



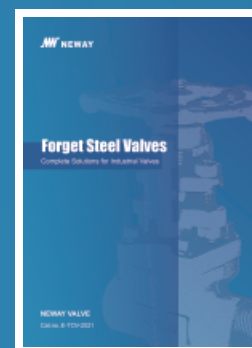
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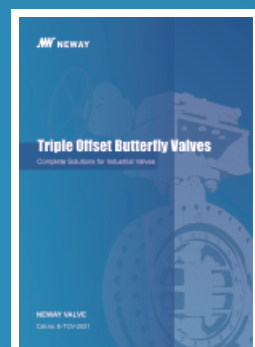
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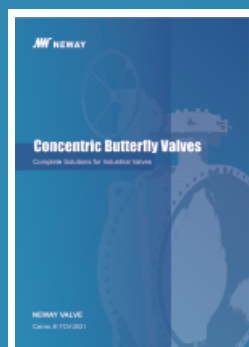
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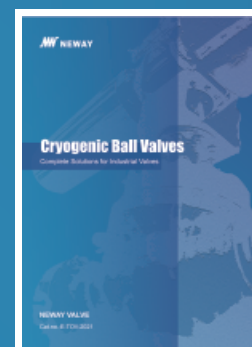
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Cat.no.:E-CBV



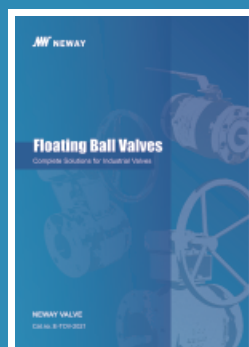
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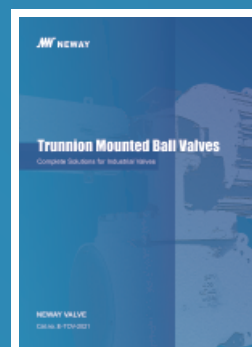
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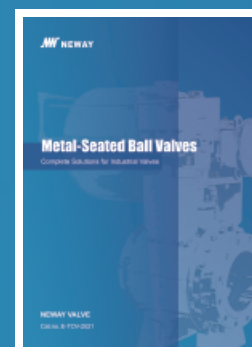
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Cat.no.:E-FBV



Cat.no.:E-TMBV



Cat.no.:E-MSBV



NEWAY VALVE (SUZHOU) CO., LTD.

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Post Code: 215129

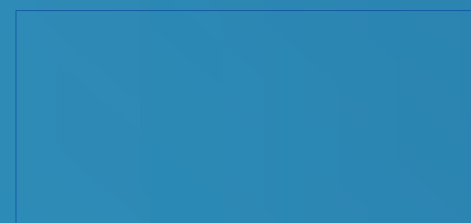
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Fax: 86-512-666-18930-2102

E-mail: overseas.sales@neway.com.cn

<http://www.newayvalve.com>

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Cat.no.:E-MMBV-2022



Metal-Seated Ball Valves

Complete Solutions for Industrial Valves

NEWAY VALVE

Cat.no.:E-MMBV-2022

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Complete Solutions for Industrial Valves

As a global leader of valve manufacturing, Neway (SSE:603699) is dedicated to the production, research, and development of industrial valves. Neway is committed to providing complete valve solutions to all industries through advanced engineering and innovation.

Neway’s product line includes Ball, Butterfly, Gate, Globe, Check, Nuclear, Control, Subsea, Safety valves. Our high quality standards and innovative ability are recognized by many global end users and EPCs. Neway valves are utilized in a wide variety of industries and working conditions such as Refining, Chemical, Coal Chemical, Offshore(including subsea), Air Separation, LNG, Nuclear Power, Power Generation, and Pipeline Transmission applications.

Facilities & Service

Neway has developed a sophisticated multi-plant management system operating one valve assembly plant, one API6A valve plant, three foundries, and one R&D center. Our largest assembly plant was expanded in 2013, and it now covers 35,000 square meters.

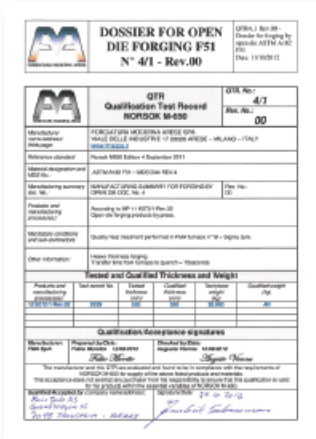
Advanced software (ANSYS, FE-Safe, CF-Design, Siemens PLM and NX) is applied here at Neway for the Research & Development of products. We use SAP to control the traceability and status of all products during the manufacturing process. In order to ensure the safety, eco-friendliness, and reliability of our products, we use the most advanced fire-safe, cryogenic, high pressure, and fugitive emission test equipment.

As part of Neway’s global strategy, to provide better service to our customers, we have established our overseas subsidiaries in USA, Netherlands, Italy, Singapore, and Dubai along with over 80 agents and distributors worldwide.

Quality Assurance

Neway is dedicated to the pursuit of “Zero Defect”. We maintain a quality management system that encompasses our entire operation from order entry, to final inspection. Through Neway’s continuous efforts, our products have successfully achieved industrial certificates including ISO 9001, API 6A, API 6D, CE/PED, ASME N & NPT, TA-Luft, ABS, CU-TR, and Fire-Safe approvals.

Quality Commitment



NORSOK



ISO9001



CE/PED



Fire Safe Test Certificate



TA Luft



ABS



API 6D



AD2000

Neway recognizes the importance of valve quality for the safety and protection of personnel health and property. It is our quality commitment to focus our resources to provide our customers with first class products at a competitive price, designed, manufactured, inspected and tested in accordance with our customers specifications and complying with all international standards.

Current industrial standards do not always take into consideration the likelihood and consequences of possible deterioration in service, related to specific service fluids or the external environments in which they operate. Therefore we request that our customers communicate with our engineering department. Our valve optimization program continuously strives to provide valves that withstand deterioration in service, and ensure safety over the valves expected lifetime.

8

①

BSM

②

3

③

R

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G

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F316

⑥

/

45666

⑦

Neway part numbers are designed to cover essential features. When ordering, Please show the figure numbers and detailed description to avoid misunderstanding of your requirements.

Following descriptions provide a basic guideline in valve specification:

① Valve Size

Full bore

in	1/2	3/4	1	1-1/2	2	2-1/2	3	4	6	8	10	12
mm	15	20	25	40	50	65	80	100	150	200	250	300
in	14	16	18	20	24	26	28	30	32	34	36	40
mm	350	400	450	500	600	650	700	750	800	850	900	1000

Reduced bore

in	1/2x3/8	3/4x1/2	1x3/4	1-1/2x1	2x1-1/2	2-1/2x2	3x2	4x3	6x4	8x6	10x8	12x10
mm	15x10	20x15	25x20	40x25	50x40	65x50	80x50	100x80	150x100	200x150	250x200	300x250
in	14x12	16x14	18x16	20x18	24x20	26x24	28x24	30x24	32x30	34x30	36x30	40x36
mm	350x300	400x350	450x400	500x450	600x500	650x600	700x600	750x600	800x750	850x750	900x750	1000x900

② Valve type

Symbol	Valve type	Symbol	Valve type
BM	Side entry casting floating type metal seat	BSM	Side entry forging trunnion mounted type metal seat
BBM	Side entry casting floating type metal seat	BSK	Side entry forging trunnion mounted type(O-ring) metal seat

③ Class & Pressure

Code	Class	Pressure (Mpa)	Code	Class	Pressure (Mpa)
1	150	2	8	800	14
3	300	5	9	900	15
4	400	6.8	15	1500	25
6	600	10	25	2500	42

④ End Connection

Symbol	End	Symbol	End	Symbol	End
R	Raised face flanged end	B	Butt-weld end	N	Screwed end
J	RTJ flanged end	S	Socket weld end	SN	Socket weld/Screwed end

⑤ Operator

Symbol	Description	SSymbol	Description
	Lever	BS	Bare shaft
G	Gear operator	H	Hydraulic actuator
M	Electric actuator	L	Gas over oil actuator
P	Pneumatic actuator	D	Electric over oil actuator

