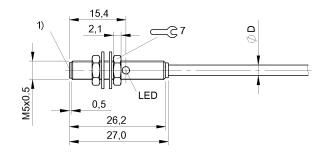
Inductive Sensors BES M05ED-PSC15B-BP00,3-GS49-119 **Order Code: BES05PA**

BALLUFF



1) Sensing surface





Basic features

| Approval/Conformity | cULus |
|---------------------|--------------------------|
| | CE |
| | UKCA |
| | WEEE |
| Base type deviation | Special cable, weld bead |
| | resistant |
| Basic standard | IEC 60947-5-2 |

Display/Operation

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

Electrical connection

| Cable diameter D | 3.00 mm |
|-----------------------------------|----------------------------------|
| Cable length L | 0.3 m |
| Conductor cross-section | 0.14 mm ² |
| Connection | M8x1-Male, 3-pin |
| Connection type | Cable with connector, 0.3 m, TPE |
| Number of conductors | 3 |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| Load capacitance max. at Ue | 1μF |
|-----------------------------------|------------|
| Min. operating current Im | 0 mA |
| No-load current lo max., damped | 6 mA |
| No-load current lo max., undamped | 2 mA |
| Operating voltage Ub | 1030 VDC |
| Output resistance Ra | Open drain |
| Rated insulation voltage Ui | 75 V DC |
| Rated operating current le | 100 mA |
| Rated operating voltage Ue DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay tv max. | 21 ms |
| Residual current Ir max. | 10 µA |
| Ripple max. (% of Ue) | 10 % |
| Switching frequency | 5000 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2 V |
| | |

Environmental conditions

| -2570 °C |
|---------------------------------------|
| 3 |
| Half-sinus, 30 g _n , 11 ms |
| 55 Hz, amplitude 1 mm, 3x30 min |
| IP67 |
| |

Functional safety

MTTF (40 °C)

305 a

Inductive Sensors BES M05ED-PSC15B-BP00,3-GS49-119 Order Code: BES05PA



| Interface | | Range/Distance | |
|------------------------------|-------------------------|----------------------------------|---------|
| Switching output | PNP normally open (NO) | Assured operating distance Sa | 1.21 mm |
| | | Hysteresis H max. (% of Sr) | 15.0 % |
| Material | | Rated operating distance Sn | 1.5 mm |
| | | Real switching distance sr | 1.5 mm |
| Housing material | Stainless steel, coated | Repeat accuracy max. (% of Sr) | 5.0 % |
| Material jacket | TPE | Switching distance marking | |
| Material sensing surface Cer | Ceramic | Temperature drift max. (% of Sr) | 10 % |
| | | Tolerance Sr | ±10 % |
| Mechanical data | | | |
| Dimension | Ø 5 x 27 mm | | |
| Installation | for flush mounting | | |
| Size | M5x0.5 | | |
| Tightening torque | 1 Nm | | |
| Remarks | | | |

External protection circuit is required. Document 825345, Section 2. The sensor is functional again after the overload has been eliminated.

Cable weld bead resistant

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

