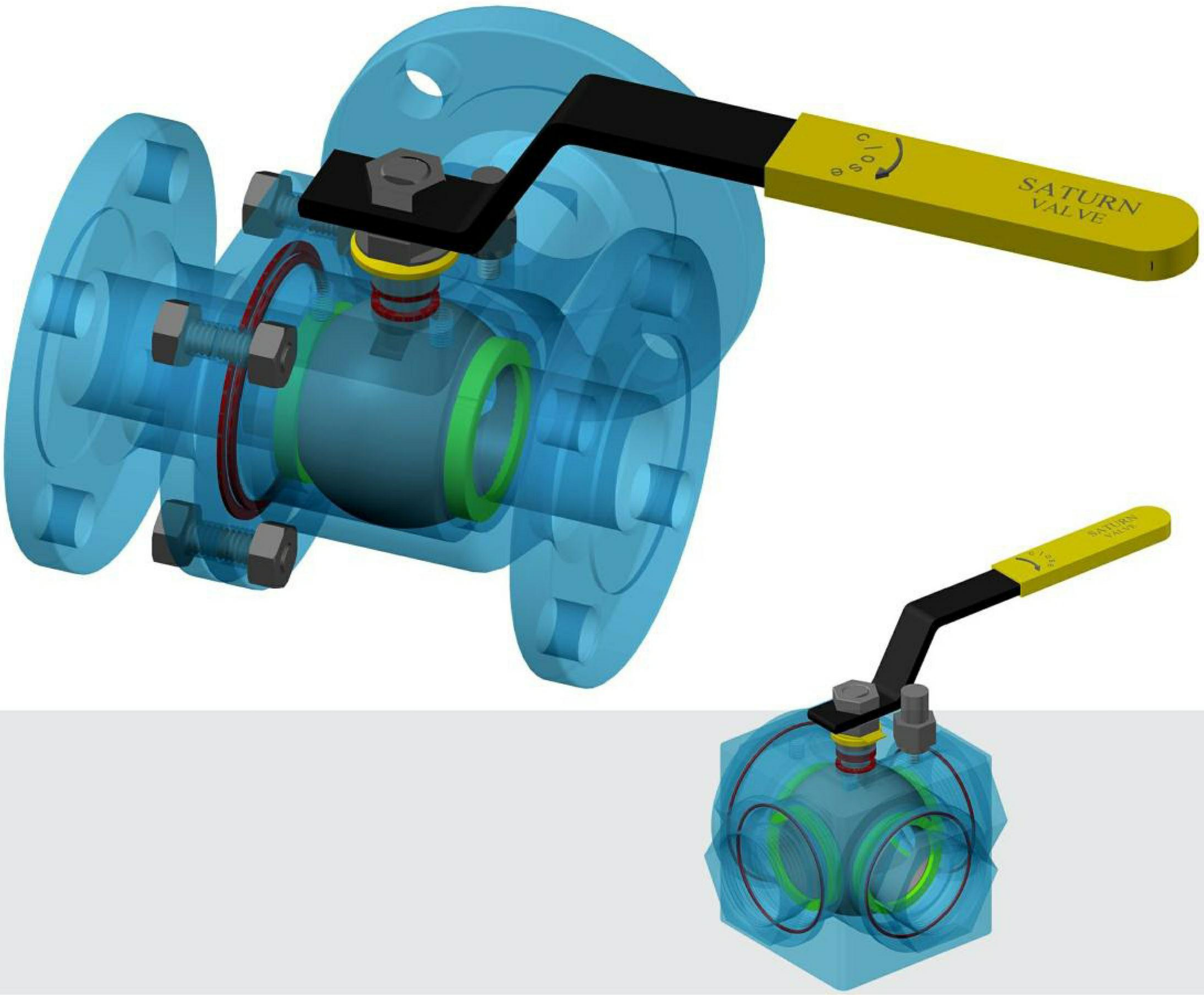
ENGINEERING RE-DEFINED

SATURN®
VALVES



THREE WAY BALL VALVE

Mevada Engineering Works Pvt. Ltd.

