

OWA FL LED

INSTALLATION AND MAINTENANCE MANUAL **EN****MOUNTING TYPE**

FL - (FLUSH MOUNTED) mounting in a suspended ceiling

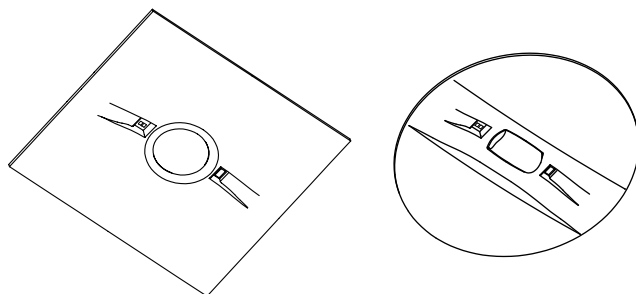
SYSTEM VARIANT

LV - luminaire supplied with 24V DC

LVAM - luminaire supplied with 24V DC from the LVDBS system, with built-in address module and operating mode selection

CB - luminaire supplied from HVCBS (230V AC/216V DC), without address module

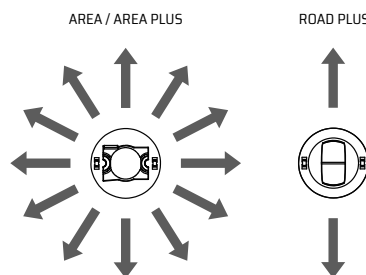
CBAM - luminaire supplied from the HVCBS (230V AC/216V DC), with built-in address module and operating mode selection

**OPTICS**

AREA - (AR) symmetrical light distribution in all directions, recommended for use in places of considerable height or to illuminate fire points

AREA PLUS - (AP) symmetrical light distribution in all directions, ensuring adequate illumination on a large area

ROAD PLUS - (RP) light distribution mainly along the escape route with a much greater range than for the ROAD optics, for small heights

**TECHNICAL DATA**

Supply voltage	CB	230V AC 50/60Hz, 80-275V DC	
	CBAM	230V AC 50/60Hz, 170-275V DC	
	LV/LVAM	10-32V DC	

Light source supply power 1W, 2W, 3W

Housing colour	RAL9016	RAL7042	RAL9005
	(white)	(grey)	(black)

Minimum luminous flux (1W)	AP: 142lm	AP: 136lm	AP: 123lm
	AR: 148lm	AR: 142lm	AR: 129lm
	RP: 145lm	RP: 139lm	RP: 126lm

Minimum luminous flux (2W)	AP: 233lm	AP: 223lm	AP: 202lm
	AR: 243lm	AR: 233lm	AR: 211lm
	RP: 238lm	RP: 228lm	RP: 207lm

Minimum luminous flux (3W)	AP: 340lm	AP: 326lm	AP: 295lm
	AR: 355lm	AR: 341lm	AR: 309lm
	RP: 347lm	RP: 333lm	RP: 302lm

Current consumption (1W/2W/3W)	CB @ 216V DC	7mA / 14mA / 20mA
	CBAM @ 216V DC	11mA / 18mA / 24mA
	LV @ 24V DC	71mA / 118mA / 190mA
	LVAM @ 24V DC	76mA / 122mA / 194mA

Power factor 0,4 - 0,6

Protection class **CB/CBAM** I
LV/LVAM III

Ingress protection of light source/emergency module IP65 / IP20

Light source type LED module ¹⁾

Light source temperature 5700K

Colour rendering index 70

Light source lifespan > 50 000h

Ambient temperature range **CB/CBAM** -10 - +55°C
TE: -25 - +55°C
LV/LVAM -25 - +55°C

Supply cable cross-section area 0,5 - 2,5mm²

Supply cable diameter < 8mm

Suitable for through wiring YES

¹⁾ Non-exchangeable but serviceable light source; ²⁾ TE - extended temperature

SAFETY

- During the installation and usage of emergency luminaires, follow the national safety rules as well as generally accepted technical rules.
- Supply voltage should never be removed from the permanent phase by any external switches, relays or contactors (BMS, wall switch, etc.).
- During usage of emergency luminaires keep a register of inspection reports. Luminaire installation or maintenance has to be preceded by turning off the power supply and battery.
- Ensure that all foreign bodies are removed before the luminaire power is switched on.
- The luminaire is to be used undamaged and in accordance with specifications.
- The luminaire is designed for use inside the building.