⑥ Body Materials

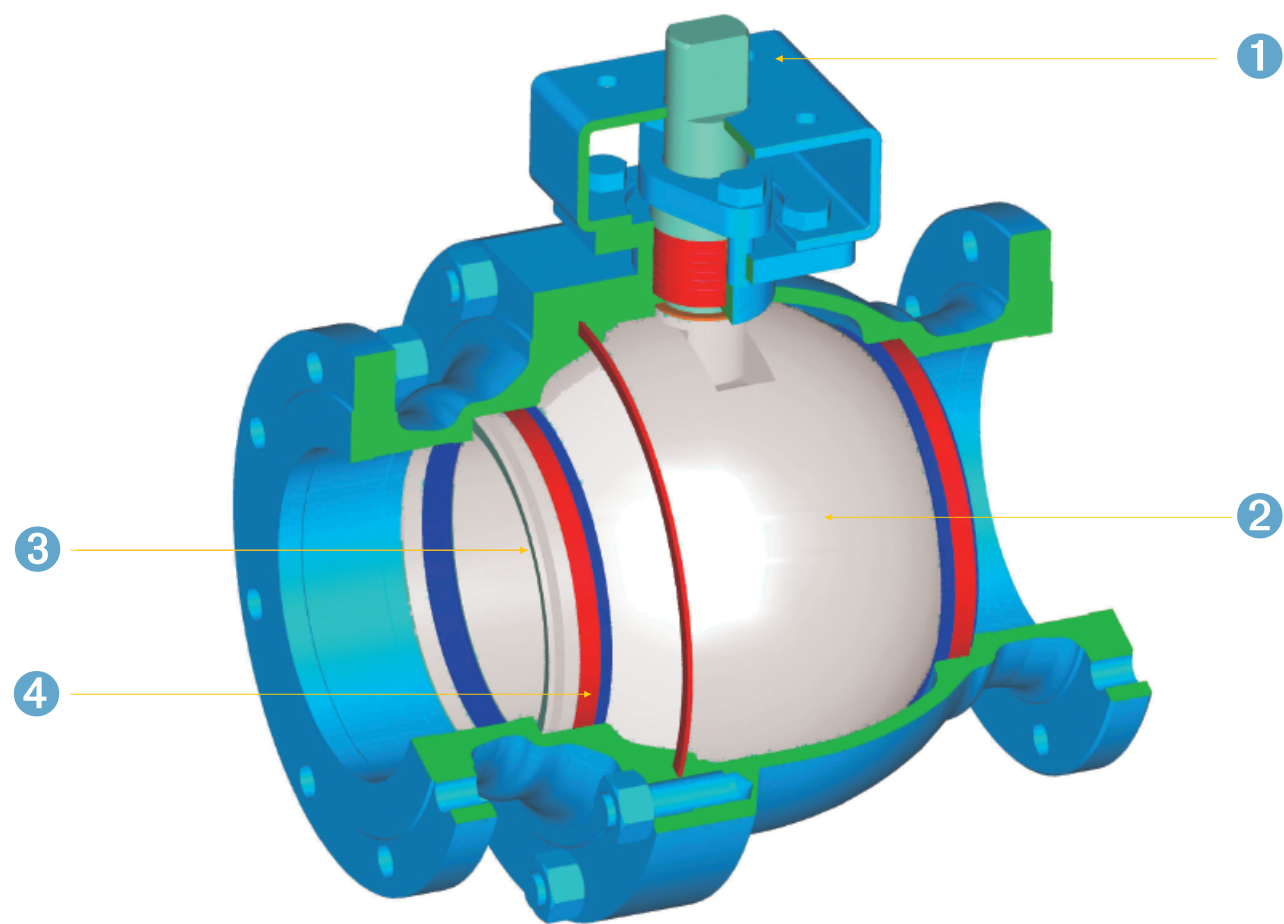
Material	WCB	LCB	CF8	CF8M	CF3	CF3M	4A
Spec.No.	A216 Gr.WCB	A352 Gr.WCB	A351 Gr.CFB	A351 Gr.CF8M	A351 Gr.CF3	A351 Gr.CF3M	A890 Gr.4A

Material	A105N	LF2	F304	F316	F304L	F316L	F51
Spec.No.	A105N	A350 Gr.LF2	A182 Gr.F304	A182 Gr.F316	A182 Gr.F304L	A182 Gr.F316L	A182 Gr.F51

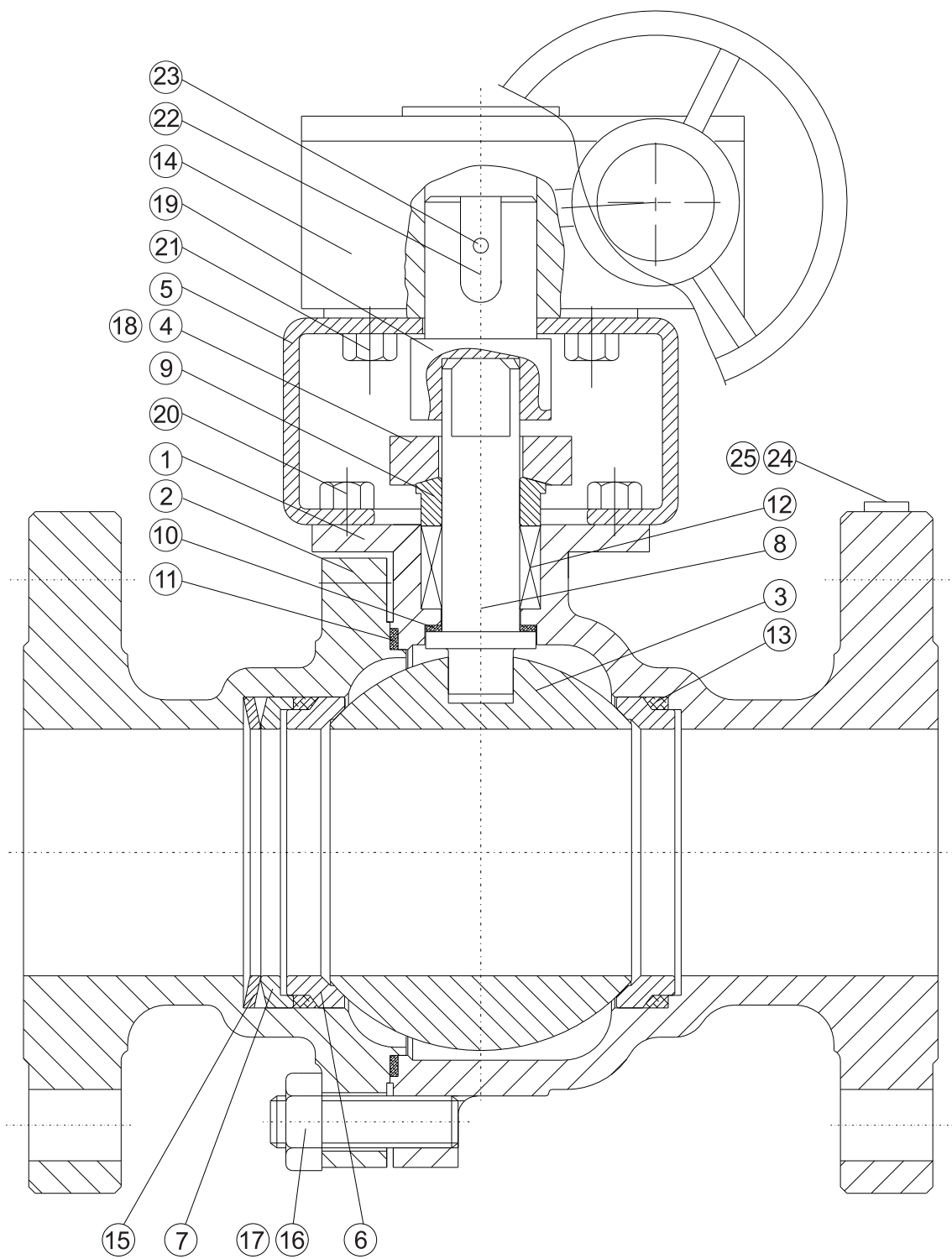
⑦ Trim Codes

Hard Face	Sealings	Stem	Ball	Seat
Material	Material	Material	Material	Material
Ball-WC Seat-TCC	O-Ring	17-4PH	F6a	F6a
Ball-NI60 Seat-NI55	Lip	F51	F304	F304
Ball-WC Seat-NI55	Graphite	F53	A105N/ENP	A105N/ENP
Ball -Cr3C2-NiCr		Inconel 718	17-4PH	17-4PH
Seat -Cr3C2-NiCr		Monel k500	AISI 4140/ENP	AISI 4140/ENP
Ball-TCC Seat-NI60			F316	F316
			F304L	F304L
			F316L	F316L
			LF2/ENP	LF2/ENP
			F51	F51

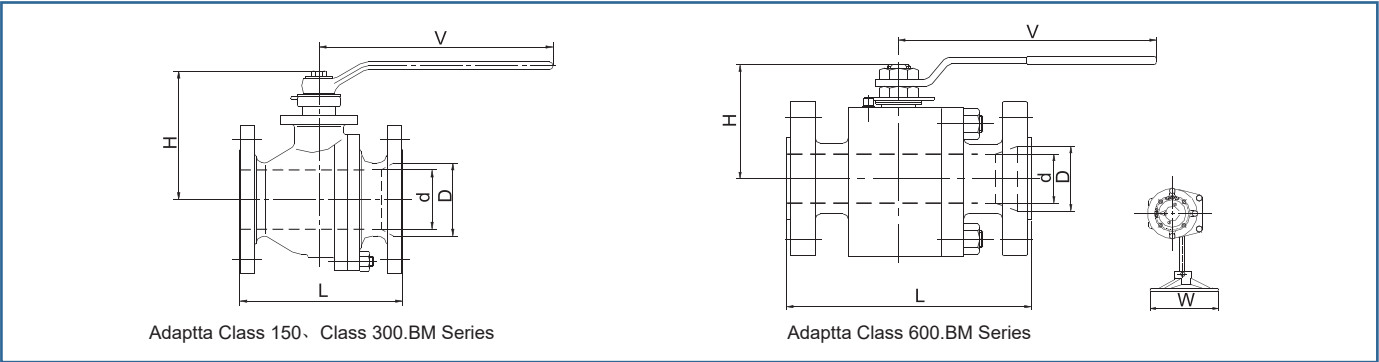
Note: Materials are according to customer requirements for reference.



