

P21

Nöding

Messtechnik



Datasheet Pressure Transmitter P21

PERFORMANCE FEATURES

- Flush process connection
- Dry ceramic sensor
- Accuracy $\leq 0,5\%$
- Smallest measuring range: 0...250 mbar
- Largest measuring range: 0...100 bar
- Negative pressure measuring range: up to -1 bar
- 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

- Viscous and pasty media
- Hygiene applications
- Liquid media
- Gaseous media
- Aggressive Media

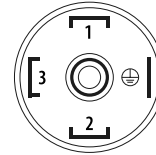
The P21 model is designed for use in applications where media tend to deposit and clog the sensor. Various output signals, process connections and high pressure ranges widen its area of application. A compact front-flush process connection prevents hidden edges and drill holes, in combination with a resistant ceramic sensor, optimal cleaning and maintenance can be ensured. The piezoresistive measuring principle allows for economical application in most liquid and gaseous 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.

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	60 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 Al_2O_3
Sensor seal	FPM (Viton), NBR, EPDM, FFKM (Chemraz/Kalrez)
Surroundings	
Protection type	IP 67
Exemplary weight	
P21-405-1110 (figure p. 1)	Approx. 150 g

ELECTRICAL CONNECTION

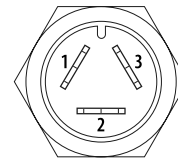
Connector
EN 175301-803A



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 +

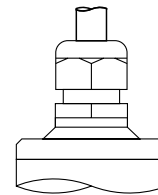
Quickon-Connector



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 +

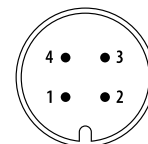
Cable connection



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 +

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