

1) Opt. axis receiver max., 2) Opt. axis receiver min., 3) Optical axis emitter, 4) stability, 5) Output function, 6) Removable cover



Basic features

Approval/Conformity	cULus CE WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	64K
Style	Square Connection 45°

Display/Operation

Adjuster	Potentiometer 240° Slide switch (4x) Adjusting screw
Display	Output function- LED yellow Stability - LED green
Setting	Time function Light-on/dark-on Rated switching distance (Sn)

Electrical connection

Cable diameter D	8...10 mm
Connection	Screw terminals
Polarity reversal protected	yes
Protection against device mix-ups	yes

Electrical data

No-load current I _o max. at U _e	25 mA
Operating voltage U _b	24...60 VDC/24...240 VAC
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	3000 mA
Rated operating voltage U _e AC	230 V
Rated operating voltage U _e DC	24 V
Ripple max. (% of U _e)	10 %
Switching frequency	20 Hz
Turn-off delay t _{off} max.	25 ms
Turn-on delay t _{on} max.	25 ms
Utilization category	AC-140

Photoelectric Sensors
BOS 64K-AA-IH12-TG
Order Code: BOS01K1

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Environmental conditions

Ambient temperature	-25...55 °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

Functional safety

MTTF (40 °C)	221 a
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Interface

Duration of time function	T = 0.6...16 s
Switching output	Relay NO/NC change-over contact
Time function	switch-off delay On/off delay Turn-on delay Single pulse

Material

Housing material	PBT, GF30
Material sensing surface	PC

Remarks

For additional information, refer to user's guide.
 Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.
 Order accessories separately.
 For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Mechanical data

Dimension	25 x 69.7 x 100.4 mm
Mounting part	Screw M4
Tightening torque max.	1.2 Nm

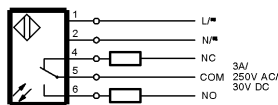
Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	Infrared
Principle of optical operation	Diffuse sensor, triangulation
Special optical feature	Background suppression
Switching function, optical	Light-on dark-on
Wave length	880 nm

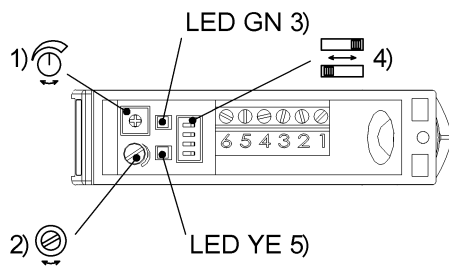
Range/Distance

Range	200...2000 mm
Rated operating distance S_n	2 m Adjustable

Wiring Diagrams



Help Views



- 1) Delay time
- 2) Background suppression
- 3) Stability
- 4) Light-on/dark-on, time function
- 5) Output function

Opto Symbols

