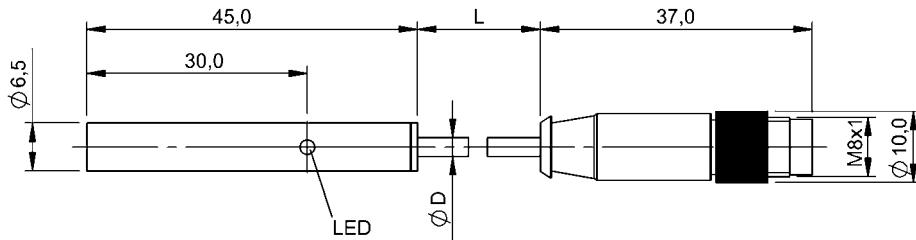


Inductive Sensors

BES G06MH-PSC30B-BP00,3-GS49

Order Code: BES03EJ

BALLUFF**Basic features**

| | |
|---------------------|---------------|
| Approval/Conformity | CE WEEE |
| Basic standard | IEC 60947-5-2 |

Display/Operation

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

Electrical connection

| | |
|-----------------------------------|-----------------------------------|
| Cable diameter D | 3.20 mm |
| Cable length L | 0.3 m |
| Connection | M8x1-Male, 3-pin |
| 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 μ F |
| Min. operating current I _m | 0 mA |
| No-load current I _o max., damped | 12 mA |
| No-load current I _o max., undamped | 10 mA |
| Operating voltage U _b | 10...30 VDC |
| Output resistance R _a | 47.0 kOhm |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e | 200 mA |
| Rated operating voltage U _e DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay t _v max. | 50 ms |
| Residual current I _r max. | 100 μ A |
| Ripple max. (% of U _e) | 20 % |
| Switching frequency | 1000 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2 V |

Environmental conditions

| | |
|-------------------------|---------------------------------------|
| Ambient temperature | -25...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 | IP67 |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 455 a |
|--------------|-------|

Interface

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

Material

| | |
|--------------------------|----------------------|
| Housing material | Brass, Chrome-plated |
| Material jacket | PUR |
| Material sensing surface | PBT |

Range/Distance

| | |
|----------------------------------|--------|
| Assured operating distance Sa | 2.4 mm |
| Hysteresis H max. (% of Sr) | 10.0 % |
| Rated operating distance Sn | 3 mm |
| Real switching distance sr | 3 mm |
| Repeat accuracy max. (% of Sr) | 5.0 % |
| Switching distance marking | ■■■ |
| Temperature drift max. (% of Sr) | 10 % |
| Tolerance Sr | ±10 % |

Mechanical data

| | |
|-----------------|---------------|
| Dimension | Ø 6.5 x 45 mm |
| Installation | quasi-flush |
| Mounting length | 45.00 mm |
| Size | D6.5 |

Remarks

The sensor is functional again after the overload has been eliminated.

Quasi-flushed: See installation instructions for inductive sensors with extended range 825356.

EMC: For operating conditions with noise sources

External protection circuit is required. Document 825345.

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**