Diaphragm Pressure Gauges
Standard Series Sealgaugé®
Type 422.12 - Dry Case
Type 423.12 - Liquid-filled Case

Applications
- With liquid filled case for applications with high dynamic pressure pulsations or vibration
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system
- Process industry: chemical/petrochemical, power stations, mining, on and offshore, environmental technology, mechanical engineering and plant construction

Special features
- Excellent load-cycle stability
- Heavy duty cast iron case
- High overpressure safety

Standard Features

Design
EN 837-3

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

Accuracy class
± 1.5% of span

Ranges
Vacuum / Compound to 200 psi
Pressure from 10" H₂O to 100" H₂O (6" flange diameter)
Pressure from 6 psi to 600 psi (4" 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
< 6 psi: 5 x full scale value
≥ 6 psi: 3 x full scale value, max. 600 psi

Operating temperature
Ambient: -4°F to +140°F (-20°C to +60°C)
Medium: +212°F (+100°C) maximum

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

Weather protection
Weather resistant (NEMA 3 / IP54) - dry case
Weather tight (NEMA 4X / IP65) - liquid-filled case

Pressure connection and lower diaphragm housing
Material: carbon steel, black finish
Lower mount (LM)
1/2” NPT female

Case and upper diaphragm housing
Material: cast iron, black finish
Case with black-painted steel bayonet ring

Diaphragm element
≤ 30 psi: 316L stainless steel
> 30 psi: carbon steel
All ranges with Buna-N sealing gasket

Movement
Material: copper alloy with nickel-alloy wearable parts

Dial
White aluminum with black lettering
**Pointer**
Black aluminum, adjustable

**Window**
Flat instrument glass with Buna-N gasket

**Case fill**
Glycerine 99.7% - Type 423.12

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**Optional extras**
- 10X overpressure safety, max. 600 psi
- Underpressure safe to -30"Hg
- Silicone for fluorolube case filling
- Special connections limited to wrench flat area
- Open flange connections (300# ASME maximum)
- Safety 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

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**Dimensions**

![Diagram of a pressure gauge with dimensions labeled]

**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&quot;</td>
<td>mm</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>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>in</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&quot;</td>
<td>1.06</td>
<td>4.5 lb.</td>
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<tr>
<td>6&quot;</td>
<td>mm</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>
</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&quot;</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 2.9 lb.
Pressure Gauges

Application
Industrial type suitable for environments where the fluid medium does not clog connection or corrode steel or 316 stainless steel. Built to withstand highly viscous and crystallizing medium. Diaphragm mechanically linked to movement, allowing use of a metallic diaphragm at low pressures. Eliminates system liquid filling and permits overpressurization up to five times the full scale range. Housing bolts limit maximum pressures to 600 PSI.

Sizes (All sizes not stocked)
4" and 6" (100 and 160 mm)

Accuracy
± 1.5% of span

Ranges (All ranges not stocked)
Vacuum / Compound to 30"HG / 0 / 200 PSI
Pressure from 10" H2O to 100" H2O (6" flange diameter)
Pressure from 6 PSI to 600 PSI (4" flange diameter)
or other equivalent units of pressure or vacuum

Working Range
Steady: Full scale value
Fluctuating: 0.9 x full scale value

Overpressure Safety
≤ 6 PSI 5 X full scale value
> 6 PSI to 30 PSI 3 X full scale value
> 30 PSI 5 X full scale value, max. 600 PSI

Operating Temperature
Ambient: -4°F to 140°F (-20°C to 60°C)
Media: max. 212°F (+100°C)

Temperature Error
Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.5% for every 18°F (10°C) rising or falling. Percentage of span.

Standard Features

Connection
316 stainless steel
Lower mount (LM)
1/2" NPT Female

Diaphragm Housing
Upper: cast iron, black finish
Lower: 316 stainless steel

Diaphragm Element
432.12: 316 stainless steel

Diaphragm Gasket
Buna-N

Movement
Material: copper alloy

Dial
White aluminum with black lettering

Pointer
Adjustable black aluminum

Case
Black iron with integral top housing and black steel twist-lock ring

Weather Protection
Weather resistant (NEMA 3 / IP 54) - dry case
Weather tight (NEMA 4X / IP 65) - liquid-filled case

Window Gasket
Buna-N

Window
Flat instrument glass

ORDER OPTIONS (min. order may apply)
10 X overpressure safety, max. 600 PSI
Underpressure safe to -30 °Hg
Liquid filled version (4X3.12)
Glycerine, silicone, or fluorocarbon case filling
Special connections limited to wrench flat area
Open flange connections (300# ANSI maximum)
Safety glass window
Acrylic plastic window
Cleaned for oxygen service
Extended media temperature up to 392°F
DIN standards
Custom dial layout
Other pressure scales available
Alarm contact switches magnetic and inductive Transmitters
Diaphragm, wetted parts lined for open flange connections such as: PTFE Foil, PFA or ECTFE powder coating, Hastelloy® B2 & C4, Monel®, Tantalum or Titanium
Only male threaded connections are available with special materials.
Dimensions:

A* NOMINAL SIZE

<table>
<thead>
<tr>
<th>TYPE</th>
<th>WEIGHT</th>
<th>KEY</th>
<th>A*</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>G</th>
<th>S</th>
<th>T</th>
<th>W</th>
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<td>mm</td>
<td>100</td>
<td>104</td>
<td>49.5</td>
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<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&quot;</td>
<td>1.06</td>
</tr>
<tr>
<td>43X.12 6&quot;</td>
<td>6.5 lbs.</td>
<td>mm</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>
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</tr>
</tbody>
</table>

NOTE: For ranges 4 PSI and lower, G dimension changes to 160 mm (6") and weight increases by 2.9 lbs.

Dimensions:

05/01

THE MEASURE OF
Total Performance™

Ordering Information:
State computer part number (if available) / type number / size / range / connection size and location / options required.

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