ISO 9001
BUREAU VERITAS
Certification

6D-0847

50 Years
OF SERVICE

Three Way Two Seated L Port Flanged Ball Valve

SATURN® VALVES

Mevada Engineering Works Pvt. Ltd.(MEWPL) Offers Three Way Two Seated L Port ball valve for diverting applications where media is passing through common inlet/outlet port & direct it through either of the two inlet/outlet ports.

SIZE	TYPE	CLASS	MODEL NO.
25-200mm 1" to 8"	Side Entry L port	150 *300	BL-L-2-F-F-A1 BL-L-2-F-F-A2

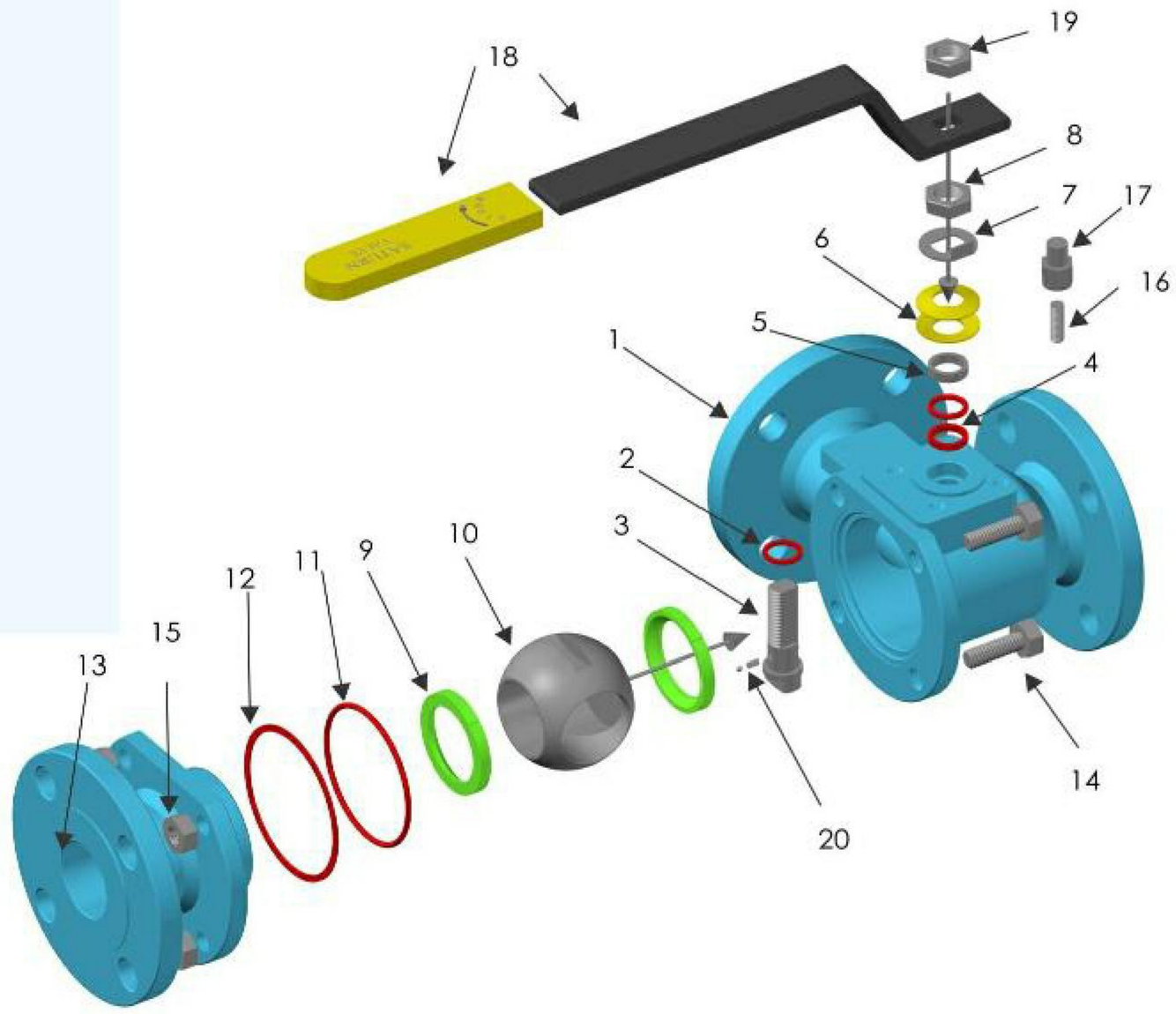
* Dimensions on request

STANDARD COMPLIANCE
- Design : ASME B 16.34, Bs EN ISO 17292
- Pressure Testing : API 598 / BS EN ISO 12266-1
- End To End : ASME B 16.10 Up to 4" & MEWPL Std. For 6" & Above
- Flange Dimension : ASME B16.5 / BS 10
