XSEL® Process Gauge - Stainless Steel
Type 232.34 - Dry Case
Type 233.34 - Liquid-filled Case

Applications
- For applications with high dynamic pressure pulsations or vibration, a liquid-filled case and socket restrictor are available.
- 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.

Product features
- Excellent load-cycle stability and shock resistance.
- Solid front thermoplastic case.
- Positive pressure ranges to 30,000 psi (2,000 bar).
- XSEL® Process Gauge with 5 year warranty on gauge and 10 year warranty on pressure system (see terms and condition).
- All lower mount connection gauges are factory prepared for liquid filling. (LBM: must install membrane prior to field filling).

Specifications
Design
ASME B40.100

Sizes
4½" & 6" (115 & 160 mm) dial size.

Accuracy class
± 0.5% of span (ASME B40.100 Grade 2A)
± 1.0% of span (ASME B40.100 Grade 1A)
for ≥ 20,000 psi (1,600 bar) range and above.

Ranges
Vacuum / Compound to 400 psi (25 bar).
Pressure from 15 psi (1 bar) to 30,000 psi (2,000 bar) or other equivalent units of pressure or vacuum.

Working pressure
Steady: full scale value.
Fluctuating: 0.9 x full scale value.
Short time: 1.5 x full scale value.

Operating temperature
Ambient: -40°F to +140°F (-40°C to +60°C) - dry.
-4°F to +140°F (-20°C to +60°C) - glycerine filled.
-40°F to +140°F (-40°C to +60°C) - silicone filled.
Medium: max. +212°F (+100°C).

Temperature error
Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

Weather protection
Weather resistant (IP54) - without membrane.
Weather tight (IP65) - dry case or filled case with membrane installed (standard for low mount versions).

Pressure connection
Material: 316L stainless steel.
Lower mount (LM) or lower back mount (LBM).
1/4" or 1/2" NPT with M4 internal tap.

Restrictor
Material: Stainless steel (0.6 mm), standard.

Bourdon tube
Material: 316L stainless steel.
≤ 1,000 psi (69 bar): C-shape.
> 1,500 psi (100 bar): Helical.

Movement
Stainless steel.
Internal overload stop set at 1.1 x full scale.
Underload stop-standard.
Dampened movement-optional.

Dial
White aluminum with black lettering, stop pin at 6 o'clock.
Standard WIKA psi single scales (4½" only) with large figures at beginning and end for quick and easy identification.

Pointer
Black aluminum, adjustable.

Case
Black fibreglass-reinforced thermoplastic (POCAN).
Solid front, blowout back.
Turret-style case with built in rear flange lugs.
**Window**
Clear acrylic with Buna-N gasket

**Case filling Type 233.34**
Glycerine 99.7% and > 40 psi (2.5 bar)
Glycerine/Water - <= 40 psi (2.5 bar)

**Optional extras**
- Silicone dampened movement
- Panel mounting adaptor kit (field assembled)
- Silicone case filling
- Halocarbon case filling
- Cleaned for oxygen service
- Instrument glass or safety glass window
- Drag pointer (maximum reading indicator)
- Alarm contacts switches (magnetic or inductive)
- Special process connections
- Custom dial layout
- External zero adjustment (4.5" size only)
- Case and ring in red or yellow thermoplastic (4½" LM only)
- Insight® reflective dial options available in white, fluorescent yellow, fluorescent orange or glow-in-the-dark

**Dimensions**

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>W</th>
<th>Weight¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5&quot;</td>
<td>mm</td>
<td>128</td>
<td>103</td>
<td>84</td>
<td>120.3</td>
<td>6.3</td>
<td>40</td>
<td>28.5</td>
<td>148</td>
<td>136.5</td>
<td>25</td>
<td>12.5</td>
<td>22</td>
<td>2 lb. dry</td>
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<tr>
<td></td>
<td>in</td>
<td>5</td>
<td>4.06</td>
<td>3.31</td>
<td>4.74</td>
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<td>1.12</td>
<td>5.83</td>
<td>5.37</td>
<td>0.99</td>
<td>0.49</td>
<td>1/2&quot; 0.87</td>
<td>3 lb. filled</td>
</tr>
<tr>
<td>6&quot;</td>
<td>mm</td>
<td>164</td>
<td>122.5</td>
<td>88</td>
<td>123.4</td>
<td>7.1</td>
<td>40.2</td>
<td>28.5</td>
<td>190</td>
<td>177.8</td>
<td>25.4</td>
<td>12.7</td>
<td>22</td>
<td>3 lb. dry</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>6.46</td>
<td>4.82</td>
<td>3.46</td>
<td>4.86</td>
<td>0.28</td>
<td>1.58</td>
<td>1.12</td>
<td>7.5</td>
<td>7</td>
<td>1</td>
<td>0.5</td>
<td>1/2&quot; 0.87</td>
<td>4 lb. filled</td>
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</table>

¹ Weight without optional accessories