

1) Optical axis, 2) Sn, 3) Output function



Basic features

Approval/Conformity	cULus CE EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	08E

Display/Operation

Adjuster	Potentiometer 270°
Display	Output function- LED yellow Limit range - LED yellow, flashing
Setting	Rated switching distance (Sn)

Electrical connection

Connection	Connector, M8x1-Male, 3-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.1 µF
No-load current I_o max. at Ue	15 mA
Operating voltage U_b	10...30 VDC
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.	30 ms
Ripple max. (% of U_e)	5 %
Switching frequency	450 Hz
Turn-off delay t_{off} max.	1.11 ms
Turn-on delay t_{on} max.	1.11 ms
Voltage drop U_d max. at I_e	0.7 V

Environmental conditions

Ambient temperature	-5...55 °C
Protection degree	IP64

Material

Housing material	Stainless steel
Material sensing surface	PMMA

Mechanical data

Dimension	Ø 8 x 40 mm
Mounting	Nut M8x1

Optical features

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light spot size	Ø 2.5 mm Light exit
Light type	LED, red light
Principle of optical operation	Diffuse sensor, triangulation
Special optical feature	Background suppression
Switching function, optical	Light-on
Wave length	640 nm

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Distance deviation 18 % max. (% of Sr)	5 % on 90 % rem.
Hysteresis H max. (% of Sr)	10.0 %
Range	7...30 mm
Rated operating distance Sn	30 mm Adjustable
Repeat accuracy max. (% of Sr)	3.0 %
Temperature drift max. (% of Sr)	10 %

Remarks

The sensor is functional again after the overload has been eliminated.

Order accessories separately.

For additional information, refer to user's guide.

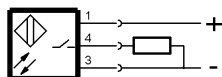
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.

Connector Drawings



Wiring Diagrams



Opto Symbols