- Mounting Pad : ISO 5211 / DIN 3337
- Material Certification : DIN 50.049-3.1B
- NACE : MR01-75 Compliant
- Quality Systems / Certifications : ISO 9001

DESIGN FEATURES
- Full bore, assures no pressure drop across the valve
- Blow out proof Stem
- Renewable Seat & Seals
- Double Body Seals
- Anti-static Device
- Live loaded Stem seals
- Mounting pad to DIN 3337/ISO 5211

OPTIONS
- Bottom Common Inlet/out let
- Extended handle for pipe insulation
- Extended stem to suit insulation and in-line gland leak monitoring & seal replacement"
- Padlock capabilities maximum safety

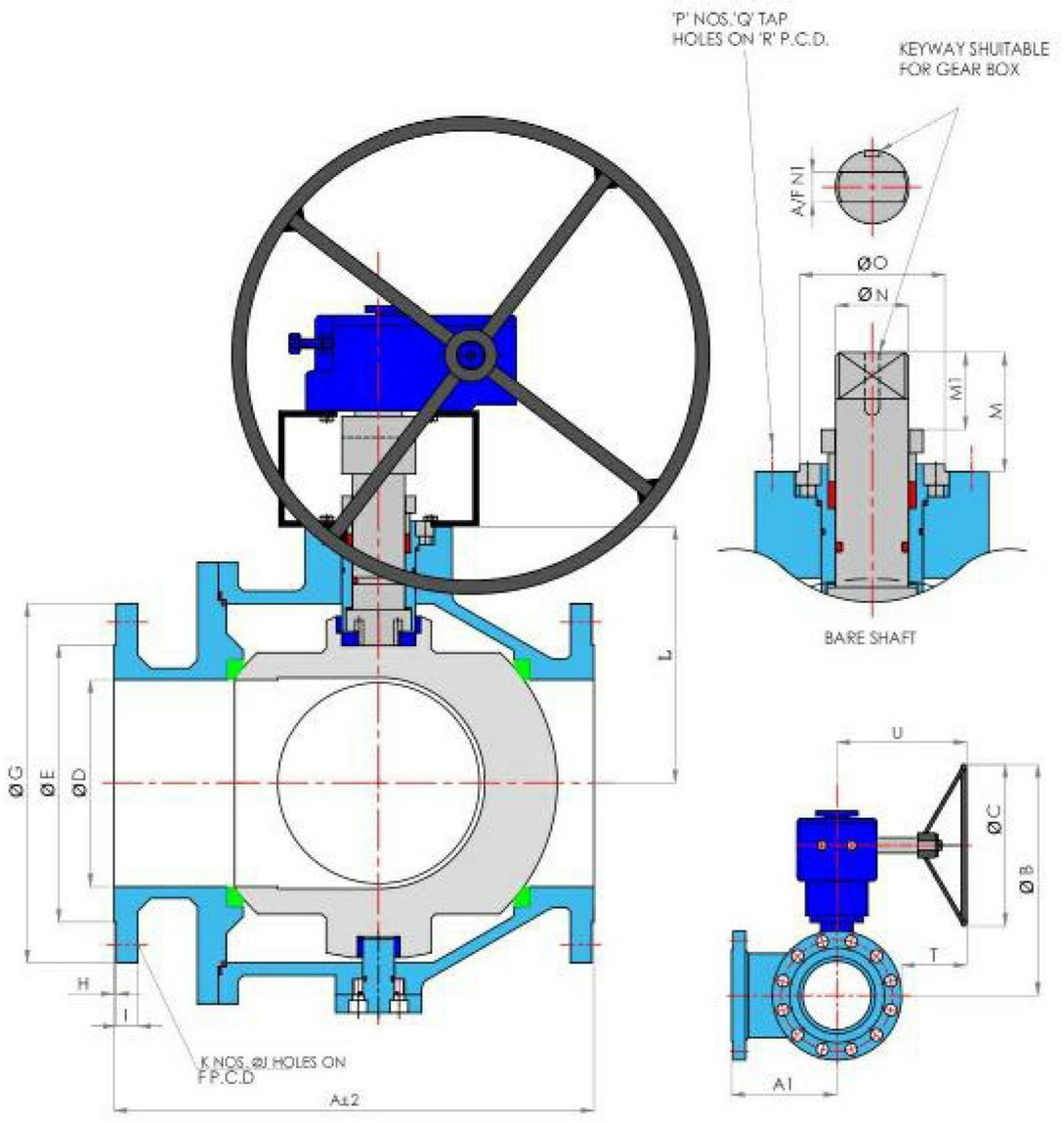
SERVICE APPLICATIONS
Process or Utilities :
Best suited for duplex strainer application for filtration purpose.



