

VATAC 3-PIECE BOLTED BALL VALVES

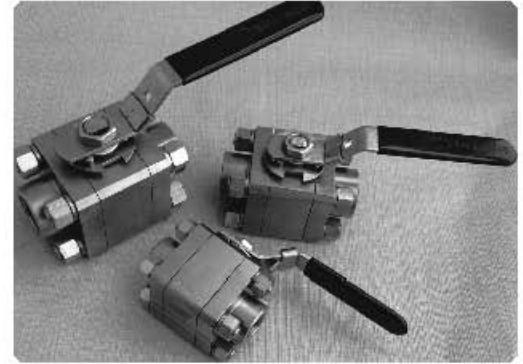
- Carbon Steel Body/Stainless Steel Trim
- All Stainless Steel Construction
- Threaded, Socket Weld or Butt Weld Ends
- 3/4"-2-1/2" Standard Port
- 1-4"-2" Full Port
- Operating Pressures to 3000 WOG

GENERAL DESIGN FEATURES

1. Internal Entry Stem
2. Handle With Slide Lock (Optional)
3. ISO 5211 Direct Mount
Actuator Mounting Pad (Optional)
4. Live Loaded High Cycle,
TFE V-Ring Style Packing
5. Body Seals For High Temp &
API 607 Applications
6. Integral Fire Lip
7. Threaded, Socket Weld & Butt Weld
End Connections Available
8. Full ANSI Class 600 Wall Thicknesses

AVAILABLE SEAT MATERIALS

- Mineral Filled PTFE
- PEEK
- Delrin



SPECIFICATIONS

Available End Connections	MSS SP-110	ANSI B16.34
Female NPTF	ANSI B1.20.3	API 598
Socket Weld	ANSI B16.11	API 607
Butt Weld (Specify Pipe Schedule)	ANSI B16.25	

● Size

1/4-2-1/2	Standard Port
3/4-2	Full Port

● Body Material

Carbon Steel, WCB
Stainless Steel, CF8/CF8M

● Construction

Bolted Cover or Unibody

● Port

Standard Port
Full Port

● End Connection

NPT
Socket Weld
Butt Weld
NPT x Socket Weld
NPT x Butt Weld

● Seat & Seal Material

Standard Options	
Seat	Packing/Body Seal
Mineral Filled	PTFE
PEEK	Graphite
Delrin	PTFE / PTFE
Firesafe Options	
Mineral Filled PTFE	Graphite

● Ball & Stem

316 Stainless Steel (17-4 Stem)

● Packing

PTFE, Standard Trim
Graphite, API 607 4th Edition Firesafe

● Configuration

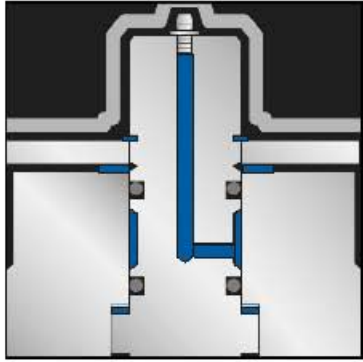
Live Loaded Stem

● Options

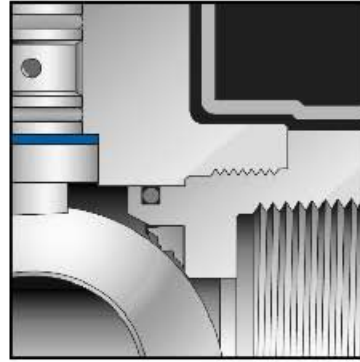
Lever Locking Handle
Oval Locking Handle
Extended Locking
Extended Oval Locking
TFE Coated 316SS
Vented Ball
Carbon Bolting
Oxygen Cleaned
Grounded Ball & Stem



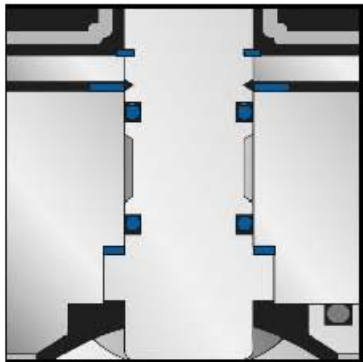
VATAC THREADED, WELDED & GROOVED-END FLOATING BALL VALVES GENERAL DESIGN FEATURES



