

Hydraulic Subsea Control Coupler



SubseaDesign

Product Datasheet

SYSTEM, PRODUCT AND SERVICE PROVIDER

SubseaDesign's hydraulic couplers are possible to pressure test to full system working pressure against the retracted coupler without the need for an additional test cap.

Due to the compact design and self-sealing abilities of both sides of the coupler, ingress from sea water is confined to a minimum.

The couplers are fully DNV design approved and qualified to 3.000m (10.000ft) water depth.

The connectors can be applied on sub-sea wellhead connectors, riser connectors, emergency disconnect packages, quick release stab plates and emergency disconnect points.

These state of the art couplers tolerates high angle interconnection and allows for both front and back loading.

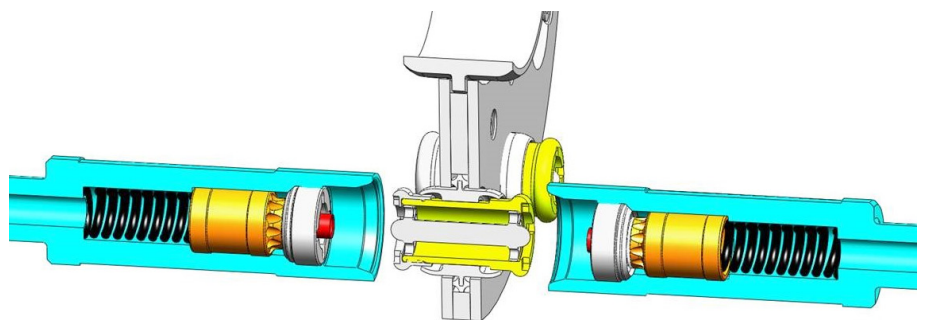
Applications include, but not limited to:

- Subsea Trees
- Tubing Hanger Penetrators
- Production Control Systems
- Drilling Control Systems
- Chemical Injection Systems
- Installation / Workover Control Systems
- Umbilicals



Characteristics:

- Metal to metal sealing cone situated in separate seal carrying plate between 2 hubs.
- Coupling halves self-sealing.
- Allows to 3° misalignment angle during connection/disconnection.
- Front and back loaded.
- End connection to lines can be adapted to line sizes.
- High CV factor.
- Weldable to most common used tube materials.
- Poppet with check valve can easily be front mounted after flushing of lines.
- Seal area near front of coupler face for easy cleaning by tool.
- Design allows for lateral offset after connection.
- Poppet housing prevents water ingress during connection.



Operating Conditions	
Minimum no of make and breaks for seal	10
Temperature range	-29°C to 121°C
Material class	ISO class FF
Water depth	3000 m (9843 ft)
Design life	30 years
Service life	30 years



Full product specification		
Pressure	Working	10000 PSI (690 bar)
	Design	11000 PSI (760 bar)
	Test	16500 PSI (1140 bar)
Materials	Coupler body	Nitronic 50
	Poppet opener	Inconel 718
	Poppet opener housing, Spring piston, Locking ring, Flying poppet	25% Cr. Duplex
	SD-Crown Body Seal	Titanium Gr. 5 / Ag coated
	Spring	Elgiloy / MP 35N
	Poppet seal	PEEK
Mate/force seal	< 40 kN	
Flow properties, CV,US Flow properties, KV	3.1 2.7	Estimated based on flow simulations
Design standard	ISO 13628 / API 6A	