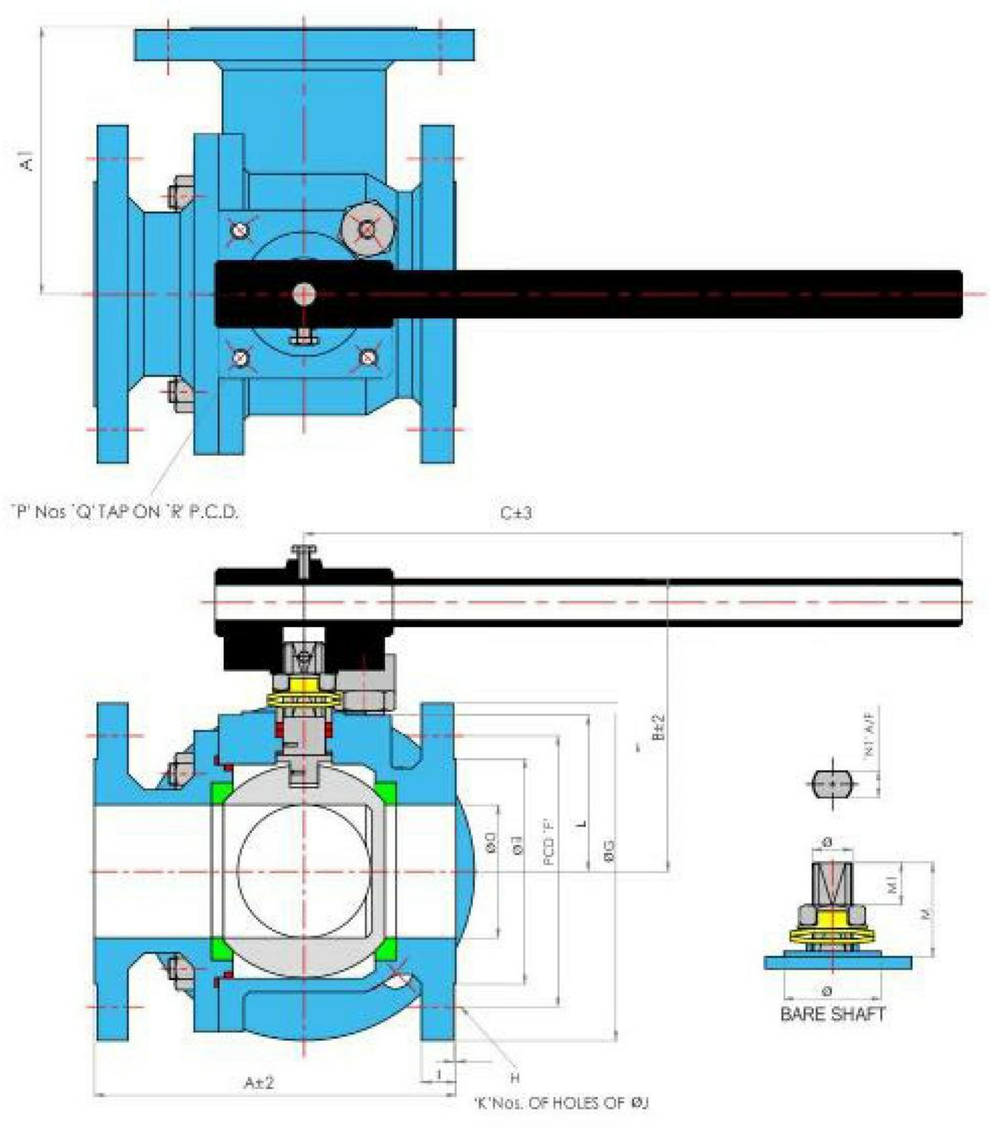
SR. NO.	DESCRIPTION	MATERIAL				
1	BODY	A 216 WCB	SS304 A 351 CF8	SS304 L A 351 CF3	SS316 A 351 CF8M	SS316 L A 351 CF3M
2	THRUST WASHER	PTFE/GFT/CFT/TFM 1600/PEEK				
3	STEM	SS304/SS316	SS304	SS304 L	SS316	SS316L
4	GLAND SEAL RING	PTFE/GFT/CFT/GRAPHITE				
5	GLAND SPACER	SS316		SS316L	SS316	SS316L
6	BELLEVILLE WASHER	SPRING STEEL ZINC PLATED/STAINLESS STEEL				
7	LOCK WASHER	CARBON STEEL ZINC PLATED/STAINLESS STEEL				
8	GLAND NUT	SS304			SS316	
9	BALL SEAT	PTFE/GFT/CFT/TFM 1600/PEEK				
10	BALL	SS304 /316 A 351 CF8/CF8M	SS304 A 351 CF8	SS304 L A 351 CF3	SS316 A 351 CF8M	SS316 L A 351 CF3M
11	BODY JOINT O' RING	PTFE				
12	BODY JOINT RING	GRAPHITE				
13	ADAPTOR	A 216 WCB	SS304 A 351 CF8	SS304 L A 351 CF3	SS316 A 351 CF8M	SS316 L A 351 CF3M
14	STUD	A 193 B7	A 193 B7 /A 193 B8/A 193 B8M			
15	NUT	A 194 2H	A 194 2H/A 194 8/A 194 8M			
16	GRUB SCREW	HIGH TENSILE ALLOY STEEL				
17	STOPPER	CARBON STEEL ZINC PLATED/STAINLESS STEEL				
18	LEVER WITH PVC SLEEVE	CARBON STEEL POWDER COATED/STAINLESS STEEL				
19	LEVER NUT	CARBON STEEL ZINC PLATED/SS304				
20	ANTISTATIC DEVICE	SS316 L				