- ① Top flange design as per ISO 5211, optional actuators of gearbox, electric actuator and pneumatic actuator are available.
- ② Hard faced ball and the seat to satisfy the requirement of high hardness, high temperature resistance, wear resistance.
- ③ With the help of the pre-loaded spring, the seat is able to maintain seal even in low operating pressure.
- ④ Several designs of the seat to choose from, among which the dust proof seat design is available.



Item	Description	Standard	Sour Service	S.S
1	BODY	ASTM A216 WCB	ASTM A216 WCB	ASTMA182 F316
2	BONNET	ASTM A216 WCB	ASTM A216 WCB	ASTMA182 F316
3	BALL	ASTM A182 F316+WC	ASTMA182 F316+WC	ASTMA182 F316+WC
4	Packing Gland	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 Cf8
5	Yoke	AISI 1020	AISI 1020	AISI 1020
6	Seat	ASTM A182 F316+STL.6	ASTM A182 F316+STL.6	ASTMA182 F316+STL.6
7	Compression Ring	ASTM A182 F316	ASTMA182 F316	ASTMA182 F316
8	Stem	17-4PH	17-4PH	17-4PH
9	Gland	ASTM A182 F316L	ASTMA182 F316L	ASTMA182 F316L
10	Thrust Washer	ASTM A182 F316L	ASTMA182 F316L	ASTMA182 F316L
11	Cavity Gasket	316+Graphite	316+Graphite	316+Graphite
12	Packing	Graphite	Graphite	Graphite
13	Packing	Graphite	Graphite	Graphite
14	Gearbox	Assembly	Assembly	Assembly
15	Disk Spring	17-7PH	Inconel x-750	Inconel x-750
16	Stud	ASTM A193 B7	ASTMA193 B7M	ASTMA193 B8
17	Stud	ASTM A194 2H	ASTMA194 2HM	ASTMA194 8
18	Nut	AISI 1035	AISI 1035	ASTMA193 B8
19	Adapter	AISI 1020	AISI 1020	ASTMA182 F304
20	Bolt	AISI 1035	AISI 1035	ASTM A276 304
21	Bolt	AISI 1035	AISI 1035	ASTM A276 304
22	Key	AISI 1045	AISI 1045	ASTM A276 304
23	Pin	ASTM A276 304	ASTM A276 304	ASTM A276 304
24	Nameplate	ASTM A276 304	ASTM A276 304	ASTM A276 304
25	Rivet	ASTM A276 304	ASTM A276 304	ASTM A276 304



Class 150 Full bore (Floating)

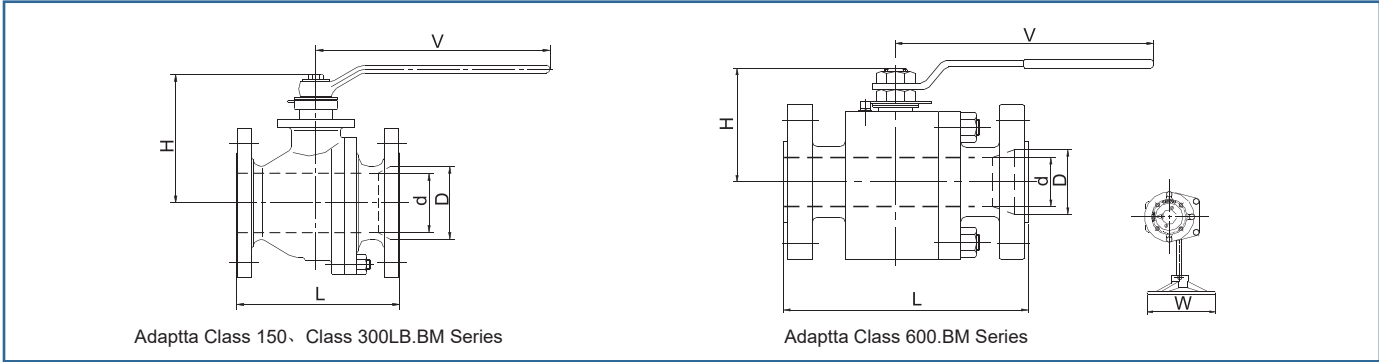
Size		D		L				H		W		V		Weight	
				RF		BW									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	4.25	108	5.49	139.5	2.23	56.6			5.51	140	4.41	2
3/4	20	0.75	19	4.61	117	6.00	152.5	2.32	59			5.51	140	6.61	3
1	25	0.98	25	5.00	127	6.50	165	3.29	83.5			8.46	215	8.82	4
1-1/2	40	1.50	38	6.50	165	7.52	191	4.63	117.5			10.43	265	17.64	8
2	50	2.01	51	7.01	178	8.50	216	5.15	130.8			16.93	430	22.05	10
3	80	2.99	76	7.99	203	11.14	283	6.90	175.3			41.73	1060	35.27	16
4	100	4.02	102	9.02	229	12.01	305	7.65	194.3			41.73	1060	88.18	40

Class 150 Reduced bore (Floating)

Size		D		d		L				H		W		V		Weight	
						RF		BW									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	4.25	108	5.49	139.5	1.93	49			5.51	140	3.31	1.5
3/4*1/2	20*15	0.75	19	0.51	13	4.61	117	6.00	152.5	2.23	56.6			5.51	140	4.41	2
1*3/4	25*20	0.98	25	0.75	19	5.00	127	6.50	165	2.32	59			5.51	140	6.61	3
1-1/2*1	40*25	1.50	38	0.98	25	6.50	165	7.52	191	3.29	83.5			8.46	215	15.43	7
2*1-1/2	50*40	2.01	51	1.50	38	7.01	178	8.50	216	4.63	117.5			10.43	265	17.64	8
3*2	80*50	2.99	76	2.01	51	7.99	203	11.14	283	5.15	130.8			10.43	265	30.86	14
4*3	100*80	4.02	102	2.99	76	9.02	229	12.01	305	6.90	175.3			16.93	430	79.37	36

Class 300 Full bore (Floating)

Size		D		L				H		W		V		Weight	
				RF		BW									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	5.51	140	5.51	140	2.23	56.6			5.51	140	6.61	3
3/4	20	0.75	19	5.98	152	5.98	152	2.32	59			5.51	140	8.82	4
1	25	0.98	25	6.50	165	6.50	165	3.29	83.5			8.46	215	13.23	6
1-1/2	40	1.50	38	7.52	191	7.52	191	4.63	117.5			10.43	265	24.25	11
2	50	2.01	51	8.50	216	8.50	216	5.15	130.8			16.93	430	33.07	15
3	80	2.99	76	11.14	283	11.14	283	6.90	175.3			41.73	1060	103.62	47
4	100	4.02	102	12.01	305	12.01	305	10.04	255	11.81	300			149.91	68



Class 300 Reduced bore (Floating)

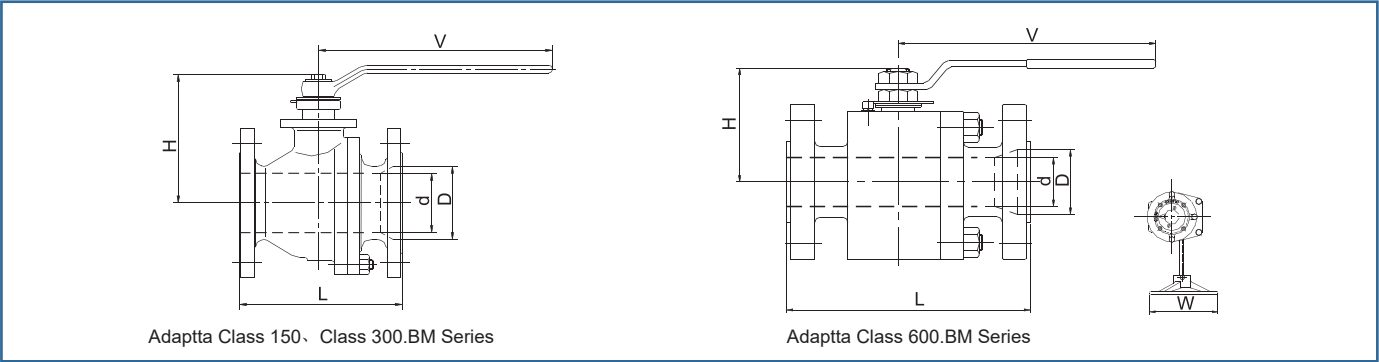
Size		D		d		L				H		W		V		Weight	
						RF		BW									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	5.51	140	5.51	140	2.14	54.3			5.51	140	4.41	2
3/4*1/2	20*15	0.75	19	0.51	13	5.98	152	5.98	152	2.23	56.6			5.51	140	6.61	3
1*3/4	25*20	0.98	25	0.75	19	6.50	165	6.50	165	2.32	59			5.51	140	8.82	4
1-1/2*1	40*25	1.50	38	0.98	25	7.52	191	7.52	191	3.29	83.5			8.46	215	19.84	9
2*1-1/2	50*40	2.01	51	1.50	38	8.50	216	8.50	216	4.63	117.5			10.43	265	28.66	13
3*2	80*50	2.99	76	2.01	51	11.14	283	11.14	283	5.15	130.8			16.93	430	99.21	45
4*3	100*80	4.02	102	2.99	76	12.01	305	12.01	305	6.90	175.3			41.73	1060	143.30	65

