

Subsea fully welded trunnion ball valves SX2 and SX3 series

NPS 2-48 (DN 50-1200), ASME Classes 150-2500

Subsea fully welded ball valves are suitable in water depths to 500 m (1700 ft) and maintain an average service life of 25 years. Valves are designed with two or three fully welded forged pieces with a solid double trunnion configuration and two independent seats with bidirectional sealing ensuring the greatest level of tightness and reliability under high pressure and temperature conditions in all critical isolation services.

The fully welded body construction ensures a lighter solution and avoids potential leak paths to the external environment. As a result, the valves are an excellent choice in marine and subsea pipelines.

Subsea fully welded trunnion ball valves may be completed with a subsea gear and ROV receptacle for remote operation by ROV or with a handwheel for manual operation by the diver. As an alternative, valves can be fitted with hydraulic subsea actuators, fully compensated in a double or single acting configuration, with or without ROV override.



Design features

- Double block and bleed design (DBB).
- Anti-static device.
- Anti-blowout stem.
- Soft-seated or metal-seated designs with hardfacing on ball and seats.
- Seat configurations available: self-relieving and double piston.
- Dynamic seals in O-ring/lip seal configuration.
- CRA overlay on all dynamic sealing areas or on all wetted parts available.

Operator

- Manual: Gear with ROV receptacle or handwheel.
- Actuated: Hydraulic with or without ROV receptacle/ handwheel override.
- Baric compensator for operators.

Specifications

Valve design	As per API 6DSS standard and customer requirements
Body design	Forged welded two-piece and three-piece
Temperature range	-76 to 410°F (-60 to 210°C)
Face-to-face	As per API 6D standard
End connections	RF, RTJ as per B16.5 & B16.47 BW, Butt weld as per B16.25 Hub connection SW. Socket weld as per B16.11

Testing & certification

- Compliance with API 6DSS Inspection and testing.
- SIL 3 Certification as per IEC 61508.
- PED 2014/68/UE.
- Hyperbaric validation testing as per API 6DSS (available on request).
- Cap test as per API 6DSS (available on request).

