

1) Operating voltage, 2) Optical axis



Basic features

Approval/Conformity	cULus CE WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 6K-...-LE10-...
Series	6K
Style	Square Connection 90°

Display/Operation

Display	LED green: Power
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Electrical connection

Connection	Connector, M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

No-load current I_0 max. at U_e	30 mA
Operating voltage U_b	10...30 VDC
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	12 %

Environmental conditions

Ambient temperature	-20...60 °C
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67
IP rating per DIN 40050	IP69K

Functional safety

MTTF (40 °C)	426 a
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Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	12 x 41 x 21.6 mm
Mounting part	Screw M3

Photoelectric Sensors
BOS 6K-XT-LS10-S49
Order Code: BOS01M1



Optical features

Average power Po max.	390 µW
Beam characteristic	Divergent
Laser class per IEC 60825-1	1
Light spot size	14 x 14 mm at 20 m
Light type	Laser red light
Principle of optical operation	Through-beam sensor (Emitter)
Pulse duration t max.	2.0 µs

Pulse frequency	13.3 kHz
Pulse power Pp max.	4.2 mW
Wave length	650 nm

Range/Distance

Range	0...18 m
Rated operating distance Sn	18 m Adjustable

Remarks

When using as a UL product the ambient temperature Ta max. must not exceed 50°C.

Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

For additional information, refer to user's guide.

Order accessories separately.

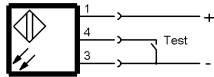
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



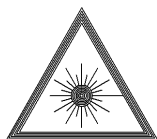
Wiring Diagrams



Opto Symbols



Warning Symbols



LASER CLASS 1 per IEC 60825-1