

# Secc



## **2" 10,000 psi Midline Weak Link** Technical DataSheet

 **CYGNET GROUP**  
COMPANY

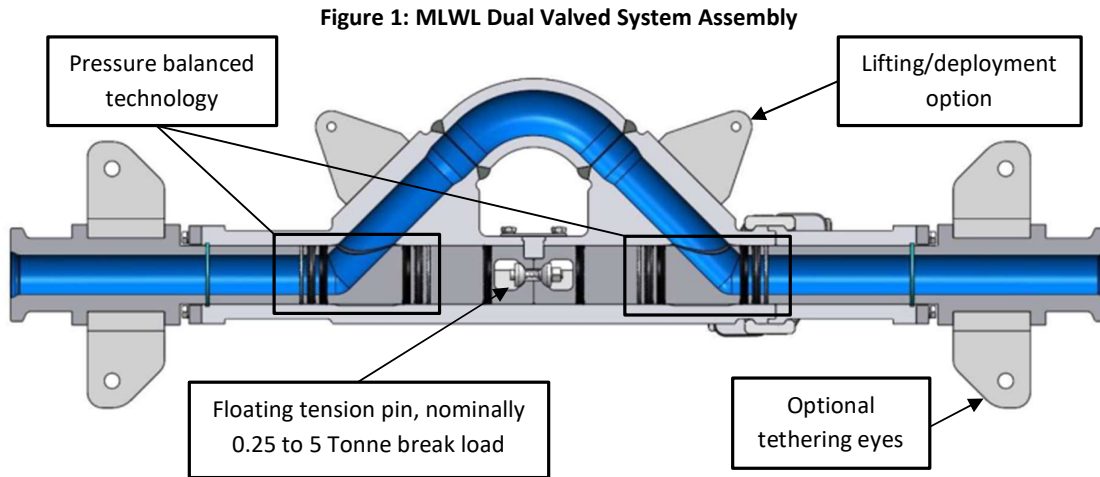
## 2" 10,000 psi MidLine Weak Link Datasheet

DESIGN BASICS			
<b>Coupling Type</b>	10,000 psi MLWL Connector (Valved)		
<b>Coupling Size</b>	2" NB (50.8mm)		
<b>Pressure Rating</b>	10,000 psi (690 Bar)	<b>Test Pressure</b>	15,000 psi (1034 Bar)
<b>Max Operating Depth</b>	10,000 ft (3048 m)	<b>Operating Temperature</b>	0.0°C to +60.0°C
<b>Flow Path</b>	Full bore <b>HIGHFLOW</b> 90° elbow		
<b>Design Code</b>	API 6A & API 17D PSL 3 PR2 for Other End Connectors (OEC) – PSL 3G available on request		
<b>Material Classification</b>	API material class FF in accordance with NACE MR0175. HH class also available		
<b>Quality Assurance</b>	ISO 9001:2015 and full traceability		
<b>Certification Level</b>	EN 10204 3.1 (EN 10204 3.2 available on request)		
<b>Operational</b>	Passive		
<b>Break Load</b>	0.25 to 5 Tonne. Other options available		
<b>Orientation</b>	Horizontal or vertical		
<b>Installation</b>	Typically mounted between 2 flexible fluid conduits to create a mid-line weak link		
<b>End Constraint</b>	Floating tension pin assembly		
<b>Spill Volume</b>	≈ 4 litres		
<b>Design Life</b>	25 years (metallic components)		
<b>Additional Options</b>	Swivel options at either end of connector. Various deployment/locking/tethering options. Protection jacket and override actuator. Transit Protection System		
PERFORMANCE			
<b>Max. Bending Moment</b>	1.4 kNm *	<b>Maximum Torque</b>	2.25 kNm
BASIC WEIGHT AND DIMENSIONS			
<b>Connected Dimensions</b>	1150 mm (L) x 212 mm (W) x 334 mm (D)	<b>Disconnected Dimensions</b>	1450 mm (L) x 212 mm (W) x 334 mm (D)
<b>Weight in Air</b>	140 kg		
CONNECTION DETAILS			
<b>Inlet Connection</b>	Grayloc B20 Hub (also available: Techlok Hub, API Flange, Hammer Unions & other end connections)		
<b>Outlet Connection</b>	Grayloc B20 Hub (also available: Techlok Hub, API Flange, Hammer Unions & other end connections)		
MATERIALS			
<b>Body</b>	Super Duplex 32760	<b>Elastomeric Seals</b>	HNBR (FKM or FFKM available)
<b>Probes</b>	Inconel 6A718	<b>Bolting (Studs)</b>	A4 Stainless Steel
<b>Sleeves</b>	Super Duplex 32760	<b>Bolting (Nuts)</b>	A4 Stainless Steel
<b>Non-Pressure Bearing</b>	Stainless Steel 316		
TESTING REQUIREMENTS			
<b>Pressure Test</b>	API 6A PSL 3	<b>Impact Testing</b>	ASTM A370
<b>Qualification Test</b>	API 6A PR2 (OEC)	<b>Hardness Testing</b>	ASTM E10 / ASTM E18
<b>Ultrasonic</b>	API 6A PSL 3	<b>Magnetic Particle</b>	API 6A PSL 3
<b>Dye Penetrant</b>	API 6A PSL 3	<b>Radiography</b>	As required (weld)
<b>Corrosion Testing</b>	ASTM G48 Method A		
WITNESS REQUIREMENTS			
<b>Customer Witness</b>	Available on request	<b>Third Party Witness</b>	Available at additional cost
PAINTING REQUIREMENTS			
<b>Painting Specification</b>	None	<b>Colour</b>	N/A
NOTES / ADDITIONAL REQUIREMENTS			

