QMS REGISTERED
ISO 9001:2015-3622

API Spec Q1 Registered
Q1-3467

6D-1782

SAMAMAT

SAMAMAT FLOW CONTROL L.L.C.

BALL VALVES

COMPANY PROFILE

Company Location	Company Name	SAMAMAT FLOW CONTROL L.L.C
	Company Address	Plot No 597-4904, Warehouse No 6, P.O. Box: 96047, DIP 2, Dubai, UAE
	Telephone Number	+971 4 884 2212
	Fax Number	+971 4 884 2213
	Website	www.samamatuae.com
	Contact	info@samamatuae.com
Company Information	Employees	35
	Product	Ball Valve, Gate Valve, Check Valve, Globe Valve & Flanges
	Production Size	1/2" to 42"
Company Size	Machine Shop Area	9,000 sq.ft.
	Welding Shop Area	1,200 sq.ft.
	Assembly Area	9,800 sq.ft.
	Testing Area	4,250 sq.ft.
Nearest Transportation	Airport	DXB 35.1KM, DWC 10.5KM
	Seaport	Jebel Ali 16.4KM

SAMAMAT

Samamat Flow Control L.L.C. is a UAE-based Valve-Manufacturing and Valve-Servicing Company for the process, power, and energy-related industries. Samamat has state-of-the-art manufacturing facility, producing high-quality valves to meet specific requirements of both local and international clients. This modern facility is supported by a specialized team of highly-skilled, ingenious technicians who ensure that the valves consistently deliver high performance and adherence to international standards.

Samamat has been specially organized to meet client requirements through an in-house testing facility of MT, PT, UT, Hardness, Chemical Analysis and PMI, in line with Machining, Assembling, Testing, Inspection, Welding and Packing. The facility is situated in Dubai Investment Park, Dubai, UAE.

Samamat also excels in delivering outstanding services to its customers. All team members are trained to work in a SMART, dedicated and timely basis to ensure that they keep their promise to stakeholders like customers, colleagues, suppliers, regulators, financiers, and shareholders.

Mission

To offer a wide range of products and specialized services for Valves and Flanges while ensuring that the customer's needs are met on time and according to specifications.

Vision

To become a global leader in providing innovative products and services for the Flow-Control industry, creating value in order to meet customer expectations in terms of quality, reliability and customer service.

Values

Integrity | Building Relationships
Ownership & Commitment | Teamwork | Customer Focus

Quality Policy

It is the policy of Samamat Flow Control to achieve rapid and continual improvement in performance to ensure that Design, Development and Manufacturing of all product of Samamat Flow Control meet or exceed API/PED design specifications and customer requirements.

ABOUT US

QUALITY CONTROL

Samamat Flow Control L.L.C. is designed to achieve the goals to produce high quality of valves and flanges to meet the client requirements and complying to standards with State of the Art equipment, facilities and well skilled and trained workers supported by highly qualified and certified technical engineering staff.

Samamat Flow Control L.L.C. have been well organized to perform all testing requirements, with in-house facility to ensure the quality of the product by qualified NDT Inspector and AWS Certified Welding Inspector.

Test Performed In-house are:

- Magnetic Particle Examination (MT)
- Ultrasonic Examination (UT)
- Dye Penetrant Examination (DP)
- Positive Material Identification (PMI)
- Hardness Test
- Valve Pressure Test

Samamat Flow Control' s Quality Management System has been certified in accordance with: ISO 9001:2015, API Spec. Q1: 9th Edition, Pressure Equipment Directive 2014/68/EU (PED) and our products meets design standards API 6D, API 594, API 600, API 602 & PED 2014/68/EU and Fire Safe according to API 607, API 6FA & ISO 10497.

SAMAMAT

CERTIFICATES

ISO 9001:2015

QMS REGISTERED

Certificate of Registration

APIQR® REGISTRATION NUMBER
3622

This certifies that the quality management system of

SAMAMAT FLOW CONTROL L.L.C.
96047 Ware House # 6
Plot # 597-4904 Dubai Investment Park 2
Dubai
United Arab Emirates

has been assessed by the American Petroleum Institute Quality Registrar (APIQR®) and found it to be in conformance with the following standard:

ISO 9001:2015

The scope of this registration and the approved quality management system applies to the:

Design, Development, Manufacture and Servicing of Valves and Flanges

APIQR® approves the organization's justification for excluding:

No Exclusions Identified as Applicable

Effective Date: MAY 1, 2018
Expiration Date: MAY 1, 2021
Registered Since: MAY 1, 2018

Executive Vice President

API SPEC Q1

API

REGISTRATION NO. Q1-3467

Certificate of Registration

The American Petroleum Institute certifies that the quality management system of

SAMAMAT FLOW CONTROL L.L.C.
96047 Ware House # 6
Plot # 597-4904 Dubai Investment Park 2
Dubai
United Arab Emirates

has been assessed by the American Petroleum Institute and found to be in conformance with the following:

API Specification Q1

The scope of this registration and the approved quality management system applies to the:

Design, Development, Manufacturing and Servicing of Valves and Flanges

API approves the organization's justification for excluding:

No Exclusions Identified as Applicable

Effective Date: MAY 1, 2018
Expiration Date: MAY 1, 2021
Registered Since: MAY 1, 2018

Q1
API Spec Q1 Registered

Executive Vice President

API 6D - BALL VALVES

Certificate of Authority to use the Official API Monogram

License Number: 6D-1782 ORIGINAL

The American Petroleum Institute hereby grants to:

SAMAMAT FLOW CONTROL L.L.C.
96047 Ware House # 6
Plot # 597-4904 Dubai Investment Park 2
Dubai
United Arab Emirates

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6D and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6D-1782

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Ball Valves

American Petroleum Institute

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: MAY 1, 2018
Expiration Date: MAY 1, 2021

To verify the authenticity of this license, go to www.api.org/compositelist.

Executive Vice President

API 600 – GATE VALVES

Certificate of Authority to use the Official API Monogram

License Number: 600-0283 ORIGINAL

The American Petroleum Institute hereby grants to:

SAMAMAT FLOW CONTROL L.L.C.
96047 Ware House # 6
Plot # 597-4904 Dubai Investment Park 2
Dubai
United Arab Emirates

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-600 and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 600-0283

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Bolted Bonnet Steel Gate Valves

American Petroleum Institute

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: MAY 1, 2018
Expiration Date: MAY 1, 2021

To verify the authenticity of this license, go to www.api.org/compositelist.

Executive Vice President

API 602 – FORGED GGC VALVES

Certificate of Authority to use the Official API Monogram

License Number: 602-0094 ORIGINAL

The American Petroleum Institute hereby grants to:

SAMAMAT FLOW CONTROL L.L.C.
96047 Ware House # 6
Plot # 597-4904 Dubai Investment Park 2
Dubai
United Arab Emirates

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-602 and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 602-0094

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Compact Steel Check Valves, Compact Steel Globe Valves and Compact Steel Gate Valves

American Petroleum Institute

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: MAY 1, 2018
Expiration Date: MAY 1, 2021

To verify the authenticity of this license, go to www.api.org/compositelist.

Executive Vice President

API 594 – CHECK VALVES

Certificate of Authority to use the Official API Monogram

License Number: 594-0023 ORIGINAL

The American Petroleum Institute hereby grants to:

SAMAMAT FLOW CONTROL L.L.C.
96047 Ware House # 6
Plot # 597-4904 Dubai Investment Park 2
Dubai
United Arab Emirates

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-594 and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 594-0023

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Check Valves - Type B

American Petroleum Institute

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: MAY 1, 2018
Expiration Date: MAY 1, 2021

To verify the authenticity of this license, go to www.api.org/compositelist.

