

1) Alignment mode active, 2) Power/alignment mode active, 3) Alignment mode on/off, 4) Optical axis, 5) rotatable 270°



Basic features

Approval/Conformity	CE cULus Ecolab WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference receiver	BOS 23K-PU-LE10-S4
Series	23K
Style	Square Connection can be rotated

Display/Operation

Adjuster	button
Display	Setup mode - LED yellow+green, alt. LED green: Power
Setting	Alignment mode on/off

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

Input function	Test (Emitter off)
No-load current I_o max. at U_e	30 mA
Operating voltage U_b	10...30 VDC
Protection class	II
Rated insulation voltage U_i	75 V DC
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	10 %

Photoelectric Sensors
BOS 23K-XT-LS11-S4
Order Code: BOS016K

BALLUFF

Environmental conditions

Ambient temperature	-20...60 °C
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating per DIN 40050	IPx9K
Protection degree	IP6x

Functional safety

MTTF (40 °C)	373 a
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Material

Housing material	PC
	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	23 x 51 x 52.4 mm
Mounting	Screw M4
Tightening torque max.	1.5 Nm

Optical features

Average power Po max.	390 µW
Beam characteristic	Divergent
Laser class per IEC 60825-1	1
Light spot size	30 x 30 mm at 25 m
Light type	Laser red light
Principle of optical operation	Through-beam sensor (Emitter)
Pulse duration t max.	1.0 µs
Pulse frequency	70 kHz
Pulse power Pp max.	140.0 mW
Wave length	655 nm

Range/Distance

Range	0...30 m
Rated operating distance Sn	30 m Adjustable

Remarks

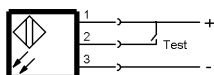
Do not press key using a pointed tool.
Order accessories separately.
For additional information, refer to user's guide.
For more information about MTTF and B10d see MTTF / B10d Certificate

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



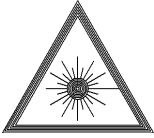
Wiring Diagrams



Opto Symbols



Warning Symbols



LASER CLASS 1 per IEC 60825-1