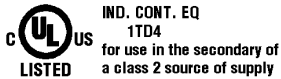


1) Opt. axis receiver max., 2) Opt. axis receiver min., 3) Optical axis emitter, 4) stability, 5) Output function, 6) Removable cover



**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 <sub>o</sub> max. at U <sub>e</sub>	25 mA
Operating voltage U <sub>b</sub>	24...60 VDC/24...240 VAC
Protection class	II
Rated insulation voltage U <sub>i</sub>	250 V AC
Rated operating current I <sub>e</sub>	3000 mA
Rated operating voltage U <sub>e</sub> AC	230 V
Rated operating voltage U <sub>e</sub> DC	24 V
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	20 Hz
Turn-off delay t <sub>off</sub> max.	25 ms
Turn-on delay t <sub>on</sub> max.	25 ms
Utilization category	AC-140

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



**Environmental conditions**

<b>Ambient temperature</b>	-25...55 °C
<b>EN 60068-2-27, Shock</b>	Half-sinus, 30 gn, 11 ms, 3x6
<b>EN 60068-2-6, Vibration</b>	10...55 Hz, amplitude 0.5 mm, 3x30 min
<b>Protection degree</b>	IP67

**Functional safety**

<b>MTTF (40 °C)</b>	221 a
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**Material**

<b>Housing material</b>	PBT, GF30
<b>Material sensing surface</b>	PC

**Mechanical data**

<b>Dimension</b>	25 x 69.7 x 100.4 mm
<b>Mounting</b>	Screw M4
<b>Tightening torque max.</b>	1.2 Nm

**Optical features**

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

**Output/Interface**

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

**Range/Distance**

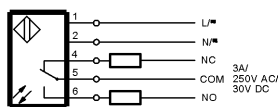
<b>Range</b>	200...2000 mm
<b>Rated operating distance Sn</b>	2 m Adjustable

**Remarks**

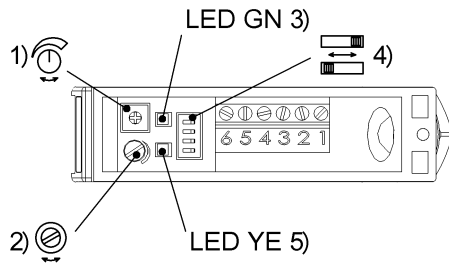
For additional information, refer to user's guide.  
 Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.  
 Order accessories separately.  
 For more information about MTTF and B10d see MTTF / B10d Certificate

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.

**Wiring Diagrams**



## Help Views



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

## Opto Symbols

