

Basic features

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

Display/Operation

Function indicator	yes
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Electrical connection

Connection	M12x1-Male
Polarity reversal protected	yes
Short-circuit protection	no

Electrical data

Min. operating current I_m	5 mA
Operating voltage U_b	20...250 VAC
Protection class	I
Rated insulation voltage U_i	250 V AC
Rated operating current I_e	500 mA
Rated operating voltage U_e AC	110 V
Rated short circuit current	100 A
Ready delay t_v max.	100 ms
Residual current I_r max.	1500 μ A
Switching frequency	25 Hz
Utilization category	AC-140
Voltage drop static max.	4 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

Functional safety

MTTF (40 °C)	670 a
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Interface

Switching output	Normally open (NO)
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Material

Housing material	Brass, nickel plated
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 18 x 65 mm
Installation	for flush mounting
Size	M18x1
Tightening torque	40 Nm

Inductive Sensors
BES 516-420-E5-L-S27
Order Code: BES0317

BALLUFF

Range/Distance

Assured operating distance Sa	4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	5 mm

Real switching distance sr	5 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

A filter is required for the EMC protection circuit. Conducted interference emission. Epcos, Model: B84112B0000B030.

Recommendation: After a short circuit check the device for proper function.

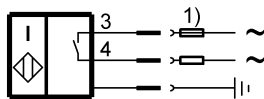
For more information about MTTF and B10d see MTTF / B10d Certificate

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



1) For SCP see electrical data