Nitrile Rubber Diaphragm
Compensated SUBSEA Stainless Steel Pressure Gauges

APPLICATIONS
Pressure gauges with volume compensating diaphragm; developed to compensate systems that are affected by ambient pressure during submersion and to indicate the system pressure during subsea operations at depth. The compensated gauge 'red zone' indicates that depth (ambient) pressure is greater than that of the system in order to avoid negative (crushing) forces on more delicate components.

STANDARD SPECIFICATION
Design to EN 837-1.
100% Pure Glycerin filled with no expansion bubble
Welded, hermetically sealed, socket

Compensating Device
Nitrile (NBR) rubber with snap fit plastic insert

Sizes
63mm (2½"), 100mm (4") and 115mm (4½")

Case/Bezel/Flange/Socket & Element
316 Stainless Steel (Bead blasted non reflective bezel and flange)
Removable bezel design allows repair or recalibration

Movement
Precision Stainless Steel Construction

Dial
Anodised Aluminium

All gauges supplied as white lettering on black background as standard (Non Glare), bespoke colours and designs are available upon request

Pointer
White Painted Aluminium

Window
Acrylic

Traceability
All instruments are individually calibrated with a unique serial number on dial.

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

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

Accuracy class
<table>
<thead>
<tr>
<th>ACCURACY CLASS</th>
<th>Higher Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 600 bar</td>
<td>&gt;600 - 1600 bar</td>
</tr>
<tr>
<td>0-8702 psi</td>
<td>&gt;1450-23206 psi</td>
</tr>
</tbody>
</table>

63mm (2½")
- 1.0
- 1.6 (N/A)

100mm (4")
- 1.0 (0.6)
- 1.0
- 1.6

115mm (4½")
- 1.0 (0.6)
- 1.0
- 1.6

0.5% Accuracy on request (Consult Sales)
Higher Ranges on request (Consult Sales)

Over-pressure

| 0-100 bar | >100-600 bar | >600-1600 bar | >1600-2500 bar |
| 0-1450 psi | >1450-23206 psi | >23206-36239 psi |

1.25 x FSD
- 1.15 x FSD
- 1.10 x FSD
- 1.10 x FSD

Scale Range
Vacuum / Compound to -1 to 0 to -1 to 24 bar
63mm (2½") gauge 0 to 1400 bar
100mm (4") & 115mm (4½") gauges 0 to 2500 bar
Or other equivalent units of pressure or vacuum
PED 2014/68/EU, GAS Group.1 <1000 bar, GAS Group.2 <3000 bar

Pressure Connection Thread
¾", ⅜", ⅜", ⅔" NPT, BSP, BSPT (See High Pressure Options)

Operating Temperature Range EN837
-20° to 60°C (-4°F to 140°F) without loss of accuracy.
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
• Aegis-Guard
• Micro adjustable pointer
• Dial White Anodised Aluminium (Black Printing)
• Dial Custom markings
• Monel according to ISO 15156 / NACE MR-01-75 wetted parts
• Other pressure connections (Including high pressure)
• Orifice Restrictor Screw (standard Ø0.9mm, Ø0.4mm on request)
• Customer logo printed on dial
• Vibragauge® (See data sheet)
• Gauge over-pressure up to 130% of FSD
Further options on request

Gauges can be Recalibrated (Please return to manufacturer)

High Pressure Options Available

| HIGH PRESSURE THREAD OPTIONS (Up to 2500 bar) |
|-----------------|-----------------|
| GAUGE |
| TUBE MP (Up to 20 ksl) | TUBE HP (Up to 36 ksl) |
| ¾" | ¼" |
| ¾" | ¼" |
| ⅜" | ⅜" |
| ⅜" | ⅔" |
| 100mm (4") | M/F |
| 63mm (2½") | M |
| 115mm (4½") | M/F |
| 100mm (4") | M |
| 100mm (4") | M/F |
| 115mm (4½") | M/F |
| 100mm (4") | M |
| 115mm (4½") | M |

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.
STEWARTS has developed a unique Aegis-Guard which will offer protection to the gauge in event of a collision.

<table>
<thead>
<tr>
<th>Cutout (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>J</th>
<th>K</th>
<th>L</th>
<th>Cutout</th>
</tr>
</thead>
<tbody>
<tr>
<td>63mm 2½ (Inches)</td>
<td>68.4 (2.7)</td>
<td>37.5 (1.5)</td>
<td>16.3 (0.64)</td>
<td>45.2 (1.8)</td>
<td>85.2 (3.35)</td>
<td>62 (2.4)</td>
<td>18 (0.71)</td>
<td>18.8 (0.74)</td>
<td>21.5 (0.85)</td>
<td>75 (2.95)</td>
<td>28 (1.1)</td>
<td>66 (2.6)</td>
</tr>
<tr>
<td>100mm 4 (Inches)</td>
<td>112.2 (4.4)</td>
<td>49 (1.9)</td>
<td>15.2 (0.60)</td>
<td>66.9 (2.6)</td>
<td>132.5 (5.22)</td>
<td>99 (3.9)</td>
<td>33.3 (1.31)</td>
<td>19.3 (0.76)</td>
<td>24.6 (0.97)</td>
<td>117.8 (4.64)</td>
<td>35.5 (1.4)</td>
<td>106 (4.17)</td>
</tr>
<tr>
<td>115mm 4½ (Inches)</td>
<td>129 (5.1)</td>
<td>49.2 (1.94)</td>
<td>15.5 (0.61)</td>
<td>74.8 (2.94)</td>
<td>160 (6.3)</td>
<td>114.8 (4.5)</td>
<td>33.3 (1.31)</td>
<td>19.3 (0.76)</td>
<td>26 (1.02)</td>
<td>150.5 (5.93)</td>
<td>37.2 (1.46)</td>
<td>122 (4.8)</td>
</tr>
</tbody>
</table>