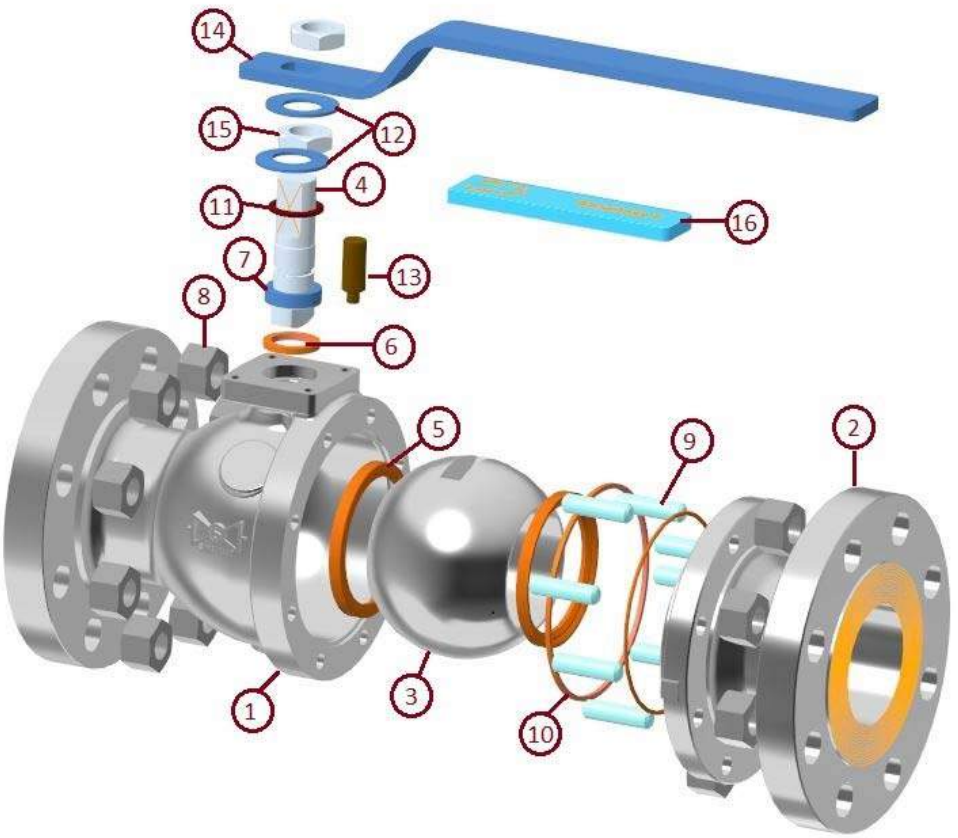
Executive Vice President

SIDE ENTRY FLOATING BALL VALVE

STANDARD FEATURE	
Construction	Two or Three Piece
Port	Reduced Bore or Full Bore
Stem Retention	Anti-blow-out stem
Antistatic Device	The ball valve design includes an electric conductive connection between the ball and body, providing the anti-static function.
Fire Safe	Soft Seated Ball Valves are designed and certified in accordance with API 607, API 6FA & ISO 10497 Fire Safe Standards.

TECHNICAL DATA	
Design	API 6D, API 608, ISO 17292
Design Pressure	ASME B16.34, ISO 17292, BS 5351
Body Wall Thickness	ASME B16.34, ASME VIII Div. 1, ISO 17292
Face to Face	ASME B16.10, API 6D
End Connection	ASME B16.5
Testing	API 6D / API 598 (Other standard upon request)
NACE	MR 0175 (on Customer request)

PART LIST OF SIDE ENTRY FLOATING BALL VALVE



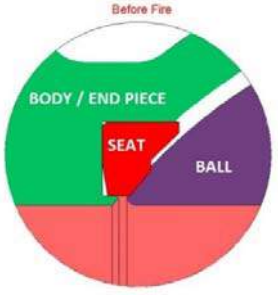
SL. No	Parts
1	Body
2	End Piece
3	Ball
4	Stem
5	Seat
6	Thrust Washer
7	Stem Packing
8	Nut

SL. No	Parts
9	Stud Bolt
10	Body Gasket
11	Stem O-ring
12	Washer
13	Stop Pin
14	Lever
15	Lever Nut
16	Lever Sleeve

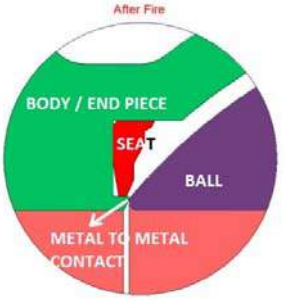
FLOATING BALL VALVE FEATURES

FIRE SAFE SEALING FEATURE

Samamat Soft Seated Ball Valves are designed and certified in accordance with API 607, API 6FA & ISO 10497 Fire Safe Standards.



BEFORE FIRE



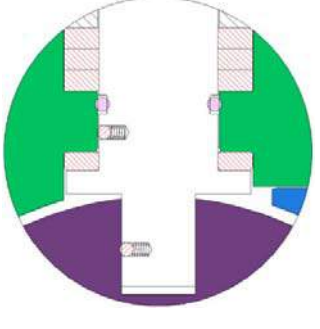
AFTER FIRE

ENLARGED VIEW OF FIRE SAFE SEALING

When Floating Non-Metal Resilient Seated Ball Valves are destroyed in fire, the upstream medium pressure pushes the ball into the downstream metal seat lip to cut off the line fluid and prevent the internal leakage ensuring a degree of tightness.

ANTI-BLOW OUT PROOF STEM & ANTI-STATIC DEVICE

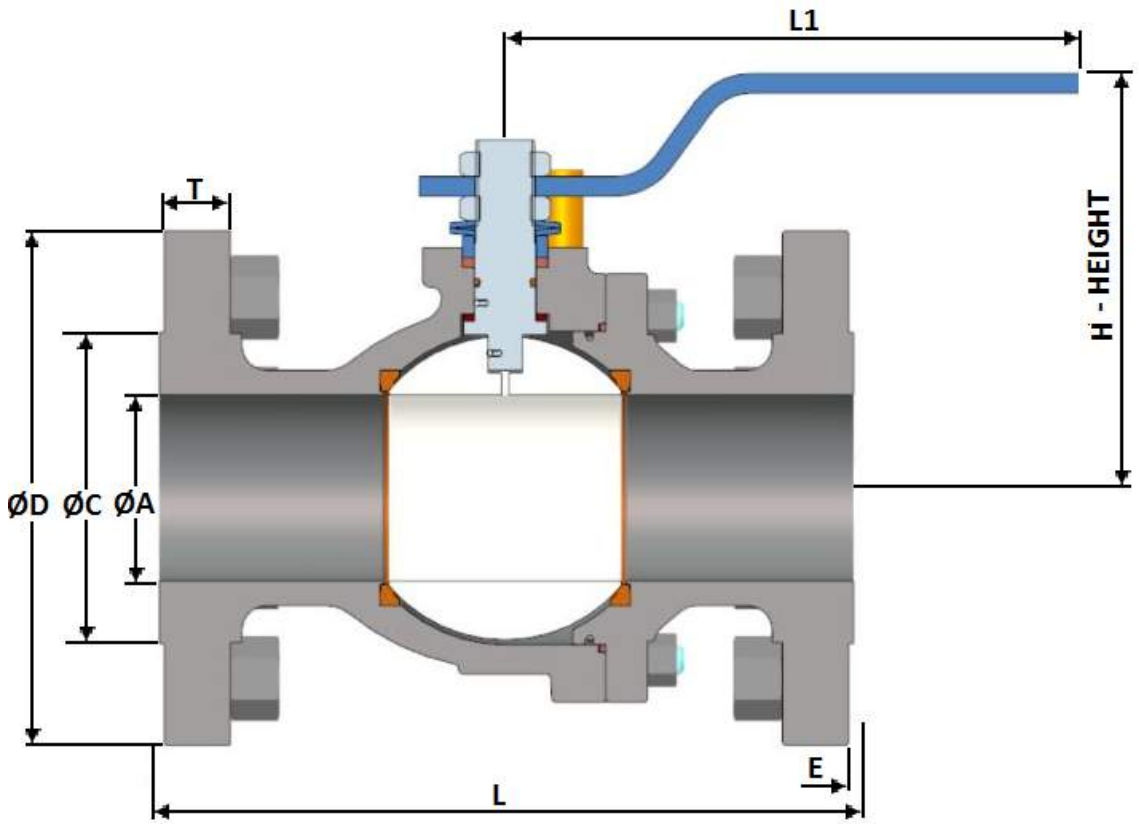
The stem is designed with Integral T-type shoulder or Stem Housing to provide blow-out proof effectively. Hence the stem will not eject out under pressure.