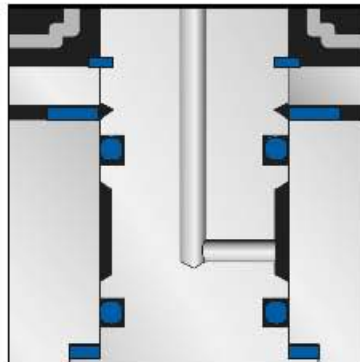
STEM JOURNAL LUBRICATION
Valves that utilize an external stem lubrication fitting also incorporate a vented weather seal which allows safe pressure relief in the event of excessive grease gun pressure.



FIRESAFE DESIGN/ CERTIFIED
Upon destruction of the seat (in the event of a fire) the ball floats downstream to provide metal-to-metal contact behind the seat area. Pressure assisted shut-off prevents fire feeding leakage.



BLOWOUT PROOF STEM
Internally inserted "back-seated" stem assures fire safety and blowout prevention by retaining stem in the valve at all pressures.



WEATHER SEAL
Weather seals are utilized in most Vatac Ball Valves to effectively eliminate stem journal corrosion, abrasion and galling. (Optional)

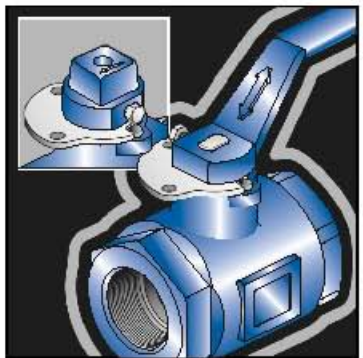


FIGHT THE COST OF CORROSION
Prolong the life of your Valves by reducing corrosion with anti-corrosive Coating. Consult factory for more information.

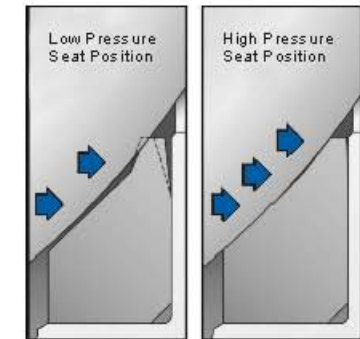


SECURE YOUR INVESTMENT
A majority of the Threaded/ Grooved Ball Valves come standard with an integral locking ear to prevent unauthorized operations.

*Padlocks not included.



STANDARD HANDLE, STEM WRENCH AREA
Vatac Ball Valves are equipped with durable handles as a standard feature. Valves can also be provided with square nut assemblies. The heavy-duty flattened stem design allows usage of standard wrenches when necessary to conserve space and prevent accidental operation

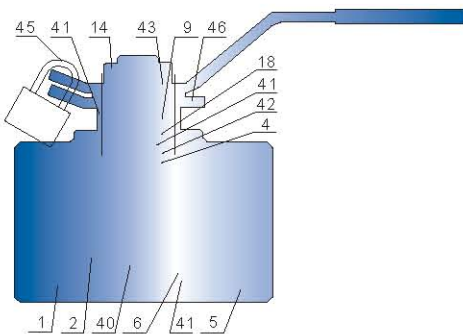


LOW PRESSURE SEAT POSITION
An integral seat lip provides positive low pressure "bubble-tight" sealing of ball and seat. The assembly preload insures constant surface load of ball to seat with minimal operating torque.

HIGH PRESSURE SEAT POSITION
The Vatac seat lip deflects slightly at higher pressures to ensure full seat-to-ball contact. The seat's "memory-action" provides bubble-tight sealing at low and high pressures. This "self compensation for swell" feature results in low torque and long life operation.

