



Digital Pressure Gauge for Gauge, Absolute and Differential Pressure



measuring
•
monitoring
•
analysing

MAN-SF/-BF



- Measuring range: -1...1600 bar
- Measuring span from 100 mbar
- Accuracy class: 0.5
- Material:
stainless steel and ceramic
- Analogue outputs:
0/4 - 20 mA, 0 -10 V
- Interface RS 232
- Option: version with up to
4 potential free alarm contacts
- Adjustment locking by password
- High overrange protection



P1

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Description

The intelligent KOBOLD digital pressure gauges are intended for indicating, monitoring and remote transmission of pressure-dependant processes in machines and production plants. Indication occurs by means of an easily visible 4-digit green LED-display of 14 mm. The version with relays can carry up to 4 alarm contacts to be set with the keypad.(backlit LCD-display). Other interfaces are available as options.

Measuring Principle

The pressure is detected by a piezo-resistive sensor and transformed by the electronics into an analogue signal which is proportional to the pressure. Parallel to the indication is also an analogue output for remote transmission of the values measured.

Application

- Food and beverage industries (with diaphragm mounting)
- Engineering
- Machine and apparatus construction
- Pneumatics, hydraulics
- Filter monitoring

Technical Details

Measuring range:	-1...0 bar to 0...1600 bar (0...2000 bar on request)
Accuracy class:	0.5
Linearity incl. hysteresis:	≤ ±0.5% v. Ew.
Repeatability:	≤ ±0.1% v. Ew.
Temperature	
Medium:	- 20...+ 85 °C
Ambient:	- 20...+ 60 °C
Coefficient (offset):	≤ 0.3% / 10 K, v. Ew.
Coefficient (span):	≤ 0.3% / 10 K, v. Ew.
Response time:	0.3 s (adjustable from 0.1 s)
Nominal size:	100 mm
Overload limit:	2 times
Housing:	stainless steel 1.4301
Process connection:	G ½ male, bottom stainless steel 1.4571 (> 400 bar sensing cell st. st.1.4542) other on request (G ¼, ½" NPT, ¼" NPT)
Front plate:	polyester foil on AL carrier
Relay (option):	changeover
Adjustable parameter:	limit value, hysteresis, delay (0, 10...99,99 s)
Switch capacity:	250 V _{AC} , 3 A, 50 VA 220 V _{DC} , 3 A, 60 W
Output signal:	4-20 mA, 0-20 mA oder 0-10 V
Max. load:	≤ 500 Ω (mA-output) ≥ 500 Ω (V _{DC} -output)
Protection:	IP 65
Electrical connection:	terminal box (Phoenix model Mini-Kombicon 3.81 or 5.08 mm)
Supply:	18-30 V _{DC}

Options

- Frontflush diaphragm
- Interface RS 232
- Peak memory
- Absolute pressure
- Differential pressure
- Scalable display
- Scalable output
- Mounting of diaphragm seals
- 5 times overpressure proof
- Longer sensor cable



Order Details (example: **MAN-SF26 AD A4 K**)

Model					
MAN-SF26...	MAN-SF20...	MAN-SF28V...	MAN-BF26...	MAN-BF20...	MAN-BF28V...
Standard version	with external sensor and wall mount bracket	with external sensor, panel mount	differential pressure sensor with external sensor	differential pressure sensor with 2 external sensors wall mount bracket	differential pressure sensor with 2 external sensors

Order Details (continuation)

Indicating range* others on request	Analogue output	Contact output	Options please specify in writing
AD = -1...0 bar A1 = -1...+1.5 bar A2 = -1...+3 bar A3 = -1...+5 bar A4 = -1...+9 bar A5 = -1...+15 bar B1 = 0...0.6 bar B2 = 0...1 bar B3 = 0...1.6 bar B4 = 0...2.5 bar B5 = 0...4 bar B6 = 0...6 bar B7 = 0...10 bar B8 = 0...16 bar B9 = 0...25 bar B0 = 0...40 bar C1 = 0...60 bar C2 = 0...100 bar C3 = 0...160 bar C4 = 0...250 bar C5 = 0...400 bar C6 = 0...600 bar C7 = 0...700 bar D7 = 0...1000 bar D8 = 0...1600 bar	... A4 ... = 4-20 mA ... A0 ... = 0-20 mA ... AV ... = 0-10 V	... G ... = 2 limit contacts ... M ... = 4 limit contacts	none = without option ... F = front flush diaphragm G½ (standard version) front flush diaphragm G 1 (with external sensor from to 1.6 bar) front flush diaphragm G 1 (with external sensor from 1.6 bar) ... R = interface RS 232 ... S = peak memory ... A = absolute pressure (max. 25 bar) ... U = 5 times overpressure proof (MAN-SF) ... L = longer sensor cable ... B = scalable display ... O = scalable output ... D = diaphragm seal mounting

* For MAN-BF... the indicating range is equal to the differential pressure measuring range. The statistic pressure for MAN-BF... must always be specified in writing.

Accessories

Power supply for the top hat rail mounting

Model: MZB-NSF 030

Input: 230 V_{AC}

Output: 24 V_{DC} / 500 mA, short-circuit proof

Screw terminals

Dimensions [mm]

