



1) O-Ring with thrust ring



### Basic features

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

### Display/Operation

Function indicator	no
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 <sub>m</sub>	0 mA
No-load current I <sub>o</sub> max., damped	8 mA
No-load current I <sub>o</sub> max., undamped	3 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	150.0 kOhm
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	50 ms
Residual current I <sub>r</sub> max.	10 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	2000 Hz
Utilization category	DC -13
Voltage drop static max.	2.1 V

### Environmental conditions

Ambient temperature	-25...90 °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	IP68

### Functional safety

MTTF (40 °C)	855 a
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**Inductive Sensors**  
**BES 516-300-S262-S4-D**  
**Order Code: BHS0032**



**Interface**

Switching output                      PNP normally open (NO)

**Material**

Housing material                      Stainless steel  
 Material sensing surface              EP  
 Support ring material                  PTFE

**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 %

**Mechanical data**

Dimension                                Ø 12 x 50 mm  
 Installation                              for flush mounting  
 Mounting part                          M12x1  
 Pressure rating max.                  500 bar  
 Pressure rating, note                oil pressure rated  
 Sealing ring, size                    5.3 x 2.4 mm  
 Size                                        M12x1  
 Tightening torque                    20 Nm ±10 %

**Remarks**

The sensor is functional again after the overload has been eliminated.  
 Pressure cycle rating: typ.1 mil. changes 350 bar 90°C on Balluff test stand per BWN Pr. 12.  
 Overvoltage protection using bi-directional Zener diode between Plus (+) and Minus (-).  
 Installation Instructions 614804  
 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**

