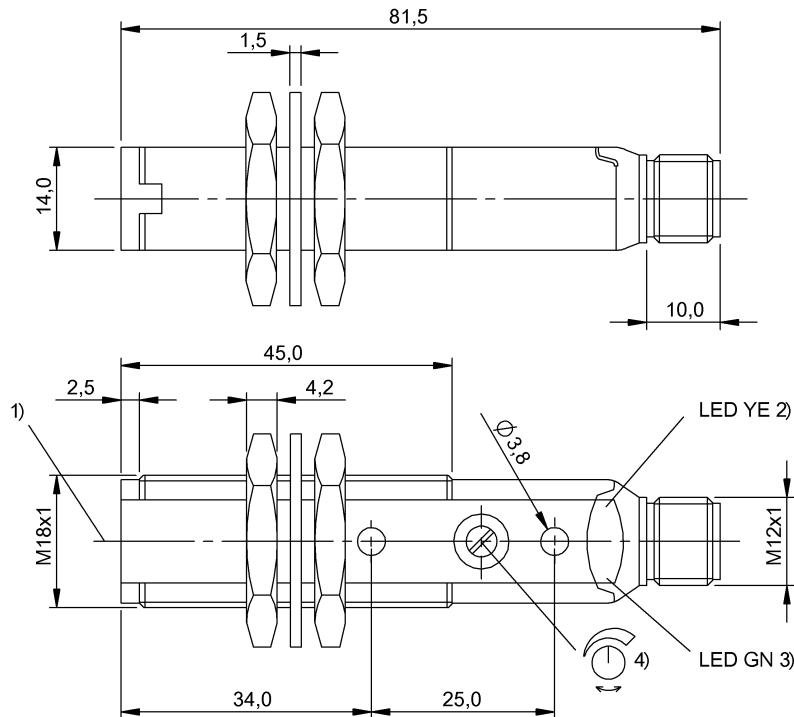


BOS 18KF-PA-1PD-S4-C BOS00JZ



1) Optical axis 2) Output function 3) Stability 4) Sn



Display/Operation

| | |
|----------|-------------------------------|
| Adjuster | Potentiometer 270° (1x) |
| Setting | Rated switching distance (Sn) |

Electrical connection

| | |
|-----------------------------|----------------------------------|
| Connection | M12x1-Connector, 4-pole, A-coded |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|-------------|
| MTTF (40 °C) | 635 a |
| No-load current I _o max. at U _e | 35 mA |
| Operating voltage U _b | 10...30 VDC |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e DC | 100 mA |
| Rated operating voltage U _e DC | 24 V |
| Switching frequency | 1000 Hz |
| Turn-off delay t _{off} max. | 0.5 ms |
| Turn-on delay t _{on} max. | 0.5 ms |
| Voltage drop U _d max. at I _e | 2 V |

Environmental conditions

| | |
|---------------------------|-------------|
| Ambient temperature | -25...55 °C |
| Protection type IEC 60529 | IP67 |

Functional safety

| | |
|---------------------|------|
| Diagnostic coverage | 0 % |
| Functional safety | no |
| Mission Time | 10 a |

General data

| | |
|---------------------|----------------------------------|
| Approval/Conformity | CE cULus |
| Basic standard | IEC 60947-5-2 |
| Series | 18KF |
| Style | Flat cylinder Straight optics |
| Trademark | Global |

Material

| | |
|------------------|-----|
| Housing material | PBT |
|------------------|-----|

BOS 18KF-PA-1PD-S4-C BOS00JZ

Material sensing surface PMMA

Mechanical data

Dimension Ø 18 x 14 mm
Fastening detail Screw M3
Nut M18x1
Tightening torque max. 1.5 Nm

Optical data

Ambient light max. 5000 Lux
Beam characteristic Divergent
Light type Infrared
Wave length 880 nm

Output/Interface

Switching output PNP Normally closed (NC)
PNP Normally open (NO)

Range/Distance

Measuring range 0...400 mm
Range 0...400 mm
Rated operating distance S_n 400 mm, Adjustable
Ripple max. (% of U_e) 8 %

Remarks

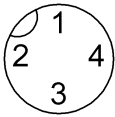
The sensor is functional again after the overload has been eliminated.
Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.

For additional information, refer to user's guide.
Order accessories separately.

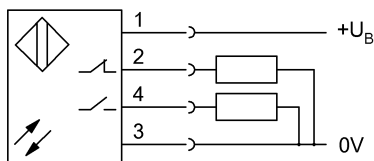
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors

