PM63

Datasheet Digital Contact Gauge PM63

PERFORMANCE FEATURES

- 3 digit LED display
- Recording min./max. pressure
- Dry piezoresistive ceramic sensor
- Smallest measuring range: 0…250 mbar
- Largest measuring range: 0…250 bar
- Negative pressure measuring range: up to -1 bar
- Accuracy ≤ 0,5%
- 1 contact output DC PNP, max. 200mA
- 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 PM63 features a large, bright display. The digital contact gauge 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 piezoresive 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.

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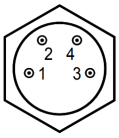
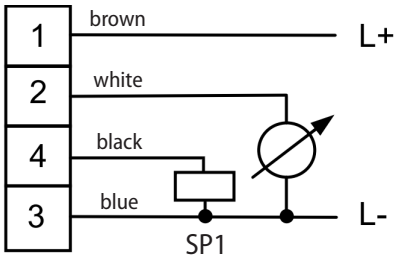
TECHNICAL DATA

Measuring range	
Pressure range	See table „Measuring ranges“ others on request
Output	
Analog output	0 (4)…20 mA 3-wires 0…10 V 3-wires
Contact output	1x DC PNP, max. 200 mA
Power supply	
20 mA output	10…30 V DC
10 V output	16…30 V DC
Signal characteristics	
Accuracy	≤ ± 0,5 % FS @ 25 °C
Long term stability	≤ ± 0,5 % FS / Year
Response time	200 ms - others on request
Swich-on time	< 1 s
Temperature coefficient	
Zero	≤ ± 0,03 % FS / Kelvin
Span	≤ ± 0,02 % 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	
PM63-A11-DD-11 (figure p. 1)	ca. 300 g

ELECTRICAL CONNECTION

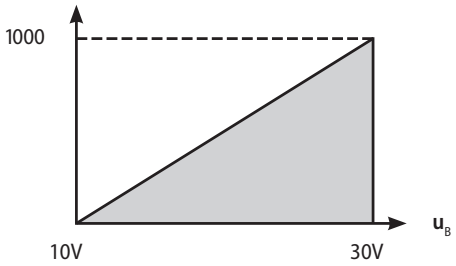
Connector M8x1 4-pole





LOAD

$$R_{B_{max}} = \frac{U_B - 10\ V}{0{,}02\ A}$$



MEASURING RANGES

Measuring ranges	Relative	Overload (bar)
0…250 mbar / 0…25 kPa *	02	-0,15/1
0…400 mbar / 0…40 kPa	03	-0,15/1
0…500 mbar / 0…50 kPa	B7	-0,2/2
0…600 mbar / 0…60 kPa	04	-0,2/2
0…1 bar / 0…100 kPa	05	-0,4/4
0…1,6 bar / 0…160 kPa	06	-0,4/4
0…2 bar / 0…200 kPa	B3	-0,4/4
0…2,5 bar / 0…250 kPa	07	-0,8/8
0…4 bar / 0…400 kPa	08	-0,8/8
0…5 bar / 0…500 kPa	F1	-0,8/8
0…6 bar / 0…600 kPa	09	-1/20
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	-1/100
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…200 bar / 0…20 MPa	F5	-1/400
0…250 bar / 0…25 MPa	17	-1/600
-1…0 bar / -100…0 kPa	D4	-1/4
-1…0,6 bar / -100…60 kPa	D5	-1/4
-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	-1/40
-1…15 bar / -100…1500 kPa	E2	-1/40
-1…19 bar / -100…1900 kPa	E3	-1/40

* Accuracy 1%

ORDERING CODE

Type
A Axial connection

Analog output
0 None
1 0…10 V 3-wires
2 0…20 mA 3-wires
3 4…20 mA 3-wires (signal range 3,8…20,5 mA)

Contact output
1 1 contact

Ranges
Measuring ranges see table
99 Non-standard range (on request)

Process connection and material
DD G 1/4 B, EN 837-1, 1.4404

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

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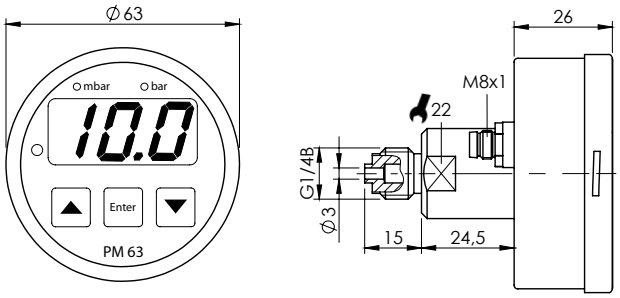
DIMENSIONS



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