

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-GI-RE10-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 ₀ max. at U _e	30 mA
Operating voltage U _b	18...30 VDC
Rated operating voltage U _e DC	24 V
Ripple max. (% of U _e)	10 %

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	IP6x
IP rating per DIN 40050	IPx9K

Photoelectric Sensors
BOS 23K-XI-RS11-S4
Order Code: BOS01UT

BALLUFF

Functional safety

MTTF (40 °C) 494 a

IO-Link

IO-Link Profil IDs 0x0006 SSP2.3

Interface

Baud rate 38.4 kBaud

Interface IO-Link

Process data cycle min. 5 ms

Material

Housing material PC

ABS

Material sensing surface PMMA

Mechanical data

Dimension 23 x 51 x 52.4 mm

Mounting part Screw M4

Tightening torque max. 1.5 Nm

Optical features

Beam characteristic Divergent

LED group per IEC 62471 Exempt Group

Light spot size 600 x 600 mm at 20 m

Light type LED, red light

Principle of optical operation Through-beam sensor (Emitter)

Wave length 640 nm

Range/Distance

Range 0...20 m

Rated operating distance Sn 20 m Adjustable

Remarks

Do not press key using a pointed tool.

Order accessories separately.

For additional information, refer to user's guide.

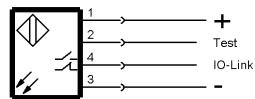
For more information about MTTF and B10d see MTTF / B10d Certificate

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

