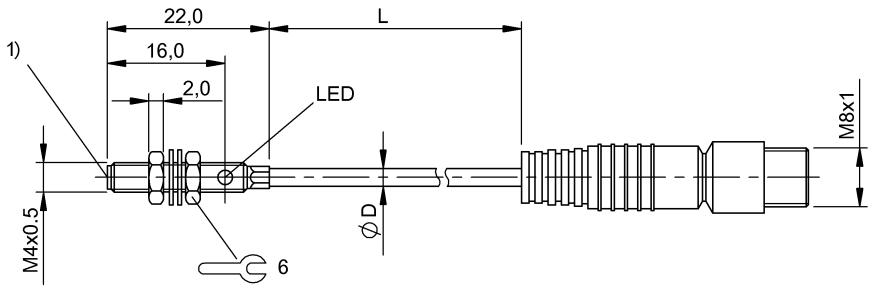
Inductive Sensors

BES M04EC-PSC10B-EP00,3-GS49

Ordercode: BES040R



1) Sensing surface

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	2.40 mm
Cable length	0.3 m
Connection	M8x1-Male, 3-pole
Connection type	Cable with connector, 0.30 m, PUR
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Contamination scale	3
Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	0.15 µF
No-load current Io undamped max.	2 mA
Operating voltage Ub	10…30 VDC
Output resistance Ra	Open drain
Polarity reversal protected	yes
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	25 ms
Repeat accuracy max. (% of Sr)	5.0 %
Residual current Ir max.	10 µA
Residual ripple max. (% of Ue)	10 %
Switching frequency	3500 Hz
Utilization category	DC-13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-25…70 °C
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 per IEC 60529	IP67

Functional safety

MTTF (40 °C)	305 a

General data

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

Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PBT

Mechanical data

Dimension	Ø 4 x 22 mm
Installation	for flush mounting
Size	M4x0.5
Tightening torque	0.8 Nm

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Output/Interface

Switching output	PNP Normally open (NO)

Range/Distance

Assured operating distance Sa	0.8 mm
Effective operating distance Sr	1 mm
Rated operating distance Sn	1 mm
Switching distance marking	■■
Temperature drift max. (% of Sr)	10 %

Remarks

EMC: Surge resistance
External protection circuit is required. Document 825345, Section 2.
The sensor is functional again after the overload has been eliminated.
The temperature drift can be below -15°C and above +60°C, up to 15% of the sensing range.

For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Connector view



Wiring Diagram

