

All stainless steel pressure gauges with capsule element

Nominal sizes ND 63, 100 and 160

Connection position bottom, radial or back, central or eccentric



Description

The pressure gauges with capsule type element are used to measure small negative or positive gauge pressures in gaseous media. The capsule element consists of two diaphragm element halves soldered together. When subjected to pressure from within, the diaphragm element expands by a precise amount. This expansion is converted by a movement into the rotary motion of the pointer.

All stainless steel pressure gauges for the chemical industry with capsule type element are manufactured using high quality stainless steel and are therefore suitable for use with aggressive or corrosive gases.

The gauges can be supplied with a rear mounting bracket, cover ring, triangular front ring or front mounting flange as required for the installation conditions

Features

- o Use in millibar range
- o Corrosion resistant
- o Zero adjustment
- o Application up to end of scale value

Measuring ranges

0 ... 2,5 mbar to 0 ... 600 mbar

Applications

Pharmaceutical industry, laboratory applications
air-conditioning, leakage tests,
filter and status monitoring,
exhaust gas measurements, gas generation,
container contents measurements

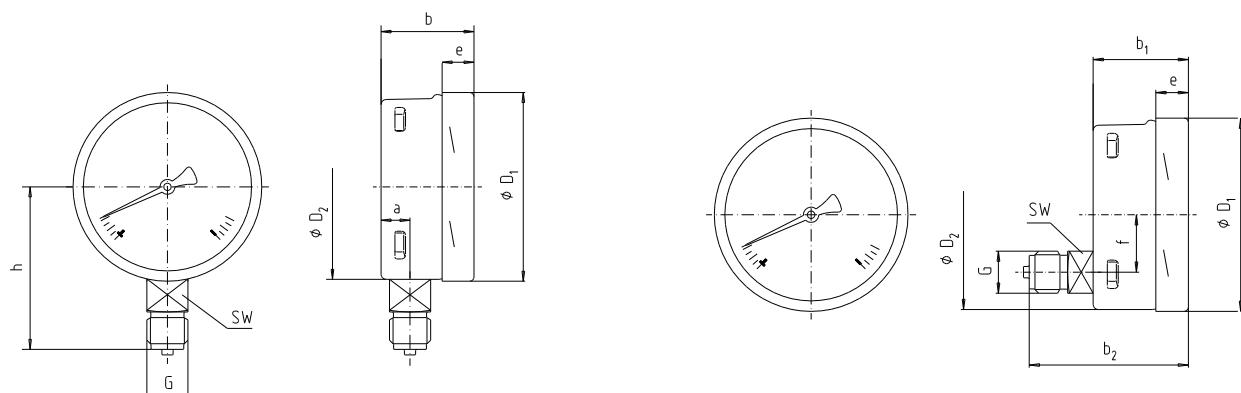
**Models: P2080, P2081, P2086,
P2087, P2089**

Technical data

| Models | P2080 | P2081 | P2086 | P2087 | P2089 | Options |
|----------------------|--|--------------|------------------------|----------------|---------------|--|
| Nominal size | 63 | | 100 | | 160 | |
| Symbol | | | | | | |
| Accuracy class | 1.6 to EN 837-3 | | | | | |
| Ranges | 0....40 mbar to 0....600 mbar negative or positive / negative and positive gauge pressure | 0....25 mbar | 0....2.5 mbar | | | |
| Application | Constant load: up to full scale value Alternating load: up to 0.9 x full scale value short-time: overload capacity 1.3 x | | | | | |
| Case | Stainless steel, 1.4301 | | | | | Rear mounting flange |
| Bezel | Stainless steel, 1.4301 Bayonet ring | | | | | Rear mounting flange, Triangular bezel and bracket |
| Window | Laminated safety glass | | | | | |
| Dial | Aluminium, white, scale and imprint black | | | | | Dual scale |
| Pointer | Aluminium, black | | | | | |
| Movement | Stainless steel | | | | | |
| Measuring element | Stainless steel, 1.4571 | | | | | |
| Pressure connection | Stainless steel, 1.4571 | | | | | |
| - position | radial bottom | rear central | radial bottom | rear eccentric | radial bottom | |
| - thread | G 1/4 B; 1/4 NPT | | G 1/2 B to DIN ISO 228 | | | Other threads on request |
| Sealing ring | FPM (Seals made of Viton®) ¹⁾ | | | | | |
| Temperatures | | | | | | |
| - Medium | Tmin. -20°C, Tmax. 80°C | | | | | |
| - Ambient | Tmin. -25°C, Tmax. 60°C | | | | | |
| Temperature drift | 0.3 %/10K if deviation from normal temperature 20°C | | | | | |
| Protection EN 60 529 | IP 54 | | IP 54 | | | |
| Orifice | | | | | | Ø 0.4 ; Ø 0.8 |
| Weight approx.. | 0.200 kg | | 0.600 kg | | 1.100 kg | |

¹⁾ Viton® fluoroelastomer, a product of DuPont Dow Elastomers

Dimensions



Models: P2080, P2086, P2089

Models: P2081 central, P2087 eccentric

| Models | Dimensions in mm | | | | | | | | | | | |
|--------|------------------|--------|--------|---------|-------|---------|---------|-------|-------|---------|------|----|
| | NG | a ±0.5 | b ±0.5 | b1 ±0.5 | b2 ±1 | e ± 0.5 | f ± 0.5 | D1 ±1 | D2 ±1 | G | h ±1 | SW |
| P2080 | 63 | 9.5 | 42 | -- | -- | 22 | -- | 64 | 62 | G 1/4 B | 52 | 14 |
| P2081 | 63 | -- | -- | 42 | 63 | 22 | -- 1) | 64 | 62 | G 1/4 B | -- | 14 |
| P2086 | 100 | 15.5 | 49.5 | -- | -- | 17.5 | -- | 101 | 99 | G 1/2 B | 87 | 22 |
| P2087 | 100 | -- | -- | 49.5 | 83 | 17.5 | 30 | 101 | 99 | G 1/2 B | -- | 22 |
| P2089 | 160 | 15.5 | 49.5 | -- | -- | 17.5 | -- | 161 | 159 | G 1/2 B | 118 | 22 |

¹⁾ connection rear central

Modifications reserved