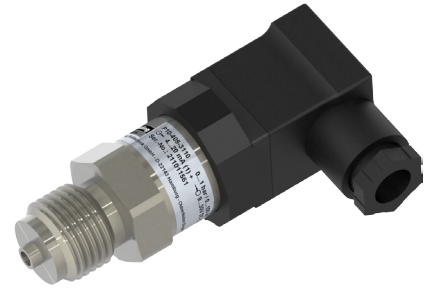


# P10

**Nöding**

Messtechnik



## Datasheet Pressure Transmitter P10

### PERFORMANCE FEATURES

- Dry ceramic sensor
- Cost optimized for standard applications
- Smallest measuring range: 0...250 mbar
- Largest measuring range: 0...250 bar
- Negative pressure measuring range: up to -1 bar
- Compact and rugged design
- Accuracy  $\leq 0,5\%$
- Analog output: 4...20 mA, 2-wires  
0...10 V, 3-wires  
0...5 V, 3-wires  
0,5...4,5 V, 3-wires ratiometric

### AREAS OF APPLICATION

- Gaseous media
- Liquid media
- Abrasive media
- Aggressive media
- Vacuum applications

The P10 pressure sensor provides a cost-optimized alternative to capacitive sensors. The piezoresistive principle in combination with a ceramic membrane is resistant to aggressive and abrasive media. Its compact housing is made of high-quality stainless steel 1.4404 and is therefore suitable for almost all media. Our modular design concept provides a wide variety of products. Feel free to contact us if you need a customization that is not listed in this datasheet.

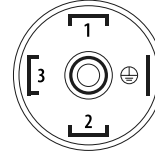
# P10 Datasheet Pressure Transmitter

## TECHNICAL DATA

Measuring range	
Pressure range	See table "Measuring ranges" others on request
Output	
Analog output	4...20 mA 2-wires 0...10 V 3-wires 0...5 V 3-wires 0,5...4,5 V 3-wires, ratiometric
Power supply	
20 mA output	9...30 V DC
5 V output	9...30 V DC
10 V output	15...30 V DC
0,5...4,5 V output	5 V DC
Signal characteristics	
Accuracy	$\leq \pm 0,5 \% \text{ FS @ } 25^\circ\text{C}$
Long term stability	$\leq \pm 0,5 \% \text{ FS/Year}$
Response time	50 ms - others on request
Swich-on time	< 1 s
Temperature coefficient	
Zero	$\leq \pm 0,03 \% \text{ FS/Kelvin}$
Span	$\leq \pm 0,02 \% \text{ FS/Kelvin}$
Temperature ranges	
Medium temperature	-25...100 °C
Surrounding temperature	-25...80 °C
Storage temperature	-40...85 °C
Electrical protections	
Short-circuit resistance	Permanent
Reverse polarity protection	Protection against reverse polarity, but no function
Electromagnetic compatibility	Interference emissions and immunity acc. to EN 61326
Wetted materials	
Process connection	Stainless steel 1.4404
Sensor	Ceramic $\text{Al}_2\text{O}_3$
Sensor seal	FPM (Viton), NBR, EPDM, FFKM (Chemraz/Kalrez)
Surroundings	
Protection type	IP 67
Exemplary weight	
P10-410-311 (figure p.1)	Approx. 150 g

