

# Emergency Lighting

**CATALOGUE 2015**

**SicuroLED-G**  
**DECENTRAL POWER SYSTEMS**



# Gruppo Beghelli

**Light is safety** - Since more than 3 decades the Gruppo Beghelli is a competent partner of lighting designers, qualified electrical contractors, industry, trade and wholesale in accordance with this motto. Our business is the development, production and the sale of emergency lightings, general lightings and lamps.

Regarding emergency lighting we deliver central supply systems with exit sign and emergency luminaires as well as self-contained exit sign and emergency luminaires, emergency supply modules and emergency supply devices.

Regarding general lighting the activities are focused on damp and waterproof luminaires and LED luminaires, partly with automatic dimming or central control and monitoring.

The Gruppo Beghelli, where Beghelli S.p.A. in Monteveglio (Italy) and further companies in Europe, America and Asia belong to, is

worldwide active. Beghelli S.p.A. has been founded almost 30 years ago by Gian Pietro Beghelli. In the meanwhile 92.9 % of the Italian population is familiar with the Beghelli brand and is using their products.

An important criterion for the conception of new products is the conservation of resources and protection of the environment. This is carried out by products with high efficiency and easy handling. As a result the costs for mounting, installation and operation are reduced, the latter by lower energy consumption and increased service life.

The Gruppo Beghelli has frequently characterized the development of the market with special innovations. At the same time these are an essential feature of the current portfolio:

**Damp and waterproof luminaires AcciaioECO** with €CO-factor 3plus1 for quick mounting and installation as well as reduction of the luminaire quantity and energy consumption.

**Monitoring modules Alog** with automatic addressing of the exit sign and emergency luminaires for central test and control of emergency lightings with central supply.

**Monitoring device LogicaFM** with wireless communication via radio bus for central test and control of self-contained emergency lightings.

**LogicaFM Control** with wireless communication via radio bus for central dimming, control and monitoring of the general lighting.

**LED lamp Sorpresa** as combined mains / emergency lamp with integrated battery, charging and switch-over device for a supplementation lighting.





SiruroLED-G  
Advantages  
6



SiruroLED-G  
System  
10



SicuroLED-G  
Centrals  
12



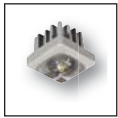
SicuroLED-G  
Options  
14

Exit sign and emergency luminaires



Pluraluce

16



Pluraluce

21



Pluraluce65

22



Multi-D

24



Dispos

25



Alu-K

26



Kubus

28



Kubus54

30



Kubus65

32



Maxima

34



Tula

35



Formula65

36



Aestetica  
LED

38



Acciaio

40



Indus

42



Nano

44



Quader

45



Lumax

46



Lumax65

48



Stufen

49



Triangle

50



I418LED

51



P236LED

51



D226LED

51



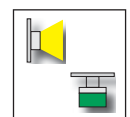
Acciaio  
ECO LED

51



MF736LED

51



## 6 SicuroLED-G - advantages

For emergency lightings with external supply escape routes, areas with particular panic hazard, workplaces with particular people hazard and safety devices can be illuminated optionally with separate emergency luminaires or combined general and emergency luminaires.

An optimal integration of the emergency lighting in the lighting concept and interior architecture of a building is the advantage of combined general and emergency luminaires. Therefore those are preferred by building contractors and lighting designers.

In both variants of luminaires can be used conventional lamps or LED lamps.

The major disadvantages of luminaires with conventional lamps are:

- small luminance efficiency
- separate emergency luminaires with not optimized light distribution
- combined general and emergency luminaires with non-reduced power input in battery operation

For that there are larger battery capacities and charger devices necessary to supply the emergency lighting as well as more circuits and luminaires for the emergency lighting.

These disadvantages can be eliminate by using separate emergency luminaires with LED lamps or reduced by using combined general and emergency luminaires with LED lamps. For a full elimination of the disadvantages there are combined general and emergency luminaires with a reduction of the power input in battery operation.

By using luminaires with LED lamps it is possible to change from one centralized power supply system for a building to one decentralized power supply system for each fire area. The differences between both systems are:

- Centralized power supply system with 216V battery, charger device, switching device and luminaire circuits in protection class I with main

and sub distributors.

- Decentralized power supply system with 24V battery, charger device, switching device and luminaire circuits in protection class III without main and sub distributors.

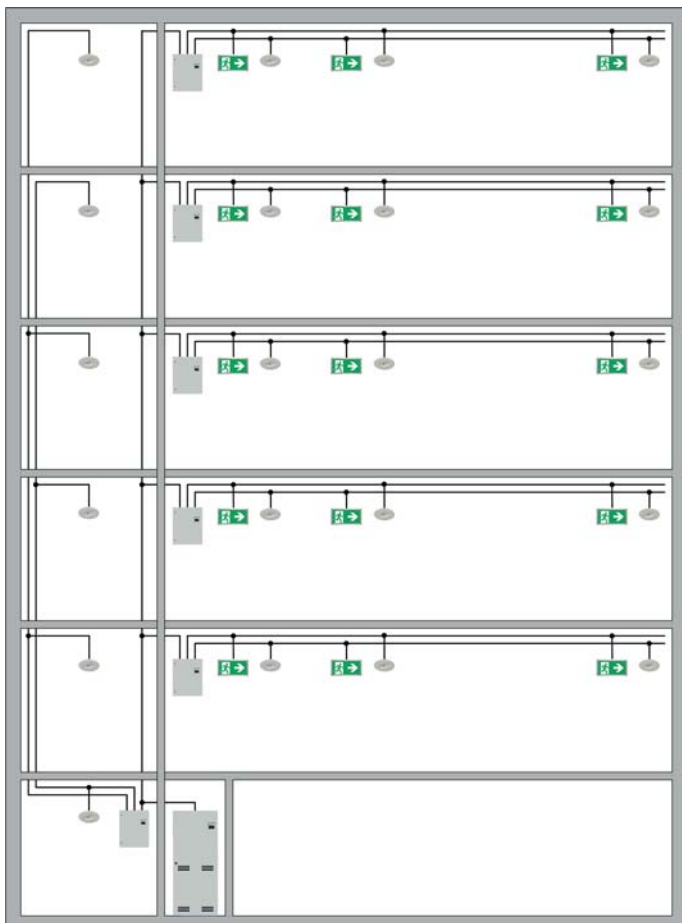
The realization of such an emergency lighting concept is the SicuroLED-G system with:

- Decentralized power supply with battery , charger device, switching device and luminaire circuits
- Exit sign luminaires with LED lamps and SicuroLED module
- Separate emergency luminaires with LED lamps and SicuroLED module
- Combined general and emergency luminaires with LED lamps and SicuroLED inverter for
- mains supply with nominal luminaire power and battery supply with reduced luminaire power.

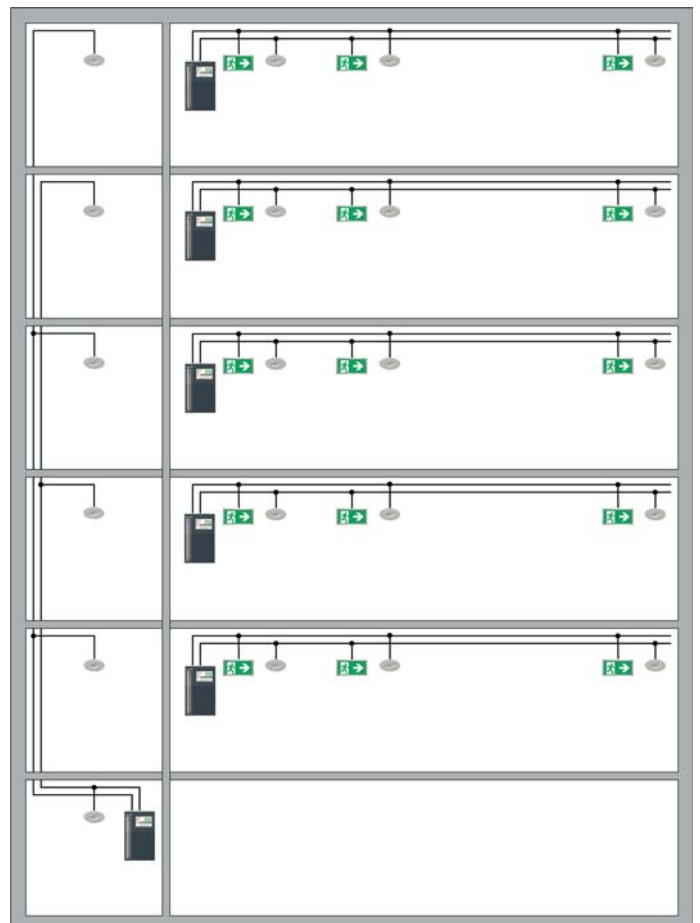
The advantages of SicuroLED-G are:

- Smaller battery capacity and charger decices by the better luminance efficiency of luminaires with LED lamps.
- Smaller battery capacity and charger devices by using separate emergency luminaires with optimized light distribution
- Smaller battery capacity and charger devices by using combined general and emergency luminaires with reduced power input in battery operation
- Smaller quantity of luminaires and circuits
- No battery room required
- No main and sub distributors as well as cable required
- No fire protection for the main and sub distributors as well as the cable required
- Less luminaires to mount and to install
- Less cable to run
- Increased safety of decentralized power supply
- Free choice by the building contractor or lighting designer between separate or combined general and emergency luminaires under economic and architectonic

### Variation with centralised supply system










### Variation with decentralised supply system










The difference between emergency luminaires with conventional lamps and LED lamps is displayed using the example of the lighting of 40 escape routes with 30 m length and 2 m width at a mounting height of 3 m in a building. The comparison is based on the use of separate or combined emergency luminaires or combined general and emergency luminaires. Regarding the combined general and emergency luminaires 10 escape routes with semicircular luminaires, downlights, louvre luminaires and damp and waterproof luminaires should be illuminated in each case.

#### Variation with conventional lamps and 1 centralised supply system with 216 V battery

Luminaire		 T5 8W	 TC-L 18W	 TC-DEL 26W	 T5 14W	 T8 58W
Luminaire distance		4.3 m	6.6 m	6.7 m	4.1 m	9.2 m
		11.2 m	16.8 m	14.6 m	9.0 m	19.7 m
Luminaire power		7.8 W	19 W	27 W	16 W	55 W
<b>Example escape route</b>						
Luminaire quantity		3	3	3	4	2
Luminaire power		23.4 W	57 W	81 W	64 W	110 W
<b>Example building</b>						
Luminaire quantity		120	30	30	40	20
Luminaire power		936 W	570 W	810 W	640 W	1.100 W
Battery power		936 W	3.120 W			
Battery capacity	Duration 1 h	18x12Ah	18x28 Ah			
	Duration 3 h	18x28 Ah	18x70 Ah			

#### Variation with LED lamps and 10 decentralised supply systems with 24 V battery

Luminaire		 LED 2.5W	 LED 13W	 LED 16W	 LED 28W	 LED 32W
Luminaire distance		8.7 m	3.6 m	4.6 m	4.1 m	5.2 m
		17.3 m	9.6 m	11.3 m	9.8 m	11.5 m
Luminaire power		3.8 W	8 W	8 W	8 W	8 W
<b>Example escape route</b>						
Luminaire quantity		2	4	3	4	3
Luminaire power		7.6 W	32 W	24 W	32 W	24 W
<b>Example building</b>						
Luminaire quantity		80	40	30	40	30
Luminaire power		304 W	320 W	240 W	320 W	240 W
Battery power		304 W	1120 W			
Battery capacity	Duration 1 h	10 x 12Ah	10 x 12Ah			
	Duration 3 h	10 x 12Ah	10 x 24Ah			

# 8 SicuroLED-G - decentralised supply system

Supply of exit sign and emergency luminaires with SicuroLED modul and combined general and emergency luminaires with SicuroLED inverter in one fire area:

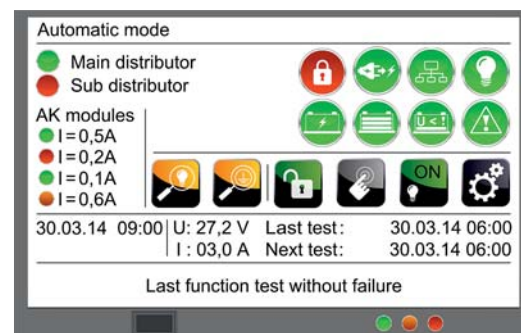


Control and monitoring device with:

- automatic testing device according for execution of function and duration tests as well as storage the test results
- dynamic light control for dynamic safety guidance to change the identification and illumination of escapes routes dependent on a particular risk

Luminaire circuit devices with:

- 4 luminaire circuits in protection class III for operation of maximal 20 luminaires per circuit
- Combined maintained, non-maintained and switchable operation of luminaires in a circuit
- Selective switching (ON/OFF) and dimming (10% and 100%) in main operation
- Selective switching from main into battery operation and from battery into main operation
- Selective switching (ON/OFF) in battery operation
- Free allocation of each luminaire to the 3 operation mode and the 64 control groups
- Selective monitoring of the luminaires (LED converter)
- Automatic addressing of the luminaires



## In- and outputs

- 4 control inputs, freely programmable, for switching of luminaires
- 1 control input, pre-programmed
- 1 control input, freely programmable
- 3 message output, pre-programmed
- 3 message output, freely programmable

## Interfaces:

- RS485 interface for the communication to a computer with optional software Sicuro-Visual by a network, connection to a building management system by Modbus or as WEB server for Sicuro-Visual
- USB interface for upload the system configuration, download of the test protocols and software updates for the Decentralized supply system SicuroLED-G and the SicuroLED modules respectively the SicuroLED-Inverter in the luminaires

Separate control and monitoring device, charger device, power device and luminaire circuit device, individual changeable.

Operation via colored 7" touch screen with graphical and alpha-numeric interface, activateable password protection, multilingual





# SicuroLED-G - advantages of the luminaires

## Exit sign and emergency luminaires



Exit sign and emergency luminaires with integrated SicuroLED module with automatic addressing for monitoring of the luminaire and programming of the operation mode.



Special versions for recessed or surface mounting in fire walls / fire ceilings with the fire resistance class F30 resp. F90.



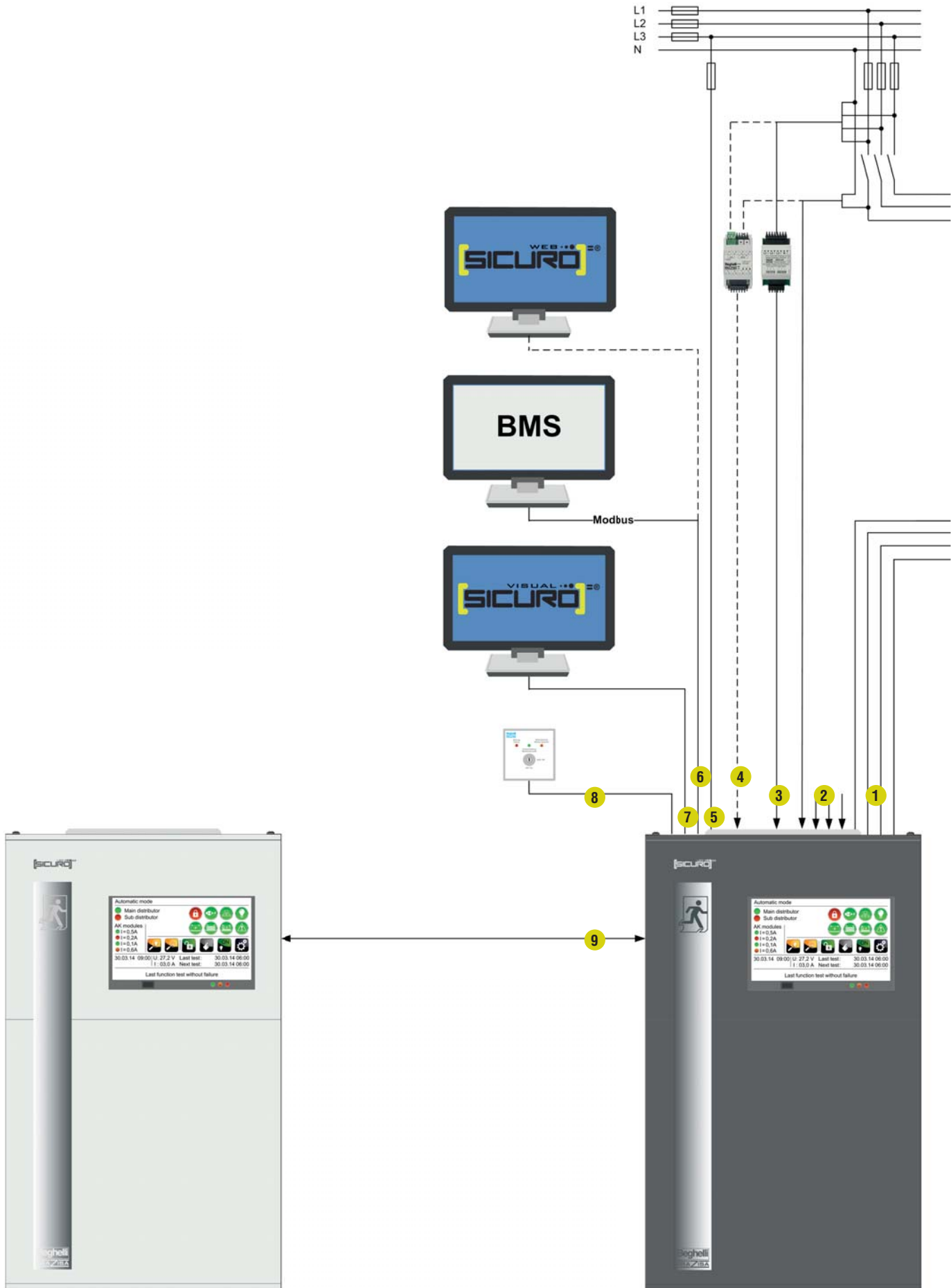
## Combined general and emergency luminaires

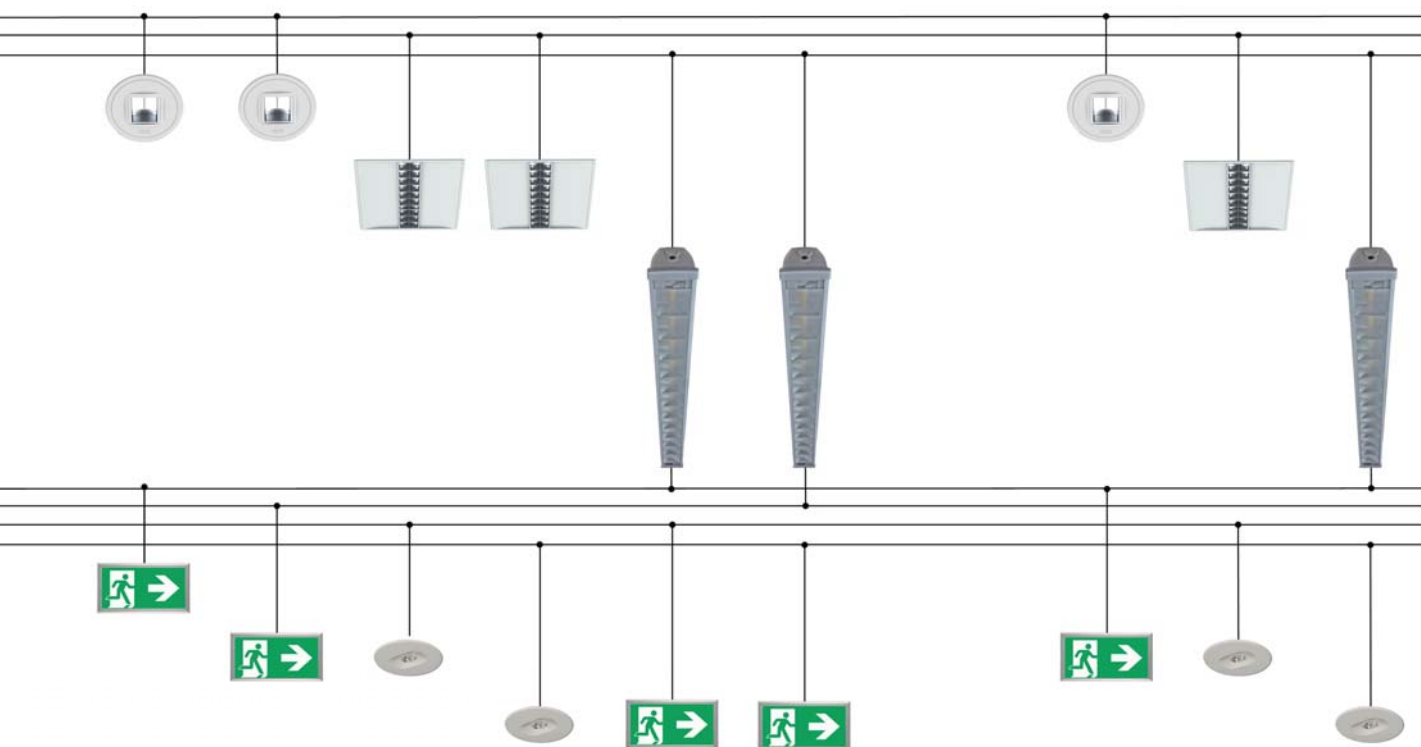


Combined general and emergency luminaires with integrated SicuroLED inverter with automatic addressing for monitoring of the luminaire and automatic reduction of the luminous flux in battery operation.