The above-mentioned luminaire is a fire protection equipment and therefore falls within relevant standards and regulations.



NOT OBEYING THE SAFETY INSTRUCTIONS AND RECOMMENDATIONS CAN CAUSE LIFE THREAT OR EVEN DEATH

Not obeying this instruction manual can result in luminaire damage and loss of warranty

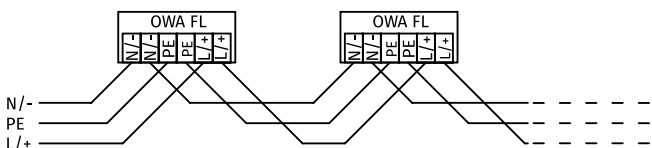


DO NOT STARE AT THE OPERATING LIGHT SOURCE

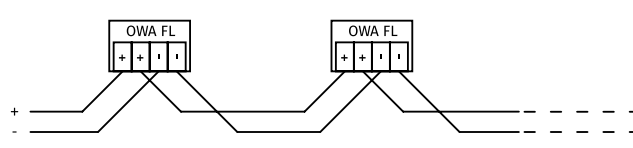
The luminaire should be positioned so that prolonged staring into the luminaire at a distance closed than 0.5m is not expected

WIRING DIAGRAMS

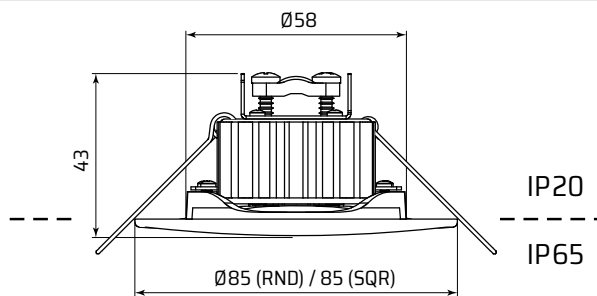
CB/CBAM



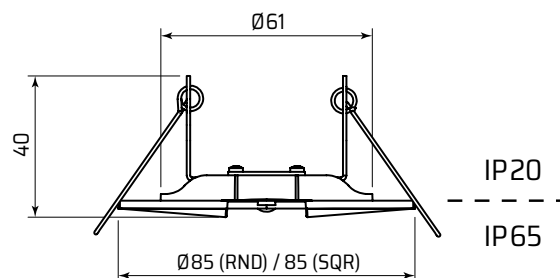
LV/LVAM



LIGHT SOURCE DIMENSIONS (mm)

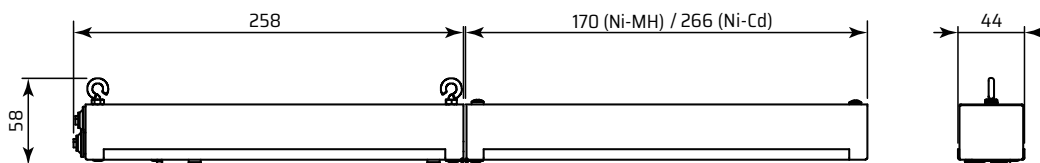


mounting hole diameter: $\varnothing 65$ -75mm
 minimal height between a luminaire and a suspended ceiling:
 for the mounting hole $\varnothing 65$ mm - 240mm,
 for the mounting hole $\varnothing 75$ mm - 220mm



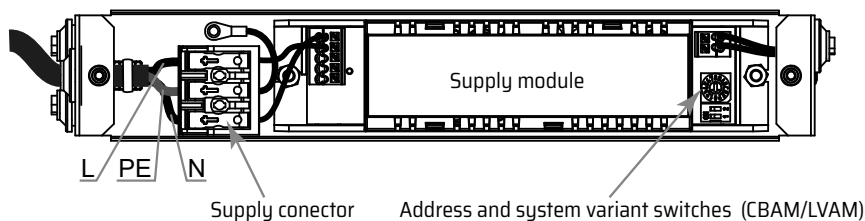
light source used for the 1W, 2W and 3W NM 1h/2h versions

