**MODELS - 3010, 3011, 3012**

**SUBSEA Pressure Gauges**

Standard Hyperbaric test 1.1 x Design Depth Pressure.

**APPLICATIONS**

Specially developed to meet the need for gauges working at great depths under the sea and in Hyperbaric conditions. Measures the true pressure of the system with reference to sea level atmospheric pressure where the gauge case is sealed. Reinforced case prevents ambient pressure affecting the inlet pressure reading.

**STANDARD SPECIFICATION**

SUBSEA Gauge (protected against complete, continuous submersion in water to IP68)

**Sizes**

63, 100 and 150 mm

**Case/ Bezel**

AISI 316 Stainless Steel (Also available in Monel) (Manufactured from a solid billet).

Pressure tight for depths up to 1,000 ft (300 mtr) of water.

Special gauges can be manufactured for depths up to 10,000 ft (3,000 mtr) of water on 100mm (4”) gauges only.

**Liquid filled (recommended)**

Socket & Element

316 Stainless Steel (Also available in Monel see Optional Extras)

**Movement**

Stainless Steel Construction

**Dial**

Anodised Aluminium

**Gauges can be supplied with either White lettering on Black background (non glare) or Black lettering on White background (Please state preference) bespoke colours and designs are available upon request.**

**Pointer**

Black Aluminium

**Window**

Toughened glass on 1000ft 63 & 100mm gauges

Acrylic on 1000ft 150mm gauge & 4000,5000 &10000ft 100mm gauges.

**Traceability**

All instruments are individually calibrated and have an 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 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>100mm</td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>150mm</td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td></td>
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<table>
<thead>
<tr>
<th>Over-pressure</th>
<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>
<td></td>
</tr>
</tbody>
</table>

**Scale Range**

**Rear Connect**

Vacuum to 1,400 bar (20,000 psi) on 63mm gauge

Vacuum to 3,000 bar (45,000 psi) on 100 & 150mm gauges

**Bottom Connect**

Vacuum to 700 bar (10,000 psi) on 63mm gauge

Vacuum to 700 bar (10,000 psi) on 100 & 150mm gauges

**Pressure Connection Thread**

3/8", 1/4", 3/8" x 1/2" NPT, BSP, BSPT (See High Pressure Options)

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

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

**DRI, Liquid Fillable or Pre-Filled. VIBRAGAUGE® Option also available. VIBRAGAUGE® for Dampeining of vibration & pulsation without liquid filling. With liquid-filled case for applications with high dynamic Pressure pulsations or vibration.**

**Model-3010 Direct Mounted (Bottom Connection)**

Model-3011 Surface Mounted (Bottom Connection)

Model-3012 Flush Mounted Screw Fixing (Rear Connection)

See Page-2 for dimension

**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 Fallng % of span

**Optional Extras**

- Optional dial materials & 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
- Liquid filled / Suitable for liquid filling
- Nitelitgage® (See data sheet)
- Vibrationgauge® (See data sheet)

**Further options on request**

* Gauges can be Recalibrated (Please return to manufacturer)

**High Pressure Options Available**
MODELS - 3010, 3011, 3012

SUBSEA Pressure Gauges

DIMENSIONS

<table>
<thead>
<tr>
<th>Depth</th>
<th>Dial</th>
<th>Dim</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F (No.)</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>PANEL CUTOUT</th>
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<tbody>
<tr>
<td>1000ft/300m</td>
<td>2.5&quot;</td>
<td>84</td>
<td>50</td>
<td>53.3</td>
<td>19</td>
<td>110</td>
<td>2</td>
<td>5.2 (CSK)</td>
<td>95</td>
<td>4.75</td>
<td>34</td>
<td>18</td>
<td>18</td>
<td>80</td>
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<tr>
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<td>4</td>
<td>9</td>
<td>150</td>
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<td>23</td>
<td>133</td>
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</tr>
<tr>
<td>4000ft/1200m</td>
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<td>129</td>
<td>93.3</td>
<td>105.5</td>
<td>33.5</td>
<td>170</td>
<td>4</td>
<td>9</td>
<td>150</td>
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<td>23</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td>5000ft/1500m</td>
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<td>92.8</td>
<td>105.5</td>
<td>33.5</td>
<td>170</td>
<td>4</td>
<td>9</td>
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<td>23</td>
<td>136</td>
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</tr>
<tr>
<td>10,000ft/3000m</td>
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<td>96.5</td>
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<td>33.9</td>
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<td>23</td>
<td>143</td>
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</table>

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