# 10 SicuroLED-G system





1	4 luminaire circuits for each 20 exit sign / emergency luminaires with SiruroLED modul	Cable: see table below
2	4 control inputs for light switch query	Cable: min. 2 x 0.5 mm <sup>2</sup> per input
3	1 control input for optional, external mains monitoring modules	Cable: min. 2 x 0.5 mm <sup>2</sup>
4	RS485 interface for optional, external light switch query-modules	Cable: min. 2 x 2 x 0.28 mm <sup>2</sup> , screened
5	Mains supply	Cable: min. 3 x 1.5 mm <sup>2</sup>
6	Ethernet interface for optional Modbus or computer with WEB	Cable: RJ45
7	RS485 interface for optional, external computer with Sicuro-Visual	Cable: min. 2 x 2 x 0.28 mm <sup>2</sup> , screened
8	Switch inputs / message outputs for optional, external message and switch module	Cable: 10 x 0.5 mm <sup>2</sup>
9	Interface for Siruro communication bus	Cable: min. 2 x 2 x 0.28 mm <sup>2</sup> , screened

	Connected load	Cable		Cable		Cable	
		Cross section	Length	Cross section	Length	Cross section	Length
1	24W (24V / 1A)	1.5 mm <sup>2</sup>	147 m	2.5 mm <sup>2</sup>	245 m	4.0 mm <sup>2</sup>	390 m
	48W (24V / 2A)	1.5 mm <sup>2</sup>	74 m	2.5 mm <sup>2</sup>	123 m	4.0 mm <sup>2</sup>	195 m
	72W (24V / 3A)	1.5 mm <sup>2</sup>	49 m	2.5 mm <sup>2</sup>	82 m	4.0 mm <sup>2</sup>	130 m

Table of cable dimensioning



# SiruroLED-G

## Decentralised supply system

Decentralized supply for operation of exit sign and emergency luminaires with SicuroLED modul and combined general and emergency luminaires with SicuroLED inverter in one fire area.

Control and monitoring device with:

- automatic testing device according EN 62034 for execution of function and duration tests as well as storage the test results
- dynamic light control for dynamic safety guidance to change the identification and illumination of escapes routes dependent on a particular risk

Luminaire circuit devices with:

- 4 luminaire circuits in protection class III for operation of maximal 20 luminaires per circuit
- Combined maintained, non-maintained and switchable operation of luminaires in a circuit
- Selective switching (ON/OFF) and dimming (10% and 100%) in main operation
- Selective switching from main into battery operation and from battery into main operation
- Selective switching (ON/OFF) in battery operation
- Free allocation of each luminaire to the 3 operation mode and the 64 control groups
- Selective monitoring of the luminaires (LED converter)
- Automatic addressing of the luminaires
- Output per circuit: 72W
- Voltage/current per circuit: 24V / 3A

In- and outputs

- 4 control inputs, freely programmable, for switching of luminaires, control signal: 230 V AC
- 1 control input, pre-programmed, for switching the maintained operation (ON/OFF), control signal: potential-free contact
- 1 control input, freely programmable, for switching of operation state/function test (START)/duration test (START)/non-maintained operation (OFF)/deep discharge protection (confirmation), control signal: potential-free contact
- 3 message output, pre-programmed, for indication of collective failure/operation state/operation mode, message signal: potential-free contact
- 3 message output, freely programmable, for indication the status of charging/battery/circuit/luminaires/operation state/main operation/battery operation/test operation/deep discharge, message signal: potential-free contact

Interfaces:

- RS485 interface for the communication to a computer with optional software Sicuro-Visual by a network, connection to a building management system by Modbus or as WEB server for Sicuro-Visual
- USB interface for upload the system configuration, download of the test protocols and software updates for the Decentralized supply system SicuroLED and the SicuroLED modules respectively the SicuroLED-Inverter in the luminaires

Charging device 27.2 V / 3 A, 27.2 V / 5A, 27.2 V / 10 A

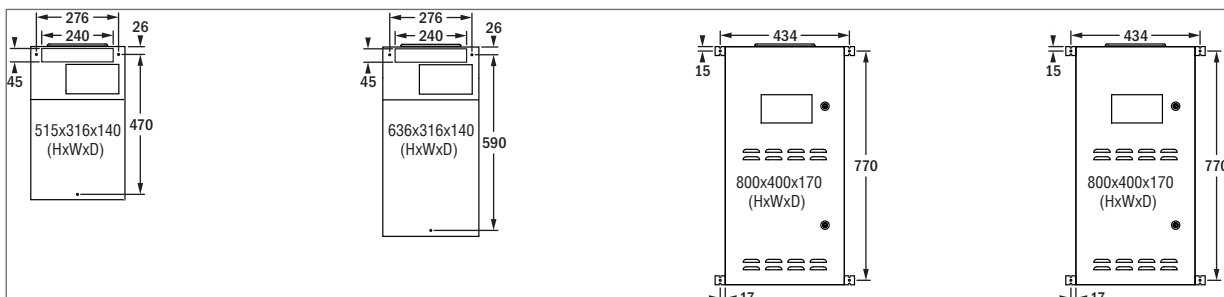
Battery: Pb battery in sealed version, design OGiV, with a life expectancy of 10 years at an ambient temperature of 20 °C







Operation via colored 7"-touch-screen with graphical and alpha-numeric interface for in and output of parameters and data, activatable password protection, multilingual colored, and state LED for mains operation/battery operation/collective failure.

Assembly in cabinet with separated electronic and battery part.

### Technical data

Mounting:	surface wall mounting
Cabinet:	sheet steel
Colour 12 Ah / 24 Ah:	white (RAL 9003) or grey (RAL 7016)
Colour 28 Ah / 56 Ah:	grey (RAL 7035)
Degree of protection:	IP20
Protection class:	I
Ambient temperature:	
Electronic part:	- 5 °C to + 25 °C
Battery part:	20 °C
Mains supply:	1 ~ N PE 50 Hz
	U : 230 V +/- 10 %



					
<b>Type</b>		<b>SicuroLED-G 12</b>	<b>SicuroLED-G 24</b>	<b>SicuroLED-G 28</b>	<b>SicuroLED-G 56</b>
<b>Order code</b>		<b>17060</b>	<b>2417061</b>	<b>17062</b>	<b>17063</b>
					
<b>Type</b>		<b>SicuroLED-G 12</b>	<b>SicuroLED-G 24</b>		
<b>Order code</b>		<b>17070</b>	<b>17071</b>		
<b>Battery capacity</b>		12 Ah	24 Ah	28 Ah	56 Ah
<b>Battery voltage</b>		24 V	24 V	24 V	24 V
<b>Battery current</b>	1 h	6.1 A	12.0 A	12.0 A	12.0 A
	3 h	2.2 A	5.1 A	7.0 A	12.0 A
	8 h	0.6 A	1.9 A	2.75 A	6.16 A
<b>Battery power</b>	1 h	147.2 W	288.0 W	288.0 W	288.0 W
	3 h	53.6 W	123.2 W	170.0 W	288.0 W
	8 h	15.2 W	46.4 W	66.0 W	148.0 W
<b>Charging device</b>		27.2 V / 3.0 A	27.2 V / 5.0 A	27.2 V / 10.0 A	27.2 V / 10.0 A
<b>Luminaire circuits</b>	<b>Quantity</b>	4	4	4	4
	<b>Voltage</b>	24 V +/-20%	24 V +/-20%	24 V +/-20%	24 V +/-20%
	<b>Current</b>	max. 3 A	max. 3 A	max. 3 A	max. 3 A
	<b>Power</b>	max. 72 W	max. 72 W	max. 72 W	max. 72 W
<b>Light switch query</b>		4	4	4	4
<b>Cable entry</b>	from above	Plate with membranes			
	from below	Opening with predisposition			
<b>Cable terminals</b>	<b>Mains</b>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
	<b>Battery</b>	4.0 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>
	<b>Luminaires</b>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup> <sup>1)</sup>	2.5 mm <sup>2</sup> <sup>1)</sup>
	<b>Control inputs</b>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
	<b>Control outputs</b>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
	<b>Message outputs</b>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
	<b>Ethernet interface</b>	RJ45 connector	RJ45 connector	RJ45 connector	RJ45 connector
<b>Dissipation power</b>	<b>Mains operation</b>	24 W	26 W	28 W	30 W
	<b>Batt. operation</b>	15 W	15 W	15 W	15 W
<b>Dimensions (HxWxD)</b>		516x316x140 mm	644x316x140 mm	800x400x170 mm	800x400x170 mm
<b>Total weight</b>		20.0 kg	30.0 kg	39.0 kg	56.0 kg

# Optional system components

## Mains monitoring module DS 1 UV / DS 3 UV



Module for mains monitoring of the general lighting inside sub distributions. Activation of the control output during mains disturbances and mains failures with  $U < 0.6 U_{Nom}$  for 0.5 s.

Mains input: 3-phase  
Control output: 2 changeover contacts, potential-free (230 V / 3 A)

### Technical data

Mains input:	1~ N 230 V / 50 Hz	Mains input:	3~ N 400 V / 50 Hz
Control output:	2 changeover contacts, potential-free, 230 V / 3 A	Control output:	2 changeover contacts, potential-free, 230 V / 3 A
Mounting:	in distribution (DIN rail)	Mounting:	in distribution (DIN rail)
Housing:	plastic	Housing:	plastic
Dimensions (HxWxD):	90x52x58 mm	Dimensions (HxWxD):	90x52x58 mm
Degree of protection:	IP 20	Degree of protection:	IP 20

Type: DS 1 UV  
Order code: G31574

Type: DS 3 UV  
Order code: G31026



## Mains monitoring and light switch query module LSSA 3+5

Module with 3 control inputs for monitoring the mains of the general lighting or query of the light switches of the general lighting and 5 control inputs for query of the light switches of the general lighting. Activation of the control inputs for mains monitoring at  $U > 0.6 U_{Nom}$  for 0.5 s. Activation of the control inputs for light switch query at 230 V AC. invertible. Function and logic of the control inputs as well as assignment to luminaire circuits or luminaires. including free input of text designations. programmable on the decentralised supply system. Connection to the decentralised supply system by a 4-wire cable for bus and supply voltage.

### Technical data

Control inputs for mains monitoring:	3 or 0
Control inputs for light switch query:	5 or 8
Control signal:	1~ N 230 V / 50 Hz
Communication bus:	RS 485
Mounting:	in distribution (DIN rail)
Housing:	plastic
Dimensions (HxWxD):	110x53x63 mm
Degree of protection:	IP 20
Protection class:	I

Type: LSSA 3+5  
Order code: G31585



## Light switch query module LSSA 8

Module with 8 control inputs for query of the light switches of the general lighting. Activation of the control inputs for light switch query by switch contacts (potential-free). Logic of the control inputs as well as assignment to luminaire circuits or luminaires. including free input of text designations. programmable on the decentralised supply system. Connection to the decentralised supply system by a 4-wire cable for bus and supply voltage.

### Technical data

Control inputs for light switch query:	8
Control signal:	switch contact (potential-free)
Communication bus:	RS 485
Mounting:	in distribution (DIN rail)
Housing:	plastic
Dimensions (HxWxD):	110x53x63 mm
Degree of protection:	IP 20
Protection class:	I

Type: LSSA 8  
Order code: G31586



## Message and switch module MSM-A

Message (optical) of:

- Operational condition
  - Battery operation
  - Collective fault
- Switching (key switch) of:
- Maintained mode ON/OFF

### Technical data

Mounting:	surface wall mounting
Housing:	plastic
Dimensions (HxWxD):	160x80x60 mm
Degree of protection:	IP 65
Protection class:	III

**Type:** MSM-A  
**Order code:** G31015



## Message and switch module MSM-E

Message (optical) of:

- Operational condition
  - Battery operation
  - Collective fault
- Switching (key switch) of:
- Maintained mode ON/OFF

### Technical data

Mounting:	recessed wall mounting
Housing:	plastic / metal
Dimensions (HxWxD):	86x86x53 mm
Degree of protection:	IP 20
Protection class:	III

**Type:** MSM-E  
**Order code:** G31045



## Sicuro Visual

Software for a centralized in- and output of system data respectively control and monitoring parameters.

Programming functions:

- import of layout plans
- textual and graphical assignment of all supply systems, circuits and luminaires in plans and lists
- configuration of the supply system, circuits and luminaires

Monitoring functions:

- automatic or manual test of supply systems, circuits and luminaires
- message of the status of supply systems, circuits and luminaires, failures and tests

Control functions:

- automatic or manual switching/dimming of supply systems, circuits and luminaires

**Type:** Sicuro Visual  
**Order code:** SWB16313



## Sicuro WEB / Sicuro MOD

Software extension for a centralized monitoring of the emergency lighting via intranet/internet or Modbus with the following function:

Monitoring functions:

- Output of the allocation of all supply systems, circuits and luminaires, operation mode per circuit or luminaires and the state of all internal or external light switch query-modules per supply system

Testing function:

- In- and output of testing parameters per supply system
- automatic or manual function or duration test per supply system

Control functions:

- manual switching switching of operation state

Message function:

- Output of the status of supply systems and failures in online mode per supply system, circuits and luminaires

**Type:** Sicuro WEB  
**Order code:** SWB16314

**Type:** Sicuro MOD  
**Order code:** SWB16316





# Pluraluce

**Exit sign luminaire** designed as shallow frame display. Integrated LED and light guide panel provides optimised light levels according to EN 1838 (> 500 cd/m<sup>2</sup>). Single or double faced exit signs available. May be changed without tools. Quick fix system for easy mounting and installation.

Versions available: surface / recessed wall mounting (single faced), surface / recessed ceiling mounting, pendulum mounting and bracket mounting (double faced)

## Technical data

Body: sheet steel (wall) / polycarbonate (ceiling, wire suspension, pendulum, bracket), grey (RAL 7035)

Frame: aluminium, anodised

Film: PMMA, printed

Degree of protection: IP40 (wall) / IP41 (ceiling, wire suspension, pendulum, bracket)

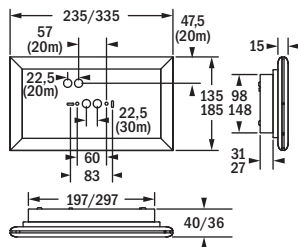
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

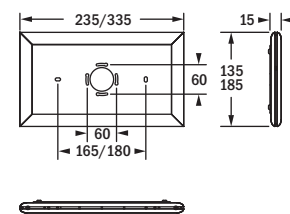
Ambient temperature: -10 to + 40 °C



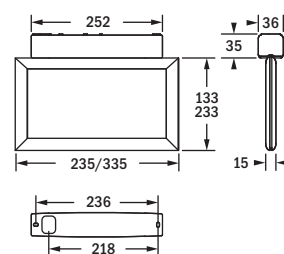
Surface wall mounting



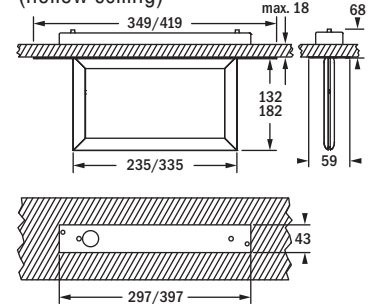
Recessed wall mounting



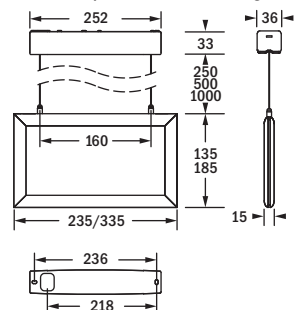
Surface ceiling mounting



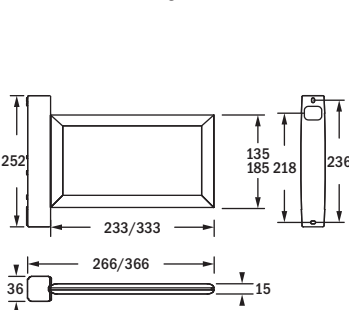
Recessed ceiling mounting (hollow ceiling)



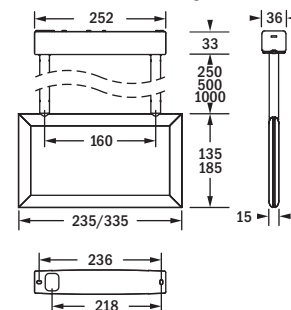
Wire suspension mounting



Bracket mounting



Pendulum mounting



ceiling-cutout  
300x45 (20m)  
370x45 (30m)



Order code	VD	Lamp	Power consumption DC
Surface wall mounting / recessed wall mounting (single faced) <sup>1</sup>			
<b>TB16731-S24</b>	20 m	LED 1.0 W (16)	1.7 W
<b>TB16730-S24</b>	30 m	LED 1.6 W (24)	2.2 W
Surface / recessed ceiling, pendulum and bracket mounting (double faced) <sup>2</sup>			
<b>TB16721-S24</b>	20 m	LED 2.1 W (32)	2.9 W
<b>TB16720-S24</b>	30 m	LED 3.2 W (48)	4.3 W

<sup>1</sup> Recessed wall mounting requires an additional installation box according to DIN 49073 for concealed or hollow wall assembly (not supplied). F. i.: brand Kaiser, order no. 1056-04 resp. 1556-04 or 9063-01 resp. 9064-01, to be sourced locally.

