# **Low-intensity LED Obstruction Light** Type A and B



**LED Obstruction Light Type B** 

- For use as "Low-intensity Obstruction Light, Type A or B" in accordance with ICAO Annex 14
- 230 V version with or without monitoring function
- · Very bright solution which far exceeds the required light output (32 cd)
- High impact resistance to 20 Joules



## **TECHNICAL SPECIFICATIONS:**



Fixing: Base mounting, bracket mounting (accessory),

tube mounting (accessory)

Screw terminal with wire protection max. 2.5 mm<sup>2</sup> Connection:

Cable entry: Cable diameter 5-7 mm

100 % Duty cycle:

Current consumption at failure of 2 of the 12 LED strips: < 50mA



### **ORDER SPECIFICATIONS:**

## Low-intensity LED Obstruction Light Type A

12-50 V DC Current consumption 500-100 mA aviation red 280 410 55



## Low-intensity LED Obstruction Light Type B

Voltage 24 V DC 230 V AC 230 V AC with monitoring funct.  $\sim 200 \text{ mA} / < 50 \text{ mA (Failure mode)}$ Current consumption ~ 400 mA ~ 200 mA aviation red 280 470 55 280 470 68 280 480 68



## **ACCESSORIES:**

Plastic bracket for wall mounting 975 883 06 975 883 09 Adaptor for tube mounting



## **ADDITIONAL INFORMATION:**

LED Obstruction Light Type A -

The adaptor (accessory) allows quick and simple mounting on

a tube

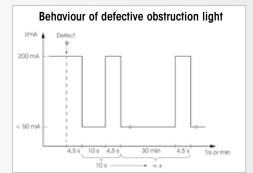


Plastic bracket, adaptor for tube mounting (accessories)

## Monitoring function:

To provide enhanced safety for obstruction light applications WERMA has developed a variant with an integrated monitoring function.

Should any two of the twelve LED strips fail, the light will switch to failure mode (see image). This can be detected for example by a current monitoring relay. After repeatedly checking the product status the unit will remain in failure mode for 30 minutes before again checking the status.





## TECHNICAL DIAGRAMS: see page 303







See note











# **Obstruction Light**



## Why do obstacles need to be illuminated?

The law stipulates that buildings of a specific height and in the vicinity of airports as well as factory chimneys, towers, masts etc. must be equipped with obstruction lights.

This special lighting makes obstacles visible for pilots in the dark or when visibility is poor. Obstruction lighting is one of the most important aspects of flight safety.



The method of marking obstacles to air traffic is laid down by diverse laws, regulations and recommendations. These regulations have a clearly defined sphere of influence and are internationally interlinked.

The International Civil Aviation Organisation (ICAO) is a special organisation within the United Nations created to establish and develop universal regulations for safety, continuity and economic efficiency in international air traffic. The recommendations of the ICAO are not directly binding in the member states, but must be transformed by them into the appropriate national legal regulations.

In **Germany** the Ministry for Transport and Construction Development **(BMVBS)** issues the regulations covering obstruction lighting on buildings. The **ICAO** regulations regarding the methods of marking and lighting aviation obstacles can be found in ICAO Annex 14.

- "Low intensity obstacle beacon type A": a red permanent night-time warning beacon for fixed obstructions with a brightness of 10 cd.
- "Low intensity obstacle beacon type B": a red permanent night-time warning beacon for fixed obstructions with a brightness of 32 cd.

## Where are obstacle lights deployed?



• **Germany:** Marking of aviation obstacles by night at any height providing the highest point of the obstacle can be marked.



• According to ICAO: Marking of aviation obstacles by night up to 45 m ("Low-intensity Obstacle Light, Type A").

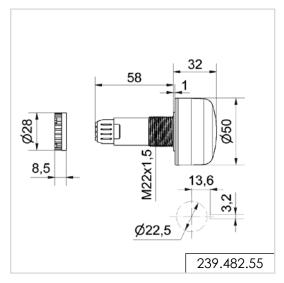


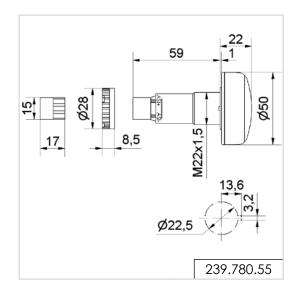


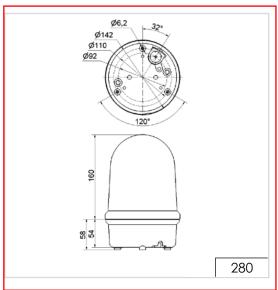


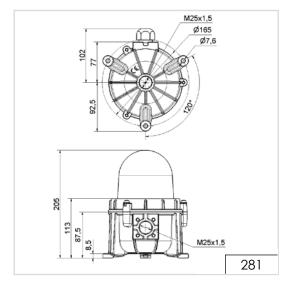


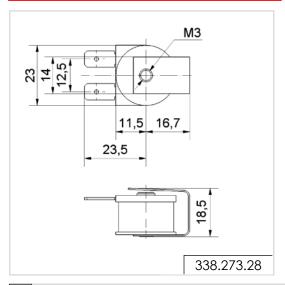


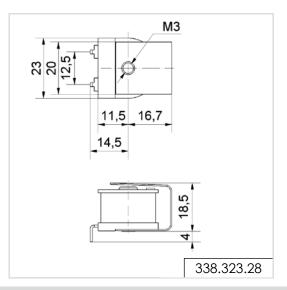












# ADDITIONAL INFORMATION:

You are welcome to request the technical diagrams in digital form. The relevant 3D models, instruction leaflets and connection diagrams can be obtained from us or downloaded from our homepage at any time.



