



Precision digital pressure gauges DIM 30



Benefits

- 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,
User interface language selectable (German/English),
Duration and intensity of backlight adjustable

Indication of measured values

bar, mbar, hPa, kPa, MPa, psi, inHg, cmHg, mmHg, inH₂O,
mmH₂O, mH₂O, or kg/cm²
Selectable pressure unit

Temperature indication

Measuring range: -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 correction

From the front via keypad

Measuring accuracy

Deviation from the
characteristic curve according to IEC
60770 – limit point calibration (non-linearity,
hysteresis, repeatability)
< 0/0.4 bar: ± 0.125 % FSO (BFSL)
≥ 0/0.4 bar: ± 0.05 % FSO (BFSL)

Long-term stability

≤ ± 0.1 % FSO/Jahr

Overpressure safety

At least 3 x FS
40 bar: 105 bar
400 bar: 1,000 bar

Burst pressure

At least 5 x FS
400 bar: 1,250 bar

Operating temperature range

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

Housing diameter

100 mm

Process connection

G $\frac{1}{2}$ B (DIN 3852)
G $\frac{1}{2}$ B (EN 837-1)

Material

Housing: Stainless steel 304
Process connection: Stainless steel 304
Diaphragm: Stainless steel 316 L
Seal: FKM (Viton)

Wetted parts

Process connection, diaphragm, Seal

Mounting position

Any

Supply voltage

3 x 1.5 V AA batteries
Battery service life
Standard mode: > 2,000 Stunden
Standby mode: > 5 Jahre

Current input

Without backlight: Approx. 1.3 mA
With backlight: Approx. 16 mA
Depends on adjusted
intensity
Standby mode: Approx. 1.2 µA

Degree of protection

IP 67 (EN 60529)

CE conformity

EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
Pressure Equipment Directive 2014/68/EU (module A)

Scope of delivery

- Precision digital pressure gauge DIM 30
- Batteries
- PC connection cables
- Evaluation software on CD-ROM

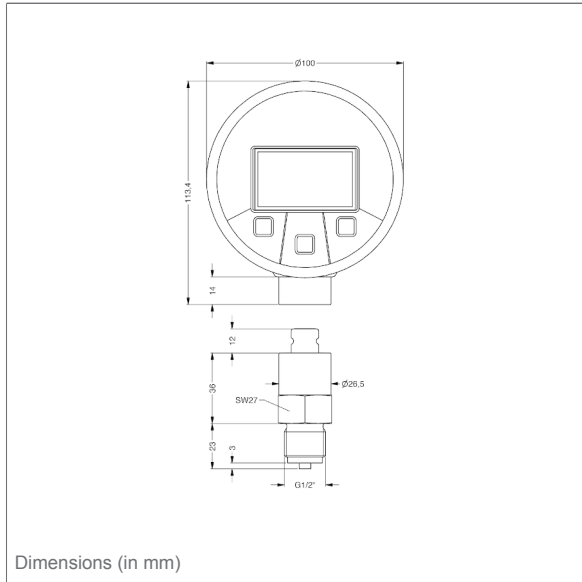
Options

- Other process connections
- Without seal (weld version only for process connections as per EN 837)