<sup>2</sup> For recessed ceiling and pendulum mounting, please order additional required accessories separately.

## Fitting supplied complete with

Order code	Description
<b>VD 20 m</b> <b>VD 30 m</b>	
<b>E16770M</b> <b>E16779M</b>	Kit of exit sign films (single faced)
<b>E16771M</b> <b>E16780M</b>	Kit of exit sign films (double faced)

## Accessories to be ordered separately

Order code	Description
<b>VD 20 m</b> <b>VD 30 m</b>	
<b>FB19384</b> <b>FB19386</b>	Kit for recessed ceiling mounting
<b>FB19380</b> <b>FB19380</b>	Pendulum rod: 250 mm
<b>FB19381</b> <b>FB19381</b>	Pendulum rod: 500 mm
<b>FB19382</b> <b>FB19382</b>	Pendulum rod: 1000 mm
<b>FB19383</b> <b>FB19383</b>	Wire suspension: 2000 mm
<b>FB19385</b> <b>FB19387</b>	Concrete ceiling box (recessed ceiling mounting)
<b>E16772M</b> <b>E16781M</b>	Exit sign film
<b>E16773M</b> <b>E16782M</b>	Exit sign film
<b>E16774M</b> <b>E16783M</b>	Exit sign film
<b>E16775M</b> <b>E16784M</b>	Exit sign film



**Mounting of exit sign luminaires on or in fire walls resp. fire ceilings with the fire resistance class F30 or F90 according to DIN 4102-4.**

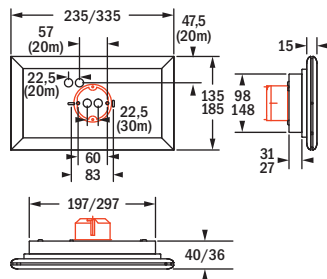
In the versions surface wall mounting, surface ceiling mounting and bracket mounting the exit sign luminaires of the series Pluraluce are standardly suitable for a mounting on / in hollow walls resp. plaster ceilings, which are carried out as fire walls resp. fire ceilings with a fire resistance duration of 30 or 90 minutes.

For this a building inspectorate approved installation box of the DIBt for fire walls resp. fire ceilings must be mounted in the wall resp. the ceiling. F. i.: brand Kaiser, order no. 9463-01 or 9464-01 resp. 9463-50 or 9464-50 (not supplied).

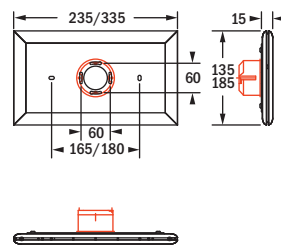
The arrangement of the SicuroLED module as well as the fixing of the exit sign luminaire takes place directly in and on the wall resp. ceiling installation box.



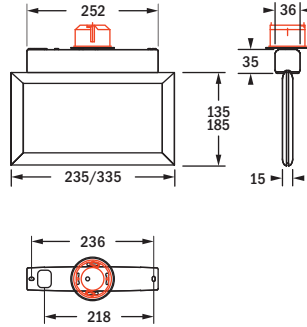
Surface wall mounting



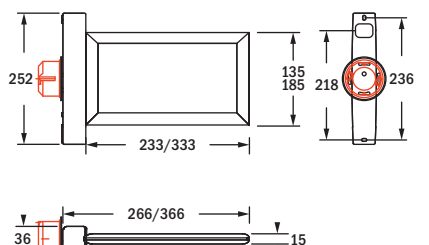
Recessed wall mounting



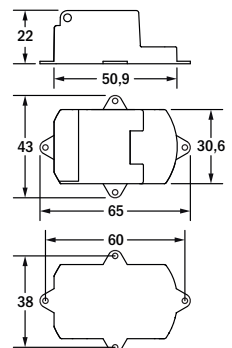
Surface ceiling mounting



Bracket mounting



Sicuro LED modul



**7 mounting types for 1- or 2-sided escape route lighting and viewing distances of 20 or 30 m**





# Pluraluce

**Emergency luminaire** in shallow design with high power LEDs, integrated reflector and special optical system. Double lens for asymmetric light distribution (illumination of escape routes) or single lens for symmetric light distribution (illumination of areas), changeable for low or high mounting height. Quick fix system for easy mounting and installation.

Versions available: surface / recessed wall mounting, surface / recessed ceiling mounting

## Technical data

Body: aluminium (surface wall / ceiling mounting), sheet steel / aluminium (recessed wall / ceiling mounting)

Cover: polycarbonate, white (RAL 9010)<sup>1</sup>

Degree of protection: IP40 (surface / recessed wall mounting) / IP41 (surface ceiling mounting) / IP42 (recessed ceiling mounting)

Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

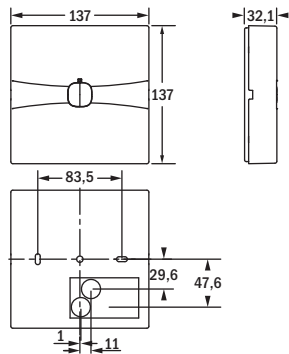
Supply: 24 V +/- 20 % DC

Ambient temperature: -10 to +40 °C

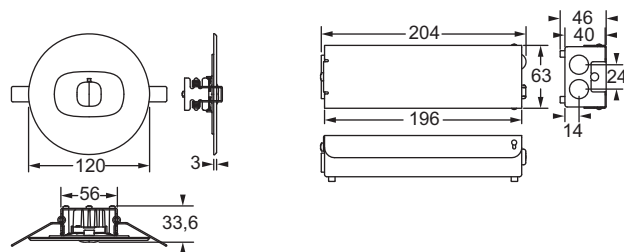
<sup>1</sup> Cover available in other colours on request



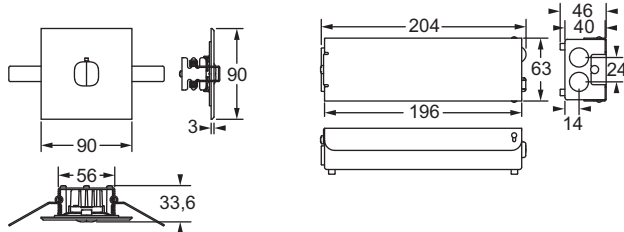
### Surface wall / ceiling mounting



### Recessed wall / ceiling mounting (cavity wall / hollow ceiling)



ceiling-cutout:  
80mm diameter  
suitable for ceiling thickness from 2mm to 15mm



ceiling-cutout:  
80mm diameter  
suitable for ceiling thickness from 2mm to 15mm



Order code	Lamp	Ballast lumen DC	Power consumption DC
Surface ceiling mounting for escape route lighting			
<b>TB16747-S24</b>	LED 2.5 W	190 lm	3.8 W
Surface ceiling mounting for area lighting with 2 changeable lenses			
<b>TB16746-S24</b>	LED 2.5 W	190 lm	3.8 W
Recessed ceiling mounting for escape route lighting <sup>1</sup>			
<b>TB16763-S24</b>	LED 2.5 W	190 lm	3.8 W
Recessed ceiling mounting for area lighting with 2 changeable lenses <sup>1</sup>			
<b>TB16762-S24</b>	LED 2.5 W	190 lm	3.8 W

<sup>1</sup> For recessed ceiling mounting please order square cover or stainless steel round cover separately.

### Accessories to be ordered separately

Order code	Description
<b>F95807</b>	Narrow beam lens for surface / recessed ceiling mounted (area lighting) for escape route lighting - mounting height > 7.5 m
<b>F95808</b>	Narrow beam lens for surface / recessed ceiling mounted luminaires (area lighting) for area lighting - mounting height > 7.5 m
<b>F95802</b>	Lens for symmetric light distribution for surface / recessed ceiling mounted luminaires (area lighting) for surface / recessed wall wall mounting
<b>F95812</b>	Sheet steel square cover, white RAL 9010 for asymmetric light distribution (escape route lighting)
<b>F95811</b>	Sheet steel square cover, white RAL 9010 for symmetric light distribution (area lighting)
<b>F95804</b>	Stainless steel round cover for asymmetric light distribution (escape route lighting)
<b>F95803</b>	Stainless steel round cover for symmetric light distribution (area lighting)
<b>F95805</b>	IP42 kit for surface ceiling mounting

**Mounting of emergency luminaires in fire ceilings with the fire resistance class F30 or F90 according to DIN 4102-4.**

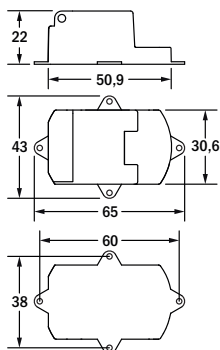
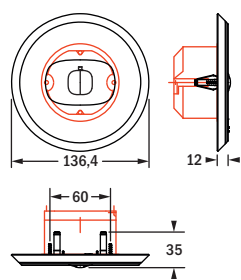
For a mounting of the emergency luminaire Pluraluce in the version surface ceiling mounting for fire ceilings with a fire resistance duration of 30 or 90 minutes special types are available.

In addition a building inspectorate approved installation box of the DIBt for fire ceilings must be mounted in the ceiling. F. i.: brand Kaiser, order no. 9463-50 or 9464-50 (not supplied).

The fixing of the emergency luminaire takes place directly on the installation box for the ceiling.



Recessed wall / ceiling mounting      Sicuro LED modul



Order code	Lamp	Ballast lumen DC	Power consumption DC
Recessed ceiling mounting in fire ceilings Version for escape route lighting			
<b>TB16757-S24</b>	LED 2.5 W	190 lm	3.8 W
Recessed ceiling mounting in fire ceilings Version for area lighting with 2 changeable lenses			
<b>TB16756-S24</b>	LED 2.5 W	190 lm	3.8 W

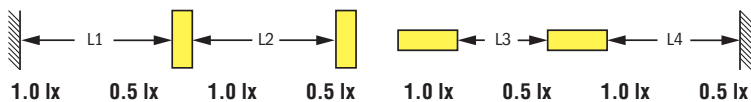


**4 mounting types for escape route and area lighting with mounting heights from 2.5 m to 30.0 m**

Type of lamp Light distribution diagram

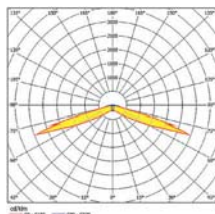
Mounting height (m)

Spacing (m)



Versions for escape route lighting

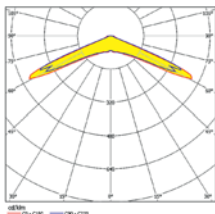
TB16763-S24



2.5	7.7	-	16.7	-	3.6	-	1.2	-
3.0	9.2	-	19.7	-	3.6	-	1.2	-
3.5	9.6	-	22.1	-	3.6	-	1.2	-
4.0	10.4	-	24.6	-	7.5	-	1.1	-
4.5	8.8	-	25.8	-	7.5	-	0.9	-
5.0	2.3	-	20.8	-	3.4	-	0.6	-

Versions for area lighting - mounting height < 3.5 m

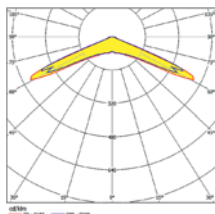
TB16762-S24



2.5	-	5.6	-	12.0	-	11.6	-	5.3
3.0	-	5.6	-	14.0	-	13.7	-	6.1
3.5	-	5.0	-	15.2	-	15.6	-	5.0
4.0	-	3.6	-	13.5	-	13.7	-	3.0
4.5	-	1.5	-	17.6	-	12.9	-	1.5
5.0	-	-	-	-	-	-	-	-

Versions for area lighting - mounting height > 3.5 m and < 7.5 m

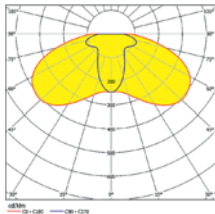
TB16746-S24



2.5	-	-	-	-	-	-	-	-
3.0	-	-	-	-	-	-	-	-
3.5	-	-	-	-	-	-	-	-
4.0	-	4.4	-	9.4	-	9.1	-	4.4
4.5	-	5.0	-	10.5	-	10.2	-	4.8
5.0	-	5.4	-	11.5	-	11.3	-	5.4
6.0	-	6.2	-	13.5	-	13.3	-	6.2
7.0	-	6.8	-	15.4	-	15.2	-	7.0
7.5	-	1.1	-	11.6	-	12.3	-	1.1

Wall mounting version

F95802

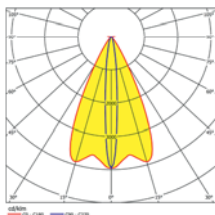


+  
TB16746-S24  
TB16762-S24

1.5	-	-	-	-	6.1	-	2.1	-
2.0	-	-	-	-	6.4	-	2.1	-
2.5	-	-	-	-	6.1	-	2.1	-
3.0	-	-	-	-	-	-	-	-
3.5	-	-	-	-	-	-	-	-

Versions for escape route lighting - mounting height > 7.5 m

F95807

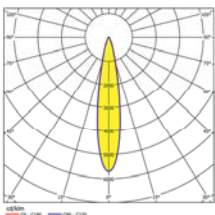


+  
TB16746-S24  
TB16762-S24  
TB16756-S24

7.5	4.7	-	10.9	-	5.3	-	1.9	-
10.0	5.8	-	13.1	-	5.3	-	2.0	-
12.5	6.4	-	15.1	-	5.5	-	1.8	-
15.0	7.3	-	17.0	-	5.6	-	1.6	-
17.5	7.8	-	18.6	-	5.5	-	1.5	-
20.0	8.1	-	20.1	-	5.2	-	1.1	-
25.0	0.9	-	19.6	-	4.7	-	-	-
30.0	-	-	14.2	-	3.3	-	-	-

Versions for area lighting - mounting height > 7.5 m

F95808



+  
TB16746-S24  
TB16762-S24  
TB16756-S24

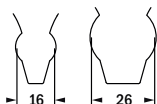
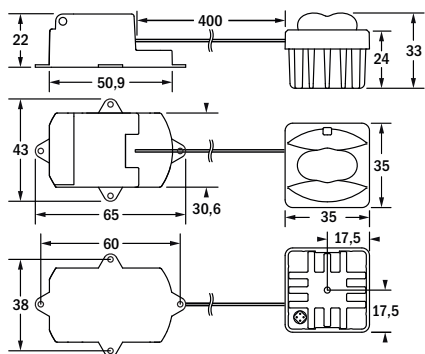
7.5	-	2.8	-	7.3	-	7.3	-	2.8
10.0	-	3.3	-	8.1	-	8.1	-	3.3
12.5	-	3.5	-	8.9	-	8.9	-	3.5
15.0	-	3.7	-	9.6	-	9.6	-	3.7
17.5	-	3.7	-	10.0	-	10.0	-	3.7
20.0	-	3.9	-	10.4	-	10.4	-	3.9
25.0	-	3.8	-	11.0	-	11.0	-	3.8
30.0	-	3.6	-	11.3	-	11.3	-	3.6

# Pluraluce-Modul

**Conversion kit** for general lighting fittings without amending the internal wiring. Module with high power LED and integral reflector and special optical lens system, either asymmetrical light distribution (escape route lighting) or symmetrical light distribution (area lighting). Lenses for low ceiling heights (up to 3 mtrs) or high ceilings (up to 7 mtrs). Quick fix system enables easy mounting and installation with attachment clip (to be fixed on the lamp) or single connection (to be fixed f.i. on the reflector). Versions available: to be supplied as conversion kit with 3 lenses

## Technical data

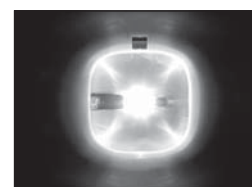
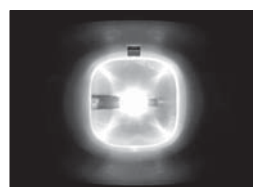
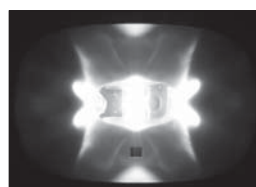
Body: aluminium, white (RAL 9010)  
 Cover: polycarbonate, white (RAL 9010)  
 Protection: IP40 (LED module), IP20 (electronics module)  
 Terminals: push-wire terminals, 1.5 mm<sup>2</sup>, 2-times  
 Supply: 24 V +/- 20 % DC  
 Ambient temperature: -10 to +40 °C



Order code	Lamp	Ballast lumen DC	Power consumption DC
Escape route or area lighting with 3 changeable lenses			
<b>TB16769-S24</b>	LED 2.5 W	190 lm	3.8 W

Optional lenses: see Pluraluce page 18

Lighting data: see Pluraluce page 20





# Pluraluce65

**Emergency luminaire** with shallow design with high power LED and integral reflector and special optical lens system, either asymmetrical light distribution (escape route lighting) or symmetrical light distribution (area lighting).

