

Heavy Duty pressure gauges with Bourdon tube and glycerine filling

Nominal sizes ND 100

Connection position bottom, radial
or back, eccentric



Description

The modern modular construction system of the Heavy Duty pressure gauges with an o-ring sealing system tested for many years ensures a high level of functional safety and a long service life. Gauges with glycerine filling are used at measuring points with high dynamic alternating loads and strong vibrations and pulses. They are suitable for gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts.

The glycerine filling ensures smooth pointer movement and thus good readability even in extreme load and strong vibration conditions. The lubricating effect of the glycerine also provides protection against increased wear.

A variety of options allow the user to customize the devices to meet their specific needs

All Heavy Duty pressure gauges comply with the general international measurement recommendations and take into account both application-oriented and standard requirements according to EN 837-1.

Special features

- o Especially sturdy design
- o Vibration and shock resistant
- o Accuracy class 1.0

Measuring ranges

0 ... 0,6 bar to 0 ... 1000 bar

Applications



For measuring points with high dynamic pressure loads or vibrations,

Hydraulics,

Compressors and shipbuilding

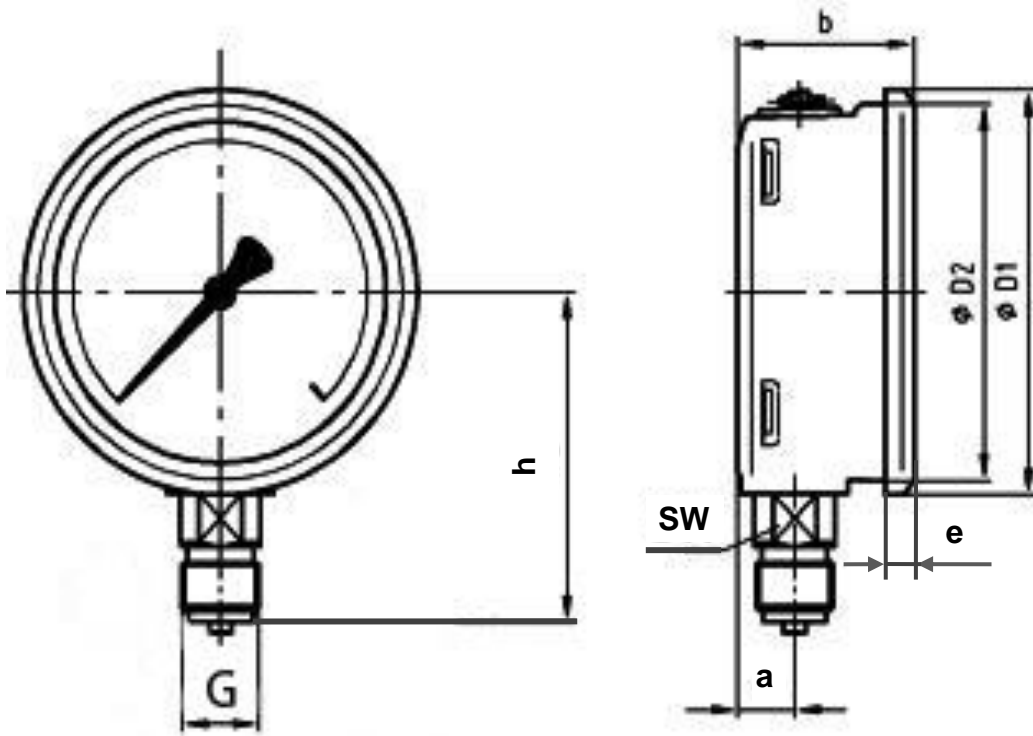
Model : P1776, P1777

Technical data

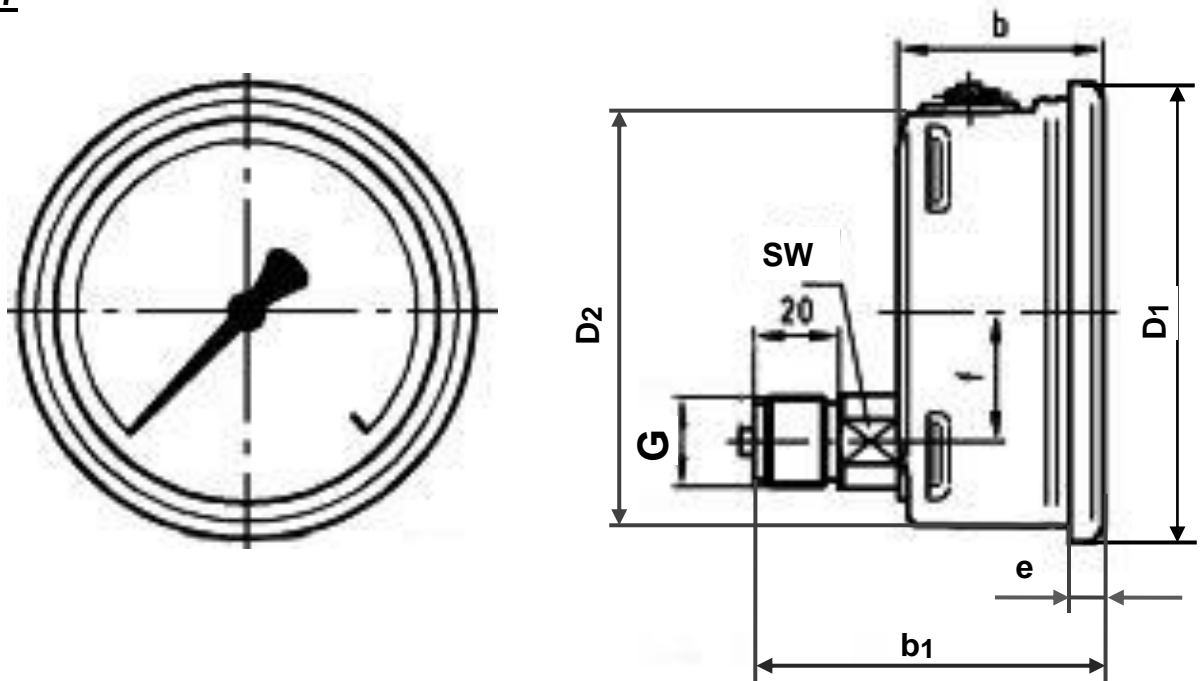
Models	P1776	P1777	Options
Nominal size	100		
Symbol			
Accuracy class	1.0 to EN 837-1		
Ranges	0...0.6 bar to 0...1000 bar negative or positive or negative and positive gauge pressure		
