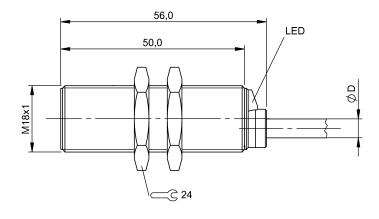
Inductive Sensors BES M18MI-PSC80B-BP05 **Order Code: BES008A**

BALLUFF



IND. CONT. EQ. 81U2 US Class 2 Type 1





Display/Operation

Function indicator yes Power indicator no

Electrical connection

| Cable diameter D | 4.60 mm |
|-----------------------------------|----------------------|
| Cable length L | 5 m |
| Conductor cross-section | 0.34 mm ² |
| Connection type | Cable, 5.00 m, PUR |
| 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 | 1 µF |
|-----------------------------------|---------------|
| Min. operating current Im | 0 mA |
| No-load current lo max., damped | 15 mA |
| No-load current lo max., undamped | 8 mA |
| Operating voltage Ub | 1230 VDC |
| Output resistance Ra | 33.0 kOhm + D |
| Protection class | П |
| Rated insulation voltage Ui | 250 V AC |
| Rated operating current le | 200 mA |
| Rated operating voltage Ue DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay tv max. | 30 ms |
| Residual current Ir max. | 20 µA |
| Ripple max. (% of Ue) | 15 % |
| Switching frequency | 150 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2.5 V |
| | |

Environmental conditions

| Ambient temperature | -2570 °C |
|-------------------------|---------------------------------|
| Contamination scale | 3 |
| EN 60068-2-27, Shock | Half-sinus, 30 gn, 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min |
| IP rating | IP68 |

Functional safety

MTTF (40 °C)

330 a

Inductive Sensors BES M18MI-PSC80B-BP05 **Order Code: BES008A**



±10 %

| General data | | Mechanical data | Mechanical data | |
|---------------------------------------|---|--|--|--|
| Approval/Conformity Basic standard | CE cULus EAC WEEE IEC 60947-5-2 | Dimension Installation Size Tightening torque | Ø 18 x 56 mm for flush mounting M18x1 25 Nm | |
| Trademark | Global | Output/Interface | | |
| Material | | Switching output | PNP normally open (NO) | |
| Housing material Material jacket | Brass PUR | Range/Distance | | |
| Material sensing surface | PA 12 | Assured operating distance Sa | 6.4 mm | |
| Surface protection | nickel plated | Hysteresis H max. (% of Sr) | 15.0 % | |
| | | Rated operating distance Sn | 8 mm | |
| | | Real switching distance sr | 8 mm | |
| | | Repeat accuracy max. (% of Sr) | 5.0 % | |
| | | Switching distance marking | | |
| | | Temperature drift max. (% of Sr) | 10 % | |

Remarks

Flush: See installation instructions for inductive sensors with extended range 939221.

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

For further information about the 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.

Tolerance Sr

Wiring Diagrams

