

FLOATING BALL VALVE



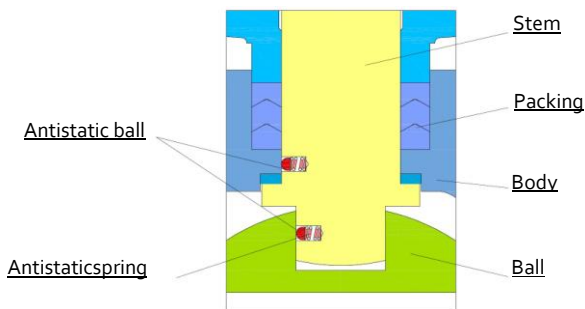
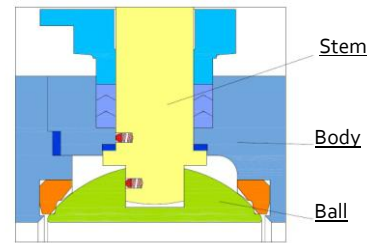
INTRODUCTION

A ball valve is a valve with a spherical disc, the part of the valve which controls the flow through it. The sphere has a hole, or port, through the middle so that when the port is in line with both ends of the valve, flow will occur. When the valve is closed, the hole is perpendicular to the ends of the valve, and flow is blocked.

BLOWOUT PROOF STEM

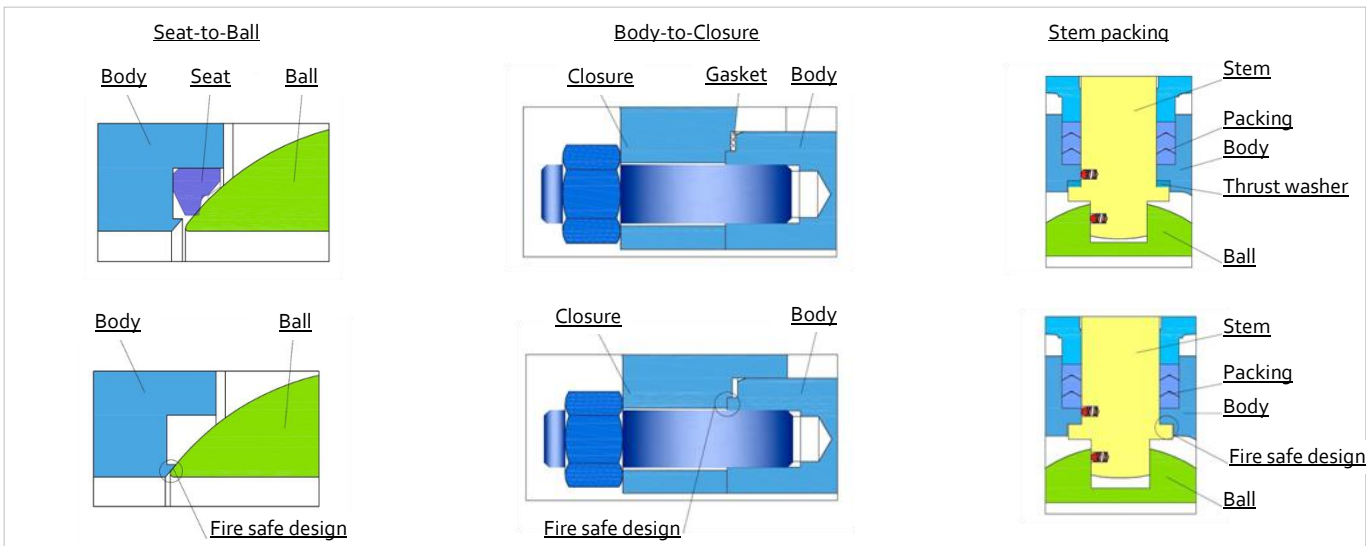
The valve stem is made with a shoulder at the bottom end. It's securely retained by the valve body, to avoid that the stem, under certain operating conditions, accidentally blows out. Other designs are available on request.

Because the ball and stem in a ball valve are suspended on non-metallic parts, i.e. the seat seal and stem seal, there is a possibility a static charge may build up on the stem-ball, a mechanical (antistatic metal spring and ball) is introduced in the design to maintain the metal-to-metal contact between the rotating ball/stem and the valve body which will ground any charges to the valve body.



FIRE SAFE DESIGN

During a fire, non-metallic soft material will be burnt, subsequently seat leakage or external leakage may occur and cause the fire to spread or contaminate the environment. YDV ball valves are fire tested in accordance with API 6FA or API 607 witnessed and certified by TUV SUD.



