

PM82

Nöding

Messtechnik



Datasheet Digital Contact Gauge PM82

PERFORMANCE FEATURES

- 3 digit LED display
- Recording min./max. pressure
- Dry piezoresistive ceramic sensor
- Smallest measuring range: 0...500 mbar
- Largest measuring range: 0...250 bar
- Negative pressure measuring range: up to -1 bar
- Accuracy $\leq 0,5\%$
- 2 contact outputs DC PNP, max. 200 mA
- Analog output: 4...20 mA, 3-wires
0...10 V, 3-wires
0...20 mA, 3-wires

AREAS OF APPLICATION

- Industrial water applications
- Beverage industry
- Gaseous media
- Hygiene applications
- Abrasive media
- Aggressive media

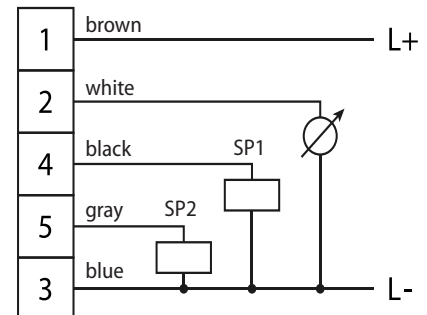
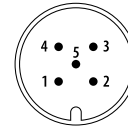
Model PM82 features a large, bright display. The digital contact gauge can still be easily read from a distance and therefore allows for a quick assessment of the process pressure. An analog output and 2 switch outputs widen the range of applications. The piezoresistive measuring principle in combination with a ceramic membrane is resistant to aggressive and abrasive media. The process connection is made of high-quality stainless steel 1.4404 and is therefore suitable for almost all media. All wetted components are food safe, making the unit ideal for use in beverage and process water applications. Additional process connections and measuring ranges can also be found in the PM82-3 and PM82-4 models.

TECHNICAL DATA

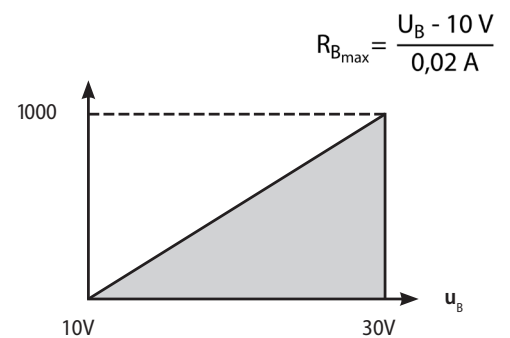
Measuring range	
Pressure range	See table „Measuring ranges“ others on request
Output	
Analog output	4...20 mA 3-wires 0...10 V 3-wires 0...20 mA 3-wires
Contact output	2x DC PNP, max. 200 mA
Power supply	
20 mA output	10...30 V DC
10 V output	16...30 V DC
Signal characteristics	
Accuracy	$\leq \pm 0,5 \% \text{ FS @ } 25^\circ\text{C}$
Long term stability	$\leq \pm 0,5 \% \text{ FS / Year}$
Response time	200 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	
PM82-410-310 (figure p. 1)	Approx. 440 g

ELECTRICAL CONNECTION

M12 Connector



LOAD



MEASURING RANGES

Measuring ranges	Relative	Overload (bar)
0...500 mbar / 0...50 kPa	B7	-0,1/1
0...600 mbar / 0...60 kPa	04	-0,5/2
0...1 bar / 0...100 kPa	05	-0,5/2
0...1,6 bar / 0...160 kPa	06	-1/4
0...2 bar / 0...200 kPa	B3	-1/4
0...2,5 bar / 0...250 kPa	07	-1/10
0...4 bar / 0...400 kPa	08	-1/10
0...5 bar / 0...500 kPa	F1	-1/10
0...6 bar / 0...600 kPa	09	-1/15
0...10 bar / 0...1 MPa	10	-1/15
0...16 bar / 0...1,6 MPa	11	-1/35
0...20 bar / 0...2 MPa	B5	-1/35
0...25 bar / 0...2,5 MPa	12	-1/100
0...40 bar / 0...4 MPa	13	-1/100
0...50 bar / 0...5 MPa	F3	-1/100
0...60 bar / 0...6 MPa	14	-1/200
0...100 bar / 0...10 MPa	15	-1/200
0...160 bar / 0...16 MPa	16	-1/400
0...250 bar / 0...25 MPa	17	-1/600
-1...1 bar / -100...100 kPa	D6	-1/4
-1...1,5 bar / -100...150 kPa	D7	-1/4
-1...3 bar / -100...300 kPa	D8	-1/10
-1...5 bar / -100...500 kPa	D9	-1/10
-1...9 bar / -100...900 kPa	E1	-1/15

ORDERING CODE

Analog output

- 0 None
- 1 0...10V 3-wires
- 2 0...20 mA 3-wires
- 3 4...20 mA 3-wires

Contact output

- 1 1 contact
- 2 2 contacts

Ranges

Measuring ranges see table

- 99 Non-standard range (on request)

Process connection and material

- 3 G 1/2 B, EN 837-1, 1.4404
- 9 Others (on request)

Sensor seal

- 1 FPM (Viton), standard
- 2 NBR (Perbuan)
- 3 EPDM
- 5 FFKM (Chemraz / Kalrez)
- 9 Others (on request)

Options

- 0 Display 3 digits (standard)
- 1 Display reduced to 2 digits

PM82 - [] - []

DIMENSIONS

