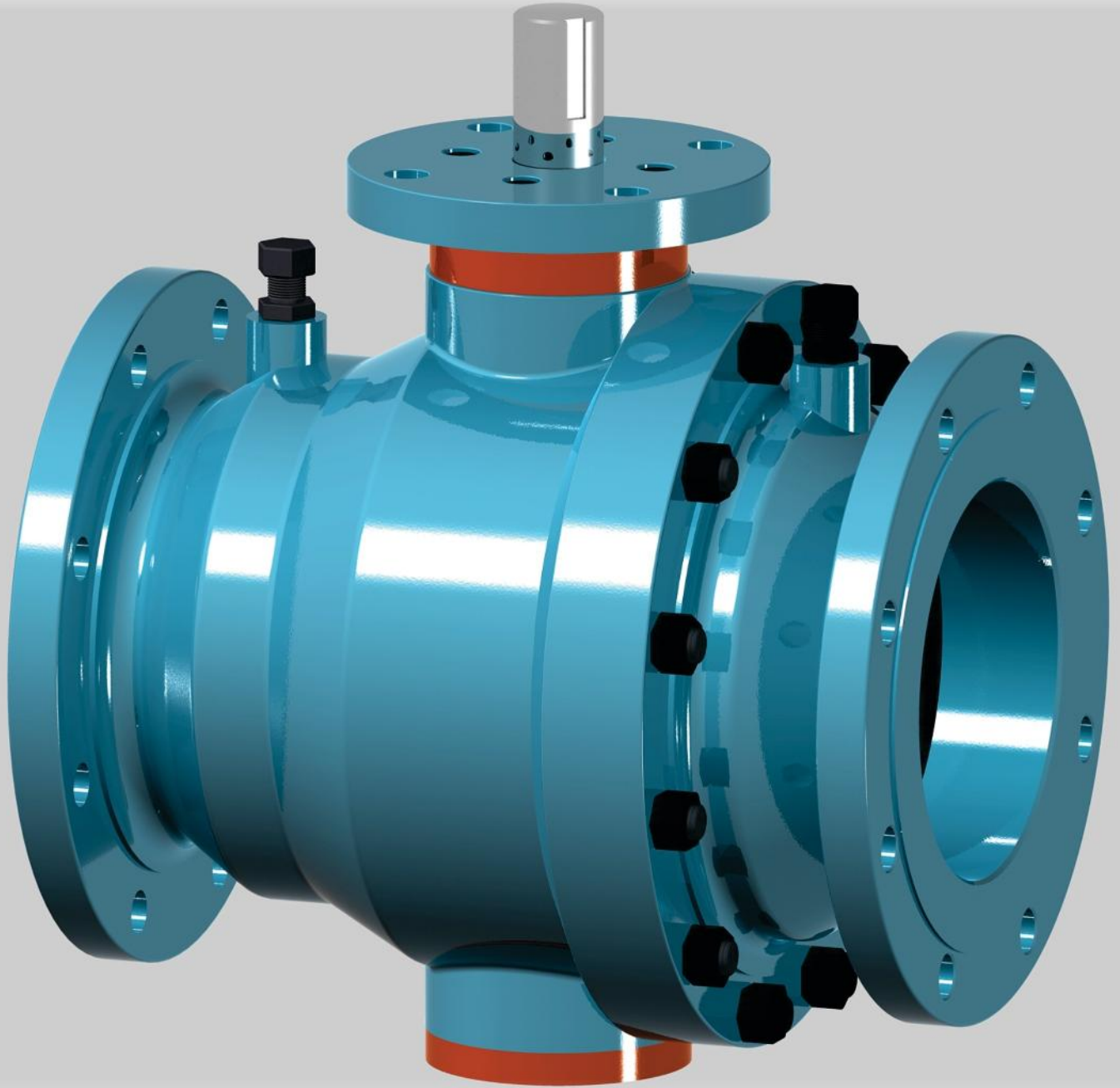


ENGINEERING RE-DEFINED



Mevada Engineering Works Pvt. Ltd.

