Capsule pressure gauge, copper alloy or stainless steel
Standard version, NS 50 and 63
Models 611.10 and 631.10

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

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.
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 ¹)
■ Sealings ¹) (model 910.17, see data sheet AC 09.08)
■ Stainless steel case ¹)
■ Overload ¹) or vacuum safety ¹) 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

¹) only for NS 63
## Approvals

<table>
<thead>
<tr>
<th>Logo</th>
<th>Description</th>
<th>Country</th>
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</thead>
</table>
| ![CE] | EU declaration of conformity  
- Pressure equipment directive  
- PS > 200 bar; module A, pressure accessory | European Union |
| ![EAC] | EAC (option)  
- Pressure equipment directive  
- Hazardous areas | Eurasian Economic Community |
| ![GOST] | GOST (option)  
- Metrology, measurement technology | Russia |
| ![KazInMetr] | KazinMetr (option)  
- Metrology, measurement technology | Kazakhstan |
| ![MTSCHS] | MTSCHS (option)  
- Permission for commissioning | Kazakhstan |
| ![BelGIM] | BelGIM (option)  
- Metrology, measurement technology | Belarus |
| ![UkrSEPRO] | UkrSEPRO (option)  
- Metrology, measurement technology | Ukraine |
| ![Uzstandard] | Uzstandard (option)  
- Metrology, measurement technology | Uzbekistan |
| ![CPA] | 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

<table>
<thead>
<tr>
<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td>50</td>
<td>-</td>
<td>-</td>
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<tr>
<td>63</td>
<td>9.5</td>
<td>40</td>
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</tbody>
</table>

Process connection per EN 837-3 / 7.3

Ordering information

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