



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

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

Electrical data

Load capacitance max. at U_e	1 μ F
Min. operating current I_m	0 mA
No-load current I_o max., damped	12 mA
No-load current I_o max., undamped	25 mA
Operating voltage U_b	10...30 VDC
Output resistance R_a	2.2 kOhm + D + LED
Rated insulation voltage U_i	75 V DC
Rated operating current I_e	130 mA
Rated operating voltage U_e DC	24 V
Rated short circuit current	100 A
Ready delay t_v max.	10 ms
Residual current I_r max.	80 μ A
Ripple max. (% of U_e)	15 %
Switching frequency	150 Hz
Utilization category	DC -13
Voltage drop static max.	3.5 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
Protection degree	IP67

Material

Housing material	Brass
Material sensing surface	PA 12
Surface protection	nickel plated

Mechanical data

Dimension	Ø 30 x 44.5 mm
Installation	for flush mounting
Size	M30x1.5
Tightening torque	70 Nm

Output/Interface

Switching output	NPN normally closed (NC)
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Range/Distance

Assured operating distance Sa	8 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	10 mm
Real switching distance sr	10 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

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

Connector Drawings



Wiring Diagrams

