



**Basic features**

Approval/Conformity	CE cULus EAC WEEE
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	1 µF
Min. operating current Im	0 mA
No-load current Io max., damped	5 mA
No-load current Io max., undamped	2 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	21 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	3500 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 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	IP68

**Functional safety**

MTTF (40 °C)	640 a
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Inductive Sensors  
**BES 516-325-E5-C-S4**  
**Order Code: BES00PK**



**Material**

<b>Housing material</b>	Brass, Nickel-free coated
<b>Material sensing surface</b>	PBT
<b>Surface protection</b>	Nickel-free coated

**Mechanical data**

<b>Dimension</b>	Ø 12 x 45 mm
<b>Installation</b>	for flush mounting
<b>Size</b>	M12x1
<b>Tightening torque</b>	10 Nm

**Output/Interface**

<b>Switching output</b>	PNP normally open (NO)
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**Range/Distance**

<b>Assured operating distance Sa</b>	1.6 mm
<b>Hysteresis H max. (% of Sr)</b>	15.0 %
<b>Rated operating distance Sn</b>	2 mm
<b>Real switching distance sr</b>	2 mm
<b>Repeat accuracy max. (% of Sr)</b>	5.0 %
<b>Temperature drift max. (% of Sr)</b>	10 %
<b>Tolerance Sr</b>	±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**

