082-000   | 110  |
| 771-9995/207-...1 | 190  | 869-132                 | 479  | 890-123           | 72   | 890-292           | 95   |
| 771-9995/207-...2 | 190  |                         |      | 890-124           | 78   | 890-292/080-000   | 95   |
| 771-9995/216-...  | 186  | 869-142                 |      | 890-125           | 84   | 890-292/082-000   | 95   |
| 771-9995/217-...  | 190  | 869-152                 | 479  | 890-131           | 64   | 890-293           | 100  |
|                   |      |                         |      | 890-132           | 64   | 890-293/081-000   | 100  |
| <b>773 Series</b> |      | 869-162                 |      | 890-133           | 72   | 890-293/082-000   | 100  |
| 773-173           | 460  |                         |      | 890-134           | 78   | 890-294           | 106  |
|                   |      | 869-182                 | 479  | 890-135           | 84   | 890-294/081-000   | 106  |
| 773-331           | 461  |                         |      | 890-202           | 65   | 890-295           | 110  |
| 773-332           | 460  | 869-192                 |      | 890-203           | 73   | 890-295/080-000   | 110  |
|                   |      |                         |      | 890-204           | 79   | 890-295/082-000   | 110  |
| 773-492           | 461  | 869-202                 | 479  | 890-205           | 85   | 890-310           | 64   |
| 773-494           | 461  |                         |      | 890-212           | 65   | 890-311           | 64   |
| 773-496           | 461  | 869-212                 |      | 890-213           | 73   | 890-382           | 496  |
| 773-498           | 461  | 869-232                 | 479  | 890-214           | 79   | 890-383           | 496  |
|                   |      |                         |      | 890-215           | 85   | 890-384           | 496  |
| 773-514           | 460  | 869-242                 |      | 890-222           | 65   | 890-385           | 497  |
|                   |      |                         |      | 890-223           | 73   | 890-392           | 64   |
| <b>793 Series</b> |      | 869-301                 | 480  | 890-224           | 79   | 890-393           | 72   |
| 793-501           | 520  | 869-304                 | 480  | 890-225           | 85   | 890-502           | 65   |
|                   |      | 869-307                 | 480  | 890-232           | 65   | 890-502/342-000   | 65   |
| 793-517           |      | 869-309                 | 480  | 890-233           | 73   | 890-503           | 73   |
| 793-565           | 520  | 869-311                 | 481  | 890-234           | 79   | 890-504           | 79   |
| 793-566           | 520  | 869-314                 | 481  | 890-235           | 85   | 890-505           | 85   |
| 793-569           | 520  | 869-316                 | 481  | 890-242           | 95   | 890-512           | 65   |
|                   |      | 869-317                 | 481  | 890-242/060-000   | 95   | 890-512/342-000   | 65   |
| 793-573           |      | 869-319                 | 481  | 890-243           | 100  | 890-513           | 73   |
|                   |      | 869-321                 | 480  | 890-243/060-000   | 100  | 890-514           | 79   |
| 793-5501          | 498  | 869-324                 | 480  | 890-243/062-000   | 100  | 890-515           | 85   |
|                   |      | 869-326                 | 480  | 890-244           | 106  | 890-523           | 72   |
|                   |      | 869-327                 | 480  | 890-244/060-000   | 106  |                   |      |
|                   |      |                         |      | 890-244/062-000   | 106  | 890-601           | 67   |



| Item No.          | Page | Item No.          | Page | Item No.          | Page | Item No.          | Page |
|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| <b>890 Series</b> |      | <b>890 Series</b> |      | <b>890 Series</b> |      | <b>891 Series</b> |      |
| 890-603           | 75   | 890-763/073-000   | 101  | 890-1762          | 102  | 891-8992/206-..1  | 70   |
| 890-605           | 87   | 890-764           | 107  | 890-1763          | 102  | 891-8992/206-..2  | 70   |
| 890-606           | 75   | 890-764/071-000   | 107  |                   |      | 891-8992/206-..3  | 99   |
| 890-615           | 75   | 890-764/072-000   | 107  | 890-2102          | 66   | 891-8992/206-..5  | 99   |
| 890-617           | 87   | 890-764/073-000   | 107  | 890-2105          | 86   | 891-8992/206-..7  | 99   |
| 890-619           | 87   | 890-765           | 111  | 890-2112          | 66   | 891-8992/216-...  | 70   |
| 890-620           | 87   | 890-765/073-000   | 111  | 890-2115          | 86   |                   |      |
| 890-621           | 87   | 890-772           | 96   |                   |      | 891-8993/005-..1  | 76   |
| 890-622           | 87   | 890-773           | 101  |                   |      | 891-8993/005-..2  | 76   |
| 890-623           | 75   | 890-773/071-000   | 101  |                   |      | 891-8993/005-..3  | 104  |
| 890-624           | 81   | 890-773/073-000   | 101  | <b>891 Series</b> |      | 891-8993/005-..5  | 104  |
| 890-625           | 87   | 890-774           | 107  | 891-8982/005-...  | 69   | 891-8993/005-..7  | 104  |
| 890-626           | 81   | 890-774/071-000   | 107  | 891-8982/015-...  | 69   | 891-8993/006-..1  | 77   |
| 890-627           | 81   | 890-774/072-000   | 107  | 891-8982/105-...  | 69   | 891-8993/006-..2  | 77   |
| 890-634           | 75   | 890-774/073-000   | 107  | 891-8982/115-...  | 69   | 891-8993/006-..3  | 105  |
| 890-636           | 75   | 890-775           | 111  |                   |      | 891-8993/006-..5  | 105  |
| 890-642           | 66   | 890-775/073-000   | 111  | 891-8982/205-...  | 69   | 891-8993/006-..7  | 105  |
| 890-643           | 74   | 890-782           | 96   | 891-8982/215-...  | 69   | 891-8993/015-...  | 76   |
| 890-653           | 75   | 890-782/080-000   | 96   |                   |      | 891-8993/016-...  | 77   |
| 890-655           | 87   | 890-782/082-000   | 96   | 891-8982/006-...  | 71   |                   |      |
| 890-656           | 75   | 890-783           | 101  | 891-8982/016-...  | 71   | 891-8993/105-..1  | 76   |
| 890-665           | 75   | 890-783/081-000   | 101  |                   |      | 891-8993/105-..2  | 76   |
| 890-671           | 87   | 890-783/082-000   | 101  | 891-8982/106-...  | 71   | 891-8993/105-..3  | 104  |
| 890-672           | 87   | 890-784           | 107  | 891-8982/116-...  | 71   | 891-8993/105-..5  | 104  |
| 890-673           | 75   | 890-784/081-000   | 107  |                   |      | 891-8993/105-..7  | 104  |
| 890-674           | 81   | 890-785           | 111  | 891-8982/206-...  | 71   | 891-8993/106-..1  | 77   |
| 890-675           | 87   | 890-785/080-000   | 111  | 891-8982/216-...  | 71   | 891-8993/106-..2  | 77   |
| 890-676           | 81   | 890-785/082-000   | 111  |                   |      | 891-8993/106-..3  | 105  |
| 890-677           | 81   | 890-792           | 96   | 891-8985/005-...  | 89   | 891-8993/106-..5  | 105  |
| 890-684           | 75   | 890-792/080-000   | 96   | 891-8985/015-...  | 89   | 891-8993/106-..7  | 105  |
| 890-686           | 75   | 890-792/082-000   | 96   |                   |      | 891-8993/115-...  | 76   |
| 890-692           | 66   | 890-793           | 101  | 891-8985/105-...  | 89   | 891-8993/116-...  | 77   |
| 890-693           | 74   | 890-793/081-000   | 101  | 891-8985/115-...  | 89   |                   |      |
|                   |      | 890-793/082-000   | 101  |                   |      | 891-8993/205-..1  | 76   |
| 890-702           | 66   | 890-794           | 107  | 891-8985/205-...  | 89   | 891-8993/205-..2  | 76   |
| 890-703           | 74   | 890-794/081-000   | 107  | 891-8985/215-...  | 89   | 891-8993/205-..3  | 104  |
| 890-704           | 80   | 890-795           | 111  |                   |      | 891-8993/205-..5  | 104  |
| 890-705           | 86   | 890-795/080-000   | 111  | 891-8985/006-...  | 91   | 891-8993/205-..7  | 104  |
| 890-705/006-000   | 86   | 890-795/082-000   | 111  | 891-8985/016-...  | 91   | 891-8993/206-..1  | 77   |
| 890-712           | 66   |                   |      |                   |      | 891-8993/206-..2  | 77   |
| 890-713           | 74   | 890-929           | 87   | 891-8985/106-...  | 91   | 891-8993/206-..3  | 105  |
| 890-714           | 80   | 890-930           | 87   | 891-8985/116-...  | 91   | 891-8993/206-..5  | 105  |
| 890-715           | 86   | 890-944           | 81   |                   |      | 891-8993/206-..7  | 105  |
| 890-715/006-000   | 86   | 890-945           | 81   | 891-8985/206-...  | 91   | 891-8993/215-...  | 76   |
| 890-722           | 66   | 890-979           | 87   | 891-8985/216-...  | 91   | 891-8993/216-...  | 77   |
| 890-723           | 74   | 890-980           | 87   |                   |      |                   |      |
| 890-724           | 80   | 890-982           | 87   | 891-8992/005-..1  | 68   | 891-8994/005-..1  | 82   |
| 890-725           | 86   | 890-983           | 87   | 891-8992/005-..2  | 68   | 891-8994/005-..2  | 82   |
| 890-725/006-000   | 86   | 890-994           | 81   | 891-8992/005-..3  | 98   | 891-8994/005-..3  | 108  |
| 890-732           | 66   | 890-995           | 81   | 891-8992/005-..5  | 98   | 891-8994/005-..5  | 108  |
| 890-733           | 74   |                   |      | 891-8992/005-..7  | 98   | 891-8994/005-..7  | 108  |
| 890-734           | 80   | 890-1102          | 65   | 891-8992/015-...  | 68   | 891-8994/006-..1  | 83   |
| 890-735           | 86   | 890-1105          | 85   |                   |      | 891-8994/006-..2  | 83   |
| 890-735/006-000   | 86   | 890-1112          | 65   | 891-8992/105-..1  | 68   | 891-8994/006-..3  | 109  |
| 890-742           | 96   | 890-1115          | 85   | 891-8992/105-..2  | 68   | 891-8994/006-..5  | 109  |
| 890-742/060-000   | 96   |                   |      | 891-8992/105-..3  | 98   | 891-8994/006-..7  | 109  |
| 890-743           | 101  | 890-1601          | 97   | 891-8992/105-..5  | 98   | 891-8994/015-...  | 82   |
| 890-743/060-000   | 101  | 890-1602          | 97   | 891-8992/105-..7  | 98   | 891-8994/016-...  | 83   |
| 890-743/062-000   | 101  | 890-1603          | 97   | 891-8992/115-...  | 68   |                   |      |
| 890-744           | 107  | 890-1606          | 67   |                   |      | 891-8994/105-..1  | 82   |
| 890-744/060-000   | 107  | 890-1615          | 67   | 891-8992/205-..1  | 68   | 891-8994/105-..2  | 82   |
| 890-744/062-000   | 107  | 890-1617          | 67   | 891-8992/205-..2  | 68   | 891-8994/105-..3  | 108  |
| 890-744/064-000   | 107  | 890-1620          | 67   | 891-8992/205-..3  | 98   | 891-8994/105-..5  | 108  |
| 890-745           | 111  | 890-1622          | 67   | 891-8992/205-..5  | 98   | 891-8994/105-..7  | 108  |
| 890-745/060-000   | 111  | 890-1626          | 123  | 891-8992/205-..7  | 98   | 891-8994/106-..1  | 83   |
| 890-745/062-000   | 111  | 890-1627          | 123  | 891-8992/215-...  | 68   | 891-8994/106-..2  | 83   |
| 890-752           | 96   | 890-1634          | 67   |                   |      | 891-8994/106-..3  | 109  |
| 890-752/060-000   | 96   | 890-1636          | 67   | 891-8992/006-..1  | 70   | 891-8994/106-..5  | 109  |
| 890-753           | 101  | 890-1656          | 67   | 891-8992/006-..2  | 70   | 891-8994/106-..7  | 109  |
| 890-753/060-000   | 101  | 890-1661          | 102  | 891-8992/006-..3  | 99   | 891-8994/115-...  | 82   |
| 890-753/062-000   | 101  | 890-1662          | 102  | 891-8992/006-..5  | 99   | 891-8994/116-...  | 83   |
| 890-754           | 107  | 890-1663          | 102  | 891-8992/006-..7  | 99   |                   |      |
| 890-754/060-000   | 107  | 890-1665          | 67   | 891-8992/016-...  | 70   | 891-8994/205-..1  | 82   |
| 890-754/062-000   | 107  | 890-1672          | 67   |                   |      | 891-8994/205-..2  | 82   |
| 890-754/064-000   | 107  | 890-1684          | 67   | 891-8992/106-..1  | 70   | 891-8994/205-..3  | 108  |
| 890-755           | 111  | 890-1686          | 67   | 891-8992/106-..2  | 70   | 891-8994/205-..5  | 108  |
| 890-755/060-000   | 111  |                   |      | 891-8992/106-..3  | 99   | 891-8994/205-..7  | 108  |
| 890-755/062-000   | 111  | 890-1701          | 97   | 891-8992/106-..5  | 99   | 891-8994/206-..1  | 83   |
| 890-762           | 96   | 890-1702          | 97   | 891-8992/106-..7  | 99   | 891-8994/206-..2  | 83   |
| 890-763           | 101  | 890-1703          | 97   |                   |      | 891-8994/206-..3  | 109  |
| 890-763/071-000   | 101  | 890-1761          | 102  | 891-8992/116-...  | 70   | 891-8994/206-..5  | 109  |

