



# DM 10

## Battery Powered Digital Pressure Gauge

Ceramic Sensor

accuracy 1 %

### Nominal pressure

from 0 ... 1.6 bar up to 0 ... 250 bar

### Special characteristics

- ▶ adjustable housing
- ▶ LC display  
4.5-digit 7-segment display
- ▶ standard battery CR 2450  
operation period > 1.500 h

### Functions

- ▶ min / max function with reset function
- ▶ auto-zero
- ▶ setting of pressure unit  
(bar, mbar, psi, MPa, mH<sub>2</sub>O)
- ▶ automatic switch-off configuration

The compact low-cost digital pressure gauge DM 10 is battery-powered and has an adjustable housing; it is thus extremely suitable for mobile pressure monitoring. The 4.5-digit LC-display indicates the battery status, the measurement value as well as the unit, this enables a fast and precise reading.

It is possible to switch between the most common units (bar, psi, mH<sub>2</sub>O, MPa). Additional functions as auto-zero, min / max values and an automatic switching-off complete the DM 10 profile.

### Preferred areas of use are



Mobile Pressure Monitoring  
Plant and Machine Engineering  
Pneumatics / Hydraulics



Environmental Engineering  
(water – sewage – recycling)



Input Pressure													
Nominal pressure gauge	[bar]	1.6	2.5	4	6	10	16	25	40	60	100	160	250
Overpressure	[bar]	4	4	10	10	20	40	40	100	100	200	400	400
Burst pressure	[bar]	7	7	15	15	35	70	70	150	150	250	450	450
Vacuum resistance		unlimited											

Performance	
Accuracy <sup>1</sup>	≤ ± 0,5 % span BFSL (1 % span IEC)
Measuring rate	1/sec
Long term stability	≤ ± 0.3 % span / year
<sup>1</sup> accuracy according to EN IEC 62828-2- minimum value setting (non-linearity, hysteresis, repeatability)	
Thermal effects (Offset and Span)	
Tolerance band	≤ ± 0.5 % span / 10 K (typ.) in compensated range 0 ... 50 °C
Permissible temperatures	
Permissible temperatures	medium: -25 ... 85 °C environment: 0 ... 70 °C storage: 0 ... 70 °C
Materials	
Pressure port / housing	stainless steel 1.4301 (304)
Display housing	PA 6.6, Polycarbonate
Seals (media wetted)	FKM others on request
Diaphragm	ceramics Al <sub>2</sub> O <sub>3</sub> 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Display	LC-Display, visible range 36 x 15 mm; 4.5-digit 7-segment-display, digit size 8.5 mm, range of indication ±1999 decimal place is calculated automatically by device considering range and accuracy - customer-setting not possible
Electromagnetic compatibility	emission and immunity according to EN 61326
Supply	3 V lithium battery (CR 2450)
Data storage	EEPROM (non-volatile)
Ingress protection	IP 65
Installation position	any
Weight	plastic: approx. 150 g
Operational life of battery	min. 1500 h with permanent operation
Mech. operational life	100 million load cycles
CE-conformity	EMC directive 2014/30/EU pressure equipment directive: 2014/68/EU (Modul A) <sup>2</sup>
<sup>2</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar.	

Dimensions (in mm)			
display housing plastic			
G1/4" DIN 3852		1/4" NPT	

This data sheet contains product specification. properties are not guaranteed. Subject to change without notice.

Ordering code DM 10

23.08.2024

DM 10

□□□ - □□□□ - 0 - □□ - 0 K 0 - □□□□ - □ - □ - □ - □□□□

<b>Pressure</b>									
Gauge	M	0	4						
<b>Input [bar]</b>									
0 ... 1,6		1	6	0	1				
0 ... 2,5		2	5	0	1				
0 ... 4		4	0	0	1				
0 ... 6		6	0	0	1				
0 ... 10		1	0	0	2				
0 ... 16		1	6	0	2				
0 ... 25		2	5	0	2				
0 ... 40		4	0	0	2				
0 ... 60		6	0	0	2				
0 ... 100		1	0	0	3				
0 ... 160		1	6	0	3				
0 ... 250		2	5	0	3				
Customer		9	9	9	9				
<b>Customer underpressure</b>									
		X	X	X	X				
<b>Accuracy</b>									
0,5 % BFSL (1 % span IEC)						B	8		
Customer						9	9		
<b>Mechanical connection</b>									
G 1/2" EN 837						2	0	0	
G 1/4" DIN 3852						3	0	0	
1/4" NPT						N	4	0	
Customer						9	9	9	
<b>Seals</b>									
Viton (FKM)								1	
Customer								9	
<b>Pressure port</b>									
Stainless steel 1.4404 (316 L)								2	
Customer								9	
<b>Diaphragm</b>									
Ceramic Al <sub>2</sub> O <sub>3</sub> 96 %								2	
Customer								9	
<b>Front foil</b>									
Standard									1
Neutral									N
<b>Special version</b>									
Standard									0 0 0
Customer									9 9 9

0,-...without additional charge

On request...in accordance with the producer

Surcharges for calibration are not subject to any discounts. Subject to change.

This document contains the specification for ordering the product;

detailed technical parameters of the product and its possible variants are given in the data sheet.

BD SENSORS reserves the right to change sensor specifications without further notice.

