



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	4.60 mm
Cable length L	5 m
Conductor cross-section	0.34 mm ²
Connection type	Cable, 5.00 m, PVC
Number of conductors	2
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

Min. operating current I_m	5 mA
Operating voltage U_b	20...250 VDC/20...250 VAC
Protection class	II
Rated insulation voltage U_i	250 V AC
Rated operating current I_e	130 mA
Rated operating voltage U_e AC	110 V
Rated short circuit current	100 A
Ready delay t_v max.	100 ms
Residual current I_r max.	1700 μ A
Switching frequency	600 Hz
Utilization category	AC-140 DC -13
Voltage drop static max.	11 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
Protection degree	IP67

Functional safety

MTTF (40 °C)	245 a
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Material

Housing material	Stainless steel
Material jacket	PVC
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 12 x 60 mm
Installation	non-flush
Size	M12x1
Tightening torque	20 Nm

Output/Interface

Switching output	Normally open (NO)
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Range/Distance

Assured operating distance Sa	3.2 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	4 mm
Real switching distance sr	4 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

$T_a \geq 25 \text{ °C} \dots \leq 70 \text{ °C}$: $I_e = 130 - 0.67 \times (T_a - 25)$

Once the overload has been eliminated, interrupt operating voltage V_s for approx. 2 sec.

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

