

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

Available End Connections

Female NPTF
Socket Weld
Butt Weld (Specify Pipe Schedule)



SPECIFICATIONS

MSS SP-110	ANSI B16.34
ANSI B1.20.3	API 598
ANSI B16.11	API 607
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

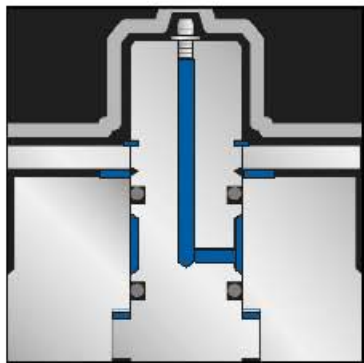
Live Loaded Stem

•Options

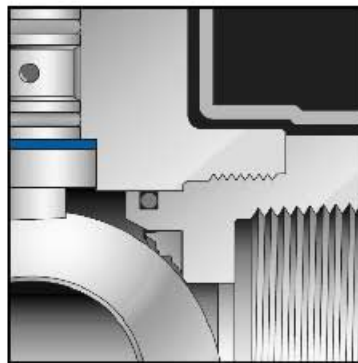
Lever Locking Handle
Oval Locking Handle
Extended Locking
Extended Oval Locking
TFE Coated 316SS
Vented Ball
Carbon Bolting
Oxygen Cleaned
Grounded Ball & Stem



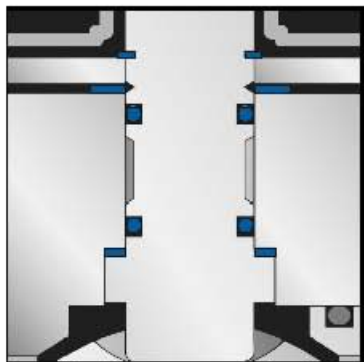
VATAC THREADED, WELDED & GROOVED-END FLOATING BALL VALVES GENERAL DESIGN FEATURES

**STEM JOURNAL LUBRICATION**

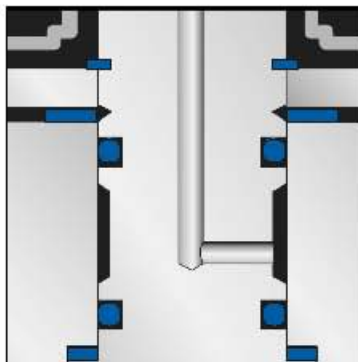
Valves that utilize an external stem lubrication fitting also incorporate a vented weather seal which allows safe pressure relief in the event of excessive grease gun pressure.

**FIRE SAFE 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)

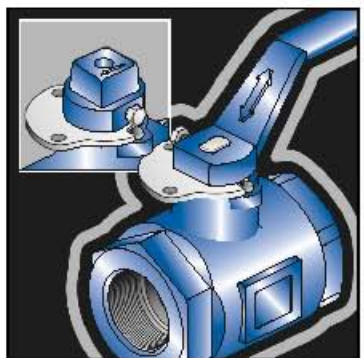
**FIGHT THE COST OF CORROSION**

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

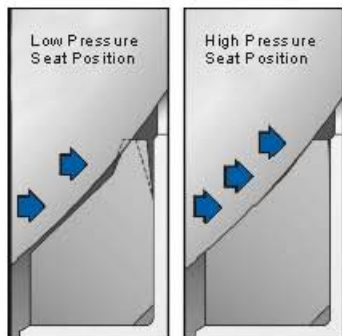
**SECURE YOUR INVESTMENT**

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.

**HIGH PRESSURE SEAT POSITION**

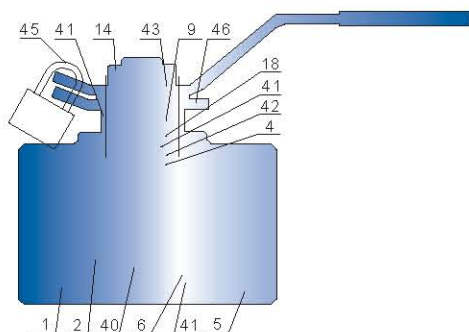
The Vatac seat lip deflects slightly at higher pressures to ensure full seat-to-ball contact. The seat's "memory-action" provides bubble-tight sealing at low and high pressures. This "self compensation for swell" feature results in low torque and long life operation.

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.

2PCS FORGED STEEL BALL VALVES

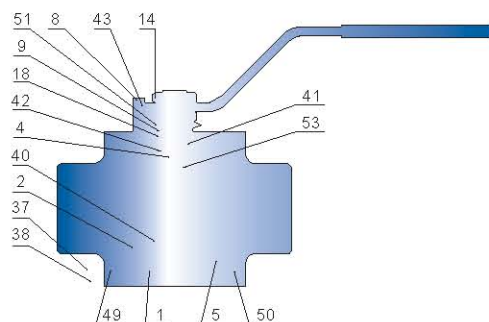
- Internal Entry Stem
- Handle With Slide Lock (Optional)
- ISO 5211 DirectMount
Actuator Mounting Pad (Optional)
- Body Seals For High Temp &
API 607 Applications
- Forged Carbon or Stainless Steel
Floating Ball Valve
- Two Piece Split Body, Available in
Standard or Full Port
- Ends Connections in Threaded 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

