



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 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 NO (pin 4)
 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
 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 43.2 mm
 Minimum operating distance 20 mm
 Mounting type Screw M3
 Range Sn Sn = 200 mm, adjustable
 Sensing face material PMMA
 Style Block, 90° 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.
 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

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

Photoelectric sensor

BOS 5K-NS-RH12-S75
BOS011F

BALLUFF
sensors worldwide

