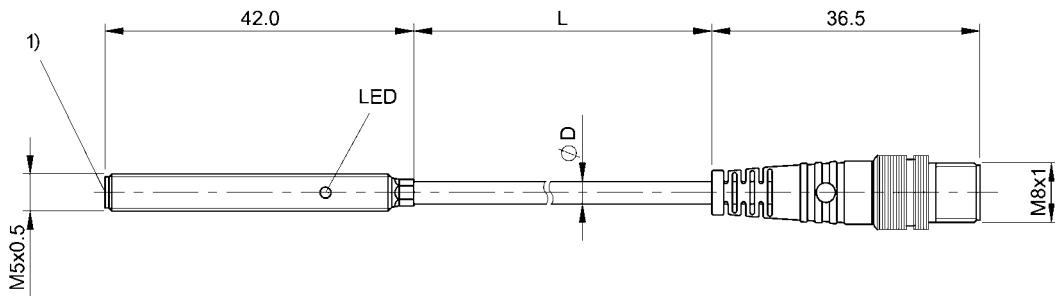


Inductive Sensors

BES M05EG-PSC08B-BP00,2-GS49

Order Code: BES03JM

BALLUFF

1) Sensing surface

**Basic features**

Approval/Conformity	CE UKCA cULus WEEE
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	0.2 m
Connection	M8x1-Male, 3-pin
Connection type	Cable with connector, 0.20 m, PUR
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.2 μ F
Min. operating current I _m	1 mA
No-load current I _o max., damped	10 mA
No-load current I _o max., undamped	3 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	Open collector
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	25 ms
Residual current I _r max.	80 μ A
Ripple max. (% of U _e)	10 %
Switching frequency	3000 Hz
Utilization category	DC-13
Voltage drop static max.	3 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)	830 a
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Interface

Switching output PNP normally open (NO)

Material

Housing material Stainless steel

Material jacket PUR

Material sensing surface Ceramic

Range/Distance

Assured operating distance Sa 0.65 mm

Hysteresis H max. (% of Sr) 15.0 %

Rated operating distance Sn 0.8 mm

Real switching distance sr 0.8 mm

Repeat accuracy max. (% of Sr) 5.0 %

Temperature drift max. (% of Sr) 10 %

Tolerance Sr -10 %/+40 %

Mechanical data

Dimension Ø 5 x 42 mm

Installation for flush mounting

Pressure rating max. 10 bar

Pressure rating, note oil pressure rated

Size M5x0.5

Tightening torque 1 Nm ±10 %

Remarks

ESD requirements met if housing is grounded.

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**