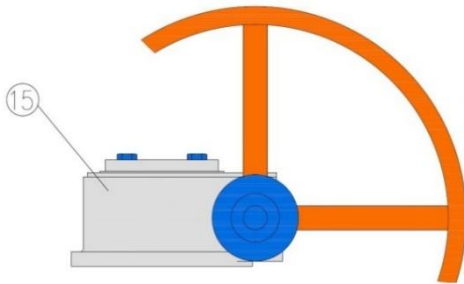
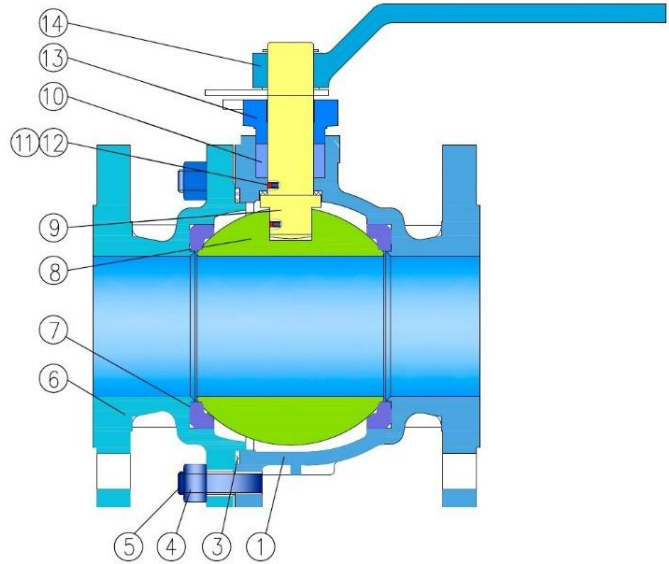
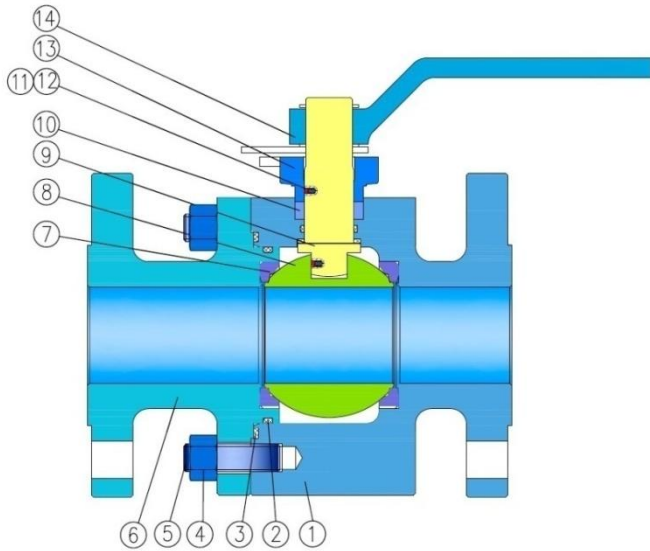
FLOATING BALL VALVE

OVERVIEW

2-PIECE SPLIT BODY

Forge Steel

Casting Steel



STANDARDS

Design & manufacture	API 6D, API 608, ISO 14313
Face-to-face	API 6D, ASME B16.10
End Dimension	ASME B16.5 (RF, RTJ) ASME B16.25 (BW)
Test & inspection	API 6D, API 598
Fire safe	API 6FA, API 607
Other	NACE MR 01-75, MR 0103

PART LIST

1 Body	9 Stem
2 O-ring	10 Packing
3 Gasket	11 Anti-static Spring
4 Nut	12 Anti-static Ball
5 Stud	13 Gland Flange
6 Closure	14 Lever
7 Seat	15 Gearbox
8 Ball	

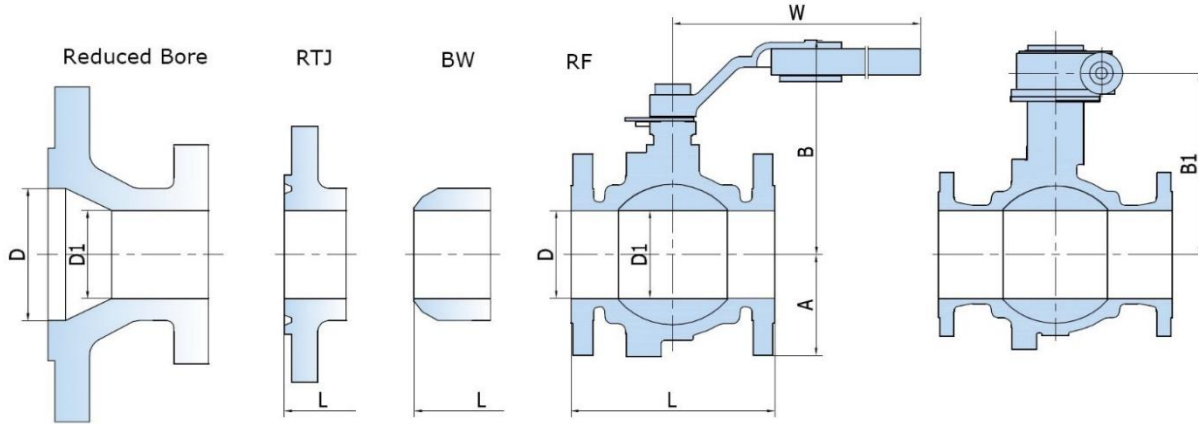
TYPICAL MATERIALS

Body/Closures	(Forging) A105, A182 F304, F304L, F316, F316L, F51, F53, A350 LF2, LF3, LF5, Inconel, Hastelloy, Monel (Casting) A216 WCB, A351 CF3, CF8, CF3M, CF8M, A352 LCB, LCC, LC2, A995 4A, 5A
Ball	CS+ENP, A182 F304, F304L, F316, F316L, F51, F53, CS/SS+TCC, CS/SS+Ni60
Seat retainer	CS+ENP, A182 F304, F304L, F316, F316L, F51, F53, CS/SS+TCC, CS/SS+Ni55
Seal Ring	PTFE, RPTFE, PCTFE, Devlon, PEEK
Stem	A182 F6a, F316, F51, A105+ENP, AISI 4140+ENP, 17-4PH, XM-19
Packing	Graphite, PTFE, RPTFE
O-ring	Viton, HNBR, FVMQ, AFLAS

FLOATING BALL VALVE

DIMENSIONS AND WEIGHTS

ASME CLASS 150 (PN 20)



