Digital pressure gauges DIM 30

Part no. 33406R111021

Precision digital pressure gauges

benefits

- accuracy ≤ ± 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 of backlight adjustable

Indication of measured values
bar, mbar, hPa, kPa, MPa, psi, inHg, cmHg, mmHg, inH_2O, mmH_2O, mH_2O, or kg/cm^2
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
≤ ± 0.05 % FSO (BFSL)

Long-term stability
≤ ± 0.1 % FSO/year

Measuring range
0/2.5 bar

Overpressure safety
at least 3 x FS

Burst pressure
at least 5 x FS

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

Housing diameter
100 mm

Process connection
G½B (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
standard mode: > 2000 hours
standby mode: > 5 Jahre

Current input
without backlight: ca. 1.3 mA
with backlight: ca. 16 mA
depends on adjusted intensity
standby mode: ca. 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

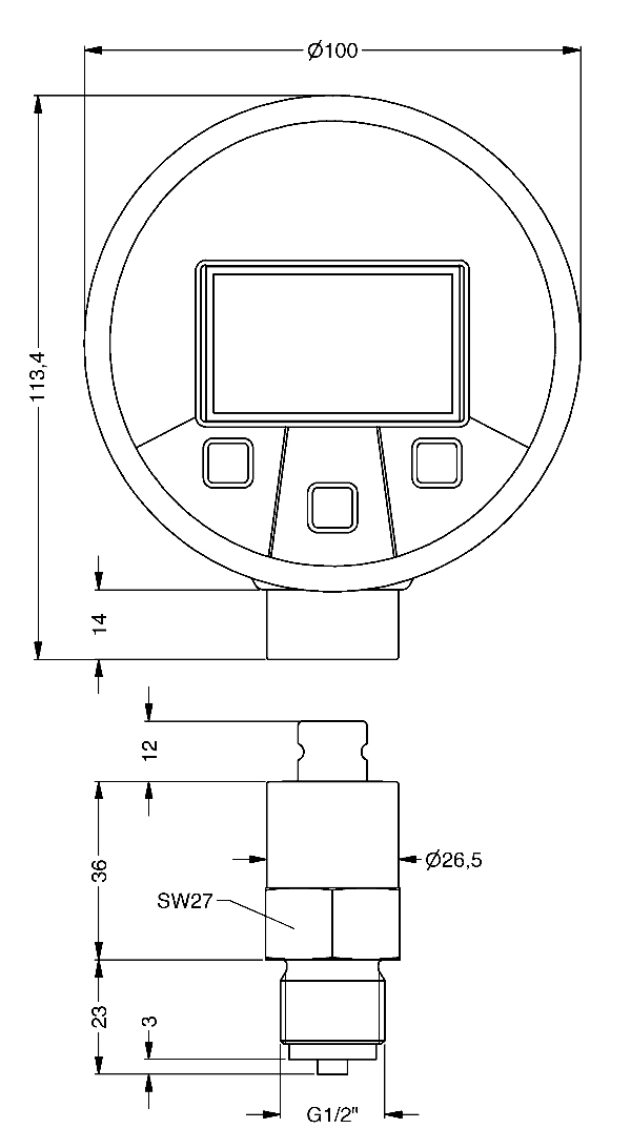
Options
- other process connections
- without seal (weld version only for process connections as per EN 837)

Options

- other process connections
- without seal (weld version only for process connections as per EN 837)

Technical Drawings

digital pressure gauge DIM 30



Dimensions (mm)

Versions

	Process connec-tion	pressure range	Overload	Burst pressure		Part no.
Digital pressure gauges DIM 30		0/2.5 bar	at least 3 x FS	at least 5 x FS	●	33406R111021

● in-stock items

● Non-stock items