TRUNNION MOUNTED BALL VALVE
API 6D



ISO 9001
BUREAU VERITAS
Certification



50
Years
OF SERVICE

Trunnion Mounted Ball Valve



Mevada Engineering Works Pvt. Ltd. (MEWPL) Offers Trunnion Mounted ball valve Suitable for use in Process Pipeline, Power, oil & Gas applications.



SIZE	BORE	CLASS	MODEL NO.
100-400mm 4" to 16"	REGULAR	150	TMBV-F-2-R-F-A1
	FULL	150	TMBV-F-2-F-F-A1
	REGULAR	300	TMBV-F-2-R-F-A2
	FULL	300	TMBV-F-2-F-F-A2
50-400mm 2" to 16"	REGULAR	600	TMBV-F-2-R-F-A3
	FULL	600	TMBV-F-2-F-F-A3

STANDARD COMPLIANCE

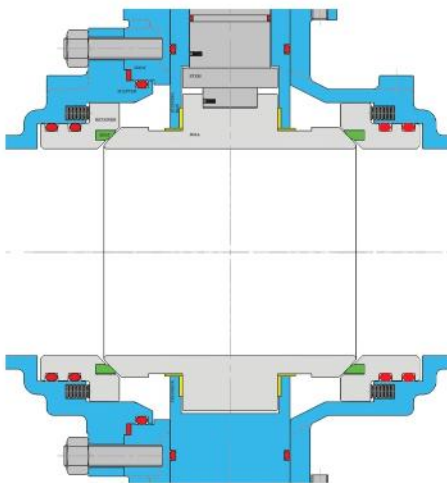
- DESIGN :- API 6D, ASME B 16.34
- PRESSURE TESTING :- API 6D /API 598
- END TO END :- ASME B 16.10
- FLANGE DIMENSIONS :- ASME B 16.5
- MOUNTING PAD :- ISO 5211
- MATERIAL CERTIFICATION :- DIN 50.049-3 1B
- NACE MR 01-75 COMPLIANT
- QUALITY SYSTEMS/CERTIFICATIONS :- ISO 9001

PRODUCT RANGE SIZE

RATING	2" (DN50)	2.1/2" (DN65)	3" (DN80)	4" (DN100)	6" (DN150)	8" (DN200)	10" (DN250)	12" (DN300)	14" (DN350)	16" (DN400)
150	-	-	-	✓	✓	✓	✓	✓	✓	✓
300	-	-	-	✓	✓	✓	✓	✓	✓	✓
600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Dimensions are not covered in this catalogue, same will be provided on request

DESIGN FEATURES



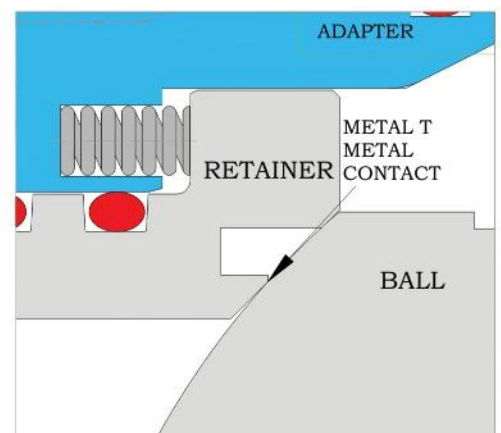
Trunnion Mounted Ball

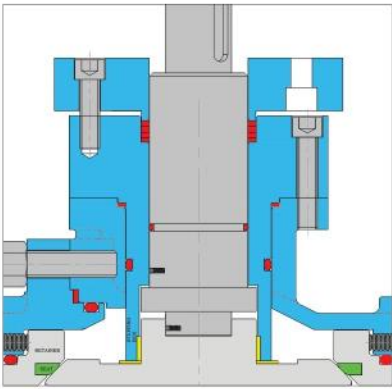
The ball is supported & the seat rings are floating free to move along flow Axis As the pressure increase the fluid pressure pushes the sat ring against the ball.