ASME CLASS 150 (PN 20) FULL BORE

Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/ka)	Forging (lb/ka)
½	0.5	0.5	4.25	-	4.25	1.77	3.15	4.89	7.87	1.77	3.15	4.33	7.87	6	7
15	12.7	12.7	108	-	108	45	80	114	200	45	80	110	200	2.5	3
¾	0.75	0.75	4.62	-	4.62	1.97	3.47	5.31	7.87	1.97	3.35	5.11	7.87	8	9
20	19.1	19.1	117	-	117	50	85	135	200	50	85	130	200	3.5	4
1	1	1	5	5.5	5	2.16	3.47	5.31	7.87	2.16	3.47	6.1	7.87	12	15
25	25.4	25.4	127	140	127	55	90	160	200	55	90	155	200	5.6	6.5
1¼	1.25	1.25	5.5	6	5.5	2.36	4.33	6.70	9.84	2.36	4.33	6.5	9.84	14	21
32	31.8	31.8	140	153	140	60	110	170	250	60	110	165	250	6.2	9.4
1½	1.5	1.5	6.5	7	6.5	2.48	4.53	7.10	13	2.48	4.53	6.97	13	16	
40	38.1	38.1	165	178	165	63	115	180	330	63	115	177	330	7	12
2	1.94	1.94	7	7.5	7	3	5.9	7.5	13	3	5.6	7.32	13	29	
50	49	49	178	191	178	76	150	191	330	76	142	186	330	13	35
2½	2.44	2.44	7.5	8	7.5	3.45	6.1	7.83	13	3.45	5.9	7.67	13	35	
65	62	62	191	203	191	85	155	200	330	85	150	195	330	16	20
3	2.91	2.91	8	8.5	8	3.74	6.3	8.46	13	3.74	6.1	8.1	13	49	
80	74	74	203	216	203	95	160	215	330	95	155	206	330	22	29
4	3.94	3.94	9	9.5	9	4.33	8.27	10.04	18.11	4.33	7.67	9.5	18.11	83	
100	100	100	229	242	229	110	210	255	460	110	195	242	460	37.5	106
6	5.91	5.91	15.5	16	15.5	6.70	12.2	12.87	30.3	6.70	11.22	12.44	30.3	216	
150	150	150	394	407	394	170	310	327	770	170	285	316	770	98	304
														138	

ASME CLASS 150 (PN 20) REDUCED BORE

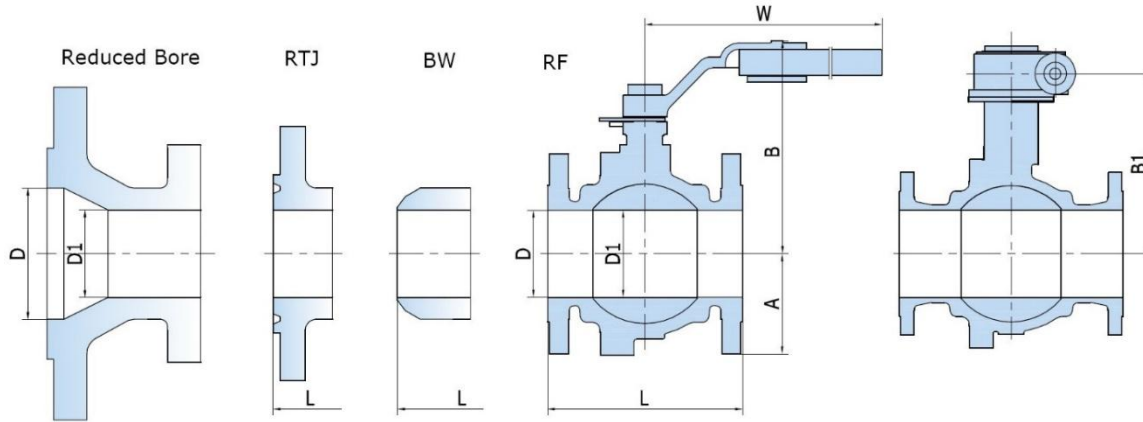
Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/ka)	Forging (lb/ka)
½	0.5	0.375	4.25	-	4.25	1.77	3.15	4.89	7.87	1.77	3.15	4.33	7.87	6	7
15	12.7	9.5	108	-	108	45	80	114	200	45	80	110	200	2.5	3
¾	0.75	0.5	4.62	-	4.62	1.97	3.15	4.89	7.87	1.97	3.25	5.11	7.87	7	8
20	19.1	12.7	117	-	117	50	80	114	200	50	85	130	200	3	3.5
1	1	0.75	5	5.5	5	2.16	3.47	5.31	7.87	2.16	3.54	6.1	7.87	10	12
25	25.4	19.1	127	140	127	55	85	135	200	55	90	155	200	4.5	5.5
1¼	1.25	1	5.5	6	5.5	2.36	3.54	6.3	7.87	2.36	4.33	6.5	9.84	12	16
32	31.8	25.4	140	153	140	60	90	160	200	60	110	165	250	5.5	7.2
1½	1.5	1.25	6.5	7	6.5	2.48	4.33	6.70	9.84	2.48	4.53	6.97	13	14	
40	38.1	31.8	165	178	165	63	110	170	250	63	115	177	330	6.3	8
2	1.94	1.5	7	7.5	7	3	4.53	7.10	13	3	5.6	7.32	13	20	
50	49	38.1	178	191	178	76	115	180	330	76	142	186	330	9	33.5
2½	2.44	1.94	7.5	8	7.5	3.45	5.9	7.5	13	3.45	5.9	7.67	13	32	
65	62	49	191	203	191	85	150	191	330	85	150	195	330	14.5	17.5
3	2.91	1.94	8	8.5	8	3.74	6.1	7.83	13	3.74	6.1	8.1	13	42	
80	74	49	203	216	203	95	155	200	330	95	155	206	330	19	23
4	3.94	2.91	9	9.5	9	4.33	6.3	8.46	13	4.33	7.67	9.5	18.11	66	
100	100	74	229	242	229	110	160	215	330	110	195	242	460	30	38.5
6	5.91	3.94	15.5	16	15.5	6.70	8.27	10.04	18.11	6.70	11.22	12.44	30.3	133	
150	150	100	394	407	394	170	210	255	460	170	285	316	770	60	93
8	8	5.91	18	18.5	18	6.73	12.2	12.87	30.3	6.73	11.22	12.44	30.3	234	
201	201	150	457	470	457	175	310	327	770	175	285	316	770	106	131

1. The dimension and weights are for reference only and subject to change without notice.
2. Contact sales representative if further information is needed.

