

**HYDRAULICALLY OPERATED, COMPACT, SHEAR AND SEAL
REVOLUTION VALVES DESIGNED WITH HIGH CUTTING PERFORMANCE
AND RELIABLE POST-CUT SEALING.**

Features:

- ▷ **Dual unidirectional coiled tubing cutting valves with recirculation capability.**
- ▷ **May be reconfigured to accept bi-directional ball valve in upper slot.**
- ▷ **Demountable actuators to facilitate in-situ maintenance.**
- ▷ **Compact & lightweight design.**
- ▷ **Separate cutting and sealing components in each single Revolution device.**

DESIGN DATA

Nominal Bore Diameter	6 3/8" (161.9 mm)
Design Pressure	Working: 15,000 psi (103.4 MPa) Test: 22,500 psi (155.1 MPa)
Design Standards	API 6A 20 th Edition (ISO 10423) 2010, ISO 13628-7 2006, API 17G 3 rd Edition 2019, NACE MR0175-2015
Temperature Class (Design)	API 6A Class U (0°F to 250°F / -18°C to +121°C)
Service	Sour
Material Class	EE, with CRA inlaid ring grooves, seat pockets & stem penetrations. CRA valve bore sealing mechanism (flapper & seat) & stems.
Product Specification Level	PSL 3G
Shearing Class	Wireline / Coiled Tubing

PERFORMANCE DATA

Maximum Hydraulic Pressure	5,000 psi (34.5 MPa)
Actuator Volume (Total, Approx.)	3.6 litres per valve
Acceptable Hydraulic Fluid	Any water or oil based control fluid
Wireline Cutting Capabilities	All common slickline, e-line and braided cable grades
Coiled Tubing Cutting Capabilities	<u>Tested</u> 2.00" OD x 0.175" wall thickness, GT-90 Coiled Tubing c/w 0.464" 7-46P XS Cable 1.75" OD x 0.175" wall thickness, QT-1300 Coiled Tubing c/w 0.464" 7-46P XS Cable <u>Indicative Predicted</u> 100ksi min yield, up to 2 3/8" x 0.224" wall thickness 110ksi min yield, up to 2 3/8" x 0.203" wall thickness 130ksi min yield, up to 2" x 0.203" wall thickness

WEIGHT AND DIMENSIONS

Overall Height (Nominal)	46.25" (1 174.8 mm)
Overall Length (Nominal)	48.37" (1 228.6 mm)
Overall Width (Nominal)	34.88" (886.0 mm)
Gross Dry Weight (Approx.)	8,270 lb (3 751 kg)

VALVE INTERFACES

Design Standard	API 6AF2 5 th Edition, 2013
Upper End Connection	Flange – 13 5/8" 15K 6BX Studded Flange, BX 159
Lower End Connection	Flange – 13 5/8" 15K 6BX Open Flange, BX 159
Side Outlet Connection (Optional)	Flange – 2 1/16" 15K 6BX Studded Flange, BX 152

STRUCTURAL CAPACITIES

Maximum Tension @ RWP	800 kip (3 550 kN) *	
Maximum Moment @ RWP	400 ft kip (540 kN m) *	
Maximum Tension @ 0 ksi	4,700 kip (20 900 kN) *	
Maximum Moment @ 0 ksi	2,300 ft kip (3 110 kN m) *	*As defined in API 6AF2

VALIDATION LEVEL

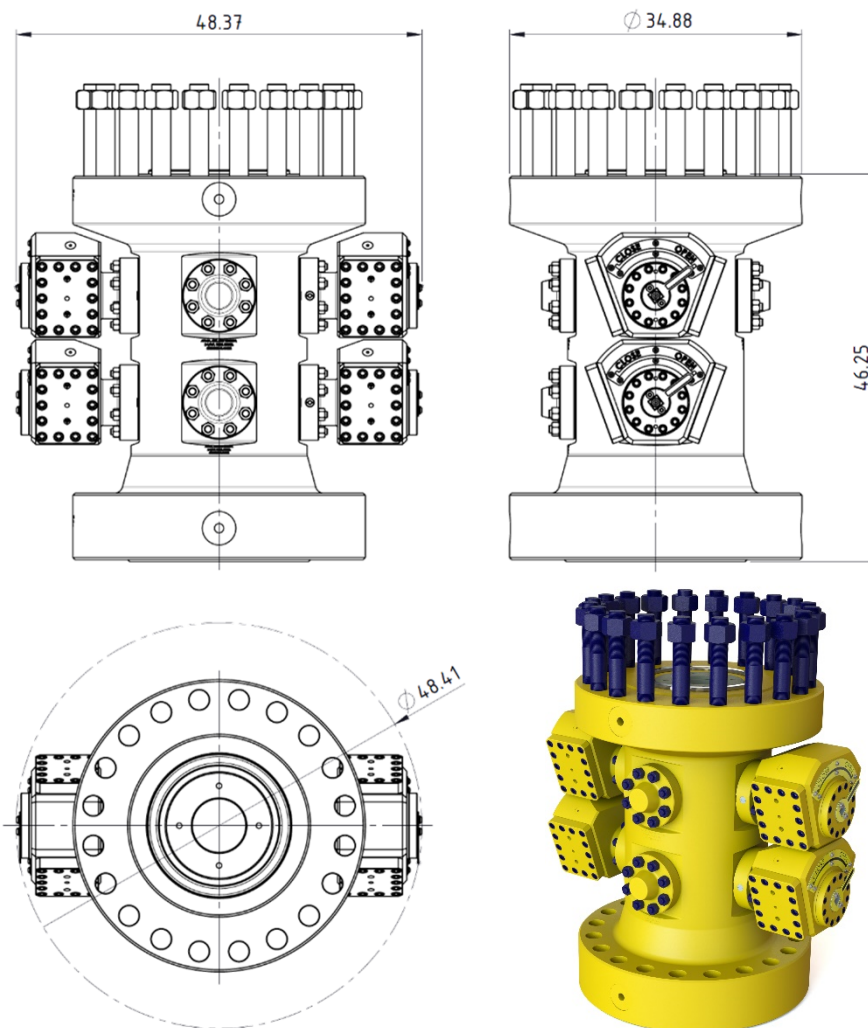
Service Specification Level	API 17G SSL-Gas		
Temperature Class (Operational)	Valve:	0°C to +92°C	Actuator: +2° to +66°C
Water Depth	10,000 ft (3,048 m)		
Shearing	API 17G Shear and Seal Class		

NOTES

API 6A, Annex F, Section F.2.2.2.2 – Dynamic Testing at Room Temperature

This valve is not designed with differential pressure breakout capability, therefore the dynamic test performed will be in line with F.2.2.2.2.2, Check Valves and not F.2.2.2.2.1 Gate or Plug Valves.

PRODUCT LAYOUR DRAWING



Document Reference

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CONTACT US: Interventek Subsea Engineering Ltd.

Unit 4 International View, ABZ Business Park, Dyce, ABERDEEN AB21 0BJ

+44 (0)1224 518 509 enquiries@interventek.com www.interventek.com