2PCS FORGED STEEL BALL VALVES

- Internal Entry Stem
- Handle With Slide Lock (Optional)
- ISO 5211 DirectMount
Actuator Mounting Pad (Optional)
- Body Seals For High Temp & API 607 Applications
- Forged Carbon or Stainless Steel Floating Ball Valve
- Two Piece Split Body, Available in Standard or Full Port
- Ends Connections in Threaded NPT, Socket Weld, Butt-weld, NPT x S.W, NPT x B.W
- Designed & Manufactured to BS5351, MSS-SP-118

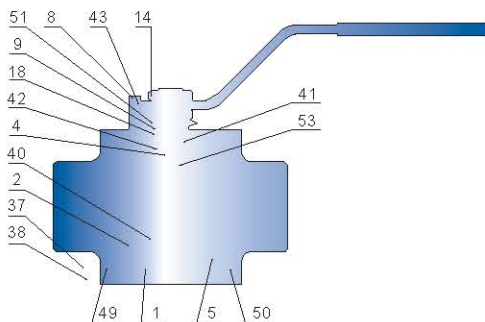


MAIN PART MATERIALS LIST

NO.	Part name	A105/F6a	LF2/304	F304(L) /304(L)	F316 (L) /316(L)	F51/F51
1	Body	A105	LF2	F304(L)	F316(L)	F51
2	Seat	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK
4	Stem	410	304	304(L)	316(L)	F51
5	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
6	Bonnet	A105	LF2	F304	F316	F51
9	Gland	410	304	304(L)	316(L)	F51
11	Gland Flange	A105	LF2	F304	F316	F51
14	Flat nut	8	8	8	8M	8M
18	Packing	PTFE	PTFE	PTFE	PTFE	PTFE
40	Ball	F6	F304	F304(L)	F316(L)	F51
41	O-ring	VITON	VITON	VITON	VITON	VITON
42	Back seat gasket	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK
43	Wrench	ANSI 10 25	ANSI 10 25	ANSI 10 25	ANSI 10 25	ANSI 10 25
44	Screw	B8	B8	B8	B8M	B8M
45	Lock	Finished product	Finished product	Finished product	Finished product	Finished product
46	Locator	ANSI 10 25	ANSI 10 25	ANSI 10 25	ANSI 10 25	ANSI 10 25

3PCS FORGED STEEL BALL VALVES

- Internal Entry Stem
- Handle With Slide Lock (Optional)
- ISO 5211 DirectMount
Actuator Mounting Pad (Optional)
- Body Seals For High Temp & API 607 Applications
- Forged Carbon or Stainless Steel Floating Ball Valve
- Three Piece Bolted Body, Available in Standard or Full Port
- Ends Connections in Threaded NPT, Socket Weld, Butt-weld, NPT x S.W, NPT x B.W
- Designed & Manufactured to BS5351, MSS-SP-118



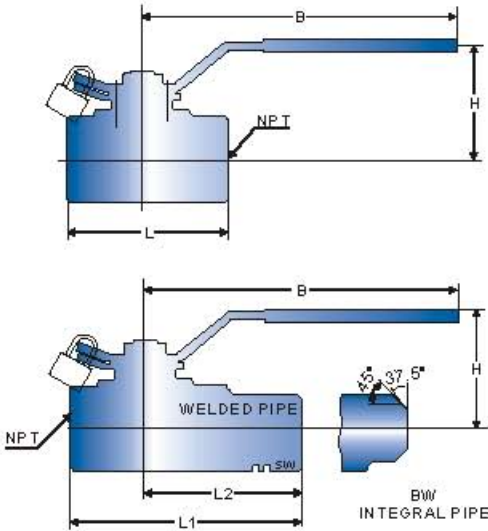
MAIN PART MATERIALS LIST

NO.	Part name	A105/F6a	LF2/304	F304(L) /304(L)	F316 (L) /316(L)	F51/F51
1	Body	A105	LF2	F304(L)	F316(L)	F51
2	Seat	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK
4	Stem	410	304	304(L)	316(L)	F51
5	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
8	Pin	25	304	304	304	304
9	Gland	410	304	304(L)	316(L)	F51
14	Flat nut	8	8	8	8M	8M
18	Packing	PTFE	PTFE	PTFE	PTFE	PTFE
37	Bolt	B7	B8	B8	B8M	B8M
38	Nut	2H	8	8	8M	8M
40	Ball	F6	F304	F304(L)	F316(L)	F51
41	O-ring	VITON	VITON	VITON	VITON	VITON
42	Back seat gasket	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK	RPTFE & PEEK
43	Wrench	ANSI 10 25	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
49	Left bonnet	A105	LF2	F304	F316	F51
50	Right bonnet	A105	LF2	F304	F316	F51
51	Butterfly spring	65Mn	65Mn	304	304	304
52	Elastic washer	65Mn	65Mn	304	304	304
53	Anti-static spring	304	304	304	316L	316L

