



**Basic features**

|           |        |
|-----------|--------|
| Trademark | Global |
|-----------|--------|

**Display/Operation**

|                 |    |
|-----------------|----|
| Power indicator | no |
|-----------------|----|

**Electrical connection**

|                                   |                      |
|-----------------------------------|----------------------|
| Cable diameter D                  | 3.00 mm              |
| Cable length L                    | 10 m                 |
| Conductor cross-section           | 0.14 mm <sup>2</sup> |
| Connection type                   | Cable, 10.00 m, PUR  |
| Number of conductors              | 3                    |
| Polarity reversal protected       | yes                  |
| Protection against device mix-ups | yes                  |
| Short-circuit protection          | yes                  |

**Electrical data**

|                                               |             |
|-----------------------------------------------|-------------|
| Load capacitance max. at U <sub>e</sub>       | 1 µF        |
| Min. operating current I <sub>m</sub>         | 0 mA        |
| No-load current I <sub>o</sub> max., damped   | 7 mA        |
| No-load current I <sub>o</sub> max., undamped | 2 mA        |
| Operating voltage U <sub>b</sub>              | 10...30 VDC |
| Output resistance R <sub>a</sub>              | 33.0 kOhm   |
| Protection class                              | II          |
| Rated insulation voltage U <sub>i</sub>       | 250 V AC    |
| Rated operating current I <sub>e</sub>        | 200 mA      |
| Rated operating voltage U <sub>e</sub> DC     | 24 V        |
| Rated short circuit current                   | 100 A       |
| Ready delay t <sub>v</sub> max.               | 25 ms       |
| Residual current I <sub>r</sub> max.          | 10 µA       |
| Ripple max. (% of U <sub>e</sub> )            | 10 %        |
| Switching frequency                           | 5000 Hz     |
| Voltage drop static max.                      | 2.5 V       |

**Environmental conditions**

|                     |             |
|---------------------|-------------|
| Ambient temperature | -25...70 °C |
| Contamination scale | 3           |
| IP rating           | IP68        |

**Functional safety**

|              |       |
|--------------|-------|
| MTTF (40 °C) | 595 a |
|--------------|-------|

**Interface**

|                  |                        |
|------------------|------------------------|
| Switching output | PNP normally open (NO) |
|------------------|------------------------|

Inductive Sensors  
**BES M08MI-PSC20B-BP10**  
Order Code: BES03TL

**BALLUFF**

**Material**

|                          |                           |
|--------------------------|---------------------------|
| Housing material         | Brass, Nickel-free coated |
| Material jacket          | PUR                       |
| Material sensing surface | PBT                       |

**Mechanical data**

|              |                    |
|--------------|--------------------|
| Dimension    | Ø 8 x 50 mm        |
| Installation | for flush mounting |
| Size         | M8x1               |

**Range/Distance**

|                                  |        |
|----------------------------------|--------|
| Assured operating distance Sa    | 1.6 mm |
| Hysteresis H max. (% of Sr)      | 15.0 % |
| Rated operating distance Sn      | 2 mm   |
| Real switching distance sr       | 2 mm   |
| Repeat accuracy max. (% of Sr)   | 5.0 %  |
| Switching distance marking       | ■ ■    |
| Temperature drift max. (% of Sr) | 10 %   |
| Tolerance Sr                     | ±10 %  |

**Wiring Diagrams**

