

**Mechanical
pressure measurement**

Bourdon tube pressure gauge Model 213.40, liquid filling, forged brass case

WIKA data sheet PM 02.06



for further approvals
see page 2

Applications

- For measuring points with high dynamic pressure loads or vibrations
- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Mining
- Hydraulics
- Shipbuilding

Special features

- Vibration and shock resistant
- Especially robust design
- NS 63 and 100 with Germanischer Lloyd and Gosstandart approval
- Scale range up to 0 ... 1,000 bar



Bourdon tube pressure gauge model 213.40

Description

Design
EN 837-1

Nominal size in mm
63, 100

Accuracy class
NS 63, : 1.6
NS 100: 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

NS 63, 80:	Steady:	3/4 x full scale value
	Fluctuating:	2/3 x full scale value
	Short time:	Full scale value
NS 100:	Steady:	Full scale value
	Fluctuating:	0.9 x full scale value
	Short time:	1.3 x full scale value

Permissible temperature

Ambient: -20 ... +60 °C
Medium: +60 °C maximum

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C): max. $\pm 0.4 \%$ / 10 K of the span

Ingress protection

IP 65 per EN 60529 / IEC 60529

Standard version

Process connection

Copper alloy, lower mount (LM) or back mount (BM)

NS 63: G ¼ B (male), 14 mm flats

NS 100: G ½ B (male), 22 mm flats

Pressure element

NS 63:

Copper alloy, C-type or helical type

NS 100:

Copper alloy, C-type

Stainless steel 1.4571 or 1.4404, helical type

Movement

Copper alloy

Dial

NS 63: Plastic ABS, white, with pointer stop pin

NS 100: Aluminium, white

Black lettering

Pointer

Aluminium, black

Window

Clear non-splintering plastic

Case

Solid forged brass, with blow-out device at case circumference, 12 o'clock.

Scale ranges ≤ 0 ... 16 bar with compensating valve to vent case.

Bezel ring

Crimp ring, stainless steel

NS 63 : Natural finish

NS 100: Polished

Filling liquid

Glycerine

Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Internal pressure compensation (pressure compensation foil)
- Increased medium temperature up to 100 °C with special soft solder
- Ambient temperature resistant -40 ... +60 °C with silicone oil filling
- Panel or surface mounting flange
- Triangular bezel with clamp
- Centre back mount (CBM) for NS 80 with scale range ≥ 60 bar

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 (Option)

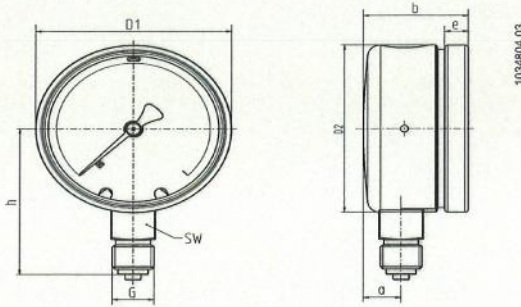
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

Approvals and certificates, see website

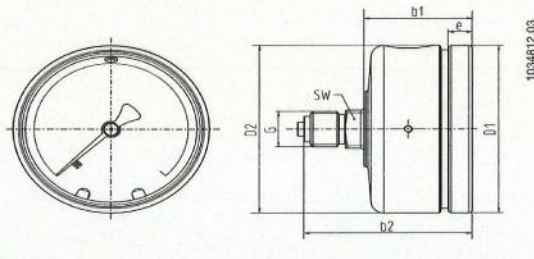
Dimensions in mm

Standard version

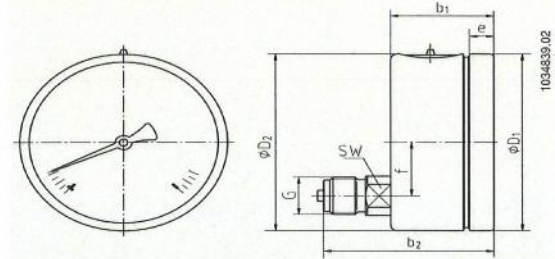
Lower mount (LM)



NS 63, centre back mount (CBM)



NS 80, 100, 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	
63	12	36	36	56	62	62	10.5	-	G ¼ B	54	14	0.30
80	14	38.5	38.5	69.5	79	79	8.5	23	G ½ B	76	22	0.80
100	13.5	49	49	81	99	99	11.5	30	G ½ B	87	22	1.10

Process connection per EN 837-1 / 7.3

Ordering information

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

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

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Art. No.	Ident No.
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