Bourdon Tube Pressure Gauges
Stainless Steel Refrigeration Ammonia Gauge
Type 232.53AM - Dry Case
Type 233.53AM - Liquid-filled Case

Applications
- Measuring refrigerant ammonia pressure and temperature
- 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 and shock resistance
- All stainless steel construction
- Ammonia refrigerant scales on dial

Description

Design
ASME B40.100 & EN 837-1

Sizes
2½” & 4” (63 and 100 mm)

Accuracy class
2½”: ± 2/1/2% of span (ASME B40.100 Grade A)  
4”: ± 1.0% of span (ASME B40.100 Grade 1A)

Ranges
30”Hg / 0 / 150 psi (84°F)  
30”Hg / 0 / 300 psi (126°F)

Working pressure
2½”:  
Steady: 3/4 scale value  
Fluctuating: 2/3 full scale value  
Short time: full scale value

4 ”:  
Steady: full scale value  
Fluctuating: 0.9 x full scale value  
Short time: 1.3 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: +212°F (+100°C)

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 tight (NEMA 4X / IP65)

Pressure connection
Material: 316L stainless steel  
1/4” NPT, lower mount (LM)

Bourdon tube
Material: 316L stainless steel  
C-type

Movement
Stainless steel

Dial
White aluminum with black lettering, 2½” with stop pin

Pointer
Black aluminum
Case
304 stainless steel with vent plug and SS crimp ring.
Case welded to socket

Window
Polycarbonate

Optional extras
- SS restrictor
- SS rear flange
- Clean for oxygen service
- Red drag pointer for mark pointer
- Other pressure connections
- Silicone or Halocarbon case filling

Case fill
Glycerine 99.7% - Type 233.53AM

Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>A (mm)</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>J</th>
<th>L (mm)</th>
<th>M</th>
<th>N</th>
<th>S</th>
<th>T</th>
<th>W</th>
<th>Weight¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot;</td>
<td>69</td>
<td>54</td>
<td>32</td>
<td>62</td>
<td>13</td>
<td>3.6</td>
<td>7.5</td>
<td>85</td>
<td>75</td>
<td>6.5</td>
<td>14</td>
<td>0.36 lb. dry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.69</td>
<td>2.13</td>
<td>1.26</td>
<td>2.45</td>
<td>0.51</td>
<td>0.14</td>
<td>0.30</td>
<td>3.35</td>
<td>2.95</td>
<td>0.26</td>
<td>1/4&quot;</td>
<td>0.55</td>
<td>0.44 lb. filled</td>
</tr>
<tr>
<td>4&quot;</td>
<td>107</td>
<td>87</td>
<td>48</td>
<td>100</td>
<td>15.5</td>
<td>4.8</td>
<td>9</td>
<td>132</td>
<td>116</td>
<td>8</td>
<td>22</td>
<td>1.10 lb. dry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.21</td>
<td>3.43</td>
<td>1.89</td>
<td>3.91</td>
<td>0.61</td>
<td>0.19</td>
<td>0.35</td>
<td>5.20</td>
<td>4.57</td>
<td>0.31</td>
<td>1/2&quot;</td>
<td>0.87</td>
<td>1.76 lb. filled</td>
</tr>
</tbody>
</table>

¹ Weight is without optional accessories