MODELS- 2030 Series

All stainless steel construction Chemical Seal Pressure Gauges

APPLICATIONS
Diaphragm seal gauges commonly known as "chemical seal" gauges are designed and recommended to isolate the measuring system of a pressure gauge from corrosive, pasty or dangerous fluid depending on the viscosity, pressure, temperature, solidification of a particular process medium.

STANDARD SPECIFICATION
Petro-Chemical Diaphragm Seal Gauge (Weatherproof Construction to IP66)

Sizes
63, 100 and 150 mm

Case/ Bezel
304 Stainless Steel (316 Stainless Steel can be supplied on request)

Socket & Bourdon Tube
316 Stainless Steel

Movement
Stainless Steel Construction

Blowout Protection
S1 Blow-out device (FSP Option S3 Baffle wall with blow-out backplate)

Dial
White Anodised Aluminium (Black Printing)

Pointer
Black Aluminium

Window
Sheet 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, S1 (or S3 option) 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 Consult Sales)</th>
<th>0 - 100 bar</th>
<th>&gt;100 - 420 bar</th>
<th>&gt;420 - 700 bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>63mm</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>100mm</td>
<td>1.6 (1.0)</td>
<td>1.6 (1.0)</td>
<td>1.6</td>
</tr>
<tr>
<td>150mm</td>
<td>1.6 (1.0)</td>
<td>1.6 (1.0)</td>
<td>1.6</td>
</tr>
<tr>
<td>Overpressured</td>
<td>1.25 FSD</td>
<td>1.15 FSD</td>
<td>1.15 FSD</td>
</tr>
</tbody>
</table>

Options: 2% on 63mm, 1.5% on 100 & 150mm (Consult Sales)

Scale Range
Vacuum / Compound to -1 to 0 to -1 to 24 bar (Where applicable)
Standard 0 to 700 bar
Or other equivalent units of pressure or vacuum
PED 2014/68/EU, GAS Group.1 <1000 bar,

Operating Temperature Range EN837
-20°C 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

Note: Cooling syphon recommended between diaphragm chamber and gauge for process temperatures above 60°C

Specifications and dimensions in this leaflet, are subject to change without prior notice.
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STEWART-BUCHANAN GAUGES LTD
Sales Office & Manufacturing Facility - 7 Garrel Road, Burnside Industrial Estate, Kilsyth, Glasgow G65 9JX, SCOTLAND
Tel: +44 (0)1236 821533 | Fax: +44 (0)1236 824090 | E-mail: sales@stewarts-group.com | Web: stewarts-group.com

MODEL - 2032
Direct Mount - Rated to 100 Bar

MODEL - 2032/HP
Direct Mount - Rated to 420 Bar

MODEL - 2032/VHP
Direct Mount - Rated to 700 Bar

General Arrangement Dimensions in mm, tol ± 1mm

<table>
<thead>
<tr>
<th>Dialø</th>
<th>Dim</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>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
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</thead>
<tbody>
<tr>
<td>2.5&quot; (63mm)</td>
<td>2.5&quot; (63mm)</td>
<td>86.5</td>
<td>88</td>
<td>88</td>
<td>53.9</td>
<td>77</td>
<td>77</td>
<td>68.4</td>
<td>11</td>
<td>41.8</td>
<td>14.5</td>
<td>9.5</td>
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<tr>
<td>SP 2.5&quot; (63mm)</td>
<td>SP 2.5&quot; (63mm)</td>
<td>42.5</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>11</td>
<td>41.8</td>
<td>20.4</td>
<td>9.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4&quot; (100mm)</td>
<td>4&quot; (100mm)</td>
<td>99</td>
<td>99</td>
<td>148</td>
<td>148</td>
<td>92.1</td>
<td>15.2</td>
<td>161.7</td>
<td>18.5</td>
<td>65.7</td>
<td>92.1</td>
<td>28.7</td>
<td></td>
</tr>
<tr>
<td>SP 4&quot; (100mm)</td>
<td>SP 4&quot; (100mm)</td>
<td>112.2</td>
<td>16.5</td>
<td>112.2</td>
<td>16.5</td>
<td>65.7</td>
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<td>28.7</td>
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<td></td>
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<tr>
<td>6&quot; (150mm)</td>
<td>6&quot; (150mm)</td>
<td>49.5</td>
<td>148</td>
<td>148</td>
<td>92.1</td>
<td>15.2</td>
<td>161.7</td>
<td>18.5</td>
<td>65.7</td>
<td>92.1</td>
<td>28.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP 6&quot; (150mm)</td>
<td>SP 6&quot; (150mm)</td>
<td>161.7</td>
<td>18.5</td>
<td>161.7</td>
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<td>92.1</td>
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### MODELS- 2030 Series

