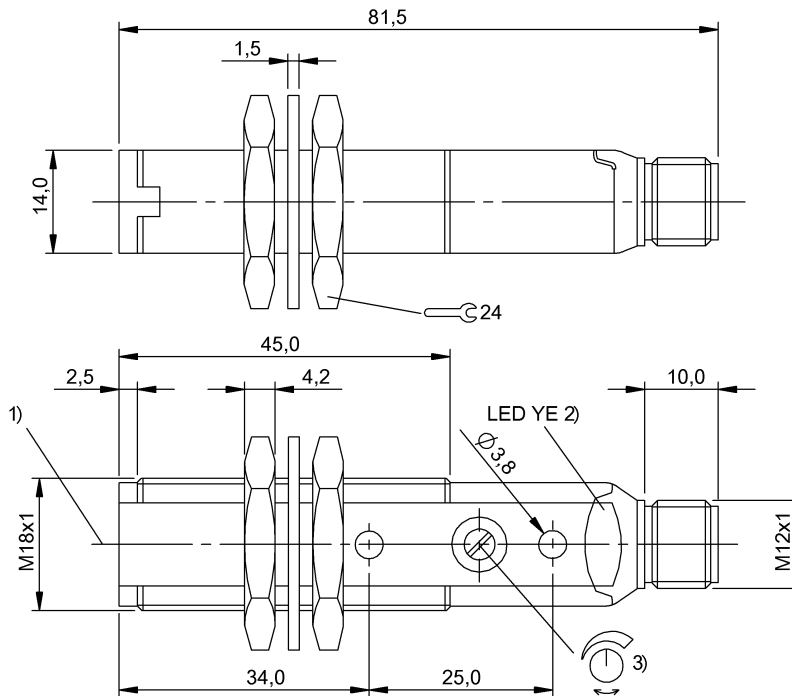


BOS 18KF-PA-1LQP-S4-C BOS00JT



1) Optical axis 2) Output function 3) Sn



Display/Operation

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

Electrical connection

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

Electrical data

MTTF (40 °C)	634 a
No-load current I ₀ max. at U _e	35 mA
Operating voltage U _b	10...30 VDC
Pulse duration t max.	6.0 µs
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	1500 Hz
Turn-off delay t _{off} max.	0.33 ms
Turn-on delay t _{on} max.	0.33 ms

Voltage drop U_d max. at I_e

2 V

Environmental conditions

Ambient temperature	-10...50 °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

BOS 18KF-PA-1LQP-S4-C BOS00JT

Material

Housing material	PBT
Material sensing surface	PMMA

Mechanical data

Blind zone	100 mm
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
Average power Po max.	390 µW
Laser class per IEC 60825-1	1
Light type	Laser Red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Wave length	650 nm

Output/Interface

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

Range/Distance

Measuring range	0...16 m
Range	0...16 m
Rated operating distance Sn	16 m, Adjustable
Ripple max. (% of Ue)	8 %

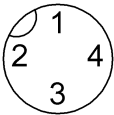
Remarks

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

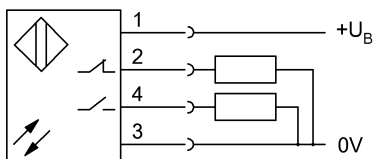
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

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

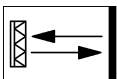
Connector view



Wiring Diagram

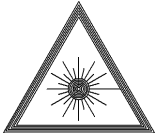


Symbols for Optoelectronic Sensors



BOS 18KF-PA-1LQP-S4-C
BOS00JT

Warning Symbols



LASER CLASS 1 per IEC 60825-1