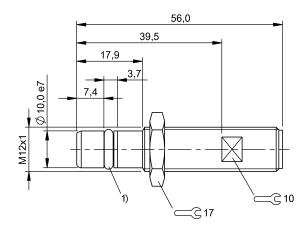
Inductive Sensors BES 516-300-S249-S4-D Order Code: BHS002Y

BALLUFF



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

M12x1-Male, 4-pin, A-coded
yes
yes
yes

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 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68

Functional safety

MTTF (40 °C)

855 a

Inductive Sensors BES 516-300-S249-S4-D Order Code: BHS002Y

BVLLAL

Interface

Switching output	PNP normally open (NO)
Material	
Housing material	Stainless steel
Material sensing surface	EP
Support ring material	PTFE
Machanical data	

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 56 mm
Installation	for flush mounting
Mounting part	M12x1
Pressure rating max.	500 bar
Pressure rating, note	oil pressure rated
Sealing ring, size	5.3 × 2.4 mm
Size	M12x1
Tightening torgue	15 Nm ±10 %

Remarks

Installation Instructions 614804

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

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

