

# Bourdon Tube Pressure Gauges

Test Gauge Series, Class 0.6 ( $\pm 0.5\%$ ) • Model 312.20

## Pressure Gauges

### Service intended

Pressure gauge testing and calibration.  
Suitable for all gaseous and liquid media that will not obstruct the pressure system or attack copper alloy parts.

### Design

EN 837-1

### Nominal size

160 mm

### Accuracy class per EN 837-1 /6

0.6

$\pm 0.5\%$  of span (ASME B 40.1 Grade 2A)

### Scale ranges per EN 837-1 /5

0 ... 0.6 to 0 ... 600 bar

or other equivalent units of pressure or vacuum.

### Calibrating medium

$\leq 25$  bar: gas

$> 25$  bar: liquid (inside of measuring system dried afterwards)

### Working pressure

Steady: full scale value

Fluctuating:  $0.9 \times$  full scale value

Short time:  $1.3 \times$  full scale value

### Operating temperature

Ambient:  $-40 \dots +60$  °C

Medium:  $+80$  °C maximum

### Temperature effect

When temperature of the pressure element deviates from reference temperature ( $+20$  °C):

max.  $\pm 0.4\%/10$  K of true scale value

### Ingress protection

IP 54 per EN 60 529 / IEC 529

### Standard features

#### Pressure connection

Material: Cu-alloy

Lower mount (LM) or lower back mount (LBM) per EN 837-1 /7.3

G  $\frac{1}{2}$  B (male), 22 mm flats

#### Pressure element

$< 100$  bar: Cu-alloy, C-type, soft soldered

$\geq 100$  bar: Stainless steel, helical type, brazed

#### Movement

Cu-alloy, wear parts argentan



### Dial

White aluminium with black lettering

### Pointer

Black aluminium, knife edge pointer

### Case

Natural finish stainless steel

### Window

Instrument glass

### Bezel ring

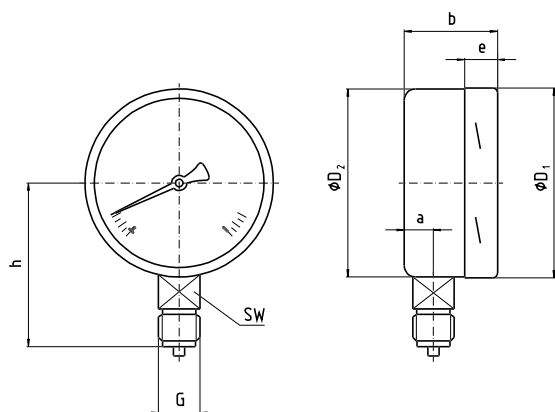
Cam ring (bayonet type), natural finish stainless steel

### Optional extras

- Other pressure connection
- Medium temperature to  $100$  °C with special soft solder
- Medium temperature to  $200$  °C (see data sheet PM 03.05)
- Liquid filling (**model 313.20**)
- 3-hole surface or panel mounting flange, stainless steel
- Triangular bezel, stainless steel, polished, with clamp
- Alarm contacts (see data sheet AC 08.01)
- Transmitter (see data sheet AE 08.02)

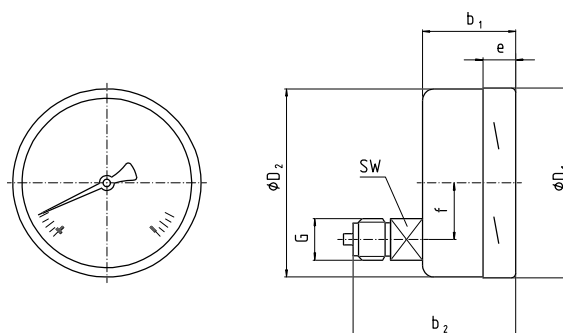
**Dimensions**  
**Standard version**

Radial bottom pressure entry (LM)



1034 561

Lower back pressure entry (LBM)



1034 570

Nominal size	Dimensions [mm]											Weight [kg]
	a	b	b <sub>1</sub>	b <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	e	f	G	h ± 1	SW	
160	15.5	49.5 <sup>1)</sup>	49.5 <sup>1)</sup>	83 <sup>1)</sup>	161	159	17.5	50	G ½ B	118	22	1.10

Standard pressure entry with parallel thread and seating to EN 837-1 /7.3.

1) Plus 16 mm with pressure ranges ≤ 4 bar and ≥ 100 bar

**Ordering information**

State:  
 Pressure gauge model / Nominal size / Scale range / Size and location of connection / Optional extras required

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.  
 Modifications may take place and materials specified may be replaced by others without prior notice.



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