

Precision digital pressure gauge DIM 30



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- Accuracy $\leq \pm 0.05\%$ at 400 mbar and higher
- Suitable for on-site calibration or pressure transducers
- Graphical LC display
- Data logger function

Application For mobile electronic pressure measurement with high demands in terms of accuracy and long-term stability in process engineering as well as mechanical and plant engineering applications. Suitable for monitoring pressure and temperature behaviour as well as on-site calibration of pressure transducers.

Description The battery-operated digital pressure gauge DIM 30 consists of two devices – the digital display with a graphical LC display and a pressure transducer with a piezo-resistive stainless steel sensor. The pressure transducer can be replaced without tools and without calibration for other measurement tasks. The integrated data logger can record pressure and temperature values linearly and cyclically. These measured values can be analysed with the enclosed PC evaluation software.

Technical specifications

Display

Backlit graphical LC display,
visible area 55 x 46 mm
Indication of measured values max. 7 digits
Temperature indication, time, 100-segment bar chart potential input value, languages German/English
Duration and intensity of backlight adjustable
Switchable pressure units: bar, mbar, hPa, kPa, MPa, psi, inHg, cmHg, mmHg, inH₂O, mmH₂O, mH₂O, kg/cm²
Temperature indication:
Measuring ranges -10 / +55 °C
Resolution 0.1 °C
Accuracy ± 2 K

Data logger

Stores pressure values and sensor temperature (sec., min., hour, daily at an adjusted time)
max. 600,000 values
Adjustable measurement interval

Zero adjustment

From the front via keypad

Supply voltage

3 x 1.5 V, battery AA (LR6)
Battery service life
Standard mode: > 2,000 h
Standby mode: At least 5 years

Current input

Without backlight: Approx. 1.3 mA
With backlight: Approx. 16 mA (depends on adjusted intensity)
In standby mode: Approx. 1.2 μ A

Housing:

Stainless steel 304, Ø 100 mm

Diaphragm

Stainless steel 316 L

Seal

Without (weld version only for process connections as per EN 837)
FKM for all other process connections

Wetted parts:

Pressure connection, diaphragm, seal

Measuring accuracy:

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)
 $\leq \pm 0.05\%$ BFSL
(measuring ranges < 0.4 bar = $\leq \pm 0.125\%$ BFSL)
Long-term stability $\leq \pm 0.1\%$ FSO / year

Mounting position:

Any

Measuring ranges:

0/100 mbar to 0/600 bar
PN ≥ 1 bar, vacuum-tight without limitation

Overload safety:

At least 3 x FS, except
40 bar, overload = 105 bar
400 bar, overload = 1,000 bar

Burst pressure

At least 5 x FS,
except 400 bar, burst pressure = 1,250 bar

DG: H, PG: 4

Accessories	Part no.	Price €
Service case with foam inlay, no content	33406	
Protective cap, rubber, blue NG 100	33407	
Manual calibration pump	33408	

Blue part no. = in-stock items

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Operating temperature range

Medium: -10/+55 °C
 Ambient: -10/+55 °C
 Storage: -20/+70 °C

Process connection

G $\frac{1}{2}$ B, (EN 837-1/7.3)

Degree of protection

IP 67 (EN 60529)

CE conformity

EMC Directive 2014/30/EU
 RoHS Directive 2011/65/EU
 PED 2014/68/EU (module A)*

* Applies to devices with a maximum permissible overpressure of > 200 bar only

Scope of delivery

- DIM 30
- Batteries
- PC connection cable
- Evaluation software on CD-ROM

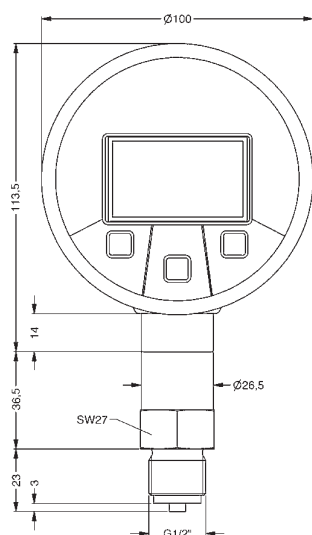
Options

- Other process connections

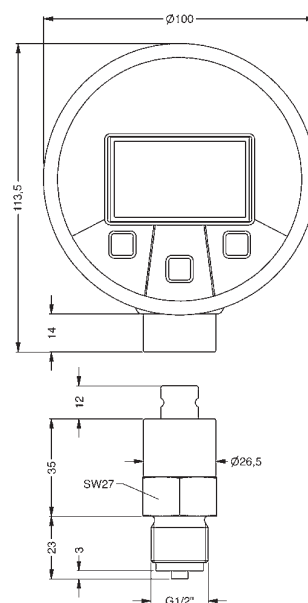
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Dimensions (mm) and electrical connections

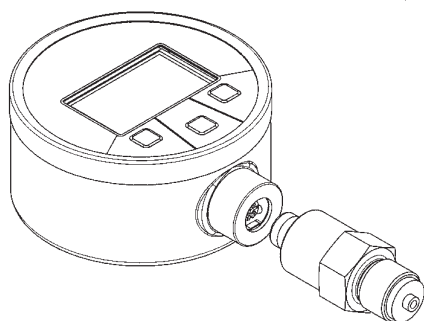
DIM 30



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Ordering data

DG: H, PG: 4

Price €

1 Precision digital pressure gauge DIM 30

33406 DIM 30

2 Pressure type

R Relative

A Absolute (possible for 0.4 bar and higher)

3 Measuring range in bar

100 -1/0

102 -1/+1.5

103 -1/+3

104 -1/+5

007 0/0.10

008 0/0.16

009 0/0.25

010 0/0.40

108 0/0.60

109 0/1.0

110 0/1.6

111 0/2.5

112 0/4.0

113 0/6.0

114 0/10

115 0/16

116 0/25

117 0/40

118 0/60

119 0/100

120 0/160

121 0/250

122 0/400

123 0/600

4 Process connection

01 G ½B (DIN 3852)

02 G ½B (EN 837-1)

03 G ¼B (DIN 3852)

04 G ¼B (EN 837-1)

05 ½-14 NPT

06 ¼-18 NPT

5 Seal

1 FKM

9 Others

On request

Ordering code

Example: 0/10 bar, G½B

33406

R

114

02

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