| Item No.           | Page | Item No.           | Page | Item No.           | Page | Item No.                  | Page |
|--------------------|------|--------------------|------|--------------------|------|---------------------------|------|
| <b>891 Series</b>  |      | <b>2000 Series</b> |      | <b>2002 Series</b> |      | <b>2060 Series</b>        |      |
| 891-8994/206-...7  | 109  | 2000-2291          | 484  | 2002-2238          | 485  | 2060-189                  | 495  |
| 891-8994/215-...   | 82   | 2000-2292          | 484  | 2002-2239          | 485  | 2060-451/998-404          | 373  |
| 891-8994/216-...   | 83   |                    |      | 2002-2247          | 485  | 2060-452/998-404          | 373  |
| 891-8995/005-...   | 88   | <b>2002 Series</b> |      | 2002-2257          | 485  | 2060-453/998-404          | 373  |
| 891-8995/006-...   | 90   | 2002-115           | 482  | 2002-2291          | 485  | 2060-471/998-404          | 373  |
| 891-8995/015-...   | 88   | 2002-121           | 486  | 2002-2292          | 485  | 2060-472/998-404          | 373  |
| 891-8995/016-...   | 90   | 2002-171           | 482  |                    |      | 2060-473/998-404          | 373  |
|                    |      | 2002-172           | 482  | 2002-2401          | 485  |                           |      |
| 891-8995/105-...   | 88   |                    |      | 2002-2402          | 485  | 2060-852/998-404          | 375  |
| 891-8995/106-...   | 90   | 2002-400           | 482  | 2002-2403          | 485  | 2060-872/998-404          | 375  |
| 891-8995/115-...   | 88   | 2002-401           | 486  | 2002-2404          | 485  |                           |      |
| 891-8995/116-...   | 90   | 2002-402           | 482  | 2002-2407          | 485  | 2060-901                  | 381  |
|                    |      |                    |      | 2002-2409          | 485  | 2060-902                  | 381  |
| 891-8995/205-...   | 88   | 2002-410           |      | 2002-2417          | 485  | 2060-903                  | 381  |
| 891-8995/206-...   | 90   | 2002-433           | 482  | 2002-2427          | 485  |                           |      |
| 891-8995/215-...   | 88   |                    |      | 2002-2431          | 485  | 2060-1451/998-404         | 377  |
| 891-8995/216-...   | 90   | 2002-440           |      | 2002-2432          | 485  | 2060-1452/998-404         | 377  |
|                    |      | 2002-472           | 482  | 2002-2433          | 485  | 2060-1453/998-404         | 377  |
| <b>893 Series</b>  |      |                    |      | 2002-2434          | 485  | 2060-1471/998-404         | 377  |
| 893-121            | 86   | 2002-482           |      | 2002-2437          | 485  | 2060-1472/998-404         | 377  |
| 893-122            | 87   |                    |      | 2002-2438          | 485  | 2060-1473/998-404         | 377  |
| 893-129            | 87   | 2002-511           | 482  | 2002-2439          | 485  |                           |      |
|                    |      | 2002-549           | 482  | 2002-2447          | 485  | 2060-1852/998-404         | 379  |
| 893-261            | 82   |                    |      | 2002-2457          | 485  | 2060-1872/998-404         | 379  |
| 893-262            | 83   | 2002-991           | 486  | 2002-2491          | 485  |                           |      |
| 893-269            | 83   | 2002-992           | 486  | 2002-2492          | 485  |                           |      |
|                    |      |                    |      |                    |      | <b>2061 Series</b>        |      |
| 893-1002           | 233  | 2002-1201          | 482  | 2002-6301          | 483  | 2061-189                  | 495  |
| 893-1012           | 233  |                    |      | 2002-6302          | 483  |                           |      |
| 893-1022           | 233  | 2002-1207          |      | 2002-6304          | 483  | 2061-601/998-404          | 383  |
| 893-1032           | 233  | 2002-1211/1000-411 | 482  | 2002-6307          | 483  | 2061-602/998-404          | 383  |
|                    |      | 2002-1291          | 482  | 2002-6391          | 483  | 2061-603/998-404          | 383  |
| 893-1606           | 235  |                    |      | 2002-6392          | 483  | 2061-621/998-404          | 383  |
| 893-1656           | 235  | 2002-1294          |      |                    |      | 2061-622/998-404          | 383  |
|                    |      |                    |      | 2002-6401          | 483  | 2061-623/998-404          | 383  |
| 893-2002           | 234  | 2002-1301          | 482  | 2002-6402          | 483  |                           |      |
| 893-2012           | 234  |                    |      | 2002-6404          | 483  | <b>2080 Series</b>        |      |
| 893-2022           | 234  | 2002-1307          |      | 2002-6407          | 483  | 2080-504                  | 427  |
| 893-2032           | 234  | 2002-1311/1000-411 | 482  | <b>2003 Series</b> |      | 2080-506                  | 427  |
|                    |      | 2002-1321/1000-434 | 482  | 2003-499           | 488  |                           |      |
| <b>894 Series</b>  |      | 2002-1391          | 482  |                    |      | <b>2081 Series</b>        |      |
| 894-8992/033-...6  | 236  |                    |      | 2003-500           | 488  | 2081-1122                 | 403  |
| 894-8992/033-...7  | 237  | 2002-1394          |      |                    |      | 2081-1122/200-604         | 405  |
| 894-8992/133-...6  | 236  |                    |      | 2003-6640          | 488  | 2081-1123                 | 403  |
| 894-8992/133-...7  | 237  | 2002-1401          | 482  | 2003-6641          | 488  | 2081-1123/200-604         | 405  |
|                    |      |                    |      | 2003-6642          | 488  | 2081-1123/200-604/997-405 | 407  |
| 894-8992/233-...6  | 236  | 2002-1411/1000-411 | 482  | 2003-6643          | 488  | 2081-1124                 | 403  |
| 894-8992/233-...7  | 237  | 2002-1421/1000-434 | 482  | 2003-6645          | 488  | 2081-1124/200-604         | 405  |
|                    |      | 2002-1441          | 482  | 2003-6646          | 488  | 2081-1124/200-604/997-405 | 407  |
|                    |      | 2002-1491          | 482  | 2003-6649          | 488  | 2081-1125                 | 403  |
| <b>2000 Series</b> |      |                    |      | 2003-6650          | 488  | 2081-1125/200-604         | 405  |
| 2000-115           | 484  | 2002-1801          | 486  | 2003-6651          | 488  | 2081-1125/200-604/997-405 | 407  |
|                    |      | 2002-1802          | 486  | 2003-6692          | 489  | 2081-1126                 | 403  |
| 2000-402           | 484  | 2002-1804          | 486  | <b>2009 Series</b> |      | 2081-1126/200-604         | 405  |
|                    |      | 2002-1811          | 486  | 2009-110           | 482  | 2081-1128                 | 403  |
| 2000-410           |      | 2002-1811/1000-541 | 486  | 2009-115           | 489  | 2081-1128/200-604         | 405  |
| 2000-405/011-000   | 484  | 2002-1811/1000-542 | 486  | 2009-174           | 483  | 2081-1132                 | 403  |
| 2000-433           | 484  | 2002-1811/1000-836 | 486  | 2009-182           | 483  | 2081-1132/200-604         | 405  |
|                    |      | 2002-1811/1000-867 | 486  |                    |      |                           |      |
| 2000-440           |      | 2002-1871          | 486  | 2009-304           | 489  | 2081-1202                 | 403  |
|                    |      | 2002-1872          | 486  | 2009-305           | 489  | 2081-1202/200-604         | 405  |
|                    |      | 2002-1874          | 486  | 2009-309           | 489  | 2081-1203                 | 403  |
| 2000-2201          | 484  | 2002-1881          | 486  | 2009-310           | 489  | 2081-1203/200-604         | 405  |
| 2000-2202          | 484  | 2002-1891          | 486  |                    |      | 2081-1203/200-604/997-404 | 407  |
| 2000-2203          | 484  | 2002-1892          | 486  | 2009-412           | 489  | 2081-1204                 | 403  |
| 2000-2204          | 484  |                    |      | 2009-414           | 489  | 2081-1204/200-604         | 405  |
| 2000-2207          | 484  | 2002-2201          | 485  | 2009-416           | 489  | 2081-1204/200-604/997-404 | 407  |
| 2000-2208          | 484  | 2002-2202          | 485  |                    |      | 2081-1205                 | 403  |
| 2000-2209          | 484  | 2002-2203          | 485  | <b>2059 Series</b> |      | 2081-1205/200-604         | 405  |
| 2000-2217          | 484  | 2002-2204          | 485  | 2059-189           | 495  | 2081-1205/200-604/997-406 | 407  |
| 2000-2227          | 484  | 2002-2207          | 485  |                    |      | 2081-1206                 | 403  |
| 2000-2231          | 484  | 2002-2208          | 485  | 2059-301/998-403   | 371  | 2081-1206/200-604         | 405  |
| 2000-2232          | 484  | 2002-2209          | 485  | 2059-302/998-403   | 371  | 2081-1206/200-604/997-406 | 407  |
| 2000-2233          | 484  | 2002-2217          | 485  | 2059-303/998-403   | 371  | 2081-1208                 | 403  |
| 2000-2234          | 484  | 2002-2227          | 485  |                    |      | 2081-1208/200-604         | 405  |
| 2000-2237          | 484  | 2002-2231          | 485  |                    |      | 2081-1208/200-604/997-406 | 407  |
| 2000-2238          | 484  | 2002-2232          | 485  |                    |      | 2081-1212                 | 403  |
| 2000-2239          | 484  | 2002-2233          | 485  |                    |      | 2081-1212/200-604         | 405  |
| 2000-2247          | 484  | 2002-2234          | 485  |                    |      |                           |      |
| 2000-2257          | 484  | 2002-2237          | 485  |                    |      |                           |      |

