

Mechanical  
pressure measurement

**Bourdon tube pressure gauge**  
**Test gauge series, class 0.6**  
**Model 312.20**

WIKA data sheet PM 03.01



for further approvals  
see page 2

**Applications**

- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Precision measurement in laboratories
- High-accuracy pressure measurement
- Testing of industrial type pressure gauges

**Special features**

- Knife edge pointer for optimal accuracy of reading
- Precise movement with wear parts of argentan
- Scale ranges up to 0 ... 600 bar



Test gauge series model 312.20

**Description**

**Design**

EN 837-1

**Nominal size in mm**

160

**Accuracy class**

0.6

**Scale ranges**

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

or all other equivalent vacuum or combined pressure and vacuum ranges

**Adjustment medium**

≤ 25 bar: Gas

> 25 bar: Liquid

**Pressure limitation**

Steady: Full scale value

Fluctuating: 0.9 x full scale value

Short time: 1.3 x full scale value

**Permissible temperature**

Ambient: -40 ... +60 °C

Medium: +80 °C maximum

**Temperature effect**

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max. ±0.4 %/10 K of full scale value

**Ingress protection**

IP 54 per EN 60529 / IEC 60529

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Data sheets showing similar products:  
Test gauge series; NS 250; model 311.11; see data sheet PM 03.02



## Standard version

### Process connection

Cu-alloy,  
 lower mount (LM) or lower back mount (LBM),  
 G ½ B (male), 22 mm flats

### Pressure element

< 100 bar: Cu-alloy, C-type  
 ≥ 100 bar: Stainless steel 316L, helical type

### Movement

Cu-alloy, wear parts argentan

### Dial

Aluminium, white, black lettering

### Pointer

Knife edge pointer, aluminium, black

### Case

Stainless steel

### Window

Instrument glass

### Bezel ring

Cam ring (bayonet type), stainless steel

## Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Liquid filling (model 333.50, data sheet PM 03.06)
- Increased medium temperature to 100 °C with special soft solder
- Increased medium temperature to 200 °C (data sheet PM 03.06)
- Panel or surface mounting flange, stainless steel
- Triangular bezel, polished stainless steel, with clamp
- Higher indication accuracy: Class 0.25
- Mirror band scale
- Zero point adjustable from outside (adjustable dial)
- Adjustment medium gas from 25 bar
- Switch contacts (data sheet AC 08.01)
- Transport case

## CE conformity

### Pressure equipment directive

97/23/EC, PS > 200 bar, module A, pressure accessory

## Approvals

- **EAC**, import certificate, customs union Russia/Belarus/Kazakhstan
- **GOST**, metrology/measurement technology, Russia
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada

## Certificates <sup>1)</sup>

- 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. material proof wetted parts metal component, indication accuracy)
- DKD/DAkkS certified accuracy

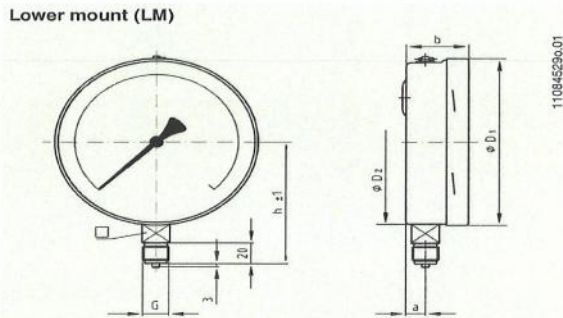
1) Option

Approvals and certificates, see website

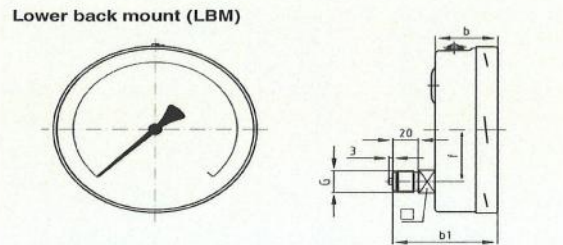
**Dimensions in mm**

**Standard version**

**Lower mount (LM)**



**Lower back mount (LBM)**



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

Process connection per EN 837-1 / 7.3  
1) Plus 16 mm with scale ranges ≤ 4 bar and ≥ 100 bar

**Ordering information**

Model / Nominal size / Scale range / Connection size / Connection location / Options

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