Differential pressure gauge
For very low differential pressures from 2.5 mbar
Models 716.11 and 736.11, copper alloy and stainless steel

Applications

- Differential pressure measurement at measuring points with very low differential pressures, for gaseous, dry, clean, oil and grease free media
- Model 736.11 also for aggressive media and ambience
- Filter monitoring in ventilation and heating systems
- Filter monitoring in overpressure and clean rooms
- Differential pressure controlled monitoring of ventilator and blast pressures

Special features

- Differential pressure measuring ranges from 0 … 2.5 mbar
- As a standard zero adjustment in front
- Ingress protection IP66
- Case from stainless steel

Description

Design
For very low differential pressures, DT - GM 87 10 226

Nominal size in mm
100, 160

Accuracy class
1.6

Scale ranges
Model 716.11: NS 100: 0 ... 10 to 0 ... 250 mbar
NS 160: 0 ... 6 to 0 ... 250 mbar
Model 736.11: NS 100: 0 ... 25 to 0 ... 250 mbar
NS 160: 0 ... 2.5 to 0 ... 250 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

Overload safety
Full scale value

Max. working pressure (static pressure)
250 mbar

Permissible temperature
Ambient: -20 ... +60 °C
Medium: +70 °C maximum

Temperature effect
When the temperature of the measuring system deviates from the reference temperature (+20 °C): max. ±0.5 % / 10 K of full scale value

Ingress protection
IP66 per IEC/EN 60529
Design and operating principle

- Pressure retaining case with capsule measuring element,
  + pressure is retained in capsule element
  - pressure is retained in case

- Pressure differential between + and - side deflects the capsule element

- The deflection is transmitted to the movement and indicated

Mounting according to affixed symbols, + high pressure and - low pressure

Mounting by means of:
- Rigid measuring lines
- Panel or surface mounting flange (option)
- Mounting bracket for wall or pipe mounting (option)

Standard version

Process connection (wetted)
Model 716.11: Copper alloy
Model 736.11: Stainless steel
Lower mount (radial), parallel in line
2 x G ½ B (male), SW 22

Pressure element (wetted)
Model 716.11: Copper alloy
Model 736.11: Stainless steel

Movement (wetted)
Model 716.11: Copper alloy
Model 736.11: Stainless steel

Dial (wetted)
Aluminium, white, black lettering

Pointer (wetted)
Aluminium, black

Zero adjustment (wetted)
Adjustment appliance for screwdriver in front

Case (wetted)
Stainless steel, pressure retaining
With blow-out device PUR

Window (wetted)
Clear non-splintering plastic

Sealings (wetted)
NBR, silicone

Bezel ring
Bayonet ring, stainless steel

Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Panel or surface mounting flange
- Mounting bracket for wall or pipe mounting (model 910.16, see data sheet AC 09.07)
- Valve manifolds (models IV3x, IV5x, see data sheet AC 09.23)
- Back mount
- Overload safety
  - + side with scale ranges
    0 ... 2.5 mbar to 0 ... 25 mbar: 3 x full scale value
    $\geq 0 ... 40$ mbar: To maximum working pressure
  - - side: On request
### Approvals

<table>
<thead>
<tr>
<th>Logo</th>
<th>Description</th>
<th>Country</th>
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<tbody>
<tr>
<td>EAC</td>
<td>EAC (option) Pressure equipment directive</td>
<td>Eurasian Economic Community</td>
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<tr>
<td>GOST</td>
<td>Metrology, measurement technology</td>
<td>Russia</td>
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<td>KazInMetr (option)</td>
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<td>MTSCHS (option)</td>
<td>Permission for commissioning</td>
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<tr>
<td>BelGIM (option)</td>
<td>Metrology, measurement technology</td>
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<td>UkrSEPRO (option)</td>
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<td>Uzstandard (option)</td>
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<td>CPA</td>
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<td>CRN</td>
<td>Safety (e.g. electr. safety, overpressure, ...)</td>
<td>Canada</td>
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</table>

### Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website
**Dimensions in mm**

**Standard version**

Lower mount (radial)

<table>
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<tr>
<th>NS</th>
<th>a</th>
<th>b</th>
<th>b₁</th>
<th>b₂</th>
<th>D₁</th>
<th>D₂</th>
<th>e</th>
<th>f</th>
<th>G</th>
<th>h ±1</th>
<th>X</th>
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<tr>
<td>100</td>
<td>15.5</td>
<td>48.5</td>
<td>49.5</td>
<td>84</td>
<td>101</td>
<td>99</td>
<td>17.5</td>
<td>30</td>
<td>2 x G ½ B</td>
<td>87</td>
<td>37</td>
<td>22</td>
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<tr>
<td>160</td>
<td>15.5</td>
<td>48.5</td>
<td>51.5</td>
<td>87</td>
<td>161</td>
<td>159</td>
<td>17.5</td>
<td>50</td>
<td>2 x G ½ B</td>
<td>118</td>
<td>37</td>
<td>22</td>
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</tbody>
</table>

**Option**

Back mount

**Ordering information**

Model / Nominal size / Scale range / Max. working pressure (static pressure) ... mbar / Connection size / Connection location / Options

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