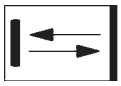
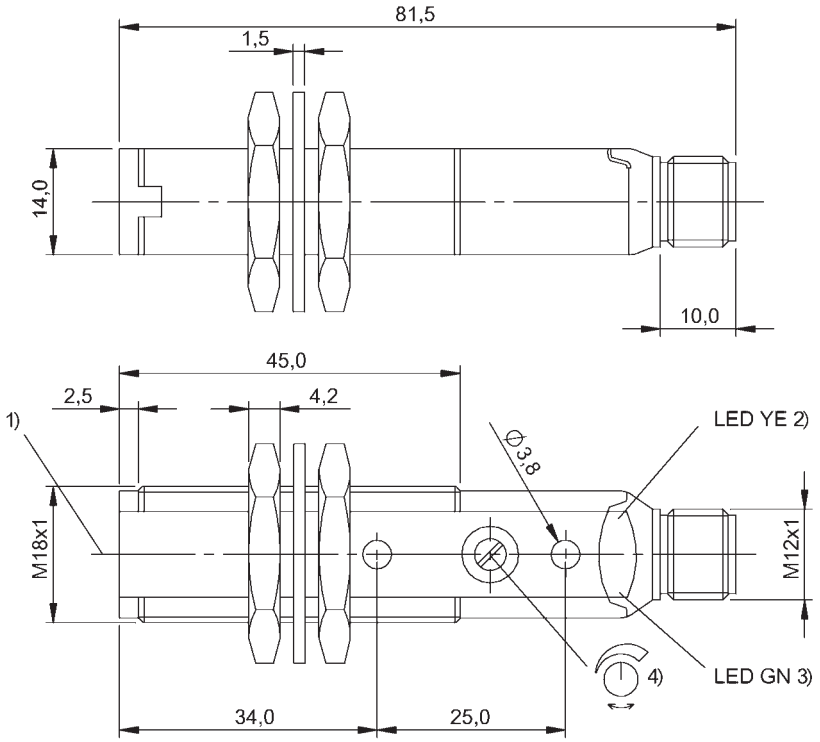
Photoelectric sensor

BOS 18KF-PA-1PE-S4-C
BOS00K1





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

- **Photoelectric sensor**
- **Series 18KF**
- **Infrared**
- **up to 1 m**

LISTED IND. CONT. EQ. 1TD4 for use in the secondary of a class 2 source of supply

General attributes

Adjuster	Potentiometer 270° (1x)
Approvals / Conformity	CE cULus
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Indicator	Stability - LED GN Output function - LED YE
Polarity reversal protected	yes
Series	Series 18KF
Setting	Switching distance (Sn)
Short circuit protected	yes
Trademark	GLOBAL

Electrical attributes

Connection type	Connector
Eff. operating current Ie	100 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
No-load current max. Io at Ue	35 mA
Operating voltage UB max. DC [V]	30.0 V
Operating voltage UB min. DC [V]	10.0 V
Rated insulation voltage Ui	75 V DC
Ripple max. (% of Ue)	8 %
Switching freq. f max. (at Ue)	1000 Hz
Switching function	NO-NC (pins 4-2)
Switching output	PNP (2x)
Turn on time ton max.	0.50 ms
Voltage drop Ud max. (at Ie)	2.0 V

Mechanical attributes

Ambient temperature Ta max.	55 °C
Ambient temperature Ta min.	-25 °C
Connector type	M12x1-S04
Detection range Sd	0...700 mm
Eff. operating distance Sr	700 mm
Housing material	PBT
Length 1	Ø18.0 mm
Length 2	81.5 mm
Length 3	14.0 mm
Minimum operating distance	0 mm
Mounting type	Screw M3 Nut M18x1
Range Sn	Sn = 700 mm, adjustable
Sensing face material	PMMA
Style	Flat cylinder, straight optics
Tightening torque max.	1.5 Nm

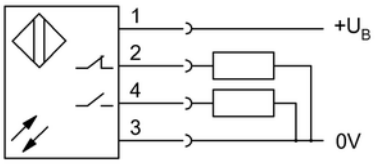
Optical attributes

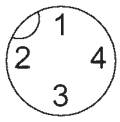
Light type	Infrared
Principle of optical operation	Light scanner, energetic
Switching function, optical	NO light-on - NC dark-on
Wavelength	880 nm

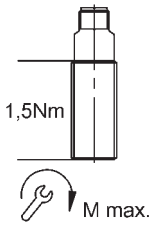
Additional text

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.


1
2
4
3
+U_B
0V


1
2
4
3


1,5Nm
M max.