



Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pole, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current I ₀ max., damped	5 mA
No-load current I ₀ max., undamped	2 mA
Operating voltage U _B	10...30 VDC
Output resistance R _a	33.0 kOhm + D
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	21 ms
Residual current I _r max.	10 µA
Ripple max. (% of U _e)	15 %
Switching frequency	2500 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 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)	640 a
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General data

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

Material

Housing material	Brass
Sensing surface material	PBT
Surface protection	Nickel-free coated

Mechanical data

Dimension	Ø 12 x 70 mm
Installation	for flush mounting
Size	M12x1
Tightening torque	10 Nm

Output/Interface

Switching output	PNP normally open (NO)
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Range/Distance

Assured operating distance S _a	3.2 mm
Hysteresis H max. (% of S _r)	15.0 %
Rated operating distance S _n	4 mm

Real switching distance s_r	4 mm
Repeat accuracy max. (% of s_r)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of s_r)	10 %
Tolerance s_r	±10 %

Remarks

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

Connector view



Wiring Diagram

