Lighting signal. Obstacle light.

**LB-LED**

LB-LED 48V, LB-LED 230V

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**About the product**

The obstruction light LB-LED is a signal luminaire designed for light marking (beaconage) of fixed high objects (aerials, communications towers, stacks etc.), in order to avoid the collision of the flying vehicles with these aerial obstacles.

Type: Low-intensity obstacle light Type A – over 10cd. Steady burning obstruction light.
**Application**

Luminous beacon to mark during the night any obstacle that may present hazard to aircraft navigation. It can be mounted on buildings being at up to 3000 m altitude.

Compliance with The International Civil Aviation Organization - ICAO Aerodromes Annex 14 Volume I, Chapter 6, Edition July 2004: Obstacle light Type A (fixed obstacle) with luminous intensity of 10cd (+6°...+10° starting from the horizontal plane), the vertical aperture of the fascicle >10°. The horizontal distribution angle of the luminous intensity is of 360° (omnidirectional light).

The beacon luminaire LB-LED covers the function of a double-lamp.

**Light sources**

- Side emitting LEDs with a lifetime L70B50 of 50000 hours (that means 14 years of 10 hours/day operating time)
- The light source emits aviation red light with the wavelength $\lambda=625\text{nm}$.
**Product type**  |  **L** [mm]  |  **m** [mm]  |  **h** [mm]  |  **n** [mm]  
--- | --- | --- | --- | ---  
LB-LED  |  172  |  70  |  186  |  60  

**Photometric data LB-LED**

Light distribution [Cd]

LB LED is an Obstacle light Type A (fixed obstacle) with luminous intensity of 10cd (+6°...+10° starting from the horizontal plane), the vertical aperture of the fascicle >10°. The horizontal distribution angle of the luminous intensity is of 360° (omnidirectional light). The adequate photometric performances correspond to Obstacle light Type A are ensured even when one LED is not functioning. The light source emits aviation red light with the wavelength \( \lambda = 625\text{nm} \).
Description

- The beacon is equipped with light sources with reduced power consumption and extremely long lifetime: 4 power LEDs with lifetime till 100,000 hours. There are no necessary interventions during exploitation for light sources replacement.
- There is not necessary to dismantle the product in order to connect it to the power supply or for maintenance.
- The product is equipped with terminals for distance connection of a green LED, for signalling the proper operation.
- The body and the red filter are made of UV and solar radiation resistant polycarbonate.
- The function of a double-lamp is ensured by special measures of protection and safety in functioning:
  - Each of the four LEDs has an independent electronic circuit for power supply.
  - The damaging of a LED or an electronic component from the supplying circuit does not compromise the functioning of the other LEDs. Such a failure is signalled at distance by turning off the control green LED.
  - With three LEDs that remain operating there are still ensured the photometric requirements corresponding to an obstacle lamp type A (minimum 10 cd).
- Exterior cable diameter exterior: 6.14mm
- The cable for the signalling LED: minimum section 1 mm², maximum length 25 m.
- Colour: grey, diffuser: red.

Mounting

- The product allows both the mounting with a collar on a pipe with the external diameter of Ø30 mm, or with fastening on a vertical flange through four screws M6x45.
- It can be mounted on buildings being at up to 3000 m altitude.

Technical features

- Rated voltage: 48V ca/50 Hz (variant for 230 V/50 Hz).
- Relative humidity: till 80% at the temperature of +20°C.
- Saline fog: 48 hours according to IEC 60068-2-11.
- Mechanical vibration: 30 Hz, acceleration 0.5g, during two hours (IEC 60068-2-6).
- Mechanical impact resistance: IK08 according to SR EN 50102.
- The luminaire is manufactured according to the requirements of the luminaire standard SR EN 60598-1.

Compliance with the European Directives
- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive

The product could be realised in more variants functions of the rated voltage.

<table>
<thead>
<tr>
<th>Product type</th>
<th>Filters’ colour</th>
<th>Product code</th>
<th>Rated voltage [V]</th>
<th>Rated power [W]</th>
<th>Protection degree</th>
<th>Class of protection against electric shock</th>
<th>IK</th>
<th>Weight [Kg]</th>
<th>Mounting accessories</th>
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</thead>
<tbody>
<tr>
<td>LB-LED 48V</td>
<td>red</td>
<td>46614001</td>
<td>48Vca ±10%</td>
<td>15.0</td>
<td>IP66 (IP44 terminals)</td>
<td>III</td>
<td>IK08</td>
<td>2.20</td>
<td>collar or flange</td>
</tr>
<tr>
<td>LB-LED 230V</td>
<td>red</td>
<td>46614002</td>
<td>230Vca ±10%</td>
<td>14.3</td>
<td>IP66 (IP44 terminals)</td>
<td>II</td>
<td>IK08</td>
<td>2.20</td>
<td>collar or flange</td>
</tr>
</tbody>
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