MODELS-1121, 1122, 1123

All stainless steel construction Safety Pattern Pressure Gauges

APPLICATIONS
Gas and Steam in excess of 25 Bar pressure can represent danger if there is a rupture in the Bourdon Tube measuring this gas. To minimize the danger, gauges in this application should be Safety Pattern type, having solid front between Bourdon tube and dial, safety window and blow-out back to allow any blast to release to the rear of gauge. Although there is not necessarily any great risk in the use of gauges for gases at pressure less than 25 Bar, a blow-out disc should be incorporated and the purchaser should regard to the nature of the gas and the installation conditions and, if necessary, order a gauge of the Safety Pattern type. See Page two for more details.

STANDARD SPECIFICATION
Petro-Chemical Safety Pattern Gauge with Baffle Wall (Weatherproof to IP66)

Sizes
63, 100 and 150 mm

Case/ Bezel
316 Stainless Steel

Socket & Element
316 Stainless Steel

Movement
Stainless Steel Construction

Blowout Protection
53 Safety Pattern with Baffle Wall and Blow-out Back

Dial
White Anodised Aluminium (Black Printing)

Pointer
Black Aluminium

Window
Laminated Safety Glass

Traceability
All instruments are individually calibrated and have an unique Serial Number.

Certification available on request
- Certificate of Conformity Traceable to National Standards
- Group Certification (Pressure Test Calibration Statement)
- Point to Point Test Certificate
- BS EN 10204 3.1 Material Certification

Safety
All units are manufactured to comply with EN 837-1, S3 Safety Pattern specification and other regulatory standards including PED 2014/68/EU.

Installation instructions:
Refer to EN 837-2 and our Guidance On Use of Equipment data sheet.

Accuracy class

<table>
<thead>
<tr>
<th>ACCURACY CLASS EN837-1 (Optional)</th>
<th>Higher Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 600 bar</td>
<td>&gt;600 - 1600 bar</td>
</tr>
<tr>
<td>63mm</td>
<td>1.0</td>
</tr>
<tr>
<td>100mm</td>
<td>1.0 (0.6)</td>
</tr>
<tr>
<td>150mm</td>
<td>1.0 (0.6)</td>
</tr>
</tbody>
</table>

0.5% Accuracy on request (Consult Sales)

Over-pressure

<table>
<thead>
<tr>
<th>0 - 100 bar</th>
<th>&gt;100 - 600 bar</th>
<th>&gt;600 - 1600 bar</th>
<th>&gt;1600 - 2500 bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25 x FSD</td>
<td>1.15 x FSD</td>
<td>1.10 x FSD</td>
<td>1.10 x FSD</td>
</tr>
</tbody>
</table>

Scale Range
Vacuum / Compound to -1 to 0 to -1 to 24 bar
63mm gauge 0 to 1400 bar & 100 & 150mm gauges 0 to 2500 bar

Pressure Connection Thread

<table>
<thead>
<tr>
<th>THREAD EN837</th>
<th>NPT (316ss / Monel)</th>
<th>BSP (316ss / Monel)</th>
<th>BSPT (316ss / Monel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>400 bar</td>
<td>400 bar</td>
<td>400 bar</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>1000 bar</td>
<td>1000 bar</td>
<td>1000 bar</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>1000 bar</td>
<td>1000 bar</td>
<td>1000 bar</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>1000 bar</td>
<td>1600 bar</td>
<td>1000 bar</td>
</tr>
</tbody>
</table>

Ordering Parameters, Please state the following: SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

Specifications and dimensions in this leaflet, are subject to change without prior notice.

Model-1121 Surface Mounted (Bottom Connection)
Model-1122 Direct Mounted (Bottom Connection)
Model-1122BC Direct Mounted (Rear Connection)
Model-1123 Flush Mounted Screw Fixing (Rear Connection)

See Page-2 for dimension

Operating Temperature Range EN837
-20° to 60°C (-4°F to 140°F)
Options for lower/Higher operating ranges (Contact Sales)

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

Optional Extras
- Micro adjustable pointer / Black finish
- Optional dial materials & Custom markings
- Monel according to ISO 15156 / NACE MR-01-75 wetted parts
- Other pressure connections (Including high pressure)
- Perspex window
- Orifice Restrictor Screw (standard Ø 0.9mm, Ø 0.4mm on request)
- Customer logo printed on dial
- Liquid filled / Suitable for liquid filling
- Nitelitegage® (See data sheet)
- Vibragauge® (See data sheet)
- Snubbagauge® (See data sheet)
- Fitted with electrical contacts (See data sheet)
- Gauge over-pressure up to 130% of FSD
Further options on request

Available with a wide range of accessories
- Syphons, Snubbers, Overrange gauge protectors, Valves, Manifolds, Diaphragm seals, Swivel adaptors, etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

High Pressure Options Available

Dry, Liquid Fillable or Pre-Filled. VIBRAGAUGE® Option also available. VIBRAGAUGE® for Dampening of vibration & pulsation without liquid filling. With liquid-filled case for applications with high dynamic Pressure pulsations or vibration.
MODELS-1121, 1122, 1123

All stainless steel construction Safety Pattern Pressure Gauges

Full safety pattern gauges as defined by the European Standard EN837-1 differ from standard pressure gauges in several different ways and offer significantly greater protection for the operator in the event of a catastrophic failure of the pressure system. These added safety features include:

- Internal Solid Baffle Wall
- Complete Blow Out Back
- Laminated Safety Glass Window

The internal baffle wall is welded around the internal diameter of the case behind the dial. Its purpose is to ensure any rapid pressure release from a failure of the bourdon tube is directed away from the front of the gauge preventing debris and process media being sprayed at high velocity in the direction of the operator. In the event of such failure, the blow out back which is designed to cover the full diameter of the case will open allowing the expanding pressure pulse to vent from the back of the gauge into a safe area away from the operator. The laminated safety glass window will not splinter in the event of a failure of the pressure chamber.

<table>
<thead>
<tr>
<th>DIM</th>
<th>Ø mm</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>CUT OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 (2½&quot;)</td>
<td>67.7</td>
<td>186</td>
<td>31.2</td>
<td>161.7</td>
<td>65.7</td>
<td>92.1</td>
<td>28.7</td>
<td>34</td>
<td>19.8</td>
<td>148</td>
<td>37.7</td>
<td>5.8</td>
<td>168</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>100 (4&quot;)</td>
<td>67.2</td>
<td>132.5</td>
<td>30.7</td>
<td>112.2</td>
<td>65.2</td>
<td>66.9</td>
<td>28.7</td>
<td>34</td>
<td>19.8</td>
<td>99</td>
<td>40.7</td>
<td>6</td>
<td>118</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>150 (6&quot;)</td>
<td>63.2</td>
<td>85.2</td>
<td>20</td>
<td>68.4</td>
<td>42.6</td>
<td>41.8</td>
<td>20.4</td>
<td>18</td>
<td>13.6</td>
<td>62</td>
<td>24.6</td>
<td>3.8</td>
<td>75</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

Surface mounted gauges should be fitted with distance pieces of not less than 3/4" (20mm) long to allow them to be mounted away from wall or panel.