



### Basic features

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

### Display/Operation

Power indicator	no
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### Electrical connection

Cable diameter D	5.70 mm
Cable length L	4 m
Conductor cross-section	0.25 mm <sup>2</sup>
Connection type	Cable, 4.00 m, PUR
Number of conductors	5
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

### Electrical data

Load capacitance max. at U <sub>e</sub>	1 µF
Min. operating current I <sub>m</sub>	0 mA
No-load current I <sub>o</sub> max., damped	30 mA
No-load current I <sub>o</sub> max., undamped	30 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	4.7 kOhm + D II 2.35 kOhm + LED
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	90 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Residual current I <sub>r</sub> max.	80 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	1000 Hz
Utilization category	DC -13
Voltage drop static max.	3.5 V

### Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

### Interface

Switching output	PNP normally open (NO)
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Inductive Sensors  
**BES 516-100-S33**  
Order Code: BES032J

# BALLUFF

### Material

Housing material	Aluminium
Material jacket	PUR
Material sensing surface	PA 12

### Mechanical data

Dimension	74 x 40 x 25.5 mm
Installation	for flush mounting

### Range/Distance

Assured operating distance Sa	1.2 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	1.5 mm
Real switching distance sr	1.5 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

### Remarks

When damping, for each switch position + 15 mA.  
The sensor is functional again after the overload has been eliminated.

### Wiring Diagrams

