



## 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



Pressure

KOBOLD companies worldwide:

ALGERIA, ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLUMBIA, CZECHIA, DOMINICAN REPUBLIC, EGYPT, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, MOROCCO, NETHERLANDS, PERU, PHILIPPINES, POLAND, ROMANIA, SINGAPORE, SLOVAKIA, SOUTH KOREA, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, USA, VENEZUELA, VIETNAM

KOBOLD Messring GmbH  
Nordring 22-24  
D-65719 Hofheim/Ts.  
☎ Head Office:  
+49(0)6192 299-0  
☎ Sales DE:  
+49(0)6192 299-500  
☎ +49(0)6192 299-23398  
info.de@kobold.com  
www.kobold.com



### 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.

### Applications

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

### Technical Details


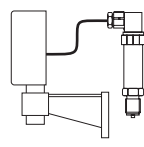
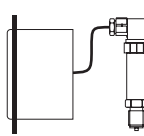
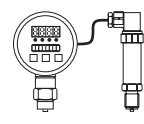
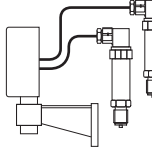
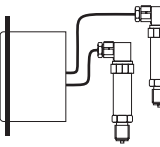
Measuring range:	-1...0 bar to 0...1600 bar (0...2000 bar on request)
Accuracy class:	0.5
Linearity incl. hysteresis:	≤ ±0.5% of f.s.
Repeatability:	≤ ±0.1% of f.s.
Temperature	
• Medium:	-20...+85 °C
• Ambient:	-20...+60 °C
• Coefficient (offset):	≤0.3% / 10 K, of f.s.
• Coefficient (span):	≤0.3% / 10 K, of f.s.
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 1/2 AG male, bottom stainless steel 1.457 (> 400 bar sensing cell st. st. 1.4542) other on request (G 1/4, 1/2 NPT, 1/4 NPT)
Front plate:	polyester foil on aluminium carrier
Relay (option):	changeover
Adjustable parameter:	limit value, hysteresis, delay (0, 10...99.99 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 or 0-10 V
Max. load:	≤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>

### Options

- Relay (max. 4)
- Frontflush diaphragm
- Interface RS 232
- Peak memory
- Absolute pressure
- Differential pressure
- Front flange
- Scalable indication
- Scalable output
- Mounting of diaphragm seals



**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

Indicating range* others on request	Analogue output	Contact output	Options Please specify in writing
<b>AD</b> = -1 to 0 bar <b>A1</b> = -1 to +15 bar <b>A2</b> = -1 to +3 bar <b>A3</b> = -1 to +5 bar <b>A4</b> = -1 to +9 bar <b>A5</b> = -1 to +15 bar <b>B1</b> = 0 to 0,6 bar <b>B2</b> = 0 to 1 bar <b>B3</b> = 0 to 1,6 bar <b>B4</b> = 0 to 2,5 bar <b>B5</b> = 0 to 4 bar <b>B6</b> = 0 to 6 bar <b>B7</b> = 0 to 10 bar <b>B8</b> = 0 to 16 bar <b>B9</b> = 0 to 25 bar <b>B0</b> = 0 to 40 bar <b>C1</b> = 0 to 60 bar <b>C2</b> = 0 to 100 bar <b>C3</b> = 0 to 160 bar <b>C4</b> = 0 to 250 bar <b>C5</b> = 0 to 400 bar <b>C6</b> = 0 to 600 bar <b>D7</b> = 0 to 1000 bar <b>D8</b> = 0 to 1600 bar	..A4.. = 4-20 mA ..A0.. = 0-20 mA ..AV.. = 0-10 Volt	..K.. = no limit contacts ..G.. = 2 limit contacts ..M.. = 4 limit contacts	none = without option ..F = front flush diaphragm G 1/2 (standard version) front flush diaphragm G 1/2 (with external sensor from 2,5 bar) front flush diaphragm G 1 (with external sensor up to 1.6 bar) ..R = interface RS 232 ..S = peak memory ..Z = protocole with 10 meas. points ..A = absolute pressure (max. 25 bar) ..U = 5times 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 mountin**

**Model: MZB-NSF 030**

Input: 230 V<sub>AC</sub>

Output: 24 V<sub>DC</sub> / 500 mA, short-circuit proof

Screw terminals

Dimensions

