

Heavy Duty pressure gauges with Bourdon tube and glycerine filling

Nominal sizes ND 100 and 160

Connection position bottom, radial
or back, eccentric

Licence:



Germanischer Lloyd



Description

The Heavy Duty pressure gauges with glycerine filling are used at measuring points with high dynamic alternating loads and strong vibrations and pulses.

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.

The modern modular construction system with an o-ring sealing system, tried and tested for many years, ensures a high level of functional safety and a long service life.

Case components are composed of stainless steel.

Features

- o High reliability and long service life due to modular construction system
- o Overload capacity 1.3x
- o Protection to IP 65
- o Accuracy class 1.0
- o Casing, stainless steel
- o Copper alloy measuring system
- o Vibration-free display

Measuring ranges

0 ... 0.6 bar to 0 ... 1000 bar

Applications

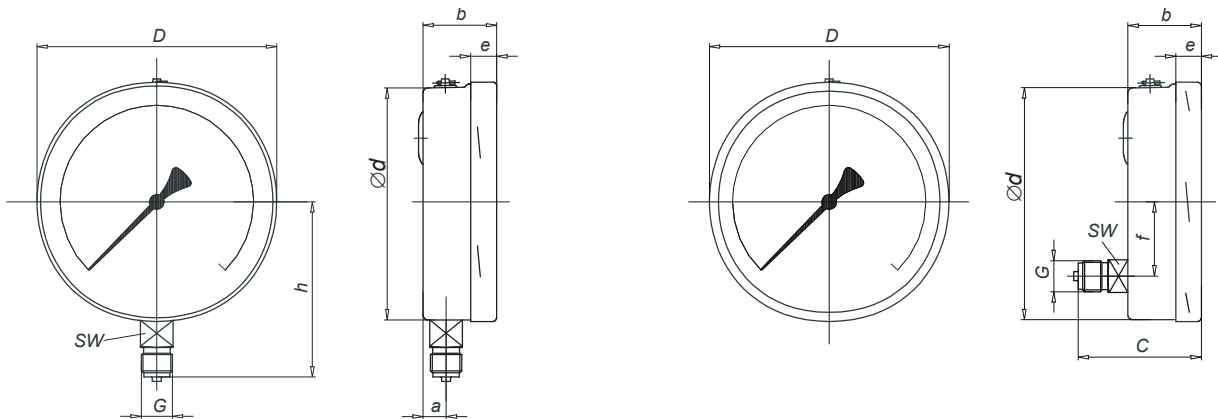
iron and steel industry, power stations,
general mechanical engineering, pumps, hydraulics,
compressors, water treatment plants.

Models: P1778, P1779, P1780, P1781

Technical data

Models	P1778	P1779	P1780	P1781	Options	
Nominal size	100		160			
Symbol						
Accuracy class	1.0 to EN 837-1					
Ranges	0...0.6 bar to 0...1000 bar negative or positive or negative/positive gauge pressure					
Applications	Constant load: up to full scale value Dynamic load: up to 0.9 x full scale value short-time: overload capacity 1.3 x				1.5 to 2 x	
Case	Stainless steel 1.4301 with pressure relief opening				Stainless steel, polished	
Bezel	Stainless steel 1.4301				Steel, black	
Mounting					Front flange / rear flange	
Window	Glass lens				Safety glass, Plexiglass	
Dial	Aluminium, white, scale and imprint black				Dual scale	
Pointer	Aluminium, black				Drag pointer	
Movement	CuZn-alloy					
Measuring element	Copper alloy up to <100 bar, above ≥ 100 bar stainless steel 316 L					
Pressure connection	Copper alloy up to 1000 bar, > 1000 bar stainless steel 316 L					
- position	radial bottom	rear eccentric	radial bottom	rear eccentric		
- thread	G 1/2 B				Other threads on request	
Temperatures						
- Medium	Tmin. -20°C, Tmax. 80°C					
- Ambient	Tmin. -25°C, Tmax. 60°C					
Temperature drift	0.4%/10K if deviation from normal temperature 20°C					
Liquid filling	Glycerine				Others on request	
Protection	IP 65 to EN 60 529/IEC 529					
Orifice						$\varnothing 0.3$; $\varnothing 0.4$; $\varnothing 0.8$
Weight	0.9 kg	0.9 kg	2.1 kg	2.1 kg		

Dimensions



Model : P1778, P1780

Model : P1779, P1781

Model	Dimensions in mm										
	ND	a	b	C	D	$\varnothing d$	e	f	G	h	SW
P1778	100	17.7	54	--	101	99	16.7	--	G 1/2 B	87	22
P1779	100	--	54	85.5	101	99	16.7	30	G 1/2 B	--	22
P1780	160	15.5	49.5 ²⁾	--	161	159	17.5	--	G 1/2 B	118	22
P1781	160	--	49.5 ¹⁾	83 ¹⁾	161	159	17.5	50	G 1/2 B	--	22

1) Plus 16 mm with pressure range ≥ 100 bar

2) Plus 16 mm with pressure range 1600 bar

Modifications reserved