## ELECTRICAL CONNECTION

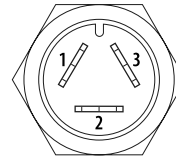
Connector  
EN 175301-803A



**4...20 mA 2-wires**  
PIN 1: Signal +  
PIN 2: Signal -

**0...10 V 3-wires**  
PIN 1: in +  
PIN 2: in -  
PIN 3: out +

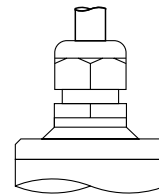
Quickon-Connector



**4...20 mA 2-wires**  
PIN 1: Signal +  
PIN 2: Signal -

**0...10 V 3-wires**  
PIN 1: in +  
PIN 2: in -  
PIN 3: out +

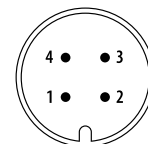
Cable connection



**4...20 mA 2-wires**  
red: Signal +  
black: Signal -

**0...10 V 3-wires**  
red: in +  
black: in -  
white: out +

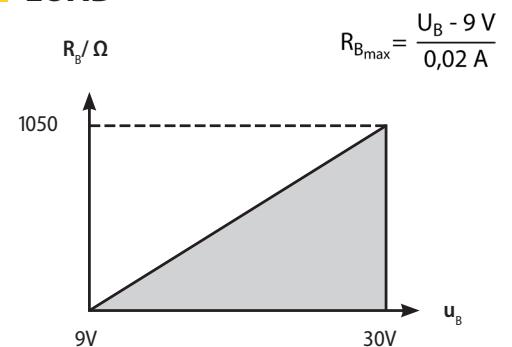
M12 Connector



**4...20 mA 2-wires**  
PIN 1: Signal +  
PIN 3: Signal -

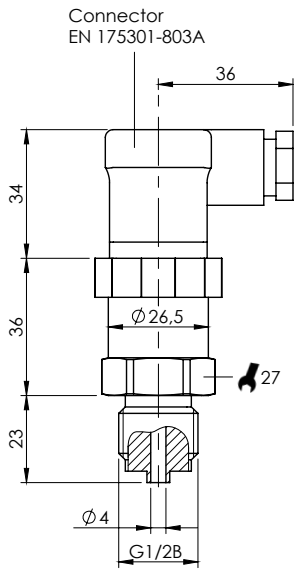
**0...10 V 3-wires**  
PIN 1: in +  
PIN 3: in -  
PIN 4: out +

## LOAD

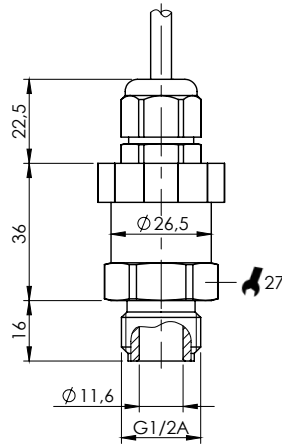




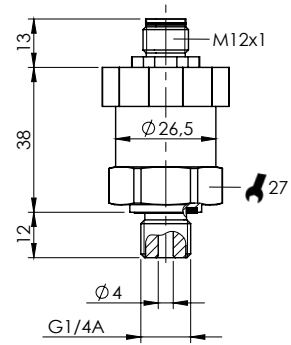
## DIMENSIONS



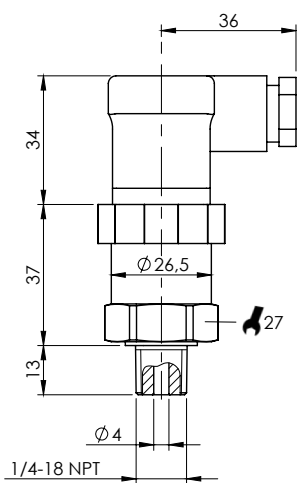
PROCESS CONNECTION ■ TYPE 3



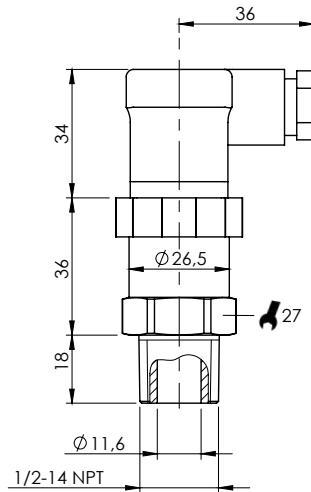
■ TYPE G



■ TYPE D



PROCESS CONNECTION ■ TYPE DN



■ TYPE 2