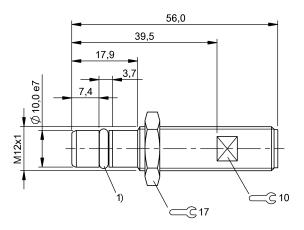
Inductive Sensors BES 516-300-S249-S4-D Ordercode: BHS002Y

BALLUFF



1) O-Ring with thrust ring



Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pole, A-coded
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current lo max., undamped	3 mA
No-load current lo max., damped	8 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	150.0 kOhm
Polarity reversal protected	yes
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
Residual ripple max. (% of Ue)	15 %
Switching frequency	2000 Hz
Utilization category	DC-13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature Contamination scale

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-25...80 °C

3

EN 60068-2-27, Shock EN 60068-2-6, Vibration IP rating	Half-sinus, 30 gn, 11 ms 55 Hz, amplitude 1 mm, 3x30 min IP68
Functional safety	
MTTF (40 °C)	855 a
General data	
Approval/Conformity	CE cULus EAC
Basic standard	IEC 60947-5-2
Thrust ring, part number	705918
Material	
Gasket, material	NBR 70
Housing material	Stainless steel (1.4104)
Material sensing surface	EP
Support ring material	PTFE
Mechanical data	
Dimension	Ø 12 x 56 mm
Fastening detail	M12x1
Installation	for flush mounting
Pressure rating max.	500 bar
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 %
For definitions of terms, see main catalog	eCl@ss 9.1: 27-27-01-01 1(2

Subject to change without notice [122731]

eCl@ss 9.1: 27-27-01-01 ETIM 6.0: EC002714 BHS002Y_0.14_2017-05-03 1(2)

Inductive Sensors BES 516-300-S249-S4-D Ordercode: BHS002Y

BALLUFF

Output/Interface		Tolerance Sr	±10 %
Switching output	PNP Normally open (NO)	Remarks	
Range/Distance		Installation Instructions 614804 The sensor is functional again after the overload has been eliminated.	
0		Mounting instructions	614804
Assured operating distance Sa	1.2 mm	For further information about the MTTF and B10d see MTTF / B10d certifical Indication of the MTTF- / B10d value does not represent a binding composit and/or life expectancy assurance; these are simply experiential values with warranty implications. These declared values also do not extend the expirate period for defect claims or affect it in any way.	
Effective operating distance Sr	1.5 mm		
Hysteresis H max. (% of Sr)	15.0 %		
Rated operating distance Sn	1.5 mm		
Repeat accuracy max. (% of Sr)	5.0 %		
Temperature drift max. (% of Sr)	10 %		



Wiring Diagram

