

# Digital Pressure Gauge for Gauge, Absolute and Differential Pressure



measuring • monitoring • analysing

# MAN-SF/-BF



- Measuring range: -1...1600 bar
- 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



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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 Data

Measuring range:	-10 bar bis 01600 bar (02000 bar on request)	
Accuracy class:	0.5	
Linearity		
incl. hysteresis:	≤ ±0.5% v. Ew.	
Repeatability:	≤ ±0.1% v. Ew.	
Temperature • Medium: • Ambient: • Coefficient (offset): • Coefficient (span):	- 20 + 85 °C - 20 + 60 °C ≤ 0.3% / 10 K, v. Ew. ≤ 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, 1099,99 s)	
Switch capacity:	250 V <sub>AC</sub> , 3 A, 50 VA 220 V <sub>DC</sub> , 3 A, 60 W	
Output signal:	4-20 mA, 0-20 mA oder 0-10 V	
Max. load:	$\leq$ 500 Ω (mA-output) ≥ 500 Ω (V <sub>DC</sub> -output)	
Protection:	IP 65	
Electrical connection:	Terminal box (Phoenix model Mini-Kombicon 3.81 or 5.08 mm)	
Supply:	18-30 V <sub>DC</sub>	

# Optionen

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)

Тур					
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 = -10 bar $A1 = -1+1.5 bar$ $A2 = -1+3 bar$ $A3 = -1+5 bar$ $A4 = -1+9 bar$ $A5 = -1+15 bar$ $B1 = 00.6 bar$ $B2 = 01 bar$ $B3 = 016 bar$ $B4 = 02.5 bar$ $B5 = 04 bar$ $B6 = 06 bar$ $B7 = 010 bar$ $B8 = 016 bar$ $B9 = 025 bar$ $B0 = 040 bar$ $C1 = 060 bar$ $C2 = 0160 bar$ $C3 = 0160 bar$ $C4 = 0250 bar$ $C5 = 0400 bar$ $C6 = 0600 bar$ $D7 = 0100 bar$ $D8 = 0160 bar$	<b>A4</b> = 4-20 mA <b>A0</b> = 0-20 mA <b>AV</b> = 0-10 V	K = no limit contacts G = 2 limit contacts M = 4 limit contacts	<pre>none = without option F = front flush diaphragm G1/2 (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</pre>

\* 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<sub>AC</sub>

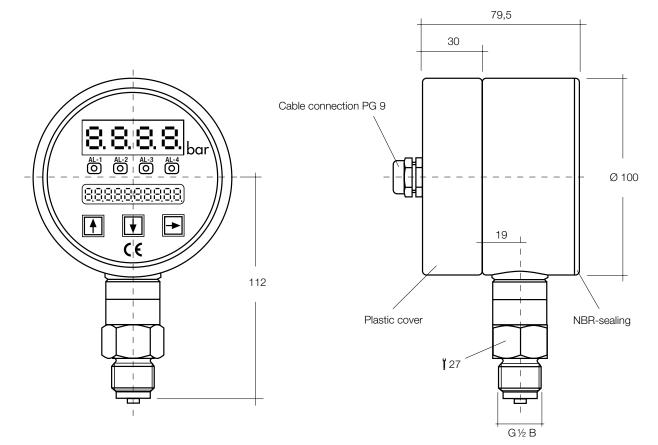
Output:  $24 V_{DC} / 500 \text{ mA}$ , short-circuit proof

Screw terminals

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Dimensions (mm)



No responsibility taken for errors; subject to change without prior notice.