EN 60598 EN 60947







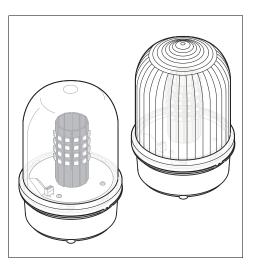














- D Anschluss ausschließlich durch ausgebildete Elektro-Fachkräfte.
- Electrical connection is to be made by trained electrical specialists only.
- E Le branchement doit **uniquement** être effectué par des professionnels.
- Il collegamento deve essere eseguito solo da elettricisti specializzati.
- E La conexión **sólo** debe ser realizada por electricistas debidamente formados.
- A ligação deve ser feita exclusivamente por profissional elétrico especializado.
- De aansluiting mag **enkel** gebeuren door erkende vakmensen.
- Připojení smí provádět pouze kvalifikovaný personál.
- Podłączenie **wyłącznie** przez specjalistów-elektryków.
- (f) Liittäminen kuuluu **ainoastaan** koulutettujen sähköalan ammattilaisten tehtäviin.
- Подключение проводится только специалистом-электриком.
- R Bağlantı **sadece** eğitimli elektrik teknisyenleri tarafından yapılmalıdır.
- <sup>©N</sup> 布线需由专业电工执行





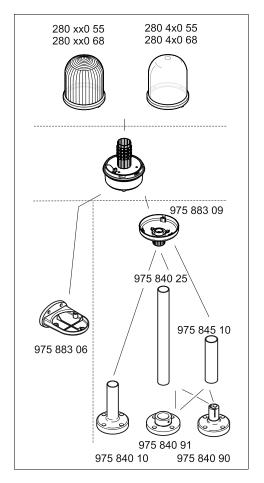


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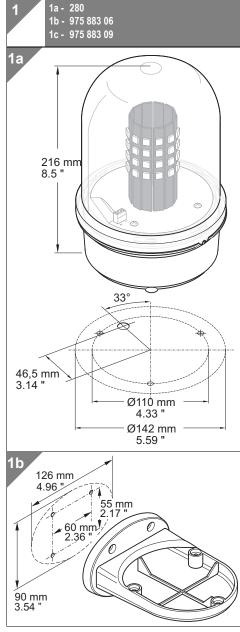
WERMA Signaltechnik GmbH + Co. KG D-78604 Rietheim-Weilheim Telefon +49 (0)7424 / 9557-0 Telefax +49 (0)7424 / 9557-44 info@werma.com www.werma.com

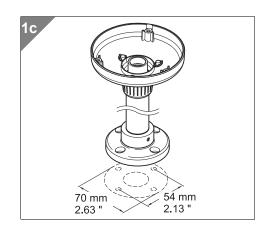


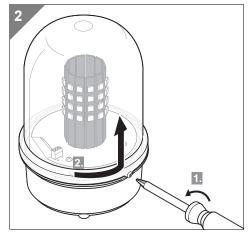
280 410 55	12-50 V=, 12 V=, ~500 mA
	50 V=, ~100 mA
280 410 68	230 V~, 50 Hz, ~50 mA
280 x00 55	12-50 V=, 12 V=, ~500 mA
	50 V=, ~100 mA
280 x00 68	230 V~, 50 Hz, ~50 mA
280 470 55	24 V=, ~400 mA
280 470 68	230 V~, 50 Hz, ~200 mA
280 480 68	230 V~, 50 Hz, ~200 mA
	intact: I ~200 mA
	defect: I < 50 mA

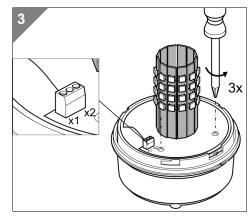


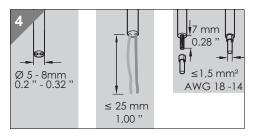


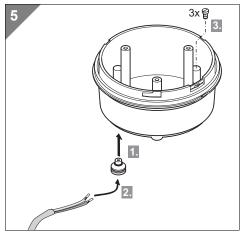


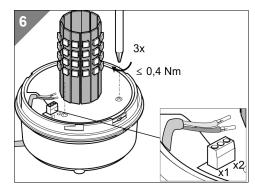


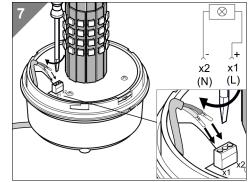


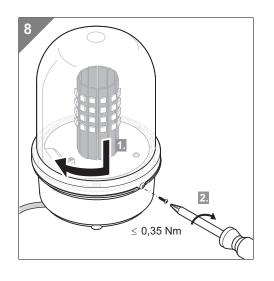












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