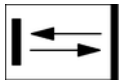
# BOS 12M-PS-RD11-S4
# Order code: BOS01TN

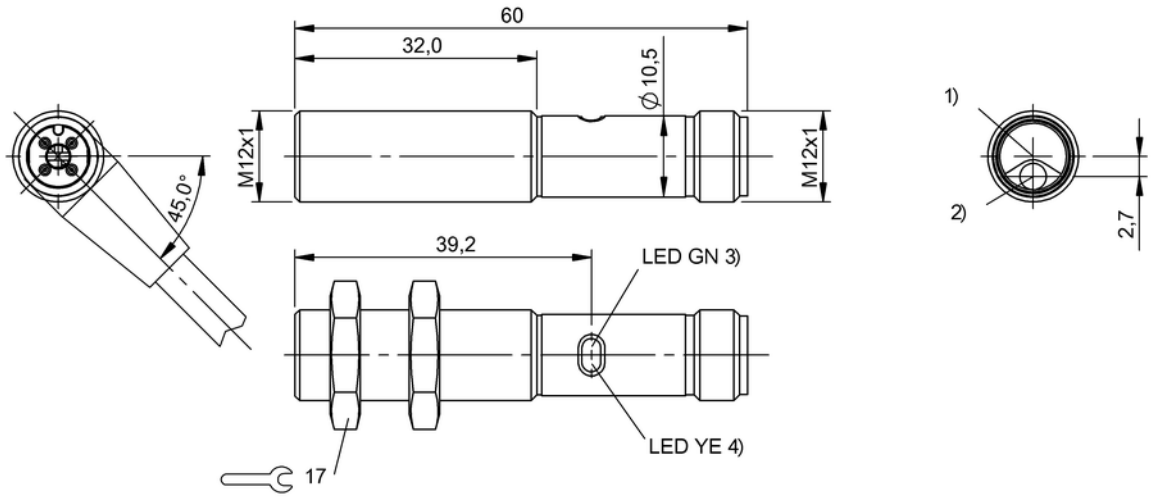
**Photoelectric sensor**
**Series 12M GLOBAL**
**Light scanner, energetic**
**Sn = 100 mm**

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

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








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

## 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 % |
| Polarity reversal protected | yes |
| Rated insulation voltage Ui | 75 V DC |
| Indicator | Power - LED GN<br>Light receipt - LED YE<br>Limit range - LED YE, flash. |
| Adjuster | No |
| Ambient temperature Ta | -5 °C... 55 °C |

## Optical data

| | |
|---|---|
| Principle of optical operation | Light scanner, energetic |
| Erfassungsbereich Sd | 1...100 mm |
| Light type | LED, red light (Pin Point) |
| Wavelength | 650 nm |
| LED group acc. IEC 62471 | Exempt group |
| Light spot size, typical | Ø8 mm at 100 mm |
| Beam characteristic | Divergent |
| Ambient light max. | 10,000 Lux |

## Electrical data

| | |
|---|---|
| Eff. operating distance Sr | 100 mm |
| Minimum operating distance | 1 mm |
| Switching output | PNP (1x) |
| Switching function | NO (pin 4) |
| 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 | Connector |
| Connector type | M12x1-S04 |

## Approval

| | |
|---|---|
| Approvals / Conformity | CE |

## Remarks

| | |
|---|---|
| Basic standard | IEC 60947-5-2 |

The sensor is functional again after the overload has been eliminated.
Reference object (target): Gray card, 200 x 200, 90 % remission, axial approach.
For additional information, refer to user's guide.
Order accessories separately.

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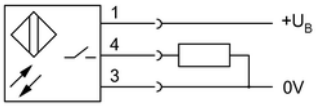
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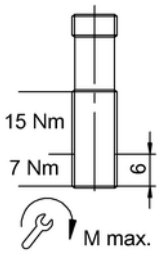
Definitions see general catalog

Subject to change without notice.










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