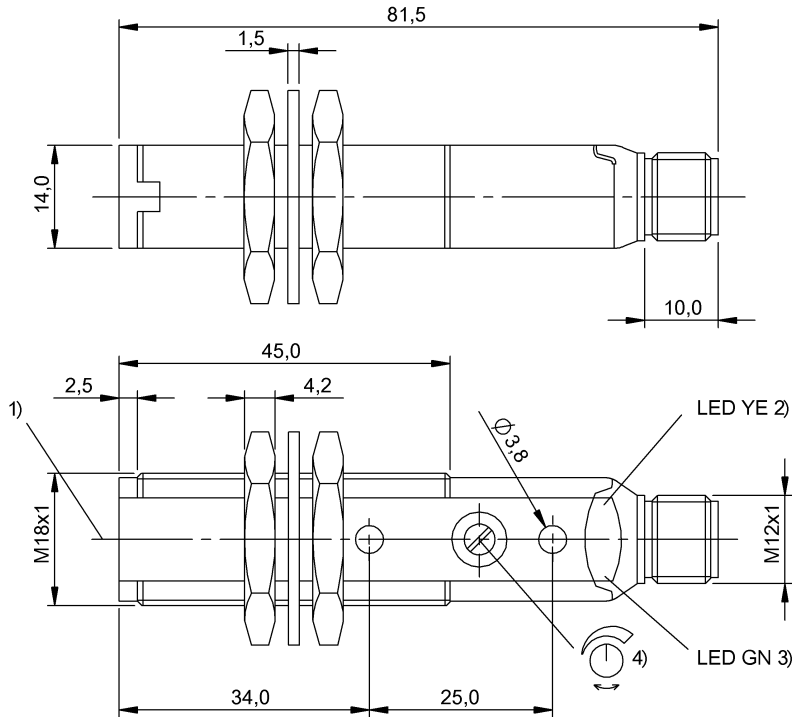


BOS 18KF-PA-1QD-S4-C BOS00K3



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



Display/Operation

| | |
|----------|-------------------------|
| Adjuster | Potentiometer 270° (1x) |
| Setting | Sensitivity (Sn) |

Electrical connection

| | |
|-----------------------------|-----|
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|-------------|
| MTTF (40 °C) | 634 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 |
| Reference reflector | BOS R-1 |

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-1QD-S4-C BOS00K3

Material sensing surface PMMA

Mechanical data

Blind zone 100 mm
 Dimension \varnothing 18 x 14 mm
 Fastening detail Screw M3
 Nut M18x1
 Tightening torque max. 1.5 Nm

Optical data

Ambient light max. 5000 Lux
 Light type LED Red light
 Polarizing filter yes
 Principle of optical operation Retroreflective sensor
 Wave length 660 nm

Output/Interface

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

Range/Distance

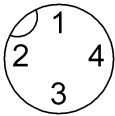
Measuring range 0...4.5 m
 Range 0...4.5 m
 Rated operating distance S_n 4.5 m, Adjustable
 Ripple max. (% of U_e) 8 %

Remarks

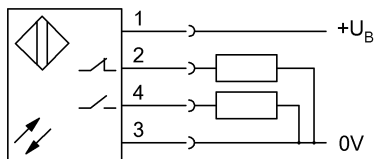
The sensor is functional again after the overload has been eliminated. Polarizing filters prevent spurious switching due to reflecting and shiny parts. For additional information, refer to user's guide. Order accessories separately. Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane. 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

