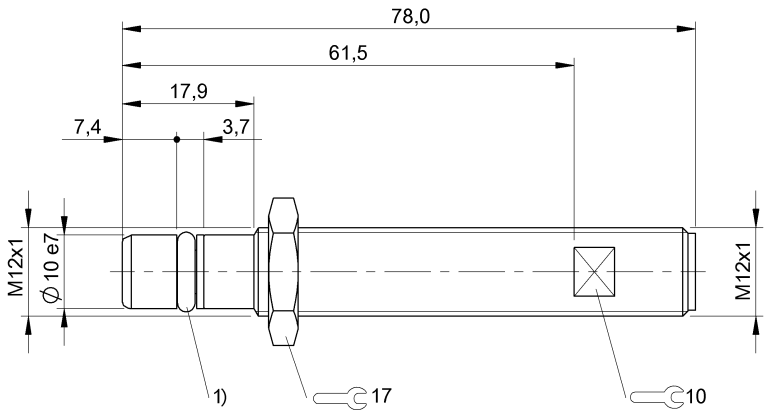
Inductive Sensors

BES 516-300-S298-S4-D
Order Code: BHS0049



1) O-Ring with thrust ring

Basic features

Approval/Conformity	CE UKCA cULus WEEE
Base type deviation	Low hysteresis
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	0.5 µF
Min. operating current Im	0 mA
No-load current Io max., damped	10 mA
No-load current Io max., undamped	1 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	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.	2.5 V

Environmental conditions

Ambient temperature	-25...80 °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

Interface

Switching output	PNP normally open (NO)

Inductive Sensors

BES 516-300-S298-S4-D
Order Code: BHS0049

Material

Housing material	1.4104 stainless steel
Material sensing surface	EP
Support ring material	PTFE

Mechanical data

Dimension	Ø 12 x 78 mm
Installation	for flush mounting
Mounting length	43.60 mm
Mounting part	M12x1
Pressure rating max.	500 bar
Pressure rating, note	oil pressure rated
Sealing ring, size	5.85 × 2.4 mm
Size	M12x1
Tightening torque	15 Nm ±10 %

Range/Distance

Assured operating distance Sa	1.2 mm
Hysteresis H max. (% of Sr)	7.5 %
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

Installation Instructions 614804
The sensor is functional again after the overload has been eliminated.

Connector Drawings

Wiring Diagrams (Schematic)