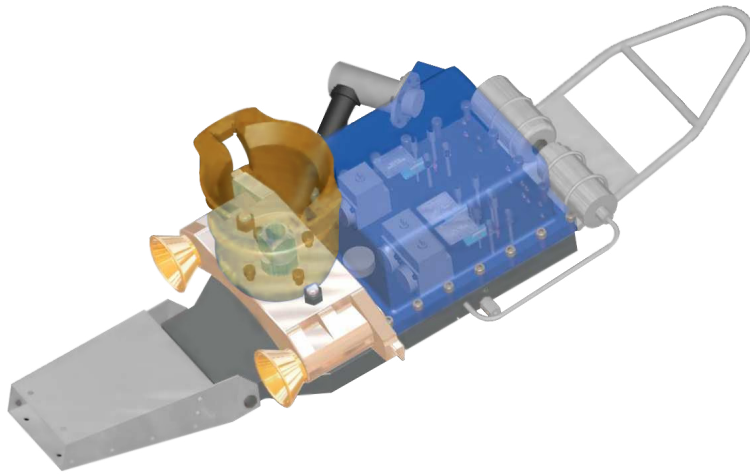
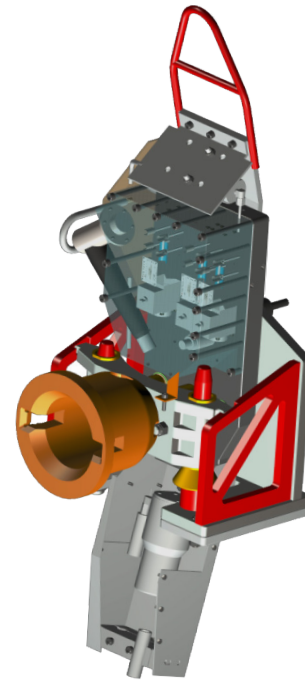


MQC TERMINATOR DELTA X ROV-OPERATED MQC / STAB PLATE



Terminator Delta X Female



Terminator Delta X Male & Female

IMPROVE SUBSEA SAFETY WITH LOW-COMPLEXITY STAB PLATES

UNITECH developed a reliable subsea electro-hydraulic multi-well control system without the need for conventional control pods. The Delta X is an advance development of our MQC Terminator Charlie X-1 Plate. The Integrated Control-module & Connection (ICC) system incorporates electronic logic functionality for independent valve control during the connector deployment. The ICC is significant in reducing development & operational cost for subsea projects.

- Manifold Plate design for Removable part which allows Female plate without pipe welding and bending complexity
- Proportional & Directional Control Solenoid Valves
- Direct or MUX Electronic Valve Control
- Pressure, Temperature & Flow Sensors
- Electrical Connectors



Qualified to
API 6A PSL-3G
standards

TERMINATOR DELTA X

FEATURES

- Integrated electronic control module & ROV-operated stab plate
- Solenoid valves & electric connectors added to proven MQC design
- No reaction forces transferred to manipulator
- Up to 30.000 psi working pressure
- Positively parked and positioned before mating hydraulic & electric connections
- Direct or MUX electronic valve control during deployment
- High-reliability vertical guide mechanism. Latching thread permanently engaged
- No external tubing. Manifold plate connects couplers & solenoid valves with termination bracket
- All critical latching / locking details retrievable
- No subsea engagement of threads required
- Anti-galling materials: subsea stainless alloys
- Double primary resilient seals in hydraulic connectors with metal to metal seal available - Anti-extrusion seals connect and disconnect under full pressure

SPECIFICATIONS

Standard plate suitable for up to 14/2 self-sealing hydraulic connectors with 2 seals for extra reliability, 8 solenoid valves & 2 electrical connectors. Other solutions available, depending on coupling size, quantity and pressure requirement.

Materials	
Fixed Plate	AISI 316 L
ROV Operated Plate	Titanium Gr. 23, Super Duplex or AISI 316 L per customer requirement
Hydraulic Elements	Inconel 625, Super Duplex, 254SMO, Nitronic 50 and AISI 316
Seals	
Hydraulic Connector	Double Seals; combinations of metal, PTFE & HNBR
Pressure Compensated Boc (PCB)	Containing solenoid valves, electric connectors & pressure transmitter
ROV Interface	Torque Tool API 17H Class 4
Pressure Compensator	Piston type/ cylinder
Nom. Mating Torque	50 Nm / 37 ft pound
Min. Pretension Torque	340 Nm / 250 ft pound
Break Out Torque	400 / 295 ft pound
Design Torque	1000 Nm / 740 ft pound
Water Depth	Independent of water depth
Tube / Hose Termination	Light-, medium- or heavy-duty brackets, or customer requirements
End Termination	JIC, Autoclave, NPT, Customer Specified
Design Torque of Latching Mechanism	2000 ft lbs
Connection System Landing Limits	Vertical – unlimited Lateral – 100mm Z axis +/- 10 degrees Y axis +/- 10 degrees X axis +/- 10 degrees