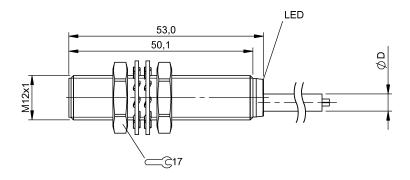
## Inductive Sensors BES M12MI-PSC40B-BV03 Order Code: BES0001







## **Basic features**

| Approval/Conformity | CE            |
|---------------------|---------------|
|                     | UKCA          |
|                     | cULus         |
|                     | WEEE          |
| Basic standard      | IEC 60947-5-2 |
| Trademark           | Global        |
|                     |               |
| Display/Operation   |               |

yes no

#### Display/Operation

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

#### **Electrical connection**

| 4.70 mm              |
|----------------------|
| 3 m                  |
| 0.34 mm <sup>2</sup> |
| Cable, 3.00 m, PVC   |
| 3                    |
| yes                  |
| yes                  |
| yes                  |
|                      |

## Electrical data

| Load capacitance max. at Ue       | 1μF           |
|-----------------------------------|---------------|
| Min. operating current Im         | 0 mA          |
| No-load current Io max., damped   | 5 mA          |
| No-load current Io max., undamped | 2 mA          |
| Operating voltage Ub              | 1030 VDC      |
| Output resistance Ra              | 33.0 kOhm + D |
| Protection class                  | II            |
| Rated insulation voltage Ui       | 250 V AC      |
| Rated operating current le        | 200 mA        |
| Rated operating voltage Ue DC     | 24 V          |
| Rated short circuit current       | 100 A         |
| Ready delay tv max.               | 21 ms         |
| Residual current Ir max.          | 10 µA         |
| Ripple max. (% of Ue)             | 15 %          |
| Switching frequency               | 2500 Hz       |
| Utilization category              | DC -13        |
| Voltage drop static max.          | 1.5 V         |
|                                   |               |
| The sine part of a small time of  |               |

## Environmental conditions

Ambient temperature Contamination scale EN 60068-2-27, Shock EN 60068-2-6, Vibration IP rating -25...70 °C 3 Half-sinus, 30 g<sub>n</sub>, 11 ms 55 Hz, amplitude 1 mm, 3x30 min IP68

## Functional safety

MTTF (40 °C)

Interface

Switching output

PNP normally open (NO)

640 a

# Inductive Sensors BES M12MI-PSC40B-BV03 Order Code: BES0001

# BALLUFF

3.2 mm

15.0 %

#### Material

| Material                 |                           | Range/Distance                                    |
|--------------------------|---------------------------|---|
| Housing material         | Brass, Nickel-free coated | Assured operating dista                           |
| Material jacket          | PVC                       | Hysteresis H max. (% of                           |
| Material sensing surface | PBT                       | Rated operating distance                          |
|                          |                           | Real switching distance                           |
| Mechanical data          |                           | Repeat accuracy max. (9                           |
| Dimension                | Ø 12 x 53 mm              | Switching distance mark<br>Temperature drift max. |
| Installation             | for flush mounting        | Tolerance Sr                                      |
| Mounting length          | 50.00 mm                  | TOIETarice Si                                     |
| Size                     | M12x1                     |   |
| Tightening torque        | 10 Nm                     |   |
|                          |                           |   |

## ssured operating distance Sa lysteresis H max. (% of Sr) ated operating distance Sn eal swite

| erating distance Sn                             | 4 mm       |
|---|------------|
| ching distance sr                               | 4 mm       |
| ccuracy max. (% of Sr)                          | 5.0 %      |
|   |            |
| g distance marking                              |            |
| g distance marking<br>ture drift max. (% of Sr) | ■■<br>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.

## Wiring Diagrams