Versions available: surface wall mounting, surface / recessed ceiling mounting, body made of sheet steel or stainless steel

## Technical data

Body: sheet steel, white (RAL 9003) / stainless steel

Cover: PMMA, clear

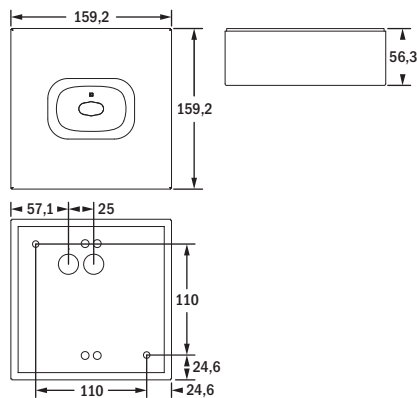
Terminals: push-wire terminals: 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

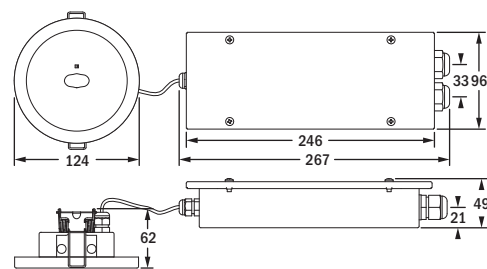
Ambient temperature: -10 to +40 °C



## Surface ceiling mounting



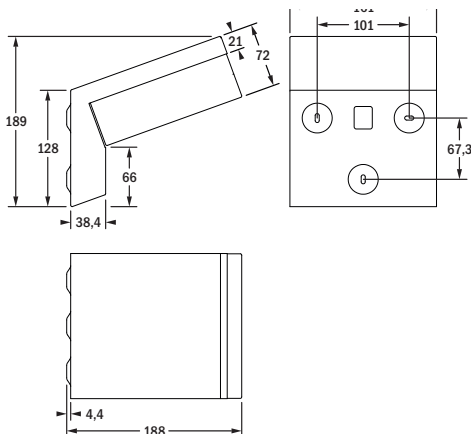
## Recessed ceiling mounting (hollow ceiling)



ceiling-cutout:  
110 mm diameter

suitable for ceiling thickness from 2mm to 40mm

## Wall mounting



## Accessories to be ordered separately

Order code	Description
F95806-RAL9003	wallbracket, white
F95806-INOX	wallbracket, stainless steel

Order code	Lamp	Ballast lumen	Power consumption	
			DC	DC
Surface wall mounting <sup>3</sup> , surface ceiling mounting for escape route lighting <b>TB16747-IP65-__1-__2-S24</b>	LED 2.5 W	198 lm	3.8 W	3.8 W
Surface wall mounting <sup>3</sup> surface ceiling mounting for area lighting <b>TB16746-IP65-__1-__2-S24</b>	LED 2.5 W	199 lm	3.8 W	3.8 W
Recessed ceiling mounting for escape route lighting <b>TB16763-IP65-__1-S24</b>	LED 2.5 W	198 lm	3.8 W	3.8 W
Recessed ceiling mounting for area lighting <b>TB16762-IP65-__1-S24</b>	LED 2.5 W	199 lm	3.8 W	3.8 W

<sup>1</sup> Order code with suffix **V2A** = stainless steel version

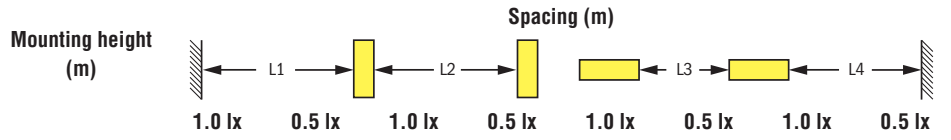
<sup>2</sup> Order code with suffix **NB** = version for mounting height > 7.5 m

<sup>3</sup> For surface wall mounting please order required accessories separately.

Lighting data

Type of lamp

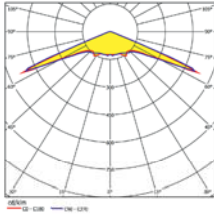
Light distribution diagram



Versions for escape route lighting

TB16747-IP65-S24

TB16763-IP65-S24

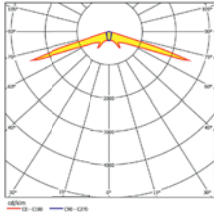


2.5	2.3	-	6.7	-	15.9	-	7.6	-
3.0	2.5	-	6.5	-	18.8	-	8.6	-
3.5	2.0	-	6.5	-	21.6	-	9.5	-
4.0	1.9	-	6.5	-	24.1	-	7.5	-
4.5	1.8	-	6.0	-	22.0	-	5.9	-
5.0	1.6	-	5.8	-	22.4	-	5.3	-
6.0	1.1	-	5.4	-	18.5	-	4.5	-
7.0	-	-	-	-	-	-	-	-
7.5	-	-	-	-	-	-	-	-

Versions for area lighting

TB16746-IP65-S24

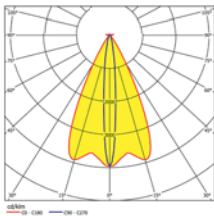
TB16762-IP65-S24



2.5	-	5.8	-	12.2	-	12.2	-	5.5
3.0	-	6.7	-	14.4	-	14.2	-	6.7
3.5	-	3.9	-	14.9	-	14.6	-	3.9
4.0	-	3.6	-	15.1	-	14.9	-	3.6
4.5	-	3.4	-	15.6	-	15.4	-	3.4
5.0	-	3.0	-	11.4	-	11.4	-	3.0
6.0	-	1.8	-	10.2	-	10.2	-	1.8
7.0	-	-	-	-	-	-	-	-
7.5	-	-	-	-	-	-	-	-

Versions for escape route lighting - mounting height > 7.5 m

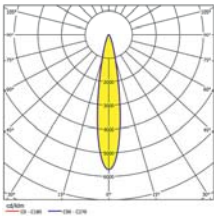
TB16747-IP65-NB-S24



7.5	2.0	-	5.7	-	11.2	-	4.9	-
10.0	2.1	-	5.8	-	13.5	-	5.8	-
12.5	2.0	-	5.9	-	15.6	-	6.6	-
15.0	1.8	-	6.1	-	17.6	-	7.6	-
17.5	1.8	-	6.2	-	19.4	-	8.2	-
20.0	1.4	-	6.0	-	21.0	-	8.5	-
25.0	0.9	-	5.4	-	23.6	-	8.1	-
30.0	-	-	-	-	-	-	-	-

Versions for area lighting - mounting height > 7.5 m

TB16746-IP65-NB-S24



7.5	-	3.0	-	7.5	-	7.5	-	3.0
10.0	-	3.3	-	8.3	-	8.3	-	3.3
12.5	-	3.7	-	9.1	-	9.1	-	3.7
15.0	-	3.7	-	9.8	-	9.8	-	3.7
17.5	-	3.7	-	10.4	-	10.4	-	3.7
20.0	-	3.9	-	10.7	-	10.7	-	3.9
25.0	-	4.1	-	11.3	-	11.3	-	4.1
30.0	-	4.0	-	11.8	-	11.8	-	4.0





## Multi-D

**Exit sign luminaire** with display technology in an universal version with a rectangular body. Suitable for all variations of mounting. Single or double faced escape route lighting by changeable pane.

Versions available: surface wall mounting (single faced), surface / recessed ceiling mounting, pendulum mounting and bracket mounting (double faced)

### Technical data

Body: sheet steel, grey (RAL 9006) / stainless steel

Cover: sheet steel, grey (RAL 9006) (recessed mounting) / stainless steel

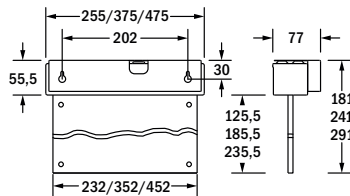
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

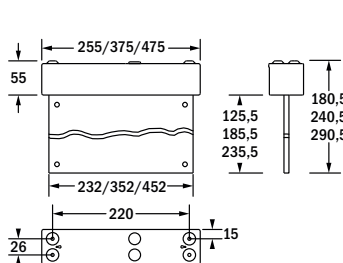
Ambient temperature: -20 to +40 °C



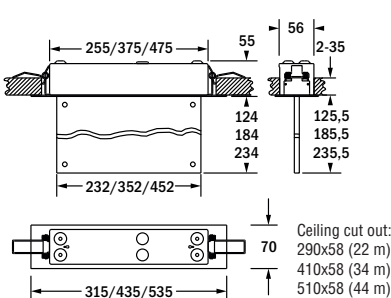
Surface wall mounting



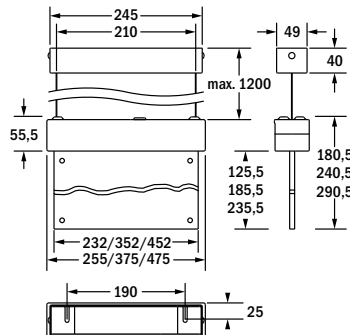
Surface ceiling mounting



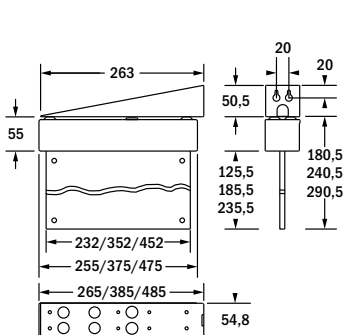
Recessed ceiling mounting (hollow ceiling)



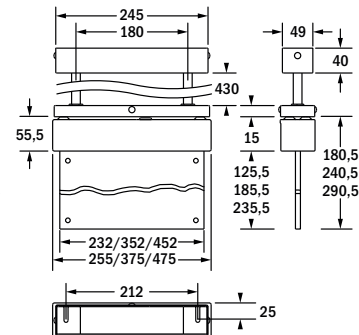
Wire suspension mounting



Bracket mounting



Pendulum mounting



Order code	VD	Lamp	Power consumption DC
Surface wall mounting (single faced), surface / recessed ceiling mounting, pendulum mounting, bracket mounting (double faced) <sup>1</sup>			
<b>T93150-S24</b>	22 m	LED 1.6W	2.2 W
<b>T93151-S24</b>	34 m	LED 2.1 W	2.9 W
<b>T93152-S24</b>	44 m	LED 3.2 W	4.3 W

### Stainless steel

Surface wall mounting (single faced), surface / recessed ceiling mounting, pendulum mounting, bracket mounting (double faced)<sup>1</sup>

<b>T93153-S24</b>	22 m	LED 1.6W	2.2 W
<b>T93154-S24</b>	34 m	LED 2.1 W	2.9 W
<b>T93155-S24</b>	44 m	LED 3.2 W	4.3 W

<sup>1</sup> For recessed ceiling mounting, pendulum and bracket mounting additional accessories are required. Please order separately.

### Fitting supplied complete with

Order code	Description
<b>VD 22 m VD 34 m VD 44 m</b>	
<b>E16500M E16501M E16502M</b>	Kit of exit sign films
<b>F95900 F95900 F95900</b>	Wall mounting adapter
<b>F95907 F95907 F95907</b>	Wall mounting adapter, stainless steel

### Accessories to be ordered separately

Order code	Description
<b>VD 22 m VD 34 m VD 44 m</b>	
<b>F95902 F95903 F95904</b>	Kit for recessed ceiling mounting
<b>F95905 F95905 F95905</b>	Wire suspension, adjustable, 1200 mm
<b>F95901 F95901 F95901</b>	Bracket
<b>F95906 F95906 F95906</b>	Pendulum, round, 500 mm
<b>F95909 F95910 F95911</b>	Kit for recessed ceiling mounting, stainless steel
<b>F95912 F95912 F95912</b>	Wire suspension, s. steel, adjustable, 1200 mm
<b>F95908 F95908 F95908</b>	Bracket, stainless steel
<b>F95913 F95913 F95913</b>	Pendulum, round, stainless steel, 500 mm
<b>F95914 F95915</b>	Concrete ceiling box



# Dispos

**Exit sign luminaire** with display pane. Rectangular body with posted line (surface mounting version only). Single or double faced exit signs are available.

Versions available: surface wall mounting (single faced), surface / recessed ceiling mounting, pendulum mounting and bracket mounting (double faced)

## Technical data

Body: aluminium, white (RAL 9003) / zinc plated steel (recessed version only)

Cover: sheet steel, white (RAL 9003) (recessed version only)

Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C

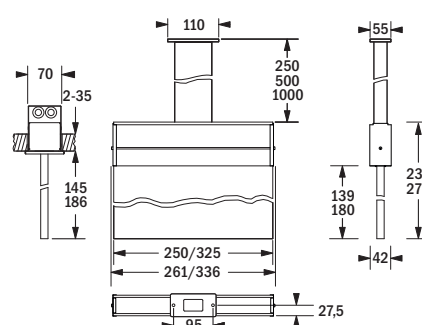
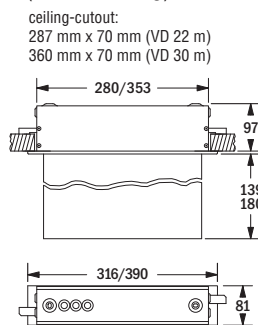
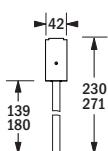
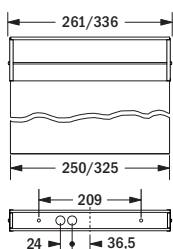
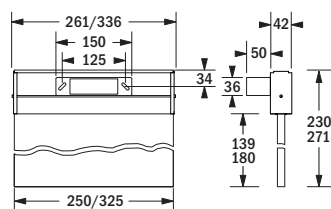


Surface wall mounting

Surface ceiling mounting

Recessed ceiling mounting  
(hollow ceiling)

Pendulum mounting, rectangular

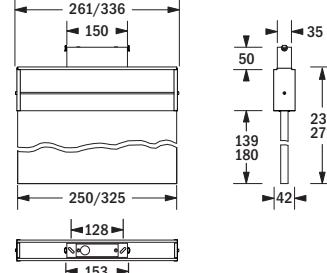
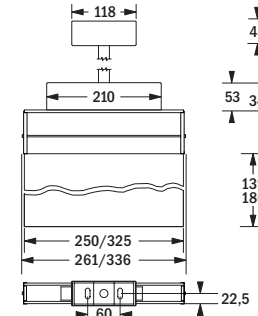
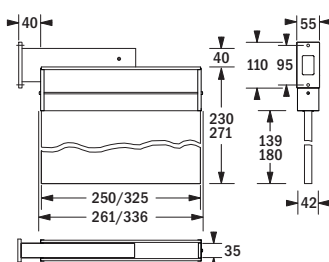
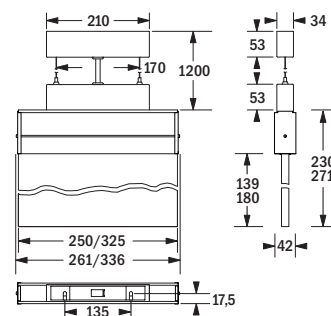


Wire suspension mounting

Bracket mounting

Pendulum mounting, round

for chain or wire



Order code	VD	Lamp	Power consumption DC
Recessed ceiling mounting (double faced)			
<b>T93001-S24</b>	22 m	LED 1.6 W	2.2 W
<b>T93002-S24</b>	30 m	LED 2.1 W	2.9 W
Surface wall mounting (single faced)			
<b>T93003-S24</b>	22 m	LED 1.6 W	2.2 W
<b>T93004-S24</b>	30 m	LED 2.1 W	2.9 W
Surface ceiling mounting (double faced)			
<b>T93005-S24</b>	22 m	LED 1.6 W	2.2 W
<b>T93006-S24</b>	30 m	LED 2.1 W	2.9 W
Pendulum, chain and bracket mounting (double faced) <sup>1</sup>			
<b>T93007-S24</b>	22 m	LED 1.6 W	2.2 W
<b>T93008-S24</b>	30 m	LED 2.1 W	2.9 W

<sup>1</sup> For pendulum, bracket and chain / wire suspension mounting please order required accessories separately.

## Accessories to be ordered separately

Order code	VD 30 m	Description
<b>E16260M</b>	<b>E16128M</b>	Exit sign pane
<b>E16261M</b>	<b>E16129M</b>	Exit sign pane
<b>E16262M</b>	<b>E16130M</b>	Exit sign pane
<b>F95600</b>	<b>F95600</b>	Rectangular pendulum: 250 mm
<b>F95601</b>	<b>F95601</b>	Rectangular pendulum: 500 mm
<b>F95602</b>	<b>F95602</b>	Rectangular pendulum: 1000 mm
<b>F95057</b>	<b>F95057</b>	Adaptor for ceiling mounting
<b>F95401</b>	<b>F95401</b>	Wire suspension: max. 1200 mm
<b>F95207N</b>	<b>F95208N</b>	Bracket
<b>F95400</b>	<b>F95400</b>	Pendulum, round: 500 mm
<b>F95067</b>	<b>F95067</b>	Adaptor for chain or wire suspension
<b>F95220</b>	<b>F95221</b>	Concrete ceiling box (recessed ceiling)



## Alu-K

**Exit sign luminaire** with rectangular body of flat aluminium profiles. Sign screens may be inserted or replaced without any tools.

Versions available: surface wall mounting (single faced), surface ceiling mounting, pendulum mounting and bracket mounting (double faced)

### Technical data

Body: aluminum, anodised

Pane: PMMA, printed

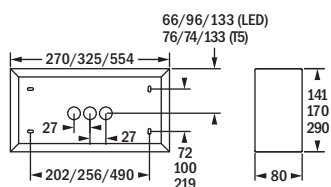
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

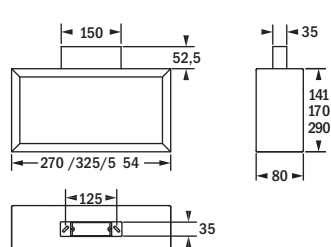
Ambient temperature: -20 to +40 °C



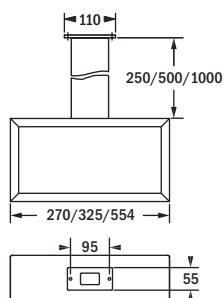
Surface wall mounting



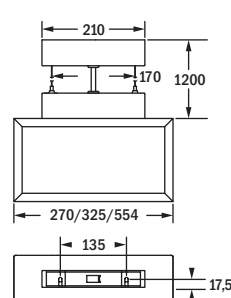
Surface ceiling mounting



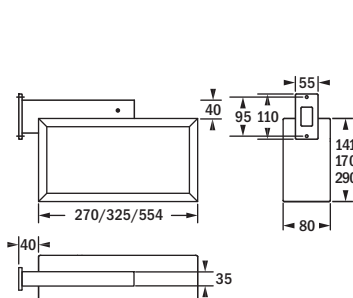
Pendulum mounting, rectangular



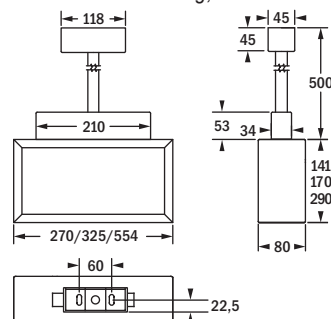
Wire suspension mounting



Bracket mounting



Pendulum mounting, round



Order code	VD	Lamp	Power consumption DC
Surface wall mounting (single faced)			
<b>T93020-S24</b>	24 m	LED 1.6W	2.2W
<b>T93021-S24</b>	30 m	LED 2.1 W	2.9W
<b>T93022-S24</b>	53 m	LED 3.2W	4.3 W
Surface ceiling mounting, pendulum, bracket, chain / wire suspension mounting (double faced) <sup>1</sup>			
<b>T93023-S24</b>	24 m	LED 1.6W	2.2 W
<b>T93024-S24</b>	30 m	LED 2.1 W	2.9 W
<b>T93025-S24</b>	53 m	LED 3.2W	4.3 W

<sup>1</sup> For surface ceiling mounting, pendulum and bracket mounting please order required accessories separately.