Design and dimensions are subject to change without prior notice

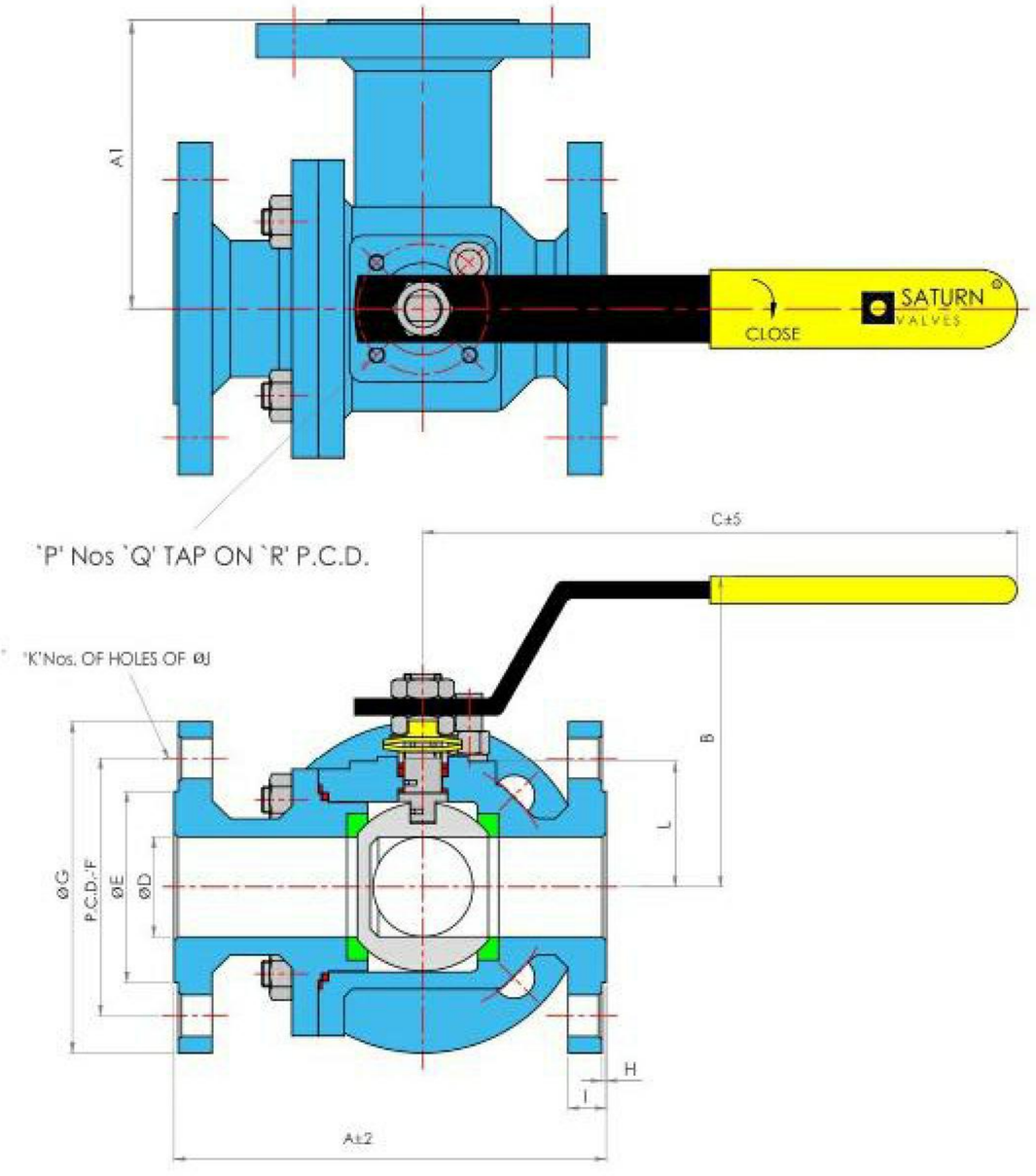
DIMENSIONS FOR Three Way Two Seated L Port Flanged Ball Valve



