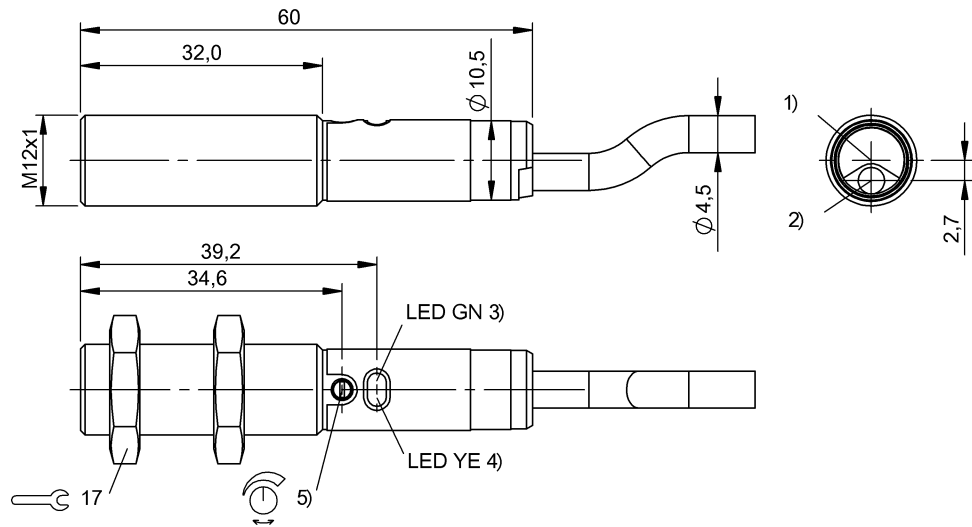


**BOS 12M-PS-PR10-02**  
**Order code: BOS01WR**

Photoelectric sensor  
 Series 12M GLOBAL  
 Retro-reflective sensor  
 Sn = 3 m, adjustable

DC, direct current  
 PNP (1x)  
 NO: dark-on  
 1,000 Hz  
 LED, red light

**BALLUFF**  
 sensors worldwide



1) Optical axis receiver 2) Optical axis emitter 3) Power 4) Light reception/Limit range 5) Sn

**Basic data**

Operating voltage UB DC 10.0 V... 30.0 V  
 Eff. operating voltage Ue DC 24.0 V  
 Ripple max. (% of Ue) 15 %  
 No-load current max. Io at Ue 20 mA  
 Polarity reversal protected yes  
 Rated insulation voltage Ui 75 V DC  
 Indicator Power - LED GN  
 Light receipt - LED YE  
 Limit range - LED YE, flash.  
 Adjuster Potentiometer 270° (1x)  
 Setting Switching distance (Sn)  
 Ambient temperature Ta -5 °C... 55 °C

**Optical data**

Principle of optical operation Retro-reflective sensor  
 Operating range Ro 0...3 m  
 Reference reflector BOS R-1  
 Light type LED, red light  
 Wavelength 644 nm  
 LED group acc. IEC 62471 Exempt group  
 Polarizing filter yes  
 Light spot size, typical Ø 160 mm at 3 m  
 Beam characteristic Divergent  
 Ambient light max. 10,000 Lux

**Electrical data**

Eff. operating distance Sr 3,000 mm  
 Switching output PNP (1x)  
 Switching function NO  
 Eff. operating current Ie 100 mA  
 Switching freq. f max. (at Ue) 1,000 Hz

Turn on time ton max. 0.50 ms  
 Turn off time toff max. 0.50 ms  
 Voltage drop Ud max. (at Ie) 1.5 V  
 Short circuit protected yes  
 Load capacitance max. (at Ue) 0.20 µF

**Mechanical data**

Style Cylinder, straight optics  
 Dimensions Ø12.0 mm x 60.0 mm  
 Mounting type Nut M12x1  
 Tightening torque max. 7/15 Nm  
 Housing material Brass  
 Surface protection Nickel-plated  
 Werkstoff aktive Fläche PMMA  
 Degree of protec. per IEC60529 IP67  
 Connection type Cable  
 Cable diameter D max. 4.6 mm  
 Cable length 2.00 m  
 Number of conductors 3  
 Conductor cross-section 0.34 mm²  
 Cable jacket material PVC

**Approval**

Approvals / Conformity CE

**Remarks**

Basic standard IEC 60947-5-2  
 The sensor is functional again after the overload has been eliminated.  
 Polarizing filters prevent spurious switching due to reflecting and shiny parts.  
 For additional information, refer to user's guide.  
 Order accessories separately.

000000000000/240089/000000000



**BOS 12M-PS-PR10-02**  
**Order code: BOS01WR**

Photoelectric sensor  
Series 12M GLOBAL  
Retro-reflective sensor  
Sn = 3 m, adjustable

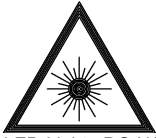
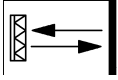
DC, direct current  
PNP (1x)  
NO: dark-on  
1,000 Hz  
LED, red light

**BALLUFF**

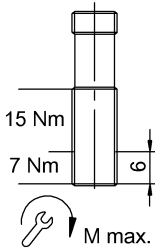
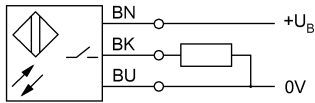
sensors worldwide

Definitions see general catalog

Subject to change without notice.



LED-Light - DO NOT STARE INTO BEAM! Exempt group per IEC 62471:2006-07



000000000000/240089/00000000