### Accessories to be ordered separately

Order code	VD 24 m	VD 30 m	VD 53 m	Description
<b>E16710M</b>	<b>E16715M</b>	<b>E16720M</b>		Exit sign pane
<b>E16711M</b>	<b>E16716M</b>	<b>E16721M</b>		Exit sign pane
<b>E16712M</b>	<b>E16717M</b>	<b>E16722M</b>		Exit sign pane
<b>E16713</b>	<b>E16718</b>	<b>E16723</b>		Opal plastic pane
<b>E16714</b>	<b>E16719</b>	<b>E16724</b>		Plastic pane painted in body color
<b>F95717</b>	<b>F95717</b>	<b>F95717</b>		Adaptor for ceiling mounting
<b>F95718</b>	<b>F95718</b>	<b>F95718</b>		Rectangular pendulum: 250 mm
<b>F95719</b>	<b>F95719</b>	<b>F95719</b>		Rectangular pendulum: 500 mm
<b>F95720</b>	<b>F95720</b>	<b>F95720</b>		Rectangular pendulum: 1000 mm
<b>F95723</b>	<b>F95723</b>	<b>F95723</b>		Wire suspension: max. 1200 mm
<b>F95714</b>	<b>F95721</b>	<b>F95729</b>		Bracket
<b>F95722</b>	<b>F95722</b>	<b>F95722</b>		Pendulum round: 500 mm
-	<b>F95724</b>	-		Wire guard (wall mounting)





# Kubus

**Exit sign luminaire** with rectangular body of flat steel profiles. Sign screens may be inserted or replaced without any tools. Wall mounting versions with slot in the body for downlighting.

Versions available: surface wall mounting (single faced), surface ceiling mounting, pendulum mounting and chain / bracket mounting (double faced)

## Technical data

Body: sheet steel, white (RAL 9003)

Pane: methacrylate, printed

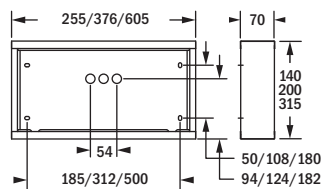
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

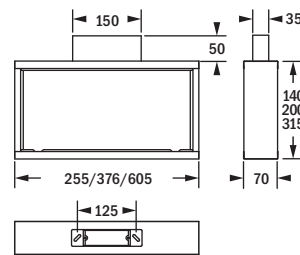
Ambient temperature: -20 to +40 °C



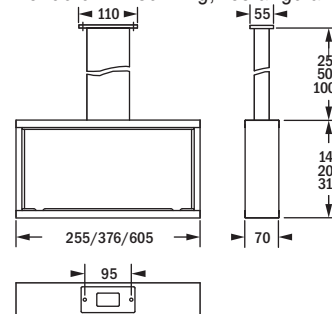
Surface wall mounting



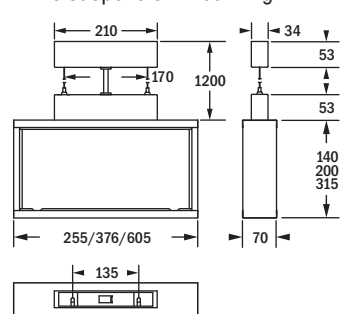
Surface ceiling mounting



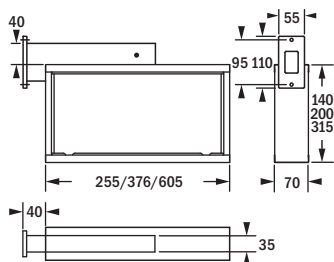
Pendulum mounting, rectangular



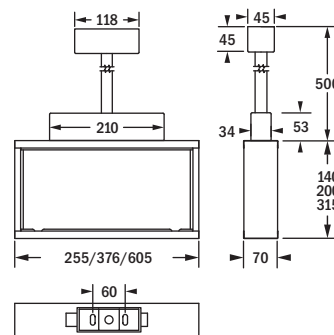
Wire suspension mounting



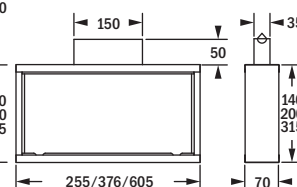
Bracket mounting



Pendulum mounting, round



for chain or wire



Order code	VD	Lamp	Power consumption DC
Surface wall mounting (single faced)			
<b>T93010-S24</b>	21 m	LED 1.6W	2.2 W
<b>T93011-S24</b>	34 m	LED 3.2W	4.3 W
<b>T93012-S24</b>	56 m	LED 3.2W	4.3 W

Surface ceiling mounting, pendulum and bracket mounting (double faced)<sup>1</sup>

<b>T93013-S24</b>	21 m	LED 1.6W	2.2 W
<b>T93014-S24</b>	34 m	LED 3.2W	4.3 W
<b>T93015-S24</b>	56 m	LED 3.2W	4.3 W

<sup>1</sup> For surface ceiling mounting, pendulum, bracket and chain / wire suspension mounting please order required accessories separately.

## Accessories to be ordered separately

Order code	VD 21 m	VD 34 m	VD 56 m	Description
<b>E16604M</b>	<b>E16608M</b>	<b>E16134M</b>		Exit sign pane
<b>E16605M</b>	<b>E16609M</b>	<b>E16135M</b>		Exit sign pane
<b>E16606M</b>	<b>E16610M</b>	<b>E16136M</b>		Exit sign pane
<b>E16607</b>	<b>E16611</b>	<b>E16234</b>		Opal plastic pane
<b>E16242</b>	<b>E16241</b>	<b>E16251</b>		Metal sheet painted in body color
<b>F95057</b>	<b>F95057</b>	<b>F95057</b>		Adaptor for ceiling mounting
<b>F95600</b>	<b>F95600</b>	<b>F95600</b>		Rectangular pendulum: 250 mm
<b>F95601</b>	<b>F95601</b>	<b>F95601</b>		Rectangular pendulum: 500 mm
<b>F95602</b>	<b>F95602</b>	<b>F95602</b>		Rectangular pendulum: 1000 mm
<b>F95401</b>	<b>F95401</b>	<b>F95401</b>		Wire suspension: max. 1200 mm
<b>F95055</b>	<b>F95056</b>	<b>F95070</b>		Bracket
<b>F95400</b>	<b>F95400</b>	<b>F95400</b>		Pendulum, round: 500 mm
<b>F95067</b>	<b>F95067</b>	<b>F95067</b>		Adaptor for chain or wire suspension
-	<b>F95032</b>	-		Wire guard (wall mounting)

# Kubus

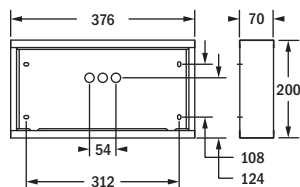
**Emergency luminaire** with shallow profiled sheet steel and shallow corners. Lighting control by specular reflector and clear cover with vertical prismatic structure. Versions available: surface wall mounting, surface ceiling mounting

### Technical data

- Body: sheet steel, white (RAL 9003)
- Cover: methacrylate, clear with vertical prisms
- Reflector: aluminium, specular
- Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times
- Supply: 24 V +/- 20 % DC
- Ambient temperature: -20 to +40 °C



Surface wall / ceiling mounting



Order code	Lamp	Ballast lumen DC	Power consumption DC
Surface wall / ceiling mounting			
<b>T93016-S24</b>	LED 3.2 W	204 lm	4.3 W

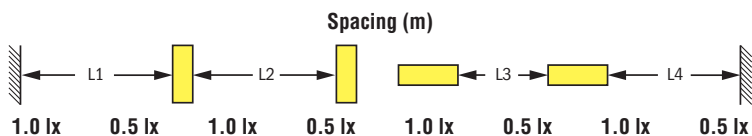
### Accessories to be ordered separately

Order code	Description
F95032	Wire guard

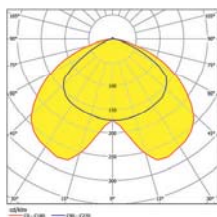
### Lighting data

Type of lamp Light distribution diagram

Mounting height (m)



T93016-S24



Mounting height (m)	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
2.5	3.6	3.6	9.1	8.8	7.8	8.8	3.1	3.6
3.0	3.8	3.7	9.8	9.5	8.4	9.5	3.3	3.7
3.5	3.9	4.0	10.4	10.1	8.9	10.1	3.3	4.0
4.0	4.1	4.1	10.8	10.6	9.2	10.6	3.4	4.1
4.5	4.0	4.2	11.2	11.1	9.4	11.1	3.5	4.2
5.0	4.0	4.2	11.4	11.4	9.6	11.4	3.3	4.2
6.0	3.7	4.2	11.6	12.0	9.9	12.0	3.0	4.2
7.0	3.1	4.9	11.5	12.2	9.7	12.2	2.3	4.0
7.5	2.7	4.8	11.4	12.2	9.5	12.2	1.7	3.8
8.0	-	4.6	-	12.2	-	12.2	-	3.5
9.0	-	3.8	-	12.0	-	12.0	-	2.7
10.0	-	1.6	-	11.6	-	11.6	-	0.7



# Kubus54

**Exit sign or emergency luminaire** with high protection grade. The Kubus54 features a rectangular body of shallow profiles with exit screens that may be inserted or replaced without any tools. Wall mounting versions offer additional floor lighting. Versions available: surface wall mounting (single faced), surface ceiling mounting, pendulum mounting, bracket mounting and chain / wire suspension mounting (double faced)

## Technical data

Body: sheet steel, white (RAL 9003)

Pane: methacrylate, printed

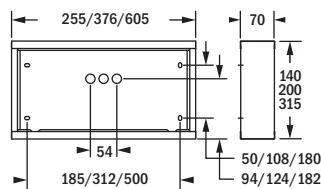
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

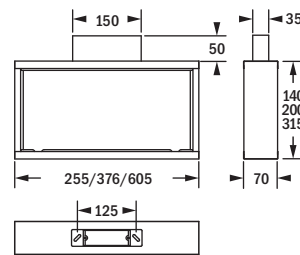
Ambient temperature: -20 to +40 °C



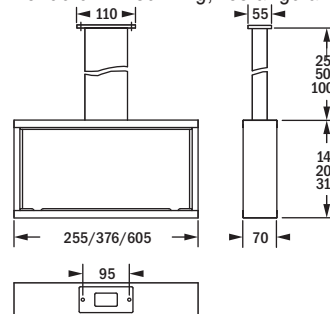
Surface wall mounting



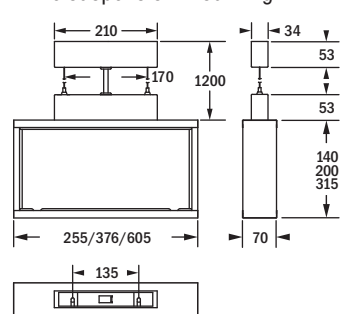
Surface ceiling mounting



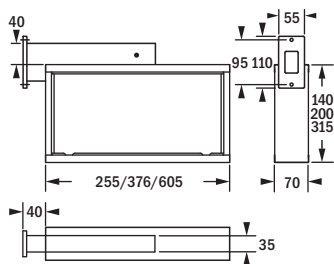
Pendulum mounting, rectangular



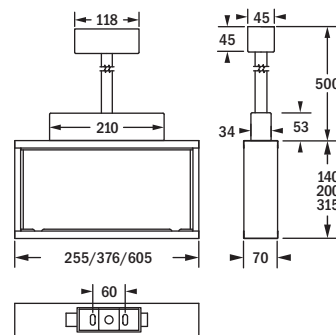
Wire suspension mounting



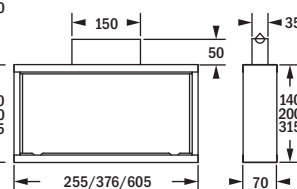
Bracket mounting



Pendulum mounting, round



for chain or wire



Order code	VD	Lamp	Power consumption DC
Surface wall mounting (single faced)			
<b>T93180-S24</b>	34 m	LED 3.2W	4.3W
Surface ceiling mounting, pendulum, bracket and chain / wire suspension mounting (double faced) <sup>1</sup>			
<b>T93181-S24</b>	34 m	LED 3.2W	4.3W

<sup>1</sup> For surface ceiling mounting, pendulum, bracket and chain / wire suspension mounting please order required accessories separately.

## Accessories to be ordered separately

Order code	Description
VD 34 m	
<b>E16608M</b>	Exit sign pane
<b>E16609M</b>	Exit sign pane
<b>E16610M</b>	Exit sign pane
<b>E16611</b>	Opal plastic pane
<b>E16241</b>	Metal sheet painted in body color
<b>F95057</b>	Adaptor for ceiling mounting
<b>F95600</b>	Rectangular pendulum: 250 mm
<b>F95601</b>	Rectangular pendulum: 500 mm
<b>F95602</b>	Rectangular pendulum: 1000 mm
<b>F95401</b>	Wire suspension: max. 1200 mm
<b>F95056</b>	Bracket
<b>F95400</b>	Pendulum, round: 500 mm
<b>F95067</b>	Adaptor for chain or wire suspension
<b>F95032</b>	Wire guard (wall mounting)

# Kubus54

**Exit sign or emergency luminaire** with a high protection grade. Kubus54 features a rectangular body of shallow profiles. Lighting controlled by specular reflector and clear cover with longitudinal prismatic structure.

Versions available: surface wall mounting

## Technical data

Body: sheet steel, white (RAL 9003)

Pane: methacrylate, printed

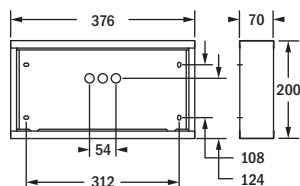
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C



Surface wall mounting



Order code	Lamp	Ballast lumen DC	Power consumption DC
Surface wall / ceiling mounting			
<b>T93182-S24</b>	LED 3.2 W	204 lm	4.3 W



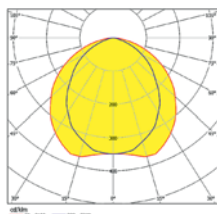
## Accessories to be ordered separately

Order code	Description
<b>F95032</b>	Wire guard

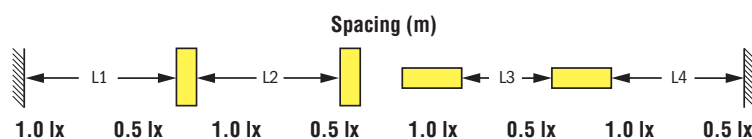
## Lighting data

Type of lamp Light distribution diagram

T93182-S24



Mounting height (m)  
wall mounting



Mounting height (m)	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
1.5	-	-	-	-	6.1	-	2.6	-
2.0	-	-	-	-	7.3	-	2.9	-
2.5	-	-	-	-	7.9	-	3.2	-





# Kubus65

**Exit sign luminaire** with high a protection grade. Kubus65 features a body of steel or stainless steel with a framed clear cover. Lighting control by a complexly shaped specular reflector. Escape route lighting through adhesive exit sign films. Versions available: surface wall mounting (single faced), surface ceiling mounting, pendulum mounting and bracket mounting (double faced)

## Technical data

Body: sheet steel, white (RAL 9003), optional stainless steel

Cover: sheet steel, optional stainless steel with methacrylate pane, clear

Reflector: aluminium, specular

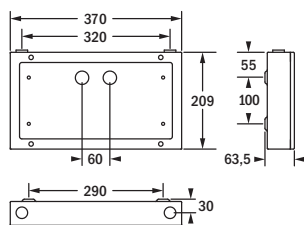
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

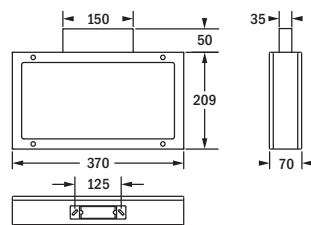
Ambient temperature: -20 to +40 °C



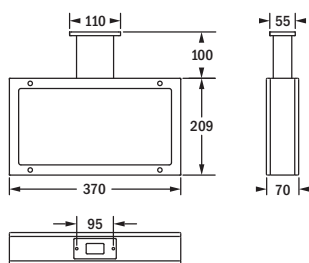
Surface wall mounting



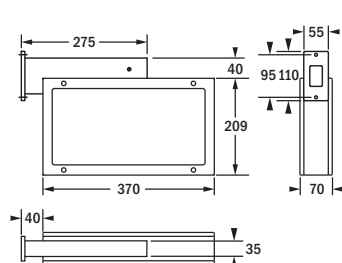
Surface ceiling mounting



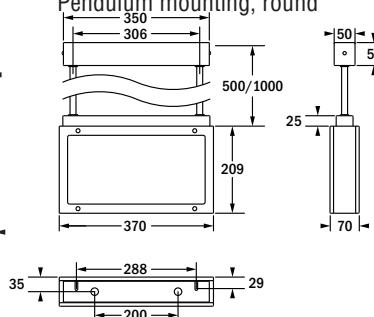
Pendulum mounting, rectangular



Bracket mounting



Pendulum mounting, round



**Order code**    **VD**    **Lamp**    **Power consumption DC**

Surface wall mounting (escape route lighting / single faced)

**T93060-S24**    32 m    LED 3.2W    4.3W

Surface ceiling mounting, pendulum, bracket mounting (double faced)<sup>1</sup>

**T93061-S24**    32 m    LED 3.2W    4.3W

### Version stainless steel

Surface wall mounting (escape route lighting / single faced)

**T93062-S24**    32 m    LED 3.2W    4.3W

Surface ceiling mounting, pendulum, bracket mounting (double faced)<sup>1</sup>

**T93063-S24**    32 m    LED 3.2W    4.3W

### Accessories to be ordered separately

**Order code**    **Description**

**Sheet steel**    **Stainless steel**

**E16700M**    **E16700M**    Kit of exit sign films



**E16701M**    **E16701M**    Kit of exit sign films



**F95612**    **F95613**    Adaptor for ceiling mounting

**F95603**    **F95608**    Rectangular pendulum: 100 mm

**F95604**    **F95609**    Pendulum rod: 500 mm

**F95605**    **F95610**    Pendulum rod: 1000 mm

**F95606**    **F95611**    Bracket

**F95607**    **F95607**    Wire guard, zinc plated (wall mounting)

<sup>1</sup>For surface ceiling mounting, pendulum and bracket mounting please order required accessories separately.



# Kubus65

**Emergency luminaire** with high a protection grade. Kubus65 features a body of steel or stainless steel with a framed clear cover. Lighting control by a complexly shaped specular reflector.

