

Basic features

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|------------------------|-----------------------------|
| Approval/Conformity | CE UKCA WEEE cULus |
| Basic standard | IEC 60947-5-2 |
| Principle of operation | Fork sensor |
| Style | Fork |

Display/Operation

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|---------|-----------------------------|
| Display | Output function- LED yellow |
|---------|-----------------------------|

Electrical connection

| | |
|-----------------------------------|-----------------------------|
| Connection | Connector, M8x1-Male, 3-pin |
| Contact, surface protection | Gold plated |
| 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 | 100 nF |
| No-load current I _o max. at Ue | 25 mA |
| Operating voltage U _b | 10...30 VDC |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e | 100 mA |
| Rated operating voltage U _e DC | 24 V |
| Ready delay t _v max. | 250 ms |
| Residual current I _r max. | 500 µA |
| Ripple max. (% of U _e) | 10 % |
| Switching frequency | 2500 Hz |
| Turn-off delay t _{off} max. | 0.2 ms |
| Turn-on delay t _{on} max. | 0.2 ms |
| Utilization category | DC -12 DC -13 |
| Voltage drop U _d max. at I _e | 1 V |

Environmental conditions

| | |
|-------------------------|--|
| Ambient temperature | -10...60 °C |
| EN 60068-2-27, Shock | Half-sinus, 30 g _n , 11 ms, 3x6 |
| EN 60068-2-6, Vibration | 10...55 Hz, 1 mm, 5 min 55 Hz, amplitude 1 mm, 3x30 min |
| IP rating | IP67 |

Functional safety

MTTF (40 °C) 474 a

Interface

Switching output Push-pull NO(PNP)/NC(NPN)

Material

Housing material Zinc, Die casting, black coated
 PUR, PA 6.6
 Material sensing surface Glass
 Surface protection black coated

Mechanical data

Dimension 10 x 50 x 68 mm
 Fork opening 30 mm
 Mounting part Through-hole 4.3 mm (3x)
 Weight 66 g

Optical features

Ambient light max. 5000 Lux
 Beam characteristic Divergent
 Light spot size Ø 0.85 mm Light exit
 Light type LED, red light
 Principle of optical operation Through-beam sensor
 Smallest part typ. 0.60 mm
 Wave length 660 nm

Range/Distance

Hysteresis H max. 20 µm
 Repeat accuracy lateral max. 20 µm

Remarks

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

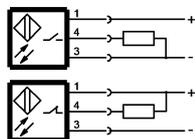
For more information about MTTF and B10d see MTTF / B10d Certificate

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 (Schematic)



Opto Symbols

