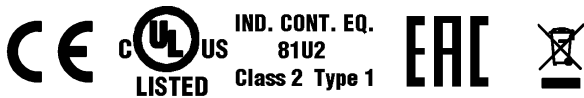


1) Optical axis, 2) Output function



**Basic features**

<b>Approval/Conformity</b>	CE cULus EAC WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Photoelectric sensor
<b>Reference reflector</b>	BOS R-2
<b>Series</b>	08E
<b>Style</b>	Cylinder Straight optics

**Display/Operation**

<b>Display</b>	Limit range - LED yellow, flashing LED yellow: Light received
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**Electrical connection**

<b>Cable diameter D</b>	3.00 mm
<b>Cable length L</b>	0.2 m
<b>Connection</b>	Cable with connector, 0.20 m, PUR
<b>Contact, surface protection</b>	Gold plated
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Load capacitance max. at Ue</b>	0.5 µF
<b>No-load current I<sub>o</sub> max. at Ue</b>	15 mA
<b>Operating voltage U<sub>b</sub></b>	10...30 VDC
<b>Rated insulation voltage U<sub>i</sub></b>	75 V DC
<b>Rated operating current I<sub>e</sub></b>	100 mA
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Ready delay t<sub>v</sub> max.</b>	20 ms
<b>Ripple max. (% of U<sub>e</sub>)</b>	10 %
<b>Switching frequency</b>	500 Hz
<b>Turn-off delay t<sub>off</sub> max.</b>	1 ms
<b>Turn-on delay t<sub>on</sub> max.</b>	1 ms
<b>Utilization category</b>	DC -13
<b>Voltage drop U<sub>d</sub> max. at I<sub>e</sub></b>	0.7 V

**Environmental conditions**

<b>Ambient temperature</b>	-5...55 °C
<b>EN 60068-2-27, Shock</b>	Half-sinus, 100 gn, 2 ms, 3x8000 Half-sinus, 30 gn, 11 ms, 3x6
<b>EN 60068-2-6, Vibration</b>	10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h 10...55 Hz, amplitude 1 mm, 3x30 min
<b>Protection degree</b>	IP67

**Material**

<b>Housing material</b>	Stainless steel
<b>Material jacket</b>	PUR
<b>Material sensing surface</b>	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 3.0 mm Light exit
Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Switching function, optical	dark-on
Wave length	645 nm

## Output/Interface

Switching output	PNP normally open (NO)
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## Range/Distance

Range	0...1 m
Rated operating distance $S_n$	1 m

## Remarks

Order accessories separately.

For additional information, refer to user's guide.

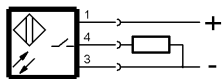
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.

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

## Connector Drawings



## Wiring Diagrams



## Opto Symbols

