

IND. CONT. EQ.
81U2
Class 2 Type 1



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 Im	0 mA
No-load current Io max., damped	12 mA
No-load current Io max., undamped	25 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	2.0 kOhm + D + LED
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	130 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	10 ms
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	200 Hz
Utilization category	DC -13
Voltage drop static max.	3.8 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	IP67

Functional safety

MTTF (40 °C)	1620 a
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General data

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

Material

Housing material	Brass
Material sensing surface	PBT
Surface protection	nickel plated

Mechanical data

Dimension	Ø 18 x 44.5 mm
Installation	for flush mounting
Size	M18x1
Tightening torque	25 Nm

Output/Interface

Switching output	PNP normally closed (NC)
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Inductive Sensors
BES 516-367-G-E5-Y-S4
Order Code: BES00YJ

BALLUFF

Range/Distance

Assured operating distance Sa	6.4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	8 mm

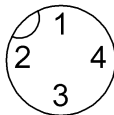
Real switching distance sr	8 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

Remarks

Flush: See installation instructions for inductive sensors with extended range 939221.
The sensor is functional again after the overload has been eliminated.
For further information about the 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

