



Basic features

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|---------------------|----------------------------|
| 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 | 3.50 mm |
| Cable length L | 0.2 m |
| Connection | M12x1-Male, 4-pin, A-coded |
| Connection type | Cable with connector, 0.20 m, PUR |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|-------------|
| Load capacitance max. at Ue | 1 µF |
| Min. operating current I _m | 0 mA |
| No-load current I _o max., damped | 10 mA |
| No-load current I _o max., undamped | 8 mA |
| Operating voltage U _b | 10...30 VDC |
| Rated insulation voltage U _i | 75 V DC |
| 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. | 50 ms |
| Residual current I _r max. | 100 µA |
| Ripple max. (% of U _e) | 20 % |
| Switching frequency | 500 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2 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) | 455 a |
|--------------|-------|

Material

| | |
|--------------------------|----------------------|
| Housing material | Brass, Chrome-plated |
| Material jacket | PUR |
| Material sensing surface | PBT |
| Surface protection | Chrome-plated |

Mechanical data

| | |
|-------------------|-------------|
| Dimension | Ø 8 x 45 mm |
| Installation | quasi-flush |
| Size | M8x1 |
| Tightening torque | 4 Nm |

Output/Interface

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

Range/Distance

| | |
|----------------------------------|--------|
| Assured operating distance Sa | 2.9 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 % |
| Switching distance marking | ■■■■ |
| Temperature drift max. (% of Sr) | 10 % |
| Tolerance Sr | ±10 % |

Remarks

The sensor is functional again after the overload has been eliminated.
 Quasi-flushed: See installation instructions for inductive sensors with extended range 825356.
 Working frequency f oscillator: 320 kHz. In the range of ±15% of the working frequency EMC incompatibilities may occur.
 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 Drawings



Wiring Diagrams

