

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

IP54 per IEC/EN 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 per EN 837 or grade 3A per ASME B40.1 for scale ranges ≤ 400 bar
- Mirror band scale
- Zero point adjustable from outside (adjustable dial)
- Adjustment medium gas from scale ranges ≥ 25 bar
- Transport case

EU conformity

Pressure equipment directive

PS > 200 bar, module A, pressure accessory

Approvals

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

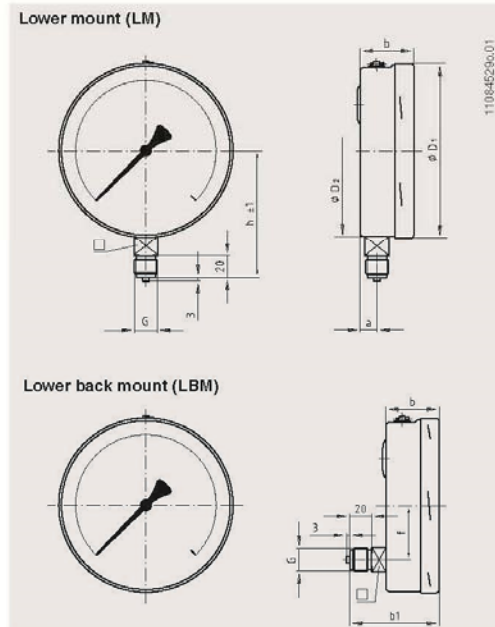
Certificates (option)

- 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

Approvals and certificates, see website

Dimensions in mm

Standard version



NS	Dimensions in mm									Weight in kg
	a	b	b ₁	D ₁	D ₂	f	G	h ±1	SW	
160	15.5 1)	49.5 1)	83 1)	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 / Process connection / Connection location / Options

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 We reserve the right to make modifications to the specifications and materials.

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WIKAI
 WIKAI Alexander Wiegand SE & Co. KG
 Alexander-Wiegand-Straße 30
 63911 Klingenberg/Germany
 Tel. +49 9372 132-0
 Fax +49 9372 132-406
 info@wika.de
 www.wika.de

Pressure Gauge

Art. No. 102561 to 102577

Type No. 1158 to 1173



Article No.	Type No.
102561	1158
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