

**Mechanical
pressure measurement**

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

WIKA data sheet PM 06.02



for further approvals
see page 2

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.

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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



Part of your business

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 ¹⁾

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)

Approvals

Logo	Description	Country
	EU declaration of conformity ■ Pressure equipment directive PS > 200 bar; module A, pressure accessory	European Union
	EAC (option) ■ Pressure equipment directive ■ Hazardous areas	Eurasian Economic Community
	GOST (option) Metrology, measurement technology	Russia
	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
	BelGIM (option) Metrology, measurement technology	Belarus
	UkrSEPRO (option) Metrology, measurement technology	Ukraine
	Uzstandard (option) Metrology, measurement technology	Uzbekistan
-	CPA (option) Metrology, measurement technology	China

Certificates (option)

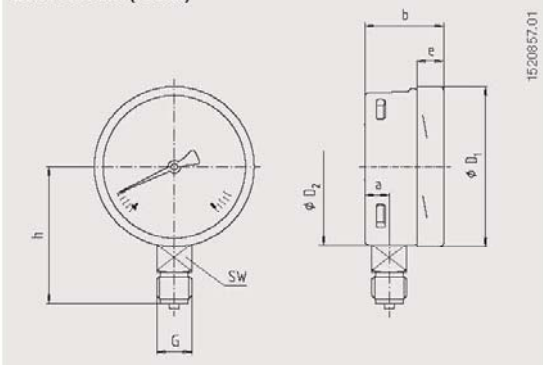
- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

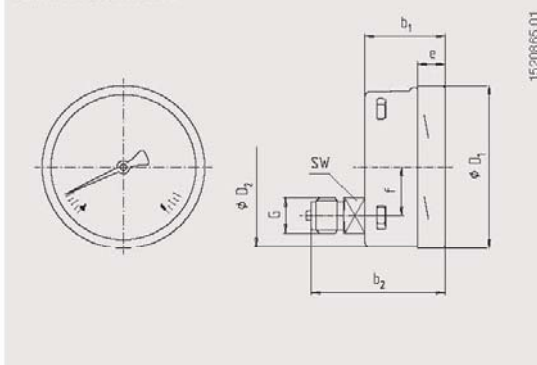
Dimensions in mm

Standard version

Lower mount (radial)



Centre back mount



NS	Dimensions in mm											Weight in kg
	a	b	b ₁	b ₂	D ₁	D ₂	e	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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We reserve the right to make modifications to the specifications and materials.

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Art. No.	Type No.
102522	6840
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