



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	Cable
Eff. operating current I _e	100 mA
Eff. operating voltage U _e DC	24.0 V
Electrical version	DC, direct current
No-load current max. I _o at U _e	30 mA
Operating voltage U _B max. DC [V]	30.0 V
Operating voltage U _B min. DC [V]	10.0 V
Ripple max. (% of U _e)	10 %
Switching freq. f max. (at U _e)	500 Hz
Switching function	NC
Switching output	PNP (1x)
Turn on time t _{on} max.	1.00 ms
Voltage drop U _d max. (at I _e)	2.0 V

Mechanical attributes

Ambient temperature T _a max.	55 °C
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Ambient temperature T _a 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 ²
Eff. operating distance S _r	4000 mm
Housing material	PC, PBT
Length 1	10.8 mm
Length 2	19.5 mm
Length 3	26.8 mm
Mounting type	Screw M3
Number of conductors	3
Operating range R _o	0...4 m
Range S _n	S _n = 4 m, adjustable
Sensing face material	PMMA
Style	Block, 45° connection

Optical attributes

Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retro-reflective sensor
Switching function, optical	NC: light-on
Wavelength	660 nm

Additional text

Order accessories separately.
For additional information, refer to user's guide.
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-PO-RR10-02
BOS0120

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