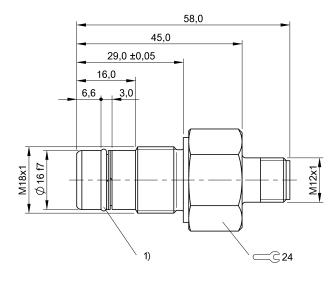
## Inductive Sensors BES 516-300-S190-S4 Order Code: BHS0026

# 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 <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)

1620 a

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

## 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