FIRE SAFE DESIGN

SATURN fire safe seat design is consist of a primary soft & secondary metal seat . A resilient material is inserted into the seat retainers soft seating in addition to metal seat. In case of fire the soft seat burn and allows spring loaded seat to ensure metal to metal sealing

Leakage from the valves stem area is prevented with multiple sealing arrangements leakage through valve body joint is also blocked by Double sealing with "O" ring seal & body gasket (Graphite) . After fire O ring burns then gland seals (stem packing) , thrust washer & body gasket prevent the external process media leakage





BLOW OUT PROOF STEM

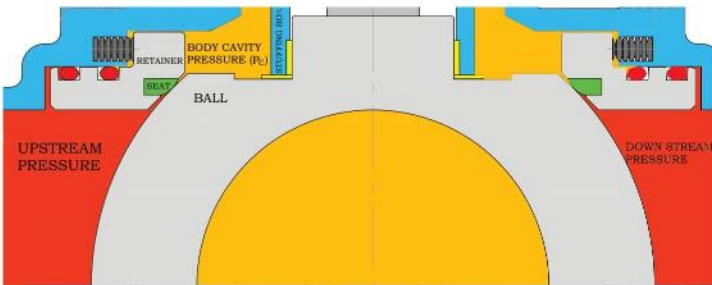
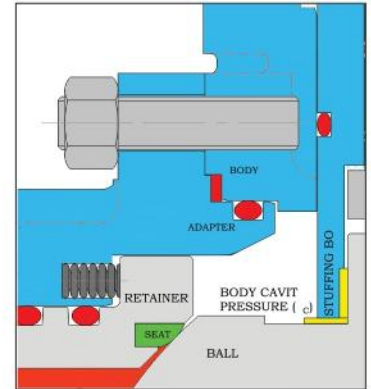
Stem has an integral collar which prevents ejection of stem under pressure or when gland packing is removed or loosened.

ANTISTATIC DEVICE

When static charge is generated due to high velocity of working fluid & gets concentrated on the ball, spring loaded ball between ball to stem & stem to body discharges static electricity.

DOUBLE BODY SEAL

Leakage from the joints the valve body is prevented by sealing with O-ring & Graphite Packing against wide spectrum of pressure/ Temperature conditions.

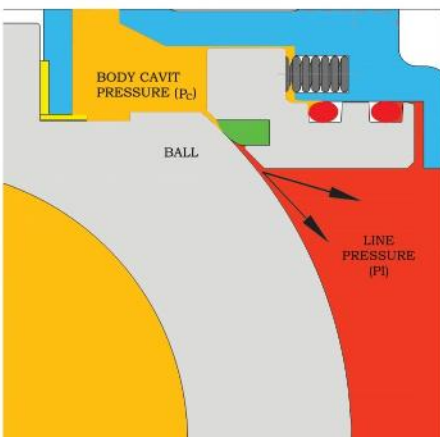
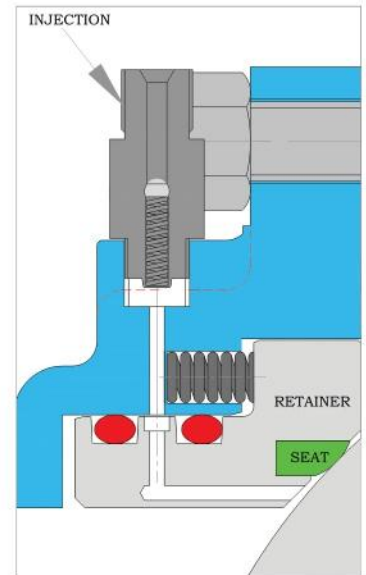


DOUBLE BLOCK & BLEED

Each ball seats shut off the line fluid independently on the upstream and downstream side, allowing double block operation. when the pressure is simultaneously applied to both sides of the ball in closed position, the valve bore and the body cavity will be isolated from each other, and the residue within the body cavity can be released through the drain plug.

