



Datasheet Differential Pressure Transmitter PDM80-2

PERFORMANCE FEATURES

- 4 digit LED display
- 2 relays 250V AC / 125V DC
- Dry capacitive ceramic sensor
- Smallest measuring range: 0...25 mbar
- Largest measuring range: 0...60 bar
- Accuracy $\leq 0,2\%$
- Analog output: 4...20 mA, 3-wires
0...10 V, 3-wires
0... 20 mA, 3-wires

Model PDM80-2 features a large, bright display. The transmitter can still be easily read from a distance and therefore allows a quick assessment of the process pressure. An analog output and 2 relays widen the range of applications. The electrical connection is done via an integrated terminal strip, the PG11 cable gland provides IP65 dust and water protection. The capacitive 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.

AREAS OF APPLICATION

- Gaseous media
- Liquid media
- Hygiene applications
- Viscous and pasty media
- Aggressive media
- Pressure superimposed level measurement

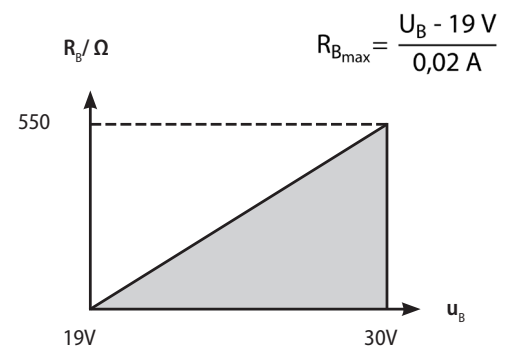
TECHNICAL DATA

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
Relays	250 V AC, max 500 W 125 V DC, max 100 W Max. switching current 2 A
Power supply	
20 mA output	19...30 V DC
10 V output	19...30 V DC
Signal characteristics	
Accuracy	$\leq \pm 0,2 \% \text{ FS @ } 25^{\circ}\text{C}$
Long term stability	$\leq \pm 0,15 \% \text{ FS/Year}$
Response time	200 ms - others on request
Switch-on time	$< 1 \text{ s}$
Temperature coefficient	
Zero	$\leq \pm 0,02 \% \text{ FS / Kelvin}$
Span	$\leq \pm 0,02 \% \text{ FS / Kelvin}$
Temperature ranges	
Medium temperature	-40...100 °C (125°C < 0,5h)
Surrounding temperature	0...60 °C
Storage temperature	-40...60 °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 65
Exemplary weight	
PDM80-2 (figure p. 1)	Approx. 1000 g

ELECTRICAL CONNECTIONS

1	+ 24 V	] Supply voltage 19...30V DC
2	-	
3	PE	
4	+ Output 0(4)...20 mA / 0...10 V	
5		
6		Relay output S 1
7		
8		Relay output S 2
9		
10		

LOAD



MEASURING RANGES

Measuring ranges	Code	Overload (bar)
0...25 mbar / 0...2,5 kPa *	A7	-0,3/4
0...40 mbar / 0...4 kPa *	A8	-0,3/4
0...60 mbar / 0...6 kPa *	A9	-0,3/4
0...100 mbar / 0...10 kPa	00	-0,3/4
0...160 mbar / 0...16 kPa	01	-0,6/5
0...200 mbar / 0...20 kPa	B1	-1/6
0...250 mbar / 0...25 kPa	02	-1/6
0...400 mbar / 0...40 kPa	03	-1/6
0...600 mbar / 0...60 kPa	04	-1/10
0...1 bar / 0...100 kPa	05	-1/10
0...1,6 bar / 0...160 kPa	06	-1/18
0...2 bar / 0...200 kPa	B3	-1/18
0...2,5 bar / 0...250 kPa	07	-1/18
0...4 bar / 0...400 kPa	08	-1/25
0...6 bar / 0...600 kPa	09	-1/40
0...10 bar / 0...1 MPa	10	-1/40
0...16 bar / 0...1,6 MPa	11	-1/40
0...20 bar / 0...2 MPa	B5	-1/40
0...25 bar / 0...2,5 MPa	12	-1/40
0...40 bar / 0...4 MPa	13	-1/60
0...60 bar / 0...60 MPa	14	-1/100

* Accuracy 0,5%

ORDERING CODE

Measuring input

2 2 measuring inputs

Output signal

1 0...10 V 3-wires

5 0(4)...20 mA 3-wires

Ranges

Measuring ranges see table

99 Non-standard range (on request)

Process connection and material

0 2x G1/4 inside, ISO 228-1, 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)

Relays

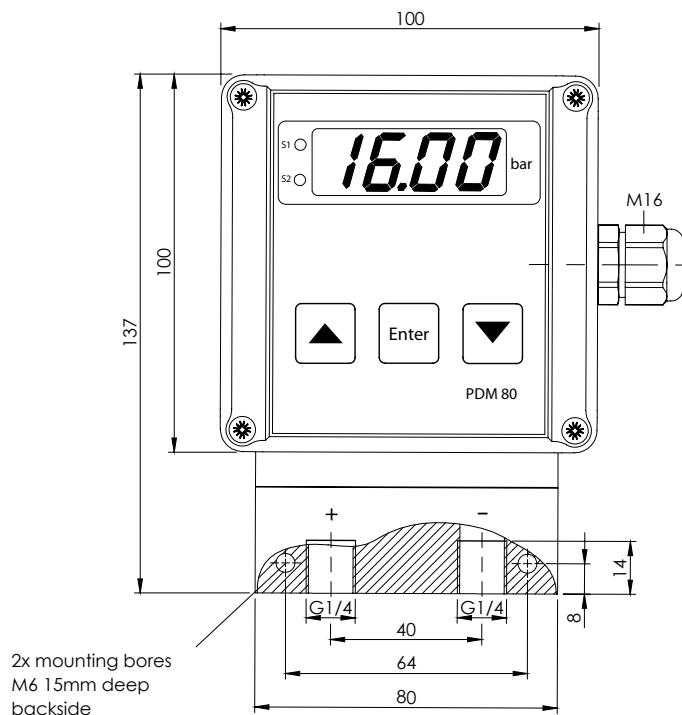
0 no relay

1 1 relay

2 2 relays

PDM80 -

DIMENSIONS



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