



1) Sensing surface



Basic features

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

Display/Operation

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

Electrical connection

| | |
|-----------------------------------|-------------|
| Connection | M5x0.5-Male |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|-----------------------------------|----------------|
| Load capacitance max. at Ue | 0.5 μ F |
| Min. operating current Im | 0 mA |
| No-load current Io max., damped | 10 mA |
| No-load current Io max., undamped | 8 mA |
| Operating voltage Ub | 10...30 VDC |
| Output resistance Ra | Open collector |
| Rated insulation voltage Ui | 75 V DC |
| Rated operating current Ie | 100 mA |
| Rated operating voltage Ue DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay tv max. | 20 ms |
| Residual current Ir max. | 10 μ A |
| Ripple max. (% of Ue) | 10 % |
| Switching frequency | 3000 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2.5 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 |
| IP rating | IP67 |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 735 a |
|--------------|-------|

Inductive Sensors
BES M05ED-POC50F-S26G
Order Code: BES0139



Interface

Switching output PNP normally closed (NC)

Material

Housing material Stainless steel
Material sensing surface PET-C

Mechanical data

Dimension Ø 5 x 44 mm
Installation non-flush
Size M5x0.5
Tightening torque 1 Nm

Range/Distance

Assured operating distance Sa 4.05 mm
Hysteresis H max. (% of Sr) 20.0 %
Rated operating distance Sn 5 mm
Real switching distance sr 5 mm
Repeat accuracy max. (% of Sr) 10.0 %
Switching distance marking ■■■
Temperature drift max. (% of Sr) 10 %
Tolerance Sr ±10 %

Remarks

Cannot be flush mounted: see installation instructions for inductive sensors with extended switching distance 939224. Avoid pressure and contact in the area of the clear zone cap.
The sensor is functional again after the overload has been eliminated.
EMC: Surge resistance
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