Enlarged View of Antistatic and Anti blow out proof design

Anti-static spring is used to ensure the electrical continuity between Ball, Stem & Body to eliminate the static charge development in the Valve. The use of Anti-static device ensures all valve metal parts are grounded.

DIMENSIONAL DETAILS OF FLOATING BALL VALVE



CLASS 150								All Dimensions are in mm
NPS	**½"**	**¾"**	**1"**	**1 ½"**	**2"**	**3"**	**4"**	**6"**
L (RF)	108	117	127	165	178	203	229	394
L (BW)	140	152	165	190	216	283	305	457
L (RTJ)	119	130	140	178	191	216	241	406
ØA	13	19	25	38	49	74	100	152
ØC	34.9	42.9	50.8	73	92.1	127	157.2	216
ØD	90	100	110	125	150	190	230	280
T (MIN.)	8	8.9	9.6	12.7	14.3	17.5	22.3	23.9
E	2	2	2	2	2	2	2	2
L1	155	160	220	290	290	390	570	1000
H	70	75	90	125	130	165	250	320
Weight (KG) (RF)	3	4	5	9	16	29	48	66
Weight (KG) (BW)	2	3	4	7.5	14	27	45	62

CLASS 300								All Dimensions are in mm
NPS	½"	¾"	1"	1 ½"	2"	3"	4"	6"
L (RF)	140	152	165	190	216	283	305	403
L (BW)	140	152	165	190	216	283	305	457
L (RTJ)	151	165	178	203	232	298	321	419
ØA	13	19	25	38	49	74	100	152
ØC	34.9	42.9	50.8	73	92.1	127	157.2	216
ØD	95	115	125	155	165	210	255	320
T (MIN.)	12.7	14.3	15.9	19.1	20.7	27	30.2	35
E	2	2	2	2	2	2	2	2
L1	155	160	225	290	290	390	570	1000
H	70	75	90	125	130	175	250	320
Weight (KG) (RF)	4	5.5	8	13	18	42	60	90
Weight (KG) (BW)	3	4	6	11	15	39	55	83

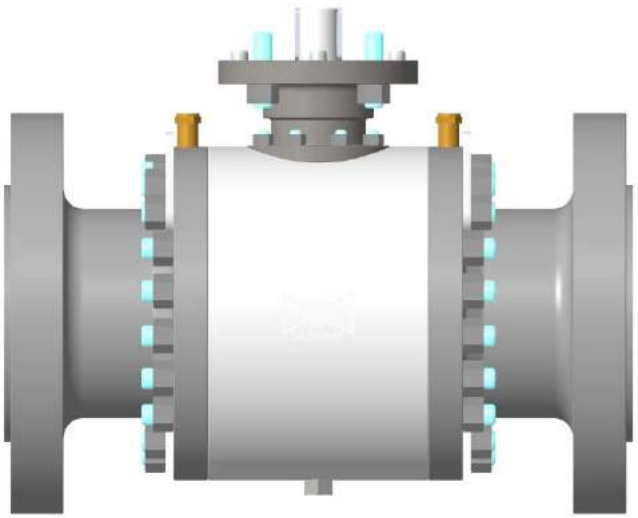
CLASS 600								All Dimensions are in mm
NPS	½"	¾"	1"	1 ½"	2"	3"	4"	6"
L (RF)	165	190	216	241	292	356	432	559
L (BW)	165	190	216	241				
L (RTJ)	165	190	216	241				
ØA	13	19	25	38	49	74	100	150
ØC	34.9	42.9	50.8	73	92.1	127	157.2	215.9
ØD	95	115	125	155	165	210	275	355
T (MIN.)	14.3	15.9	17.5	22.3	25.4	31.8	38.1	47.7
E	7	7	7	7	7	7	7	7
L1	215	225	290	290	390	575	575	1000
H	80	85	110	125	140	195	270	350
Weight (KG) (RF)	5	7	10	16	26	50	90	190
Weight (KG) (BW)	3.5	6	9	14	24	44	86	183

CLASS 900					All Dimensions are in mm
NPS	½"	¾"	1"	1 ½"	2"
L (RF)	216	229	254	305	368
L (BW)	216	229	254	305	368
ØA	13	19	25	38	51
ØC	34.9	42.9	50.8	73	92.1
ØD	120	130	150	180	215
T (MIN.)	22.3	25.4	28.6	31.8	38.1
E	7	7	7	7	7
L1	140	180	250	400	500
H	95	101	128	153	170
Weight (KG) (RF)	8	11	13	23	33
Weight (KG) (BW)	6.5	9	10	20	29

CLASS 1500	All Dimensions are in mm				
NPS	**½”**	**¾”**	**1”**	**1 ½”**	**2”**
L (RF)	216	229	254	305	368
L (BW)	216	229	254	305	368
ØA	13	19	25	38	49
ØC	34.9	42.9	50.8	73	92.1
ØD	120	130	150	180	215
T (MIN.)	22.3	25.4	28.6	31.8	38.1
E	7	7	7	7	7
L1	140	180	250	400	500
H	75	91	108	133	150
Weight (KG) (RF)	5	8	10	20	30
Weight (KG) (BW)	4	7	8	18	27

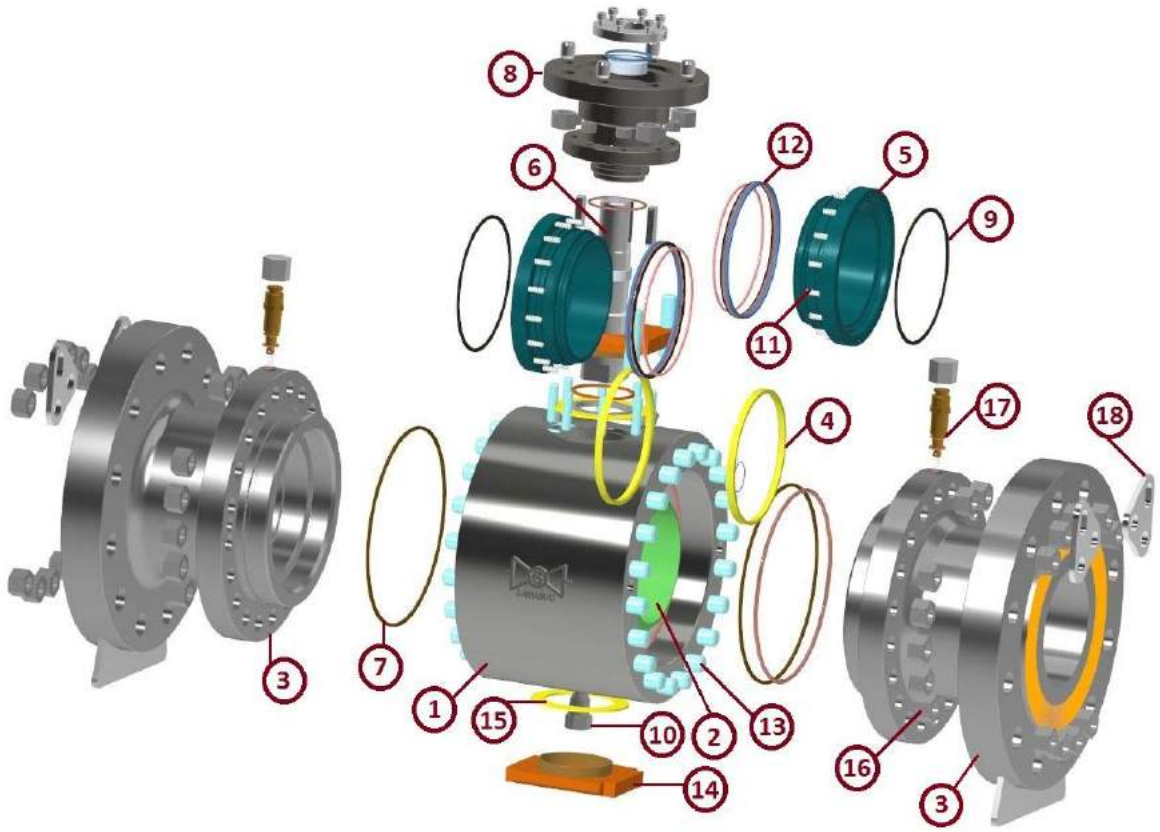
CLASS 2500	All Dimensions are in mm				
NPS	**½”**	**¾”**	**1”**	**1 ½”**	**2”**
L (RF)	264	273	308	384	451
L (BW)	264	273	308	384	451
ØA	13	19	25	38	42
ØC	34.9	42.9	50.8	73	92.1
ØD	135	140	160	205	235
T (MIN.)	30.2	31.8	35	44.5	50.9
E	7	7	7	7	7
L1	230	230	300	400	500
H	88	117	128	148	183
Weight (KG) (RF)	7.5	12	15	30	37.5
Weight (KG) (BW)	6	10	13	27	35

