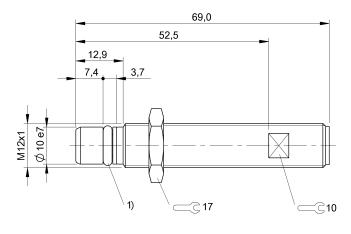
Inductive Sensors BES 516-300-S162-S4-D Order Code: BHS0021

BALLUFF



1) O-Ring with thrust ring



Basic features

Approval/Conformity	CE
	cULus
	EAC
	WEEE
Basic standard	IEC 60947-5-2
Thrust ring, part number	705918

Display/Operation

Function indicator
Power indicator

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

no no

Electrical data

Load capacitance max. at Ue	1μF
Min. operating current Im	0 mA
No-load current lo max., damped	8 mA
No-load current lo max., undamped	3 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	150.0 kOhm
Rated insulation voltage Ui	75 V DC
Rated operating current le	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	50 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	2000 Hz
Utilization category	DC -13
Voltage drop static max.	2.1 V

Environmental conditions

Ambient temperature	-2580 °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)

855 a

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Material

Material		Output/Interface	
Gasket, material	NBR 70	Switching output	PNP normally open (NO)
Housing material	Stainless steel		
Material sensing surface	EP	Range/Distance	
Support ring material	PTFE	Assured operating distance Sa	1.2 mm
Machanical data		Hysteresis H max. (% of Sr)	15.0 %
Mechanical data	Rated operating distance Sn	1.5 mm	
Dimension	Ø 12 x 69 mm	Real switching distance sr	1.5 mm
Installation	for flush mounting	Repeat accuracy max. (% of Sr)	5.0 %
Mounting	M12x1	Temperature drift max. (% of Sr)	10 %
Pressure rating max.	500 bar	Tolerance Sr	±10 %
Pressure rating, note	oil pressure rated		
Sealing ring, part number	631753		
Sealing ring, size	5.3 × 2.4 mm		
Size	M12x1		
Tightening torque	15 Nm ±10 %		

Remarks

The sensor is functional again after the overload has been eliminated. 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

