

## All stainless steel pressure gauges with capsule element

Nominal sizes ND 63, 100 and 160

Connection position bottom, radial or back, 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

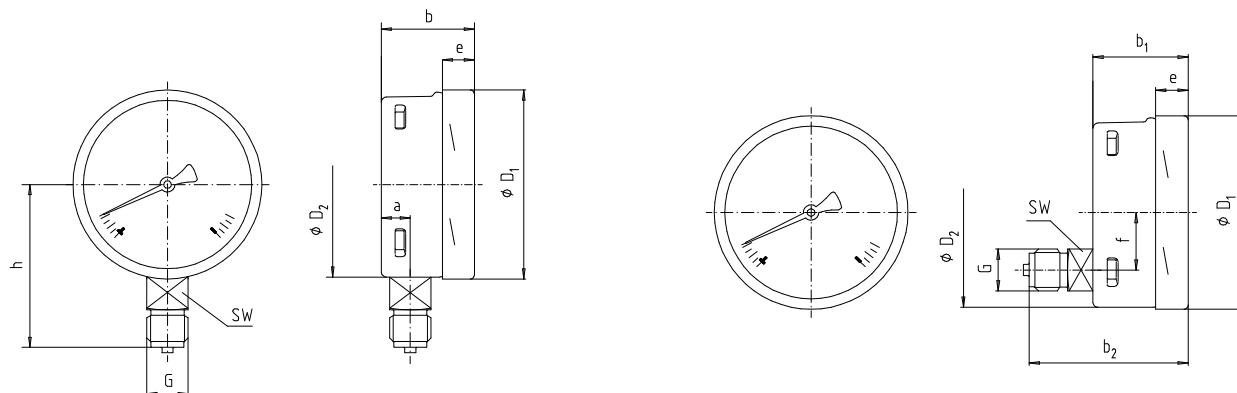
**Models:** P2080, P2081, P2086,  
P2087, P2089

## 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®) <sup>1)</sup>					
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	

<sup>1)</sup> 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

<sup>1)</sup> connection rear central

Modifications reserved