



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

- Photoelectric sensor
- Series 5K
- LED, red light
- up to 200 mm



**General attributes**

Adjuster	Potentiometer 6-turn (1x)
Approvals / Conformity	cULus CE
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Indicator	Output function - LED YE
Polarity reversal protected	yes
Series	Series 5K
Setting	Switching distance (Sn)
Short circuit protected	yes
Trademark	GLOBAL

Connector type	M8x1-S75
Detection range Sd	20...200 mm
Eff. operating distance Sr	200 mm
Housing material	PC, PBT
Length 1	10.8 mm
Length 2	19.5 mm
Length 3	32.7 mm
Minimum operating distance	10 mm
Mounting type	Screw M3
Range Sn	Sn = 200 mm, adjustable
Sensing face material	PMMA
Style	Block, 90° connection

**Electrical attributes**

Connection type	Connector
Eff. operating current Ie	100 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
No-load current max. Io at Ue	30 mA
Operating voltage UB max. DC [V]	30.0 V
Operating voltage UB min. DC [V]	10.0 V
Ripple max. (% of Ue)	10 %
Switching freq. f max. (at Ue)	500 Hz
Switching function	NC (pin 2)
Switching output	PNP (1x)
Turn on time ton max.	1.00 ms
Voltage drop Ud max. (at Ie)	2.0 V

**Optical attributes**

Ambient light max.	5,000 Lux
Light type	LED, red light
Optical special feature	Background suppression
Principle of optical operation	Light scanner, triangulation
Switching function, optical	NC: dark-on
Wavelength	660 nm

**Additional text**

Order accessories separately.  
For additional information, refer to user's guide.  
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.  
Reference object (target): Gray card, 100 x 100

**Mechanical attributes**

Ambient temperature Ta max.	55 °C
Ambient temperature Ta min.	-25 °C

90 % remission, axial approach.

The sensor is functional again after the overload has been eliminated.

Photoelectric sensor

**BOS 5K-PO-RH12-S75**  
**BOS011Z**

**BALLUFF**

sensors worldwide