Class 400 Full bore (Floating)

Size		D		L						H		W		V		Weight	
				RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	6.50	165	6.50	165	6.46	164	3.86	98			5.91	150	8.82	4
3/4	20	0.75	19	7.52	191	7.52	191	7.52	191	4.53	115			7.09	180	13.23	6
1	25	0.98	25	8.50	216	8.50	216	8.50	216	4.74	120.5			10.43	265	24.25	11
1-1/2	40	1.50	38	9.49	241	9.49	241	9.49	241	6.26	159			11.81	300	55.11	25
2	50	2.01	51	11.50	292	11.50	292	11.61	295	11.34	288	11.81	300			110.23	50
3	80	2.99	76	14.02	356	14.02	356	14.13	359	11.89	302	15.75	400			121.25	55
4	100	4.02	102	15.98	406	15.98	406	16.14	410	12.60	320	23.62	600			414.46	188

Class 400 Reduced bore (Floating)

Size		D		d		L						H		W		V		Weight	
						RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	6.50	165	6.50	165	6.46	164	3.19	81			5.91	150	6.61	3
3/4*1/2	20*15	0.75	19	0.51	13	7.52	191	7.52	191	7.52	191	3.86	98			5.91	150	11.02	5
1*3/4	25*20	0.98	25	0.75	19	8.50	216	8.50	216	8.50	216	4.53	115			7.09	180	19.84	9
1-1/2*1	40*25	1.50	38	0.98	25	9.49	241	9.49	241	9.49	241	4.74	120.5			10.43	265	48.50	22
2*1-1/2	50*40	2.01	51	1.50	38	11.50	292	11.50	292	11.61	295	6.26	159			11.81	300	55.11	25
3*2	80*50	2.99	76	2.01	51	14.02	356	14.02	356	14.13	359	11.34	288	11.81	300			112.43	51
4*3	100*80	4.02	102	2.99	76	15.98	406	15.98	406	16.14	410	11.89	302	15.75	400			399.03	181



Class 600 Full bore (Floating)

Size		D		L						H		W		V		Weight	
				RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	6.50	165	6.50	165	6.46	164	3.86	98			5.91	150	8.82	4
3/4	20	0.75	19	7.52	191	7.52	191	7.52	191	4.53	115			7.09	180	13.23	6
1	25	0.98	25	8.50	216	8.50	216	8.50	216	4.74	120.5			10.43	265	24.25	11
1-1/2	40	1.50	38	9.49	241	9.49	241	9.49	241	6.26	159			11.81	300	55.11	25
2	50	2.01	51	11.50	292	11.50	292	11.61	295	11.34	288	11.81	300			110.23	50
3	80	2.99	76	14.02	356	14.02	356	14.13	359	11.89	302	15.75	400			121.25	55
4	100	4.02	102	17.01	432	17.01	432	17.13	435	12.60	320	23.62	600			414.46	188

Class 600 Reduced bore (Floating)

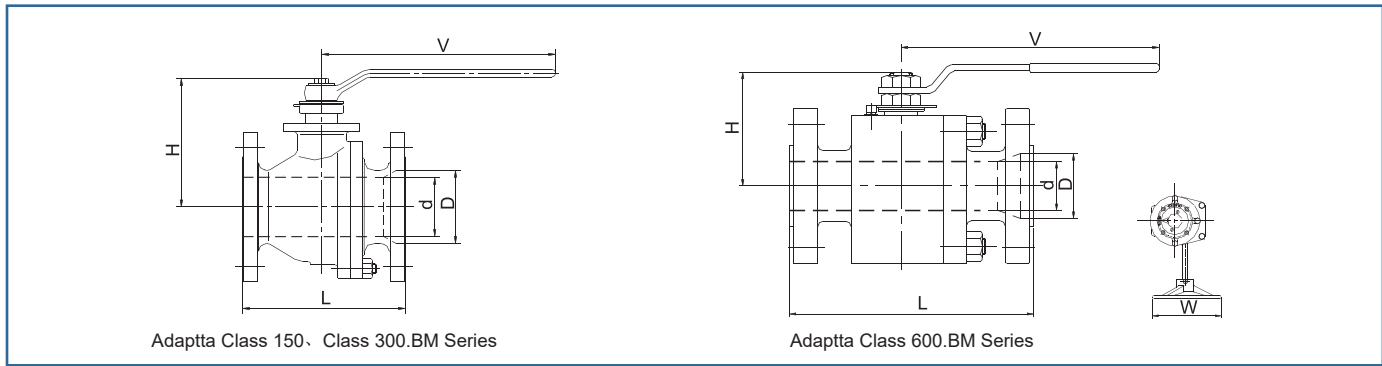
Size		D		d		L						H		W		V		Weight	
						RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	6.50	165	6.50	165	6.46	164	3.23	82			5.91	150	6.61	3
3/4*1/2	20*15	0.75	19	0.51	13	7.52	191	7.52	191	7.52	191	3.86	98			5.91	150	11.02	5
1*3/4	25*20	0.98	25	0.75	19	8.50	216	8.50	216	8.50	216	4.53	115			7.09	180	19.84	9
1-1/2*1	40*25	1.50	38	0.98	25	9.49	241	5.55	241	9.49	241	4.74	120.5			10.43	265	48.50	22
2*1-1/2	50*40	2.01	51	1.50	38	11.50	292	7.56	292	11.50	292	6.26	159			11.81	300	55.11	25
3*2	80*50	2.99	76	2.01	51	14.02	356	14.02	356	14.13	359	11.34	288	11.81	300			112.43	51
4*3	100*80	4.02	102	2.99	76	17.01	432	17.01	432	17.13	435	11.89	302	15.75	400			399.03	181

Class 900 Full bore (Floating)

Size		D		L						H		W		V		Weight	
				RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	8.50	216	8.50	216	8.50	216	4.41	112			7.09	180	22.05	10
3/4	20	0.75	19	9.02	229	9.02	229	9.02	229	4.75	120.5			10.43	265	28.66	13
1	25	0.98	25	10.00	254	10.00	254	10.00	254	6.24	158.5			11.81	300	33.07	15
1-1/2	40	1.50	38	12.01	305	12.01	305	12.01	305	7.48	190			15.75	400	105.82	48
2	50	2.01	51	14.49	368	14.49	368	14.61	371	11.42	290	15.75	400			158.73	72

Class 900 Reduced bore (Floating)

Size		D		d		L						H		W		V		Weight	
						RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	8.50	216	8.50	216	8.50	216	4.17	106			6.50	165	17.64	8
3/4*1/2	20*15	0.75	19	0.51	13	9.02	229	9.02	229	9.02	229	4.41	112			7.09	180	19.84	9
1*3/4	25*20	0.98	25	0.75	19	10.00	254	10.00	254	10.00	254	4.74	120.5			10.43	265	26.46	12
1-1/2*1	40*25	1.50	38	0.98	25	12.01	305	12.01	305	12.01	305	6.24	158.5			11.81	300	30.86	14
2*1-1/2	50*40	2.01	51	1.50	38	14.49	368	14.49	368	14.61	371	7.49	190			15.75	400	99.21	45



Class 1500 Full bore (Floating)

Size		D		L						H		W		V		Weight	
				RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	8.50	216	8.50	216	8.50	216	4.41	112			7.09	180	22.05	10
3/4	20	0.75	19	9.02	229	9.02	229	9.02	229	4.25	120.5			10.43	265	28.66	13
1	25	0.98	25	10.00	254	10.00	254	10.00	254	6.24	158.5			11.81	300	33.07	15
1-1/2	40	1.50	38	12.01	305	12.01	305	12.01	305	7.49	190			15.75	400	105.82	48
2	50	2.01	51	14.49	368	14.49	368	14.61	371	11.42	290	15.75	400			158.73	72

