

1) Optical axis receiver, 2) Optical axis emitter, 3) Stability, 4) Output function, 5) Removable cover



Basic features

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

Display/Operation

Adjuster	Potentiometer 240° (2x) Slide switch (4x)
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_0 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-PR10-TG
 Order Code: BOS01K3



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)	287 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

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
Blind zone	100 mm
LED group per IEC 62471	Exempt Group
Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Switching function, optical	Light-on dark-on
Wave length	660 nm

Range/Distance

Range	0...10 m
Rated operating distance Sn	10 m, Adjustable

Remarks

For additional information, refer to user's guide.

Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

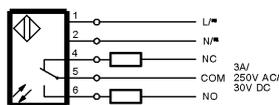
Polarizing filters prevent spurious switching due to reflecting and shiny parts.

Order accessories separately.

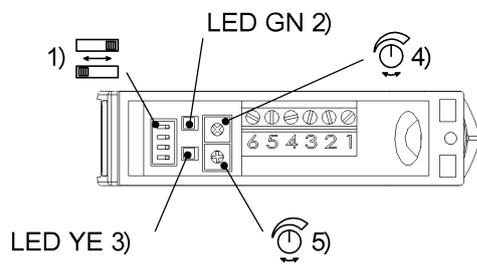
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

Wiring Diagrams (Schematic)



Help Views



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

Opto Symbols

