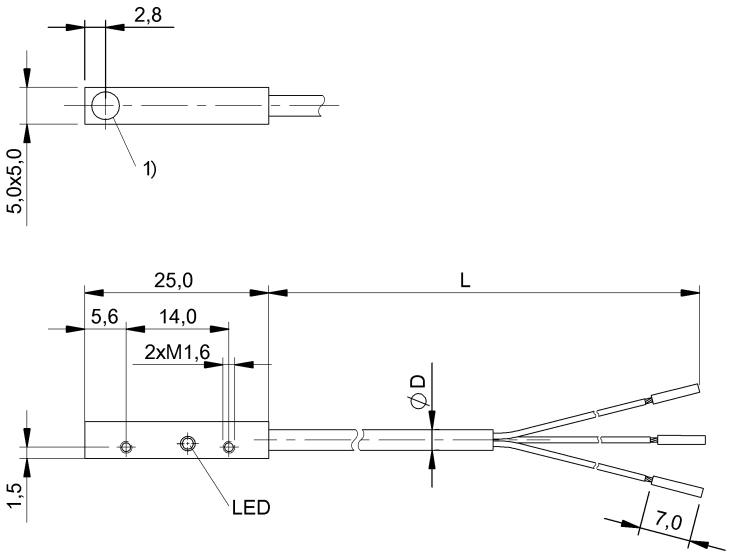
Inductive Sensors

BES Q05AC-POC15B-EP02
Order Code: BES01RJ



IND. CONT. EQ.
81U2
Class 2 Type 1

Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	2.80 mm
Cable length L	2 m
Conductor cross-section	0.14 mm²
Connection type	Cable, 2.00 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.2 µF
Min. operating current Im	1 mA
No-load current Io max., damped	10 mA
No-load current Io max., undamped	3 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open collector
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.	15 ms
Residual current Ir max.	50 µA
Ripple max. (% of Ue)	10 %
Switching frequency	2000 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 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

Functional safety

MTTF (40 °C)	830 a

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Material

Housing material	Stainless steel (1.4305)
Material jacket	PUR
Material sensing surface	PBT

Mechanical data

Dimension	25 x 5 x 5 mm
Installation	for flush mounting
Size	5x5

Output/Interface

Switching output	PNP normally closed (NC)

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)	10.0 %
Switching distance marking	■■
Temperature drift max. (% of Sr)	20 %
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.
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.

Wiring Diagrams