

Basic features

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|---------------------|---|
| Additional features | Factor 1 Extended temperature range Housing resistant to weld spatter |
| Approval/Conformity | CE UKCA cULus WEEE |
| Basic standard | IEC 60947-5-2 |
| Scope of delivery | 2x nut M18x1 |
| Trademark | Factor 1 |

Display/Operation

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|--------------------|-----|
| Function indicator | yes |
| Power indicator | no |

Electrical connection

| | |
|-----------------------------------|----------------------------|
| Connection | M12x1-Male, 3-pin, A-coded |
| Electrical version | 3-wire |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|-------------|
| Load capacitance max. at Ue | 1 μ F |
| Magnetic field strength, interference field | 100 kA/m |
| Min. operating current Im | 0 mA |
| No-load current Io max., damped | 30 mA |
| No-load current Io max., undamped | 25 mA |
| Operating voltage Ub | 10...30 VDC |
| Output resistance Ra | 100.0 kOhm |
| Protection class | II |
| Rated operating current Ie | 200 mA |
| Rated operating voltage Ue DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay tv max. | 50 ms |
| Ripple max. (% of Ue) | 15 % |
| Switching frequency | 2000 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2 V |

Environmental conditions

| | |
|-------------------------|---------------------------------------|
| Ambient temperature | -40...85 °C |
| Contamination scale | 3 |
| EN 60068-2-27, Shock | Half-sinus, 30 g _n , 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min |
| IP rating | IP67, IP68, according to BWN Pr 20 |
| Magnetic field immune | magnetic field immune (AC/DC) |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 240 a |
|--------------|-------|

Interface

Switching output PNP normally open (NO)

Material

Housing material Brass, PTFE coated

Material sensing surface PBT

Mechanical data

Dimension Ø 18 x 56 mm

Installation non-flush

Mounting length 30 mm

Size M18x1

Tightening torque 15 Nm

Range/Distance

Assured operating distance Sa 9.7 mm

Hysteresis H max. (% of Sr) 15.0 %

Rated operating distance Sn 12 mm

Real switching distance sr 12 mm

Repeat accuracy max. (% of Sr) 5.0 %

Switching distance marking ■■

Temperature drift max. (% of Sr) 10 %

Tolerance Sr 10 %

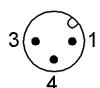
Remarks

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

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

