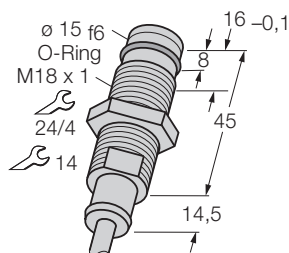
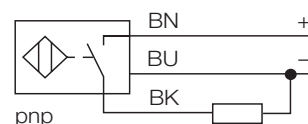


Inductive sensor for high pressures BiD2-G180-AP6/S212



- threaded barrel, M18 x 1
- stainless steel, 1.4305
- admissible pressure static/dynamic 500/350 bar
- 3-wire DC, 10...30 VDC
- normally open pnp output
- cable connection

Wiring diagram



Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. This field is generated by an LC resonant circuit with a ferrite core coil.

Pressure resistant inductive sensors withstand pressures of up to 500 bar which makes them perfectly suited for position control in hydraulic cylinders.

Type	BiD2-G180-AP6/S212
Ident-No.	1688003
Rated operating distance S_n	2 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Pressure static	≤ 500 bar
Pressure dynamic	≤ 350 bar
Permitted contact medium	electric non-conductive
Temperature drift	≤ ± 10 %
Operating temperature	-10 ... + 70 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U_{pp}
Rated operational current (DC) I_e	≤ 200 mA
No-load current I_0	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 2 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Housing style	threaded barrel; M18 x 1
Dimensions	58 mm
Housing material	metal, A2 1.4305 (AISI 303)
Active face	plastic, PA12-GF30
Rated pressure on frontcap	≤ 100 bar
Max. fixing torque of coupling nut	25 Nm
Wiring	cable
Cable	Ø 5,2, LiYY, PVC, 2 m
Cable cross section	3 x 0,34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67

Inductive sensor for high pressures BiD2-G180-AP6/S212

Mounting instructions

Gap D	minimum gap 2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn

Diameter of active face B

Ø 18 mm

sensor head must be circulated by oil during set-up.

