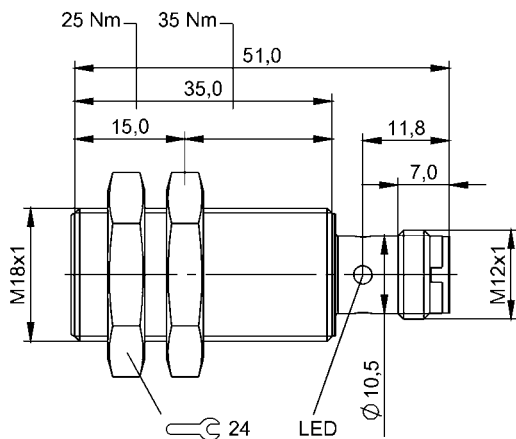


Inductive Sensors  
BES M18MF-GSC70B-S04G  
Order Code: BES0328



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

|                                   |                            |
|-----------------------------------|----------------------------|
| 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   | 1 µF        |
| Min. operating current Im     | 5 mA        |
| Operating voltage Ub          | 10...36 VDC |
| Rated insulation voltage Ui   | 75 V DC     |
| Rated operating current Ie    | 100 mA      |
| Rated operating voltage Ue DC | 24 V        |
| Rated short circuit current   | 100 A       |
| Ready delay tv max.           | 50 ms       |
| Residual current Ir max.      | 600 µA      |
| Ripple max. (% of Ue)         | 15 %        |
| Switching frequency           | 600 Hz      |
| Utilization category          | DC -13      |
| Voltage drop static max.      | 4.2 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                                  |

Interface

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

Material

|                          |                           |
|--------------------------|---------------------------|
| Housing material         | Brass, Nickel-free coated |
| Material sensing surface | PA 12                     |

Mechanical data

|                   |                    |
|-------------------|--------------------|
| Dimension         | Ø 18 x 51 mm       |
| Installation      | for flush mounting |
| Mounting length   | 35.00 mm           |
| Size              | M18x1              |
| Tightening torque | 25 Nm              |

Range/Distance

|                                  |        |
|----------------------------------|--------|
| Assured operating distance Sa    | 5.6 mm |
| Hysteresis H max. (% of Sr)      | 20.0 % |
| Rated operating distance Sn      | 7 mm   |
| Real switching distance sr       | 7 mm   |
| Repeat accuracy max. (% of Sr)   | 5.0 %  |
| Switching distance marking       | ■ ■    |
| Temperature drift max. (% of Sr) | 10 %   |
| Tolerance Sr                     | ±10 %  |

Remarks

The sensor is functional again after the overload has been eliminated.  
Specify maximum attainable switching frequency (not per IEC 60947-5-2)  
Flush: See installation instructions for inductive sensors with extended range 825357.

Connector Drawings



Wiring Diagrams

