

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



Display/Operation

Adjuster	button
Display	LED yellow: Light received Stability - LED green
Setting	Factory setting (Reset) Light-on/dark-on Sensitivity (Sn)

Environmental conditions

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

Electrical connection

Cable diameter D	3.70 mm
Cable length L	2 m
Conductor cross-section	0.14 mm ²
Connection	Cable, 2.00 m, PVC
Number of conductors	4
Polarity reversal protected	yes
Short-circuit protection	yes

General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference reflector	BOS R-9
Series	6K
Style	Square Connection 90°

Electrical data

Input function	Key disable on/off Same function as button
No-load current I _{o max.} at U _e	25 mA
Operating voltage U _b	10...30 VDC
Protection class	II
Rated operating current I _e	100 mA
Rated operating voltage U _{e DC}	24 V
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

Material

Housing material	ABS
Jacket material	PVC
Sensing surface material	PMMA

Mechanical data

Dimension	12 x 37 x 21 mm
Mounting	Screw M3

Optical data

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Blind zone	50 mm

Light spot size	75 x 75 mm at 150 mm
Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Switching function, optical	dark-on/light-on
Wave length	660 nm

Range/Distance

Range	0...3 m
Rated operating distance Sn	3 m Adjustable

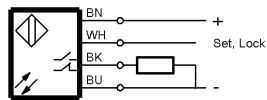
Remarks

Polarizing filters prevent spurious switching due to reflecting and shiny parts.
 For additional information, refer to user's guide.
 Order accessories separately.
 Do not press key using a pointed tool.
 The sensor is functional again after the overload has been eliminated.
 Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

Output/Interface

Switching output	PNP normally open/normally closed (NO/NC)
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Wiring Diagram



Symbols for Optoelectronic Sensors