Application	Constant load: up to full scale value Alternating load: up to 0.9 x full scale value short-time: overload capacity 1.3 x		
Case	Natural finish stainless steel, with blow-out device: at the case circumference, 12 o'clock o-ring seal between case and connection. (crimp design)		Stainless steel, polished
Filling	Glycerine 86.5% for measuring ranges ≤ 4 bar Glycerine 99.7% for measuring ranges > 4 bar		Silicone oil M50
Compensating valve	<ul style="list-style-type: none"> - <u>Compensating valve black with vent lever</u> → with compensating valve to vent case. - Compensating valve without vent 		
Ring	Crimp ring, stainless steel polished, triangular bezel		
Mounting option	directly		Rear flange stainless steel <u>For connection back:</u> - Front flange, stainless steel polished - Triangular bezel, stainless steel polished with mounting-clamp
Window	Polycarbonat, crystal-clear		Safety glass
Dial	Aluminium white, scale and imprint black		Dual scale
Pointer	Standard, Aluminium black		Knife edge pointer
Marker-/ drag pointer	Marker- or drag pointer red on window, adjustable from outside		
Movement	CuZn-alloy		Stainless steel
Measuring element	CuZn-alloy < 100 bar (C-type bourdon tube) Stainless steel 316 L ≥ 100 bar (spiral spring)		
Pressure connection	CuZn-alloy bottom radial rear eccentric G 1/2 B (acc. to EN 837-1 / 7.3)		Other connection on request Other threads on request
Temperatures	- Medium Tmax: +60°C - Ambient Tmin.: -20°C ... Tmax. 60°C		-40°C...+60°C with silicone oil filling
Temperature drift	When the temperature of the measuring system deviates from the reference temperature (+20 °C): max. ±0.4 %/10 K of full scale value		
Protection	IP 65 acc. to EN 60529 / IEC 60529		
Throttle	without		Brass / ø 0.3; ø 0.6
Wight approx.	0.8 kg		

