Capsule pressure gauge, stainless steel
For the process industry
Models 632.50, 633.50, NS 63, 100, 160

Applications

- With liquid-filled case for applications with high dynamic pressure loads or vibrations 1)
- For gaseous, dry and aggressive media, also in aggressive ambience
- Process industry: Chemical/petrochemical, pharmaceutical, biotechnology, machine and power generation industries

Special features

- Zero adjustment at the front
- All stainless steel construction
- Special connection location on request
- Low scale ranges from 0 ... 2.5 mbar

1) Model 633.50

Description

Design
EN 837-3

Nominal size in mm
63, 100, 160

Accuracy class
1.6

Scale ranges
NS 63: 0 ... 40 mbar to 0 ... 600 mbar
NS 100: 0 ... 16 mbar to 0 ... 600 mbar
NS 160: 0 ... 2.5 mbar to 0 ... 600 mbar
or all other equivalent vacuum or combined pressure and vacuum ranges 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 maximum

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 for model 632.50 (without liquid filling)
IP65 for model 633.50 (with liquid filling)

Capsule pressure gauge, model 632.50

for further approvals see page 3
Standard version

**Process connection**
Stainless steel 316L
Lower mount (LM) or lower back mount (LBM) 1)
NS 63: G ¼ B (male), SW 14
NS 100, 160: G ½ B (male), SW 22

**Pressure element**
Stainless steel 316L

**Sealing**
FPM/FKM

**Movement**
Stainless steel

**Zero adjustment**
At the front

**Dial**
Aluminium, white, black lettering

**Pointer**
Aluminium, black

**Case**
Stainless steel

**Window**
Laminated safety glass
(with liquid filling: Clear non-splintering plastic)

**Ring**
Bayonet ring, stainless steel

**Filling liquid** 1)
Glycerine 86.5 % for scale ranges ≥ 60 mbar 2)

Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Accuracy class 1.0 for model 632.50 and scale range ≥ 40 mbar (without filling liquid)
- Accuracy class 1.0 for model 633.50 and scale range ≥ 100 mbar (with filling liquid)
- Permissible ambient temperatures -40 ... +60 °C
- Overload safety and vacuum safety with scale range > 25 mbar: 10 x full scale value
  scale range ≤ 25 mbar: 3 x full scale value
- Surface mounting flange
- NS 100 and 160: Panel mounting flange
- NS 100 and 160: Triangular bezel with clamp
- NS 100: From scale range ≥ 100 mbar switch contacts (model 831, data sheet AC 08.01)

1) only available for model 633.50 with NS 100, 160
2) Option accuracy class 1.0 available from ≥ 100 mbar
## 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**

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<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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<tr>
<td></td>
<td>a</td>
<td>b</td>
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<tr>
<td>63</td>
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<td>42</td>
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<td>100</td>
<td>15.5</td>
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<tr>
<td>160</td>
<td>15.5</td>
<td>49.5</td>
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Process connection per EN 837-1 / 7.3
1) With NS 63: Centre back mount (CBM)

#### Ordering information

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