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

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

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 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

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 > 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

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### Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website
## Dimensions in mm

### Standard version

#### Lower mount (radial)

![Diagram of lower mount (radial)](image)

#### Centre back mount

![Diagram of centre back mount](image)

<table>
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<th>Dimensions in mm</th>
<th>Weight in kg</th>
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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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