

## Precision test gauges with Bourdon tube and mirrored scale

Nominal size ND 160 mm

Connection position bottom, radial

Accuracy 0.25 % ASME B40



### Description

Our precision test gauges with mirrored scale are manufactured with highest precision and are used to test pressure in research and development and in laboratories.

The precision test gauges have a high-grade measuring element. The pressure proportional elastic deformation of this Bourdon tube is transmitted through a low friction movement to the knife edge pointer.

Test gauges are suitable for measuring of non-aggressive gaseous and liquid media, although this may not be too viscous or be susceptible to crystallization.

### Features

- o Exact readings
- o 1.3-fold overload capacity
- o Mirrored scale
- o Pointer with microadjustment

### Ranges


0 ... 0.6 bar up to 0 ... 1600 bar

### Applications

Precision monitoring in processing plants;  
Control and adjustment of pressure gauges,  
Test equipment

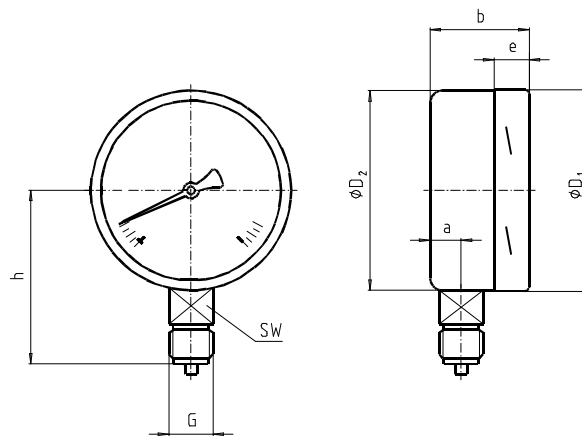
**Model : P1881**

## Technical data

Models	P1881	Options
Nominal size	160	
Symbol		
Accuracy class	0.25 % (ASME B40.1-1991)	
Ranges	0 ... 0.6 bar up to 0 ... 1600 bar negative or positive / negative and positive gauge pressure	
Application	Static pressure : up to full scale value Dynamic pressure : up to 0.9 times full scale value 1.3 times max. rating shortly	
Case	Stainless steel 1.4301 Pressure relief opening at back of the case	Back flange
Bezel	Stainless steel 1.4301	Front flange
Window	Glass lens	Safety glass
Dial	Aluminium white, scale and imprint black, mirrored	Dual scale
Pointer	Knife-edge pointer, alu., black, with micro-adjustment	
Movement	Brass	
Measuring element	<100 bar Copper alloy / Bourdon tube / soft soldered ≥100 bar Stainless steel / helical tube / brazed ≥1000 bar Stainless steel / helical tube / welded	
Connection - Location - Thread	<1000 bar Brass; ≥1000 bar stainless steel 1. 4571 bottom G 1/2 B or 1/2-14 NPT	Other threads on request
Temperatures - Media - Ambient	Tmin. -20°C , Tmax. 60°C; Tmin. -40°C , Tmax. 60°C	
Temperature drift	0.3 % / 10K if deviation from normal temperature 20°C	
Protection class	IP 54 according EN 60 529/IEC 259	
Calibration medium <sup>1)</sup>	≤ 25 bar : gas , >25 bar : oil	≥ 4 bar : oil
Orifice		ø0.4 ; ø0.8
Weight ca.	1.3 kg	

1) Please state the used medium when ordering, because with the change of the pressure transmitting medium gas (G) or liquid (F), display changes can take place

## Dimensions (mm)



G	h ±1	D1	D2	b <sup>2)</sup>	e	a
G½ B	118	161	159	49.5	17.5	15.5
G3/8 B	114	161	159	49.5	17.5	15.5
½ -14NPT	117	161	159	49.5	17.5	15.5
R½ - 2999	117	161	159	49.5	17.5	15.5

2) plus 16 mm with pressure ranges ≤4 bar and ≥1600 bar