| Item No.                  | Page | Item No.           | Page | Item No. | Page | Item No. | Page |
|---------------------------|------|--------------------|------|----------|------|----------|------|
| <b>2081 Series</b>        |      | <b>2734 Series</b> |      |          |      |          |      |
| 2081-1222                 | 403  | 2734-124/107-000   | 292  |          |      |          |      |
| 2081-1222/200-604         | 405  |                    |      |          |      |          |      |
| 2081-1223                 | 403  | 2734-202           | 292  |          |      |          |      |
| 2081-1223/200-604         | 405  |                    |      |          |      |          |      |
| 2081-1223/200-604/997-404 | 407  | 2734-206           |      |          |      |          |      |
| 2081-1224                 | 403  |                    |      |          |      |          |      |
| 2081-1224/200-604         | 405  | 2734-202/031-000   | 293  |          |      |          |      |
| 2081-1224/200-604/997-404 | 407  |                    |      |          |      |          |      |
| 2081-1225                 | 403  | 2734-206/031-000   |      |          |      |          |      |
| 2081-1225/200-604         | 405  | 2734-202/037-000   | 292  |          |      |          |      |
| 2081-1225/200-604/997-406 | 407  |                    |      |          |      |          |      |
| 2081-1226                 | 403  | 2734-206/037-000   |      |          |      |          |      |
| 2081-1226/200-604         | 405  | 2734-208           | 292  |          |      |          |      |
| 2081-1226/200-604/997-406 | 407  |                    |      |          |      |          |      |
| 2081-1228                 | 403  | 2734-210           |      |          |      |          |      |
| 2081-1228/200-604         | 405  | 2734-208/031-000   | 293  |          |      |          |      |
| 2081-1208/200-604/997-406 | 407  |                    |      |          |      |          |      |
| 2081-1232                 | 403  | 2734-210/031-000   |      |          |      |          |      |
| 2081-1232/200-604         | 405  |                    |      |          |      |          |      |
|                           |      | 2734-208/037-000   | 292  |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
|                           |      | 2734-210/037-000   |      |          |      |          |      |
| <b>2273 Series</b>        |      | 2734-212           | 292  |          |      |          |      |
| 2273-202                  | 455  | 2734-212/031-000   | 293  |          |      |          |      |
| 2273-203                  | 455  | 2734-212/037-000   | 292  |          |      |          |      |
| 2273-204                  | 455  | 2734-214           | 292  |          |      |          |      |
| 2273-205                  | 455  | 2734-214/031-000   | 293  |          |      |          |      |
| 2273-208                  | 455  | 2734-214/037-000   | 292  |          |      |          |      |
|                           |      | 2734-216           | 292  |          |      |          |      |
| 2273-500                  | 455  | 2734-216/031-000   | 293  |          |      |          |      |
|                           |      | 2734-216/037-000   | 292  |          |      |          |      |
|                           |      | 2734-218           | 292  |          |      |          |      |
| <b>2721 Series</b>        |      | 2734-218/031-000   | 293  |          |      |          |      |
| 2721-102/008-000          | 333  | 2734-218/037-000   | 292  |          |      |          |      |
|                           |      | 2734-219           | 292  |          |      |          |      |
| 2721-116/008-000          |      | 2734-219/031-000   | 293  |          |      |          |      |
|                           |      | 2734-219/037-000   | 292  |          |      |          |      |
| 2721-102/026-000          | 333  | 2734-220           | 292  |          |      |          |      |
|                           |      | 2734-220/031-000   | 293  |          |      |          |      |
| 2721-116/026-000          |      | 2734-220/037-000   | 292  |          |      |          |      |
| 2721-102/031-000          | 334  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2721-116/031-000          |      |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2721-102/037-000          | 333  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2721-116/037-000          |      |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2721-120/008-000          | 333  |                    |      |          |      |          |      |
| 2721-120/026-000          | 333  |                    |      |          |      |          |      |
| 2721-120/031-000          | 334  |                    |      |          |      |          |      |
| 2721-120/037-000          | 333  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| <b>2734 Series</b>        |      |                    |      |          |      |          |      |
| 2734-102                  | 291  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2734-114                  |      |                    |      |          |      |          |      |
| 2734-102/031-000          | 291  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2734-114/031-000          |      |                    |      |          |      |          |      |
| 2734-102/037-000          | 291  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2734-114/037-000          |      |                    |      |          |      |          |      |
| 2734-102/107-000          | 292  |                    |      |          |      |          |      |
|                           |      |                    |      |          |      |          |      |
| 2734-114/107-000          |      |                    |      |          |      |          |      |
| 2734-116                  | 291  |                    |      |          |      |          |      |
| 2734-116/031-000          | 291  |                    |      |          |      |          |      |
| 2734-116/037-000          | 291  |                    |      |          |      |          |      |
| 2734-116/107-000          | 292  |                    |      |          |      |          |      |
| 2734-118                  | 291  |                    |      |          |      |          |      |
| 2734-118/031-000          | 291  |                    |      |          |      |          |      |
| 2734-118/037-000          | 291  |                    |      |          |      |          |      |
| 2734-118/107-000          | 292  |                    |      |          |      |          |      |
| 2734-120                  | 291  |                    |      |          |      |          |      |
| 2734-120/031-000          | 291  |                    |      |          |      |          |      |
| 2734-120/037-000          | 291  |                    |      |          |      |          |      |
| 2734-120/107-000          | 292  |                    |      |          |      |          |      |
| 2734-124                  | 291  |                    |      |          |      |          |      |
| 2734-124/031-000          | 291  |                    |      |          |      |          |      |
| 2734-124/037-000          | 291  |                    |      |          |      |          |      |

