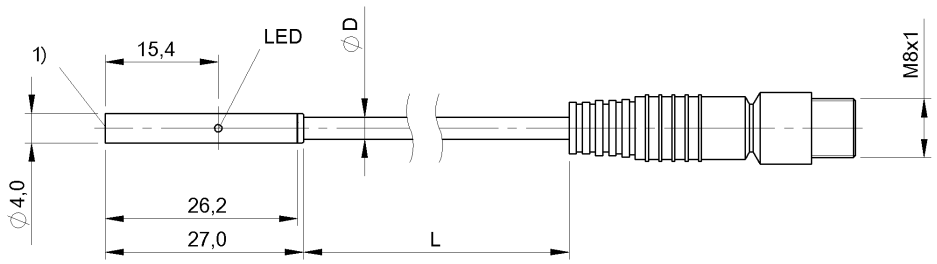
Inductive Sensors

BES 516-3017-E4-C-S49-00,3
Order Code: BES00K3



1) Sensing surface

Basic features

Approval/Conformity	CE cULus EAC 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	0.3 m
Connection	M8x1-Male, 3-pin
Connection type	Cable with connector, 0.30 m, PUR
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
Min. operating current Im	0 mA
No-load current Io max., damped	2 mA
No-load current Io max., undamped	6 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open drain
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.	21 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	10 %
Switching frequency	5000 Hz
Utilization category	DC -13
Voltage drop static max.	2 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

Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PBT

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Mechanical data

Dimension	Ø 4 x 27 mm
Installation	for flush mounting
Size	D4.0

Output/Interface

Switching output	PNP normally closed (NC)

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 %
Switching distance marking	■
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.

Connector Drawings

Wiring Diagrams