Bourdon Tube Pressure Gauges
Paper Machine Gauge
Type 212.40PM - Dry Case
Type 213.40PM - Liquid-filled Case

Applications
- With liquid filled case for applications with high dynamic pressure pulsations or vibration
- Paper machines and hydraulic presses
- Suitable for gaseous or liquid media that will not obstruct the pressure system

Special features
- Excellent load-cycle stability and shock resistance
- Front flange for panel mounting
- Solid forged-brass case and connection

Standard Features

Design
ASME B40.100 & EN 837-1

Sizes
3½” (80 mm)

Accuracy class
± 2/1/2% of span (ASME B40.100 Grade A)

Ranges
Vacuum / Compound to 200 psi
Pressure from 15 psi to 15,000 psi
or other equivalent units of pressure or vacuum

Working pressure
Steady: 3/4 scale value
Fluctuating: 2/3 full scale value
Short time: 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
Medium: max. +140°F (+60°C) ≤ 1,000 psi
max. +212°F (+100°C) ≥ 1,500 psi

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

Weather protection
Weather resistant (NEMA 4 / IP 54)

Pressure connection
Material: copper alloy
1/4” NPT lower back mount (LBM)

Bourdon tube
Material: copper alloy
≤ 1,000 PSI: C-type, soldered
≥ 1,500 PSI: helical type, brazed

Movement
Copper alloy

Dial
White aluminum with black lettering

Pointer
Black aluminum

Case
Gold-painted forged brass with integral connection and blowout plug with polished stainless steel front flange. Suitable for liquid filling

Window
Acrylic with Buna-N gasket
**Case fill**
Glycerine 99.7% - Type 213.40PM

**Optional extras**
- Brass restrictor
- Flat glass or safety glass window
- Silicone or Fluorolube case filling
- Special connections limited to wrench flat area
- Custom dial layout
- Other pressure scales available
  - bar, kPa, MPa, kg/cm² and dual scales

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**Dimensions**

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>C</th>
<th>D</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>S</th>
<th>T</th>
<th>W</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5”</td>
<td>mm</td>
<td>80</td>
<td>40</td>
<td>80</td>
<td>65</td>
<td>23</td>
<td>4.8</td>
<td>2</td>
<td>127</td>
<td>112</td>
<td>2.5</td>
<td>22</td>
<td>1.47 lb. dry</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>3.5</td>
<td>1.57</td>
<td>3.15</td>
<td>2.56</td>
<td>0.91</td>
<td>0.19</td>
<td>0.08</td>
<td>5.0</td>
<td>4.41</td>
<td>0.10</td>
<td>1/4”</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Recommended panel cutout is dimension D + 1 mm