TWO PIECE FORGED BALL VALVE

- Investment Forged Two Piece Split body, Free Floating Ball
- Full Port or Reduced Bore, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO5211 Mounting Pad
- Designed to ASME B16.34, BS5351

Face to Face	VATAC Standard
Threaded Ends	Rc to BS21, NPT to ASME B1.20.1
Socketed Ends	ASME B16.11
Class	ASME CL1500/2500



CLASS 1500 DIMENSION

SIZE (in)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	Unit mm
L1	80	80	95	115	125	135	155	155	
L2	121	121	130	136	140	148	160	175	
B	160	160	160	170	230	230	280	280	
H	60	60	65	85	105	105	125		
d	6	9	13	19	25	32	38	49	
W.T(kg)	1.2	1.5	2.5	3.7	5.8		11.5	13.7	

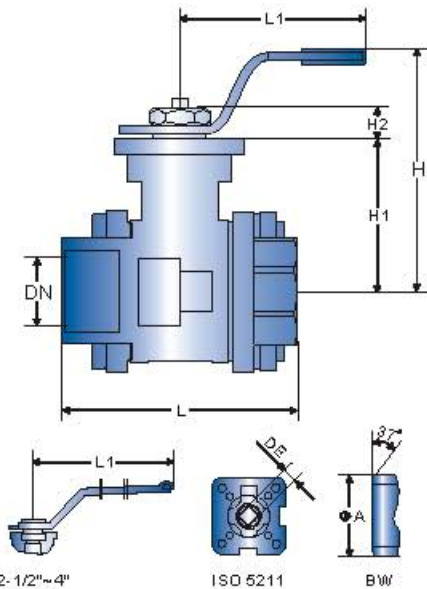
CLASS 2500 DIMENSION

SIZE (in)	1/2	3/4	1	1 1/2	2	Unit mm
L1	125	135	155	155		
L2	136	140	148	175		
B	230	230	280	280	130	
H	90	110	125			
d	13	19	25	38	42	
W.T(kg)	2.7	4.1	6.3	12	15	

THREE PIECE FORGED BALL VALVE

- Investment Casting Three Piece Body Free Floating Ball
- Full Port or Reduced Bore, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO5211 Mounting Pad
- Designed to ASME B16.34

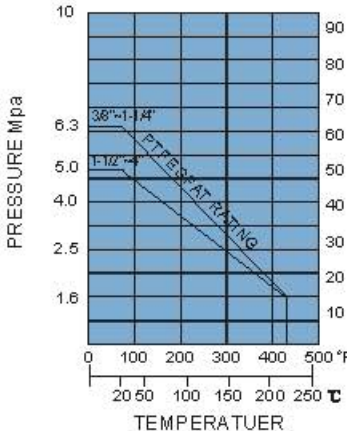
Face to Face	VATAC Standard
Threaded Ends	Rc to BS21, NPT to ASME B1.20.1
Socketed Ends	ASME B16.11
Class	1000/2000/3000CWP



1000/2000/3000CWP DIMENSION

SIZE (in)	A	L	L1	E	H	H1	H2	ISO5211	Unit mm
3/8"	18	60	120	9	63	32	32	F03/F04	
1/2"	22.5	73.5	120	9	70	40	40	F03/F04	
3/4"	27	80	137	11	80	50	50	F04/F05	
1"	34.5	90	137	11	90	57	57	F04/F05	
1-1/4"	43	110	187	11	95	61	61	F04/F05	
1-1/2"	49	120	187	11	105	76	76	F04/F05	
2"	62	140	187	14	112	84	84	F05/F07	
2-1/2"	76.5	185	315	17	174	100	100	F07/F10	
3"	92	206	315	17	185	111	111	F07/F10	
4"	115.5	240	315	19	205	130	130	F07/F10	

