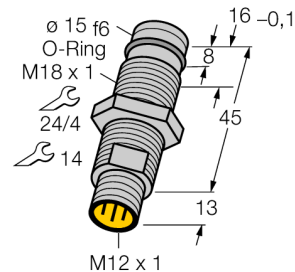
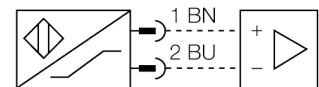


**Inductive sensor
for high pressures
BID2-G180-Y0-H1141/S212**



- Threaded barrel, M18 x 1
- Stainless steel, 1.4305
- Admissible pressure static/dynamic 500/350 bar
- DC 2-wire, nom. 8.2 VDC
- Output acc. to DIN EN 60947-5-6 (NAMUR)
- M12 x 1 connector

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

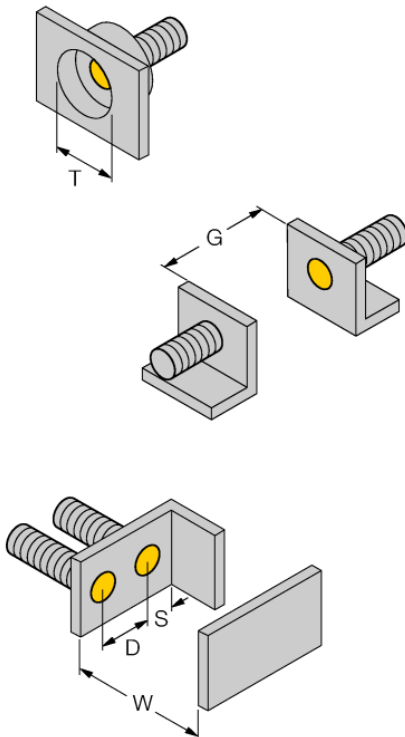
Pressure resistant inductive sensors withstand pressures of up to 500 bar which makes them perfectly suited for position control in hydraulic cylinders.

Type	BID2-G180-Y0-H1141/S212
Ident-No.	1088500
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	$\leq 2\%$
Static pressure	≤ 500 bar
Dynamic pressure	≤ 350 bar
Admissible contact medium	electrically non-conductive
Hysteresis	1...10 %
Ambient temperature	-25...+70 °C
Output function	2-wire, NAMUR
Switching frequency	≤ 2 kHz
Voltage	Nom. 8.2 VDC
Non-actuated current consumption	≥ 2.1 mA
Actuated current consumption	≤ 1.2 mA
Design	threaded barrel, M18 x 1
Dimensions	58 mm
Housing material	Metal, V2A (1.4305)
Material active face	Plastic, PA12-GF30
Tightening torque of housing nut	25 Nm
Connection	connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67

**Inductive sensor
for high pressures
BID2-G180-Y0-H1141/S212**

Mounting instructions	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B	Ø 18 mm
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- In order to protect the coil connections integrated in the sensor head, it is required to ventilate the chamber of the oscillator coil.
- For this the employed non-conductive and neutral medium is filled into the cavity via the middle hole of the sensor's active face, using a thin cannula.

**Inductive sensor
for high pressures
BID2-G180-Y0-H1141/S212**



Accessories

Type code	Ident-No.	Short text	Dimension drawing
IM1-22EX-R	7541231	Isolating switching amplifier, dual-channel; 2 relay outputs NO; input NAMUR signal; selectable ON/OFF mode for wire- break and short-circuit monitoring; adjustable signal flow (NO/ NC mode); removable terminal blocks; 18 mm width; universal voltage supply unit	