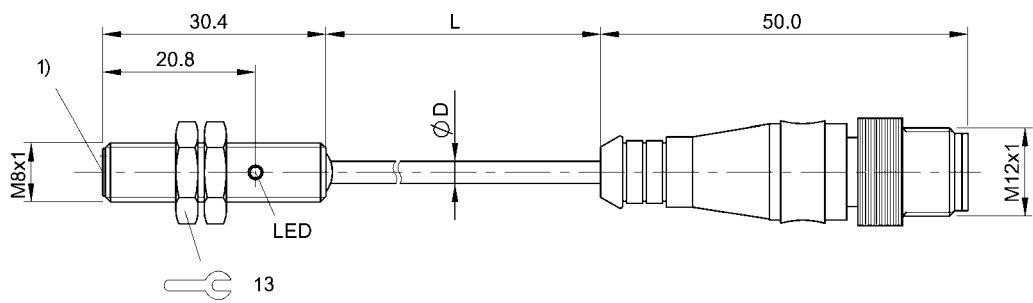


Inductive Sensors
BES M08EE-PSH15B-EP01,5-GS04
Order Code: BES01P4



1) Sensing surface



Basic features

Approval/Conformity	CE UKCA 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	1.5 m
Connection	M12x1-Male, 4-pin, A-coded
Connection type	Cable with connector, 1.50 m, PUR
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.1 µF
Min. operating current Im	0 mA
No-load current Io max., damped	10 mA
No-load current Io max., undamped	7 mA
Operating voltage Ub	10...55 VDC
Output resistance Ra	Open collector
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	150 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	25 ms
Residual current Ir max.	50 µA
Ripple max. (% of Ue)	10 %
Switching frequency	5000 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...70 °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	IP65

Functional safety

MTTF (40 °C)	770 a
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Interface

Switching output PNP normally open (NO)

Material

Housing material Stainless steel
Material jacket PUR
Material sensing surface PBT

Mechanical data

Dimension Ø 8 x 30 mm
Installation for flush mounting
Size M8x1
Tightening torque 6 Nm

Range/Distance

Assured operating distance Sa 1.2 mm
Hysteresis H max. (% of Sr) 15.0 %
Rated operating distance Sn 1.5 mm
Real switching distance sr 1.5 mm
Repeat accuracy max. (% of Sr) 5.0 %
Temperature drift max. (% of Sr) 10 %
Tolerance Sr ±10 %

Remarks

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

EMC: Surge resistance

External protection circuit is required. Document 825345, Section 2.

$T_a \geq 25\text{ °C} \dots \leq 70\text{ °C}$: $I_e = 200 - 1.1 \times (T_a - 25)$

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