**Algeria**  
please contact WAGO France

**Argentina**  
Bruno Schillig S.A.  
Arenales 4030, B1604CFD  
Florida, PBA  
Phone +54 11 4730 1100  
Fax +54 11 4761 7244  
wago@schillig.com.ar

**Australia**  
Kontakt Group  
Building Automation & WINSTA Systems  
Office: 730 Springvale Rd  
Mulgrave Victoria 3170  
P.O. Box 3003, Wheelers Hill VIC 3150  
Tel. +61 03 95602757  
Fax +61 03 95601727  
sales@kontaktgroup.com.au

**NHP ELECTRICAL ENGINEERING PRODUCTS PTY LTD**  
43-67 River Street  
Richmond, Victoria, 3121, P.O. Box 199  
Phone +61 3 9429 2999  
Fax +61 3 9429 1075  
export@wago.com

**Austria**  
WAGO Kontakttechnik Ges.m.b.H.  
Laxenburger Straße 244  
1230 Wien  
Phone +43 1 6150780  
Fax +43 1 6150775  
info.at@wago.com

**Azerbaijan**  
AZ Technics LTD  
Zulfu V. Alizade  
Y.Safarov str.33 , AZ1025,  
Baku  
Republic of Azerbaijan  
Tel. +994 12 4968335  
Fax +994 12 4968334  
info@AZtechnics.az

**Belarus**  
UP FEK  
pr-t Pushkina 29-B  
220015 Minsk  
Phone +375 17 2102189  
Fax +375 17 2102189  
wago@fek.by

**Belgium**  
WAGO Kontakttechnik  
Excelsiorlaan 11  
1930 Zaventem  
Phone +32 2 7179090  
Fax +32 2 7179099  
info-be@wago.com

**Bosnia and Herzegovina**  
please contact WAGO Bulgaria

**Brazil**  
WAGO Eletroeletrônicos Ltda  
Rua Américo Simões 1470  
São Roque da Chave  
Itupeva SP Brasil 13295-000  
Phone +55 11 4591 0199  
Fax +55 11 4591 0190  
info.br@wago.com

**Bulgaria**  
WAGO Kontakttechnik GmbH & Co. KG  
Business Center Serdika  
2E Akad. Ivan Geshov Blvd.  
Building 1, Floor 4, Office 417  
1330 Sofia  
Phone +359 2 489 46 09  
Fax +359 2 928 28 50  
info-BG@wago.com

**Canada**  
please contact WAGO USA

**Chile**  
Desimat Chile  
Av Puerto Vespuccio 9670  
Pudahuel Santiago  
Phone +56 2 7470152  
Fax +56 2 7470153  
ventaschile@desimat.cl

**China**  
WAGO ELECTRONIC (TIANJIN) Co. LTD  
No.5, Quan Hui Road, Wuqing Development Area  
Tianjin 301700  
Phone +86 22 59617688  
Fax +86 22 59617668  
info-cn@wago.com

**Columbia**  
T.H.L. Ltda.  
Cra. 49 B # 91-33  
Bogotá  
Phone +57 1 621 85 50  
Fax +57 1 621 60 28  
ventas-thl@thl-ltda.com

**Croatia**  
M.B.A. d.o.o. za trgovinu i zastupanje  
Frana Supila 5  
51211 Matulji HR  
Phone +385 51 275-736  
Fax +385 51 275-066  
mba@ri.htnet.hr

**Croatia**  
GENERA CTR d.o.o.  
- just for automation technology -  
Siget 18 b  
10020 Zagreb  
Phone +385 13647849  
Fax +385 13636662  
wago@geneza.hr

**Czech Republic**  
WAGO Elektro spol. sr. o.  
Rozvodova 1116/36  
143 00 Praha 4 - Modřany  
Phone +420 261 090 143  
Fax +420 261 090 144  
info.cz@wago.com

**Denmark**  
WAGO Danmark  
Filial af WAGO Kontakttechnik GmbH & Co. KG  
Leirvej 17  
3500 Værløse  
Phone +45 44 357777  
Fax +45 44 357787  
salg.dk@wago.com

**Ecuador**  
ECUAINSETEC CIA LTDA  
El Zurriago 177 y El Vengador  
Quito  
Phone +593 2 2 26 91 48  
Fax +593 2 2 46 18 33  
g.castro@ecuainsetec.com.ec

**Egypt**  
IBN Engineering Instrumentation & Control  
71 a El Shaheed Ahmed Hamdi St.  
King Faisal, Giza  
Phone +20 2 7214350  
Fax +20 2 7221709  
sales@ibnengineering.com

**Estonia**  
Eltarko OÜ  
Laki 14 - 502  
10621 Tallinn  
Phone +372 651 7731  
Fax +372 651 7786  
andres@eltarko.ee

**Finland**  
WAGO Kontakttechnik GmbH & Co. KG  
Filial i Finland  
Vellamontkatu 30 B  
00550 Helsinki  
Phone +358 9 7744 060  
Fax +358 9 7744 0660  
tilaus@wago.fi

**France**  
WAGO CONTACT SAS  
Paris Nord 2  
83 Rue des Chardonnerets  
B.P. 55065 - Tremblay en France  
95947 - ROISSY CDG CEDEX  
Phone +33 1 48172590  
Fax +33 1 48632520  
info-fr@wago.com

**Germany**  
WAGO Kontakttechnik GmbH & Co. KG  
Postfach 28 80, 32385 Minden  
Hansastraße 27  
32423 Minden  
Phone +49 571 887-0  
Fax +49 571 887-169  
info@wago.com

**WAGO Kontakttechnik GmbH & Co. KG**  
Waldstraße 1  
99706 Sondershausen  
Phone +49 3632 659-0  
Fax +49 3632 659-100  
info@wago.com

**Great Britain**  
WAGO Limited  
Triton Park, Swift Valley Industrial Estate  
RUGBY  
Warwickshire, CV21 1SG  
Phone +44 1788 568008  
Fax +44 1788 568050  
uksales@wago.com

**Greece**  
PANAGIOTIS SP. DIMOULAS - BIOMAT  
DIMOULAS AUTOMATIONS  
Kritis Str. 26  
10439 Athen  
Tel. +30 210 883 3337  
Fax +30 210 883 4436  
wago.info@dimoulas.com.gr

**Hong Kong**  
National Concord Eng., Ltd.  
Unit A-B, 5/F.  
Southeast Industrial Building  
611-619 Castle Peak Road  
Tsun Wan, N.T.  
Phone +852 24292611  
Fax +852 24292164  
sales@nce.com.hk

**Hungary**  
WAGO Hungária KFT  
Ipari Park, Gyár u. 2  
2040 Budapest  
Phone +36 23 502-170  
Fax +36 23 502-166  
info.hu@wago.com

**Iceland**  
S. Gudjonsson ehf.  
Audbrekku 9-11  
202 Kopavogur  
Phone +354 520-4500  
Fax +354 520-4501  
export@wago.com

**India**  
WAGO & CONTROLS (INDIA) LTD.  
C-27, Sector-58, Phase-III  
Noida-201 301  
Gautam Budh Nagar (U.P)  
Phone +91 120 2 580409 10  
Fax +91 120 2 580081  
info@wagoindia.com

**Indonesia**  
please contact WAGO Singapore

**Iraq**  
please contact WAGO Middle East

**Iran**  
Patsa Industry  
No. 2 Bahar St.  
South Shiraz Ave  
P.O. Box.: 15875-1698  
14369 Tehran  
Phone +98 21 88047626  
Fax +98 21 88040886  
info.uae@wago.com