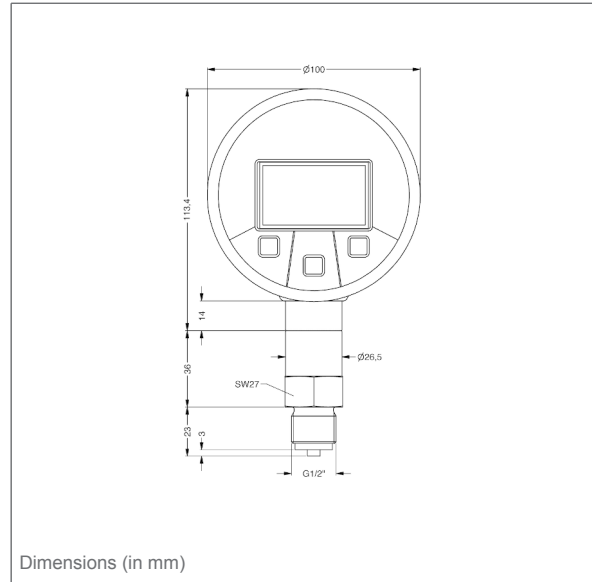


Technical drawings

digital pressure gauge DIM 30



digital pressure gauge DIM 30



Versions

	Process connection	Pressure range	Overload	Burst pressure	Part no.
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/0.1 bar	At least 3 x FS	At least 5 x FS	33406R007011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/0.16 bar	At least 3 x FS	At least 5 x FS	33406R008011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/0.25 bar	At least 3 x FS	At least 5 x FS	33406R009011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/0.4 bar	At least 3 x FS	At least 5 x FS	33406R010011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/0.6 bar	At least 3 x FS	At least 5 x FS	33406R108011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/1 bar	At least 3 x FS	At least 5 x FS	33406R109011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/1.6 bar	At least 3 x FS	At least 5 x FS	33406R110011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/2.5 bar	At least 3 x FS	At least 5 x FS	33406R111011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/4 bar	At least 3 x FS	At least 5 x FS	33406R112011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/6 bar	At least 3 x FS	At least 5 x FS	33406R113011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/10 bar	At least 3 x FS	At least 5 x FS	33406R114011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/16 bar	At least 3 x FS	At least 5 x FS	33406R115011
Digital pressure gauges DIM 30	G $\frac{1}{2}$ B (DIN 3852)	0/25 bar	At least 3 x FS	At least 5 x FS	33406R116011

Blue part no. = in-stock items



	Process connection	Pressure range	Overload	Burst pressure	Part no.
Digital pressure gauges DIM 30	G½B (DIN 3852)	0/40 bar	105 bar	At least 5 x FS	33406R117011
Digital pressure gauges DIM 30	G½B (DIN 3852)	0/60 bar	At least 3 x FS	At least 5 x FS	33406R118011
Digital pressure gauges DIM 30	G½B (DIN 3852)	0/100 bar	At least 3 x FS	At least 5 x FS	33406R119011
Digital pressure gauges DIM 30	G½B (DIN 3852)	0/160 bar	At least 3 x FS	At least 5 x FS	33406R120011
Digital pressure gauges DIM 30	G½B (DIN 3852)	0/250 bar	At least 3 x FS	At least 5 x FS	33406R121011
Digital pressure gauges DIM 30	G½B (DIN 3852)	0/400 bar	1,000 bar	1,250 bar	33406R122011
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/0.1 bar	At least 3 x FS	At least 5 x FS	33406R007021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/0.16 bar	At least 3 x FS	At least 5 x FS	33406R008021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/0.25 bar	At least 3 x FS	At least 5 x FS	33406R009021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/0.4 bar	At least 3 x FS	At least 5 x FS	33406R010021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/0.6 bar	At least 3 x FS	At least 5 x FS	33406R108021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/1 bar	At least 3 x FS	At least 5 x FS	33406R109021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/1.6 bar	At least 3 x FS	At least 5 x FS	33406R110021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/2.5 bar	At least 3 x FS	At least 5 x FS	33406R111021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/4 bar	At least 3 x FS	At least 5 x FS	33406R112021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/6 bar	At least 3 x FS	At least 5 x FS	33406R113021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/10 bar	At least 3 x FS	At least 5 x FS	33406R114021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/16 bar	At least 3 x FS	At least 5 x FS	33406R115021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/25 bar	At least 3 x FS	At least 5 x FS	33406R116021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/40 bar	105 bar	At least 5 x FS	33406R117021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/60 bar	At least 3 x FS	At least 5 x FS	33406R118021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/100 bar	At least 3 x FS	At least 5 x FS	33406R119021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/160 bar	At least 3 x FS	At least 5 x FS	33406R120021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/250 bar	At least 3 x FS	At least 5 x FS	33406R121021
Digital pressure gauges DIM 30	G½B (EN 837-1)	0/400 bar	1,000 bar	1,250 bar	33406R122021

Blue part no. = in-stock items