150mm & 200mm
GEAR OPERATED



80mm & 100mm



25mm To 50mm

FULL BORE CLASS 150

VALVE SIZE	A	A1	B	C	T	U	FLANGE DIMENSIONS								ISO PAD DETAILS									
							ØD	ØE	F P.C.D	ØG	H	I	J	K	L	M	M1	ØN	ØO	N1 A/F	P	Q	R P.C.D	ISO PAD
25	127	85	104.5	180	N/A		25.4	50.8	79.4	110	2	11.6	15.9	4	39.5	27	12	12.7	30	7.9	4	M5	42	F04
40	165	110	119	225			38.1	73	98.4	125	2	14.7	15.9	4	48	32	14	14.35	35	9.52	4	M6	50	F05
50	178	120	128	245			50.8	92.1	120.7	150	2	16.3	19	4	61	34.5	15.5	17	55	11.1	4	M8	70	F07
80	203	150	165	335			75	127	152.5	190	2	19.5	19	4	88.5	41	18	23.8	70	15.85	4	M10	102	F10
100	229	175	196	335			98	157.2	190.5	230	2	24.3	19	8	108	45.5	21	28.6	70	19	4	M10	102	F10
150 GEAR	394*	225	422	350	100	240	148	215.9	241.3	280	2	25.9	22.22	8	193.5	70	28	34.92	85	22.2	4	M12	125	F12
200 GEAR	457*	270	507	600	107.5	280	198	269.9	298.5	345	2	29	22.22	8	245	78	25	50	100	SQ36	4	M16	140	F14

ALL DIMENSIONS ARE IN MM *FACE TO FACE DIMENSIONS AS PER MFGR'S STANDARD

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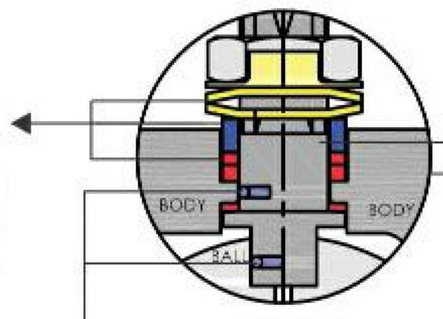
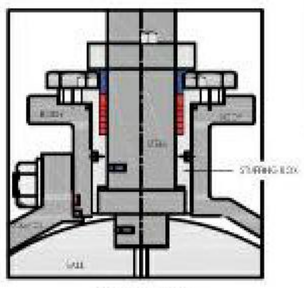
GENERAL DESIGN FEATURES

Auto Packing Compensation

Live loading is designed to provide gland load retention, compensating for expected in-service consolidation of the packing. A set of Belleville-Spring Washers are used on gland spacer to help exert a continuous compressive force on the gland spacer and therefore reduce fugitive emissions from the stem packing.



1/2" TO 4"



6" TO 10"

Blow-out Proof Stem

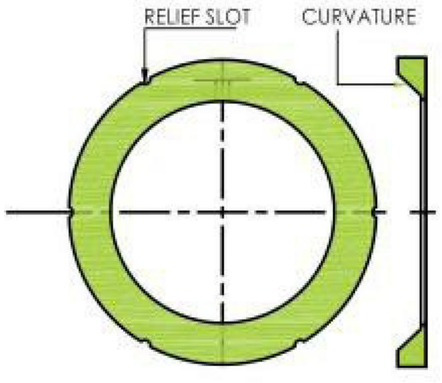
Stem lower end is integral T shaped designed to be blow-out proof. It is internally inserted and functions as the backseat for assured stem sealing at all pressures.