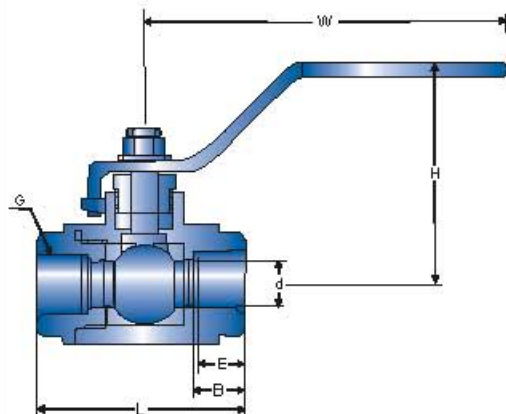
**MAIN PART MATERIALS LIST**

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 CASTED BALL VALVE

- Investment Casting Two Piece Split Body, Full Port
- Free Floating Ball, Fire Safe, Blow-out Proof Stem
- Anti-static Device, Cavity Relieving Seats
- Optional Locking Device & ISO 5211 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	1000Psi



1000WOG DIMENSION

SIZE (in)	d	L	W	H	W.T (kg)
1/4	10	55	95	42	0.2
3/8	10	55	95	42	0.2
1/2	15	65	108	51	0.35
3/4	20	75	115	58	0.5
1	25	85	135	77	0.75
1-1/4	32	102	150	83	1.3
1-1/2	38	108	175	97	2.0
2	50	124	190	106	3.3
2-1/2	65	163	220	122	6.1
3	80	185	250	133	9.9

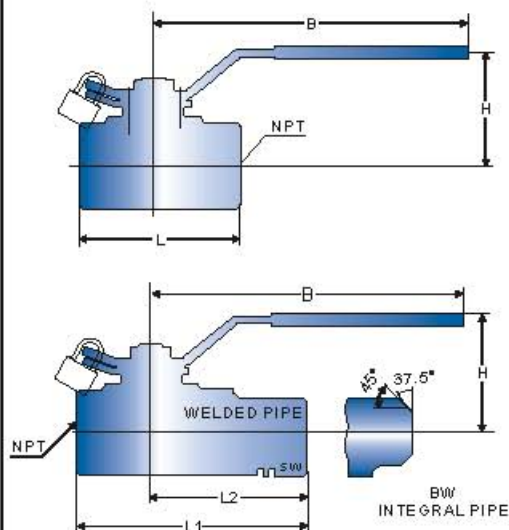
Unit: mm



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 & ISO 5211 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 1500/2500 DIMENSION

R.P(in)	1/4	1/2	3/4	1	1-1/4	1-1/2	2	2
F.P(in)	3/8	1/2	3/4	1	1-1/4	1-1/4	1-1/2	1-1/2
L1	70	70	80	95	115	125	135	155
L2	121	121	121	130	136	140	148	160
B	160	160	160	160	170	230	230	280
H	60	60	60	65	85	105	105	125
d	6	9	12.5	17	24	37	37	49
W.T(kg)	1.2	0.9	1.3	2.2	3.5	6.5	6.5	11

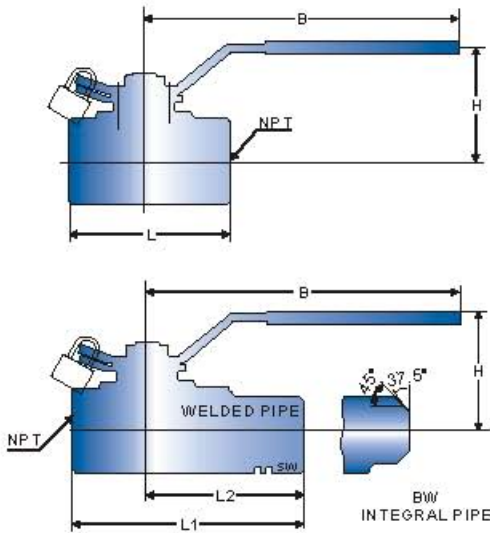
Unit: mm



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

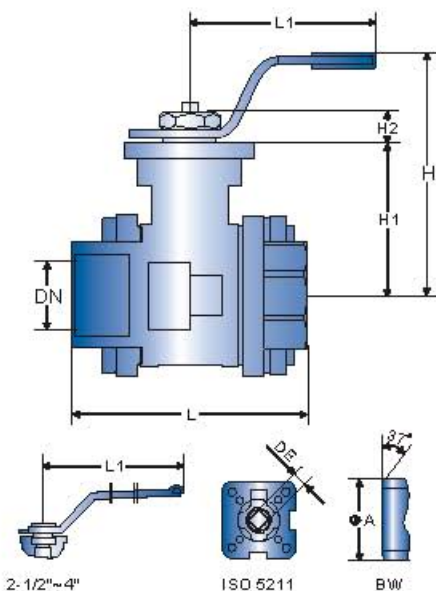
Face to Face	VATAC Standard
Threaded Ends	Rc to BS21, NPT to ASME B1.20.1
Socketed Ends	ASME B16.11
Class	ASME CL1500/2500



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



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	

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"

