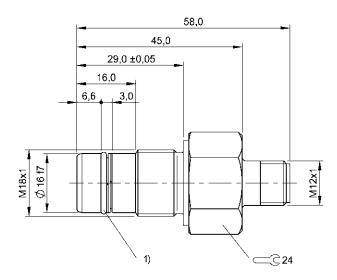
# BES 516-300-S190-S4 Order Code: BHS0026

# **BALLUFF**



## 1) O-Ring with thrust ring







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 μΑ
Ripple max. (% of Ue)	15 %
Switching frequency	400 Hz
Utilization category	DC -13
Voltage drop static max.	3.5 V

#### **Environmental conditions**

Ambient temperature

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MTTF (40 °C)	1620 a
Functional safety	
IP rating	IP68
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
Contamination scale	3

-25...80 °C

Material sensing surface

Support ring material

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#### Interface

Switching output PNP normally open (NO) Material Gasket, material NBR 60-80 Housing material Stainless steel

PEEK

PTFE

## Mechanical data

Dimension Ø 18 x 58 mm Installation for flush mounting Mounting length 13.00 mm Mounting part M18x1 Pressure rating max. 500 bar Pressure rating, note oil pressure rated Sealing ring, size  $13 \times 1.5 \, \text{mm}$ M18x1 Tightening torque 40 Nm ±10 %

## Range/Distance

Assured operating distance Sa	2.1 mm	
Hysteresis H max. (% of Sr)	15.0 %	
Rated operating distance Sn	3 mm	
Real switching distance sr	3 mm	
Repeat accuracy max. (% of Sr)	5.0 %	
Temperature drift max. (% of Sr)	10 %	
Tolerance Sr	-20 %	

#### 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.

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# **Connector Drawings**



## Wiring Diagrams (Schematic)

