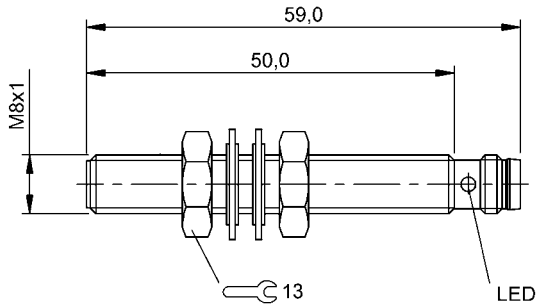
Inductive Sensors

BES M08MI-PSC40B-S49G
Ordercode: BES01ZW



Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M8x1-Male, 3-pole
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current Io max., undamped	8 mA
No-load current Io max., damped	10 mA
Operating voltage Ub	10…30 VDC
Output resistance Ra	33.0 kOhm + 2D
Polarity reversal protected	yes
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	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.	10 µA
Residual ripple max. (% of Ue)	15 %
Switching frequency	800 Hz
Utilization category	DC-13
Voltage drop static max.	2.8 V

Environmental conditions

Ambient temperature	0…60 °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	IP67

Functional safety

MTTF (40 °C)	355 a

General data

Approval/Conformity	CE cULus EAC
Basic standard	IEC 60947-5-2

Material

Housing material	Brass
Material sensing surface	PBT
Surface protection	nickel plates

Mechanical data

Dimension	Ø 8 x 59 mm
Installation	quasi-flush
Size	M8x1
Tightening torque	3 Nm

Output/Interface

Switching output	PNP Normally open (NO)

Range/Distance

Assured operating distance Sa	2.9 mm
Effective operating distance Sr	4 mm
Hysteresis H max. (% of Sr)	15.0 %

Inductive Sensors

BES M08MI-PSC40B-S49G
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Rated operating distance Sn	4 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■■■■
Temperature drift max. (% of Sr)	20 %
Tolerance Sr	±10 %

Remarks

EMC: EMC protection circuit required, see 825345. Burst: 1.2 IVW: 2.2
Quasi-shielded: See installation instructions for inductive sensors with extended range 825356.
The sensor is functional again after the overload has been eliminated.
Quasi-shielded: See installation instructions for inductive sensors with extended range 825356.
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.

Connector view



Wiring Diagram

