



1) Sensing surface



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	2.10 mm
Cable length L	2 m
Conductor cross-section	0.073 mm ²
Connection type	Cable, 2.00 m, PUR
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	0.2 µF
Min. operating current I _m	1 mA
No-load current I _o max., damped	3 mA
No-load current I _o max., undamped	14 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	Open collector
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	150 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	20 ms
Residual current I _r max.	10 µA
Ripple max. (% of U _e)	10 %
Switching frequency	3000 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 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Interface

Switching output	NPN normally closed (NC)
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Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PBT

Mechanical data

Dimension	Ø 6.5 x 10 mm
Installation	for flush mounting
Size	D6.5

Range/Distance

Assured operating distance Sa	1.2 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	1.5 mm
Real switching distance sr	1.5 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

For mounting and installation see Accessories section

Max. pull force on cable 10 N.

EMC: EMC protection circuit required, see 825345. IVW: 2.2

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

Wiring Diagrams (Schematic)

