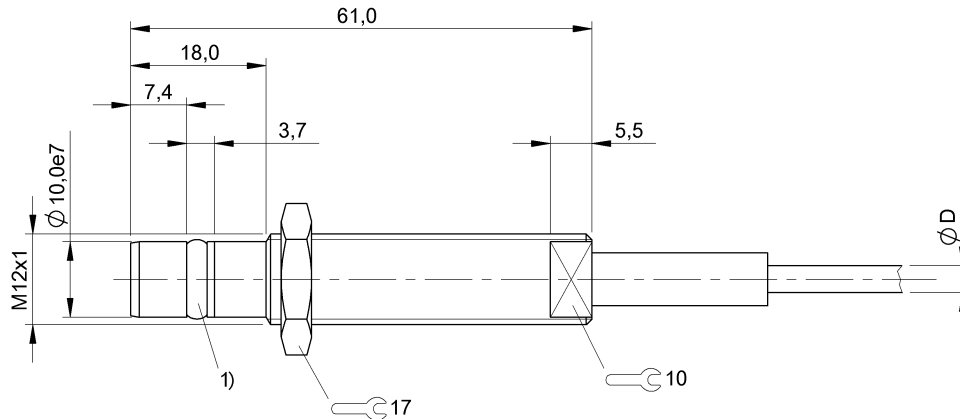


**BES 516-300-S135-D-PU-05**  
**Ordering code: BHS001F**

**Inductive sensor**  
**M12x61 mm**  
**High-pressure-rated**

**DC, direct current**  
**PNP/Normally open (NO)**  
**Sn = 1,5 mm**  
**Flush (shielded)**

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**Characteristic data**

Eff. switching distance $S_r$	1,5 mm
Tolerance $S_r$	$\pm 10\%$
Assured operating distance $S_a$	1,2 mm
Hysteresis $H$ max. (in % of $S_r$ )	15 %
Repeat accur. $R$ max. (% of $S_r$ )	5 %
Ambient temperature	-25...80 °C
Temp. drift max. (% of $S_r$ )	10%
Switching freq. $f$ max.	1000 Hz
Ready delay $t_v$ max.	10 ms
Utilisation category	DC 13
Function indicator	No
Power-on indicator	No
Short-circuit protected	Yes
Degree of protection as per IEC 60529	IP68 according to BWN PR 20
Protected against polarity reversal	Yes
Protected against reverse connection	Yes
Part number sealing ring	636594
Part number thrust ring	705918

**Electrical data**

Operating voltage	
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	15 %
Voltage drop static max.	1,5 V
Rated insulation voltage $U_i$	75 DC V
Effective operating current $I_e$	200 mA
No-load current $I_0$ damped	10 mA
No-load current $I_0$ undamped	1 mA
Off-state current $I_r$ max.	10 $\mu$ A
Minimum operating current $I_m$	0 mA
Rated short circuit current	100 A

Output resistance $R_a$	33.0k + D
Load capacitance max. (at $U_e$ )	0,5 $\mu$ F
Principle of operation	Inductive

**Mechanical data**

Housing material	1.4104
Sensing surface material	EP
Sealing ring material	FPM 70
Thrust ring material	PTFE
Tightening torque max.	25 Nm $\pm 10\%$
Mounting length	37,5 mm
Connection type	Cable
Cable jacket material	PUR
Cable diameter $D$ max.	3,5 mm
Cable short designation	LiFYY11Y-O
Cable length	5 m
Number of conductors	3
Conductor cross-section	0.14 mm <sup>2</sup>
Pressure resistance	oilpressure-rated to 500 bar
Shock rating	Shock, half-sinus, 30 gn, 11ms
Vibration rating	55 Hz, 1 mm ampl., 3x30 min
Degree of contamination	3
Size sealing ring	5.85 x 2.4
Mounting hi-pressure switches	M12x1

**Basic data**

Basic standard	IEC 60947-5-2
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**Remarks**

The sensor is functional again after the overload has been eliminated.  
 Pressure rated even for O<sub>2</sub>, N<sub>2</sub>O, N<sub>2</sub>, air.  
 Installation instructions 614804.

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Definitions see main catalog

subject to change

