



Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	4.60 mm
Cable length L	3 m
Conductor cross-section	0.34 mm ²
Connection type	Cable, 3.00 m, TPU
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at U _e	1 µF
No-load current I _o max., damped	5 mA
No-load current I _o 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	1000 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 V

Environmental conditions

Ambient temperature	-40...85 °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
--------------	-------

General data

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

Material

Housing material	Stainless steel
Jacket material	TPU
Sensing surface material	PBT

Mechanical data

Dimension	Ø 12 x 48 mm
Installation	non-flush
Size	M12x1
Tightening torque	12 Nm

Output/Interface

Switching output	PNP normally open (NO)
------------------	------------------------

Tolerance Sr ±10 %

Range/Distance

Assured operating distance Sa	6.4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	8 mm
Real switching distance sr	8 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	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.

Wiring Diagram

