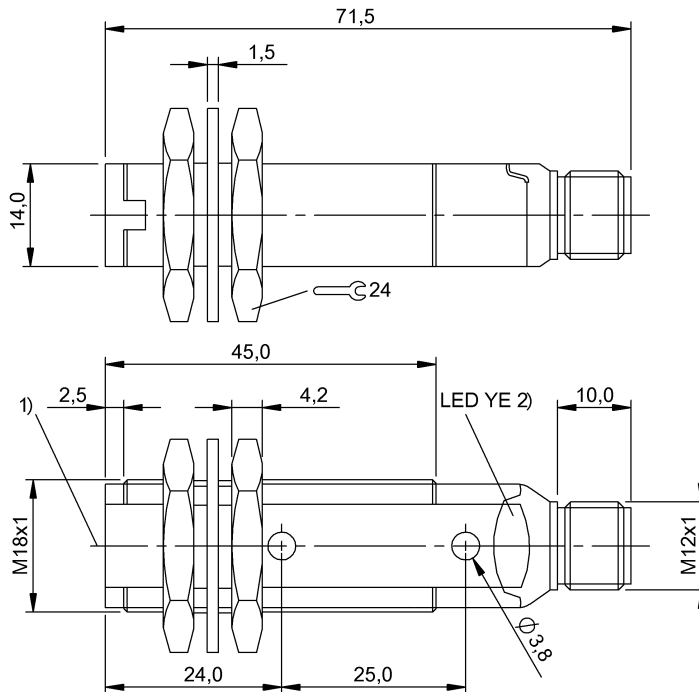


BOS 18KF-PA-1RE-S4-C BOS00K5



1) Optical axis 2) Output function



Electrical connection

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

Electrical data

MTTF (40 °C)	834 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
Material sensing surface	PMMA

BOS 18KF-PA-1RE-S4-C BOS00K5

Mechanical data

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

Optical data

Ambient light max.	5000 Lux
Light type	Infrared
Polarizing filter	no
Principle of optical operation	Retroreflective sensor
Wave length	880 nm

Output/Interface

Switching output	PNP Normally closed (NC) PNP Normally open (NO)
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Range/Distance

Measuring range	0...5 m
Range	0...5 m
Rated operating distance S_n	5 m, Adjustable
Ripple max. (% of U_e)	8 %

Remarks

The sensor is functional again after the overload has been eliminated. For additional information, refer to user's guide.

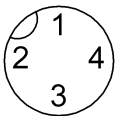
Order accessories separately.

Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

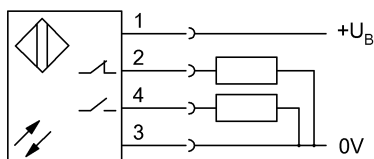
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

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