EMERGENCY SEALANT INJECTION SYSTEM

For 6" & above sizes valves can be installed with a sealant injection fittings on both stem and ball seats. when the seating materials (seat sealing or stem o-ring) are damaged or decomposed by fire or other accidental causes, leakage from the seat and stem can be prevented by injection of sealant into these fittings. fitting also have check valve which withstands the line pressure



CAVITY PRESSURE RELIEF

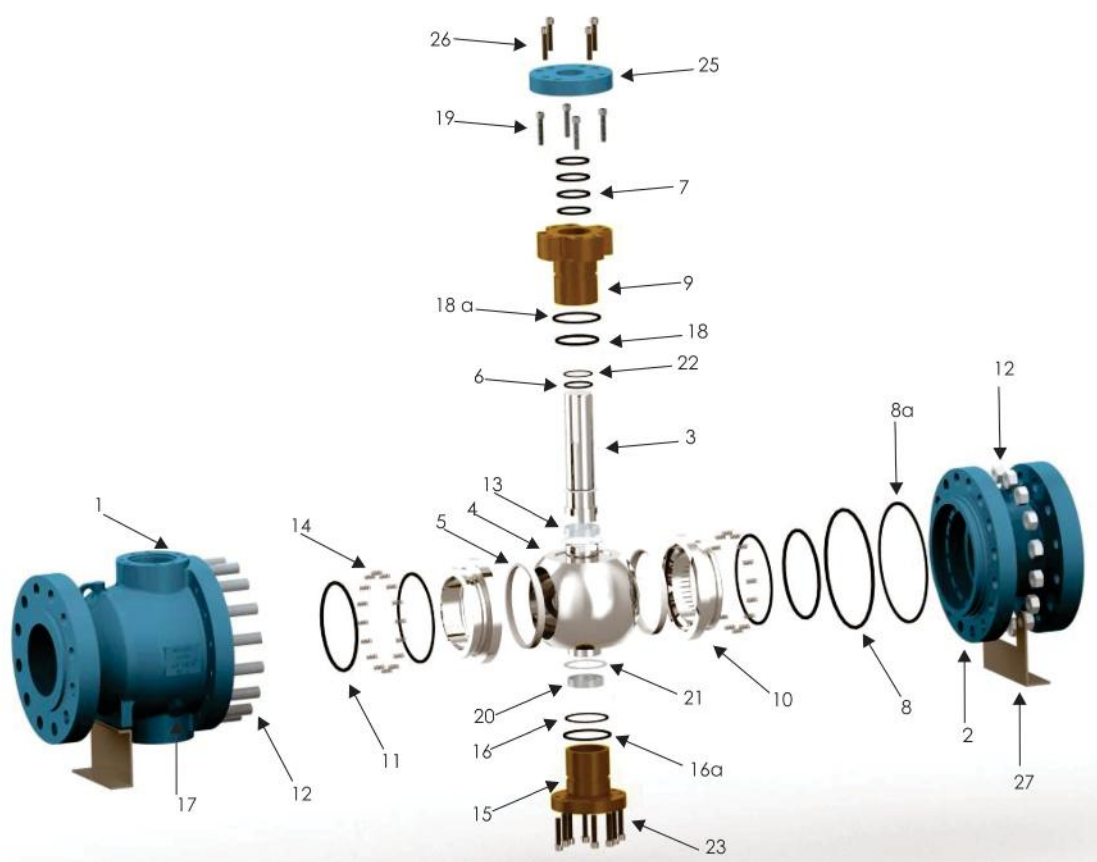
When cavity pressure (P_c) is lower than seat spring and line pressure (P_l), then contact between ball and seat ring is assured to provide a tight seal.

