



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Cable diameter D	4.60 mm
Cable length L	10 m
Conductor cross-section	0.34 mm ²
Connection type	Cable, 10.00 m, PVC
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at U _e	0.5 µF
Min. operating current I _m	0 mA
No-load current I _o max., damped	10 mA
No-load current I _o max., undamped	4 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.	15 ms
Residual current I _r max.	30 µA
Ripple max. (% of U _e)	15 %
Switching frequency	2000 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-25...70 °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)	830 a
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Interface

Switching output	PNP normally open (NO)
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Inductive Sensors
BES 515-356-E4-C-10
Order Code: BES02F8

BALLUFF

Material

Housing material	Stainless steel
Material jacket	PVC
Material sensing surface	PBT

Mechanical data

Dimension	Ø 12 x 37.5 mm
Installation	non-flush
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.
EMC: Surge resistance
External protection circuit is required. Document 825345, Section 2.
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.

Wiring Diagrams

