

1) Output function 2) Operating voltage 3) Optical axis 4) Sn



## Display/Operation

Adjuster	Potentiometer 270°
Display	Output function- LED yellow LED green: Power
Setting	Rated switching distance (Sn)

## Electrical connection

Connection	Cable with connector, M12x1- Male, 4-pole
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

No-load current $I_0$ max. at $U_e$	25 mA
Operating voltage $U_b$	10...30 VDC
Protection class	II
Rated insulation voltage $U_i$	75 V DC
Rated operating current $I_e$	100 mA
Rated operating voltage $U_e$ DC	24 V
Ready delay $t_v$ max.	200 ms
Residual current $I_r$ max.	100 $\mu$ A

Ripple max. (% of $U_e$ )	10 %
Switching frequency	500 Hz
Turn-off delay $t_{off}$ max.	1 ms
Turn-on delay $t_{on}$ max.	1 ms
Voltage drop $U_d$ max. at $I_e$	2 V

## Environmental conditions

Ambient temperature	-20...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

## Functional safety

MTTF (40 °C)	561 a
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## General data

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor

Series	11K
Style	Square Connection 90°
Trademark	Global

Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	15 x 44.8 x 29.3 mm
Mounting	Screw M3 Nut M18x1

Optical data

Ambient light max.	10000 Lux
Beam characteristic	Divergent
Light type	Infrared
Principle of optical operation	Diffuse sensor, energetic
Switching function, optical	Light/dark switching
Wave length	950 nm

Output/Interface

Switching output	PNP normally open (NO) PNP NC Pins 4-2
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Range/Distance

Range	10...450 mm
Rated operating distance Sn	450 mm Adjustable

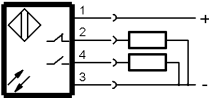
Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.  
Reference object (target): gray card, 100 x 100, 90 % remission, axial approach.  
The sensor is functional again after the overload has been eliminated.  
  
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.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors

