

- 1) Output function
- 2) Optical axis
- 3) Light-on/dark-on
- 4) Sensitivity



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 23UU  
 for use in the secondary of  
 a class 2 source of supply

### Display/Operation

Adjuster	Potentiometer 270° (2x)
Setting	Sensitivity Light-on/dark-on

Repeat accuracy lateral max.	10 µm
Residual current I <sub>r</sub> max.	50 µA
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	5000 Hz
Turn-off delay t <sub>off</sub> max.	0.1 ms
Turn-on delay t <sub>on</sub> max.	0.1 ms
Utilization category	DC-13
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	3 V

### Electrical connection

Connection	M8x1-Male, 3-pole
Contact, surface protection	Gold plated
Protection against device mix-ups	yes
Short-circuit protection	yes

### Environmental conditions

Ambient temperature	-10...60 °C
IP rating per IEC 60529	IP67

### Electrical data

Hysteresis H max.	0.025 mm
Load capacitance max. at U <sub>e</sub>	0.5 µF
No-load current I <sub>o</sub> max. at U <sub>e</sub>	20 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Polarity reversal protected	yes
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	200 ms

### General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Principle of operation	Fork sensor
Series	A
Style	Fork Straight connection

## Material

Housing material	Zinc, Die casting
Material sensing surface	Glass
Surface protection	painted

## Mechanical data

Dimension	10 x 70 x 88 mm
Fastening detail	Screw M4
Fork opening	50 mm

## Optical data

Ambient light max.	10000 Lux
Average power Po max.	390 µW
Beam characteristic	Collimated
Laser class per IEC 60825-1	1
Light spot size	Ø 0.3 mm Light exit

Light type	Laser Red light
Smallest part typ.	0.08 mm
Switching function optical	Dark-on/Light-on
Wave length	655 nm

## Output/Interface

Switching output	PNP Normally open/Normally closed (NO/NC)
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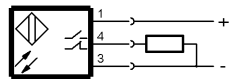
## Remarks

Order accessories separately.  
 For additional information, refer to users guide.  
 Factory default setting for switching output: Normally open.  
 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.  
 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.

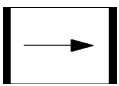
## Connector view



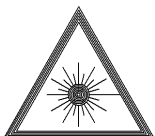
## Wiring Diagram



## Symbols for Optoelectronic Sensors



## Warning Symbols



LASER CLASS 1 per IEC 60825-1