When cavity pressure is higher than seat spring and line pressure, the self relieving action allows that valve seat to move slightly away from the ball surface, therefore any over pressure acting in the body cavity is discharged into the line to restore the balance between the body cavity and line (either upstream or downstream)

ISO 5211 MOUNTING PAD

Ball valves are Equipped with Integral mounting pad as per ISO 5211 that facilitates easy mounting of hardware viz. Pneumatic Actuator, Gear Box, Limit Switch, Locking Arrangement, etc

Exploded View



SR.NO.	DESCRIPTION	MATERIAL				
1	BODY	A 216 GR.WCB	A 351 GR.CF8	A 351 GR.CF3	A 351 GR.CF8M	A 351 GR.CF3M
2	ADAPTOR	A 216 GR.WCB	A 351 GR.CF8	A 351 GR.CF3	A 351 GR.CF8M	A 351 GR.CF3M
3	STEM	AISI 304	AISI 304	AISI 304L	AISI 316	AISI 316L
4	BALL	A 351 GR.CF8	A 351 GR.CF8	A 351 GR.CF3	A 351 GR.CF8M	A 351 GR.CF3M
5	BALL SEAT	PTFE/CFT/GFT/NYLON/DEVLON/DELRIN/PEEK				
6	THRUST WASHER	PTFE/CFT/GFT/NYLON/DEVLON/DELRIN/PEEK				
7	GLAND SEAL RING	PTFE/CFT/GFT/GRAPHITE				
8	BODY 'O'RING	VITON				
8a	BODY SEAL RING	DIE MOLDED GRAPHITE				
9	STUFFING BOX	A 216 GR.WCB	A 351 GR.CF8	A 351 GR.CF3	A 351 GR.CF8M	A 351 GR.CF3M
10	SEAT RETAINER	A 351 GR.CF8	A 351 GR.CF8	A 351 GR.CF3	A 351 GR.CF8M	A 351 GR.CF3M
11	SEAT RETAINER 'O' RING	VITON				
12	BODY STUD WITH 1 NUT	A 193 GR.B7- A 194 GR.2H / A 193 GR.B8- A 194 GR.8 / A 193 GR.B8M- A 194 GR.8M				
13	ANTISTATIC DEVICE	AISI 316L				
14	RETAINER SPRING	INCONEL X 750				
15	TRUNNION	A 216 GR.WCB	A 351 GR.CF8	A 351 GR.CF3	A 351 GR.CF8M	A 351 GR.CF3M
16	TRUNNION 'O'RING	VITON				
16a	TRUNNION GASKET	DIE MOLDED GRAPHITE				
17	DRAIN PLUG	C.S./S.S.				
18	STUFFING BOX 'O'RING	VITON				
18a	STUFFING BOX GASKET	DIE MOLDED GRAPHITE				
19	STUFFING BOX ALLEN BOLT	HIGH TENSILE / A 193 GR.B8 / A 193 GR.B8M				
20	BALL GUIDE (DU) BEARING	STEEL BACKED PTFE				
21	BALL GUIDE (DU) THRUST WASHER	STEEL BACKED PTFE				
22	STEM 'O'RING	VITON				
23	TRUNNION ALLEN BOLT	HIGH TENSILE / A 193 GR.B8 / A 193 GR.B8M				
24	VENT VALVE	C.S./S.S.				
25	MOUNTING FLANGE	C.S./S.S.				
26	MOUNTING FLANGE ALLEN BOLT	HIGH TENSILE / A 193 GR.B8 / A 193 GR.B8M				
27	STAND	C.S./S.S.				

Design and dimensions are subject to change without prior notice



Mevada Engineering Works Pvt. Ltd.

Unit No. 1, Plot No 9, Mistry Ind. Estate, I.B. Patel Road,
Goregaon (East), Mumbai : 400063. Maharashtra, INDIA.
Telephone : +91 - 22 - 42523200
Fax : +91 - 22-42523202
Email : info@saturnvalves.com / sales@saturnvalves.com
Web : www.saturnvalves.com