

# 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, 80, 100

### Accuracy class

NS 63, 80: 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.  $\pm 0.4 \text{ } \%/10 \text{ K}$  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 80, 100: G ½ B (male), 22 mm flats

### Pressure element

NS 63:

Copper alloy, C-type or helical type

NS 80, 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 80, 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  $\leq 0 \dots 16$  bar with compensating valve to vent case.

### Bezel ring

Crimp ring, stainless steel

NS 63, 80: 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  $\geq 60$  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)

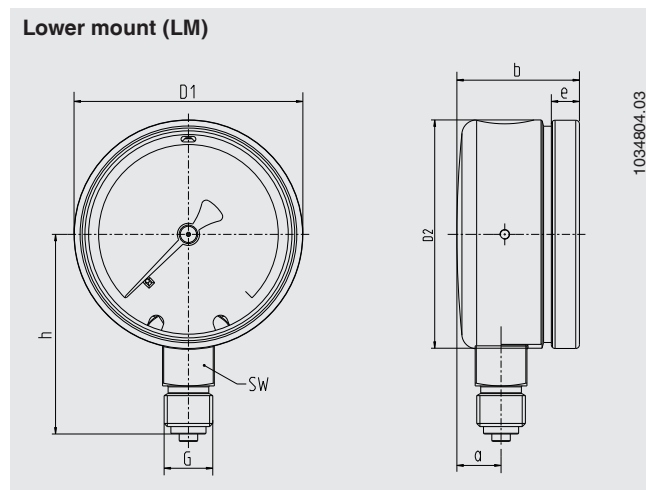
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

Approvals and certificates, see website

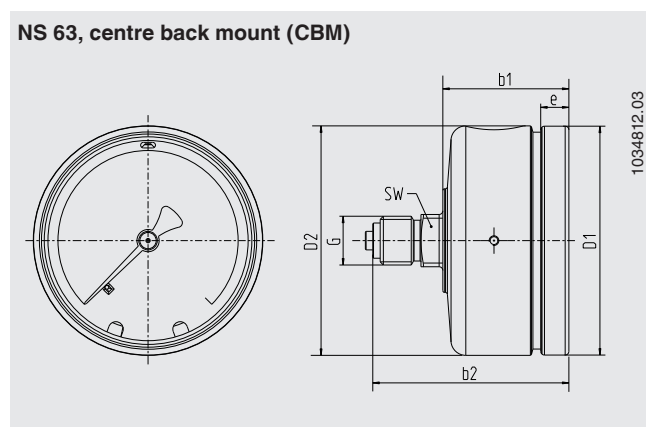
## Dimensions in mm

### Standard version

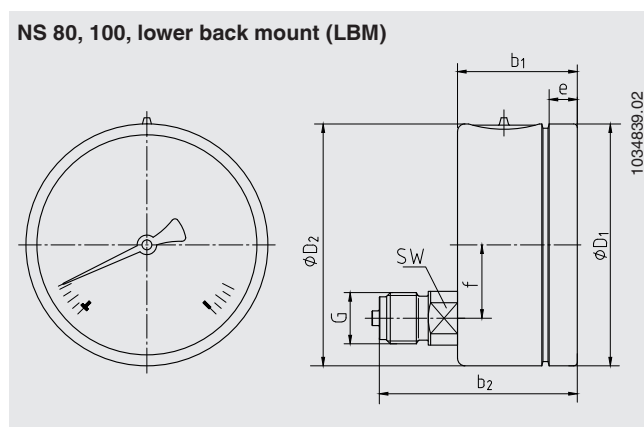
#### Lower mount (LM)



#### NS 63, centre back mount (CBM)



#### NS 80, 100, lower back mount (LBM)



NS	Dimensions in mm											Weight in kg
	a	b	b <sub>1</sub>	b <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	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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