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

WIKA data sheet PM 06.02



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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.





Data sheets showing similar products: Test gauge, copper alloy or stainless steel; for low pressure ranges up to 600 mbar; class 0.6; models 610.20 and 630.20, NS 160; see data sheet PM 06.09 Capsule pressure gauge, stainless steel for the process industry; models 632.50 and 633.50; NS 63, 100, 160; see data sheet PM 06.03 Page 1 of 4

## 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:  $\leq$  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.  $\pm 0.6$  %/10 K of full scale value

#### Ingress protection per IEC/EN 60529 IP54

#### Process connection

#### Pressure element

Copper alloy

Sealing NBR

Movement Copper alloy

Zero point setting In front

**Dial** Aluminium, white, black lettering

#### Pointer

Aluminium, black

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

Case Stainless steel

Window Instrument glass

#### Ring

Bayonet ring, stainless steel

### Options

- Other process connection
- Overload or vacuum safety with scale ranges < 40 mbar: 3 x full scale value scale ranges ≥ 40 mbar: 10 x full scale value
- NS 100 and 160: Panel or surface mounting flange
- NS 100 and 160: Triangular profile ring with clamp
- NS 100 and 160: Ingress protection IP65

## **Approvals**

Logo	Description	Country
G	GOST (option) Metrology, measurement technology	Russia
ß	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
œ	BelGIM (option) Metrology, measurement technology	Belarus
©	UkrSEPRO (option) Metrology, measurement technology	Ukraine
Ø	Uzstandard (option) Metrology, measurement technology	Uzbekistan
-	CPA (option) 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	
	а	b	<b>b</b> 1	b <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	е	f	G	h ± 1	SW	
63	9.5	33	42	63	64	62	22	1)	G ¼ B	52	14	0.19
100	15.5	49.5	49.5	83	101	99	17.5	30	G ½ B	87	22	0.60
160	15.5	49.5	49.5	83	161	159	17.5	50	G ½ B	118	22	1.10

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

Process connection per EN 837-3 / 7.3

#### Ordering information

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

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WIKA Alexander Wiegand SE & Co. KG Alexander-Wiegand-Straße 30 63911 Klingenberg/Germany Tel. +49 9372 132-0 Fax +49 9372 132-406 info@wika.de www.wika.com

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