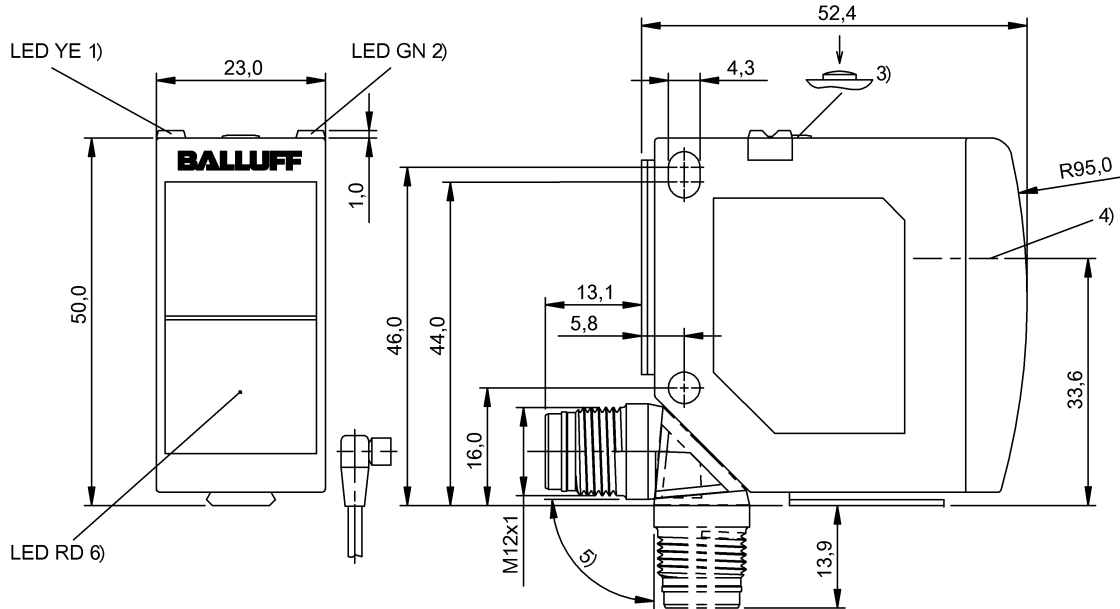


## BOS 23K-GI-RE10-S4 BOS016J



1) Output function/Error 2) Power/setting mode 3) Sn, light/dark 4) Optical axis 5) rotatable 270° 6) Alignment good/limit area



### Display/Operation

Adjuster	Key (1x)
Setting	Rated switching distance (Sn) Light-on/dark-on

### Electrical connection

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

### Electrical data

Baud rate	38.4 kBaud
MTTF (40 °C)	494 a
No-load current I <sub>0</sub> max. at U <sub>e</sub>	30 mA
Operating voltage U <sub>b</sub>	18...30 VDC
Protected against miswiring	yes
Rated operating current I <sub>e</sub> DC	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	300 ms
Reference emitter	BOS 23K-XI-RS11-S4
Residual current I <sub>r</sub> max.	50 µA

Switching frequency	500 Hz
Turn-off delay t <sub>off</sub> max.	1 ms
Turn-on delay t <sub>on</sub> max.	1 ms
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	2 V

### Environmental conditions

Ambient temperature	-20...60 °C
IP rating per DIN 40050	IPx9K
Protection type IEC 60529	IP6x

### Functional safety

Diagnostic coverage	0.0 %
Functional safety	no
Mission Time	10 a

### General data

Approval/Conformity	Ecolab CE cULus
Basic standard	IEC 60947-5-2
Series	23K
Style	Square Connection can be rotated

## BOS 23K-GI-RE10-S4 BOS016J

### Material

Housing material	PC ABS
Material sensing surface	PMMA

### Mechanical data

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

### Optical data

Ambient light max.	5000 Lux
Light type	LED Red light
Principle of optical operation	Through-beam sensor (receiver)

### Output/Interface

Input function	Key disable on/off Same function as button
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Interface	IO-Link 1.1
Process data cycle min.	5 ms
Switching output	PNP/NPN Normally open/ Normally closed (NO/NC)

### Range/Distance

Measuring range	0...20 m
Range	0...20 m
Rated operating distance Sn	20 m, Adjustable
Ripple max. (% of Ue)	10 %

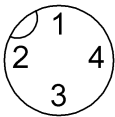
### Remarks

The sensor is functional again after the overload has been eliminated.  
Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach  
Teach-in also possible when object is in motion.  
For additional information, refer to user's guide.  
Order accessories separately.  
Do not press key using a pointed tool.

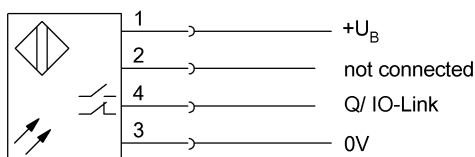
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

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