SIDE ENTRY TRUNNION BALL VALVE



STANDARD FEATURE	
Construction	Two or Three Piece
Port	Reduced Bore or Full Bore
Stem Retention	Anti-blow-out stem
Antistatic Device	The ball valve design includes an electric conductive connection between the ball and body, giving the anti-static function.
Pressure Relief	Auto Cavity Relief to prevent overpressure in the body cavity (self-relieving seats).
Sealing	Bi-Directional, Double Block & Bleed (DBB) with sealing in both direction. (DIB-1&2 can be provided upon request) & Single & Double Piston effect.
Drain & Vent	Drilled and threaded connection for all sizes, Flanged or Welded Drain and Vent can be provided upon request.
Stem & Seat Grease Injector Lifting Point & Support Feet	Shall be provided for Size 6'' (DN150) and above; upon request for below 6'' (DN150)
Stem Extension	upon request
Valve Operation	Lever, Gear Box or Actuator.
Fire Safe	Soft Seated Ball Valves are designed and certified in accordance with ISO 10497, API 607, API 6FA & ISO 10497 Fire Safe Standards.
TECHNICAL DATA	
Design	API 6D
Design Pressure	ASME B16.34
Body Wall Thickness	ASME B16.34, ASME VIII Div. 1
Face to Face	ASME B16.10, API 6D
End Connection	ASME B16.5, ASME B16.25
Testing	API 6D / API 598 (Other standards upon request)
NACE	MR 0175 (on Customer request)

PART LIST OF SIDE ENTRY TRUNNION BALL VALVE



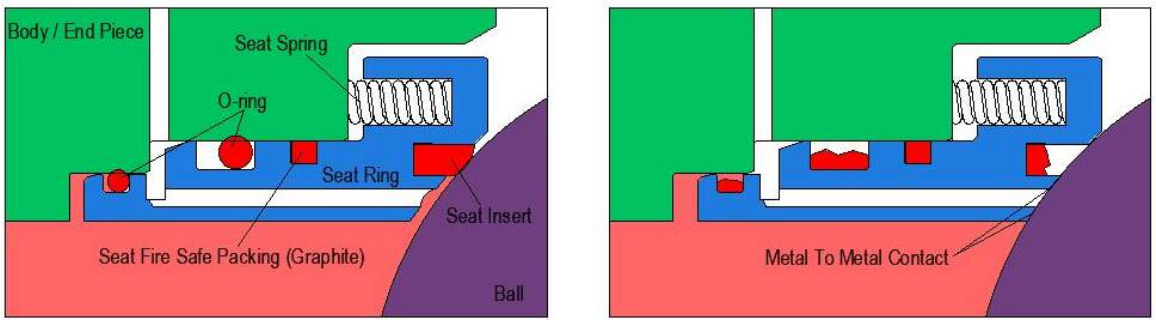
SL. No	Parts
1	Body
2	Ball
3	End Piece
4	Seat Insert
5	Seat Ring
6	Stem
7	Body Gasket
8	Stem Housing
9	Back Up Ring

SL. No	Parts
10	Drain Plug
11	Springs
12	O Ring
13	Stud Bolt
14	Trunnion Plate
15	Trunnion Gasket
16	Nuts
17	Seat Injector
18	Lifting Lug

TRUNNION BALL VALVE FEATURES

FIRE SAFE SEALING FEATURE

Samamat Soft Seated Ball Valves are designed and certified in accordance with API 607, API 6FA & ISO 10497 Fire Safe Standards.



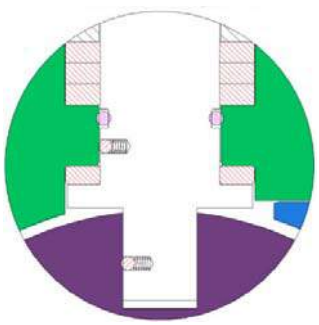
BEFORE FIRE **AFTER FIRE**

ENLARGED VIEW OF FIRE SAFE SEALING

When Trunnion Non- Metal Resilient Seated Ball Valves are destroyed in fire, the upstream medium pressure pushes the Metallic Seat Ring towards the ball hence a metal to metal sealing is made ensuring a degree of tightness.

ANTI-BLOW OUT PROOF STEM & ANTI-STATIC DEVICE

The stem is designed with Integral T-type shoulder or Stem Housing to provide blow-out proof effectively. Hence the stem will not eject out under pressure.



ENLARGED VIEW OF ANTISTATIC AND ANTI BLOW OUT PROOF DESIGN

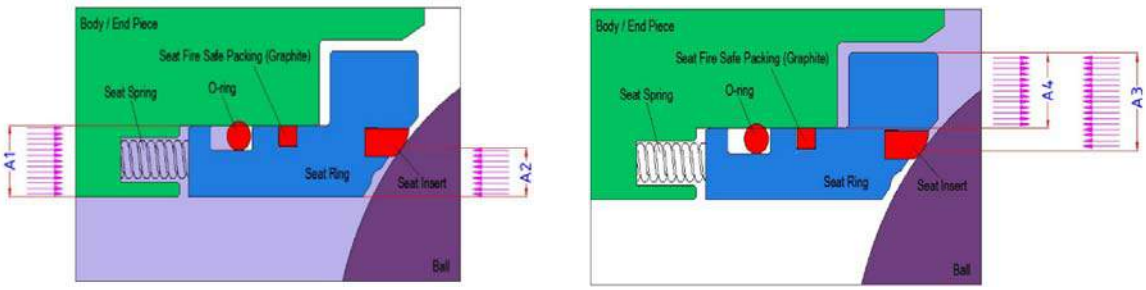
Anti-static spring is used to ensure the electrical continuity between Ball, Stem & Body to eliminate the static charge development in the Valve. The use of Anti-static device ensures all valve metal parts are grounded.

EMERGENCY SEALANT INJECTION FACILITY

Emergency Stem and Seat Injector fitting is provided through which the sealant can be injected in case of damage of the soft seals and seats.

SINGLE PISTON EFFECT FEATURE (SELF RELIEVING)

During normal operation, upstream or downstream pressure in combination with force created by the seat springs pushes the seat ring against the ball creating positive shutoff (A1>A2).



ENLARGED VIEW OF SINGLE PISTON EFFECT

With media trapped in the body cavity any increase in media pressure attempts to push the seat ring away from the ball (A3). As pressure in the cavity continues to increase a point is reached where the pressure in the cavity can now overcome the spring force and any other forces (A4).

The resultant force pushes the seat assembly away from the ball (A3>A4). Seat assemblies with this feature are referred to as “self-relieving”. Once the excess pressure is relieved the seat returns to the ball under spring action to ensure the integrity of the valve.

A valve with two single piston effect seats has a double block and bleed (DBB) design.

