



### Basic features

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

### Display/Operation

Function indicator	yes
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### Electrical connection

Cable diameter D	3.10 mm
Cable jacket, material	PUR
Cable length L	2.00 m
Cable length L	2.00 m
Conductor cross-section	0.14 mm <sup>2</sup>
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

### Electrical data

Assured switching field strength Ha	2 kA/m
Load capacitance max. at Ue	1 µF
No-load current I <sub>o</sub> max., undamped	10 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	Open drain
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
Rated short circuit current	100 A
Rated switch field strength H <sub>n</sub>	1.2 kA/m
Residual current I <sub>r</sub> max.	80 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	10000 Hz
Turn-off delay t <sub>off</sub> max.	0.05 ms
Turn-on delay t <sub>on</sub> max.	0.05 ms
Utilization category	DC -13
Voltage drop static max.	3.1 V

### Environmental conditions

Ambient temperature	-25...85 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
ESD	4A(8KV)
IP rating	IP67

### Functional safety

MTTF (40 °C)	225 a
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## Interface

Switching output NPN normally open (NO)

## Material

Housing material Brass, nickel-plated  
Material jacket PUR  
Material sensing surface PBTP  
Surface protection nickel-plated

## Mechanical data

Dimension  $\varnothing 8 \times 30.5$  mm  
Size M8x1  
Tightening torque 3 Nm/6 Nm

## Remarks

The switching distance depends on the magnet used. Switching distances of >20 mm can be achieved.

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

EMC: Surge resistance

External protection circuit is required. Document 825345, Section 2.

UL-MARKINGS: - For use in NFPA 79 Applications only - Adapters providing field wiring means are available from the manufacturer. Refer to manufacturers information.

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.

## Wiring Diagrams (Schematic)