Versions available: surface wall mounting, surface ceiling mounting

## Technical data

Body: sheet steel, white (RAL 9003), optional stainless steel

Cover: sheet steel, optional stainless steel with methacrylate pane, clear

Reflector: aluminium, specular

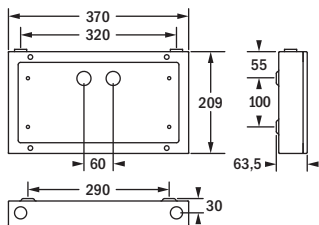
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C



Surface wall / ceiling mounting



Order code	Lamp	Ballast lumen DC	SICURO	
			Power consumption DC	
Surface wall mounting (escape route lighting / single faced)				
<b>T93060-S24</b>	LED 3.2W	204 lm	4.3W	

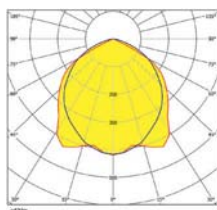
### Version stainless steel

Surface wall mounting (escape route lighting / single faced)

<b>T93062-S24</b>	LED 3.2W	204 lm	4.3W
-------------------	----------	--------	------

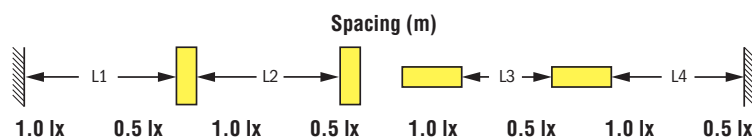
### Lighting data

Type of lamp Light distribution diagram



**T93060-S24**  
**T93062-S24**

Mounting height (m)



Mounting height (m)	L1	L2	L3	L4
2.5	3.5	3.5	8.6	8.7
3.0	3.8	3.9	9.9	9.5
3.5	4.0	4.0	10.2	10.1
4.0	4.0	4.3	10.6	10.7
4.5	4.0	4.3	11.0	11.3
5.0	4.0	4.5	11.2	11.7
6.0	3.9	4.7	11.5	12.5
7.0	3.5	4.8	11.4	13.0
7.5	3.2	4.8	11.3	13.2
8.0	1.3	4.7	11.1	13.3
9.0	-	4.4	-	13.6
10.0	-	3.4	-	13.7
11.0	-	2.0	-	13.6
12.0	-	-	-	-
12.5	-	-	-	-

### Accessories to be ordered separately

Order code	Description
Sheet steel	Stainless steel
<b>F95607</b>	<b>F95607</b>
	Wire guard, zinc plated (wall mounting)



# Maxima

**Exit sign luminaire** in functional design. Body with clear convex shaped cover. Additional downlighting provided by slots in the body. Versions available: surface wall mounting (single faced), surface ceiling mounting, pendulum mounting, bracket mounting and chain / wire suspension mounting (double faced)

## Technical data

Body: polycarbonate, grey (RAL 7035) / polyester, grey (RAL 7035)

Pane: polycarbonate, clear

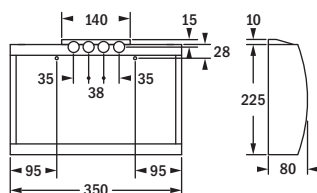
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C



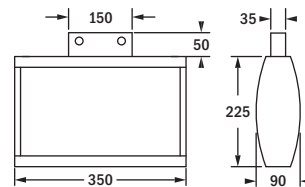
Surface wall mounting



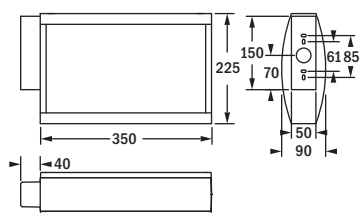
Surface ceiling mounting



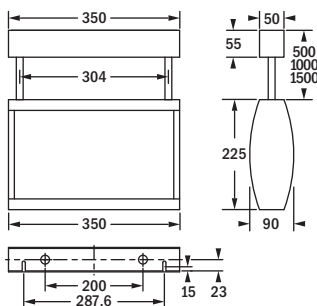
Adaptor for ceiling mounting and visible conduits



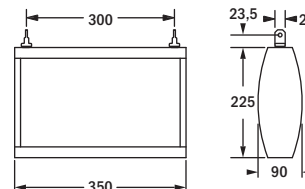
Bracket mounting



Pendulum mounting



for chain or wire



Order code	VD	Lamp	Power consumption DC
Surface wall mounting (single faced)			
<b>T93040-S24</b>	33 m	LED 2W	2.9W
Surface ceiling mounting, pendulum, bracket and chain / wire suspension mounting (double faced) <sup>1</sup>			
<b>T93041-S24</b>	33 m	LED 2W	2.9W

<sup>1</sup> For surface ceiling mounting, pendulum, bracket and chain / wire suspension mounting please order required accessories separately.

## Fitting supplied complete with

Order code	Description
<b>VD 33 m</b>	
<b>FB16910M</b>	Kit of exit sign films
<b>F95506</b>	Bracket (double faced)

## Accessories to be ordered separately

Order code	Description
<b>VD 33 m</b>	
<b>F95700</b>	Adaptor for ceiling mounting and visible conduits
<b>F95510</b>	Pendulum rod: 500 mm
<b>F95511</b>	Pendulum rod: 1000 mm
<b>F95512</b>	Pendulum rod: 1500 mm
<b>FB3723</b>	Adaptor for chain or wire suspension
<b>F95032</b>	Wire guard (wall mounting)

# Tula

**Exit sign luminaire** with flat body and convex shaped cover. Cover made as opal pane with horizontal rounded shapes. May be changed without tools. Single or double faced escape route lighting through adhesive exit sign films.

Versions available: surface wall mounting (single faced), surface ceiling mounting, pendulum mounting and bracket mounting (double faced)

## Technical data

Body: steel, grey (RAL 9006)

Pane: polycarbonate, opal

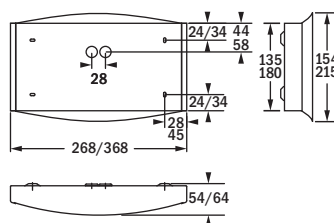
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

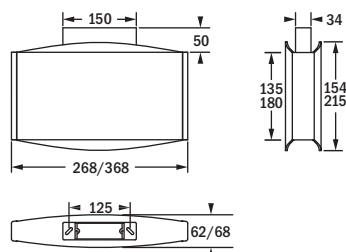
Ambient temperature: -20 to +40 °C



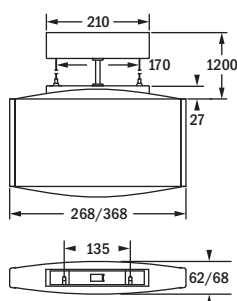
Surface wall mounting



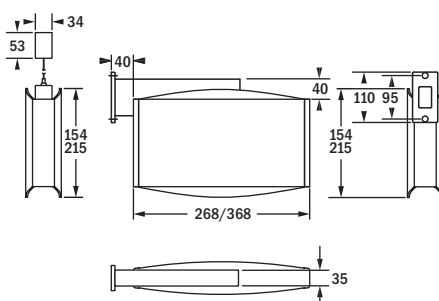
Surface ceiling mounting



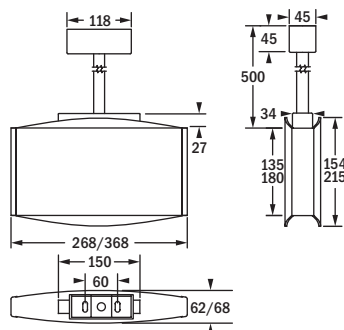
Wire suspension mounting



Bracket mounting



Pendulum mounting



Order code	VD	Lamp	Power consumption DC
------------	----	------	----------------------

Surface wall mounting (single faced)

<b>T93100-S24</b>	23 m	LED 1.6W	2.2W
-------------------	------	----------	------

<b>T93102-S24</b>	31 m	LED 2.1W	2.9W
-------------------	------	----------	------

Surface ceiling mounting, pendulum and bracket mounting (double faced)<sup>1</sup>

<b>T93101-S24</b>	23 m	LED 1.6W	2.2W
-------------------	------	----------	------

<b>T93103-S24</b>	31 m	LED 2.1W	2.9W
-------------------	------	----------	------

<sup>1</sup> For surface ceiling mounting, pendulum and bracket mounting please order required accessories separately.

## Fitting supplied complete with

Order code	VD	Description
<b>VD 23 m</b>	<b>VD 31 m</b>	
<b>F15337MU</b>	<b>F15338MU</b>	Exit sign pane
<b>F15337MR</b>	<b>F15338MR</b>	Exit sign pane
<b>F15337ML</b>	<b>F15338ML</b>	Exit sign pane
<b>E16625</b>	<b>E16626</b>	Opal plastic pane

## Accessories to be ordered separately

Order code	Description	
<b>VD 23 m</b>	<b>VD 31 m</b>	
<b>F95109PK</b>	<b>F95109PK</b>	Adaptor for ceiling mounting
<b>F95109PS</b>	<b>F95109PS</b>	Wire suspension: max. 1200 mm
<b>F95109P</b>	<b>F95109P</b>	Bracket
<b>F95109PR</b>	<b>F95109PR</b>	Pendulum, round: 500 mm



# Formula65

**Exit sign luminaire** with high protection grade. Shallow body with clear convex shaped clip on diffuser. Lighting control by complex shaped reflector.

Versions available: surface / recessed wall mounting (single faced sign through adhesive films), surface / recessed ceiling mounting, pendant and bracket mounting (double faced sign through changeable display pane)

## Technical data

Body: polycarbonate, white (RAL 9003)

Cover: polycarbonate, clear

Reflector: polycarbonate, white

Display pane: methacrylate, printed

Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

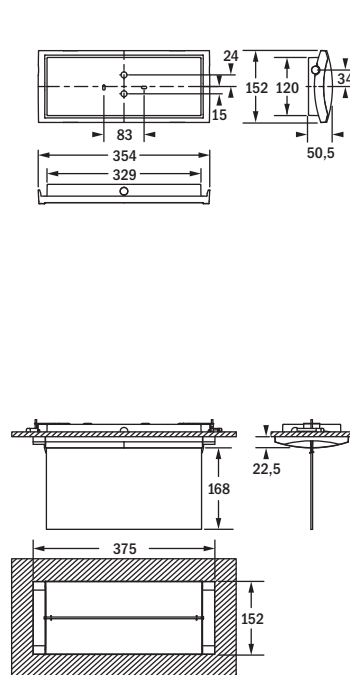
Supply: 24 V +/- 20 % DC

Ambient temperature: - 10 to +40 °C

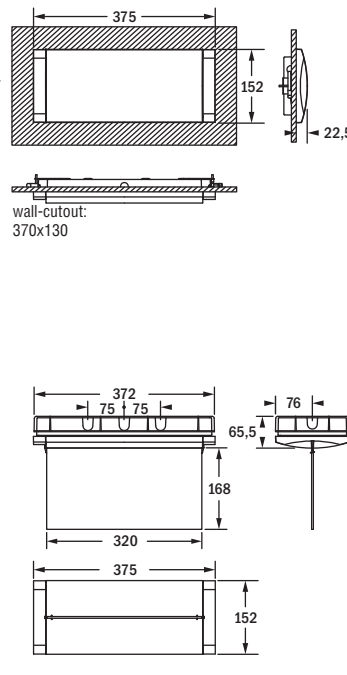
(with box for recessed mounting for concrete wall or ceiling IP40)



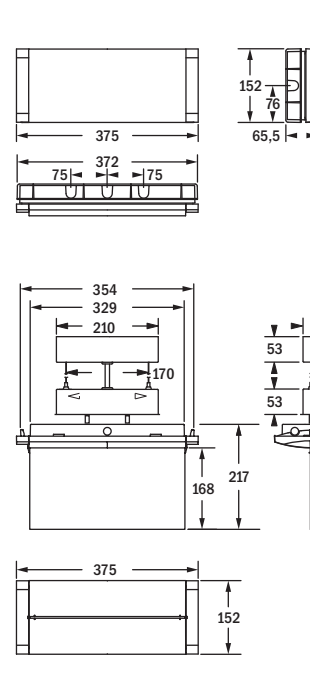
Surface wall mounting



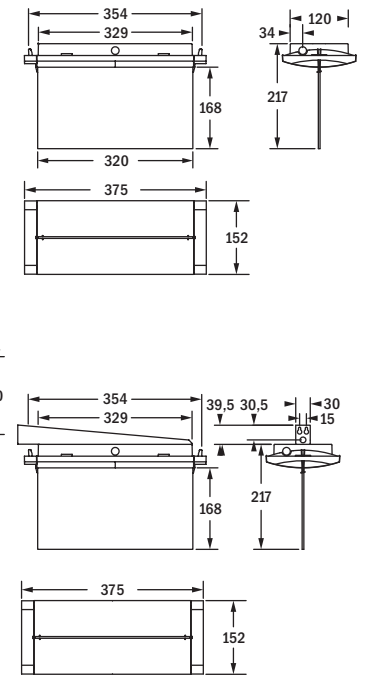
Recessed wall mounting  
(cavity wall)



Recessed wall mounting  
(concrete wall)



Surface ceiling mounting



Recessed ceiling mounting  
(hollow ceiling)

ceiling-cutout:  
370x130

Recessed ceiling mounting  
(concrete ceiling)

Wire suspension

Bracket mounting

Order code	VD	Lamp	Power consumption DC
------------	----	------	----------------------

Surface / recessed wall mounting (single faced), surface / recessed ceiling mounting (double faced), pendant and bracket mounting (double faced)<sup>1</sup>

**TB16025-S24** 25/30 m LED 3.2 W 4.3 W

<sup>1</sup> For recessed wall / ceiling mounting in cavity walls or hollow ceilings, pendant and bracket mounting please order required accessories separately.



## Fitting supplied complete with

Order code	Description
<b>FB19044M</b>	Kit of exit sign films
<b>FB19040</b>	Box for recessed mounting

## Accessories to be ordered separately

Order code	Description
<b>VD 25 m</b>	
- <b>E16041M-KIT-F65</b>	Exit sign display pane
- <b>E16040M-KIT-F65</b>	Exit sign display pane
<b>F95210</b>	Adaptor for pendulum mounting
<b>F95401</b>	Wire suspension: max. 1200 mm
- <b>FB19045</b>	Bracket
<b>FB19041</b>	<b>FB19041</b> Kit for recessed mounting in suspended ceilings
<b>FB12194</b>	- Wire guard (wall mounting)

# Formula65

**Emergency luminaire** with high protection grade. Shallow body with clear convex shaped clip on diffuser. Lighting control by complex shaped reflector. Versions available: surface / recessed wall mounting and surface / recessed ceiling mounting, pendant mounting

## Technical data

Body: polycarbonate, white (RAL 9003)

Cover: polycarbonate, clear

Reflector: polycarbonate, white

Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

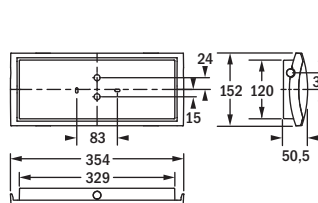
Supply: 24 V +/- 20 % DC

Ambient temperature: -10 to +40 °C

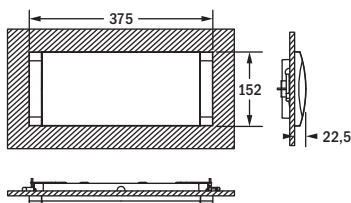
(with box for recessed mounting for concrete wall or ceiling IP40)



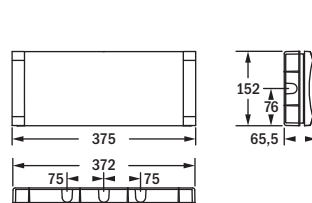
Surface wall / ceiling mounting



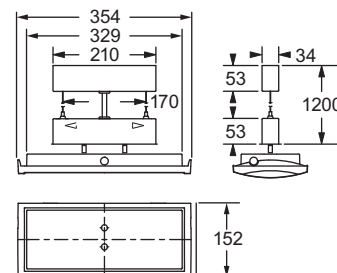
Recessed wall / ceiling mounting  
(cavity wall/ hollow ceiling)



Recessed wall / ceiling mounting  
(concrete wall / ceiling)



Wire suspension



Order code	Lamp	Ballast lumen DC	Power consumption DC DC
------------	------	------------------	-------------------------

Surface / recessed wall mounting, surface / recessed ceiling mounting, pendant mounting<sup>1</sup>

**TB16025-S24** LED 3.2 W 340 lm 4.3 W

<sup>1</sup> For recessed wall / ceiling mounting in cavity walls or hollow ceilings or pendant mounting please order required accessories separately.



## Fitting supplied complete with

Order code	Description
FB19044M	Kit of exit sign films
FB19040	Box for recessed mounting

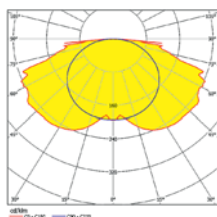
## Accessories to be ordered separately

Order code	Description
F95210	Adaptor for pendulum mounting
F95401	Wire suspension: max. 1200 mm
FB19041	Kit for recessed mounting in suspended ceilings
FB12194	Wire guard (wall mounting)

## Lighting data

Type of lamp Light distribution diagram

TB16025-S24



Mounting height (m)

Spacing (m)

Mounting height (m)	Spacing (m)							
	L1	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
2.5	3.6	4.7	3.3	11.5	12.51	11.7	4.8	4.7
3.0	3.8	4.9	9.9	12.3	13.2	12.6	1.9	4.9
3.5	3.8	5.1	10.3	13.1	13.7	13.4	4.9	5.1
4.0	3.8	5.4	10.7	13.7	14.0	13.9	5.1	5.4
4.5	3.7	5.4	10.9	14.2	14.2	14.4	4.9	5.4
5.0	3.6	5.6	10.9	14.7	14.4	14.9	4.8	5.6
6.0	3.0	5.6	10.8	15.2	14.5	15.5	4.3	5.6
7.0	1.6	5.3	10.3	15.5	14.0	15.9	3.2	5.3
7.5	-	5.3	-	15.5	-	16.0	-	5.3
8.0	-	5.1	-	15.4	-	16.0	-	5.1
9.0	-	4.2	-	15.1	-	15.9	-	4.2
10.0	-	1.0	-	14.8	-	15.5	-	1.0

# Aestetica LED



**Exit sign luminaire** in universal version. Small and flat body with clear cover. Light distribution through reflector.