FLOATING BALL VALVE

DIMENSIONS AND WEIGHTS

ASME CLASS 300 (PN 50)



ASME CLASS 300 (PN 50) FULL BORE

Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/kg)	Forging (lb/kg)
1/2	0.5	0.5	5.5	5.94	5.5	1.77	3.15	4.89	7.87	1.77	3.15	4.33	7.87	8	9
15	12.7	12.7	140	151	140	45	80	114	200	45	80	110	200	3.5	4
3/4	0.75	0.75	5.98	6.61	6	1.97	3.47	5.31	7.87	1.97	3.35	5.11	7.87	9	13
20	19.1	19.1	152	168	152	50	85	135	200	50	85	130	200	4	6
1	1	1	6.5	7.13	6.5	2.16	3.54	6.3	7.87	2.16	3.54	6.1	7.87	12	18
25	25.4	25.4	165	181	165	55	90	160	200	55	90	155	200	5.3	8
1 1/4	1.25	1.25	7	7.64	7	2.36	4.33	6.70	9.84	2.36	4.33	6.5	9.84	21	3
32	31.8	31.8	178	194	178	60	110	170	250	60	110	165	250	9.5	13.5
1 1/2	1.5	1.5	7.5	8.11	7.5	2.48	4.53	7.10	13	2.48	4.53	6.97	13	29	14.0
40	38.1	38.1	190	206	190	63	115	180	330	63	115	177	330	13	8
2	1.94	1.94	8.5	9.13	8.5	3	5.9	7.5	13	3	5.6	7.32	13	38	51
50	49	49	216	232	216	76	150	191	330	76	142	186	330	17	23
2 1/2	2.44	2.44	9.5	10.12	9.5	3.45	6.1	7.83	13	3.45	5.9	7.67	13	55	62
65	62	62	241	257	241	85	155	200	330	85	150	195	330	25	28
3	2.91	2.91	11.1	11.73	11.1	3.74	6.3	8.46	22.05	3.74	6.1	8.1	22.05	77	93
80	74	74	282	298	282	95	160	215	560	95	155	206	560	35	42
4	3.94	3.94	12	12.64	12	4.33	8.27	10.04	22.05	4.33	7.67	9.5	22.05	117	148
100	100	100	305	321	305	110	210	255	560	110	195	242	560	53	67
6	5.91	5.91	15.87	16.5	15.87	6.70	12.2	12.87	31.8	6.70	11.22	12.44	31.8	249	331
150	150	150	403	419	403	170	310	327	800	170	285	316	800	113	150

ASME CLASS 300 (PN 50) REDUCED BORE

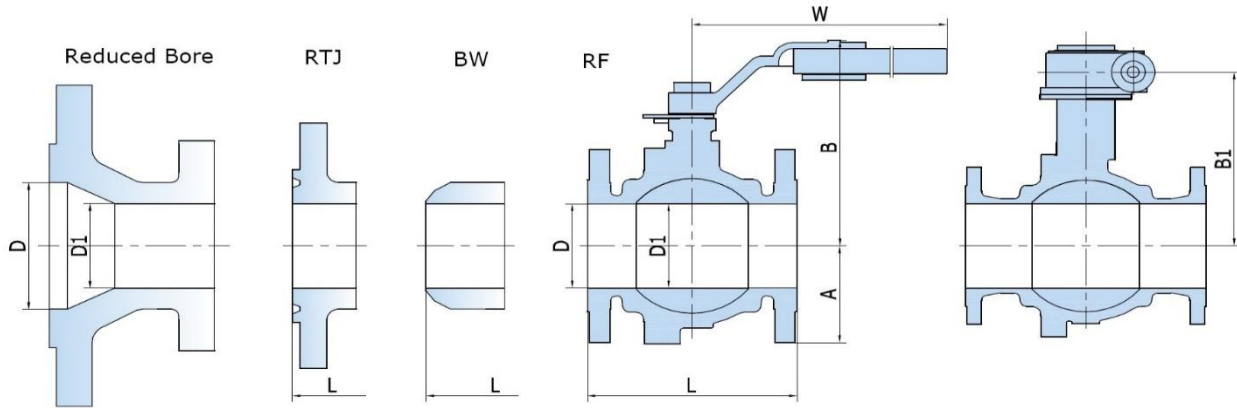
Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/kg)	Forging (lb/kg)
1/2	0.5	0.375	4.25	-	4.25	1.77	3.15	4.89	7.87	1.77	3.15	4.33	7.87	7	9
15	12.7	9.5	108	-	108	45	80	114	200	45	80	110	200	3.3	4.2
3/4	0.75	0.5	4.62	-	4.62	1.97	3.15	4.89	7.87	1.97	3.35	5.11	7.87	8	11
20	19.1	12.7	117	-	117	50	80	114	200	50	85	130	200	3.8	5
1	1	0.75	5	5.5	5	2.16	3.47	5.31	7.87	2.16	3.54	6.1	7.87	10	15
25	25.4	19.1	127	140	127	55	85	135	200	55	90	155	200	4.5	7
1 1/4	1.25	1	5.5	6	5.5	2.36	3.54	6.3	7.87	2.36	4.33	6.5	9.84	17	20
32	31.8	25.4	140	153	140	60	90	160	200	60	110	165	250	7.5	9
1 1/2	1.5	1.25	6.5	7	6.5	2.48	4.33	6.70	9.84	2.48	4.53	6.97	13	20	24
40	38.1	31.8	165	178	165	63	110	170	250	63	115	177	330	9	11
2	1.94	1.5	7	7.5	7	3	4.53	7.10	13	3	5.6	7.32	13	33	44
50	49	38.1	178	191	178	76	115	180	330	76	142	186	330	15	20
2 1/2	2.44	1.94	7.5	8	7.5	3.45	5.9	7.5	13	3.45	5.9	7.67	13	51	55
65	62	49	191	203	191	85	150	191	330	85	150	195	330	23	25
3	2.91	1.94	8	8.5	8	3.74	6.1	7.83	13	3.74	6.1	8.1	13	71	77
80	74	49	203	216	203	95	155	200	330	95	155	206	330	32	35
4	3.94	2.91	9	9.5	9	4.33	6.3	8.46	13	4.33	7.67	9.5	18.11	106	128
100	100	74	229	242	229	110	160	215	330	110	195	242	460	48	58
6	5.91	3.94	15.5	16	15.5	6.70	8.27	10.04	18.11	6.70	11.22	12.44	30.3	187	238
150	150	100	394	407	394	170	210	255	460	170	285	316	770	85	108
8	8	5.91	18	18.5	18	6.73	12.2	12.87	30.3	6.73	11.22	12.44	30.3	297	419
201	201	150	457	470	457	175	310	327	770	175	285	316	770	135	190

