

## OWA FL LED



## INSTALLATION AND MAINTENANCE MANUAL

## MOUNTING TYPE

**FL** – (FLUSH MOUNTED) mounting in a suspended ceiling

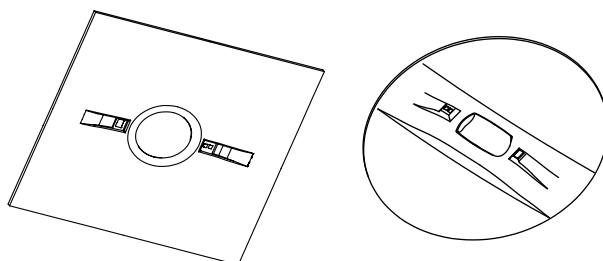
## SYSTEM VARIANT

**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

**AR** – AREA – open area optics for high ceiling altitudes or for the illumination of fire protection equipment

**AP** – AREA PLUS – open area optics for low and medium ceiling altitudes

**RP** – ROAD PLUS – evacuation (corridor) optic for low and medium ceiling altitudes

## TECHNICAL DATA

Supply voltage	<b>CB</b>	230V AC 50/60Hz 80 – 275V DC
	<b>CBAM</b>	230V AC 50/60Hz 170 – 275V DC
	<b>LV/LVAM</b>	8 – 32V DC

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

Housing colour	<b>RAL9016</b> (white)	<b>RAL7042</b> (grey)	<b>RAL9005</b> (black)
----------------	---------------------------	--------------------------	---------------------------

**AP:** 142lm **AR:** 136lm **AR:** 123lm

Minimum luminous flux (1W) **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)	<b>CB @ 216V DC</b>	7mA / 14mA / 20mA
	<b>CBAM @ 216V DC</b>	11mA / 18mA / 24mA
	<b>LV @ 24V DC</b>	71mA / 118mA / 190mA
	<b>LVAM @ 24V DC</b>	76mA / 122mA / 194mA

Power factor 0,4 – 0,6

Protection class	<b>CB/CBAM</b>	I
	<b>LV/LVAM</b>	III

Ingress protection of light source/emergency module IP65 / IP20

Light source type LED module <sup>1)</sup>

Light source temperature 5700K

Colour rendering index 70

Light source lifespan > 50 000h

Ambient temperature range (1W)	<b>CB/CBAM</b>	<b>TS (standard):</b> -10 – +60°C <b>TE (extended):</b> -25 – +60°C
	<b>LV/LVAM</b>	-25 – +60°C

Ambient temperature range (2W, 3W)	<b>CB/CBAM</b>	<b>TS (standard):</b> -10 – +55°C <b>TE (extended):</b> -25 – +55°C
	<b>LV/LVAM</b>	-25 – +55°C

Supply cable cross-section area 0,5 – 2,5mm<sup>2</sup>

Supply cable diameter < 8mm

Suitable for through wiring YES

<sup>1)</sup> Non-exchangeable but serviceable light source.

## 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

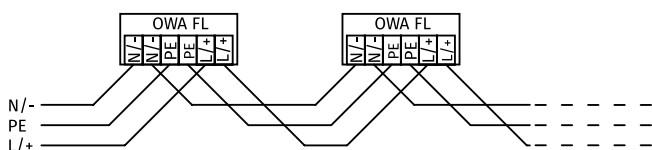


### DO NOT STARE AT THE OPERATING LIGHT SOURCE

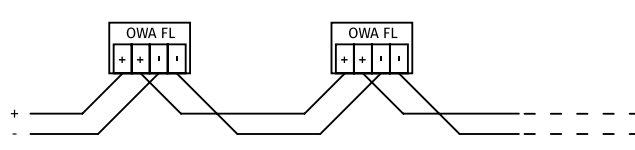
The luminaire should be positioned so that  
prolonged staring into the luminaire at  
a distance closed than 0.5m is not expected