**Ireland**  
Drives & Controls  
Unit F4, Riverview Business Park  
Nangor Road  
Dublin 12  
Phone +353 1 4604474  
Fax +353 1 4604507  
wago@drivesandcontrols.ie

**Israel**  
Comtel Israel Electronic Solutions Ltd.  
Bet Hapaamon  
20 Hataas Street  
P.O. Box 66  
44425 Kefar-Saba  
Phone +972 9 76 77 240  
Fax +972 9 76 77 243  
sales@comtel.co.il

**Italy**  
WAGO ELETTRONICA SRL  
Via Parini 1  
40033 Casalecchio di Reno (BO)  
Phone +39 051 6132112  
Fax +39 051 6272174  
info-ita@wago.com

**Japan**  
WAGO Co. of JAPAN Ltd.  
Nittetsu ND-Tower Building 4F  
Kameido 1-5-7  
Koto-Ku  
Tokyo 136-0071  
Phone +81 3 5627 2050  
Fax +81 3 5627 2055  
info-jp@wago.com

**Kazakhstan**  
TOO INTANT  
ul. Muratbaeva, d. 61  
050026 Almaty  
Phone +7 727 2371492  
Fax +7 727 2980151  
info@intant.kz

**TOO Technik-Trade**  
ul. i. A. Protosanova, 81  
070004 Ust-Kamenogorsk  
Phone +7 7232 254064  
Fax +7 7232 253251  
info@technik.kz

**Korea**  
WAGO Korea Co., Ltd.  
#205 Anyang Mega Valley  
Dongan-gu, Anyang-si  
Kyunggi-do, South Korea  
Phone +82 3142 12470  
export@wago.com

**Kosovo**  
please contact WAGO Bulgaria

**Kuwait**  
Kuwait Controls Company  
Al Sour Street, Above Lufthansa Airline  
Safat Kuwait 13062  
Phone +965 222 54300  
Fax +965 224 33698  
info.uae@wago.com

**Latvia**  
INSTABALT LATVIA SIA  
Vestienas iela 6  
Riga, LV-1035  
Phone +371 790 1188  
Fax +371 790 1180  
info@instabalt.lv

**Lebanon**  
Gemayel Trading & Contracting  
Antonins Project  
P.O. BOX 70-1096  
Antelias, Lebanon  
Phone +961 4 521 029  
Fax +961 4 521 029  
gtc.libanon@gmail.com



**Lithuania**

INSTABALT LIT UAB  
Savanorių 187  
Vilnius, 2053  
Phone +370 52 322 295  
Fax +370 52 322 247  
info@instabalt.lt

**Luxembourg**

please contact WAGO Belgium

**Macedonia**

please contact WAGO Bulgaria

**Malaysia**

WAGO Representative Office Malaysia  
No 806, Block A4, Leisure Commerce Square,  
No 9, Jalan PJS 8/9, 46150 Petaling Jaya,  
Selangor Darul Ehsan, Malaysia  
Phone +60 3 7877 1776  
Fax +60 3 7877 2776  
kian.guan.tan@wago.com

HPH Materials (M) Sdn Bhd  
No. 4, Jalan Nilam 1/6  
Suban Hi-Tech Industrial Park  
40000 Shah Alam  
Selangor, D.E. Malaysia  
Phone +60 3 5638 2213  
Fax +60 3 5638 8213  
info@hphmaterials.com

Setia Raya Teknik Sdn. Bhd.  
40 & 42 Jalan SS15/4  
Subang Jaya, 47500 PJ.  
Selangor D.E. Malaysia  
Phone +60 3 5633 5511  
Fax +60 3 5633 3411  
sales@setiaraya.com.my

**Mexico**

WAGO SA de CV  
Av. Del Marques 38 Bodega 3  
P. I. Bernardo Quintana  
76240 El Marques, Querétaro  
Phone +52 442 221 5946  
Fax +52 442 221 5063  
Toll-Free: 001-800-309-5975  
info.mx@wago.com

**Morocco**

please contact WAGO France

**Netherlands**

WAGO Nederland  
Laan van de Ram 19  
7324 BW Apeldoorn  
Phone +31 55 36 83 500  
Fax +31 55 36 83 599  
info-nl@wago.com

**New Zealand**

NHP NZ  
7 Lockhart Place  
Mt Wellington  
New Zealand  
Phone +64 9 2761967  
Fax +64 9 2761992  
export@wago.com

**Norway**

WAGO Norge NUF  
Jerkoveien 20  
1067 Oslo  
Phone +47 22 30 94 50  
Fax +47 22 30 94 51  
info.no@wago.com

**Pakistan**

Fuzilogix Automation & Control  
Suit No. 14, 5th Floor, Shan Arcade  
New Garden Town, Lahore  
Pakistan  
Phone +92 42 594 1503 - 4  
Fax +92 42 585 1431  
info@fuzilogix.com

**Philippines**

please contact WAGO Singapore

**Poland**

WAGO ELWAG sp. z o. o.  
ul. Piekna 58 a  
50-506 Wrocław  
Phone +48 71 3602970  
Fax +48 71 3602999  
wago.elwag@wago.com

**Portugal**

MORGADO & CA. LDA - SEDE  
Estrada Exterior da  
Circunvalação 3558/3560  
Apartado 1057  
4435 Rio Tinto  
Phone +351 22 9770600  
Fax +351 22 9770699  
geral@morgadocl.pt

**Republic of Moldova**

Electroservice Slavinschi T.T.  
str. Bolgarskaia 9, office 6  
2001 Kishinev  
Phone +373 22 274427  
Fax +373 22 224481  
es@es.mldnet.com

**Romania**

WAGO Kontakttechnik GmbH & Co. KG  
WAGO Representative Office Bucharest  
Str. Nicolae G. Caramfil Nr. 26, Bl. 1D, Et. 3, Ap. 7, Sect. 1, OP52  
014144-Bucuresti, Romania  
Tel. +40-(0)31 421 85 68  
Fax +40-(0)21 232 02 31  
info-RO@wago.com

**VDR & Servicii srl**

Str. Valeriu Braniste, nr. 60, ap.1, sector 3  
Romania  
Phone +40 21 3225074/76  
Fax +40 21 3225075  
office@componente-automatizari.ro

**Russia**

OOO WAGO Kontakt Rus  
Dmitrovskoe shosse, 157, bldg. 12/5  
127411 Moscow  
Russia  
Phone +7 495 9874790  
Fax +7 495 9874791  
info.ru@wago.com

**WAGO Branch office**

Ekaterinburg  
Phone +7 343 216 3426

**WAGO Branch office**

Novosibirsk  
Phone +7 383 217 9244

**WAGO Branch office**

St. Petersburg  
Phone +7 812 312 1918

**Saudi Arabia**

Ali Zaid Al Quraishi & Partners Electrical Services of S.A.  
Al Quraishi Center, King Khalid Street  
P.O. Box 7386  
Dammam - 31462  
Phone +966 3 8351155  
Fax +966 3 8352297  
info.uae@wago.com

**Serbia**

please contact WAGO Bulgaria

**Tagor Electronic doo**

Tihomira Brankovica 21  
18000 Nis  
Tel. +381 18 575545  
Fax +381 18 217125  
ana.aleksic@tagor.rs

**Singapore**

WAGO Electronic Pte Ltd  
10 Upper Aljunied Link  
#04-04 Johnson Controls Building  
Singapore 367904  
Phone +65 62866776  
Fax +65 62842425  
info-sing@wago.com

**Slovakia**

WAGO Elektrik spol. s. r. o  
Odborárska 52  
83102 Bratislava  
Tel. +421 2 4569 2503  
export@wago.com

**Proelektro spol. s. r. o.**

Na barine 22  
84103 Bratislava Lamač  
Tel. +421 2 4569 2503  
info@wago.sk

**Slovenia**

GENERA d.o.o.  
Prevale 10  
1236 Trzin  
Phone +386 14393050  
Fax +386 14393090  
genera@genera.si

**IC elektronika d.o.o.**

Vodovodna cesta 100  
1000 Ljubljana  
Phone +386 15680110  
Fax +386 15689107  
info@ic-elect.si

**South Africa**

Shorrock Automation (Pty) Ltd  
Postnet Suite # 219  
Private Bag X 8, Elardus Park  
0047 Pretoria  
Phone +27 12 4500300  
Fax +27 12 4500322  
sales@shorrock.co.za

**Spain**

DICOMAT S.L.  
Avda. de la Industria, 36  
Apartado Correos, 1.178  
28108 - Alcobendas (Madrid)  
Phone +34 91 6621362  
Fax +34 91 6610089  
info@dicomat.com

**Sweden**

WAGO Sverige  
WAGO Kontakttechnik GmbH  
Tyskland Filial  
Box 639, 17527 Järfälla  
Datavägen 9 A, 17543 Järfälla  
Phone +46 858410680  
Fax +46 858410699  
info.se@wago.com

**Switzerland**

WAGO CONTACT SA  
Rte. de l'Industrie 19  
Case Postale 168  
1564 Domdidier  
Phone +41/26 676 75 86  
Fax +41/26 676 75 01  
info.switzerland@wago.com