- The dimension and weights are for reference only and subject to change without notice.
- Contact sales representative if further information is needed.

FLOATING BALL VALVE

DIMENSIONS AND WEIGHTS

ASME CLASS 600 (PN 100)



ASME CLASS 600 (PN 100) FULL BORE

Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/kg)	Forging (lb/kg)
1/2 15	0.5 12.7	0.5 12.7	16.5 65	6.42 163	16.5 65	1.89 48	3.15 80	4.69 119	7.87 200	1.89 48	2.95 75	4.69 119	7.87 200	6 2.8	8 3.8
3/4 20	0.75 19.1	0.75 19.1	7.48 190	7.48 190	7.48 190	2.28 58	3.35 85	5.51 140	7.87 200	2.28 58	3.15 80	5.51 140	7.87 200	12 5.3	14 6.2
1 25	1 25.4	1 25.4	8.5 216	8.5 216	8.5 216	2.48 63	3.54 90	6.69 170	7.87 200	2.48 63	3.35 85	6.69 170	7.87 200	18 8	25 11.5
1 1/4 32	1.25 31.8	1.25 31.8	9.02 229	9.02 229	9.02 229	2.87 73	4.33 110	7.09 180	11.81 300	2.87 73	4.13 105	7.09 180	11.81 300	25 11	33 15
1 1/2 40	1.5 38.1	1.5 38.1	9.49 241	9.49 241	9.49 241	3.07 78	4.53 115	7.48 190	13 330	3.07 78	4.33 110	7.48 190	13 330	230 13.6	40 18
2 50	1.94 49	1.94 49	11.5 292	11.61 295	11.5 292	3.23 82	5.91 150	7.87 200	13 330	3.23 82	5.71 145	7.87 200	13 330	42 19	66 30
2 1/2 65	2.44 62	2.44 62	12.99 330	13.11 333	12.99 330	3.74 95	6.5 165	8.46 215	22.05 560	3.74 95	6.3 160	8.46 215	22.05 560	71 32	106 48
3 80	2.91 74	2.91 74	14.02 356	14.13 359	14.02 356	4.33 110	7.28 185	8.9 226	31.5 800	4.33 110	7.09 180	8.9 226	31.5 800	113 51	144 65