## WIRING DIAGRAM

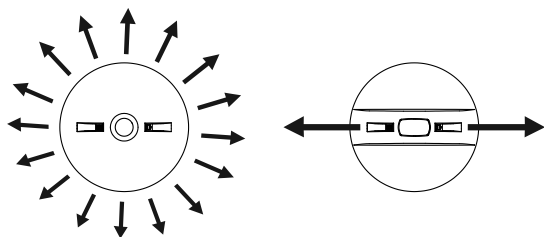
CB/CBAM



LV/LVAM



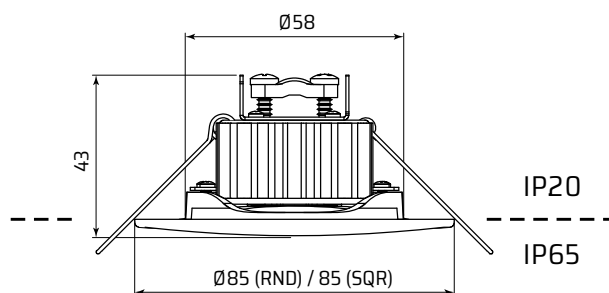
## OPTICS



AREA/AREA PLUS

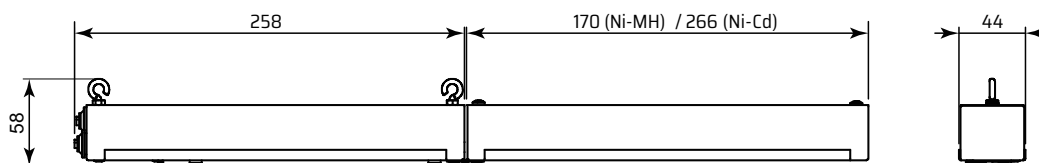
ROAD PLUS

## LIGHT SOURCE DIMENSIONS (mm)



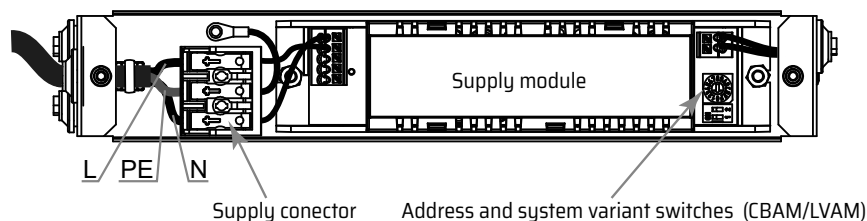
mounting hole diameter: Ø65-75mm  
minimal height between a luminaire and a suspended ceiling:  
for the mounting hole Ø65 mm - 240mm  
for the mounting hole Ø75 mm - 220mm

## EMERGENCY MODULE DIMENSIONS (mm)

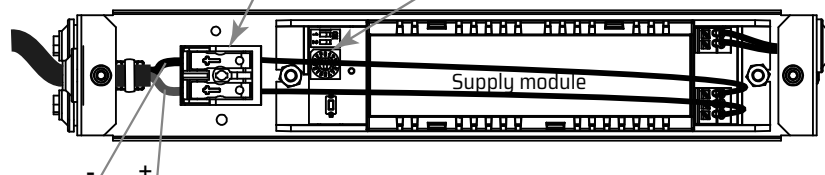


## EMERGENCY MODULE CONSTRUCTION

CB/CBAM



LV/LVAM





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

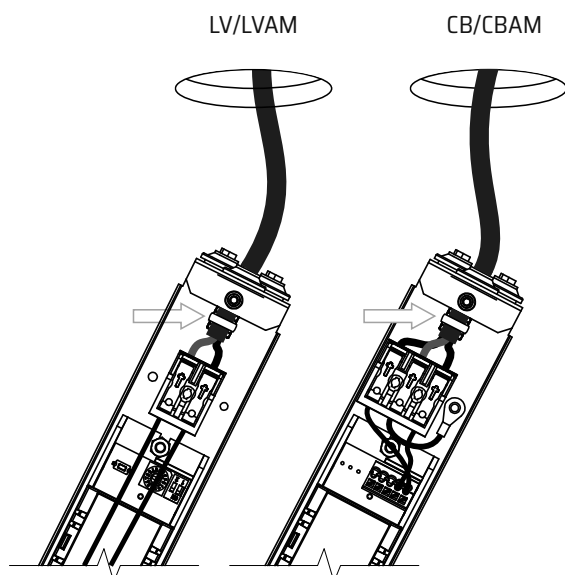
All installation and maintenance procedures can be performed only by qualified,  
properly trained and if appropriate, certified staff.