All stainless steel construction Chemical Seal Pressure Gauges

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#### Materials and Fill Fluids

<table>
<thead>
<tr>
<th>Available Materials</th>
<th>Diaphragm</th>
<th>Lower Housing</th>
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<tbody>
<tr>
<td>Carbon Steel</td>
<td>☒</td>
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<tr>
<td>316 St.St</td>
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</tr>
<tr>
<td>MONEL® 400</td>
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<tr>
<td>HASTELLOY® C276</td>
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<td>HASTELLOY® C22</td>
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<td>INCONEL® 625</td>
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<tr>
<td>INCOLOY® 825</td>
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<td>☒</td>
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<tr>
<td>TITANIUM Gr2</td>
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<tr>
<td>DUPLEX S31803</td>
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<tr>
<td>SUPER DUPLEX S32750</td>
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</tr>
<tr>
<td>6% Moly S31254</td>
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</tr>
<tr>
<td>Tantalum</td>
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<td>☒</td>
</tr>
<tr>
<td>PTFE (Protection)</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>PVDF (Protection)</td>
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<td>☒</td>
</tr>
</tbody>
</table>

#### SBG Code | Application | Fill Fluids | Temperature Range
--- | --- | --- | ---
1 | Vacuum or Compound | Silicone DC 704 / CVC-4 | 0 to 250°C
8 | Vacuum or Compound | Vegetable / Rapeseed Oil | 0 to 100°C
14 | Vacuum or Compound Low Temperature (PFPE) | FOMBLIN® Y L-VAC 06/6 | -50 to 80°C
2 | Standard | Silicone 200/100 | -40 to 200°C
13 | Standard | Silicone 200/20 | -50 to 240°C
15 | Standard | Silicone 200/5 | -70 to 130°C
4 | Low Temperature | Fluorinert™ FC-77 | -100 to 90°C
3 | High Temperature | Silicone DC 550 | -40 to 315°C
9 | High Temperature | Octoil | 315 to 400°C
12 | High Temperature | SYLThERM 800 | -40 to 200°C
5 | Oxygen & Chlorine (PFPE) | Galden® D05 PFPE | -40 to 140°C
11 | Oxygen & Chlorine (PFPE) | Halocarbon 6.3 | -40 to 180°C
2 | High Pressure | Silicone 200/100 | -20 to 160°C
6 | Food Industry (FDA) | NEOBEE® M-20 | -20 to 150°C
7 | Food Industry (FDA) | Medicinal paraffin | -20 to 150°C
10 | Food Industry (FDA) | Pure Glycerine | 0 to 120°C

*Other fill fluids available*

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DATA SHEET REF: 203 REV02-17
As well as the standard “threaded” direct mounting and “flanged” range of filled system gauge assemblies, STEWARTS also manufacture chemical seal chambers for use in the dairy, food and pharmaceutical industries. Our range includes, but is not limited to, mounting forms compatible with various hygienic and sanitary type connections to BS4825, including IDF, ISS, RJT and tri-clamp fittings (see images below for examples).
Also available, for use with our full chemical seal range; giving increased gauge mounting options, is the option of filled armoured flexible capillary (between the top section of the filled chamber and gauge) at a length specified by the customer- contact SBG sales department for details.

Note: fixing clamp not supplied with model 2034; included for illustration purposes only and elbow section not supplied with model 2035, nut supplied assembled over chamber.