

# Bourdon Tube Pressure Gauges Model 213.40, Liquid Filling, Forged Brass Case

WIKA Data Sheet PM 02.06



## Applications

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

## Special Features

- Vibration and shock resistant
- Especially sturdy design
- Approval German Lloyd
- Scale range up to 0 ... 1000 bar

## 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 ... 1000 bar  
or all other equivalent vacuum or combined pressure and vacuum ranges



**Bourdon Tube Pressure Gauge Model 213.40**

### Pressure limitation

|         |              |                        |
|---------|--------------|------------------------|
| NS 63:  | 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 |

### Operating 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. ±0.4 %/10 K of the span

### Ingress protection

IP 65 per EN 60 529 / IEC 529

## Standard version

### Process connection

Cu-alloy, lower mount (LM) or back mount

NS 63: G ¼ B (male), 14 mm flats

NS 100: G ½ B (male), 22 mm flats

### Pressure element

NS 63:

< 60 bar: Cu-alloy, C-type, soft soldered

≥ 60 bar: Cu-alloy, helical type, soft soldered

NS 100:

< 100 bar: Cu-alloy, C-type, soft soldered

≥ 100 bar: Stainless steel 1.4571, helical type, brazed

**Movement:** Cu-alloy

### Dial

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

NS 100: Aluminium, white  
black lettering

**Pointer:** Aluminium, black

**Window:** Clear plastic

### Case

Solid forged brass, with pressure relief at case circumference, 12 o'clock

Ranges ≤ 0 ... 6 bar with compensating valve to vent case

### Bezel ring

Crimp ring, natural finish stainless steel

### Liquid filling

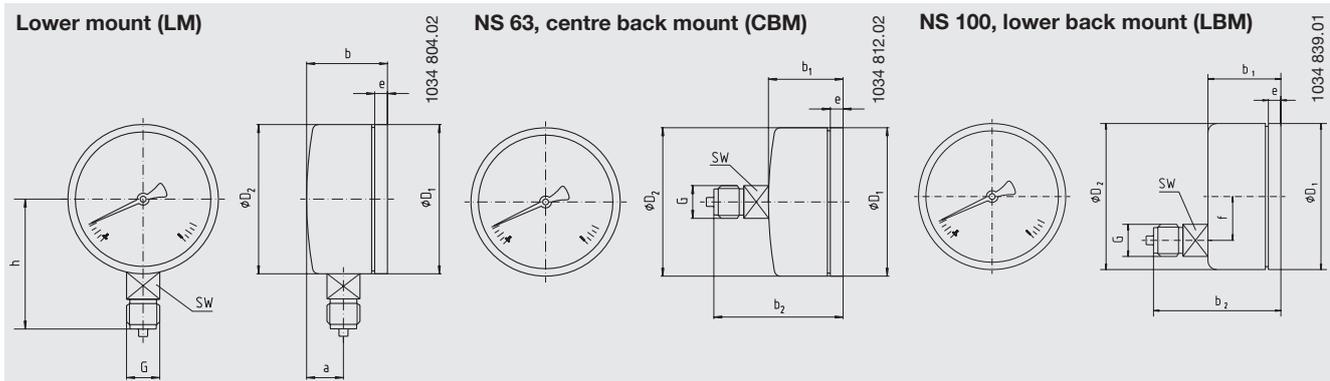
Glycerine 99.7 %

## Options

- Other process connection
- Internal pressure compensation
- Medium temperature up to 100 °C with special soft solder
- Panel or surface mounting flange
- Triangular bezel with clamp

## Dimensions in mm

### Standard version



| 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         |
| 100 | 13.5             | 53.5 | 53.5           | 86             | 99             | 99             | 11.5 | 30 | G ½ B | 87    | 22 | 1.10         |

Process connection EN 837-1 / 7.3

## Ordering information

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

Modifications may take place and materials specified may be replaced by others without prior notice.

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