## 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.

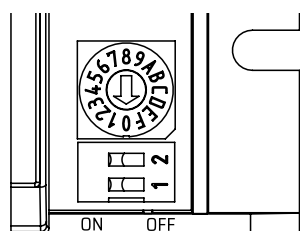
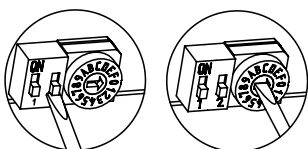


4. Lead the power cables from the hole and connect them to the power supply connector according to the wiring diagram, strip 7-8mm of wire copper insulation. After connecting secure the wires with a cable tie as shown in the drawing below.

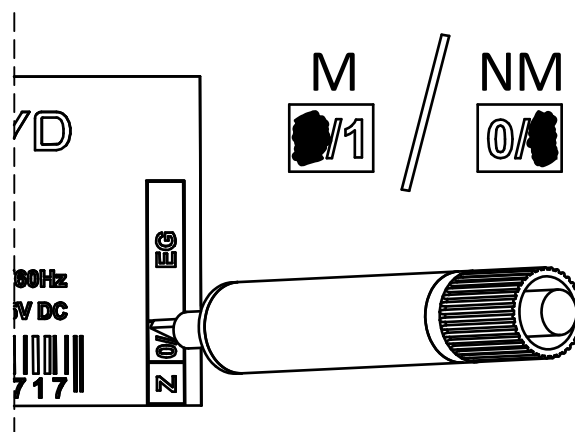


5. In case of luminaires with built-in address module (CBAM/ LVAM) set luminaire address and operating mode.
  - a. Using the rotary switch SW2 and second slider of SW1 switch set the luminaire address.

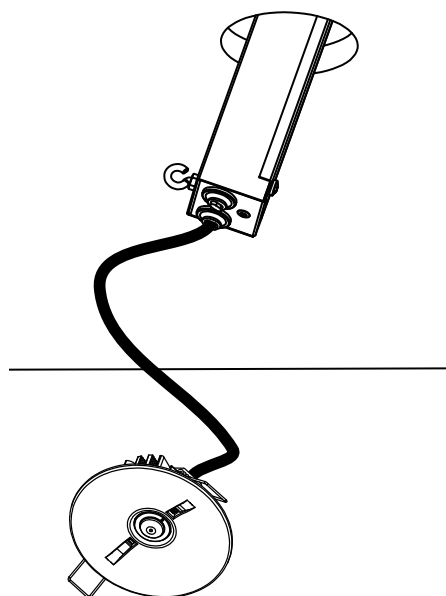
SW1-2	SW2	Address	SW1-2	SW2	Address
OFF	1	1	ON	1	11
OFF	2	2	ON	2	12
OFF	3	3	ON	3	13
OFF	4	4	ON	4	14
OFF	5	5	ON	5	15
OFF	6	6	ON	6	16
OFF	7	7	ON	7	17
OFF	8	8	ON	8	18
OFF	9	9	ON	9	19
OFF	A	10	ON	A	20



- b. Using the first slider of SW1 switch select the operating mode. Switch position 0 - non-maintained operating mode (NM), switch position 1 - maintained operating mode (M).
- c. Mark the operating mode on the luminaire label. Mark 0 for maintained mode and 1 for non-maintained mode.

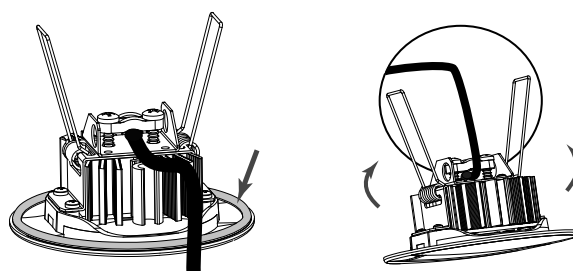


6. Place the emergency module in the ceiling.



7. 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).



8. 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.