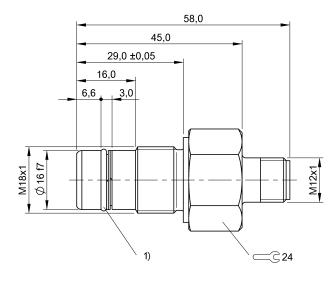
Inductive Sensors BES 516-300-S190-S4 Order Code: BHS0026

BALLUFF



1) O-Ring with thrust ring



Basic features

Approval/Conformity	CE	
	UKCA	
	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 Im	0 mA
No-load current lo max., damped	25 mA
No-load current lo max., undamped	12 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	2.0 kOhm + D
Rated insulation voltage Ui	75 V DC
Rated operating current le	130 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	10 ms
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	400 Hz
Utilization category	DC -13
Voltage drop static max.	3.5 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)

1620 a

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BALLUFF

-20 %

Interface

Interface		Mechanical data		
Switching output	PNP normally open (NO)	Dimension Installation Mounting part	Ø 18 x 58 mm for flush mounting M18x1	
Gasket, materialNHousing materialStMaterial sensing surfaceP	NBR 60-80 Stainless steel PEEK PTFE	Pressure rating max. Pressure rating, note Sealing ring, size Size Tightening torque Range/Distance	500 bar oil pressure rated 13 × 1.5 mm M18x1 40 Nm ±10 %	
		Assured operating distance Sa Hysteresis H max. (% of Sr) Rated operating distance Sn Real switching distance sr Repeat accuracy max. (% of Sr) Temperature drift max. (% of Sr)	2.1 mm 15.0 % 3 mm 3 mm 5.0 % 10 %	

Remarks

Installation Guide 836665

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

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.

Tolerance Sr

Connector Drawings



Wiring Diagrams