**Syria**

Zahabi Co.  
8/5 Shouhadaa St., P.O. Box 8262  
Aleppo  
Phone +963 21 21 22 235 / 6  
Fax +963 21 21 24 768  
info.uae@wago.com

**Taiwan R.O.C.**

WAGO Contact, Ltd.  
5F., No.168, Jiankang Rd  
Zhonghe City  
Taipei County 23585, Taiwan  
Phone +886 2 22250123  
Fax +886 2 22251511  
info.taiwan@wago.com

**Thailand**

WAGO Representative Office Thailand  
4th Floor, K5 Building  
213/6-8 Rachada Phisek Road  
Ding Daeng Bangkok 10320  
Phone +66 2 6935611  
Fax +66 2 6935612  
wago@asianet.co.th

**US Power Distribution Co., Ltd.**

4th Floor K.S. Building  
213/6-8 Rachada Phisek Road  
Ding Daeng, Bangkok 10400  
Phone +66 2 2763040  
Fax +66 2 2763049  
wago@asianet.co.th

**Tunisia**

please contact WAGO France

**Turkey**

WAGO Elektronik Sanayi ve Ticaret Ltd. Şti.  
Yukan Dudullu Mahallesi Bayraktar Bulvan  
Cad. Hattat Sok. No. 10  
34775 Ümraniye - Istanbul  
Turkey  
Tel. +90 216 472 1133  
Fax +90 216 472 9910  
info.tr@wago.com

**Ukraine**

NPP Logicon  
Predslavinskaya street, 39, office 303  
03150 Kiev  
Phone +380 44 5228019  
Fax +380 44 2611803  
info@logicon.ua

**OOO Mikropribor**

ul. Kotelnikova, 4  
03115 Kiev  
Phone +380 44 5369386  
Fax +380 44 5369387  
sales@micropribor.kiev.ua

**United Arab Emirates (UAE)**

WAGO Middle East (FZC)  
SAIF Zone, Q4-282  
P.O. Box: 120665  
Sharjah, UAE  
Phone +971 6 5579920  
Fax +971 6 5579921  
info.uae@wago.com

**USA**

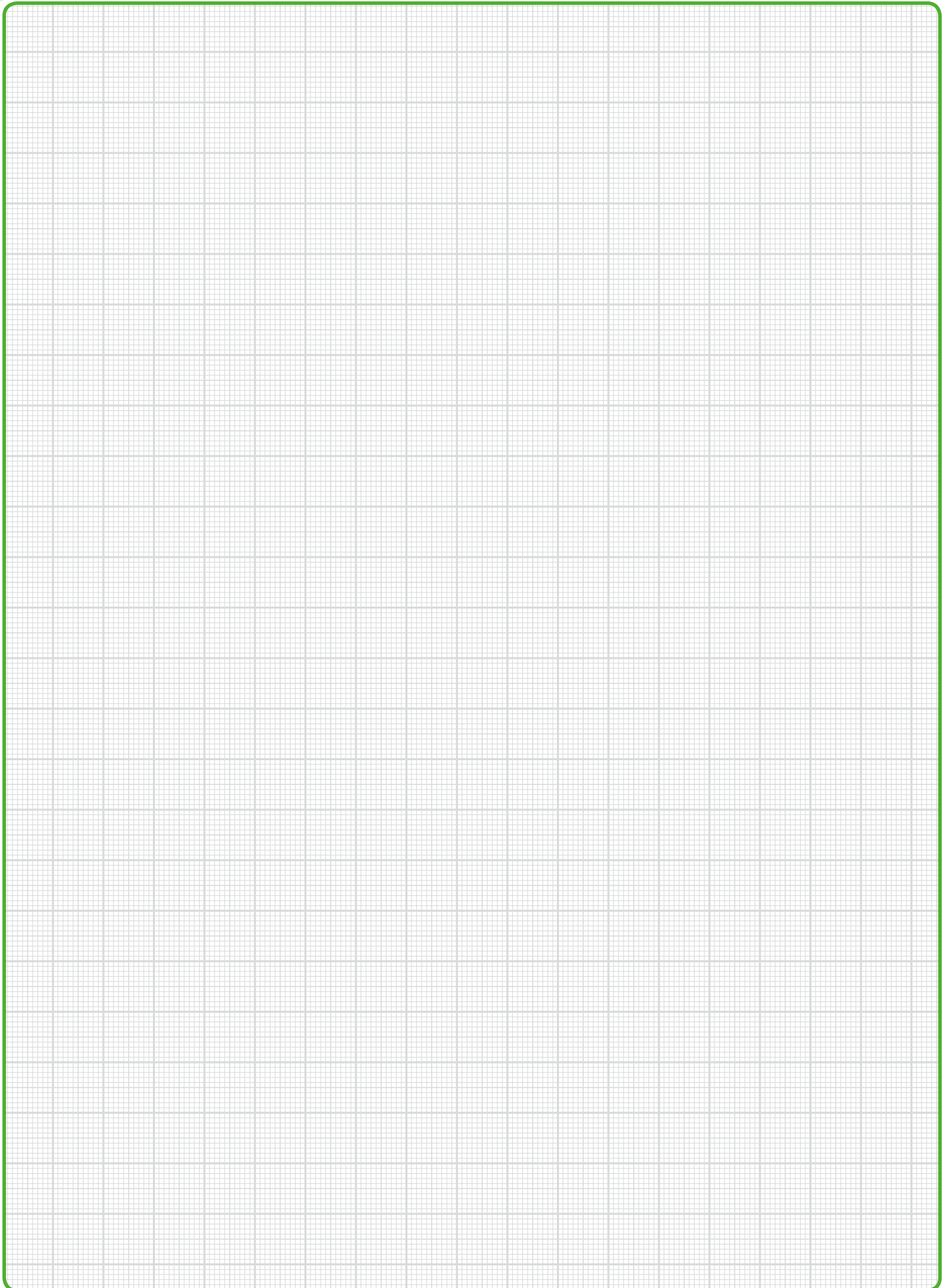
WAGO Corporation  
N120 W19129 Freistadt Road  
Germantown, WI 53022  
Phone +1 262 255 6222  
Fax +1 262 255 3232  
Toll-Free: 1-800 DIN Rail (346-7245)  
info.us@wago.com

**Venezuela**

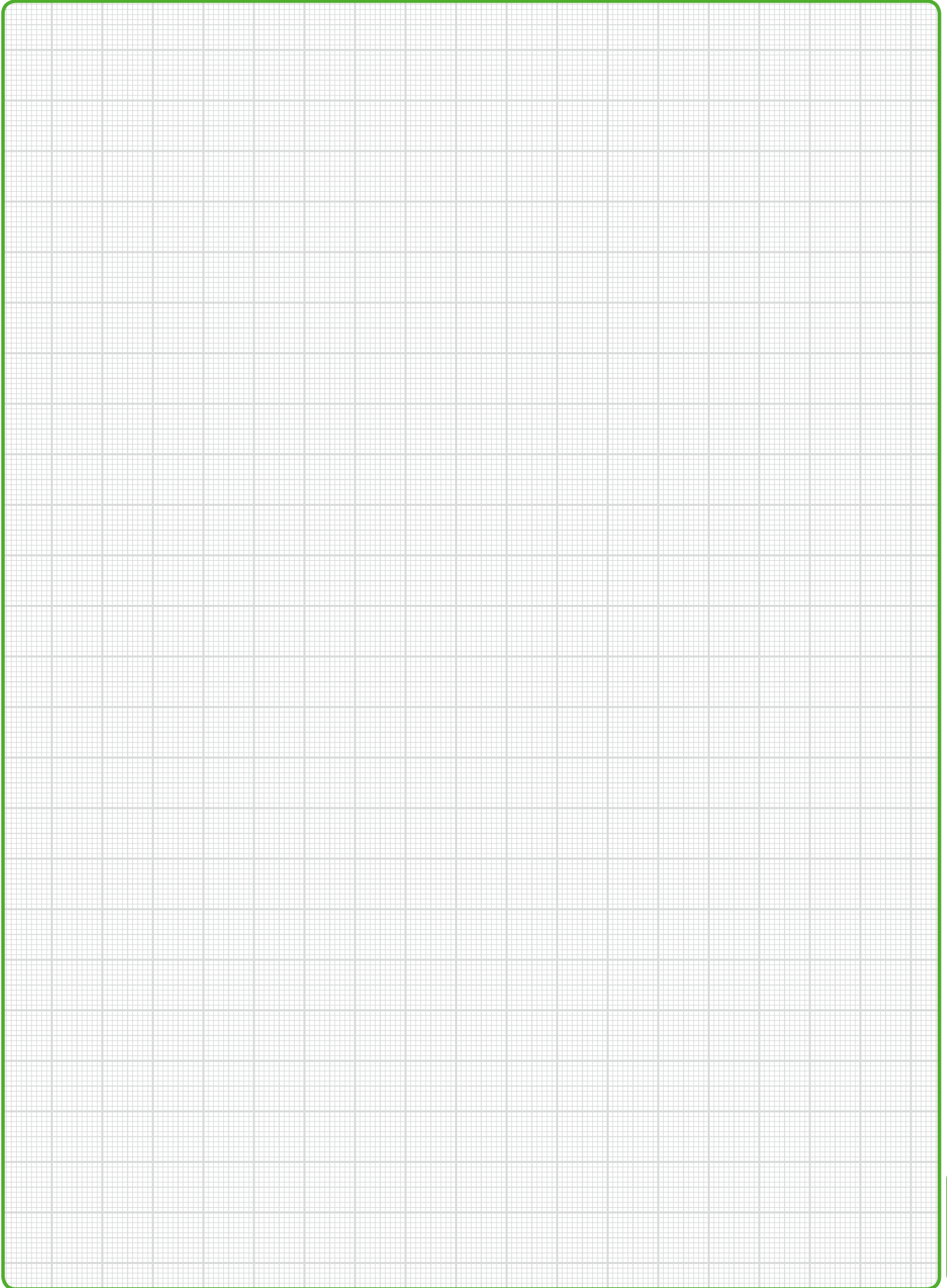
PETROBORNAS, C.A.  
C.C. PLAZA AEROPUERTO - PISO 1 - LOCAL P1 - B - 03  
(8015) UNARE - PUERTO ORDAZ - ESTADO BOLIVAR  
REPÚBLICA BOLIVARIANA DE VENEZUELA  
Tel. +58 286 951 3382  
Fax +58 286 951 3382  
info@petrobornas.com

