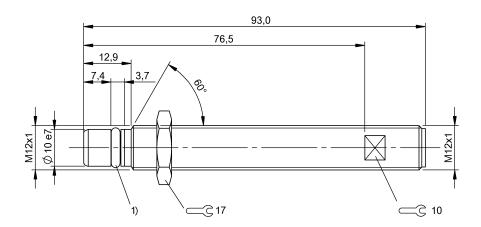
# BES 516-300-S163-S4-D Order Code: BHS0022

# **BALLUFF**



# 1) O-Ring with thrust ring









## **Basic features**

Polarity reversal protected

Short-circuit protection

Protection against device mix-ups

Approval/Conformity	CE UKCA cULus WEEE
Base type deviation	Housing length
Basic standard	IEC 60947-5-2
Display/Operation	
Function indicator	no
Power indicator	no
Electrical connection	
Connection	M12x1-Male, 4-pin, A-coded

yes

yes

yes

## **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 μΑ
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 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 mir
IP rating	IP68
Functional safety	
MTTF (40 °C)	720 a

MTTF (40 °C)

Subject to change without notice: 263744

### **Inductive Sensors**

# BES 516-300-S163-S4-D Order Code: BHS0022



#### **Interface**

Switching output PNP normally open (NO)

#### Material

Housing material Stainless steel

Material sensing surface EP
Support ring material PTFE

#### Mechanical data

DimensionØ 12 x 93 mmInstallationfor flush mounting

Mounting part M12x1

Pressure rating max. 500 bar

Pressure rating, note oil pressure rated

Sealing ring, size $5.3 \times 2.4 \text{ mm}$ SizeM12x1Tightening torque15 Nm ±10 %

## 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 %

#### 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**