ASME CLASS 600 (PN 100) REDUCED BORE

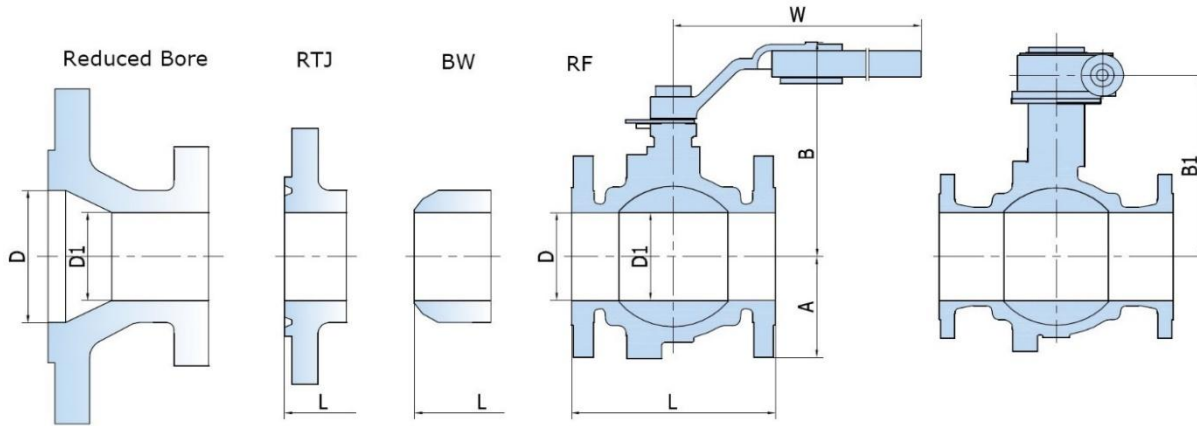
Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/kg)	Forging (lb/kg)
1/2 15	0.5 12.7	0.375 9.5	16.5 65	6.42 163	16.5 65	1.89 48	3.15 80	4.53 115	7.87 200	1.89 48	2.95 75	4.43 110	7.87 200	9 4	10 4.5
3/4 20	0.75 19.1	0.5 12.7	7.48 190	7.48 190	7.48 190	2.28 58	3.35 85	4.69 119	7.87 200	2.28 58	3.15 80	4.53 115	7.87 200	10 4.5	11 4.8
1 25	1 25.4	0.75 19.1	8.5 216	8.5 216	8.5 216	2.48 63	3.54 90	5.51 140	7.87 200	2.48 63	3.35 85	5.31 135	7.87 200	14 6.5	20 9
1 1/4 32	1.25 31.8	1 25.4	9.02 229	9.02 229	9.02 229	2.87 73	4.33 110	6.69 170	7.87 200	2.87 73	4.13 105	6.5 165	7.87 200	19 8.5	28 12.5
1 1/2 40	1.5 38.1	1.25 31.8	9.49 241	9.49 241	9.49 241	3.07 78	4.53 115	7.09 180	11.81 300	3.07 78	4.33 110	6.89 175	11.81 300	23 10.5	33 15
2 50	1.94 49	1.5 38.1	11.5 292	11.61 295	11.5 292	3.23 82	5.91 150	7.48 190	13 330	3.23 82	5.71 145	7.28 185	13 330	35 16	46 21
2 1/2 65	2.44 62	1.94 49	12.99 330	13.11 333	12.99 330	3.74 95	6.5 165	7.87 200	13 330	3.74 95	6.3 160	7.68 195	13 330	58 26.5	66 30
3 80	2.91 74	1.94 49	14.02 356	14.13 359	14.02 356	1.89 48	7.28 185	8.46 215	22.05 560	4.33 110	7.09 180	8.27 210	22.05 560	84 38	79 36
4 100	3.94 100	2.91 74	17 432	17.13 435	17 432	5.43 138	16.93 230	8.9 226	31.5 800	5.43 138	16.93 230	8.66 220	31.5 800	137 62	174 79

1. The dimension and weights are for reference only and subject to change without notice.
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FLOATING BALL VALVE

DIMENSIONS AND WEIGHTS

ASME CLASS 900/1500 (PN 150/2500)



ASME CLASS 900/1500 (PN 150/250) FULL BORE

Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/kg)	Forging (lb/kg)
1/2 15	0.5 12.7	0.5 12.7	8.5 216	8.5 216	8.5 216	-	-	-	-	2.36 60	2.76 70	-	7.87 200	-	20 9
3/4 20	0.75 19.1	0.75 19.1	9.02 229	9.02 229	9.02 229	-	-	-	-	2.56 65	3.03 77	-	9.84 250	-	24 11
1 25	1 25.4	1 25.4	10 254	10 254	10 254	-	-	-	-	2.95 75	3.35 85	-	9.84 250	-	42 19
1 1/4 32	1.25 31.8	1.25 31.8	10.98 279	10.98 279	10.98 279	-	-	-	-	3.15 80	3.74 95	-	13 330	-	59 27
1 1/2 40	1.5 38.1	1.5 38.1	12.01 305	12.01 305	12.01 305	-	-	-	-	3.54 90	4.33 110	-	19.69 500	-	71 32
2 50	1.94 49	1.94 49	14.49 368	14.61 371	14.49 368	-	-	-	-	4.25 108	5.31 135	-	24 610	-	121 55

ASME CLASS 900/1500 (PN 150/250) REDUCED BORE

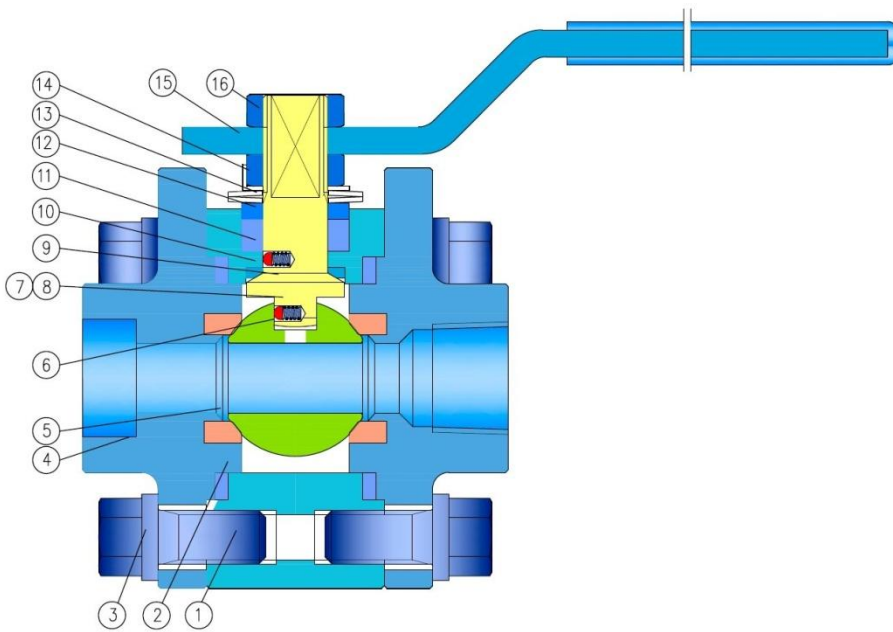
Size in/mm	D	D1	L			Casting				Forging				Weight	
			RF	RTJ	BW	A	B	B1	W	A	B	B1	W	Casting (lb/kg)	Forging (lb/kg)
1/2 15	0.5 12.7	0.375 9.5	8.5 216	8.5 216	8.5 216	-	-	-	-	2.36 60	2.76 70	-	7.87 200	-	16.5 7.5
3/4 20	0.75 19.1	0.5 12.7	9.02 229	9.02 229	9.02 229	-	-	-	-	2.36 60	2.76 70	-	7.87 200	-	20 9
1 25	1 25.4	0.75 19.1	10 254	10 254	10 254	-	-	-	-	2.56 65	3.03 77	-	9.84 250	-	29 13
1 1/4 32	1.25 31.8	1 25.4	10.98 279	10.98 279	10.98 279	-	-	-	-	2.95 75	3.35 85	-	9.84 250	-	40 18
1 1/2 40	1.5 38.1	1.25 31.8	12.01 305	12.01 305	12.01 305	-	-	-	-	3.15 80	3.74 95	-	13 330	-	53 24
2 50	1.94 49	1.5 38.1	14.49 368	14.61 371	14.49 368	-	-	-	-	3.54 90	4.33 110	-	19.69 500	-	95 43
2 1/2 65	2.44 62	1.94 49	16.5 419	16.61 422	16.5 419	-	-	-	-	4.25 108	5.31 135	-	24 610	-	137 62