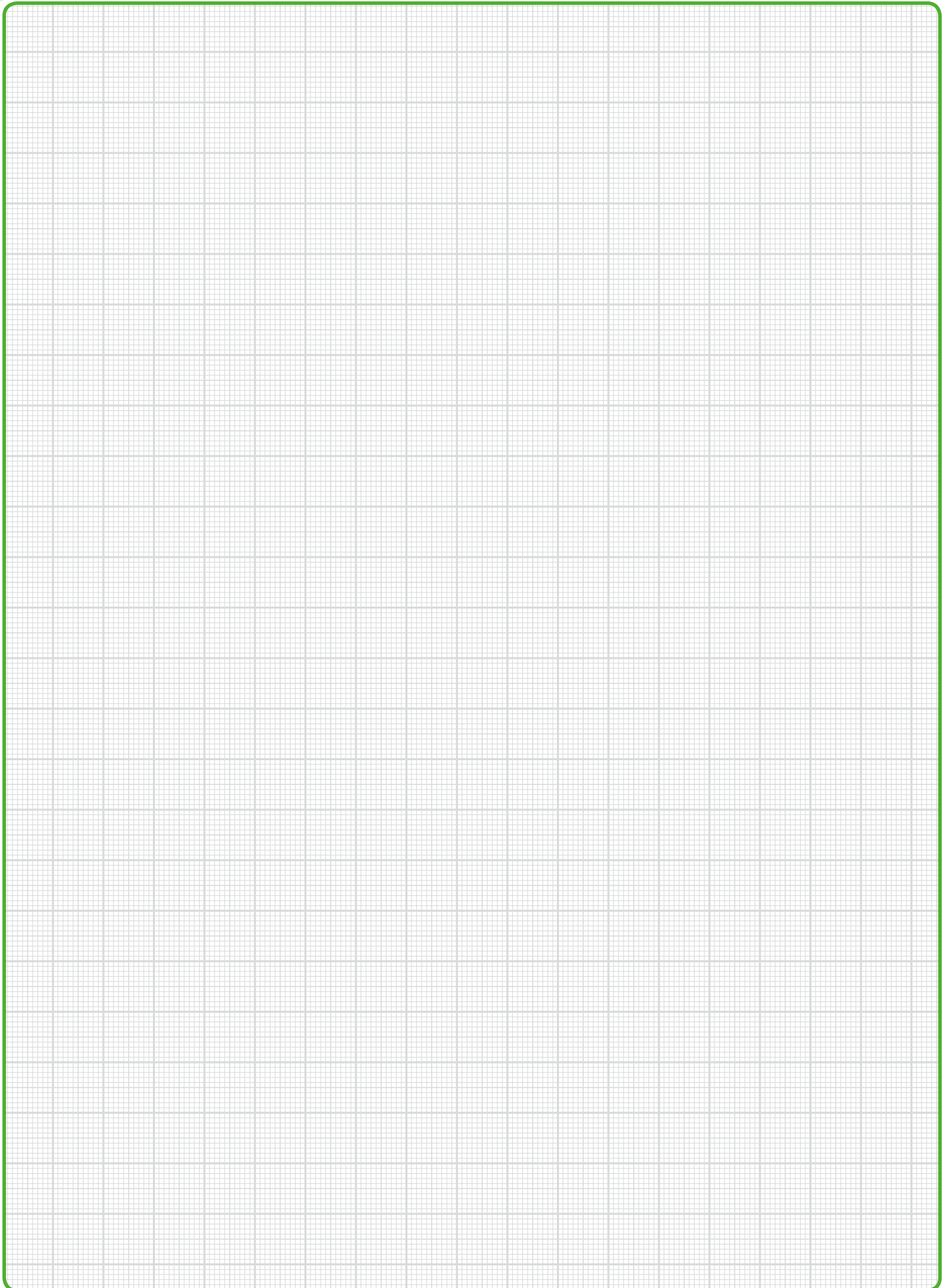
**Vietnam**

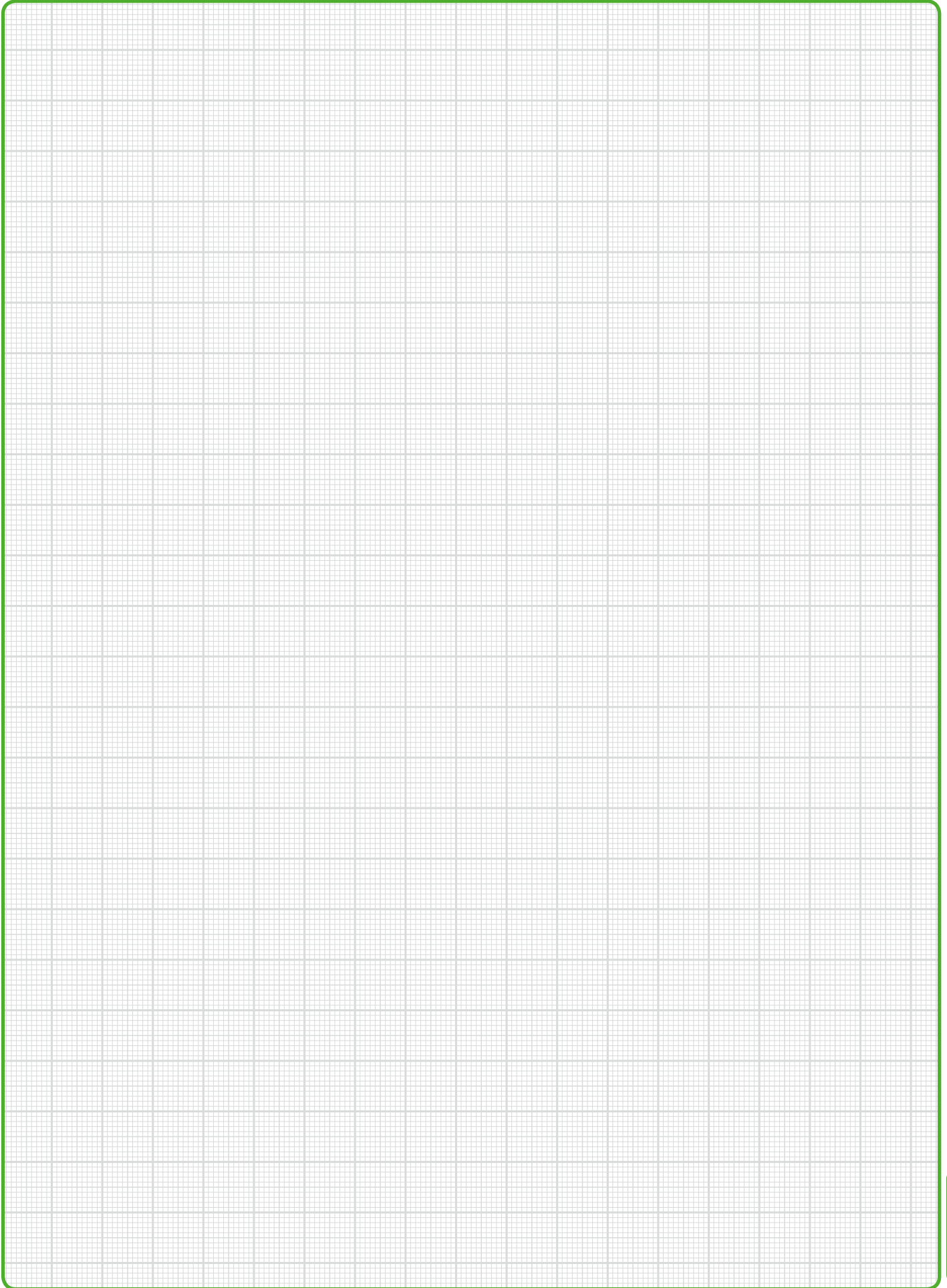
please contact WAGO Germany (Minden)

