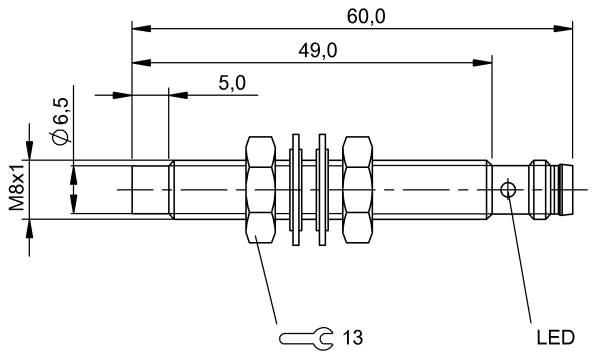
Inductive Sensors

# BES M08EH-PSC40F-S49G
# Order Code: BES001J




## Basic features

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

## Display/Operation

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

## Electrical connection

| | |
|---|---|
| Connection | M8x1-Male, 3-pin |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

## Electrical data

| | |
|---|---|
| Load capacitance max. at Ue | 1.0 µF |
| No-load current Io max., damped | 7 mA |
| No-load current Io max., undamped | 2 mA |
| Operating voltage Ub | 10...30 VDC |
| Output resistance Ra | 33.0 kOhm |
| Protection class | II |
| Rated insulation voltage Ui | 250 V AC |
| Rated operating current Ie | 200 mA |
| Rated operating voltage Ue DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay tv max. | 25 ms |
| Residual current Ir max. | 10 µA |
| Ripple max. (% of Ue) | 10 % |
| Switching frequency | 4000 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2.5 V |

## Environmental conditions

| | |
|---|---|
| Ambient temperature | -25...70 °C, Temperature drift max. (% Sr) > 15% valid from 50...70 °C |
| Contamination scale | 3 |
| EN 60068-2-27, Shock | Half-sinus, 30 $g_n$, 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min |
| IP rating | IP68 |

## Functional safety

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

## Interface

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

Inductive Sensors

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## Material

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

## Mechanical data

| | |
|---|---|
| Dimension | Ø 8 x 60 mm |
| Installation | non-flush |
| Mounting length | 43.0 mm |
| Size | M8x1 |
| Tightening torque | 8 Nm |

## Range/Distance

| | |
|---|---|
| Assured operating distance Sa | 3.2 mm |
| Hysteresis H max. (% of Sr) | 15.0 % |
| Rated operating distance Sn | 4 mm |
| Real switching distance sr | 4 mm |
| Repeat accuracy max. (% of Sr) | 5.0 % |
| Switching distance marking | ■■ |
| Temperature drift max. (% of Sr) | 10 % |
| Tolerance Sr | ±10 % |

## Remarks

Not for flush mounting: See installation instructions for inductive sensors with extended range 939229.
The sensor is functional again after the overload has been eliminated.
In rare cases, the function of the sensor may be impaired during contact with water
it is fully functional again after drying
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 (Schematic)