EMERGENCY MODULE DIMENSIONS (mm)

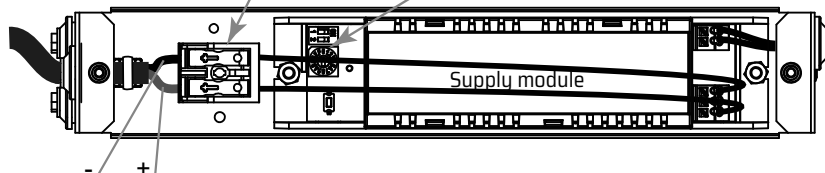


EMERGENCY MODULE CONSTRUCTION

CB/CBAM



LV/LVAM



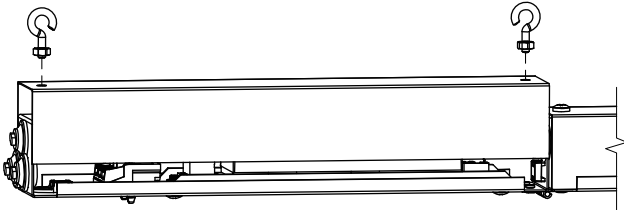


BEFORE ANY INSTALLATION OR MAINTENANCE OPERATION IS PERFORMED ON THE LUMINAIRE THE POWER SUPPLY SHOULD BE DISCONNECTED.

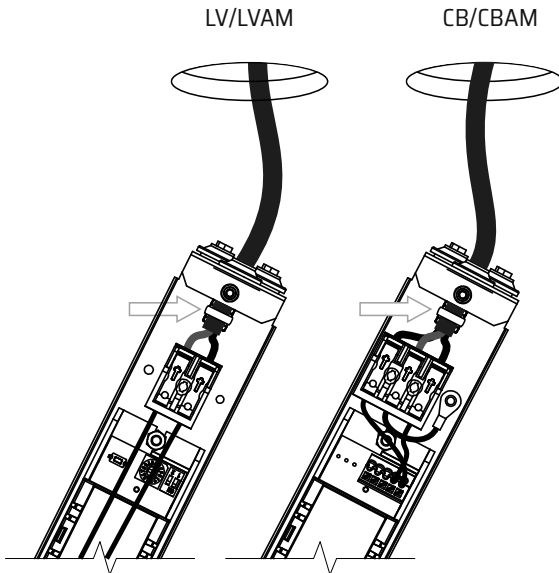
All installation and maintenance procedures can be performed only by qualified, properly trained and if appropriate, certified staff.

INSTALLATION

1. Unpack the luminaire after transport and verify its condition.
2. Cut a hole with the Ø65-75mm diameter in the suspended ceiling.
3. Remove the emergency lighting module housing cover.

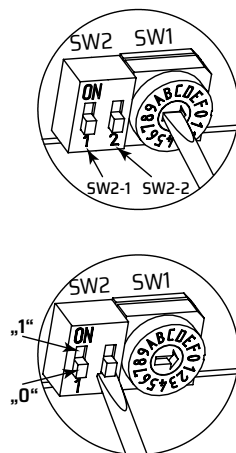


4. Lead the power cables from the hole and connect them to the power supply connector according to the wiring diagram, strip 7-8mm of wire copper insulation. After connecting secure the wires with a cable tie as shown in the drawing below.

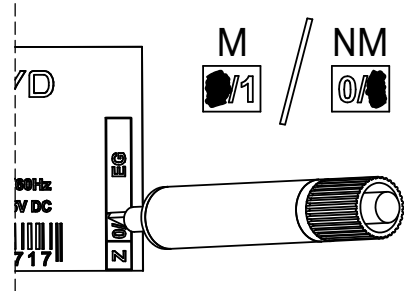


5. In case of luminaires with built-in address module:
 - a. set luminaire address using the rotary switch SW1 and second slider of SW2 switch (SW2-2). Setting the SW2-2 position to „1” means adding 10 to the address, according to the table below.