Versions available: surface / recessed wall mounting (single faced through changeable pane), surface / recessed ceiling mounting and bracket mounting (double faced through changeable display pane)

## Technical data

Body: polycarbonate, white (RAL 9003)

Cover: polycarbonate, clear

Reflector: polycarbonate, white

Display-Scheibe: PMMA, printed

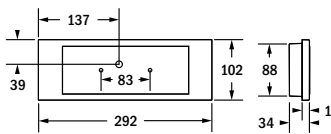
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

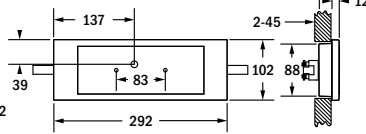
Ambient temperature: -10 to +40 °C



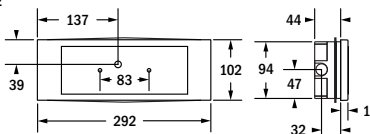
Surface wall mounting



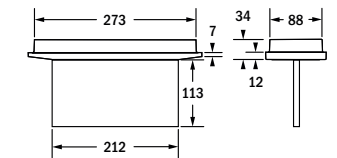
Recessed wall mounting (cavity wall)



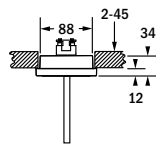
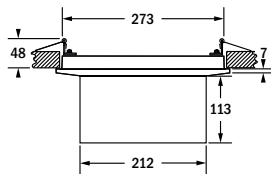
Recessed wall mounting (concrete wall)



Surface ceiling mounting

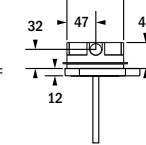
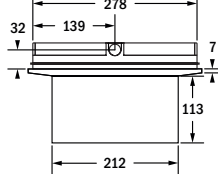


Recessed ceiling mounting (hollow ceiling)

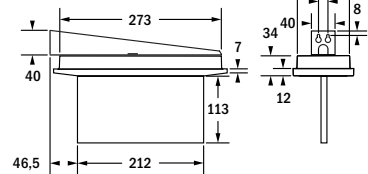


wall cutout  
278x92

Recessed ceiling mounting (concrete ceiling)



Bracket mounting



ceiling cutout  
278x92



Order code	VD	Lamp	Power consumption DC
Surface / recessed wall mounting <sup>1</sup> (single faced), surface / recessed ceiling mounting <sup>1</sup> (double faced), bracket mounting <sup>1</sup> (double faced)			
<b>TB93230-S24</b>	15/20 m	LED 1.4 W	2.0 W

<sup>1</sup>For recessed wall / ceiling mounting and bracket mounting please order required accessories separately.

## Accessories to be ordered separately

Order code	VD 15 m	VD 20 m	Description
<b>EB16237M</b>			Exit sign pane
<b>EB16235M</b>			Exit sign pane
<b>EB16236M</b>			Exit sign pane
		<b>EB16234M</b>	Exit sign display pane
		<b>EB16233M</b>	Exit sign display pane
<b>FB4265</b>	<b>FB4265</b>		Bracket
<b>FB3733</b>			Recessed box for massive ceilings / walls
<b>FB4266</b>	<b>FB4266</b>		Recessed mounting set, plaster ceilings / walls

# Aestetica LED

**Emergency luminaire** in universal version. Small and flat body with clear cover. Light distribution through reflector.

Versions available: surface / recessed wall mounting, surface / recessed ceiling mounting and bracket mounting

**Technical data**

Body: polycarbonate, white (RAL 9003)

Cover: polycarbonate, clear

Reflector: polycarbonate, white

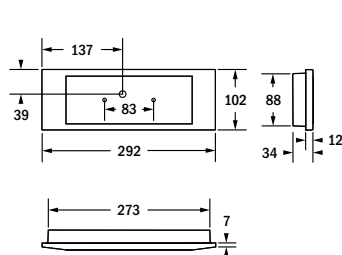
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

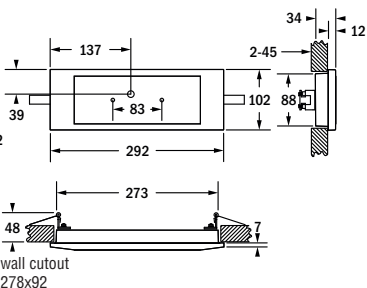
Ambient temperature: -10 to +40 °C



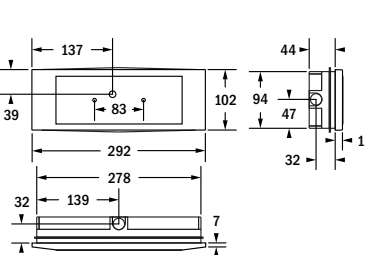
Surface wall mounting



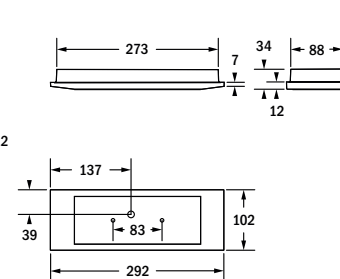
Recessed wall mounting (cavity wall)



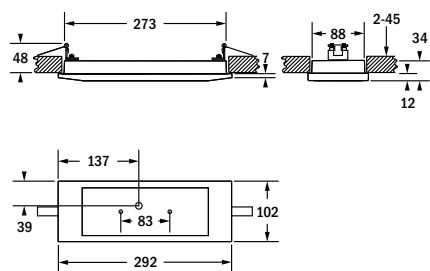
Recessed wall mounting (concrete wall)



Surface ceiling mounting

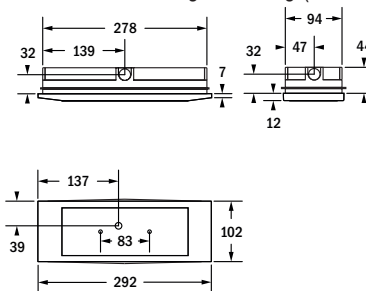


Recessed ceiling mounting (hollow ceiling)



ceiling cutout  
278x92

Recessed ceiling mounting (concrete ceiling)



**Accessories to be ordered separately**

Order code	Lamp	Ballast lumen DC	Power consumption DC
Surface / recessed wall mounting, surface / recessed ceiling mounting <sup>1</sup>			
<b>TB93230-S24</b>	LED 1.4 W	120 lm	2.0 W

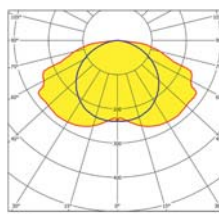
Order code	Description
<b>FB3733</b>	Recessed box, massive ceilings / walls
<b>FB4266</b>	Recessed mounting set, plaster ceilings / walls

<sup>1</sup> For recessed wall / ceiling mounting please order required accessories separately.

**Lighting data**

Type of lamp Light distribution diagram

TB93230-S24



Mounting height (m)

Spacing (m)

Mounting height (m)	Spacing (m)								
	L1	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
2.5	3.1	3.3	8.5	8.3	6.5	8.3	2.3	3.3	
3.0	3.0	3.4	9.0	8.9	6.7	8.8	2.3	3.4	
3.5	2.8	3.4	9.0	9.3	6.8	9.2	2.1	3.4	
4.0	2.5	3.4	8.9	9.6	6.7	9.4	1.8	3.4	
4.5	1.9	3.2	8.6	9.7	6.5	9.6	1.1	3.2	
5.0	-	3.1	-	9.7	-	9.6	-	3.1	





# Indus

**Exit sign luminaire** with industrial design. Rectangular body with opal diffuser. Light distribution by additional reflector. Escape route signs with self adhesive films. Versions available: surface wall mounting (single faced), surface ceiling mounting, bracket mounting, chain / wire suspension mounting (double faced)

## Technical data

Body: polycarbonate, white (RAL 9003)

Cover: polycarbonate, opal

Reflector: sheet steel, white

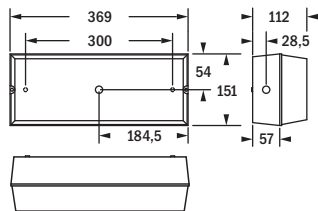
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

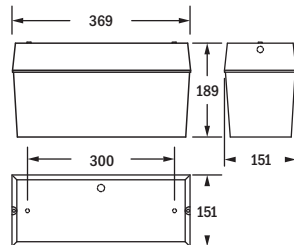
Ambient temperature: -20 to +40 °C



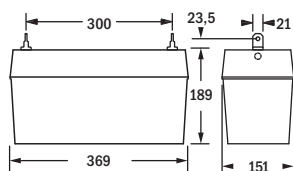
Surface wall mounting



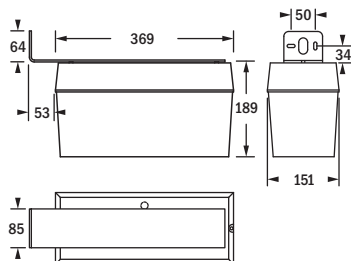
Surface ceiling mounting



Bracket mounting



Wire suspension mounting, chain



**Order code**    **VD**    **Lamp**    **Power consumption DC**

Surface wall mounting (single faced)

**T93050-S24**    26 m    LED 3.2 W    4.3 W

Surface ceiling mounting, bracket, chain / wire suspension mounting (double faced)<sup>1</sup>

**T93051-S24**    26 m    LED 3.2 W    4.3 W

<sup>1</sup> For surface ceiling mounting, bracket and chain / wire suspension mounting please order required accessories separately.



## Fitting supplied complete with

Order code	Description
VD 26 m	
F15314M	Exit sign film
F15313M	Exit sign film
F15312M	Exit sign film

## Accessories to be ordered separately

Order code	Description
VD 26 m	
F95029	Bracket
FB3723	Adaptor for chain or wire suspension
F95032	Wire guard (wall mounting)
F95800	IP65 set (wall mounting)



# Indus

**Emergency luminaire** with industrial design. Rectangular body with clear diffuser and internal prisms. Lighting control by prismatic diffuser and white reflector. Versions available: surface wall mounting and surface ceiling mounting

## Technical data

Body: polycarbonate, white (RAL 9003)

Cover: polycarbonate, clear with internal prism structure

Reflector: sheet steel, white

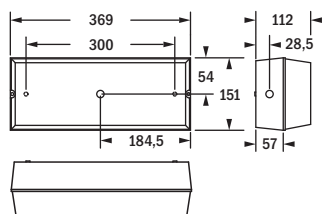
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C



Surface wall / ceiling mounting



Order code	Lamp	Ballast lumen DC	Power consumption DC
Surface wall / ceiling mounting <sup>1</sup>			
<b>T93052-S24</b>	LED 3.2 W	204 lm	4.3 W

## Accessories to be ordered separately

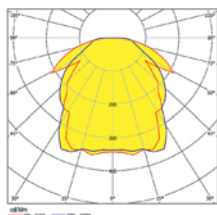
Order code	Description
<b>F95032</b>	Wire guard
<b>F95800</b>	IP65 set

<sup>1</sup> For surface ceiling mounting please order required accessories separately.

## Lighting data

Type of lamp Light distribution diagram

T93052-S24



Mounting height (m)	Spacing (m)							
	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
2.5	3.1	3.8	10.1	10.4	8.7	10.4	3.6	3.8
3.0	3.3	3.7	9.9	11.1	9.5	11.1	3.7	3.7
3.5	3.5	3.8	9.0	11.0	10.1	11.0	3.8	3.8
4.0	3.6	3.8	9.4	10.7	10.5	10.7	3.9	3.8
4.5	3.6	3.7	9.8	10.8	10.8	10.8	3.8	3.7
5.0	3.7	3.9	10.2	11.0	11.0	11.0	3.7	3.9
6.0	3.3	4.1	10.3	11.0	11.2	11.0	3.7	4.1
7.0	3.2	4.3	10.4	11.1	10.8	11.1	3.5	4.3
7.5	2.8	4.4	10.2	11.3	10.4	11.3	3.3	4.4
8.0	2.0	4.2	9.8	11.4	10.5	11.4	1.8	4.2
9.0	-	3.9	-	12.0	-	12.0	-	3.9
10.0	-	3.2	-	12.0	-	12.0	-	3.2



# Nano

**Exit sign luminaire** with rectangular body, clear corners and 3 integrated frames. Escape route indication by changeable display panes. Wall mounting luminaires offer up and downlight distribution, surface mounting luminaires offer downlight only. Versions available: surface wall mounting (single faced) and surface ceiling mounting (double faced)

## Technical data

Body: sheet steel, white (RAL 9003)

Pane: methacrylate, printed

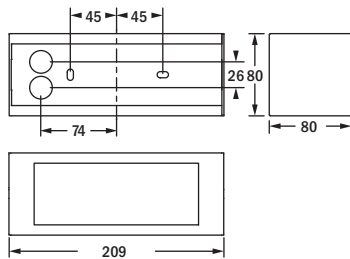
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C



Surface wall / ceiling mounting



Order code	VD	Lamp	DC
Surface wall mounting (single faced), surface ceiling mounting (double faced)			
<b>T93120-S24</b>	12 m	LED 2 W	2.9 W

## Accessories to be ordered separately

Order code	Description	
<b>E16632M</b>	Exit sign pane	
<b>E16631M</b>	Exit sign pane	
<b>E16630M</b>	Exit sign pane	
<b>E16634</b>	Opal plastic pane	
<b>E16635</b>	Metal sheet painted in body color	

# Quader

**Exit sign luminaire** luminaire with square body and cubicle diffuser. 3 sided exit sign. Versions available: surface ceiling mounting, pendulum mounting, chain / wire suspension mounting (triple sided)

## Technical data

Body: sheet steel, white (RAL 9003)

Cover: methacrylate, opal

Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -20 to +40 °C

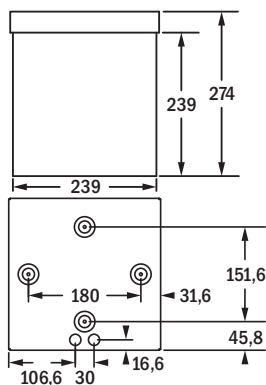


Surface ceiling mounting

Pendulum mounting, rectangular

Wire suspension mounting, chain

Pendulum mounting, round



Order code	VD	Lamp	DC
T93090-S24	44 m	LED 2 W	2.9 W

Surface ceiling mounting, pendulum, chain / wire suspension mounting (triple faced)<sup>1</sup>

<sup>1</sup> For surface ceiling mounting, pendulum, bracket and chain / wire suspension mounting please order required accessories separately.



### Fitting supplied complete with

Order code	Description
VD 44 m	
F15330M	Exit sign film
F15331M	Exit sign film
F15332M	Exit sign film

### Accessories to be ordered separately

Order code	Description
VD 44 m	
F95210	Adaptor for pendulum mounting
F95600	Rectangular pendulum: 250 mm
F95601	Rectangular pendulum: 500 mm
F95602	Rectangular pendulum: 1000 mm
F95400	Pendulum, round: 500 mm
F95406	Adaptor for chain or wire suspension



# Lumax

**Combined general and emergency luminaire:** circular luminaire with concealed body made of sheet steel and domed cover, opal, made of polycarbonate. Separate LED modules and LED driver for general and emergency lighting.

Versions available: surface wall mounting and surface ceiling mounting

## Technical data

Mounting: surface wall / ceiling mounting

Body: sheet steel, white (RAL 9010)

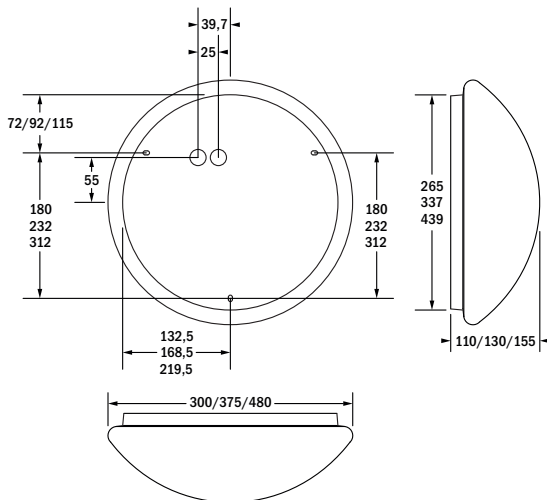
Cover: methacrylate, opal

Supply: 24 V +/- 20 % DC, 230 V AC 50/60 Hz

Ambient temperature: -20 to +40 °C



Surface wall / ceiling mounting



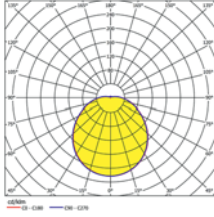
Order code	Lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Surface wall mounting / surface ceiling mounting						
T93190-S24	LED 10.5W / 2.5W	1460 lm	360 lm	4000 K	13 VA	4.3 W
T93191-S24	LED 10.5W / 2.5W	1390 lm	360 lm	3000 K	13 VA	4.3 W
T93192-S24	LED 22.0W / 2.5W	2920 lm	360 lm	4000 K	24 VA	4.3 W
T93193-S24	LED 22.0W / 2.5W	2780 lm	360 lm	3000 K	24 VA	4.3 W
T93194-S24	LED 32.0W / 2.5W	3690 lm	360 lm	4000 K	34 VA	4.3 W
T93195-S24	LED 32.0W / 2.5W	3510 lm	360 lm	3000 K	34 VA	4.3 W

Lighting data

Type of lamp Light distribution diagram

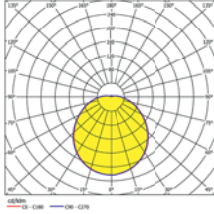
T93190-S24

T93191-S24



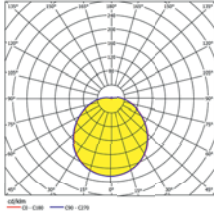
T93192-S24

T93193-S24



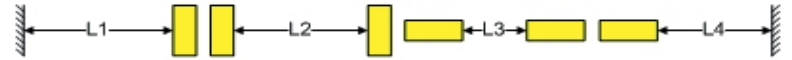
T93194-S24

T93195-S24



Spacing (m)

Mounting height (m)



Mounting height (m)	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
2.5	3.6	3.9	9.4	10.1	9.4	10.0	3.6	3.9
3.0	3.8	4.2	10.0	10.8	10.0	10.7	3.8	4.2
3.5	4.0	4.4	10.5	11.4	10.5	11.4	4.0	4.4
4.0	4.0	4.6	10.9	11.9	10.9	11.9	4.0	4.6
4.5	4.0	4.7	11.2	12.4	11.2	12.3	4.0	4.7
5.0	4.0	4.9	11.4	12.8	11.4	12.7	3.9	4.9
6.0	3.6	4.9	11.5	13.4	11.5	13.3	3.6	4.9
7.0	3.0	4.8	11.4	13.7	11.4	13.7	3.0	4.8
7.5	2.4	4.8	11.1	13.9	11.1	13.8	2.4	4.8
2.5	3.6	3.9	9.4	10.0	9.4	10.0	3.6	3.9
3.0	3.9	4.2	10.0	10.8	10.0	10.7	3.8	4.2
3.5	4.0	4.5	10.5	11.4	10.5	11.3	4.0	4.5
4.0	3.9	4.6	10.9	11.9	10.9	11.9	3.9	4.6
4.5	4.0	4.7	11.2	12.4	11.2	12.3	4.0	4.7
5.0	4.0	4.8	11.4	12.8	11.4	12.7	3.9	4.9
6.0	3.6	4.9	11.5	13.4	11.5	13.3	3.6	4.9
7.0	2.9	4.8	11.4	13.8	11.4	13.7	2.9	4.8
7.5	2.4	4.8	11.1	13.9	11.1	13.8	2.4	4.8
2.5	3.6	3.9	9.4	10.1	9.4	10.0	3.6	3.9
3.0	3.9	4.2	10.0	10.8	10.0	10.7	3.8	4.2
3.5	4.0	4.5	10.5	11.4	10.5	11.3	4.0	4.5
4.0	3.9	4.6	10.9	11.9	10.9	11.9	3.9	4.6
4.5	4.0	4.7	11.2	12.4	11.2	12.3	4.0	4.7
5.0	4.0	4.8	11.4	12.8	11.4	12.7	3.9	4.8
6.0	3.6	4.9	11.5	13.4	11.5	13.3	3.6	4.9
7.0	2.9	4.8	11.4	13.8	11.4	13.7	2.9	4.8
7.5	2.4	4.8	11.1	13.9	11.1	13.8	2.4	4.8