DOUBLE BLOCK & BLEED FEATURE

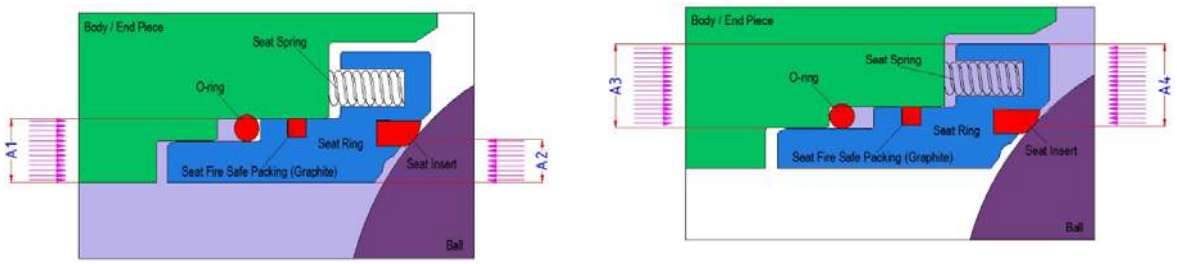
When the ball is in the closed position, each seat of the ball valve can cut off the medium independently on the upstream and downstream side to realize double block function. The body cavity is isolated from each side of the valve, the body cavity pressure could be released through the vent or drain connection.

DOUBLE PISTON EFFECT FEATURE

DOUBLE ISOLATION AND BLEED DIB-1 (BOTH SEATS BIDIRECTIONAL)

During normal operation, upstream or downstream pressure in combination with force created by the seat springs pushes the seat ring against the ball creating positive shutoff (A1>A2).

With media trapped in the body cavity any increase in media pressure acts to push the seat ring against the ball (A3). As a result, regardless of whether the pressure is from upstream, downstream or within the body cavity, the seat ring is always pushed against the ball.



ENLARGED VIEW OF DOUBLE PISTON EFFECT

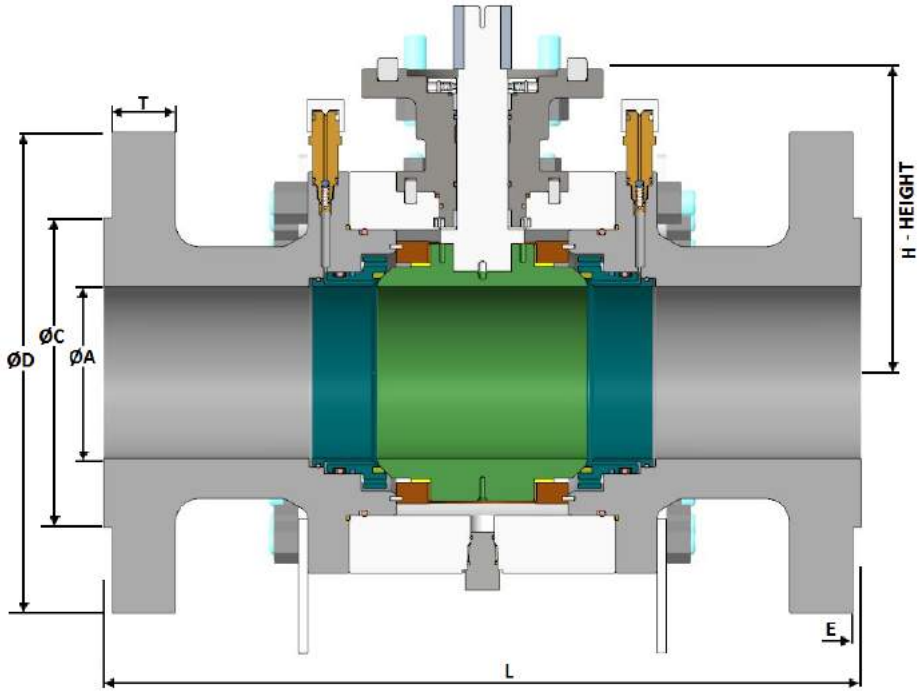
The movement of the seat ring against the ball is created due to differences in the effective pressure influenced area of the upstream and downstream side of the seat assembly (A3>A4). Seat assemblies with this feature are not self-relieving.

A valve with two double piston effect seats has a double isolation and bleed (DIB-1) design.

DOUBLE ISOLATION AND BLEED DIB-2 (ONE SEAT UNIDIRECTIONAL AND ONE SEAT BIDIRECTIONAL)

In order to overcome the Non-self-relieving function of DIB1 seats, it is possible to adopt double piston effect on one side only i.e. the valve will have one seat unidirectional and the other side bi-directional seat; hence this eliminates the need for a pressure relief valve, however it does make the valve uni-directional.

DIMENSIONAL DETAILS OF TRUNNION BALL VALVE



CLASS 150	All Dimensions are in mm								
NPS	**2”**	**3”**	**4”**	**6”**	**8”**	**10”**	**12”**	**14”**	**16”**
L (RF)	178	203	229	394	457	533	610	686	762
L (BW)	216	282	305	457	521	559	635	762	838
L (RTJ)	191	216	241	406	470	546	622	699	775
ØA	51	76	100	150	201	252	303	334	385
ØC	92.1	127	157.2	215.9	269.9	323.8	381	412.8	469.9
ØD	150	190	230	280	345	405	485	535	595
T (MIN.)	14.3	17.5	22.3	23.9	27	28.6	30.2	33.4	35
E	2	2	2	2	2	2	2	2	2
H	140	177	206	305	398	495	580	625	720
Weight (KG) (RF)	15	24	40	95	170	255	390	510	820
Weight (KG) (BW)	13	21	38	90	165	249	381	501	812

CLASS 150									All Dimensions are in mm
NPS	18”	20”	24”	26”	28”	30”	32”	34”	36”
L (RF)	864	914	1067	1143	1245	1295	1372	1473	1524
L (BW)	914	991	1143	1245	1346	1397	1524	1626	1727
L (RTJ)	876	927	1080	-	-	-	-	-	-
ØA	436	487	589	633	684	735	779	830	874
ØC	533.4	584.2	692.2	749	800	857	914	965	1022
ØD	635	700	815	870	925	985	1060	1110	1170
T (MIN.)	38.1	41.3	46.1	66.7	69.9	73.1	79.4	81	88.9
E	2	2	2	2	2	2	2	2	2
H	770	840	920	870	935	1010	1060	1077	1115
Weight (KG) (RF)	1010	1828	2100	3200	4045	4820	5490	6704	7615
Weight (KG) (BW)	1003	1820	2090	3189	4036	4809	5480	6695	7603

Note: For other sizes up on request.

CLASS 300									All Dimensions are in mm
NPS	2”	3”	4”	6”	8”	10”	12”	14”	16”
L (RF)	216	282	305	403	502	568	648	762	838
L (BW)	216	282	305	457	521	559	635	762	838
L (RTJ)	232	298	321	419	517	584	664	778	854
ØA	51	76	100	150	201	252	303	334	385
ØC	92.1	127	157.2	215.9	269.9	323.8	381	412.8	469.9
ØD	165	210	255	320	380	445	520	585	650
T (MIN.)	20.7	27	30.2	35	39.7	46.1	49.3	52.4	55.6
E	2	2	2	2	2	2	2	2	2
H	140	177	206	305	398	495	580	625	720
Weight (KG) (RF)	20	33	55	135	210	391	550	710	1250
Weight (KG) (BW)	18	30	50	129	201	389	539	698	1237

CLASS 300

All Dimensions are in mm

NPS	18”	20”	24”	26”	28”	30”	32”	34”	36”
L (RF)	914	991	1143	1245	1346	1397	1524	1626	1727
L (BW)	914	991	1143	1245	1346	1397	1524	1626	1727
L (RTJ)	930	1010	1165	1270	1372	1422	1550	1654	1756
ØA	436	487	589	633	684	735	779	830	874
ØC	533.4	584	692.2	749	800	857	914	965	1022
ØD	710	775	915	970	1035	1090	1150	1205	1270
T (MIN.)	58.8	62	68.3	77.8	84.2	90.5	96.9	100.1	103.2
E	2	2	2	2	2	2	2	2	2
H	770	840	875	900	958	1035	1087	1104	1143
Weight (KG) (RF)	1300	2180	2890	3200	4575	5590	6240	7370	8435
Weight (KG) (BW)	1289	2169	2877	3190	4563	5577	6228	7355	8420

Note: For other sizes up on request.

