Diaphragm Pressure Gauges
Process Industry Series Sealgage®
Type 432.50 - Dry Case
Type 433.50 - Liquid-filled Case

Applications
- With liquid-filled case optional for applications with high dynamic pressure pulsations or vibration
- Suitable in corrosive environments for gaseous, liquid or highly viscous media
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction
- Ideally for applications in the water/wastewater industry

Product Features
- Threaded or open flange process connections
- Wide selection of special materials
- All stainless steel construction
- High overpressure safety
- Ranges from 6" H₂O (16 mbar)

Specifications

Design
EN 837-3

Sizes
4" & 6" (100 & 160 mm)

Accuracy class
± 2.5% of span

Ranges
Vacuum / Compound to 300 psi (20 bar)
Pressure from 6" H₂O (16 mbar) to 100" H₂O (250 mbar), 6" (160 mm) flange diameter
Pressure from 6 psi (400 mbar) to 360 psi (25 bar), 4" (100 mm) flange diameter
or other equivalent units of pressure or vacuum

Working pressure
Steady: full-scale value
Fluctuating: 0.9 x full-scale value

Overpressure safety
5 x full-scale value, not exceeding 600 psi (40 bar)

Operating temperature
Ambient: -4°F to +140°F (-20°C to +60°C)
Medium: +212°F (+100°C) maximum
Storage: -40°F...+158°F (-40°C to +70°C)
-4°F...+158°F (-20°C to +70°C)
for ranges ≤ 25" H₂O (60 mbar)

Temperature error
Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.8% of span for every 18°F (10°K) rising or falling.

Weather protection
Weather resistant (NEMA 3 / IP54) - dry case
Weather tight (IP65) - liquid-filled case

Case and upper diaphragm housing
Material: stainless steel
Case with pressure relief disc and stainless steel bayonet ring

Pressure connection and lower diaphragm housing
Material: 316L SS
Lower mount (LM)
½" NPT female

Diaphragm element
≤ 100" H₂O (250 mbar): 316 SS with PTFE lining
> 100" H₂O (250 mbar): Inconel® (NiCr-alloy) with PTFE lining
All ranges with FPM (Viton) sealing gasket

Movement
Material: stainless steel
Optional extras

- 10X overpressure safety, max. 600 psi (40 bar)
- Underpressure safe to -30”Hg (-1 bar)
- Silicone or fluorolube case filling
- Special connections limited to wrench flat area
- Open flange connections (300# ASME maximum)
- Instrument glass or acrylic window
- Cleaned for oxygen service
- Extended media temperature to +392°F
- Exotic metal or PTFE lining for open flanges
- Alarm contacts switches (magnetic or inductive)
- Special process connections
- Custom dial layout

Dimensions

### Size

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>G¹</th>
<th>S</th>
<th>T</th>
<th>W</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4”</td>
<td>100</td>
<td>104</td>
<td>49.5</td>
<td>99</td>
<td>15.5</td>
<td>100</td>
<td>17.5</td>
<td>27</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>4.0</td>
<td>4.09</td>
<td>1.95</td>
<td>3.90</td>
<td>0.61</td>
<td>3.94</td>
<td>0.69</td>
<td>1/2”</td>
<td>1.06</td>
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<tr>
<td>6”</td>
<td>160</td>
<td>134</td>
<td>49.5</td>
<td>159</td>
<td>15.5</td>
<td>100</td>
<td>17.5</td>
<td>27</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>in</td>
<td>6.0</td>
<td>5.28</td>
<td>1.95</td>
<td>6.26</td>
<td>0.61</td>
<td>3.94</td>
<td>0.69</td>
<td>1/2”</td>
<td>1.06</td>
</tr>
</tbody>
</table>

¹ For ranges 100”H₂O and lower, G dimension changes to 160 mm (6”) and weight increases by 1.0 lb.