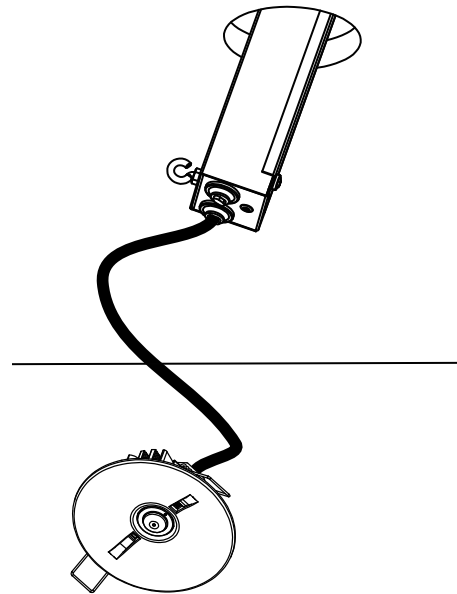
SW2-2	SW1	Address	SW2-2	SW1	Address
0	1	1	1	1	11
0	2	2	1	2	12
0	3	3	1	3	13
0	4	4	1	4	14
0	5	5	1	5	15
0	6	6	1	6	16
0	7	7	1	7	17
0	8	8	1	8	18
0	9	9	1	9	19
0	A	10	1	A	20



- b. using the first slider of SW2 switch (SW2-1) select the operating mode. Position „1” - maintained (M), position „0” - non-maintained (NM).
6. Mark the operating mode on the luminaire label. Mark **0** for maintained mode (M) and **1** for non-maintained mode (NM).

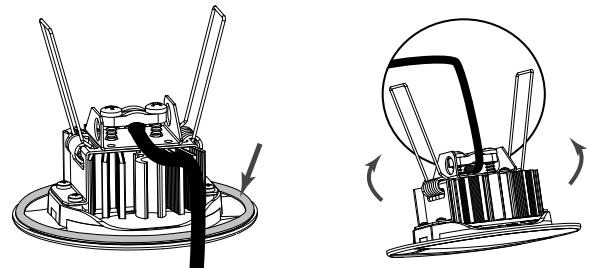


7. Place the emergency module in the ceiling.



8. Apply the silicone along the luminaire backside. A sealing is not required when ingress protection IP20 is sufficient.

Bend the springs fixing the luminaire upwards and slide the luminaire into previously prepared mounting hole in the ceiling, press it to seal the luminaire. Pay attention to the direction of the luminaire optics (see page 2).



9. Perform the commissioning procedure.

COMMISSIONING

After all installation procedures are finished, luminaire operation needs to be verified. Follow the instructions below:

1. Switch the luminaire power supply on the HVCBS (CB, CBAM) or LVDBS (LV, LVAM) system.
2. For luminaires without built-in address module (CB, LV):
 - a. Leave luminaire operating and verify light source operation – should be operating.
 - b. Turn off luminaire power supply.
3. For luminaires with built-in address module:
 - a. Configure the HVCBS/LVDBS system.
 - b. Configure HVCBS/LVDBS circuit as maintained.
 - c. If required, switch between maintained and non-maintained luminaire operating mode.
 - d. Run the functional test on HVCBS/LVDBS system.
 - e. Verify luminaire operation. The light source should operate properly.
 - f. Verify if the HVCBS/LVDBS system reports proper luminaire operation.

MAINTENANCE

Luminaire should be cleaned with a damp cloth according to building maintenance plan.

Do not use abrasive cleaners, solvents, substances and cleaning agents containing alcohol to clean the light source.

The light source used in this luminaire may only be replaced by the manufacturer, his service agent or a similar qualified person.

STORAGE

The luminaire should be stored no longer than 6 months from the date of purchase, in a dry place with an ambient temperature range of -10 – +30°C.

WARRANTY

Warranty is valid and enforceable only when manufacturer's recommendations are preserved, and the installation and usage are proper. Warranty is granted for a period of 12 months from the date of sale, unless the luminaire has been sold under different contract conditions. The warranty is excluded in case of misuse, unsuitable use, wrong connection or mechanical defects of the luminaire caused by the client.