ROV operated high pressure coupling
10,000 / 15,000 psi

Series 87 / HFL
Description:
Most existing ROV connectors are either stab solutions which require depressurized lines before connection to avoid unmanageable forces, or screw solutions with one thread side in the subsea half, which is difficult to engage and can suffer from contamination and damage easily. The superior principle of WALther 87-series has proven itself since its 1st installation in the ESSO Balder field in 1996. Since then thousands of units serve trouble free in many different fields.

- Subsea half made of few single components
- All primary seals and complete drive mechanism on retrievable half
- Main housing seal made of Inconel
- Generous guiding funnel for easy connection under bad visibility
- Mateable at full working pressure
- Low connection torque at 10,000 psi
- Constant flow condition due to mechanically fixed valve position
- Heavy duty ring valves
- No squirting during connection / disconnection

Materials:
Stainless steel 1.4404 (316L), duplex 1.4462 (UNS 31803), Bronze 2.0966.97
Superduplex on request
Seals: Inconel with metal seal /polymer back up

Accessories:
Ask for parking stations, dirt protection caps or pressure sealing caps

Features:
- Deep sea valves. Unlike standard poppet valves which open when external pressure exceeds internal pressure, these valves remain closed.
- Tested for up to 5000 m water depth.
- Other ROV interfaces like fish tail or D-bar.
- Funnel with front end mounting flange to minimize protrusion from panel.
- Non interchangeable version by mechanical means and colour.

<table>
<thead>
<tr>
<th>Size</th>
<th>Type</th>
<th>Working Pressure Rating [MPa/psi]</th>
<th>Cv*2</th>
<th>Dimension</th>
<th>ROV-interface</th>
<th>End-connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4“–3/8”</td>
<td>87-006</td>
<td>10,000</td>
<td>0,56</td>
<td>481</td>
<td>150</td>
<td>96</td>
</tr>
<tr>
<td>1/2”</td>
<td>87-010</td>
<td>69</td>
<td>1,5</td>
<td>494</td>
<td>133</td>
<td>96</td>
</tr>
<tr>
<td>3/4“–1”</td>
<td>87-016</td>
<td>5,5</td>
<td>5,5</td>
<td>633</td>
<td>160</td>
<td>120</td>
</tr>
</tbody>
</table>

* Other profiles for gripping tools possible too

*1 Working pressure rating can be reduced by project specific material selection
*2 The Cv is strongly influenced by the individual choice of end connection
**Series 87 Ultra high pressure version 15,000 psi**

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>3/8”–1/2”</td>
<td>87-G08</td>
<td>104 / 15,000</td>
<td>0,65</td>
<td>496</td>
<td>180</td>
<td>120</td>
<td>square 3/4” to attach handling interface of choice</td>
<td>tba</td>
</tr>
</tbody>
</table>

**Features:**  
Increased working pressure to 104 MPa (15,000 psi)  
Deep sea valves - which do not open at external over pressure

**Materials:**  
Superduplex 1.4410 (UNS 32750) and duplex 1.4462 (UNS 31803), Bronze (2.0966.79)  
Seals: Inconel and polymer back up

**Accessories:**  
Parking station, protection cap, pressure sealing cap

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**Series 87 + Hose = HFL**

<table>
<thead>
<tr>
<th>Size</th>
<th>Type</th>
<th>L [m]</th>
<th>Working Pressure Rating [MPa/psi]</th>
<th>Hose termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8”</td>
<td>87-006-B-00008-AABS-Y06</td>
<td>7</td>
<td>34,5/5,000</td>
<td>2 x self sealing ROV couplings 87-006-0</td>
</tr>
<tr>
<td></td>
<td>87-006-B-00009-AABS-Y06</td>
<td>8,5</td>
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<td>87-006-B-00007-AABS-Y06</td>
<td>15</td>
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<td>87-006-B-00005-AABS-Y06</td>
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<tr>
<td></td>
<td>87-006-B-00010-AABS-Y06</td>
<td>20</td>
<td></td>
<td>1 x self sealing ROV coupling 87-006-0 1 x Nut JIC # 8 female</td>
</tr>
</tbody>
</table>

**Optional features:**  
Hose highly collapse resistant (HCR); size and pressure variations as series 87 listed above
Special designs for Offshore Couplings

Elements for plate mounting
Series OM

Elements for cavity mounting
Type 84-006

ROV coupling for gas lift
Type 87-050

Workover Stabplates
Type 91553

Emergency Disconnect Unit
Type 91559

ROV stab plates
Type 91561
also available with HFL, fully assembled

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