Class 1500 Reduced bore (Floating)

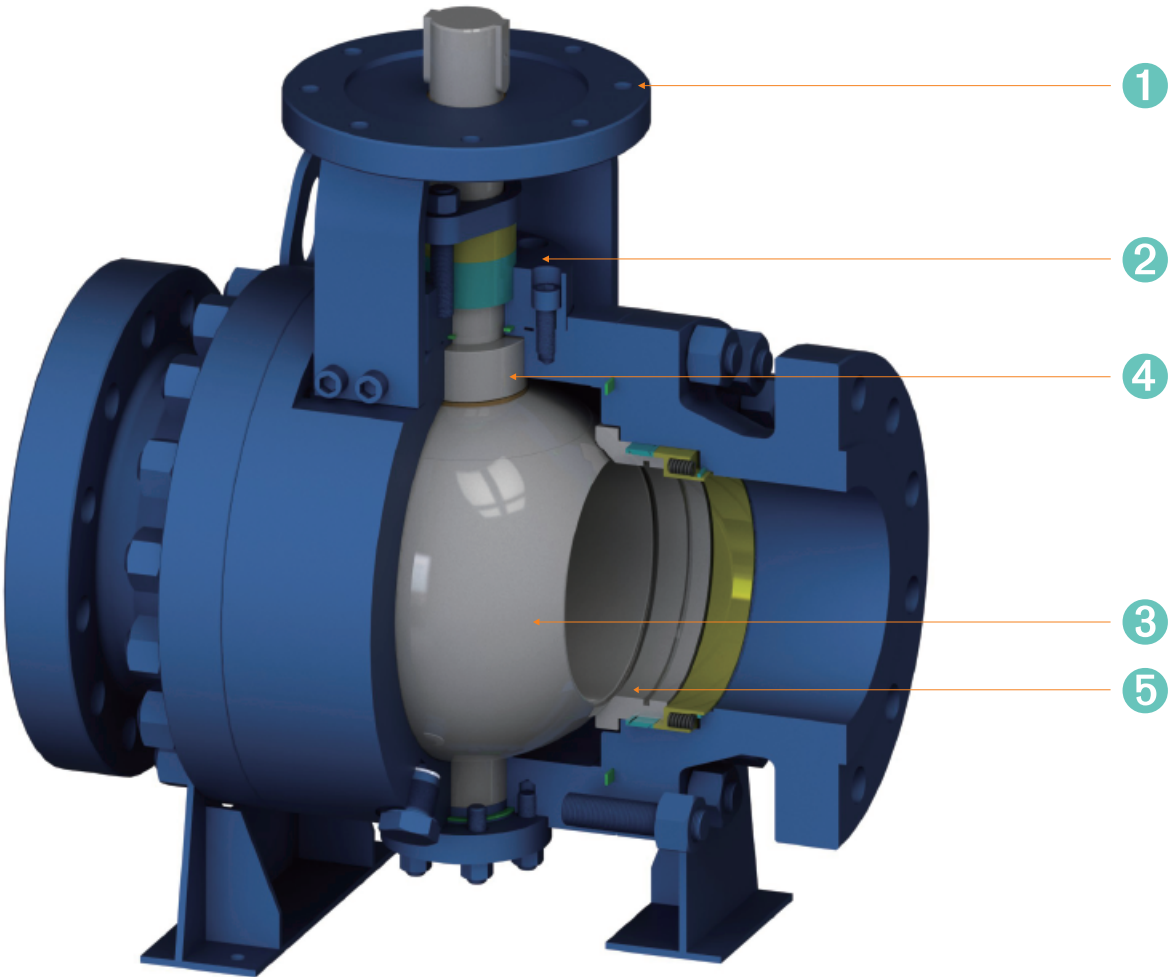
Size		D		d		L						H		W		V		Weight	
						RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	8.50	216	8.50	216	8.50	216	4.17	106			6.50	165	17.64	8
3/4*1/2	20*15	0.75	19	0.51	13	9.02	229	9.02	229	9.02	229	4.41	112			7.09	180	19.84	9
1*3/4	25*20	0.98	25	0.75	19	10.00	254	10.00	254	10.00	254	4.74	120.5			10.43	265	26.46	12
1-1/2*1	40*25	1.50	38	0.98	25	12.01	305	12.01	305	12.01	305	6.24	158.5			11.81	300	30.86	14
2*1-1/2	50*40	2.01	51	1.50	38	14.49	368	14.49	368	14.61	371	7.48	190			15.75	400	99.21	45

Class 2500 Full bore (Floating)

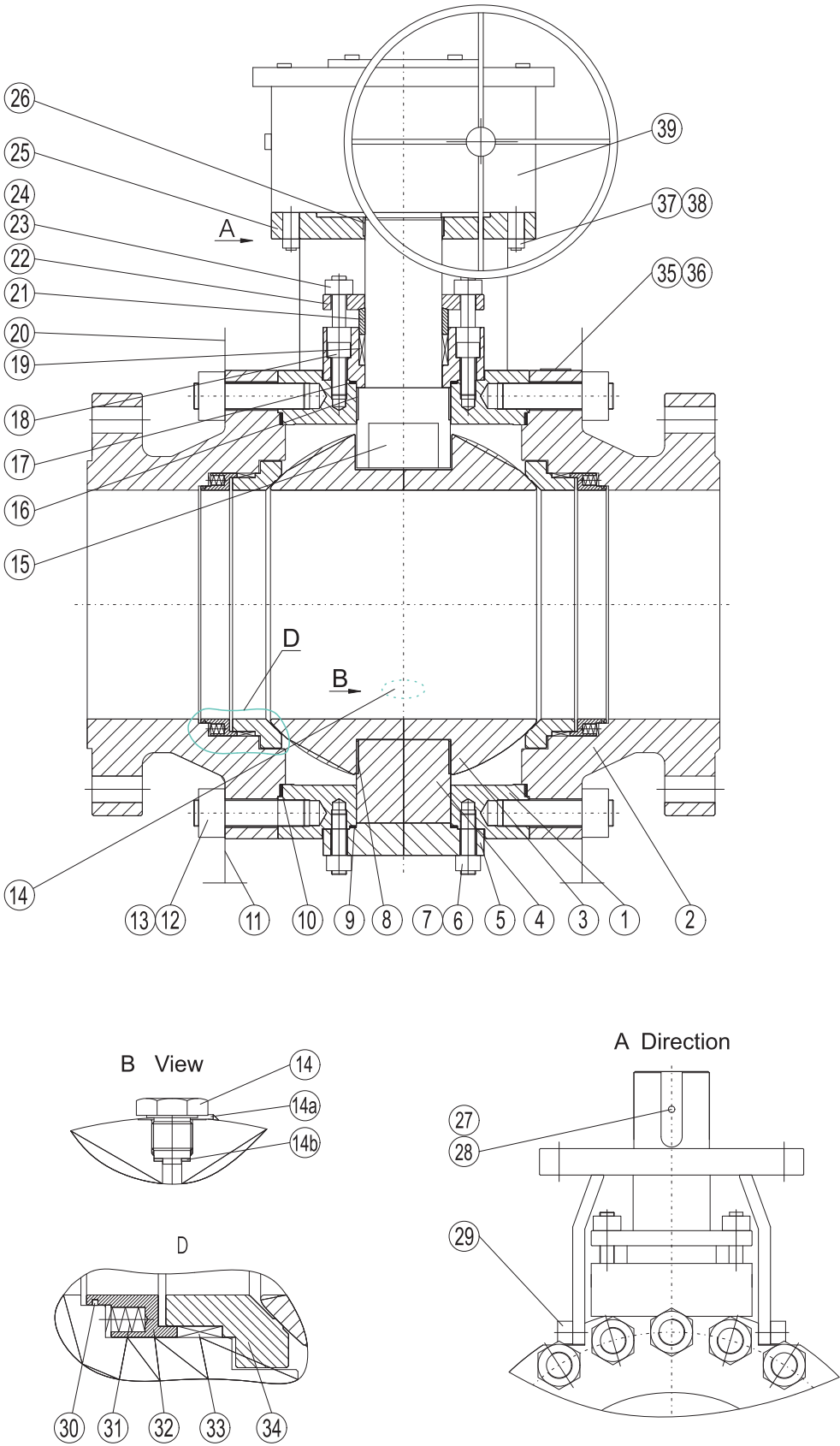
Size		D		L						H		W		V		Weight	
				RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2	15	0.51	13	10.39	264	10.39	264	10.39	264	4.53	115			7.09	180	26.46	12
3/4	20	0.75	19	10.75	273	10.75	273	10.75	273	4.65	118			10.43	265	35.27	16
1	25	0.98	25	12.13	308	12.13	308	12.13	308	6.97	177			11.81	300	41.89	19
1-1/2	40	1.50	38	14.49	368	14.49	368	14.49	368	8.03	204			15.75	400	108.02	49
2	50	1.65	42	17.76	451	17.76	451	17.87	454	11.73	298	15.75	400			169.75	77

