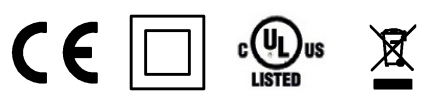
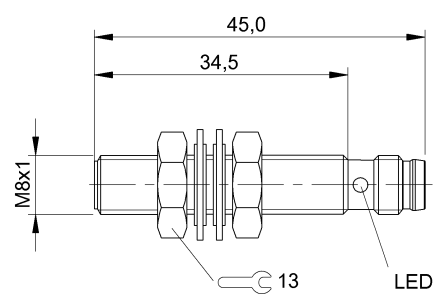


Inductive Sensors
BES 516-324-SA96-G-E5-C-S49
Order Code: BES02P0



Basic features

Approval/Conformity	CE cULus WEEE
Base type deviation	Ceramic coating
Basic standard	IEC 60947-5-2

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.5 μ F
Min. operating current Im	0 mA
No-load current Io max., damped	9 mA
No-load current Io max., undamped	3 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	20 ms
Residual current Ir max.	20 μ A
Ripple max. (% of Ue)	15 %
Switching frequency	1500 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 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
IP rating	IP68, according to BWN Pr 20

Interface

Switching output	PNP normally open (NO)
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BALLUFF

Material

Housing material	Stainless steel
Material sensing surface	ceramic coated

Mechanical data

Dimension	Ø 8 x 45 mm
Installation	for flush mounting
Mounting length	34.10 mm
Size	M8x1
Tightening torque	8 Nm

Range/Distance

Assured operating distance Sa	1.4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	2 mm
Real switching distance sr	2 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

Sn: reduced by the coating thickness of 0.2 mm.
Flush: See installation instructions for inductive sensors with extended range 825357.
The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams

