

Product Specification for Two & Three -Piece Trunnion Mounted Ball Valve

Valve Type: Series 7/8, Two-Piece & Three-Piece construction

Valve Body:

- Heavy duty two-piece / three-piece bolted body cast/forged construction.
- Optional fully welded body flanged and butt weld end construction.

ISO Top Flange:

- Top flange is drilled as per DIN EN ISO 5211 to accommodate direct mounting of a wide range of actuators /gears.

Stem:

- Anti-blowout proof stem.

Trunnion Mounted Ball:

- Dual trunnion plates provide maximum stability and support to the ball, as well as help lower the torque required to operate.



Floating Seat Ring:

- The seats are contained in metal carriers which are spring loaded against ball. Line pressure applied to a close valve increases load on the upstream seat to affect a tight seal.
- Two independent floating seat rings assures bi-directional tightness of the valve from zero differential pressure to the maximum rated pressure.

Double Block and Bleed and Self-relieving Seat, DIB-1 and DIB-2:

- Double Block and Bleed with self-relieving center cavity and bidirectional seating as.
- Optional DIB-1 and DIB-2.

Lifting Points and Support:

- Lifting points and supports are provided for valve size DN 150 / NPS 6 and above for Class 150, 300, 600, 900.
- Lifting points and supports are provided for valve size DN 100 / NPS 4 and above for Class 1500, 2500.

Fire Safe Design:

- Fire Tested API 607/ISO 10497 available with secondary metal seating.

Emergency Seat Sealant Injection:

- Optional an emergency sealant injection system is available at seat and stem junction.

Stem Sealing:

- Multiple seal sealing featuring a triple seal with dual O-ring seals and fire-safe gasket.

Body Seal:

- Double seal combination of O-ring and fire safe gasket ensures perfect body joint sealing.

Lipseal Design (Optional):

- Lipseal is the spring-energized seal including Elgiloy or Inconel spring and PTFE jacket. It's effective in a wide range of application, such as high resistance to corrosive chemical media, high sour gas, low temperature or cryogenic service.

Metal-To-Metal Seat Design (Optional):

- Metal-to-metal seat for high abrasive or high temperature service.

Material of Construction:

- **Body / End Connector:**
ASTM A216 WCB
ASTM A352 LCB
ASTM A351 CF8M, CF8, CF3M
ASTM A995 4A, 5A, 6A
ASTM A105
ASTM A350 LF2
ASTM A182 F316, F304, F316L, F51, F53, F55
- **Ball:** ASTM A105+ENP
ASTM A216 WCC+ENP
ASTM A350 LF2+ENP
ASTM A182 F316, F304, F316L, F51, F53, F55
- **Seat Insert:** DEVLON®, PEEK, PCTFE, Metal to Metal
- **Stem:** ASTM A322 4130+ENP
ASTM A479 SS316, SS304, XM-19, SS410-cond.2
ASTM A564 Type 630 17-4PH
- **Seat Ring:** ASTM A105+ENP
ASTM A350 LF2+ENP
ASTM A182 F316, F304, F316L, F51, F53, F55
- **Trunnion:** ASTM A516 70
ASTM A105
ASTM A350 LF2
ASTM A240 SS316, SS304
DUPLEX SS
SUPER DUPLEX SS
- **Seat Seal:** VITON® (FKM) AED, HNBR AED
- **Body Gasket:** SWG ASTM A240 SS316, SS316L + GRAPHITE
- **Stem Packing:** GRAPHITE

Size Range: 2" to 48"

Body Style: Flanged end / Butt weld end

Rating: ASME Class 150, 300, 600, 900, 1500, 2500

Design: API 6D

Testing: API 6D, API 598, ISO 5208

Face to Face: API 6D, ASME B16.10

Flange Standard: ASME B16.5, ASME B16.47

Butt Weld Ends: ASME B16.25

Pressure Temperature: ASME B16.34

Fugitive Emission: ISO 15848

NACE: ANSI / ASME MR 0175 / ISO 15156-1

Fire Safe Certified: API 6FA / API 607

Approvals & Certifications:

- API 6D
- PED/ATEX
- SIL3
- IBR
- TR CU 032 – EAC
- TR CU 012 - EAC

Special Applications:

- Process On-Off Valves
- Oil & Gas or Chemicals
- Emergency Shutdown
- Buried Services
- Block & Bypass
- Suction & Discharge Isolation
- Pig Traps
- Surge-Relief Skids
- Decoking Isolation
- Metering Station
- Pumping, Compression & Reinjection Units

Working Temperature:

- **DEVLON:** -58 °F TO 302 °F (-50 °C TO 150 °C)
- **PEEK:** -58 °F TO 500 °F (-50 °C TO 260 °C)
- **PCTFE:** -320 °F TO 302 °F (-196 °C TO 150 °C)