Class 2500 Reduced bore (Floating)

Size		D		d		L						H		W		V		Weight	
						RF		BW		RTJ									
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
1/2*3/8	15*10	0.51	13	0.28	7	10.39	264	10.39	264	10.39	264	3.70	94			6.30	160	19.84	9
3/4*1/2	20*15	0.75	19	0.51	13	10.75	273	10.75	273	10.75	273	4.53	115			7.09	180	26.46	12
1*3/4	25*20	0.98	25	0.75	19	12.13	308	12.13	308	12.13	308	4.65	118			10.43	265	34.17	15.5
1-1/2*1	40*25	1.50	38	0.98	25	14.49	368	14.49	368	14.49	368	6.97	177			11.81	300	92.59	42
2*1-1/2	50*40	1.65	42	1.50	38	17.76	451	17.76	451	17.87	454	8.03	204			15.75	400	152.12	69

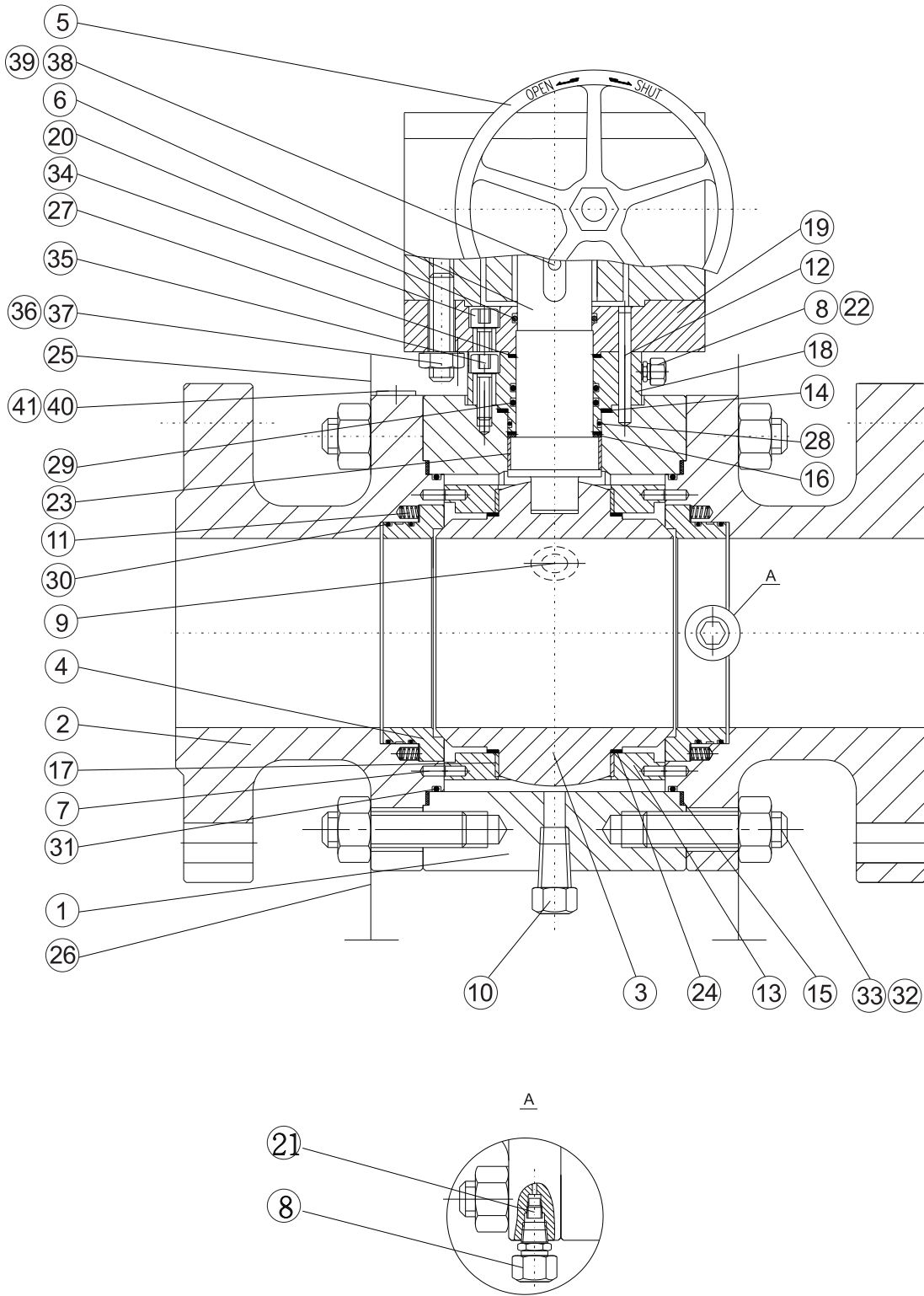


- 1 Top flange design as per ISO 5211, optional actuators of gearbox, electric actuator and pneumatic actuator are available.
- 2 Low emission graphite packing design.
- 3 Hard faced ball and the seat to satisfy the requirement of high hardness, high temperature resistance, wear resistance.
- 4 With the help of the pre-loaded spring, the seat is able to maintain seal even in low operating pressure.
- 5 Several designs of the seat to choose from, among which the dust proof seat design is available.



No.Parts Standard Material Sour Condition Stainless Steel Low Temperature Condition

Item	Descriptio	Standard	Sour Service	S.S
1	BODY	ASTMA105N	ASTM A105N	ASTM A182 F316
2	BONNET	ASTMA105N	ASTM A105N	ASTM A182 F316
3	BALL	ASTMA182 F316+WC	ASTM A182 F316+WC	ASTM A182 F316+WC
4	TRUNNION	17-4PH	17-4PH	17-4PH
5	COVER FLANGE	ASTMA105N	ASTM A105N	ASTM A182 F316
6	STUD	ASTM A183 B7	ASTM A193 B7M	ASTM A193 B8
7	NUT	ASTM A194 2H	ASTM A194 2HM	ASTM A194 8
8	BEARING	316+Cr	316+Cr	316+Cr
9	GASKET	316+Graphite	316+Graphite	316+Graphite
10	GASKET	316+Graphite	316+Graphite	316+Graphite
11	SUPPORT LEG	ASTMA283 GRD	ASTM A283 GRD	ASTM A283 GRD
12	STUD	ASTMA193 B7	ASTM A193 B7M	ASTM A193 B8
13	NUT	ASTMA194 2H	ASTM A194 2HM	ASTMA194 8
14	PLUG	ASTM A182 F304	ASTM A182 F304	ASTMA182 F316
14a	RETAINER	AISI 1020	AISI 1020	ASTM A276 304
14b	GASKET	316+Graphite	316+Graphite	316+Graphite
15	STEM	17-4PH	17-4PH	17-4PH
16	BEARING	316+Cr	316+Cr	316+Cr
17	GASKET	316+Graphite	316+Graphite	316+Graphite
18	SCREW	ASTM A193 B7	ASTMA193 B7M	ASTM A193 B8
19	PACKING ASSEMBLY	Graphite	Graphite	Graphite
20	LIFTING LUG	ASTM A283 GRD	ASTM A283 GRD	ASTM A283 GRD
21	GLAND	ASTM A182 F316L	ASTM A182 F316L	ASTMA182 F316L
22	PACKING GLAND	AISI 588 GRB	AISI 588 GRB	ASTM A182 F304
23	STUD	ASTMA193 B7	ASTM A193 B7M	ASTM A193 B8
24	NUT	ASTMA194 2H	ASTM A194 2HM	ASTM A194 8
25	TOP FLANGE	ASTM A105N	ASTM A 105N	ASTM A182 F304
26	BEARING	316+PTFE Braided Fabric	316+PTFE Braided Fabric	316+PTFE Braided Fabric
27	KEY	AISI 1045	AISI 1045	ASTM A276 304
28	PIN	ASTM A276 304	ASTM A276 304	ASTM A276 304
29	SCREW	AIS 1035	AISI 1035	ASTM A276 304
30	GRAPHITE RING	Graphite	Graphite	Graphite
31	SPRING	XINCONELX-750	XINCONEL X-750	XINCONEL X-750
32	COMPRESSION RING	ASTMA182 F318	ASTMA182 F316	ASTMA182 F316
33	PACKING SET	Graphite	Graphite	Graphite
34	SEAT	ASTM 182 F316+STL.6	ASTM A182 F318+STL.6	ASTMA182 F316+STL.6
35	NAMEPLATE	ASTM A276 304	ASTM A276 304	ASTM A276 304
36	RIVET	ASTM A276 304	ASTM A278 304	ASTM A276 304
37	STUD	AISI 1035	AISI 1035	ASTM A276 304
38	NUT	AISI 1035	AISI 1035	ASTM A276 304
39	GEARBOX	Assembly	Assembly	Assembly

