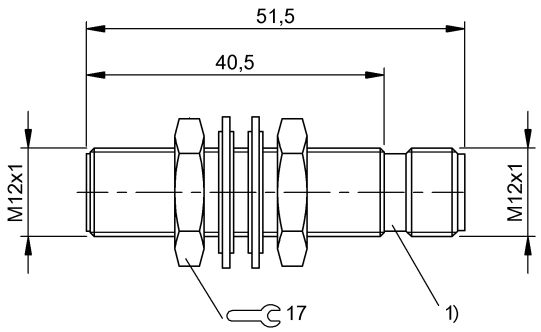
Inductive Sensors

BES 516-325-SA43
Order Code: BES035C



1) LED visible all around

Basic features

Approval/Conformity	CE EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Inductive sensor

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	no
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	25 mA
No-load current Io max., undamped	12 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	2.2 kOhm + D + LED
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	130 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	10 ms
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	600 Hz
Utilization category	DC -13
Voltage drop static max.	3.5 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g_n, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Interface

Switching output	PNP normally open (NO)

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Material

Housing material	Brass, nickel-plated
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 12 x 51.5 mm
Installation	for flush mounting
Mounting length	40.50 mm
Size	M12x1
Tightening torque	10 Nm

Range/Distance

Assured operating distance Sa	2.9 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	4 mm
Real switching distance sr	4 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	-20 %

Remarks

Sr: 3.5 mm -20 % for non-flush mounting.
The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams (Schematic)

