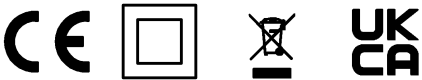
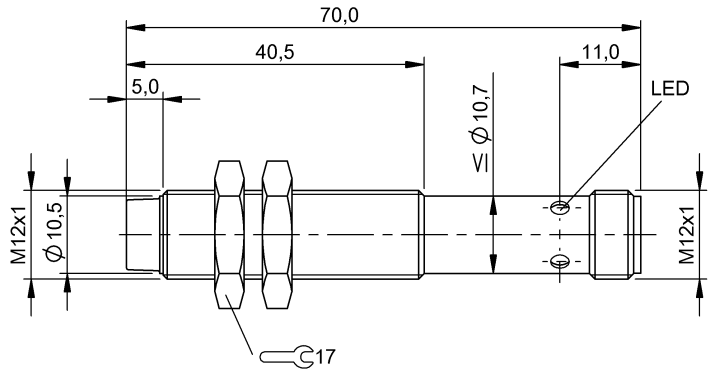


Inductive Sensors
BES 516-356-SA24-S4-C
Order Code: BES036R



Basic features

Approval/Conformity	CE UKCA WEEE
Base type deviation	No lockwashers
Basic standard	IEC 60947-5-2

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
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 I _m	0 mA
No-load current I _o max., damped	8 mA
No-load current I _o max., undamped	1 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	33.0 kOhm + D
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating current I _e	200 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	40 ms
Residual current I _r max.	50 μ A
Ripple max. (% of U _e)	15 %
Switching frequency	1500 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 V

Environmental conditions

Ambient temperature	-40...85 °C
Contamination scale	3
EN 60068-2-27, Shock	30 gn, 11 ms, 3x12 shocks
EN 60068-2-6, Vibration	10...2000 Hz, 1 mm, 30 gn, 3x5 h
IP rating	IP68

Functional safety

MTTF (40 °C)	720 a
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Interface

Switching output	PNP normally open (NO)
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Inductive Sensors
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BALLUFF

Material

Housing material	Stainless steel
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 12 x 70 mm
Installation	non-flush
Mounting length	35.50 mm
Size	M12x1
Tightening torque	20 Nm

Range/Distance

Assured operating distance Sa	3.2 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	±10 %

Remarks

The sensor is functional again after the overload has been eliminated.
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.

Connector Drawings



Wiring Diagrams

