



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 4  
 Stability - LED GN 5  
 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 NPN (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

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**

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.  
 Polarizing filters prevent spurious switching due to reflecting and shiny parts.  
 Operating object (test target): Gray card, 200 x 200, 90 % remission, lateral approach,

direction of movement vertical to plane of lens axes.  
 The sensor is functional again after the overload has been eliminated.

Photoelectric sensor

**BOS 5K-NS-RR10-S49**  
**BOS015H**

**BALLUFF**  
*sensors worldwide*

