

## Capsule pressure gauge, copper alloy Stainless steel case Model 612.20, NS 63, 100 and 160



for further approvals  
see page 3

### Applications

- Robust design and ingress protection IP54
- For gaseous, dry and non-aggressive media
- Medical, vacuum, environmental, laboratory technology, for contents measurement and filter monitoring

### Special features

- Zero point setting in front
- Case from stainless steel
- Special connection location on request
- Low scale ranges from 0 ... 6 mbar



**Capsule pressure gauge, model 612.20**

### Description

The model 612.20 capsule pressure gauge is 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 and the bayonet ring are made from stainless steel. The material of the process connection is a copper alloy.

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**

63, 100, 160

**Accuracy class**

1.6

**Scale ranges**

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

NS 100: 0 ... 10 mbar to 0 ... 600 mbar

NS 160: 0 ... 6 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

+ 80 °C maximum (with NS 100 and 160 back mount)

**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**

IP54

**Process connection**

Copper alloy

Lower mount (radial) or lower back mount <sup>1)</sup>

NS 63: G ¼ B (male), SW 14

NS 100, 160: G ½ B (male), SW 22

**Pressure element**

Copper alloy

**Sealing**

NBR

**Movement**

Copper alloy

**Zero point setting**

In front

**Dial**

Aluminium, white, black lettering

**Pointer**

Aluminium, black

**Case**

Stainless steel

**Window**

Instrument glass

**Ring**







Bayonet ring, stainless steel

**Options**

- Other process connection
- Overload or vacuum safety with  
scale ranges > 25 mbar: 10 x full scale value  
scale ranges ≤ 25 mbar: 3 x full scale value
- NS 100 and 160: Panel or surface mounting flange
- NS 100 and 160: Triangular bezel with clamp
- NS 100 and 160: Ingress protection IP65
- Switch contacts model 831 (data sheet AC 08.01)

1) with NS 63: Centre back mount (CBM)

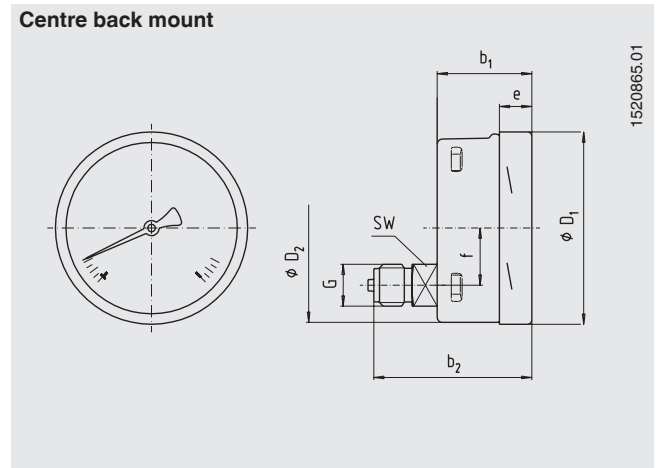
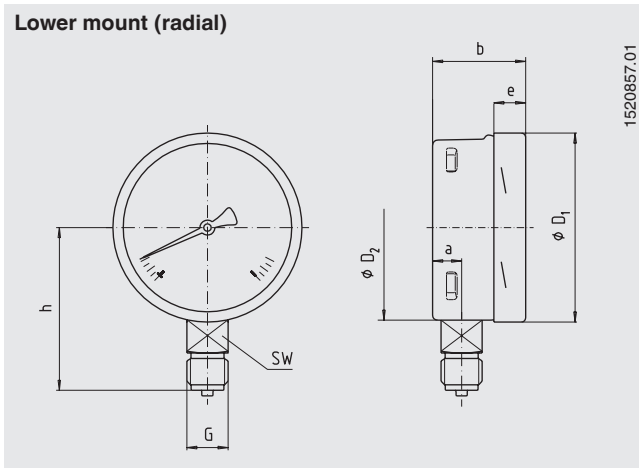
## Approvals

Logo	Description	Country
	<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 <sub>1</sub>	D <sub>2</sub>	e	f	G	h ± 1	SW	
<b>63</b>	9.5	33	42	63	64	62	22	<sup>1)</sup>	G ¼ B	52	14	0.19
<b>100</b>	15.5	49.5	49.5	83	101	99	17.5	30	G ½ B	87	22	0.60
<b>160</b>	15.5	49.5	49.5	83	161	159	17.5	50	G ½ B	118	22	1.10

<sup>1)</sup> with NS 63: Centre back mount (CBM)

Process connection per EN 837-3 / 7.3