

1) Output function, 2) Operating voltage, 3) Optical axis, 4) Light-on/dark-on, 5) Sensitivity



Basic features

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

Electrical connection

Connection	Connector, M8x1-Male, 3-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

Display/Operation

Adjuster	Potentiometer 270° (2x)
Display	Output function- LED yellow LED green: Power
Setting	Light-on/dark-on Sensitivity

Electrical data

Load capacitance max. at Ue	1 µF
No-load current I _o max. at Ue	35 mA
Operating voltage U _b	10...30 VDC
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	200 ms
Residual current I _r max.	50 µA
Ripple max. (% of U _e)	10 %
Switching frequency	2000 Hz
Turn-off delay t _{off} max.	0.25 ms
Turn-on delay t _{on} max.	0.25 ms
Utilization category	DC -13
Voltage drop U _d max. at I _e	3 V

Environmental conditions

Ambient temperature	-10...60 °C
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

Material

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

Remarks

Order accessories separately.

For additional information, refer to user's guide.

Factory default setting for switching output: Normally open.

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.

Reference object (target): Steel plate, 50 x 50, thickness 0.5 mm, lateral approach.

For plain water a liquid thickness of 2mm is sufficient for reliable detection. If the water component of the liquid diminishes, the thickness must be accordingly greater.

Measuring through bowed or thick-walled containers may yield false results due to refraction and absorption effects.

Mechanical data

Dimension	10 x 100 x 88 mm
Fork opening	80 mm
Mounting	Screw M4

Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Light spot size	Ø 2.5 mm Light exit
Light type	Infrared
Principle of optical operation	Through-beam sensor
Smallest part typ.	0.80 mm
Special optical feature	Water detection
Switching function, optical	dark-on/light-on
Wave length	1480 nm

Output/Interface

Switching output	PNP normally open/normally closed (NO/NC)
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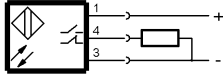
Range/Distance

Hysteresis H max.	0.2 mm
Repeat accuracy lateral max.	100 µm

Connector Drawings



Wiring Diagrams



Opto Symbols

