



Basic features

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

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	1 µF
Min. operating current I _m	5 mA
Operating voltage U _b	10...36 VDC
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Ready delay t _v max.	50 ms
Residual current I _r max.	600 µA
Ripple max. (% of U _e)	15 %
Switching frequency	400 Hz
Utilization category	DC -13
Voltage drop static max.	5.3 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	Brass
Material sensing surface	PA 12
Surface protection	Nickel-free coated

Inductive Sensors
BES M30MF-USC15B-S04G
Order Code: BES027E

BALLUFF

Mechanical data

Dimension	Ø 30 x 51 mm
Installation	for flush mounting
Size	M30x1.5
Tightening torque	70 Nm

Output/Interface

Switching output	non-polarized normally open (NO)
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Range/Distance

Assured operating distance Sa	12 mm
Hysteresis H max. (% of Sr)	20.0 %
Rated operating distance Sn	15 mm
Real switching distance sr	15 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.
Flush: See installation instructions for inductive sensors with extended range 825357.
Specify maximum attainable switching frequency (not per IEC 60947-5-2)

Connector Drawings



Wiring Diagrams

