

Basic features

Approval/Conformity	CE UKCA WEEE cULus
Basic standard	IEC 60947-5-2
Principle of operation	Fork sensor
Style	Fork

Display/Operation

Display	Output function- LED yellow
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Electrical connection

Connection	Connector, M8x1-Male, 3-pin
Contact, surface protection	Gold plated
Electrical version	3-wire
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	100 nF
No-load current I <sub>o</sub> max. at Ue	25 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	250 ms
Residual current I <sub>r</sub> max.	500 µA
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	2500 Hz
Turn-off delay t <sub>off</sub> max.	0.2 ms
Turn-on delay t <sub>on</sub> max.	0.2 ms
Utilization category	DC -12 DC -13
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	1 V

Environmental conditions

Ambient temperature	-10...60 °C
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, 1 mm, 5 min 55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C) 474 a

Interface

Switching output Push-pull NO(PNP)/NC(NPN)

Material

Housing material Zinc, Die casting, black coated  
PUR, PA 6.6  
Material sensing surface Glass  
Surface protection black coated

Mechanical data

Dimension 10 x 100 x 88 mm  
Fork opening 80 mm  
Mounting part Through-hole 4.3 mm (3x)  
Weight 129 g

Remarks

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

Optical features

Ambient light max. 5000 Lux  
Beam characteristic Divergent  
Light spot size Ø 1.2 mm Light exit  
Light type LED, red light  
Principle of optical operation Through-beam sensor  
Smallest part typ. 0.80 mm  
Wave length 660 nm

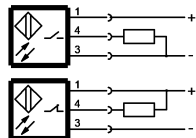
Range/Distance

Hysteresis H max. 40 µm  
Repeat accuracy lateral max. 40 µm

Connector Drawings



Wiring Diagrams



Opto Symbols

