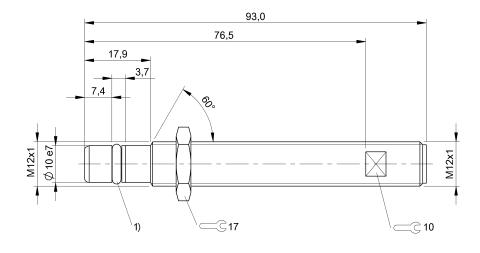
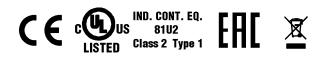
# Inductive Sensors BES 516-300-S300-S4-D Order Code: BHS004C

# 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**

led

no no

## **Electrical data**

Load capacitance max. at Ue	0.5 μF
Min. operating current Im	0 mA
No-load current lo max., damped	10 mA
No-load current lo max., undamped	1 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	33.0 kOhm + D
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.	10 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	1000 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 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)

720 a

# **Inductive Sensors** BES 516-300-S300-S4-D **Order Code: BHS004C**



#### 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	
		Hysteresis H max. (% of Sr)	15.0 %	
Mechanical data		Rated operating distance Sn	1.5 mm	
Dimension	Ø 12 x 93 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