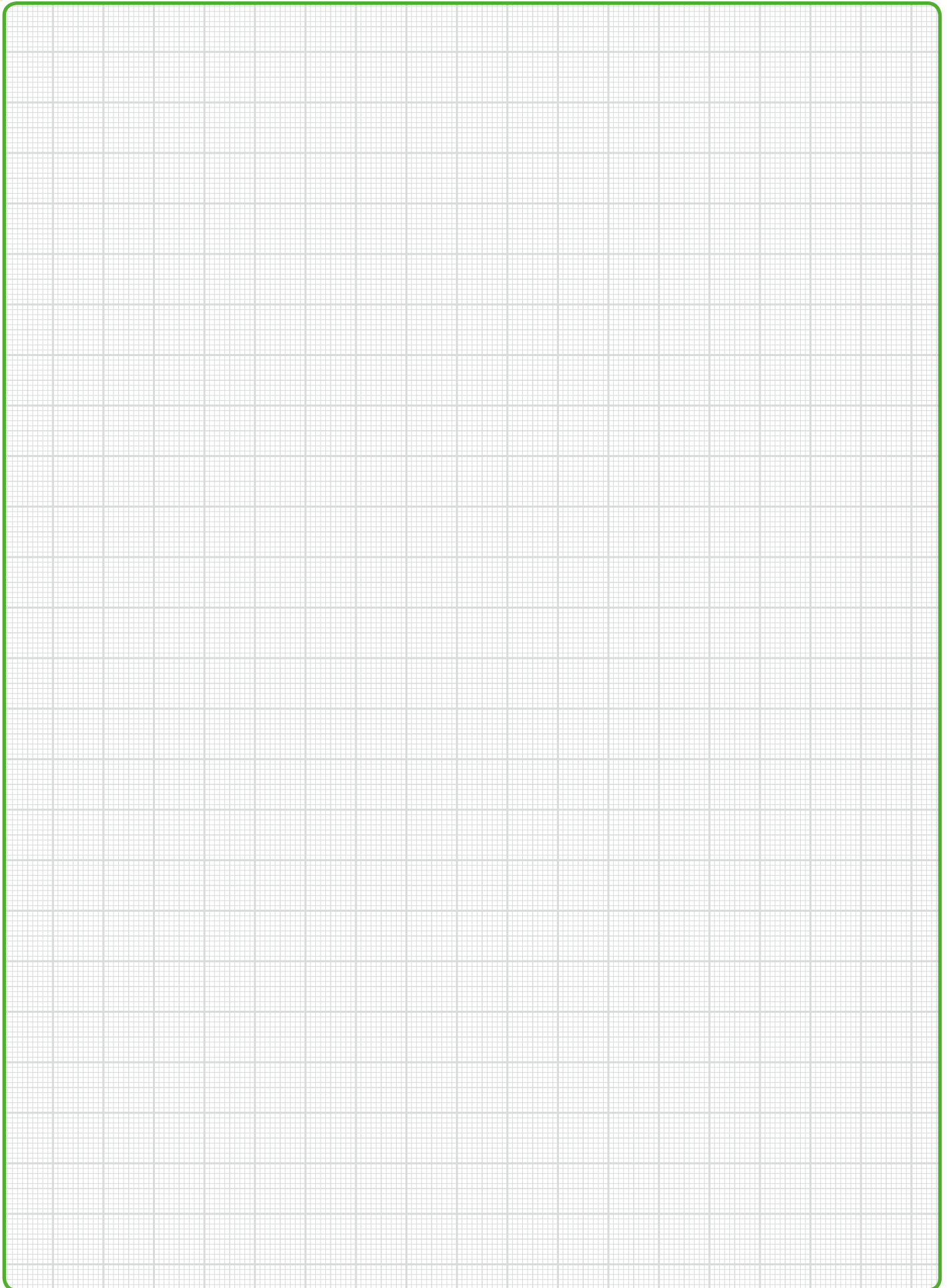


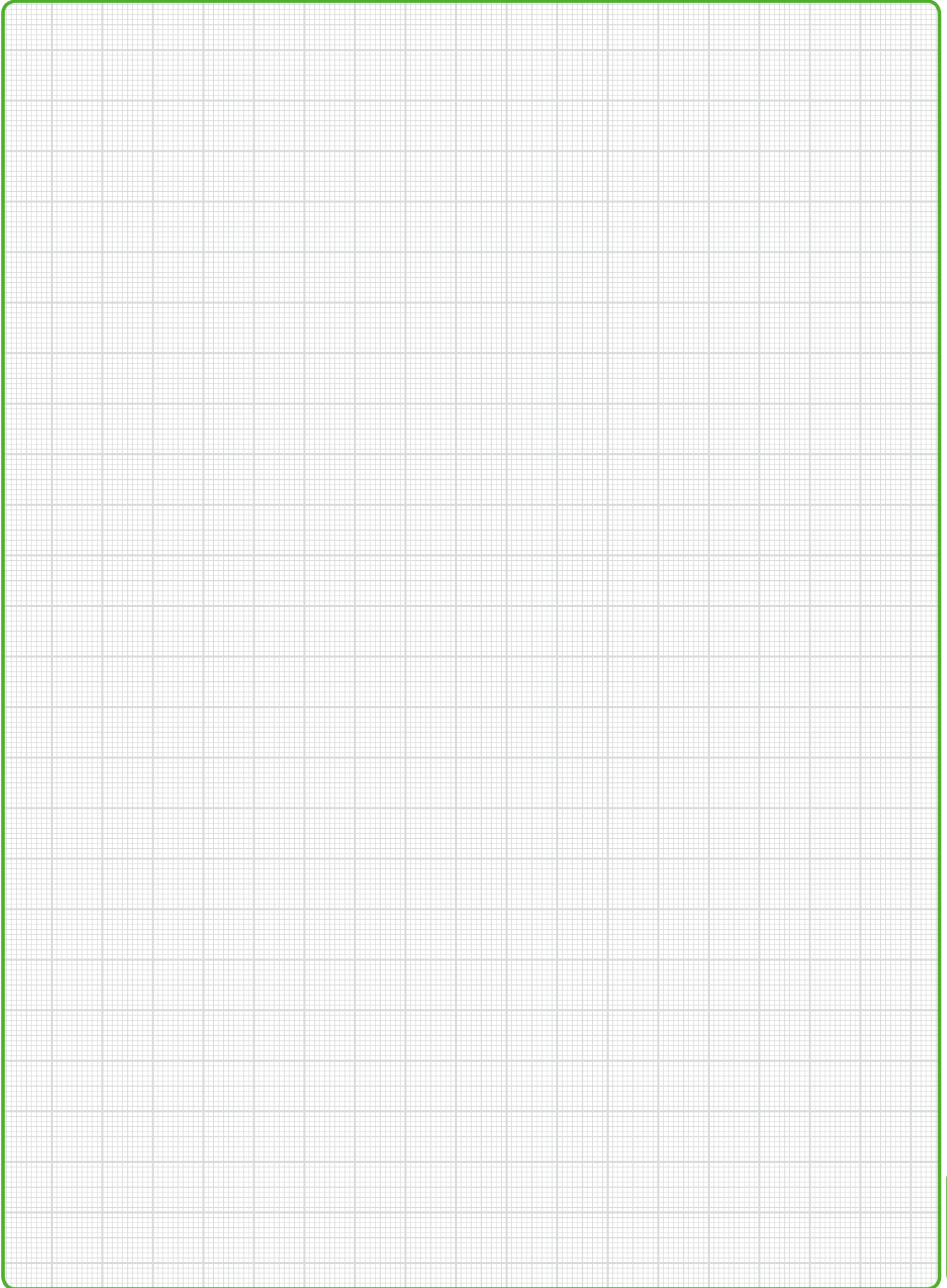








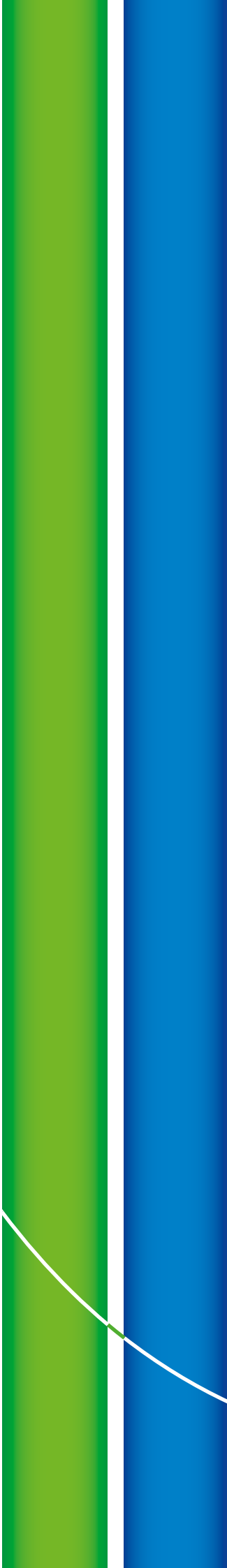












WAGO Kontakttechnik GmbH & Co. KG  
Postfach 2880 · 32385 Minden  
Hansastraße 27 · 32423 Minden

Phone:  
Head Office +49 (0)571/887 - 0  
Fax: +49 (0)571/887 - 169

E-Mail [info@wago.com](mailto:info@wago.com)  
Internet [www.wago.com](http://www.wago.com)