1. The dimension and weights are for reference only and subject to change without notice.
2. Contact sales representative if further information is needed.

FLOATING BALL VALVE

OVERVIEW

3-PIECE SPLIT BODY



PART LIST

- ① Body
- ② Gasket
- ③ Bolt
- ④ Closure
- ⑤ Seat
- ⑥ Ball
- ⑦ Anti-static Spring
- ⑧ Anti-static Ball
- ⑨ Stem
- ⑩ Thrust Washer
- ⑪ Packing
- ⑫ Packing Gland
- ⑬ Belleville Spring
- ⑭ Stopper Washer
- ⑮ Lever
- ⑯ Nut

Floating Ball with 3 Piece design is provided in forged material in long pattern and short pattern.

Short Pattern: Mainly applies for soft seated with lever operation.

Long Pattern: Can be applied for metal seat, stem extension, or bare stem, or actuated ball valves, or full welded and butt welded;

STANDARDS

Design & manufacture	API 608, ISO 17292, ASME B16.34,
Face-to-face	MFG' STD
End Dimension	ASME B1.20.1 (NPT) ASME B16.11 (SW) ASME B16.25 (BW) Or ASME B36.10(BW)
Test & inspection	API 598
Fire safe	API 6FA, API 607
Other	NACE MR 01-75, MR 0103

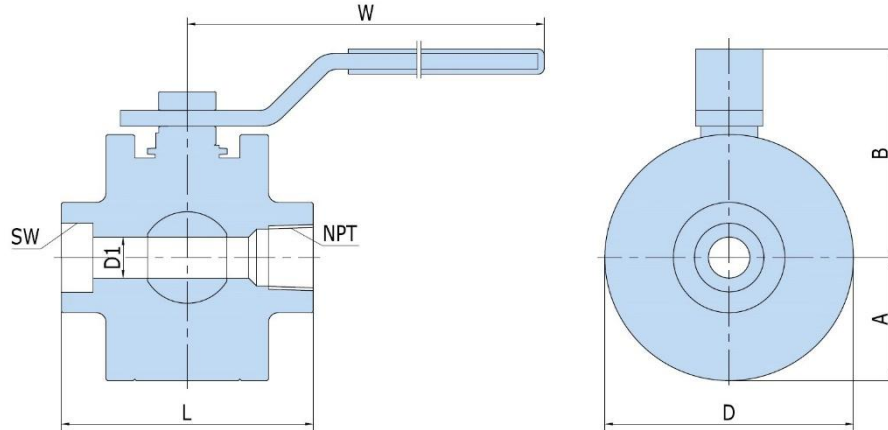
TYPICAL MATERIALS

Body/Closures	(Forging) A105, A182 F304, F304L, F316, F316L, F51, F53, A350 LF2, LF3, LF5, Inconel, Hastelloy, Monel
Ball	A182 F304, F304L, F316, F316L, F51, F53, CS/SS+TCC, CS/SS+Ni60
Seal Ring	PTFE, RPTFE, PCTFE, Devlon, PEEK
Stem	F316, F51, 17-4PH, XM-19
Packing	Graphite, PTFE, RPTFE
O-ring	Viton, HNBR, FVMQ, AFLAS

FLOATING BALL VALVE

DIMENSIONS AND WEIGHT (SW/NPT - Short Pattern)

ASME CLASS 800/ CLASS1500



ASME CLASS 800 (PN136)

Size in/mm	D1	L		Forging			Weight
		SW / NPT	A	B	D	W	SW / NPT (lb/kg)
1/2	0.5	3.11	1.57	2.56	3.15	7.87	6.5
15	12.7	79	40	65	80	200	2.9
3/4	0.75	3.62	1.67	3.03	3.35	7.87	8.6
20	19.1	92	42.5	77	85	200	3.9
1	1	4.37	1.87	3.35	3.7	7.87	12
25	25.4	111	47	85	94	200	5.6
1 1/4	1.25	5.51	2.2	3.74	4.33	11.81	20
32	31.8	140	56	95	110	300	9
1 1/2	1.5	5.51	2.42	4.33	4.48	11.81	26
40	38.1	140	61.5	110	123	300	11.8
2	1.94	5.98	2.93	5.31	5.87	13	41
50	49	152	74.5	135	149	330	18.5

1. Face to Face dimension for pressure rating CL150~CL600 SW/NPT ball valve can refer to the dimension specified on table above for CL800.
2. The face to face and outline dimension for reduce ball valve are the same as full bore ball valve, just the flow port dimension has been reduced.
3. Short Pattern only applies to the SW/NPT soft seat ball valve with lever operation.

