

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

Features:

- ▷ **Unidirectional coiled tubing cutting valve with recirculation capability.**
- ▷ **Demountable actuators to facilitate in-situ maintenance without disturbing drive shaft well bore seals.**
- ▷ **Compact & lightweight design.**
- ▷ **Separate cutting and sealing components in single Revolution device.**
- ▷ **Mechanical ROV Override Socket.**

DESIGN DATA

Nominal Bore Diameter	5-1/8" (130 mm)
Design Pressure	Working: 20,000 psi (137.9 MPa) Test: 30,000 psi (206.8 MPa)
Design Standards	API 17G, API 6A, API 17D, API 17TR8, NACE MR0175
Valve Temperature Class	API Class X (0°F to 302°F / -18°C to +150°C)
Service	Sour – in accordance with ISO 15156 (NACE MR0175)
Material Class	HH
Product Specification Level	PSL 4 (Valve) PSL 3 (Actuator)
Maximum Water Depth	10,000 ft (3,048 m)

PERFORMANCE DATA

Maximum Hydraulic Pressure	5,000 psi (34.5 MPa)
Actuator Volume (Total, Approx.)	1.45 USg (5.5 litres) per valve
Hydraulic Control 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>Indicative Predicted</u> 152ksi max. UTS up to 2.00" OD x 0.250" wall thickness
Service Classification	Safety Class, SSL-Gas
Shearing Class	WL/CT Class (Shear and Seal Wireline/Coiled Tubing)

WEIGHT AND DIMENSIONS

Overall Height (Nominal)	42.00" (1066.8 mm)
Overall Length (Nominal)	72.01" (1829.1 mm)
Overall Width (Nominal)	38.31" (972.9 mm)
Gross Dry Weight (Approx.)	11,500 lb (5,216 kg)

VALVE INTERFACES

Design Standard	API 6A (ISO 10423)
Upper End Connection	11" 20K API 6BX Studded Interface (BX-158)
Lower End Connection	11" 20K API 6BX Flange Interface (BX-158)
Side Outlet Connection (Above Valve)	2-1/16" 20K API 6BX Studded Interface (BX-152)
Actuator Control Ports	9/16" AE Medium Pressure Female
ROV Override Socket	1.500" (38.1 mm) Square Socket

STRUCTURAL CAPACITIES*

Maximum Tension @ RWP	2,600 kip (11,565 kN)
Maximum Moment @ RWP	1,230 ft kip (1,667 kNm)
Maximum Tension @ 0 ksi	6,290 kip (27,979 kN)
Maximum Moment @ 0 ksi	2,970 ft kip (4,026 kNm)

*As defined in API 6AF2 for an 11" 20k API 6BX Flange

DESIGN VALIDATION

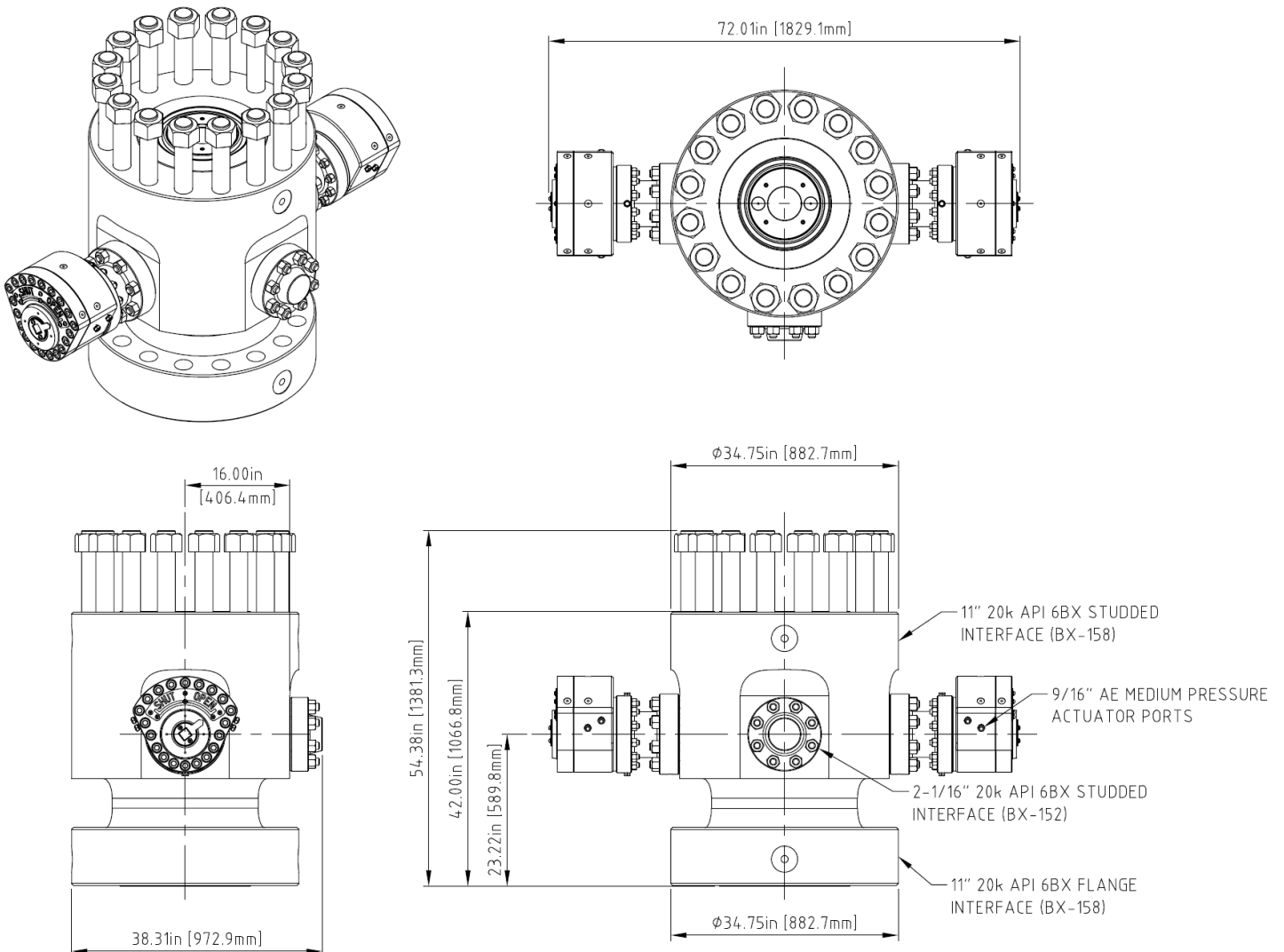
Validation Test Code	API 17G 3 rd Edition, Annex H
FAT Acceptance Criteria	PSL 3 (Hydrostatic) PSL 3G (Gas)

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, Check Valves and not F.2.2.2.1 Gate or Plug Valves.

PRODUCT LAYOUT DRAWING



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

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