



**Basic features**

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

**Display/Operation**

Function indicator	yes
Power indicator	no

**Electrical connection**

Cable diameter D	3.00 mm
Cable length L	3 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection type	Cable, 3.00 m, PVC
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

**Electrical data**

Load capacitance max. at Ue	0.5 µF
Min. operating current Im	0 mA
No-load current Io max., damped	9 mA
No-load current Io max., undamped	3 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	20 ms
Residual current Ir max.	20 µA
Ripple max. (% of Ue)	15 %
Switching frequency	1500 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

**Environmental conditions**

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68

**Functional safety**

MTTF (40 °C)	830 a
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**Interface**

Switching output	PNP normally open (NO)
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## Material

Housing material	Stainless steel
Material jacket	PVC
Material sensing surface	PBT

## Mechanical data

Dimension	Ø 8 x 30 mm
Installation	for flush mounting
Mounting length	29.00 mm
Size	M8x1
Tightening torque	8 Nm

## Range/Distance

Assured operating distance Sa	1.6 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	2 mm
Real switching distance sr	2 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

## Remarks

The sensor is functional again after the overload has been eliminated.  
 Flush: See installation instructions for inductive sensors with extended range 825357.  
 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)

