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
- Dampered 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 fiberglass-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)

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**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

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**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”</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>
</tr>
<tr>
<td></td>
<td>in</td>
<td>5</td>
<td>4.06</td>
<td>3.31</td>
<td>4.74</td>
<td>0.248</td>
<td>1.57</td>
<td>1.12</td>
<td>5.83</td>
<td>5.37</td>
<td>0.99</td>
<td>0.49</td>
<td>1/2”</td>
<td>0.87</td>
</tr>
<tr>
<td>6”</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”</td>
<td>0.87</td>
</tr>
</tbody>
</table>

¹ Weight without optional accessories
Quick Order Guide

Specifications according to data sheet
Case
Bezel ring
Accuracy Class

APM 02.10
Black Fiberglass Reinforced Thermoplastic (Pocan B4225)
Threaded, Black Fiberglass Reinforced Thermoplastic (Pocan B4225)
+/- .5% (ASME B40.100 2A)

Ordering information

<table>
<thead>
<tr>
<th>Measuring System</th>
<th>Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case filling</td>
<td>without</td>
</tr>
<tr>
<td>Nominal size</td>
<td>4.5&quot;</td>
</tr>
<tr>
<td>Process size</td>
<td>1/2 NPT</td>
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</tbody>
</table>

Connector location

<table>
<thead>
<tr>
<th>Scale range</th>
<th>2nd Scale / Special Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>without 2nd scale kPa</td>
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<tr>
<td>0/15 psi</td>
<td>9834800 9776885</td>
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<tr>
<td>0/30 psi</td>
<td>9934818 9837680</td>
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<td>0/60 psi</td>
<td>9934826 9776877</td>
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<tr>
<td>0/100 psi</td>
<td>9934834 9937760</td>
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<tr>
<td>0/160 psi</td>
<td>9934842 9776899</td>
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<tr>
<td>0/200 psi</td>
<td>9934850 9937641</td>
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<td>0/300 psi</td>
<td>9934859 9937884</td>
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<td>0/400 psi</td>
<td>9934867 9985118</td>
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<td>0/600 psi</td>
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<td>0/10000 psi</td>
<td>9934940 9938244</td>
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<tr>
<td>0/15000 psi</td>
<td>9934958 4209660</td>
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<tr>
<td>-30 in/Hg 0 psi</td>
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<tr>
<td>-30 in/Hg 30 psi</td>
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<tr>
<td>-30 in/Hg 100 psi</td>
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<tr>
<td>-30 in/Hg 180 psi</td>
<td>9934770 52263486</td>
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<td>-30 in/Hg 200 psi</td>
<td>9934788 9837361</td>
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<tr>
<td>-30 in/Hg 300 psi</td>
<td>4260180 52968970</td>
</tr>
</tbody>
</table>

Available on stock
Available after production
Not available
# Standard Order Code

1. Measuring System
   - 3: Stainless Steel

2. Case Filling
   - 2: without
   - 3: with

3. Nominal Size
   - U: 4.5" (30°±5)
   - 551: 0/50 psi (±20% of span)
   - 541: 0/50 psi
   - 549: 0/100 psi
   - 410: 0/200 psi
   - 421: 0/300 psi
   - 422: 0/400 psi
   - 441: 0/500 psi
   - 455: 0/500 psi
   - 510: 0/1000 psi
   - 514: 0/2000 psi
   - 551: 0/3000 psi
   - 558: 0/5000 psi
   - 561: 0/10000 psi
   - 610: 0/15000 psi
   - 331: -30 Hz/60 psi
   - 352: -30 Hz/50 psi
   - 379: -30 Hz/100 psi
   - 412: -30 Hz/10 psi
   - 415: -30 Hz/100 psi
   - 422: -30 Hz/300 psi

3. Unit of outer Scale
   - 2: without
   - B: 2nd scale bar
   - P: 2nd scale psi
   - L: 2nd scale kPa
   - E: 2nd scale MPa
   - K: 2nd scale kg/cm²

4. Measuring range
   - G: gauge pressure range
   - V: vacuum or compound range

5. Scale range
   - 269: 0/10 psi
   - 311: 0/15 psi
   - 321: 0/30 psi
   - 341: 0/50 psi
   - 369: 0/100 psi
   - 411: 0/200 psi
   - 442: 0/300 psi
   - 469: 0/500 psi
   - 510: 0/1000 psi
   - 514: 0/2000 psi
   - 551: 0/3000 psi
   - 558: 0/5000 psi
   - 561: 0/10000 psi
   - 610: 0/15000 psi
   - 331: -30 Hz/60 psi
   - 352: -30 Hz/50 psi
   - 379: -30 Hz/100 psi
   - 412: -30 Hz/10 psi
   - 415: -30 Hz/100 psi
   - 422: -30 Hz/300 psi

6. 2nd Scale / Special Scale
   - Z: without
   - B: 2nd scale bar
   - P: 2nd scale psi
   - L: 2nd scale kPa
   - E: 2nd scale MPa
   - K: 2nd scale kg/cm²

7. Process Connection
   - ND: 1/2 NPT
   - GB: G 1/2 B
   - NB: 1/4 NPT
   - GB: G 1/4 B

8. Connector location
   - U: lower mount
   - S: lower back mount
   - P: mounting frame bracket

9. Window
   - A: acrylic (PMMA) (standard)
   - G: flat instrument glass

10. Restrictor
    - Z: without (standard)
    - Q: stainless steel, DN 6

11. Special design features
    - Z: without (standard)
    - G: for Oxygen, Cleanliness ASME B3.1 Level IV

12. Certificates
    - Z: without (standard)
    - 1: quality certificates

13. Approvals
    - Z: without (standard)
    - 1: with

14. Elicitive alarm contact
    - Z: without (standard)
    - A: 0/20:1 Normal Open
    - B: 0/20:2 Normal Close
    - C: 0/20:1 Normal Open / Normal Close
    - D: 0/20:12 Normal Open / Normal Close
    - E: 0/20:21 Normal Close / Normal Open
    - F: 0/20:22 Normal Close / Normal Close
    - G: 0/38:1 Normal Open
    - H: 0/38:2 Normal Close
    - I: 0/38:11 Normal Open / Normal Close
    - J: 0/38:12 Normal Open / Normal Close
    - K: 0/38:21 Normal Close / Normal Open
    - L: 0/38:22 Normal Close / Normal Close
    - T: Additional ordering information

15. Z: without (standard)

16. T: Additional text

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### Modelcode:

- 1 2 3 .34 - - - - - - - - - - A - -

### Additional Text:

Additional scale ranges and options are available. Please contact the factory or access the product configurator for model 232.34 on the WIKA US website.

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