CLASS 600

All Dimensions are in mm

NPS	2”	3”	4”	6”	8”	10”	12”	14”	16”
L (RF)	292	356	432	559	660	787	838	889	991
L (BW)	292	356	432	559	660	787	838	889	991
L (RTJ)	295	359	435	562	664	791	841	892	994
ØA	51	76	100	150	201	252	303	334	385
ØC	92.1	127	157.2	215.2	269.9	323.8	381	412.8	469.9
ØD	165	210	275	355	420	510	560	605	685
T (MIN.)	25.4	31.8	38.1	47.7	55.6	63.5	66.7	69.9	76.2
E	7	7	7	7	7	7	7	7	7
H	145	182	211	435	530	615	680	720	840
Weight (KG) (RF)	25	50	86	250	437	735	1050	1300	1775
Weight (KG) (BW)	22	46	82	245	429	725	1040	1289	1764

CLASS 600									All Dimensions are in mm
NPS	18”	20”	24”	26”	28”	30”	32”	34”	36”
L (RF)	1092	1194	1397	1448	1549	1651	1778	1930	2083
L (BW)	1092	1194	1397	1448	1549	1651	1778	1930	2083
L (RTJ)	1095	1200	1407	1461	1562	1664	1794	1946	2099
ØA	436	487	589	633	684	735	779	830	874
ØC	533.4	584.2	692.2	749	800	857	914	965	1022
ØD	745	815	940	1015	1075	1130	1195	1245	1315
T (MIN.)	82.6	88.9	101.6	108	111.2	114.3	117.5	120.7	123.9
E	7	7	7	7	7	7	7	7	7
H	890	925	980	980	990	1035	1087	1104	1143
Weight (KG) (RF)	2100	3100	4750	5250	6060	6690	7825	8460	10650
Weight (KG) (BW)	2087	3088	4736	5239	6046	6678	7212	8449	10639

Note: For other sizes up on request.

CLASS 900							All Dimensions are in mm
NPS	2”	3”	4”	6”	8”	10”	12”
L (RF)	368	381	457	610	737	838	965
L (BW)	368	381	457	610	737	838	965
L (RTJ)	-	1140	1232	1568	-	-	-
ØA	49	74	100	150	201	252	303
ØC	92.1	127	157.2	215.9	269.9	323.8	381
ØD	215	240	290	380	470	545	610
T (MIN.)	38.1	38.1	44.5	55.6	63.5	69.9	79.4
E	7	7	7	7	7	7	7
H	193	302	332	350	365	495	600
Weight (KG) (RF)	52	87	160	385	560	820	1125
Weight (KG) (BW)	48	83	151	376	545	806	1112

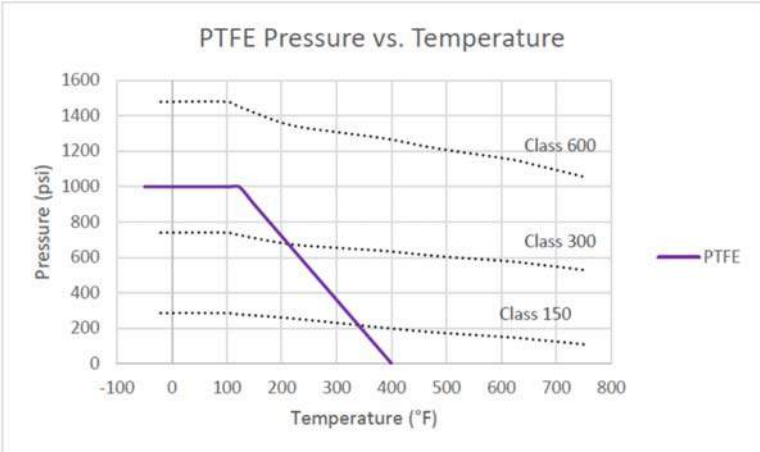
CLASS 1500							All Dimensions are in mm
NPS	**2”**	**3”**	**4”**	**6”**	**8”**	**10”**	**12”**
L (RF)	368	470	546	705	832	991	1130
L (BW)	368	470	546	705	832	991	1130
L (RTJ)	371	473	549	711	841	1000	1146
ØA	49	74	100	144	192	239	287
ØC	92.1	127	157.2	215.9	269.9	323.8	381
ØD	215	265	310	395	485	585	675
T (MIN.)	38.1	47.7	54	82.6	92.1	108	123.9
E	7	7	7	7	7	7	7
H	193	270	275	325	501	536	614
Weight (KG) (RF)	60	115	194	580	752	1195	1970
Weight (KG) (BW)	55	106	177	563	738	1181	1956

CLASS 2500							All Dimensions are in mm
NPS	**2”**	**3”**	**4”**	**6”**	**8”**	**10”**	**12”**
L (RF)	451	578	673	914	1022	1270	1422
L (BW)	451	578	673	914	1022	1270	1422
L (RTJ)	454	584	683	927	1038	1292	1445
ØA	42	62	87	131	179	223	265
ØC	92.1	127	157.2	215.9	269.9	323.8	381
ØD	235	305	356	483	550	675	760
T (MIN.)	51	67	76.5	108	127	165.5	184.2
E	7	7	7	7	7	7	7
H	230	284	303	394	488	600	872
Weight (KG) (RF)	90	200	385	778	1352	2137	3267
Weight (KG) (BW)	85	188	372	765	1338	2122	3251

SOFT SEAT OPTIONS FOR BALL VALVES

PTFE (100% VIRGIN POLYTETRAFLUOROETHYLENE)

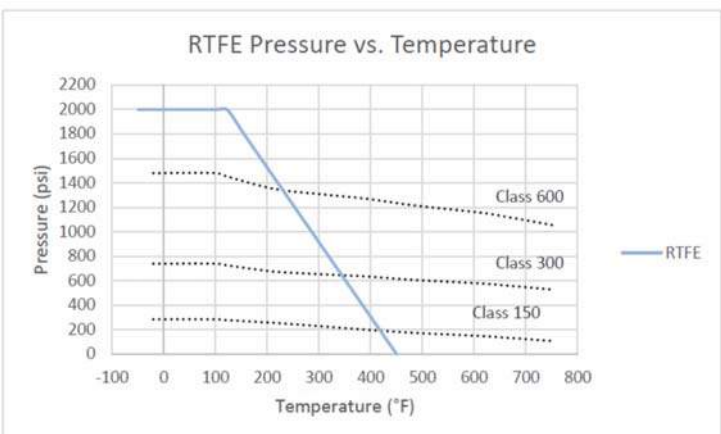
Commonly referred to as DuPont's Teflon®, PTFE is a thermoplastic fluoropolymer that consists of Carbon and Fluorine. This structure allows PTFE to be non-reactive to many chemicals and applied to severe chemical environments. PTFE is ideal for low cycle life applications. Do not use in molten alkali metal and molten Fluorine applications.



Temperature Range: -50°F to 400°F
Max Pressure at Room Temperature: 1000 psi
Color: White

RTFE (REINFORCED TEFLON®: 85% PTFE, 15% GLASS FIBER)

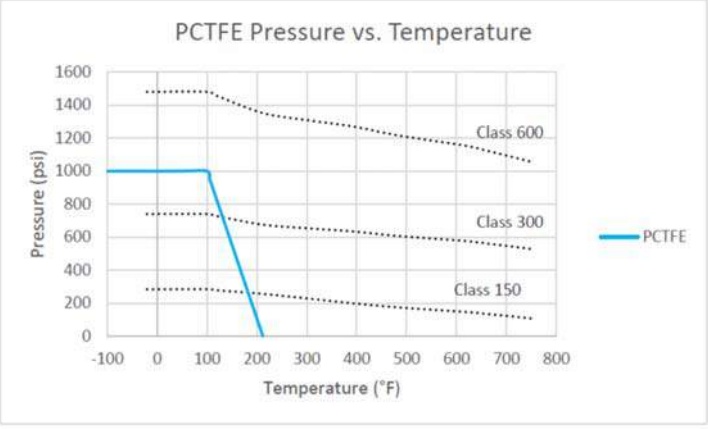
RTFE has improved wear and abrasion resistance over PTFE while maintaining its chemical compatibility. Its versatile temperature characteristics allow RTFE to be used in saturated steam applications. RTFE is the standard seat material for A-T Controls ball valves. This seat should not be used in caustic (sodium hydroxide, potassium hydroxide, etc.) service.



