

1) Sensing surface, 2) Sensing surface, 3) Output function, 4) stability/error, 5) Operating voltage



## Basic features

Approval/Conformity	CE WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Light grid
Series	1-010
Style	Square Connection 90°

## Display/Operation

Display	Output function- LED yellow LED green: Power Error - LED green, alt. Stability - LED green
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## Electrical connection

Connection	Connector, M12x1-Male
Connection 2	M12x1
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

Input function	Synchronization (Emitter)
Operating voltage $U_b$	20...28 VDC
Rated operating current $I_e$	100 mA
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	15 %
Switching frequency	250 Hz
Turn-off delay $t_{off}$ max.	2 ms
Turn-on delay $t_{on}$ max.	2 ms
Utilization category	DC -13

## Environmental conditions

Ambient temperature	0...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	55 Hz, amplitude 0.5 mm, 3x30 min
Protection degree	IP65

## Functional safety

MTTF (40 °C)	44 a
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## Material

Housing material	Aluminum, Anodized
Material sensing surface	PMMA
Surface protection	Anodized

## Mechanical data

Dimension	22 x 150.1 x 43.2 mm
Mounting	Screw M4

## Remarks

Mounting bracket included, order other accessories separately.  
 For additional information, refer to user's guide.  
 Reference object (target): Steel plate, 50 x 50, thickness 0.5 mm, lateral 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.

## Optical features

Beam characteristic	Divergent
Blind zone	150 mm
Light beams, number	32
Light type	Infrared
Principle of optical operation	Through-beam sensor
Smallest part typ.	5.0 at t 0.5 x Sn, R 0 = 2.1 m
Switching function, optical	dark-on
Wave length	880 nm

## Output/Interface

Analog output	Analog, voltage 0...10 V
Supplementary output	Synchronization (Receiver)
Switching output	PNP normally open (NO)

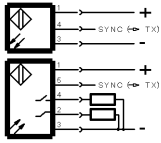
## Range/Distance

Active length AL 1	100 mm
Range	0...2.1 m
Rated operating distance Sn	2.1 m
Resolution	≤ 3.5 mm

## Connector Drawings



## Wiring Diagrams



## Opto Symbols

