



1) Optical axis receiver 2) Optical axis emitter 3) Sn 4) Output function 5) Stability

- Photoelectric sensor
- Series 5K
- LED, red light
- up to 5 m



**General attributes**

Adjuster	Potentiometer 270° (1x)
Approvals / Conformity	cULus CE
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Indicator	Output function - LED YE Stability - LED GN
Polarity reversal protected	yes
Reference reflector	BOS R-9
Series	Series 5K
Setting	Sensitivity (Sn)
Short circuit protected	yes
Trademark	GLOBAL

**Electrical attributes**

Connection type	Connector
Eff. operating current I <sub>e</sub>	100 mA
Eff. operating voltage U <sub>e</sub> DC	24.0 V
Electrical version	DC, direct current
No-load current max. I <sub>o</sub> at U <sub>e</sub>	30 mA
Operating voltage U <sub>B</sub> max. DC [V]	30.0 V
Operating voltage U <sub>B</sub> min. DC [V]	10.0 V
Ripple max. (% of U <sub>e</sub> )	10 %
Switching freq. f max. (at U <sub>e</sub> )	500 Hz
Switching function	NO
Switching output	PNP (1x)
Turn on time t <sub>on</sub> max.	1.00 ms
Voltage drop U <sub>d</sub> max. (at I <sub>e</sub> )	2.0 V

**Mechanical attributes**

Ambient temperature T <sub>a</sub> max.	55 °C
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Ambient temperature T <sub>a</sub> min.	-25 °C
Connector type	M8x1-S49
Eff. operating distance S <sub>r</sub>	4000 mm
Housing material	PC, PBT
Length 1	10.8 mm
Length 2	19.5 mm
Length 3	43.5 mm
Mounting type	Screw M3
Operating range R <sub>o</sub>	0...4 m
Range S <sub>n</sub>	S <sub>n</sub> = 4 m, adjustable
Sensing face material	PMMA
Style	Block, 90° connection

**Optical attributes**

Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retro-reflective sensor
Switching function, optical	NO: dark-on
Wavelength	660 nm

**Additional text**

Polarizing filters prevent spurious switching due to reflecting and shiny parts.  
Only for NFPA 79 applications (machines with a supply voltage of maximum 600 volts).  
Device shall be connected only by using any R/C (CYJV2) cord, having suitable ratings.  
Order accessories separately.  
Operating object (test target): Gray card, 200 x 200, 90 % remission, lateral approach,

direction of movement vertical to plane of lens axes.  
For additional information, refer to user's guide.  
The sensor is functional again after the overload has been eliminated.

Photoelectric sensor

**BOS 5K-PS-RR10-S49**  
**BOS015E**

**BALLUFF**

sensors worldwide

