## Technical Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Hydraulic ½&quot;, ¾&quot; &amp; 2&quot;</th>
<th>Electrical &amp; Optical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal diameter (minimum)</td>
<td>Ø½&quot; (12.7mm) or Ø¾&quot; (19mm) or Ø2&quot; (50mm)</td>
<td>N/A</td>
</tr>
<tr>
<td>Working pressure</td>
<td>10,000psi (690 Bar)</td>
<td></td>
</tr>
<tr>
<td>Test pressure</td>
<td>15,000psi (1,035 Bar)</td>
<td></td>
</tr>
<tr>
<td>Hydraulic working pressure (nominal)</td>
<td>3,000psi (207 Bar)</td>
<td></td>
</tr>
<tr>
<td>Hydraulic working pressure (maximum)</td>
<td>5,000psi (345 Bar)</td>
<td></td>
</tr>
<tr>
<td>Design temperature</td>
<td>0 to 250°F (-18 to 121°F)</td>
<td></td>
</tr>
<tr>
<td>Pass through controls</td>
<td>One per stab</td>
<td>Third party vendor specific</td>
</tr>
<tr>
<td>End connections</td>
<td>½&quot; &amp; ¾&quot;: to client specification</td>
<td>2&quot;: API 6A 2½&quot; flange, 6BX 152 Gasket</td>
</tr>
<tr>
<td>Service</td>
<td>H₂S NACE MR0175</td>
<td></td>
</tr>
<tr>
<td>Design certification</td>
<td>½&quot; &amp; ¾&quot;: DNV, 2&quot;: BV</td>
<td></td>
</tr>
<tr>
<td>Design compliance (generally in compliance with noted standards where applicable)</td>
<td>API 6A</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>½&quot; 13.8kg (30.4lbs) or ¾&quot; 33.3kg (73.4lbs) or 2&quot; 210kg (462lbs)</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>½&quot; 98mm (3.9&quot;) max OD, 633mm (25&quot;) long</td>
<td>2½&quot;, 12.35mm (4.8&quot;) max OD, 715mm (28&quot;) long</td>
</tr>
<tr>
<td></td>
<td>¼&quot; 123.5mm (4.8&quot;) wide, 320mm (12.6&quot;) deep, 1230mm (48.4&quot;) long</td>
<td></td>
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</tbody>
</table>

### Uses:

- Subsea wellhead connectors
- Riser connectors
- Emergency Disconnect Packages
- Quick release stab plates
- Emergency disconnect points

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Hydraulically Retractable Subsea Control Couplers

- Fully qualified and tested to 3,000m water depth
- Pressure balanced design
- Heavy duty engagement
- Multiple uses subsea and on surface
Hydraulically Retractable Subsea Control Couplers

Unique hydraulically retractable couplers creating remote engage and disengage functionality. They reduce reliance on ROVs subsea, creating new opportunities for remote emergency release system designs, and allow people to be removed from stab plate engagement functions on surface. They also allow heavy duty engagement of subsea equipment to be separate from the comparatively delicate engagement of control system interfaces.

Extremely robust and designed for constant heavy duty operations, the couplers operate on very small fluid volumes to ensure rapid movement. The ½” coupler is designed for clean fluid use only, while the ¾” and 2” couplers are specifically designed to cope with solids laden fluids such as drilling muds and well effluents. A hydraulically retractable carrier for third party electrical and optical wet connectors is also available, enabling STL’s hydraulically retractable couplers to be incorporated into the latest MUX systems as well.

The hydraulic couplers are pressure balanced in both the extended and the retracted positions, ensuring that the couplers will remain in position in the event of hydraulic operating system failure. Additionally, it is possible to pressure test to full system working pressure against the retracted coupler without the need for an additional test cap. When retracted, the couplers are flush with the coupler plate, preventing dirt ingress and preventing external impact on the retracted coupler from damaging the seals.

The couplers are fully DNV design approved and qualified to 3,000m (10,000ft) water depth. They can be used on subsea wellhead connectors, riser connectors, emergency disconnect packages, quick release stab plates and emergency disconnect points. These couplers are used in the STL Xtreme Release (XR) Connector to provide unique robust operation and functionality.

The hydraulic couplers are available in checked or vented versions, with either one or both sides checked or vented. The electrical and optical coupler carrier is suitable for use with any current third party wet mateable connector.

**Features**
- 10,000psi working pressure, 15,000psi last pressure for conveyed fluid
- 5,000psi max. 3,000psi nominal hydraulic system pressure
- NACE MR 0175 compliant materials
- ¾” and 2” versions dirty fluid resistant
- Low operating volumes = high speed operation
- Protected seals prevent damage while disconnected
- Pressure balanced design prevents separation forces
- Checked version allows for independent testing of male and female assemblies

Also available...

Electrical/Optical Coupler Carrier

Key:
- Blue: Hydraulic Control Fluid
- Red: Conveyed Fluid

Hydraulic Couplers

Vented (Retracted)

Vented (Extended)

Checked (Retracted)

Checked (Extended)

2” Hydraulic Retractable Coupler

2” Hydraulic Coupler ¾” Hydraulic Coupler

Electrical/Optical Coupler Carrier

Vented (Retracted)

Vented (Extended)

Checked (Retracted)

Checked (Extended)