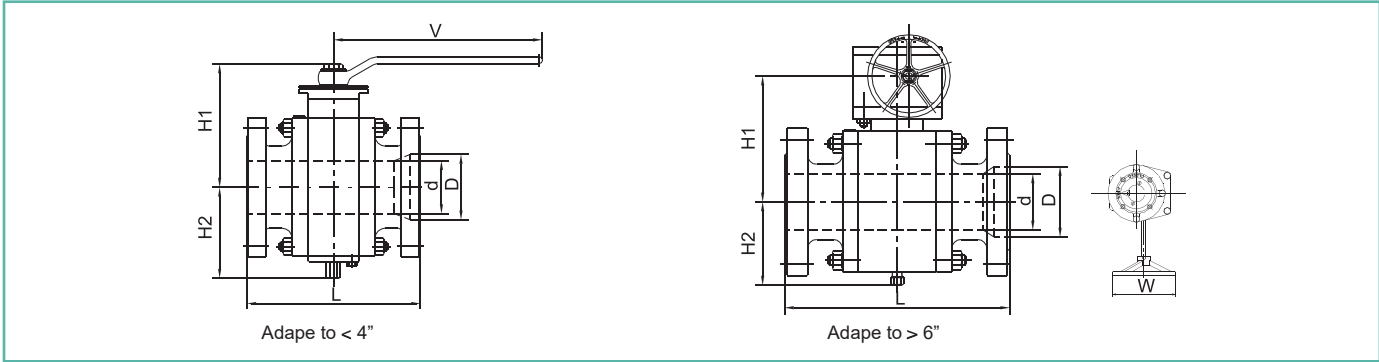


No.Parts Standard Material Sour Condition Stainless Steel Low Temperature Condition

Item	Descriptio	Standard	Sour Service	S.S
1	BODY	ASTM A105N	ASTM A105N	ASTM A182 F316
2	BONNET	ASTM A105N	ASTM A105N	ASTM A182 F316
3	BALL	ASTM A182 F316+WC	ASTM A182 F316+WC	ASTM A182 F316+WC
4	SEAT	ASTM A182 F316+STL.6	ASTM A182 F316+STL.6	ASTM A182 F316+STL.6
5	GEARBOX	ASSEMBLY	ASSEMBLY	ASSEMBLY
6	STEM	17-4PH	17-4PH	17-4PH
7	PIN	ASIM A276 304	ASIM A276 304	ASIM A276 304
8	INJECTION	ASIM A182 F304	ASIM A182 F304	ASIM A182 F316
9	VENT VALVE	ASIM A182 F304	ASIM A182 F304	ASIM A182 F316
10	PLUG	ASIM A182 F304	ASIM A182 F304	ASIM A162 F316
11	SPRING	INCONEL X-750	INCONELX-750	INCONEL X-750
12	PIN	AISI 1035	AISI 1035	ASIM A276 304
13	BEARING SUPPORT	AISI 588 GRB	AISI 588 GRB	ASTMA351 CF3M
14	GASKET	316+Graphite	316+Graphite	316+Graphite
15	GASKET	316+Graphite	316+ Graphite	316+Graphite
16	THRUST WASHER	PTFE	PTFE	PTFE
17	BEARING	316+PTFE Braided Fabric	316+PTFE Braided Fabric	316+PTFE Braided Fabric
18	GLAND FLANGE	ASTM A105N	ASTM A105N	ASTM A182 F316
19	TOP FLANGE	ASTM A105N	ASTM A105N	ASTM A182 F304
20	O-RING	VITON	VITON	VITON
21	CHECK VALVE	ASTM A182 F316	ASTM A182 F316	ASTMA182 F316
22	FITTING	ASTM A182 F304	ASTM A182 F304	ASTMA182 F316
23	BEARING	316+PTFE Braided Fabric	316+PTFE Braided Fabric	316+PTFE Braided Fabric
24	GASKET	316+Graphite	316+Graphite	316+Graphite
25	LIFTING LUG	Carbon Steel	Carbon Steel	Carbon Steel
26	SUPPORT LEG	ASTM A283 GRD	ASTM A283 GRD	ASTM A283 GRD
27	GASKET	ASTM A283 GRD	ASTM A283 GRD	ASTM A283 GRD
28	O-RING	VITON	VITON	VITON
29	O-RING	VITON	VITON	VITON
30	O-RING	VITON	VITON	VITON
31	O-RING	VITON	VITON	VITON
32	STUD	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
33	NUT	ASTM A194 2H	ASTM A194 2HM	ASTM A194 8
34	SCREW	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
35	SCREW	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
36	STUD	AISI 1035	AISI 1035	ASTM A276 304
37	NUT	AISI 1035	AISI 1035	ASTM A276 304
38	PIN	ASTM A276 304	ASTM A276 304	ASTM A276 304
39	KEY	AISI 1045	AISI 1045	ASTM A276 304
40	NAMEPLATE	ASTM A276 304	ASTM A276 304	ASTM A276 304
41	RIVET	ASTM A276 304	ASTM A276 304	ASTM A276 304

Metal-Seated Trunnion Mounted Ball Valve

Dimension&Weight



Class 150 Full bore -TM

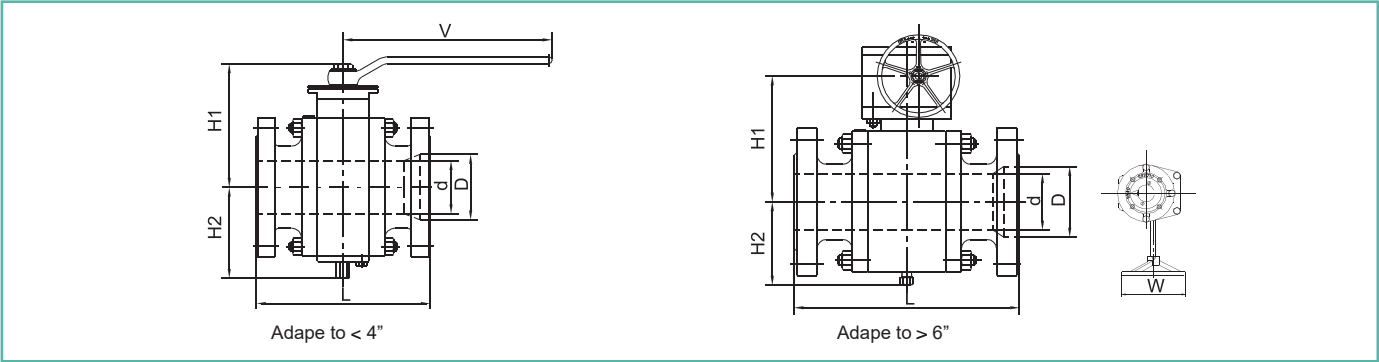
Size		D		L				H1		H2		W		V		Weight	
				RF		BW											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.93	49	7.01	178	8.50	216	4.25	108	3.54	90			11.22	285	40	18
3	80	2.91	74	7.99	203	11.14	283	11.02	280	4.33	110	11.81	300			66	30
4	100	3.94	100	9.02	229	12.01	305	11.61	295	5.51	140	11.81	300			229	104
6	150	5.91	150	15.51	394	17.99	457	14.41	366	6.89	175	19.69	500			430	195
8	200	7.91	201	17.99	457	20.51	521	20.16	512	7.48	190	23.62	600			866	393
10	250	9.92	252	20.98	533	22.01	559	23.23	590	9.06	230	23.62	600			1113	505
12	300	11.93	303	24.02	610	25.00	635	26.22	666	11.61	295	27.56	700			1598	725
14	350	13.15	334	27.01	686	30.00	762	29.92	760	14.17	360	27.56	700			1984	900
16	400	15.16	385	30.00	762	32.99	838	32.68	830	16.73	425	29.92	760			2756	1250
18	450	17.17	436	34.02	864	35.98	914	36.22	920	18.50	470	29.92	760			4134	1875
20	500	19.17	487	35.98	914	39.02	991	39.49	1003	20.87	530	29.92	760			5181	2350
22	550	21.18	538	39.02	991	39.02	991	41.65	1058	23.43	595	29.92	760			6834	3100
24	600	23.19	589	42.01	1067	45.00	1143	43.90	1115	25.98	660	29.92	760			8609	3905
28	700	26.93	684	49.02	1245	52.99	1346	46.06	1170	28.54	725	29.92	760			12743	5780
30	750	28.94	735	50.98	1295	55.00	1397	48.23	1225	31.69	805	29.92	760			17163	7785
32	800	30.67	779	54.02	1372	60.00	1524	50.79	1290	34.53	877	31.50	800			20205	9165
34	850	32.68	830	57.99	1473	64.02	1626	53.15	1350	36.46	926	31.50	800			23810	10800
36	900	34.41	874	60.00	1524	67.99	1727	55.12	1400	38.39	975	35.43	900			28704	13020
40	1000	38.43	976	67.99	1727	67.99	1727	67.72	1720	40.16	1020	35.43	900			39793	18050