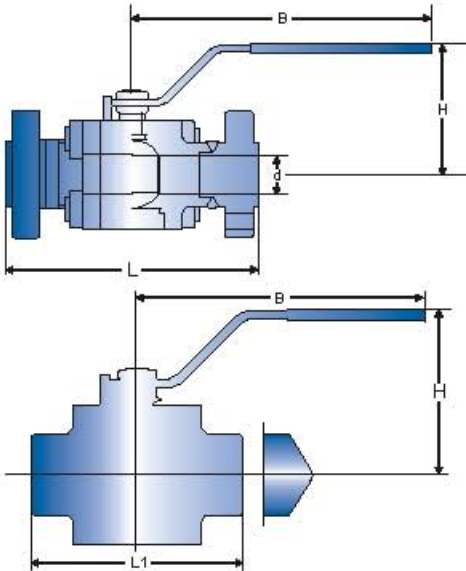
PRESSURE-TEMPERATURE RATING 3/8"-4"



THREE PIECE FORGED BALL VALVE

- Investment Forged Three Piece Body, Free Floating Ball
- Full Port or Reduced Bore, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO5211 Mounting Pad
- Designed to ASME B16.34, BS5351

Face to Face	VATAC Standard
Threaded Ends	Rc to BS21, NPT to ASME B1.20.1
Socketed Ends	ASME B16.11
Class	ASME CL800/1500/2500



CLASS 800 DIMENSION

SIZE (in)	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	Unit mm
L1	92	92	92	111	127	140	152	152	
B	108	108	108	146	178	178	200	200	
H	51	51	51	108	81	85	105	105	
d	6	9	13	18	23	28	35	49	
W.T(kg)	2.5	2.4	2.3	3.4	5.4	6.4	11	13	

CLASS 1500 DIMENSION

SIZE (in)	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	Unit mm
L1	92	92	92	111	127	140	152	152	
B	108	108	108	146	178	178	200	200	
H	51	51	51	108	81	85	105	105	
d	6	9	13	19	25	32	38	49	
W.T(kg)	2.5	2.4	2.5	3.7	5.8	6.8	11.5	13.7	

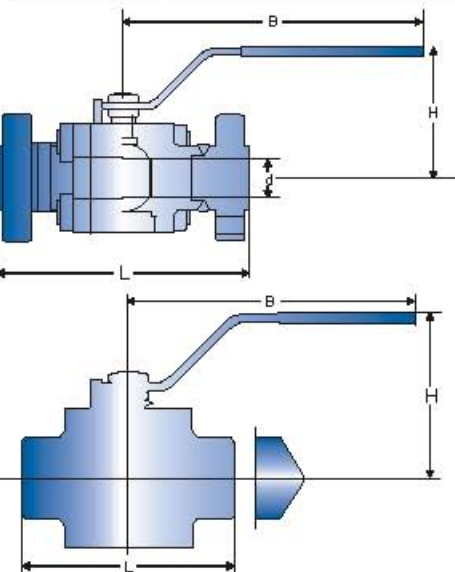
CLASS 2500 DIMENSION

SIZE (in)	1/2	3/4	1	1-1/2	Unit mm
L	110	125	135	160	
B	170	230	230	310	
H	95	110	125		
d	13	19	25	38	
W.T(kg)	2.7	4.1	6.3	12	

THREE PIECE FORGED BALL VALVE

- Investment Forged Three Piece Body, Free Floating Ball
- Full Port or Reduced Bore, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO5211 Mounting Pad
- Designed to ASME B16.34, BS5351

Face to Face	VATAC Standard
Threaded Ends	Rc to BS21, NPT to ASME B1.20.1
Socketed Ends	ASME B16.11
Flanged Ends	ASME B16.5
Class	ASME CL1500~CL2500



CLASS 1500 DIMENSION

SIZE (in)	1/2	3/4	1	1-1/4	1-1/2	2	Unit mm
L	216	229	256	279	305	368	
B	230	230	350	280	400	400	
H	75	85	85	105	110	130	
d	13	19	25	32	38	49	
W.T(kg)	2.5	5.8	5.8	6.8	12	13.7	

