

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	1-030
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	180 Hz
Turn-off delay t_{off} max.	2.8 ms
Turn-on delay t_{on} max.	2.8 ms
Utilization category	DC -13

Photoelectric Sensors
BLG 1-030-210-070-PV01-SX
Order Code: BLG0005



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)	32 a
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Material

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

Mechanical data

Dimension	22 x 350.1 x 43.2 mm
Mounting	Screw M4

Optical features

Beam characteristic	Divergent
Blind zone	150 mm
Light beams, number	48
Light type	Infrared
Principle of optical operation	Through-beam sensor
Smallest part typ.	7.0 at t 0.5 x Sn, R0 = 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	300 mm
Range	0...2.1 m
Rated operating distance Sn	2.1 m
Resolution	≤ 7.0 mm

Remarks

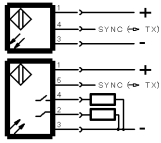
Mounting bracket included, order other accessories separately.
 For additional information, refer to user's guide.
 Reference object (target): Steel plate, 50 x 50, thickness 0.5 mm, lateral approach.
 The sensor is functional again after the overload has been eliminated.
 For more information about 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.

Connector Drawings



Wiring Diagrams



Opto Symbols

