

**Mechanical
pressure measurement**

**Bourdon tube pressure gauge
Model 212.20, industrial series**

WIKA data sheet PM 02.01



for further approvals
see page 2

Applications

- Sturdy industrial pressure gauge designed in compliance with the operational safety requirements of EN 837-1
- Reliable pressure gauge for the machine and plant construction industry as well as building services industry
- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Proven in refrigeration technology

Special features

- Long service life, robust
- Cost-effective and reliable
- To combine with WIKA diaphragm seals
- German Lloyd and Gosstandart approval
- Scale ranges up to 0 ... 1,000 bar



Bourdon tube pressure gauge model 212.20

Description

Design
EN 837-1

Nominal size in mm
100, 160

Accuracy class
1.0

Scale ranges
0 ... 0.6 to 0 ... 1,000 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

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

WIKA data sheet PM 02.01 · 02/2015

Page 1 of 3

Data sheets showing similar products:
Industrial series NS 250; model 211.11; see data sheet PM 02.17



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

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)
- NS 100: Liquid filling (model 213.53, data sheet PM 02.12)
- NS 160: Liquid filling (model 233.50, data sheet PM 02.02)
- Increased medium temp. to 100 °C with special soft solder
- Increased medium temperature up to 200 °C (data sheet PM 02.02)
- Panel or surface mounting flange, stainless steel
- Panel mounting flange, polished stainless steel
- Triangular bezel, stainless steel, polished, with clamp
- Pressure gauge with switch contacts, see model PGS21.1x0, data sheet PV 22.01

Special versions

Refrigerant gauges

NS 100: With temperature scale for refrigerants in °C,
Refrigerants: R 744, R 764, R 40, R 22 or R 134a

CE conformity

Pressure equipment directive

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

Approvals

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

Certificates ¹⁾

- 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. indication accuracy)

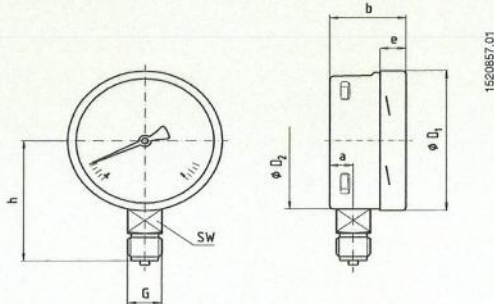
¹⁾ Option

Approvals and certificates, see website

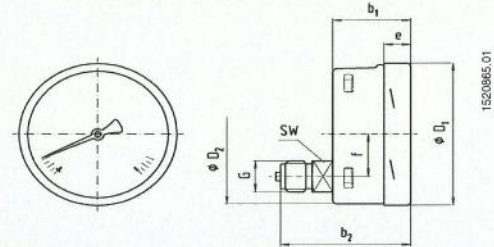
Dimensions in mm

Standard version

Lower mount (LM)



Lower back mount (LBM)



NS	Dimensions in mm											Weight in kg
	a	b	b ₁	b ₂	D ₁	D ₂	e	f	G	h ±1	SW	
100	15.5	49.5	49.5	83	101	100	17.5	30	G ½ B	87	22	0.60
160	15.5	49.5	49.5 ¹⁾	83 ¹⁾	161	160	17.5	50	G ½ B	118	22	1.10

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

Ordering information

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

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WIKA data sheet PM 02.01 - 02/2015

Page 3 of 3



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Art. No.	Ident No.
2201	102595
2202	102596
2203	102597
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2207	102601
2208	102602
2209	102603
2210	102604
2211	102605
2212	102606
3300	102607
3300/1	102608
3301	102609
3303	102610
3304	102611
3305	102612
3307	102613
3313	102614