CLASS 2500 DIMENSION

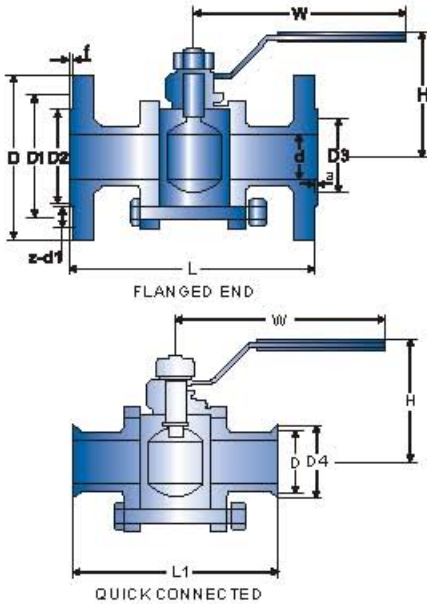
SIZE (in)	1/2	3/4	1	1-1/4	1-1/2	2	Unit mm
L	264	273	308	349	400	451	
B	280	280	95	350	110	400	
H	75	85	95	105	38	130	
d	13	19	25	32	11.5	42	
W.T(kg)	2.7	6.3	6.3	6.8		15	



THREE PIECE FLANGED BALL VALVE

- Investment Casting Three Piece Body, Free Floating Ball
- Full Port or Reduced Bore, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO5211 Mounting Pad
- Designed to DIN3357, BS5351

Face to Face	VATAC Standard
Flanged Ends	ASME B16.5
Butt Weld	ASME B16.25
Class	PN16/PN25/PN40



PN16/25/40 DIMENSION

SIZE (DN)	d	L	H	D	FLANGED END		f	PN4.0 a	Unit mm
					D1	D2			
15	15	130	77	95	65	45	2	4	
20	20	150	77	105	75	55	2	4	
25	25	160	88	115	85	65	2	4	
32	32	180	113	135	100	78	2	4	
40	40	200	132	145	112	85	3	4	
50	50	230	142	160	125	100	3	4	
65	65	290	173	180	145	120	3	4	
80	80	310	182	190	160	135	3	4	
100	100	350	250	215/230	180/190	122/162	3	4.5	

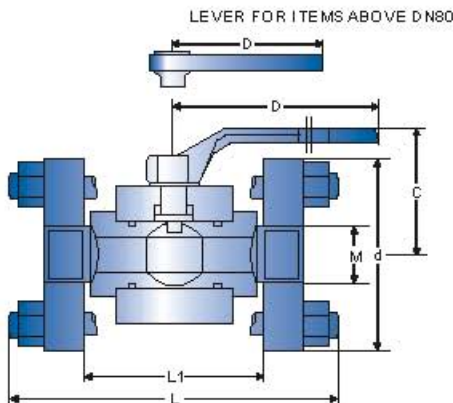
PN160/PN320 DIMENSION

SIZE (DN)	PN4.0 D3	Z	FLANGED END		QUICK CONNECTED			Unit mm
			d1	W	D	D4	L1	
15	40	4	14	130	43.5	50.5	108	
20	51	4	14	130	43.5	50.5	130	
25	58	4	14	130	43.5	50.5	138	
32	66	4	18	180	43.5	50.5	152	
40	76	4	18	230	56.5	64	166	
50	88	4	18	400	56.5	64	198	
65	110	4/8	18	400	83.5	91	230	
80	121	4/8	18	640	96	106	249	
100	150	4/8	18/23	1100	-	-	-	

THREE PIECE HIGH PRESSURE BALL VALVE

- Investment Forged Three Piece Body, Free Floating Ball
- Full Port or Reduced Bore, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO5211 Mounting Pad
- Designed to ASME B16.34, BS5351

Face to Face	VATAC Standard
Threaded Ends	Rc to BS21, NP Tt to ASME B1.20.1
Socketed Ends	ASME B16.11
Flanged Ends	ASME B16.5
Class	PN160/PN320



