



1) Sensing surface



## Display/Operation

Function indicator	yes
Power indicator	no

## Electrical connection

Cable diameter D	3.00 mm
Cable length	2 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection type	Cable, 2.00 m, PUR
Number of conductors	3
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

Contamination scale	3
Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	1 µF
No-load current I <sub>o</sub> undamped max.	2 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	Open drain
Polarity reversal protected	yes
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
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	21 ms
Repeat accuracy max. (% of Sr)	5.0 %
Residual current I <sub>r</sub> max.	10 µA
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	5000 Hz
Utilization category	DC-13

Voltage drop static max.	2 V
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## Environmental conditions

Ambient temperature	-25...70 °C
IP rating per IEC 60529	IP67

## Functional safety

MTTF (40 °C)	305 a
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## General data

Approval/Conformity	cULus CE EAC
Basic standard	IEC 60947-5-2

## Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PBT

## Mechanical data

Dimension	Ø 4 x 27 mm
Installation	for flush mounting
Size	D4.0

## Output/Interface

Switching output	PNP Normally open (NO)
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Range/Distance

Assured operating distance Sa	0.65 mm
Effective operating distance Sr	0.8 mm
Rated operating distance Sn	0.8 mm
Switching distance marking	■
Temperature drift max. (% of Sr)	10 %

Remarks

The sensor is functional again after the overload has been eliminated.  
EMC: Surge resistance  
External protection circuit is required. Document 825345, Section 2.

For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Wiring Diagram

