

1) Light reception, 2) Stability, 3) Sn, light/dark, 4) Optical axis receiver, 5) Optical axis emitter



Basic features

Basic standard	IEC 60947-5-2, IEC 60947-5-7
Principle of operation	Photoelectric distance sensor
Series	6K
Style	Square Connection 90°

Display/Operation

Adjuster	button
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Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

No-load current I_o max. at U_e	30 mA
Operating voltage U_b	15...30 VDC
Protection class	II
Rated operating current I_e	100 mA
Rated operating voltage U_e DC	24 V
Ripple max. (% of U_e)	10 %
Switching frequency	1000 Hz
Turn-off delay t_{off} max.	0.5 ms
Turn-on delay t_{on} max.	0.5 ms
Voltage drop U_d max. at I_e	2.4 V

Environmental conditions

Ambient temperature	-20...60 °C
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

Interface

Analog output	Analog, voltage 0...10 V
Output characteristic	progressively falling
Switching output	PNP normally open/normally closed (NO/NC)

Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	12 x 42 x 21 mm
Mounting part	Screw M3

Photoelectric Sensors
BOD 6K-RA01-S75-C
Order Code: BOD000H

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Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light spot size	5 x 5 mm at 60 mm
Light type	LED, red light
Principle of optical operation	Triangulation
Switching function, optical	Light/dark switching

Wave length 660 nm

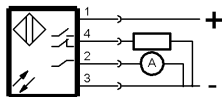
Range/Distance

Distance deviation 18 % max. (% of Sr)	7 %
Range	40...80 mm
Rated operating distance Sn	80 mm Adjustable

Connector Drawings



Wiring Diagrams



Opto Symbols

