



### Basic features

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

### Display/Operation

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

### Electrical connection

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Cable diameter D                  | 3.00 mm                           |
| Cable length L                    | 0.3 m                             |
| Connection                        | M12x1-Male, 4-pin, A-coded        |
| Connection type                   | Cable with connector, 0.30 m, PUR |
| Polarity reversal protected       | yes                               |
| Protection against device mix-ups | yes                               |
| Short-circuit protection          | yes                               |

### Electrical data

|   |             |
|---|-------------|
| Load capacitance max. at Ue               | 1 µF        |
| Min. operating current I <sub>m</sub>     | 5 mA        |
| Operating voltage U <sub>b</sub>          | 10...36 VDC |
| Rated insulation voltage U <sub>i</sub>   | 75 V DC     |
| Rated operating current I <sub>e</sub>    | 100 mA      |
| Rated operating voltage U <sub>e</sub> DC | 24 V        |
| Rated short circuit current               | 100 A       |
| Ready delay t <sub>v</sub> max.           | 50 ms       |
| Residual current I <sub>r</sub> max.      | 600 µA      |
| Ripple max. (% of U <sub>e</sub> )        | 15 %        |
| Switching frequency                       | 1500 Hz     |
| Utilization category                      | DC -13      |
| Voltage drop static max.                  | 5.3 V       |

### Environmental conditions

|                         |                                       |
|-------------------------|---------------------------------------|
| Ambient temperature     | -25...70 °C                           |
| Contamination scale     | 3                                     |
| EN 60068-2-27, Shock    | Half-sinus, 30 g <sub>n</sub> , 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min       |
| IP rating               | IP67                                  |

### Functional safety

|              |       |
|--------------|-------|
| MTTF (40 °C) | 315 a |
|--------------|-------|

### Interface

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

Inductive Sensors  
**BES M08MG-GSC20B-BP00,3-GS04**  
Order Code: **BES001Z**



### Material

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

### Mechanical data

|                   |                    |
|-------------------|--------------------|
| Dimension         | Ø 8 x 40 mm        |
| Installation      | for flush mounting |
| Size              | M8x1               |
| Tightening torque | 3 Nm               |

### Range/Distance

|                                  |        |
|----------------------------------|--------|
| Assured operating distance Sa    | 1.6 mm |
| Hysteresis H max. (% of Sr)      | 20.0 % |
| 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 %  |

### Remarks

Specify maximum attainable switching frequency (not per IEC 60947-5-2)  
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