ASME CLASS1500 (PN 250)

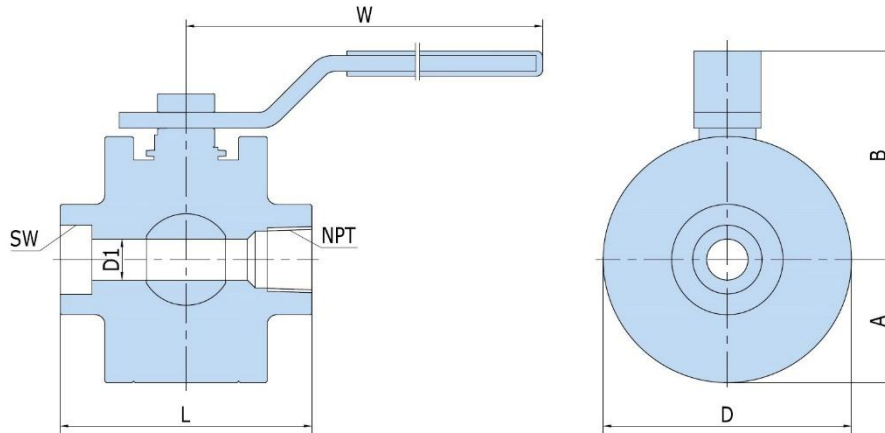
Size in/mm	D	L		Forging			Weight
		SW / NPT	A	B	D	W	SW / NPT (lb/kg)
1/2	0.5	3.62	1.65	3.11	3.31	7.87	9
15	12.7	92	42	79	84	200	3.9
3/4	0.75	4.37	1.93	3.46	3.74	9.84	13
20	19.1	111	49	88	95	250	5.9
1	1	5	2.09	3.54	4.17	9.84	18
25	25.4	127	53	90	106	250	8.3
1 1/4	1.25	5.51	2.44	4.53	4.33	13	30
32	31.8	140	62	115	110	330	13.5
1 1/2	1.5	5.98	2.76	5.12	5.51	19.3	38
40	38.1	152	70	130	140	490	17
2	1.94	7.01	3.31	5.91	6.61	24	63
50	49	178	84	150	168	610	28.3

1. The face to face and outline dimension for reduce ball valve are the same as full bore ball valve, just the flow port dimension has been reduced.
2. Short Pattern only applies to the SW/NPT soft seat ball valve with lever operation.

FLOATING BALL VALVE

DIMENSIONS AND WEIGHT (SW/NPT - Long Pattern)

ASME CLASS 800/CLASS1500



ASME CLASS 800 (PN136)

Size in/mm	D1	L SW / NPT	Forging				Weight SW / NPT (lb/kg)
			A	B	D	W	
1/2	0.5	4.25	1.89	3.44	3.78	7.87	12
15	12.7	108	48	87.5	96	200	5.5
3/4	0.75	4.61	2.07	3.54	4.13	7.87	13
20	19.1	117	52.5	90	105	200	5.8
1	1	5	2.17	3.64	4.33	7.87	15
25	25.4	127	55	92.5	110	200	6.7
1 1/4	1.25	5.51	2.64	5.12	5.28	11.81	29
32	31.8	140	67	130	134	300	13
1 1/2	1.5	6.5	3.05	5.91	6.1	11.81	36
40	38.1	165	77.5	150	155	300	16
2	1.94	7.01	3.25	6.69	6.5	13	51
50	49	178	82.5	170	165	330	23

1. Face to Face dimension for pressure rating CL150~CL600 SW/NPT ball valve can refer to the dimension specified on table above for CL800.
2. The face to face and outline dimension for reduce ball valve are the same as full bore ball valve.
3. Long pattern can be applied to the ball valve with structure of metal seat, stem extension, or bare stem, or actuated ball valves, or full welded and butt welded.

ASME CLASS1500 (PN 250)

Size in/mm	D	L SW / NPT	Forging				Weight SW / NPT (lb/kg)
			A	B	D	W	
1/2	0.5	5.51	2.24	3.74	4.49	7.87	18
15	12.7	140	57	95	114	200	8
3/4	0.75	5.98	2.48	4.02	4.96	9.84	2
20	19.1	152	63	102	126	250	11
1	1	6.5	2.56	4.37	5.12	9.84	29
25	25.4	165	65	111	130	250	13
1 1/4	1.25	7	3.07	5.12	5.71	13	39
32	31.8	178	78	130	145	330	17.5
1 1/2	1.5	7.48	3.43	5.91	6.3	19.3	46
40	38.1	190	87	150	160	490	21
2	1.94	8.5	3.54	6.69	7.09	24	83
50	49	216	90	170	180	610	37.5

1. Face to Face dimension for pressure rating CL900 SW/NPT ball valve can refer to the dimension specified on table above for CL1500.
2. The face to face and outline dimension for reduce ball valve are the same as full bore ball valve.
3. Long pattern can be applied to the ball valve with structure of metal seat, stem extension, or bare stem, or actuated ball valves, or full welded and butt welded.