Anti-Static Device

When static are generated due to high velocity of fluid and concentrated on the ball, the spring-loaded pins installed on stem are provided to ensure electrical continuity throughout the ball, stem & body.
In addition to this the inter components like graphite body seal & gland seal have good electric conductivity which discharges the static.
Note : For sizes up to 2" one antistatic device is provided

Packing

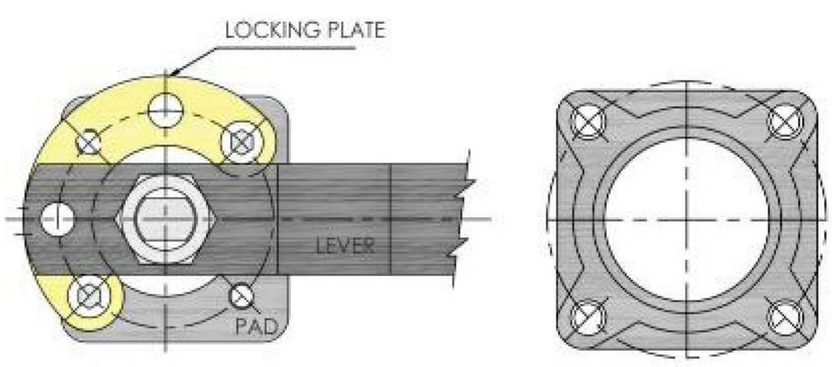
The packing set is a combination of parallel and vertical layer sealing elements, which are made of elastomer and graphite rings having less stress relaxation and low creep. With this special structure it allows for a low-friction on rotary stem, providing the stabilized seal performance for long cycle life.
For medium and low temperature service, the standard V shape PTFE packing rings are installed for low emission control.



Seat Design

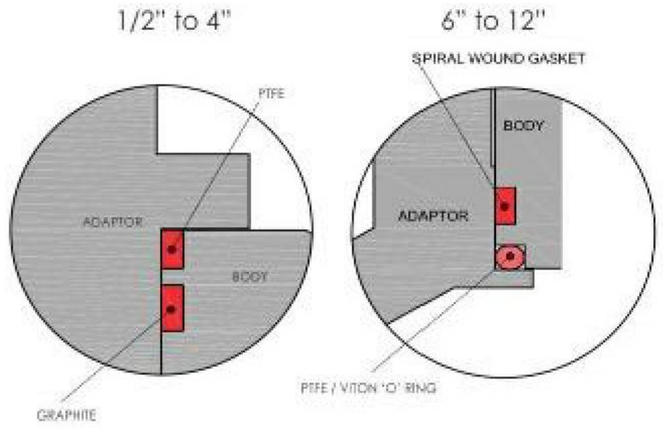
The special design seat feature relief slots or seat O.D. Clearance to relive pressure past the upstream seat. This design reduces friction, minimize seat wear and lowering operating torque. The curvature design feature minimize contact between the ball & seat when the valve is in open position, thus it prevent cold flow, lowers torque and reduced wear.

The pressure relief slots design also features automatic pressure relief from upstream in continuos pressure. During closing of the valve, the maximum surge pressure occurs, during which the downstream seat can be forced to intrude into the ball port and valve can become inoperative. The pressure relief slots prevent this potential failure. When pressure causes the upstream seat to move against the ball and ball moves to the downstream seat to effect and maintain a seal, the pressure simply leaks into the ball port through the relief slots.



ISO 5211 MOUNTING PAD

Ball Valves are Equipped with an Integral mounting pad as per ISO 5211 that facilitates easy mounting of hardware viz. pneumatic Actuator, Gear box, Limit Switch, Locking arrangement, etc.



Double Body Seals(for Two Seated Valves)

Double body sealing ensures positive body joint sealing against pipeline stresses. The inner body seal of elastomer prevents the contact of the fluid with the outer body seal of graphite having pure carbon.
For 6" & above step is provided with 'O" ring as inner body seal against pipeline stresses & joint expansions.

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SATURN® VALVES

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