



HYDRAULICALLY OPERATED, COMPACT OPEN WATER BALL VALVE DESIGNED WITH BIDIRECTIONAL SEALING

Features:

- ▷ Bidirectional Ball Valve.
- ▷ Demountable actuator to facilitate in-situ maintenance, without disturbing drive shaft wellbore seals.
- ▷ Compact & lightweight design.
- ▷ Mechanical override interface.
- ▷ External Open and Closed indication.

DESIGN DATA

Nominal Bore Diameter	6-3/8" (162 mm)
Design Pressure	Working: 15,000 psi (103.4 MPa) Test: 22,500 psi (155.1 MPa)
Design Standards	API 17G 3 rd Edition 2019, API 6A 21 st Edition (ISO 10423) 2019, NACE MR0175
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 seal surfaces (bore wetted)
Product Specification Level	PSL 3G
Sand Service Class	Sand Class A

PERFORMANCE DATA

Maximum Hydraulic Pressure	5,000 psi (34.5 MPa)
Actuator Volume (Total, Approx.)	Valve OPEN 1.8 litres. Valve CLOSE 1.8 litres
Acceptable Hydraulic Fluid	Any water or oil based control fluid

VALVE INTERFACES

Design Standard	API 6AF2 5 th Edition, 2013
Upper End Connection	Flange – 11" 15K API 6BX (BX-158) Open Flange
Lower End Connection	Flange – 7-1/16" 15K API 6BX (BX-156) Studded Flange

WEIGHT AND DIMENSIONS

Height (Nominal) Flange-to-Flange	45.530" (1,156 mm)
Overall Height (Nominal) Flange-to-Studs	52.130" (1,324 mm)
Overall Width (Nominal)	45.930" (1,167 mm)
Gross Dry Weight (Approx.)	7,432 lbs (3,371 kg)

STRUCTURAL CAPACITIES : 11", 15K, API 6BX Flange

Maximum Tensile Load @ 0 psi	3,900 kip (limited by API flange capacity*)
Maximum Bending Moment @ 0 psi	1,730 ft-kip (limited by API flange capacity*)
Maximum Tensile Load @ 15,000 psi	1,170 kip (limited by API flange capacity*)
Maximum Bending Moment @ 15,000 psi	520 ft-kip (limited by API flange capacity*)

* As defined in API 6AF2 for studs with $S_y = 105$ ksi and pre-load tensile stress equal to 52.5 ksi

STRUCTURAL CAPACITIES : 7-1/16", 15K, API 6BX Flange

Maximum Tensile Load @ 0 psi	1,540 kip (limited by API flange capacity*)
Maximum Bending Moment @ 0 psi	410 ft-kip (limited by API flange capacity*)
Maximum Tensile Load @ 15,000 psi	300 kip (limited by API flange capacity*)
Maximum Bending Moment @ 15,000 psi	80 ft-kip (limited by API flange capacity*)

* As defined in API 6AF2 for studs with $S_y = 105$ ksi and pre-load tensile stress equal to 52.5 ksi

VALIDATION LEVEL

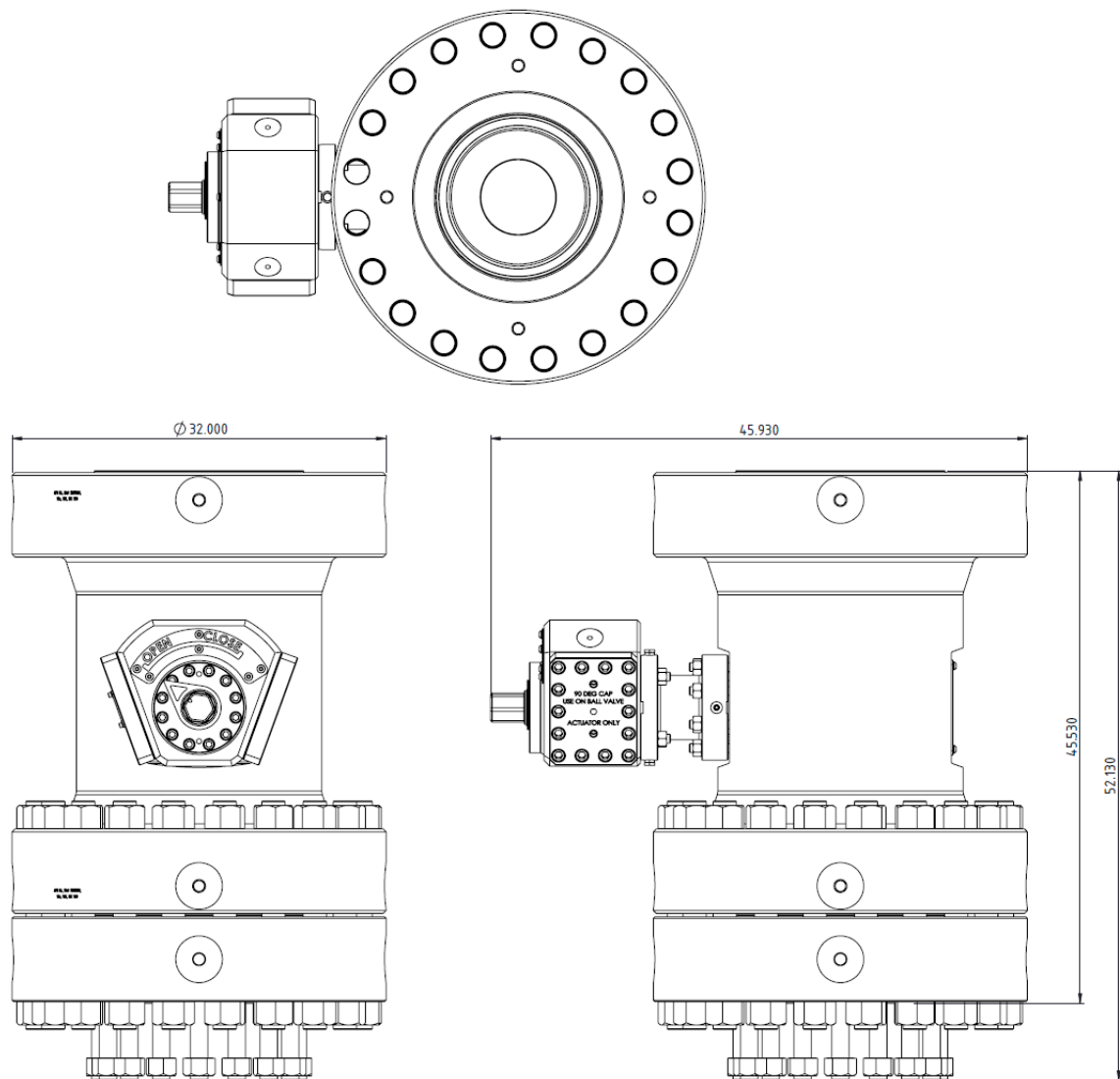
Service Specification Level	API 17G SSL-Gas	
Temperature Class (Operational)	Valve: 0°C to +92°C	Actuator: +2° to +66°C
Water Depth	10,000 ft (3,048 m)	

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 was in line with F.2.2.2.2.2, Check Valves and not F.2.2.2.2.1 Gate or Plug Valves.

PRODUCT LAYOUT DRAWING



Document Reference

The information in this document is uncontrolled and subject to change without notice.

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