



## Environmental conditions

<b>Ambient temperature</b>	-20...60 °C
<b>EN 60068-2-27, Shock</b>	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6
<b>EN 60068-2-6, Vibration</b>	10...55 Hz, amplitude 0.5 mm, 3x30 min
<b>IP rating</b>	IP67

## Functional safety

<b>MTTF (40 °C)</b>	193 a
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## Interface

<b>Switching output</b>	PNP normally closed (NC) PNP normally open (NO) Pins 4-2
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## Material

<b>Housing material</b>	ABS
<b>Material sensing surface</b>	PMMA

## Mechanical data

<b>Dimension</b>	17 x 50 x 50 mm
<b>Mounting part</b>	Screw M4

## Optical features

<b>Ambient light max.</b>	5000 Lux
<b>Light spot size</b>	Ø 8 mm at 200 mm
<b>Light type</b>	LED, red light
<b>Principle of optical operation</b>	Diffuse sensor, triangulation
<b>Special optical feature</b>	Background suppression
<b>Switching function, optical</b>	Light-on dark-on
<b>Wave length</b>	660 nm

## Range/Distance

<b>Distance deviation 18 % max. (% of Sr)</b>	8 % on 90 % rem.
<b>Hysteresis H max. (% of Sr)</b>	5.0 %
<b>Range</b>	30...300 mm
<b>Rated operating distance Sn</b>	300 mm

## Remarks

Order accessories separately.

For additional information, refer to user's guide.

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

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

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.

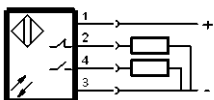
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

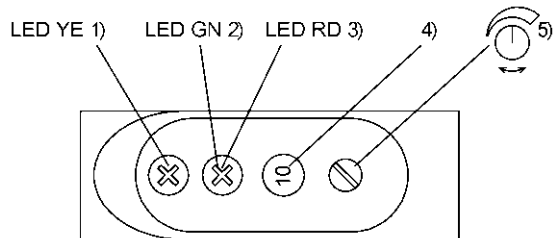
## Connector Drawings



## Wiring Diagrams (Schematic)



## Help Views



- 1) Output function
- 2) Stability
- 3) Error
- 4) Switching dist. dig. displ.
- 5) Sensitivity

## Opto Symbols

