

# FLASHING WARNING LIGHTS 5 J

## WBL-M / WBS-M



Flashing light with integrated flash monitoring and fault message contact.

- For systems with safety-relevant applications, such as X-ray and laser equipment.
- Housing and fixing bracket made of sturdy anodised aluminium.
- Also available with GL approval.
- Ideally suited for tough industrial environments.
- Flash tube secured by additional steel clamp.
- Impact-proof lens.



protection system



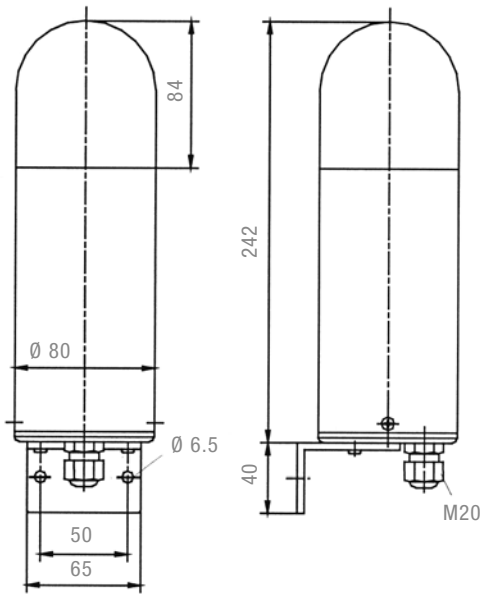
operating temperature



| PRODUCT                                 | WBL-M  |   | WBS-M   |         |         |
|---|--|---|---------|---------|---------|
| <b>DATA</b>                             |  |   |         |         |         |
| Rated voltage                           | 230 V  | 42 V  | 48 V    | 24 V    | 12 V    |
|   | AC 50   60 Hz  | AC 50   60 Hz   | DC      | DC      | DC      |
| Operating range                         | 185–242 V  | 37–47 V   | 40–57 V | 18–35 V | 10–15 V |
| Nominal current consumption             | 0.07 A   | 0.5 A   | 0.18 W  | 0.25 A  | 0.6 A   |
| Failure indication                      | switching voltage  | max. 250 V AC   |         |         |         |
|   | switching current  | max. 3 A  |         |         |         |
| Flash rate                              | 1 Hz = 60 flashes/min  |   |         |         |         |
| Flash energy                            | 5 J  |   |         |         |         |
| Light intensity (DIN 5037) <sup>1</sup> | 61 cd  |   |         |         |         |
| Max. viewing distance                   | 181 m  |   |         |         |         |
| Operating temperature                   | –20 °C ... +55 °C  |   |         |         |         |
| Storage temperature                     | –40 °C ... +70 °C  |   |         |         |         |
| Relative humidity                       | 90 %   |   |         |         |         |
| Protection system (EN 60529)            | IP 54 (vertical mounting)  |   |         |         |         |
| Duty cycle                              | 100 %  |   |         |         |         |
| Service life of the light source        | light emission still 70 % after 8,000,000 flashes  |   |         |         |         |
| Material                                | lens   |  polycarbonate (PC) |         |         |         |
|   | housing  | aluminium (Al Mg Si 1), yellow anodised   |         |         |         |
|   | base   | polycarbonate (PC) with fibre glass   |         |         |         |
| Cable entry                             | M20x 1.5   |   |         |         |         |
| Connecting terminal                     | single wire 0.5–2.5 mm <sup>2</sup> , fine wire 0.5–1.5 mm <sup>2</sup> , with cable end sleeves DIN 46228/1 |   |         |         |         |
| Weight                                  | 700 g  |   |         |         |         |

<sup>1</sup> with a clear lens

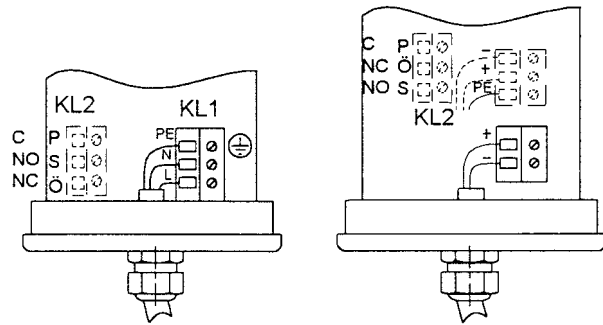
**DIMENSIONS**






**CONNECTION DIAGRAMS**

**WBL-M**

**WBS-M**



| ARTICLE NO.  | WBL-M        |              | WBS-M        |
|--|--------------|--------------|--------------|
| LENS COLOUR  | 230 V AC     | 115 V AC     | 24 V DC      |
|  | 21003103 156 | 21003163 156 | 21003803 156 |
|  | 21003104 156 | 21003164 156 | 21003804 156 |
|  | 21003105 156 | 21003165 156 | 21003805 156 |

Article numbers for other colours and voltages on request.

**OPTIONS/ACCESSORIES**



Article no.  
28710500042

**CONFORMITY TO STANDARDS**

The visual characteristics of flashing lights conform to the European standard DIN EN 842; “**Machine safety – visual alarm signals**”. Requirements contained in the DIN EN 981 standard; “**Machine safety – system of acoustic and visual alarm and information signals**”, can be fulfilled. The colours “red” for the emergency signal and “yellow” for the warning signal conform to the requirements of IEC 73 / DIN EN 60073 / VDE 0199; “**Coding of display devices and control elements using colours and supplementary means**”.

References to visual alarm devices can be found in the following standards:  
 EN 60825-1      Radiation safety of laser devices, identical to IEC 825 and DIN-VDE 0837  
 DIN EN 54      Fire alarm systems  
 DIN 54113-2    Radiation protection regulations for the technical operation of X-ray equipment up to 500 kV