Temperature Range: -50°F to 450°F
Max Pressure at Room Temperature: 2000 psi
Color: Off-White

PCTFE (POLYCHLOROTRIFLUOROETHENE)

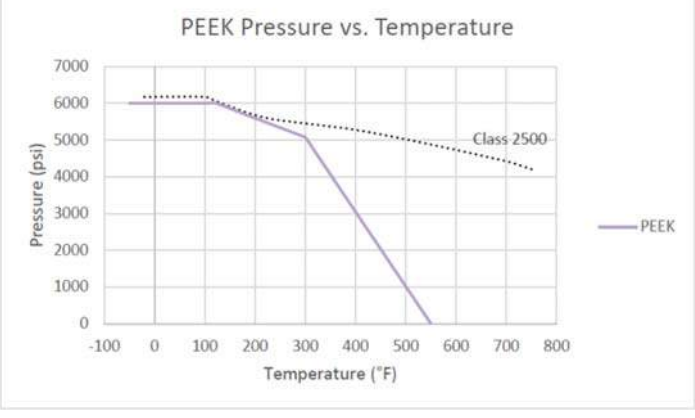
PCTFE is ideal in applications with low and cryogenic temperatures. It offers comparable chemical compatibility to PTFE, with few differences (should not be used for Ethylene Oxide applications, for example).



Temperature Range: -320°F to 212°F
Max Pressure at Room Temperature: 1000 psi
Color: Transparent White

PEEK (POLYETHER ETHER KETONE)

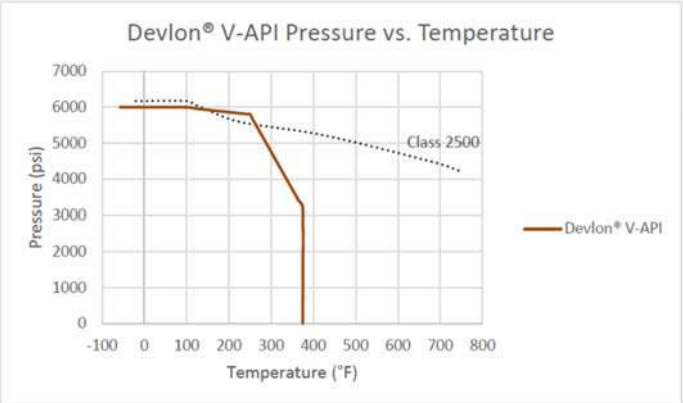
PEEK has good chemical resistance, and also high temperature tolerance. Ideal for high pressure applications. Other thermoplastics should be used for low pressure applications. Use of PEEK seats require the use of a 17-4 PH® stem. Do not use in applications prone to thermal shock, or in Chlorine and Sulfuric Acid applications.



Temperature Range: -50°F to 550°F
Max Pressure at Room Temperature: 6000 psi
Color: Beige

DEVLON® V-API

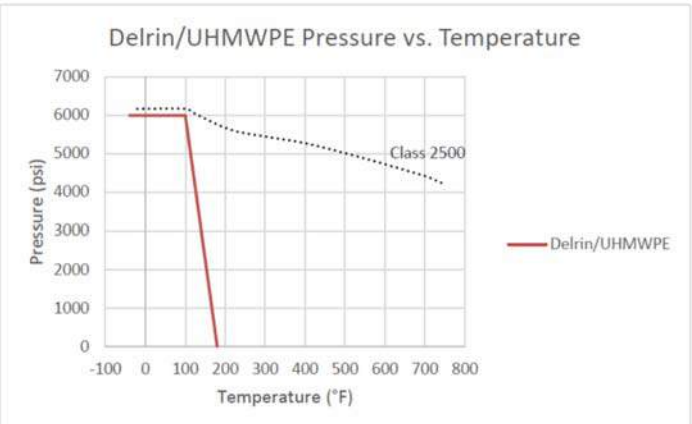
Devlon® V-API is a polyamide that has mechanical properties that are comparable to PEEK but does not share its high temperature characteristics. It is able to withstand high pressures and is standard on our Class 150/300 (larger than 12") and Class 600 trunnion ball valves. Avoid using with alcohols, amines, and acids.



Temperature Range: -58°F to 375°F
Max Pressure at Room Temperature: 6000 psi
Color: Yellow

DELRIN® (DUPONT™ POLYOXYMETHYLENE)

Delrin® has decent chemical resistance and is ideal for high pressure characteristics. Do not use in Oxygen service.



Temperature Range: -40°F to 180°F
Max Pressure at Room Temperature: 6000 psi
Color: White

ON/OFF VALVES, MOTOR OPERATED (MOV) & EMERGENCY SHUTDOWN VALVES (ESDV)

The valves manufactured in Samamat Flow controls can be supplied with all type of actuators and controls like:

- Electric Actuators for Motor Operated Valves (MOV).
- Pneumatic Actuators (Rack & Pinion & Scotch Yoke) for ESDV – Single & Double acting.
- Gas over Oil Actuators.
- Hydraulic Actuators.
- Electro-Hydraulic Actuators.

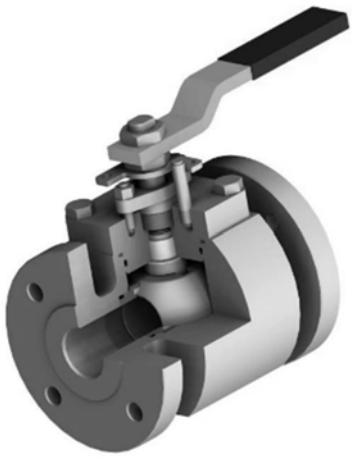
The actuators can be supplied with all kind of accessories like:

- Limit Switches
- Interlocks
- Control Panels
- Accumulators / Air Storage Tanks
- Hydraulic Powerpacks, etc.

We can supply our valves equipped with any actuator Brand as per needed by the customer and / or the Project specification.

The actuators are sized, assembled, regulated and functional tested by Samamat Flow Control L.L.C, assuring correct integration & performance of the valve & actuator.

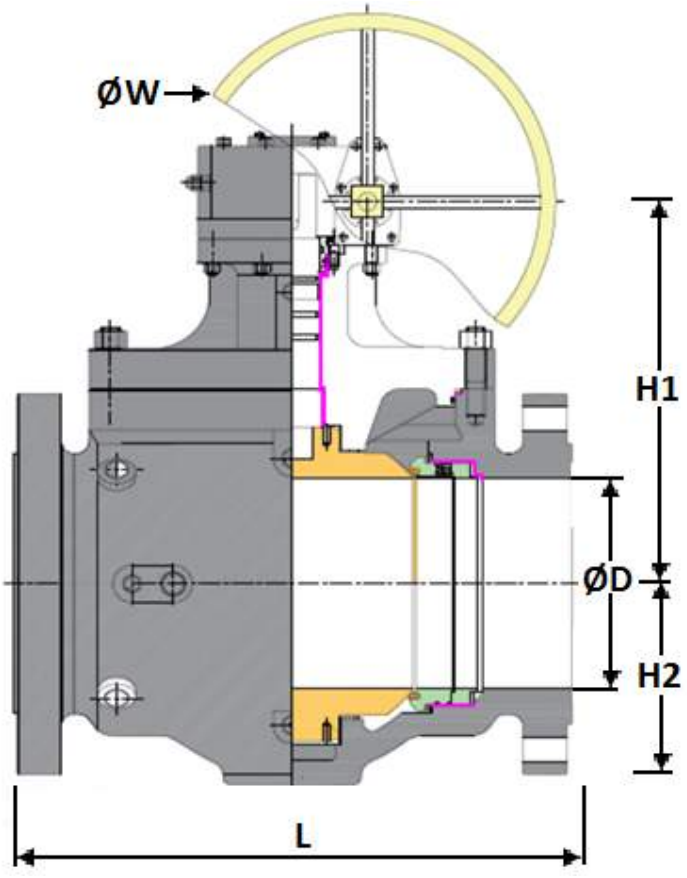
TOP ENTRY BALL VALVE



STANDARD FEATURE	
Construction	Uni-body / One Piece Symmetric Body (Cast)
Port	Reduced Bore or Full Bore (Available in Both Floating & Trunnion)
Stem Retention	Anti-blow-out stem
Antistatic Device	The ball valve design includes an electric conductive connection between the ball and body, providing the anti-static function.
Pressure Relief	Automatic Cavity Relief to prevent overpressure in the body cavity (self-relieving seats).
Sealing	Bi-Directional, Double Block & Bleed (DBB) with sealing in both direction. (DIB-1&2 can be provided upon request) & Single & Double piston effect.
Drain & Vent	Drilled and threaded connection for all sizes, Flanged or Welded Drain and Vent can be provided upon request
Stem & Seat Grease Injector Lifting Point & Support Feet	Shall be provided for Size 6'' (DN150) and above; upon request for below 6'' (DN150)
Stem Extension	Upon request
Valve Operation	Lever, Gear Box or Actuator.

