



**Basic features**

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Approval/Conformity</b> | CE<br>UKCA<br>cULus<br>EAC<br>WEEE |
| <b>Basic standard</b>      | IEC 60947-5-2                      |

**Display/Operation**

|                           |     |
|---------------------------|-----|
| <b>Function indicator</b> | yes |
| <b>Power indicator</b>    | no  |

**Electrical connection**

|  |                            |
|--|----------------------------|
| <b>Connection</b>                        | M12x1-Male, 4-pin, A-coded |
| <b>Polarity reversal protected</b>       | yes                        |
| <b>Protection against device mix-ups</b> | yes                        |
| <b>Short-circuit protection</b>          | yes                        |

**Electrical data**

|   |               |
|---|---------------|
| <b>Load capacitance max. at Ue</b>                  | 1 µF          |
| <b>Min. operating current I<sub>m</sub></b>         | 0 mA          |
| <b>No-load current I<sub>o</sub> max., damped</b>   | 7 mA          |
| <b>No-load current I<sub>o</sub> max., undamped</b> | 2 mA          |
| <b>Operating voltage U<sub>b</sub></b>              | 10...30 VDC   |
| <b>Output resistance R<sub>a</sub></b>              | 33.0 kOhm + D |
| <b>Protection class</b>                             | II            |
| <b>Rated insulation voltage U<sub>i</sub></b>       | 250 V AC      |
| <b>Rated operating current I<sub>e</sub></b>        | 200 mA        |
| <b>Rated operating voltage U<sub>e</sub> DC</b>     | 24 V          |
| <b>Rated short circuit current</b>                  | 100 A         |
| <b>Ready delay t<sub>v</sub> max.</b>               | 25 ms         |
| <b>Residual current I<sub>r</sub> max.</b>          | 10 µA         |
| <b>Ripple max. (% of U<sub>e</sub>)</b>             | 15 %          |
| <b>Switching frequency</b>                          | 2000 Hz       |
| <b>Utilization category</b>                         | DC -13        |
| <b>Voltage drop static max.</b>                     | 2.5 V         |

**Environmental conditions**

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

**Functional safety**

|                     |       |
|---------------------|-------|
| <b>MTTF (40 °C)</b> | 595 a |
|---------------------|-------|

**Interface**

|                         |                        |
|-------------------------|------------------------|
| <b>Switching output</b> | PNP normally open (NO) |
|-------------------------|------------------------|

Inductive Sensors  
**BES M08EG-PSC25F-S04G**  
Order Code: BES01P8



**Material**

|                          |                 |
|--------------------------|-----------------|
| Housing material         | Stainless steel |
| Material sensing surface | PBT             |

**Mechanical data**

|                   |             |
|-------------------|-------------|
| Dimension         | Ø 8 x 58 mm |
| Installation      | non-flush   |
| Size              | M8x1        |
| Tightening torque | 8 Nm        |

**Range/Distance**

|                                  |        |
|----------------------------------|--------|
| Assured operating distance Sa    | 2 mm   |
| Hysteresis H max. (% of Sr)      | 15.0 % |
| Rated operating distance Sn      | 2.5 mm |
| Real switching distance sr       | 2.5 mm |
| Repeat accuracy max. (% of Sr)   | 5.0 %  |
| Temperature drift max. (% of Sr) | 10 %   |
| Tolerance Sr                     | ±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.

**Connector Drawings**



**Wiring Diagrams**