# Lumax65

**Combined general and emergency damp and waterproof luminaire:** circular luminaire with frame body made of sheet steel and domed cover, opal, made of polycarbonate. Separate LED modules and LED driver for general and emergency lighting. Versions available: surface wall mounting and surface ceiling mounting

## Technical data

Mounting: surface wall / ceiling mounting

Body: polycarbonate, grey (RAL 9006) or black (RAL 9011)

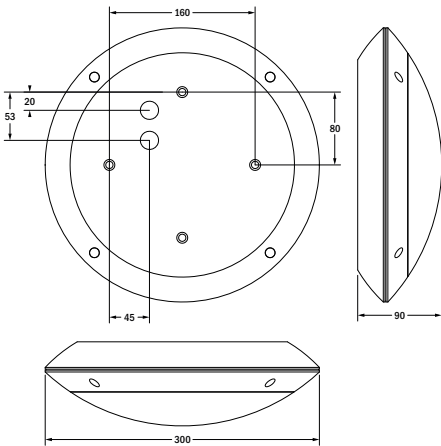
Cover: polycarbonate, opal

Supply: 24 V +/- 20 % DC, 230 V AC 50/60 Hz

Ambient temperature: -20 to +40 °C



Surface wall / ceiling mounting



Order code	Lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Surface wall mounting / surface ceiling mounting with grey body						
<b>T93212-S24</b>	LED 16W / 2.5W	2100 lm	340 lm	4000 K	17.0 VA	4.3W
<b>T93213-S24</b>	LED 16W / 2.5W	2000 lm	340 lm	3000 K	17.0 VA	4.3W
Surface wall mounting / surface ceiling mounting with black body						
<b>T93210-S24</b>	LED 16W / 2.5W	2100 lm	340 lm	4000 K	17.0 VA	4.3W
<b>T93211-S24</b>	LED 16W / 2.5W	2000 lm	340 lm	3000 K	17.0 VA	4.3W

## Lighting data

Type of lamp	Light distribution diagram	Mounting height (m)	Spacing (m)							
			1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
<b>T93212-S24</b>		2.5	4.0	4.2	10.0	10.4	10.0	10.4	4.0	4.2
<b>T93213-S24</b>		3.0	4.2	4.5	10.8	11.3	10.7	11.3	4.2	4.5
<b>T93210-S24</b>		3.5	4.4	4.6	11.4	12.0	11.4	12.0	4.4	4.6
<b>T93211-S24</b>		4.0	4.5	4.9	11.9	12.7	11.9	12.7	4.5	4.9
		4.5	4.6	5.2	12.3	13.2	12.3	13.2	4.6	5.2
		5.0	4.6	5.4	12.7	13.7	12.6	13.7	4.6	5.4
		6.0	4.5	5.4	13.1	14.6	13.0	14.6	4.5	5.4
		7.0	4.2	5.5	13.2	15.1	13.1	15.1	4.0	5.5
	7.5	3.8	5.5	13.1	15.4	13.1	15.4	3.8	5.5	

# Stufen

**Exit sign or emergency luminaire** with recessed body. Either with frame or lamella screen and inserted pane. Single faced escape route lighting through adhesive exit sign films (version with frame screen) or lighting (version with lamella screen).  
Versions available: recessed wall mounting and recessed step mounting

## Technical data

Body: aluminium, grey (RAL 9006)

Cover: die cast aluminium, grey (RAL 9006)

Pane: glass, satined

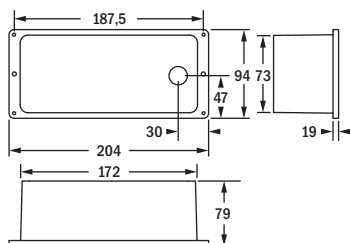
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

Ambient temperature: -10 to +40 °C



## Recessed wall mounting



Order code	VD	Lamp	Luminous flux	Power consumption DC
Version with frame screen				
Recessed wall mounting, recessed step mounting (single faced)				
<b>T93130-S24</b>	12 m	LED 2 W	100 lm	2.9 W
Version with lamella screen				
Recessed wall mounting, recessed step mounting				
<b>T93131-S24</b>	12 m	LED 2 W	19 lm	2.9 W

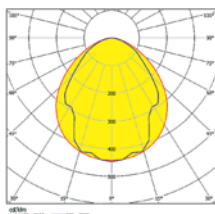
## Accessories to be ordered separately

Order code	Description
VD 12 m	
<b>F15021M</b>	Exit sign film
<b>F15022M</b>	Exit sign film
<b>F15023M</b>	Exit sign film

## Lighting data

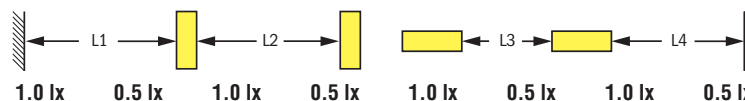
Type of lamp Light distribution diagram

T93130-S24  
T93131-S24



Mounting height (m)  
wall mounting

Spacing (m)



Mounting height (m)	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
0.5	-	-	-	-	2.0	-	1.0	-
1.0	-	-	-	-	2.3	-	1.2	-
1.5	-	-	-	-	2.4	-	1.4	-





# Triangle

**Emergency luminaire** with shallow triangular body and integrated shutters. Body made of sheet steel, optional stainless steel.

Versions available: surface wall mounting, surface floor mounting

## Technical data

Body: sheet steel, white (RAL 9003) / optional stainless steel

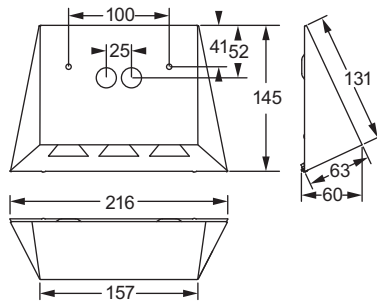
Terminals: push-wire terminals, 2.5 mm<sup>2</sup>, 2-times

Supply: 24 V +/- 20 % DC

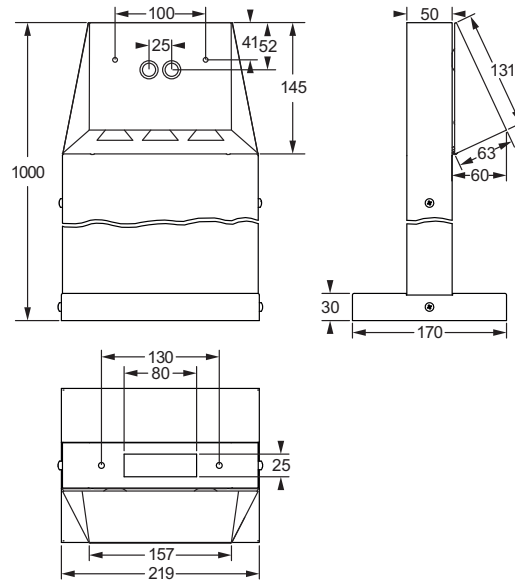
Ambient temperature: -20 to +40 °C



### Surface wall mounting



### Surface floor mounting



Order code	Lamp	Ballast lumen DC	Power consumption DC
Surface wall mounting, surface floor mounting <sup>1</sup>			
<b>T93240-S24</b>	LED 3.0	180 lm	4.3 W

Accessories to be ordered separately	
Order code	Description
<b>F95240</b>	Bollard, angular, length 1000mm
<b>F95241</b>	Bollard stainless steel, angular, length 1000mm

### Version stainless steel

Surface wall mounting, surface floor mounting<sup>1</sup>

<b>T93241-S24</b>	LED 3.0	180 lm	4.3 W
-------------------	---------	--------	-------

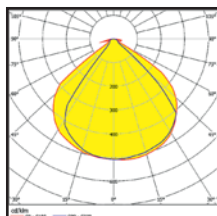
<sup>1</sup> For surface floor mounting please order required accessories separately.

### Lighting data

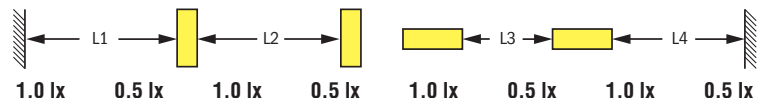
Type of lamp Light distribution diagram

T93240-S24

T93241-S24



Mounting height (m)  
Wall mounting



Mounting height (m)	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx	1.0 lx	0.5 lx
1.5	-	-	-	-	3.2	-	1.4	-
2.0	-	-	-	-	3.9	-	1.7	-
2.5	-	-	-	-	4.6	-	1.9	-



## Louvre luminaire I418LED

Order code	lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Recessed ceiling mounting / surface ceiling mounting						
<b>I418LED-S24</b>	LED 32 W	4000 lm	675 lm	4000 K	36 W	8 W



## Louvre luminaire P236LED

Order code	lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Surface ceiling mounting / pendulum for single or row assembly						
<b>P236LED-S24</b>	LED 32 W	4000 lm	667 lm	4000 K	36 W	8 W
<b>P258LED-S24</b>	LED 43 W	5100 lm	638 lm	4000 K	48 W	8 W



## Downlight D226LED

Order code	lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Recessed ceiling mounting / surface ceiling mounting						
<b>D226LED-S24</b>	LED 16 W	1700 lm	638 lm	4000 K	20 W	8 W



## Damp and waterproof luminaire AcciaioECO LED

Order code	lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Surface wall mounting / surface ceiling mounting / pendulum mounting						
<b>A136EP-S24</b>	LED 17 W	2500 lm	776 lm	4000 K	22 W	8 W
<b>A236EP-S24</b>	LED 35 W	4400 lm	754 lm	4000 K	40 W	8 W
<b>A158EP-S24</b>	LED 26 W	3500 lm	762 lm	4000 K	32 W	8 W
<b>A258EP-S24</b>	LED 52 W	6500 lm	750 lm	4000 K	58 W	8 W



## Reflector luminaire MF736LED

Order code	lamp	Ballast lumen		Light Color	Power consumption	
		AC	DC		AC	DC
Surface ceiling mounting / pendulum mounting						
<b>H250LED-S24</b>	LED 123 W	15000 lm	731 lm	4000 K	135 W	8 W
<b>H400LED-S24</b>	LED 194 W	26000 lm	804 lm	4000 K	214 W	8 W
<b>H250CLED-S24</b>	LED 123 W	15000 lm	731 lm	4000 K	135 W	8 W
<b>H400CLED-S24</b>	LED 194 W	26000 lm	804 lm	4000 K	214 W	8 W
<b>H250ELED-S24</b>	LED 123 W	15000 lm	731 lm	4000 K	135 W	8 W
<b>H400ELED-S24</b>	LED 194 W	26000 lm	804 lm	4000 K	214 W	8 W

## Order codes

A136E-S24	49	F15330M	43	F95909	24
A158E-S24	49	F15331M	43	F95910	24
A236E-S24	49	F15332M	43	F95911	24
A258E-S24	49	F15337ML	35	F95912	24
D226LED-S24	49	F15337MR	35	F95913	24
E16040M-KIT-F65	36	F15337MU	35	F95914	24
E16041M-KIT-F65	36	F15338ML	35	F95915	24
E16128M	25	F15338MR	35	FB12194	36,37
E16129M	25	F15338MU	35	FB16910M	34
E16130M	25	F95029	40	FB19040	36,37
E16134M	28	F95032	28,29,30,31,34,40,41	FB19041	36,37
E16135M	28	F95055	28	FB19044M	36
E16136M	28	F95056	28,30	FB19045	36
E16234	28	F95057	25,28,30	FB19380	16
E16241	28,30	F95067	25,28,30	FB19381	16
E16242	28	F95070	28	FB19382	16
E16251	28	F95109P	35	FB19383	16
E16260M	25	F95109PK	35	FB19384	16
E16261M	25	F95109PR	35	FB19385	16
E16262M	25	F95109PS	35	FB19386	16
E16500M	24	F95207	25	FB19387	16
E16501M	24	F95208	25	FB3723	34
E16502M	24	F95210	36,37,43	FB3723	40
E16604M	28	F95220	25	FB3733	38
E16605M	28	F95240	48	FB3733	39
E16606M	28	F95241	48	FB4265	38
E16607	28	F95400	25,28,30,43	FB4266	38
E16608M	28,30	F95401	25,28,30,36,37	FB4266	39
E16609M	28,30	F95406	43	G31015	15
E16610M	28,30	F95506	34	G31045	15
E16611	28,30	F95510	34	G31574	14
E16625	35	F95511	34	G31585	14
E16626	35	F95512	34	G31586	14
E16630M	42	F95600	25,28,30,43	H250LED-S24	49
E16631M	42	F95601	25,28,30,43	H250CLELED-S24	49
E16632M	42	F95602	25,28,30,43	H250ELED-S24	49
E16634	42	F95603	32	H400LED-S24	49
E16635	42	F95604	32	H400CLELED-S24	49
E16700M	32	F95605	32	H400ELED-S24	49
E16701M	32	F95606	32	I418LED-S24	49
E16710M	26	F95607	32,33	P236LED-S24	49
E16711M	26	F95608	32	P258LED-S24	49
E16712M	26	F95609	32	SWB16313	15
E16713	26	F95610	32	SWB16314	15
E16714	26	F95611	32	SWB16316	15
E16715M	26	F95612	32	T93001-S24	25
E16716M	26	F95613	32	T93002-S24	25
E16717M	26	F95700	34	T93003-S24	25
E16718	26	F95714	26	T93004-S24	25
E16719	26	F95717	26	T93005-S24	25
E16720M	26	F95718	26	T93006-S24	25
E16721M	26	F95719	26	T93007-S24	25
E16722M	26	F95720	26	T93008-S24	25
E16723	26	F95721	26	T93010-S24	28
E16724	26	F95722	26	T93011-S24	28
E16770M	16	F95723	26	T93012-S24	28
E16771M	16	F95724	26,27	T93013-S24	28
E16772 m	16	F95729	26	T93014-S24	28
E16773M	16	F95800	40,41	T93015-S24	28
E16774 m	16	F95802	18	T93016-S24	29
E16775M	16	F95803	18	T93020-S24	26
E16779M	16	F95804	18	T93021-S24	26
E16780M	16	F95805	18	T93022-S24	26
E16781M	16	F95806-RAL9003	22	T93023-S24	26
E16782 m	16	F95806-INOX	22	T93024-S24	26
E16783M	16	F95807	18	T93025-S24	26
E16784 m	16	F95808	18	T93026-S24	27
EB16233M	38	F95811	18	T93040-S24	34
EB16234M	38	F95812	18	T93041-S24	34
EB16235M	38	F95900	24	T93050-S24	40
EB16236M	38	F95901	24	T93051-S24	40
EB16237M	38	F95902	24	T93052-S24	41
F15021M	47	F95903	24	T93060-S24	32,33
F15022 M	47	F95904	24	T93061-S24	32
F15023M	47	F95905	24	T93062-S24	32,33
F15312 M	40	F95906	24	T93063-S24	32
F15313M	40	F95907	24	T93090-S24	43
F15314 M	40	F95908	24	T93100-S24	35

T93101-S24	35
T93102-S24	35
T93103-S24	35
T93120-S24	42
T93130-S24	47
T93131-S24	47
T93150-S24	24
T93151-S24	24
T93152-S24	24
T93153-S24	24
T93154-S24	24
T93155-S24	24
T93180-S24	30
T93181-S24	30
T93182-S24	31
T93190-S24	44
T93191-S24	44
T93192-S24	44
T93193-S24	44
T93194-S24	44
T93195-S24	44
T93210-S24	46
T93211-S24	46
T93212-S24	46
T93213-S24	46
T93240-S24	48
T93241-S24	48
TB16025-S24	36,37
TB16720-S24	16
TB16721-S24	16
TB16730-S24	16
TB16731-S24	16
TB16746-IP65	22,23
TB16746-S24	18,20
TB16747-IP65	22,23
TB16747-S24	18
TB16756-S24	19
TB16757-S24	19
TB16762-IP65	22, 23
TB16762-S24	18,20
TB16763-IP65	22, 23
TB16763-S24	18,20
TB16769-S24	21
TB93230-S24	38,39

# Symbols



Degree of protection IP20 - minimum degree of protection. basic protection (against fingers/foreign objects >12mm)



Degree of protection IP21 - protected against solid foreign objects > 12.5mm. protection against ingress of vertical falling dripping water



Degree of protection IP40 - protected against solid foreign objects > 1mm



Degree of protection IP41 - protected against solid foreign objects > 1mm. protection against ingress of vertical falling dripping water



Degree of protection IP42 - protected against solid foreign objects > 1mm. protection against ingress of vertical falling dripping water. luminaire can be slanted up to 15°



Degree of protection IP54 - dustproof (ingress of dust not fully prevented). protection against ingress of spray water



Degree of protection IP65 - dustproof. protection against ingress of hose water



Degree of protection IP66 - dustproof. protected against heavy sea (strong hose water)



Protection class I



Protection class III



Suitable for mounting on normally flammable surfaces



Impact resistance IK07 - resistance against impacts with an impact energy of up to 2.00 J



Impact resistance IK09 - resistance against impacts with an impact energy of up to 10.00 J



ENEC certified



Explosionproof



Viewing distance (exit sign luminaire)



LED illuminant

**disclaimer**

Beghelli PRÄZISA GmbH is constantly developing and improving the product range. All descriptions, illustrations, drawings and specifications present only general particulars and shall not form part of any contract. The right is reserved to change specifications without prior notification or public announcement.

Publication date: January 2015



Beghelli PRÄZISA GmbH  
Lanterstraße 34  
D-46539 Dinslaken  
Fon +49 (0)2064 9701 - 0  
Fax +49 (0)2064 9701 - 99  
info@beghelli.de  
www.beghelli.de