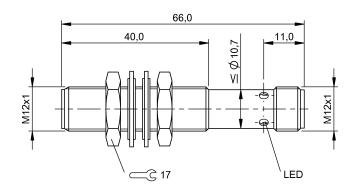
BES M12EL-PSC20B-S04G-M01

Order Code: BES01PP















Basic features

Additional features Function monitoring Approval/Conformity CE UKCA cULus WEEE Basic standard IEC 60947-5-2 Principle of operation Inductive sensor Display/Operation Function indicator yes Power indicator nο

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 0.5 µF Min. operating current Im 3 mA No-load current lo max., damped 8 mA No-load current lo max., undamped 6 mA Operating voltage Ub 10...30 VDC Output resistance Ra Open collector Protection class Ш 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. 10 ms Residual current Ir max. 80 μΑ Ripple max. (% of Ue) 15% Switching frequency 800 Hz Utilization category DC -13 Voltage drop static max. 3.5 V

Environmental conditions

Ambient temperature -25...70 °C Contamination scale 3 EN 60068-2-27, Shock Half-sinus, 30 g_n, 11 ms 55 Hz, amplitude 1 mm, 3x30 min EN 60068-2-6, Vibration IP rating IP68 Functional safety MTTF (40 °C) 330 a Interface Switching output PNP normally open (NO)

BES M12EL-PSC20B-S04G-M01 Order Code: BES01PP



Material

Housing material 1.4305 stainless steel

Material sensing surface LCP

Mechanical data

DimensionØ 12 x 66 mmInstallationfor flush mountingMounting length40.00 mmSizeM12x1Tightening torque20 Nm

Range/Distance

Assured operating distance Sa 1.6 mm

Hysteresis H max. (% of Sr) 15.0 %

Rated operating distance Sn 2 mm

Real switching distance sr 2 mm

Repeat accuracy max. (% of Sr) 5.0 %

Temperature drift max. (% of Sr) 10 %

Tolerance Sr ±10 %

Remarks

Monitor output: High level when the sensor is functional. The load capacity is 50 mA.

Load detection: System limited to 200 Hz. If the sensor is damped, at least 3 mA must flow through the output (pin 4). Otherwise a fault is detected. Adjusting aid for installation: LED flashes when in range between Sr and Sa.

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

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)