TECHNICAL DATA	
Design	API 6D
Design Pressure	ASME B16.34
Body Wall Thickness	ASME B16.34, ASME VIII Div. 1
Face to Face	ASME B16.10, API 6D
End Connection	ASME B16.5, ASME B16.25
Testing	API 6D / API 598 (Other standards upon request)
NACE	MR 0175

DIMENSIONAL DETAILS OF TOP ENTRY TRUNNION BALL VALVE



CLASS 150						All Dimensions are in mm
NPS	ØB	L	H1	H2	W	Approx. Weight (Kgs)
2”	51	292	170	76	285	30
3”	76	356	210	95	285	60
4”	102	432	250	115	400	92
6”	152	559	265	140	400	190
8”	203	660	355	172	400	345
10”	254	787	385	203	600	495
12”	305	838	400	242	600	705
14”	337	889	450	267	600	859
16”	387	991	510	299	600	1020
18”	438	1092	565	381	600	1440
20”	489	1194	620	349	600	1918
24”	591	1397	680	407	700	2803

CLASS 300

All Dimensions are in mm

NPS	ØB	L	H1	H2	W	Approx. Weight (Kgs)
2”	51	292	170	83	285	31
3”	76	356	210	105	285	69
4”	102	432	250	127	400	110
6”	152	559	265	159	400	211
8”	203	660	355	191	500	376
10”	254	787	385	222	600	540
12”	305	838	400	261	600	763
14”	337	889	450	292	600	900
16”	387	991	510	324	600	1300
18”	438	1092	565	356	700	1715
20”	489	1194	620	388	700	2090
24”	591	1397	680	457	700	2220

CLASS 600

All Dimensions are in mm

NPS	ØB	L	H1	H2	W	Approx. Weight (Kgs)
2”	51	292	180	83	282	45
3”	76	356	220	105	285	80
4”	102	432	260	137	400	150
6”	152	559	275	175	400	248
8”	203	660	370	210	400	438
10”	254	787	398	254	600	701
12”	305	838	410	280	700	925

CLASS 900 / 1500

All Dimensions are in mm

NPS	ØB		L		H1		H2		W	Approx. Weight (Kgs)
	900	1500	900	1500	900	1500	900	1500		
2”	51	51	368	368	190	195	108	108	760	90
3”	76	76	381	470	230	233	121	134	400	200
4”	102	102	457	546	270	276	146	156	500	385
6”	152	146	610	705	320	324	191	197	600	778
8”	203	194	737	832	375	397	235	242	700	1352
10”	254	241	838	991	440	462	273	292	700	2137
12”	305	289	965	1130	498	493	305	337	760	3267

CLADDING

Cladding is a process that provides protection for metallic components by welding a layer of corrosion-resistant alloy to areas at risk of corrosion and wear exists. It can be applied to an entire component, or only to specific areas of concern.

PURPOSE OF CLADDING:

The main purpose of cladding on components is for corrosion resistance or wear resistance. While most components will have corrosion allowance built into their wall thickness the wastage rate can still be excessive for certain materials such as carbon steels or low alloy steels. Cladding provides a surface protection which then allows the substrate material to provide strength requirements to meet codes and standards.

BENEFITS OF CLADDING:

- Cladding offers superior corrosion and wear resistance properties extending the part life dramatically and reducing the risk of corrosion and wear exists.
- Another very important consideration is the dilution of the clad layer by the substrate material, as dilution can have a dramatic effect on the corrosion resistance of the cladding.
- And improve the life span of material and reducing the maintenance & shutdown operations in working severe conditions.
- Fully cladding a carbon steel component with alloy 625, as opposed to producing it in solid alloy 625, can reduce costs by as much as 50 to 60%.

CLADDING PROCESS & CAPACITY:

Samamat Flow Control L.L.C. has the capacity to process from 4" to 36" Flanges and Valves.
Maximum Bore Depth: up to 600mm
Weldable Bore Dia.: 800mm
Welding Speed: 340 to 450mm/min.
Deposition Rate: 1.7 to 2.5kg/hr

The process is usually applied to increase the availability work sources for Gas Metal Arc Welding (GMAW) & Gas Tungsten Arc Welding (GTAW) cladding of the walls with metal alloys that are more resistant to wear.

HOW CLADDING WILL IMPROVE QUALITY OF COMPONENTS:

- Unusual alloy castings can include sub-surface defects, Cladding the surface produces a very high-Quality layer with minimal imperfections.

- Cladding process that builds up the corrosion resistant alloy (CRA) layer of 1.5 to 3 mm on the welded parts of flange and Valve. It protects the piping system's integrity and provides a low cost and long-term solution.

- A full range of NDT provides reassurance of quality.


GLOBAL

FACILITY DETAILS

SL.NO.	MACHINE NAME	MACHINE TYPE	QUANTITY
1	Horizontal Turning Center	CNC	1 No.
2	Horizontal Turning Mill Center	CNC	1 No.
3	Vertical Machining Center	CNC	1 No.
4	Vertical Turning Lathe	CNC	1 No.
5	Surface Grinding Machine	Semi-Automatic	1 No.
6	Radial Drilling Machine	Manual	1 No.
7	Pillar Drilling Machine	Manual	1 No.
8	Heavy Duty Lathe	Manual	2 No's.
9	Medium Duty Lathe	Manual	2 No's
10	Light Duty Lathe	Manual	3 No's.
11	Universal Milling Machine	Manual	1 No.
12	Band Saw Cutting Machine	Semi-Automatic	2 No's.
13	Horizontal Boring Machine	Manual	1 No.
14	Vertical Slotting Machine	Manual	2 No's.
15	Thread Cutting Machine	Manual	2 No's.
16	Air Compressor	Automatic	1 No.
17	MIG Welding Machine	Semi-Automatic	1 No.
18	TIG Welding Machine	Manual	1 No.
19	ARC Welding Machine	Manual	1 No.
20	Vertical Hydro Testing Machine	Manual	1 No.
21	Horizontal Hydro Testing Machine	Manual	1 No.
22	Mobile Hydro Testing Machine	Manual	1 No.
23	Wedge Lapping Machine	Manual	1 No.
24	Body Lapping Machine 2" - 12"	Manual	1 No.
25	Body Lapping Machine 14" - 24"	Manual	1 No.
26	Marking Machine	Manual	1 No.
27	A Frame Crane	6 Tons	1 No.
28	A Frame Crane	3 Tons	3 No's.


OKUMA OSP-P300L-R
AUTO OPERATION
STIMULATION MIN
PRE(ADD)
PROGRAM SELECT
QUICK EDIT
TRACE/ MATERIAL
MATERIAL DRAWING
CLEAR
AUTO SCALE
SCALE DOWN

Samamat Flow Control L.L.C.
Warehouse No: 6, Plot No: 597-4904,
Dubai Investments Park 2, Dubai, U.A.E.
P.O. Box: 96047

+971 4 884 2212
+971 4 884 2213

info@samamatuae.com
www.samamatuae.com