



Universal digital pressure gauges

DIM 20 service instrument

MAterm
www.materm.si
tel: 02 608 90 10

- High flexibility due to selectable units
- Min./max. memory
- Intuitive operation via menus
- Display can be rotated by 330°
- Zero and full scale can be calibrated

Application For high-precision electronic pressure measurement with local digital display, for applications such as hydraulics, pneumatics, mechanical and plant engineering.

Description Compact microprocessor-controlled pressure gauge with thick film ceramic measuring cell. The signal received from the pressure sensor is processed by the microprocessor, converted into the desired unit and displayed. Each device is shipped with its own measurement log.

Technical specifications

Functions

Selection of units, min./max. memory, zero and full scale calibration, adjustable auto-off function, adjustable decimal point, battery status indication

Displayed values

Selectable pressure unit:
bar/mbar/psi/InHg/mmHg/hPa/kPa/MPa/mWC

Display

Multi-line LC display

Line 1:

4.5 digit, numeric, for displaying the measured value (character height 9.5 mm)

Line 2:

6-digit, alphanumeric, for displaying additional information (character height 6.8 mm) and additional symbols

Display can be rotated by 330°

Measuring accuracy

±0.5 % FSO as per IEC 60770

±1 % FSO (-1/0 bar)

Measuring ranges

Relative pressure: -1/0 bar, 0/2.5 bar to 0/700 bar

Overpressure safety

At least 1.5 x FS

Burst pressure

≤ 160 bar at least 2.5 x FS

> 160 bar at least 1.5 x FS

Operating temperature range

Medium: -20/+125 °C

Ambient: -20/+45 °C

Storage: -30/+80 °C

Temperature error

In compensated range

0/70 °C < 0.5 % FSO/10 K

Dynamic characteristics

Measuring rate 5/s

Process connection

G1/4B (EN 837-1/7.3), bottom

Materials

Housing: PA6, glass-loaded

Pressure connection: Stainless steel 304

Diaphragm: Ceramic (Al₂O₃ 96 %)

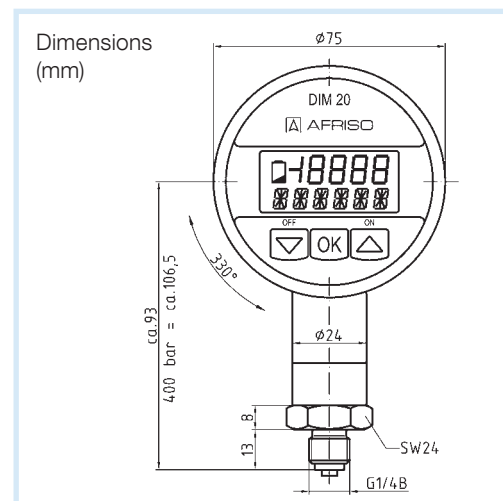
Seal: FKM

Degree of protection

IP 51 (EN 60529)

Supply voltage


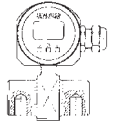
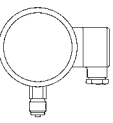
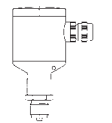
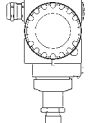

1 x lithium battery 3.6 V (included), battery life depends on usage (max. 5 years)



See page 566 for prices.

Pressure transducers/digital pressure gauges

DG: H

Type s	DMU 12	DMU 12 Dif	DMU 13	DMU 14 FG	DMU 14 DG	DIM 20
Version						
Housing Ø	62	62	100	60	75	75
Housing	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Aluminium	Plastic
Measuring accuracy	0.2 % FSO	0.2 % FSO	0.5 % FSO Pressure gauge: class 1.0	See data sheet	See data sheet	0.5 % FSO
Wetted parts	Stainless steel 316 L	Stainless steel 316 L	Stainless steel 316 Ti/316 L	Stainless steel 316 Ti/316 L	Stainless steel 316 Ti/316 L	Stainless steel 304 ceramic/FKM
Connection	G½B	EN 61518	G½B	G½B	G½B	G¼B
Supply voltage	DC 12–50 V	DC 12–50 V	DC 12–36 V	DC 10–30 V	DC 10–30 V	DC 3.6 V
Output	4–20 mA	4–20 mA	4–20 mA	4–20 mA	4–20 mA	---
Measuring range	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
Price €						
0/400 mbar	---	---	---	31977	31987	---
Price €						
-1/0 bar	---	---	---	---	---	32500
0/0.6 bar	---	---	31076	---	---	---
0/1 bar	31040*	31049	31077	31978	31988	---
Price €						
0/1.6 bar / 0/2 bar ****	---	---	31078	31979	31989	---
0/2.5 bar	---	---	31079	---	---	32503
0/4 bar	31041*	31050	31080	31980	31990	---
0/6 bar	---	---	31081	---	---	32505
0/10 bar	---	---	31082	---	---	32506
0/16 bar	31042*	31051	31083	---	---	---
0/25 bar / 0/20 bar ****	---	---	31084	31981	31991	32508
0/40 bar	31043*	---	31085	31982	31992	32509
Price €						
0/60 bar	---	---	---	---	---	---
0/100 bar	31044*	---	---	31983	31993	32511
0/160 bar	---	---	---	---	---	32512
0/250 bar / 0/200 bar ****	---	---	---	31984	31994	32513
0/400 bar	31045*	---	---	31985	31995	32514
0/600 bar	---	---	---	31986	31996	---
Price €						
0/700 bar	---	---	---	---	---	32516
Extra charges	Price €	Price €	Price €	Price €	Price €	Spare battery
EX protection/HART communication	On request	On request	---	Standard	Standard	Part no. 68309
Housing filling	---	---	---	---	---	
Display	Standard	Standard	---	---	---	Price €
Clamp connection ** 1" or 1½"	---	---	---	---	---	Connection ¼-18NPT
Clamp connection 2" **	---	---	---	---	---	
Dairy fitting DIN 11851 DN 25 **	---	---	---	---	---	
Dairy fitting DIN 11851 DN 40 **	---	---	---	---	---	
Dairy fitting DIN 11851 DN 50 **	---	---	---	---	---	Price €
High-temperature version +300 °C	---	---	---	---	---	

* Measuring range -1/+x bar.

** Wetted parts of clamp connection and dairy fitting version = stainless steel (316 L).



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*** Extra charge; please append N2 to the part no. when ordering.

**** DMU14 only.