PN160/PN320 DIMENSION

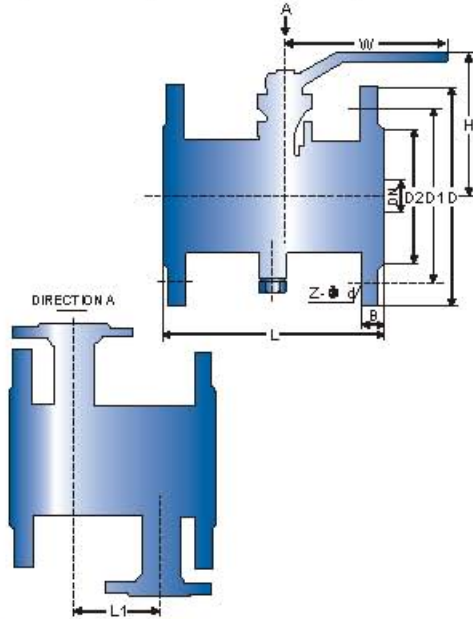
SIZE (DN)	d	M	L	L1	C	D	Unit mm
15	100	33X2	160	70	62	130	
20	110	33X2	170	81	75	230	
25	115	42X2	195	95	80	230	
32	150	48X2	220	110	96	300	
40	170	64X3	260	120	111	400	
50	200	80X3	310	140	128	580	
65	225	100X3	345	150	180	580	
80	270	125X4	355	160	200	700	
100	320	155X4	440	188	245	1100	



JACKETED BALL VALVE

- One Piece Uni-body, Full Port or Reduced Bore
- Floating Ball, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- NACE MR-01-75, Optional Locking Device
- Designed to ASME B16.34

Face to Face	VATAC Standard
End Flange	ASME B16.5
Buttweld	ASME B16.25
Class	PN16



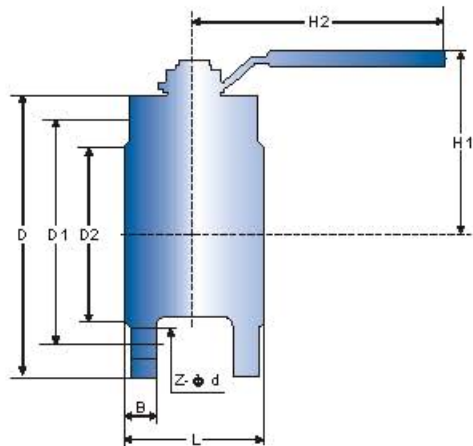
PN16 DIMENSION

SIZE (DN)	L	L1	D	D1	D2	B	Z-φ d	H	W	WT(kg)
15	108	45	95	85	45	14	4-φ 14	95	160	2.5
20	117	55	105	75	55	14	4-φ 14	101	160	3
25	127	65	115	85	65	14	4-φ 14	106	160	5
32	140	78	135	100	78	16	4-φ 18	112	230	6
40	165	85	145	110	85	16	4-φ 18	125	230	7
50	178	100	160	125	100	16	4-φ 18	135	230	10
65	191	120	180	145	120	18	4-φ 18	170	400	16
80	203	135	195	160	135	20	8-φ 18	193	400	19
100	229	155	215	180	155	20	8-φ 18	265	700	33
125	356	185	245	210	185	22	8-φ 18	310	700	48
150	394	210	280	240	210	24	8-φ 23	355	1100	62
200	457	265	335	295	265	26	12-φ 23	410	1500	93
250	533	320	405	355	320	30	12-φ 25	560	1500	120

WAFER BALL VALVE

- One Piece Uni-body, Full Port, Floating Ball
- Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- NACE MR-01-75, Optional Locking Device
- Designed to ASME B16.34

Face to Face	VATAC Standard
End Flange	ASME B16.5
Buttweld	ASME B16.25
Class	PN 16/PN25



PN 16/25 DIMENSION

SIZE (DN)	L	D	D1	D2	B	Z-φ d	H1	H2	Unit:mm
20	38	105	75	55	16	4-14	70	130	
25	45	115	85	65	16	4-14	80	150	
32	55	140	100	78	18	4-18	86	150	
40	62	150	110	85	18	4-18	92	180	
50	72	165	125	100	20	4-18	102	180	
65	95	185	145	120	22	8-18	160	250	
80	120	200	160	135	22	8-18	172	300	
100	145	230	190	160	24	8-23	187	350	
125	200	270	220	188	28	8-26	200	650	
150	225	300	250	218	30	8-26	240	840	

