



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

**Electrical attributes**

Connection type	Cable
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	NO
Switching output	NPN (1x)
Turn on time ton max.	1.00 ms
Voltage drop Ud max. (at Ie)	2.0 V

**Mechanical attributes**

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

Cable diameter D max.	3.5 mm
Cable jacket material	PVC
Cable length	2.00 m
Conductor cross-section	0.20 mm <sup>2</sup>
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	26.8 mm
Minimum operating distance	20 mm
Mounting type	Screw M3
Number of conductors	3
Range Sn	Sn = 200 mm, adjustable
Sensing face material	PMMA
Style	Block, 45° connection

**Optical attributes**

Light type	LED, red light
Optical special feature	Background suppression
Principle of optical operation	Light scanner, triangulation
Switching function, optical	NO: light-on
Wavelength	660 nm

**Additional text**

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

90 % remission, axial approach.  
The sensor is functional again after the overload has been eliminated.

Photoelectric sensor

**BOS 5K-NS-RH12-02**  
**BOS011E**

**BALLUFF**  
*sensors worldwide*

