



HYDRAULICALLY OPERATED, FAIL-AS-IS, SHEAR AND SEAL REVOLUTION VALVE DESIGNED WITH HIGH CUTTING PERFORMANCE AND RELIABLE POST CUT SEALING.

Features:

- ▷ **Uni-directional valve with pump through capability**
- ▷ **Separate cutting and sealing components in a single device**
- ▷ **Fewer, simpler components and stronger fit-for-purpose design**
- ▷ **Compact and lightweight design**
- ▷ **Elastomeric wellbore sealing**
- ▷ **Pass Through Ports (16 off)**

DESIGN DATA

Nominal Bore Diameter	4-1/8" (104.8 mm)
Design Pressure	Working: 10,000 psi (68.9 MPa) Test: 15,000 psi (103.4 MPa)
Design Standard	API 6A 21 st Edition 2018 (ISO 10423), API 17G 3 rd Edition 2019 (ISO 13628-7)
Temperature Class (Design)	API 6A Class U (0°F to 250°F / -18°C to +121°C)
Service	General
Material Class	AA
Product Specification Level	PSL 3G
Design Validation Level	API 17G 3 rd Edition (Modified)
Sand Service Class	N/A
Shear Class	Wireline / Coiled Tubing Shear and Seal

PERFORMANCE DATA

Maximum Hydraulic Pressure	10,000 psi (68.9 MPa)
Actuator Volume (Total, Approx.)	0.26 U.S. gallons (0.98 Litres)
Acceptable Hydraulic Fluid	Any water or oil-based control fluid
Cutting Capabilities	1 off ϕ 0.125" Slickline 1 off ϕ 15/32" (ϕ 0.4687") Braided Wire / Electrical Cable 1 off ϕ 1.750" x 0.203" QT1400 CT with ϕ 7/32" (ϕ 0.2187") Electrical Cable
Pump Through Capabilities	Present at approx. 10 psi

WEIGHT AND DIMENSIONS

Overall Height (Nominal)	46.274" (1175 mm)
Overall Diameter (Nominal)	15.125" (384 mm)
Gross Dry Weight (Approx.)	1,778 lbs (806.5 kg)

FUNCTIONAL CAPACITIES

Maximum Tension @ RWP	485 kip (2,157 kN)*
Maximum Tension @ 0 ksi	1,050 kip (4,671 kN)*
Maximum Torsion	30 ft kip (40.7 kN m)*
Maximum External Pressure	5,000 psi (34.5 MPa)*

Note that these values are the limiting values, if GRA is conducted then greater localized values may be available

*Subject to change

VALVE INTERFACES

Upper End Connection	9.000"-4 TPI Stub Acme Box (Client Specified, DWG No: PRT-107391)
Lower End Connection	9.000"-4 TPI Stub Acme Box (Client Specified, DWG No: PRT-107391)
Hydraulic Interface	Valve Open: 10,000 psi 3/8" MP Autoclave
	Valve Close: 10,000 psi 3/8" MP Autoclave
	Chemical Injection (Above): 10,000 psi 3/8" MP Autoclave
	Chemical Injection (Below): 10,000 psi 3/8" MP Autoclave
	16 off 10,000 psi 3/8" MP Autoclave through ports

VALIDATION LEVEL

Product Verification (FAT)	API 17G 3 rd Edition, Clause 8.7.13
Product Validation (Qualification)	API 17G 3 rd Edition, Annex G (Modified)
Product Validation (Cutting Trials)	API 17G 3 rd Edition w/ Customer Specified Shear Media
Temperature Class (Operational)	35°F to 200°F / +2°C to +94°C

REFERENCE CODES & STANDARDS

API 17G 3rd Edition	Design and Manufacture of Subsea Well Intervention Equipment
ISO 13628-4 (API 17D)	Subsea Wellhead and Tree Equipment

NOTES

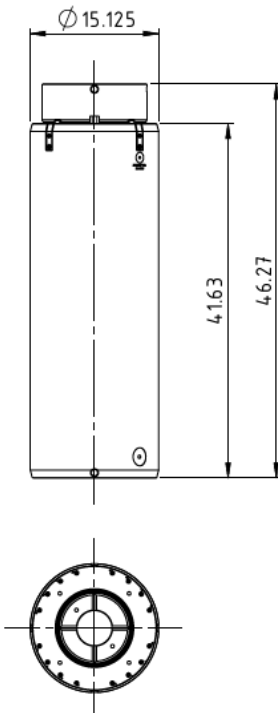
API 17G - 3rd Edition - Annex E – Validation of Connectors

Due to customer requirements to use existing qualified end connections, validation testing of connectors is omitted.

API 17G - 3rd Edition - Annex G – Sand Slurry Testing

In agreement with the customer the sand slurry validation testing (class A), covered under Annex A, has been performed successfully for information only by minor assembly reconfigurations.

PRODUCT LAYOUT DRAWING



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

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