Dimensions

P1776



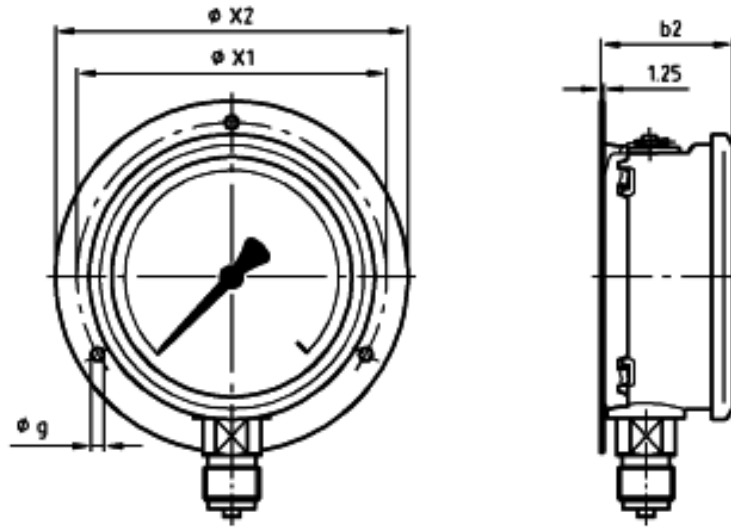
P1777



Models	Dimensions in mm									
	a	b±0,5	b ₁ ±0,5	D ₁	D ₂	e	f	G	h ±1	SW
P1776	15.5	48	---	107	100	8	---	G1/2B	87	22
P1777	---	48	83	107	100	8	30	G1/2B	---	22

Dimensions

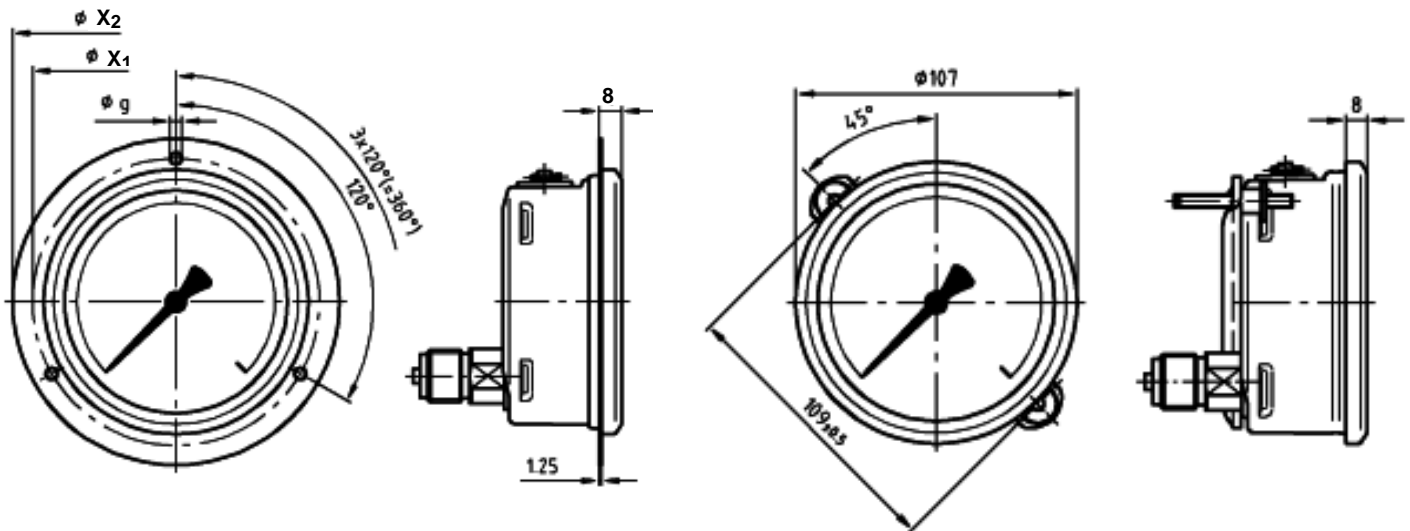
BR P1776: Pressure connection radial bottom, with hole-diagram, rear flange



BR P1777: Pressure connection rear connection for front panel mounting

Hole-diagram for front flange

and with U-clamp



Models	Dimensions in mm												
	a	b ±1	b ₁ ±1	b ₂	X ₁	X ₂	D ₁	D ₂	Ø g	f	G	h ±1	SW
P1776	15.5	48	---	49.5	116	132	107	100	4.8	---	G1/2B	87	22
P1777	---	48	81.5	---	116	132	107	100	4.8	30	G1/2B	---	22

Certificates:

- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

More certificates, see website: www.tecsis.de

Modifications reserved