

High pressure compact ball valves BC2 and BC3 and BCS series

NPS 2-36 (DN 50- 900), ASME Classes 900-2500 NPS 1¹³/₁₆-16³/₄ (DN 46-425), API Classes 5000-20000

With several years of experience in high pressure ball valves for offshore platforms and FPSO, Velan ABV has developed a new generation of compact valves in both a single and double ball configuration. Our design provides a competitive solution in an ever-expanding market that faces technical and economic challenges.

We offer a wide range of two or three-piece forged boltedbody trunnion mounted ball valves. Two independent seats provide easy bidirectional sealing to ensure the greatest level of tightness and reliability under high pressure and temperature conditions in critical isolation services.



Specifications

Valve design	As per API 6D or API 6A or API 6DSS standards and customer requirements.
Body design	Forged bolted two-piece and three-piece
Temperature range	-150 to 428°F (-101 to 220°C)
Face-to-face	As per Velan standard
End connections	Norsok L005 compact flange Freudenberg/Grayloc compact flange

High pressure compact ball valves have the same reliability and level of quality as traditional API valves but with significant space and weight savings due to the compact flange design integrated into the valve closures. Compact welding neck flanges that connect the pipeline to the valve provide further space savings. Design and selection of materials are fully customizable to meet the customer's project specifications.

Design features

- Double block and bleed design (DBB).
- Secondary seals in pure Graphite.
- Anti-static device.
- Anti-blowout stem.
- Soft-seated or metal-seated designs with hardfacing on ball and seats.
- Seat configurations available: self-relieving, double piston, and combination.
- Lip seal configuration.
- Emergency sealant injection on seats and stem available.
- Low fugitive emission stem packing available.
- CRA overlay on all dynamic sealing areas or on all wetted parts available.
- Compact and lightweight design.
- Lighter piping welding neck flanges with smaller dimensions offer 80% in weight savings

Operator

- Manual: wrench or gear with padlocking.
- Actuated: pneumatic/ hydraulic/electric.

Testing & certification

- Compliance with inspection and testing: API 6D, ISO 5208, and API 598 or API 6A or API 6DSS.
- Fire safe and fire tested as per API 6FA/607.
- SIL 3 Certification as per IEC 61508.
- Fugitive emission as per ISO 15848.
- PED 2014/68/UE.
- Available as per API 6A:
 Product specification levels PSL 1, 2, 3, 3G, and 4.

 Performance requirement levels PR1, PR2.
 Design validation as per PR2F.