\*Bending moment calculated with MLWL in a fixed constraint

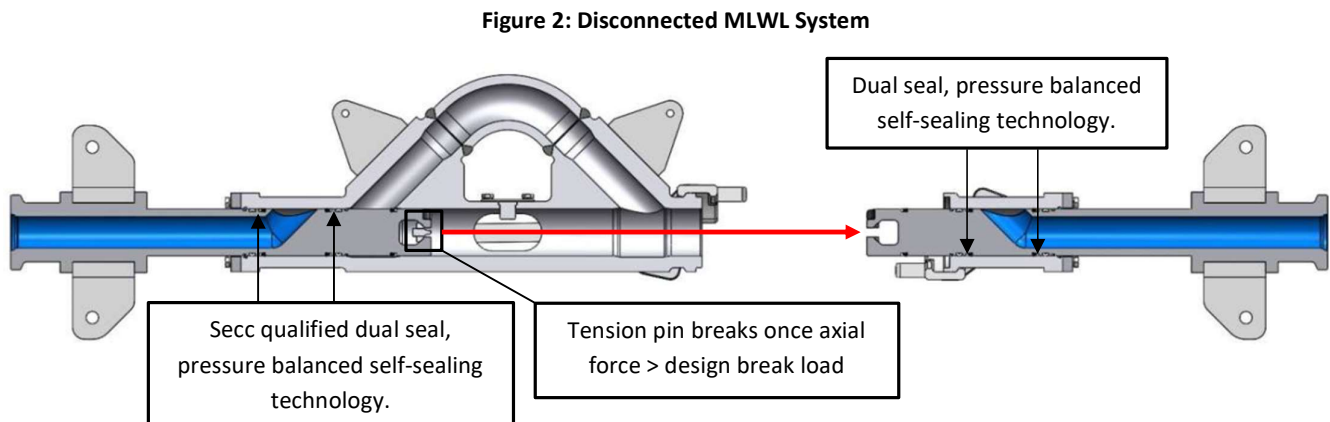
These figures are based on known and estimated data. Secc reserves the right to change specifications without notice.

The MidLine Weak Link is a full-bore, pressure-balanced connector, positioned midway along the fluid conduit. It is designed to break away in an emergency, automatically sealing the bore. This system prevents fluid loss to the marine environment. It also protects personnel and equipment from an uncontrolled disconnect and the impact of dangerous loads.



Secc MLWL employs a floating tension pin mounted outside of the flow path. Floating the tension pin protects it from bending and torsional loads generated during operation. Being outside of the flow path protects the pin from forces generated from flow or pressure fluctuations.

The MLWL emergency quick disconnect is designed to break only when an external axial pull is applied. The tension pin can be accurately matched to a desired break load. The fatigue free design eliminates uncontrolled actuation and premature disconnection.



Secc protection jacket offers complete safeguarding of the MLWL during installation, operation and recovery; whilst also allowing for unrestricted access to end-connections, lifting points, and inspection of the tension pin assembly without removal.