

Mechanical  
pressure measurement

## 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.

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Data sheets showing similar products:  
Capsule pressure gauge, heavy-duty version for NS 63, 100 and 160; model 612.20; see data sheet PM 06.02

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### 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> <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> <ul style="list-style-type: none"> <li>■ Pressure equipment directive</li> <li>■ Hazardous areas</li> </ul>	Eurasian Economic Community
	<b>GOST (option)</b> Metrology, measurement technology	Russia
	<b>KazInMetr (option)</b> Metrology, measurement technology	Kazakhstan
-	<b>MTSCHS (option)</b> Permission for commissioning	Kazakhstan
	<b>BelGIM (option)</b> Metrology, measurement technology	Belarus
	<b>UkrSEPRO (option)</b> Metrology, measurement technology	Ukraine
	<b>Uzstandard (option)</b> Metrology, measurement technology	Uzbekistan
-	<b>CPA (option)</b> Metrology, measurement technology	China

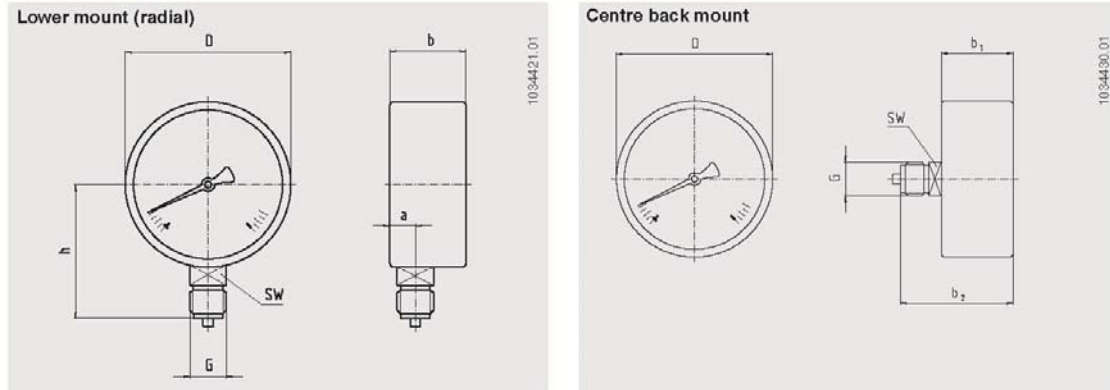
## Certificates (option)

- 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

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Art. No.	Type No.
102517	5840
102518	5841
102519	5842
102520	5843
102521	5844
102527	5801
102528	5802
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