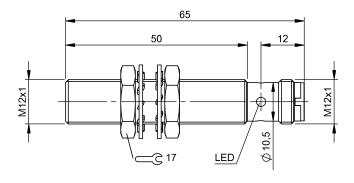
Inductive Sensors BES M12EI-PSC40A-S04G-S Order Code: BES04Z5





Basic features

| Additional features | Factor 1 |
|---------------------|---------------|
| | Weld immune |
| Approval/Conformity | CE |
| | cULus |
| | EAC |
| | WEEE |
| Basic standard | IEC 60947-5-2 |
| Trademark | Factor 1 |
| | |
| Disulardonaration | |

yes no

Display/Operation

| Function indicator | |
|--------------------|--|
| Power indicator | |

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 Ue | 1μF |
|---|---------------|
| Magnetic field strength, interference field | 100 kA/m |
| Min. operating current Im | 0 mA |
| No-load current lo max., damped | 33 mA |
| No-load current lo max., undamped | 25 mA |
| Operating voltage Ub | 1030 VDC |
| Output resistance Ra | 33.0 kOhm + D |
| Rated insulation voltage Ui | 75 V DC |
| Rated operating current le | 200 mA |
| Rated operating voltage Ue DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay tv max. | 30 ms |
| Ripple max. (% of Ue) | 15 % |
| Switching frequency | 80 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2 V |
| | |

Environmental conditions

| Ambient temperature | -2570 °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 |
| Magnetic field immune | magnetic field immune (AC/DC) |

Functional safety

MTTF (40 °C)

260 a

Inductive Sensors BES M12EI-PSC40A-S04G-S Order Code: BES04Z5



Interface

| Switching output | PNP normally open (NO) | |
|--------------------------|------------------------|--|
| Material | | |
| Housing material | Stainless steel | |
| Material sensing surface | Stainless steel | |
| Mechanical data | | |
| Dimension | Ø 12 x 65 mm | |
| Installation | for flush mounting | |
| Size | M12x1 | |
| Tightening torgue | 00.11 | |
| | 20 Nm | |

Range/Distance

| Assured operating distance Sa | 3 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) | 15 % |
| Tolerance Sr | ±10 % |
| | |

Remarks

Installation notice: flush in Al or non-ferrous metal $Sr = 0.7 \times Sn$ The sensor is functional again after the overload has been eliminated. Installation permitted only in clamp without positive stop.

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

