

# Capsule pressure gauge, copper alloy or stainless steel

## Standard version, NS 50 and 63

### Models 611.10 and 631.10

WIKA data sheet PM 06.01



for further approvals  
see page 3

#### Applications

- Pressure gauge for use in a protected environment
- Medical, vacuum, environmental, laboratory technology, for contents measurement and filter monitoring
- For gaseous, dry and non-aggressive media
- Model 631.10 also for aggressive media

#### Special features

- Zero point setting in front
- Special connection location on request
- Low scale ranges from 0 ... 25 mbar



Capsule pressure gauge, model 611.10

## Description

The model 611.10 and 631.10 capsule pressure gauges are based upon the proven capsule measuring system. The capsule measuring principle is particularly suitable for low pressures. On pressurisation, the expansion of the capsule element, proportional to the incident pressure, is transmitted to the movement and indicated.

The case is made from black lacquered steel with a snap-fitted window. The material of the process connection is a copper alloy with model 611.10 and stainless steel with model 631.10.

The modular design enables a multitude of combinations of case materials, process connections, nominal sizes and scale ranges. Due to this high variance, the instrument is suitable for use in a wide range of applications within industry.

For mounting in control panels, the capsule pressure gauges can, depending on the process connection, be fitted with a surface mounting flange or with a triangular bezel and mounting bracket.

## Standard version

### Design

EN 837-3

### Nominal size in mm

50, 63

### Accuracy class

1.6

### Scale ranges

NS 50: 0 ... 60 mbar to 0 ... 600 mbar

NS 63: 0 ... 25 mbar to 0 ... 600 mbar

or all other equivalent vacuum or combined pressure and vacuum ranges

### Pressure limitation

Steady: Full scale value

Fluctuating: 0.9 x full scale value

### Permissible temperature

Ambient: -20 ... +60 °C

Medium: ≤ 100 °C

### Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C): max. ±0.6 %/10 K of full scale value

### Ingress protection per IEC/EN 60529

IP32

### Process connection

Model 611.10: Copper alloy

Model 631.10: Stainless steel

Lower mount or back mount

(NS 50: Only back mount)

G ¼ B (male), SW 14

### Pressure element

Model 611.10: Copper alloy

Model 631.10: Stainless steel

### Sealing

NBR

### Movement

Copper alloy

### Zero point setting

In front

### Dial

Aluminium, white, black lettering

### Pointer

Aluminium, black

### Case

Steel, black

### Window

Clear non-splintering plastic, domed, snap-fitted in case

## Options

- Other process connection <sup>1)</sup>
- Sealings <sup>1)</sup> (model 910.17, see data sheet AC 09.08)
- Stainless steel case <sup>1)</sup>
- Overload <sup>1)</sup> or vacuum safety <sup>1)</sup> with  
scale ranges < 40 mbar: 3 x full scale value  
scale ranges ≥ 40 mbar: 10 x full scale value
- Slip-on bezel
- Panel or surface mounting flange
- Triangular bezel with clamp

<sup>1)</sup> only for NS 63

## Approvals

| Logo  | Description  | Country                     |
|---|--|-----------------------------|
|  | <b>EU declaration of conformity</b><br><ul style="list-style-type: none"> <li>■ Pressure equipment directive</li> <li>PS &gt; 200 bar; module A, pressure accessory</li> </ul> | European Union              |
|  | <b>EAC (option)</b><br><ul style="list-style-type: none"> <li>■ Pressure equipment directive</li> <li>■ Hazardous areas</li> </ul>   | Eurasian Economic Community |
|  | <b>GOST (option)</b><br>Metrology, measurement technology  | Russia                      |
|  | <b>KazInMetr (option)</b><br>Metrology, measurement technology   | Kazakhstan                  |
| -   | <b>MTSCHS (option)</b><br>Permission for commissioning   | Kazakhstan                  |
|  | <b>BelGIM (option)</b><br>Metrology, measurement technology  | Belarus                     |
|  | <b>UkrSEPRO (option)</b><br>Metrology, measurement technology  | Ukraine                     |
|  | <b>Uzstandard (option)</b><br>Metrology, measurement technology  | Uzbekistan                  |
| -   | <b>CPA (option)</b><br>Metrology, measurement technology   | China                       |

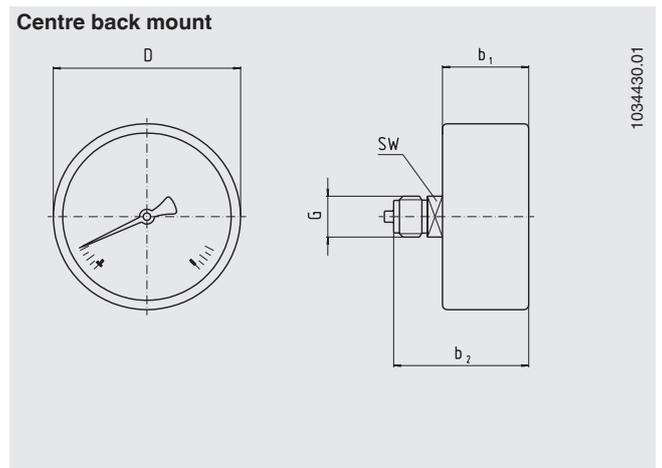
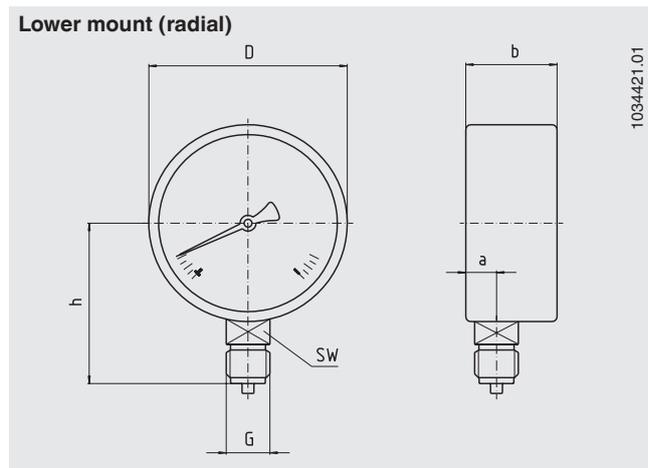
## Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

# Dimensions in mm

## Standard version



| NS | Dimensions in mm |    |                |                |    |       |      |    | Weight in kg |
|----|------------------|----|----------------|----------------|----|-------|------|----|--------------|
|    | a                | b  | b <sub>1</sub> | b <sub>2</sub> | D  | G     | h ±1 | SW |              |
| 50 | -                | -  | 28             | 47             | 50 | G ¼ B | -    | 14 | 0.09         |
| 63 | 9.5              | 40 | 36.5           | 54.5           | 63 | G ¼ B | 51   | 14 | 0.20         |

Process connection per EN 837-3 / 7.3

## Ordering information

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

© 11/2008 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.  
 The specifications given in this document represent the state of engineering at the time of publishing.  
 We reserve the right to make modifications to the specifications and materials.

