WERMA SIGNALTECHNIK

Obstruction Lights




The LED Signal Beacons especially for the marking of aviation obstacles

Obstruction Lights - the background

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.**

What directives and regulations are there?

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.

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").

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LED Obstruction Light 280

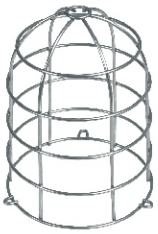
Lightweight solution ensures easy installation

- LED obstruction light certified in accordance with German BMVBS regulations
- For use as "Low-intensity Obstruction Light, Type A" in accordance with ICAO Annex 14
- Lightweight solution ensures easy installation
- High impact resistance to 20 Joules
- DC multi-voltage version

TECHNICAL SPECIFICATIONS:

Life duration up to 50,000 hrs

Dimensions (Ø x Height):	142 mm x 218 mm
Housing:	PC/ABS-Blend
Lens:	PC, transparent, clear
Fixing:	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Connection:	Screw terminal with wire protection max. 2.5 mm² Contact protection according to VDE
Cable entry:	Cable diameter 5-7 mm
Duty cycle:	100 %



Plastic bracket, adaptor for tube mounting and wire guard (accessories)

ORDER SPECIFICATIONS:

Voltage	24 V = (12-50 V)	230 V ~
Current consumption	12 V: 500 mA 50 V: 100 mA	50 mA
Aviation red	**280 410 55**	**280 410 68**

ACCESSORIES:

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

ADDITIONAL INFORMATION:

Extremely high light output using unique LED technology

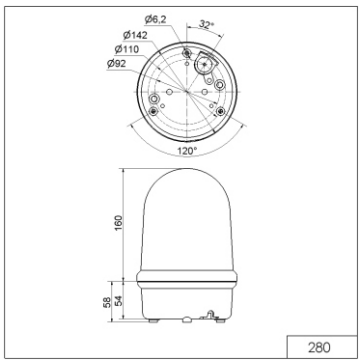
What benefits do you have?

1. Greater safety

- The high light intensity ensures obstacles are clearly marked.
- Thanks to a life duration of up to 50,000 hours, the risk of a beacon failure is minimal.

2. Reduction in maintenance costs

- The LED technology guarantees a life duration of up to 50,000 hours. As a result, the LED Obstruction Light from WERMA is maintenancefree – and will require no attention for almost 6 years.
- No need to change light bulbs.
- Thanks to the LED technology, a reserve beacon and monitoring of



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LED Obstruction Light 281

- LED Obstruction Light with robust glass/metal housing
- Suitable for use in rough conditions, salt water resistant
- DC multi-voltage version (12-50 V)
- LED Obstruction Light certified in accordance with German BMVBS regulations
- For international use as „Low-intensity Obstacle Light, Type A" in accordance with ICAO Annex 14

TECHNICAL SPECIFICATIONS:

Life duration up to 50,000 hrs

Dimensions (Ø x Height):	185 mm x 205 mm
Housing:	Aluminium, coloured powder coating
Lens:	Reinforced borosilicate glass
Fixing:	Base mounting, tube mounting M 25 (no accessory required)
Connection:	Screw terminal with wire protection max. 2.5 mm² Contact protection according to VDE
Cable entry:	Cable gland M 25 x 1.5 mm (included in assembly), Cable diameter 9-17 mm

Available: 1st quarter 2011

Long-life and maintainance-free LED technology

ORDER SPECIFICATIONS:

Voltage	12-50 V =	230 V ~
Current consumption	500-100 mA	50 mA
Aviation red	**281 410 55**	**281 410 68**

ADDITIONAL INFORMATION:

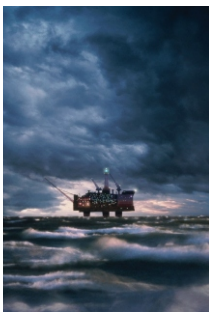
Salt water and fuel resistant

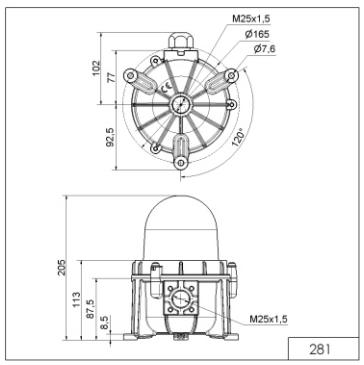
The new WERMA obstruction light is especially robust. It provides reliable signalling for all air traffic hazards – even in extreme conditions. To protect the obstruction light against sea salt, UV radiation or aviation fuel, WERMA has selected a particularly robust material - the aluminium die-cast housing is made of a high-quality salt water resistant alloy which is covered with a powder coating.

The glass lens is made of hardened borosilicate glass. This ensures that the signalling device does not weather even in the toughest Conditions.

Once installed, the signalling device lasts many years

Thanks to the LED technology, WERMA's obstruction light is maintenance-free. With a life duration of up to 50,000 hours the LEDs last up to 50 times longer than conventional light bulbs. This fact embodies one of the biggest advantages of LED obstruction lights, as it does away with the cumbersome job of replacing light bulbs at great heights.





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