Class 150 Reduced bore -TM

Size		D		d		L				H1		H2		W		V		Weight	
						RF		BW											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2"1-1/2	50*40	1.93	49	1.50	38	7.01	178	8.50	216	4.13	105	2.95	75			13.78	350	33	15
3"2	80*50	2.91	74	1.93	49	7.99	203	11.14	283	4.25	108	3.54	90			11.22	285	55	25
4"3	100*80	3.94	100	2.91	74	9.02	229	12.01	305	11.02	280	4.33	110	11.81	300			190	86
6"4	150*100	5.91	150	3.94	100	15.51	394	17.99	457	11.61	295	5.51	140	11.81	300			276	125
8"6	200*150	7.91	201	5.91	150	17.99	457	20.51	521	14.41	366	6.89	175	19.69	500			518	235
10"8	250*200	9.92	252	7.91	201	20.98	533	22.01	559	20.16	512	7.48	190	23.62	600			1005	456
12"10	300*250	11.93	303	9.92	252	24.02	610	25.00	635	23.23	590	9.06	230	23.62	600			1323	600
14"12	350*300	13.15	334	11.93	303	27.01	686	30.00	762	26.22	666	11.61	295	27.56	700			1786	810
16"14	400*350	15.16	385	13.15	334	30.00	762	32.99	838	29.92	760	14.17	360	27.56	700			2238	1015
18"16	450*400	17.17	436	15.16	385	34.02	864	35.98	914	32.68	830	16.73	425	29.92	760			2976	1350
20"18	500*450	19.17	487	17.17	436	35.98	914	39.02	991	36.22	920	18.50	470	29.92	760			4378	1986
22"20	550*500	21.18	538	19.17	487	39.02	991	39.02	991	39.49	1003	20.87	530	29.92	760			6173	2800
24"20	600*500	23.19	589	19.17	487	42.01	1067	45.00	1143	41.65	1058	23.43	595	29.92	760			7857	3564
28"24	700*600	26.93	684	23.19	589	49.02	1245	52.99	1346	43.90	1115	25.98	660	29.92	760			9535	4325
30"28	750*700	28.94	735	26.93	684	50.98	1295	55.00	1397	46.06	1170	28.54	725	29.92	760			14237	6458
32"30	800*750	30.67	779	28.94	735	54.02	1372	60.00	1524	48.23	1225	31.69	805	29.92	760			18569	8423
34"32	850*800	32.68	830	30.67	779	57.99	1473	64.02	1626	50.79	1290	34.53	877	31.50	800			21715	9850
36"32	900*800	34.41	874	30.67	779	60.00	1524	67.99	1727	53.15	1350	36.46	926	31.50	800			26786	12150
40"36	1000*900	38.43	976	34.41	874	73.03	1855	82.01	2083	57.48	1460	38.82	986	35.43	900			31415	14250

Dimension&Weight

Metal-Seated Trunnion Mounted Ball Valve



Class 300 Full bore -TM

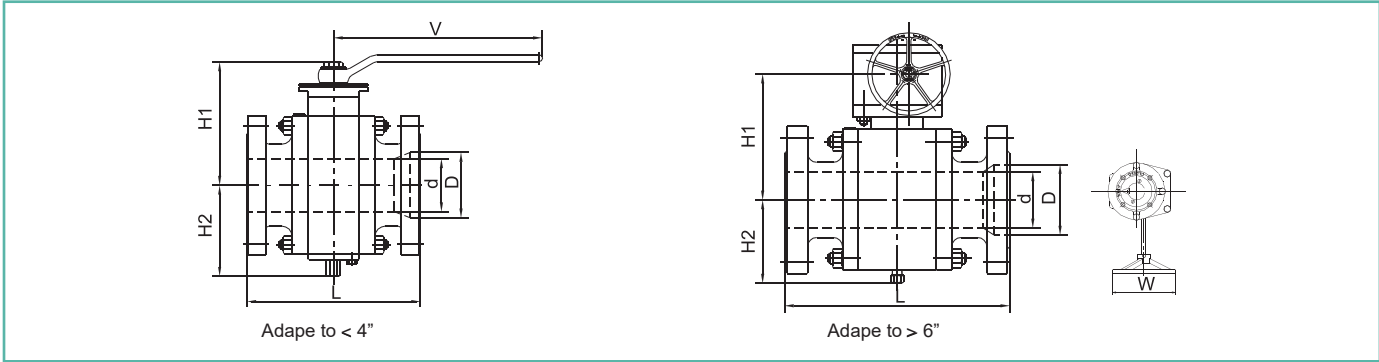
Size		D		L				H1		H2		W		V		Weight	
				RF		BW											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.93	49	8.50	216	8.50	216	4.23	107.5	3.54	90			11.22	285	51	23
3	80	2.91	74	11.14	283	11.14	283	11.02	280	4.33	110	11.81	300			77	35
4	100	3.94	100	12.01	305	12.01	305	12.05	306	5.51	140	19.69	300			229	104
6	150	5.91	150	15.87	403	15.87	403	14.41	366	6.89	175	19.69	500			474	215
8	200	7.91	201	19.76	502	20.51	521	21.69	551	7.48	190	27.56	700			853	387
10	250	9.92	252	22.36	568	22.01	559	24.57	624	9.84	250	27.56	700			1411	640
12	300	11.93	303	25.51	648	25.00	635	27.60	701	12.44	316	29.92	760			1900	862
14	350	13.15	334	30.00	762	30.00	762	30.94	786	15.67	398	29.92	760			2976	1350
16	400	15.16	385	32.99	838	32.99	838	33.46	850	19.29	490	29.92	760			3439	1560
18	450	17.17	436	35.98	914	35.98	914	35.83	910	19.69	500	31.50	800			4643	2106
20	500	19.17	487	39.02	991	39.02	991	37.01	940	20.87	530	31.50	800			6173	2800
22	550	21.18	538	42.99	1092	42.99	1092	39.84	1012	23.11	587	31.50	800			7500	3402
24	600	23.19	589	45.00	1143	45.00	1143	42.52	1080	25.00	635	31.50	800			9259	4200
28	700	26.93	684	52.99	1346	52.99	1346	49.21	1250	31.10	790	31.50	800			13889	6300
30	750	28.94	735	55.00	1397	55.00	1397	51.97	1320	33.70	856	35.43	900			18827	8540
32	800	30.67	779	60.00	1524	60.00	1524	55.12	1400	36.22	920	35.43	900			22343	10135
34	850	32.68	830	64.02	1626	64.02	1626	59.69	1516	37.20	945	39.37	1000			24802	11250
36	900	34.41	874	67.99	1727	67.99	1727	64.06	1627	38.78	985	39.37	1000			31305	14200
40	1000	38.43	976	75.98	1930	75.98	1930	67.91	1725	40.47	1028	39.37	1000			42989	19500

Class 300 Reduced bore -TM

Size		D		d		L				H1		H2		W		V		Weight	
						RF		BW											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2"1-1/2	50*40	1.93	49	1.50	38	8.50	216	8.50	216	4.13	105	2.95	75			9.84	250	42	19
3"2	80*50	2.91	74	1.93	49	11.14	283	11.14	283	4.23	107.5	3.54	90			11.22	285	68	31
4"3	100*80	3.94	100	2.91	74	12.01	305	12.01	305	11.02	280	4.33	110	11.81	300			190	86
6"4	150*100	5.91	150	3.94	100	15.87	403	15.87	403	12.05	306	5.51	140	19.69	500			357	162
8"6	200*150	7.91	201	5.91	150	19.76	502	20.51	521	14.41	366	6.89	175	19.69	500			584	265
10"8	250*200	9.92	252	7.91	201	22.36	568	22.01	559	21.69	551	7.48	190	27.56	700			939	426
12"10	300*250	11.93	303	9.92	252	25.51	648	25.00	635	24.57	624	9.84	250	27.56	700			1499	680
14"12	350*300	13.15	334	11.93	303	30.00	762	30.00	762	27.60	701	12.44	316	29.92	760			2017	915
16"14	400*350	15.16	385	13.15	334	32.99	838	32.99	838	30.94	786	15.67	398	29.92	760			3100	1406
18"16	450*400	17.17	436	15.16	385	35.98	914	35.98	914	33.46	850	19.29	490	29.92	760			3642	1652
20"18	500*450	19.17	487	17.17	436	39.02	991	39.02	991	35.83	910	19.69	500	31.50	800			4859	2204
22"20	550*500	21.18	538	19.17	487	42.99	1092	42.99	1092	37.01	940	20.87	530	31.50	800			6504	2950
24"20	600*500	23.19	589	19.17	487	45.00	1143	45.00	1143	39.84	1012	23.11	587	31.50	800			8029	3642
28"24	700*600	26.93	684	23.19	589	52.99	1346	52.99	1346	42.52	1080	25.00	635	31.50	800			9614	4361
30"28	750*700	28.94	735	26.93	684	55.00	1397	55.00	1397	49.21	1250	31.10	790	31.50	800			14356	6512
32"30	800*750	30.67	779	28.94	735	60.00	1524	60.00	1524	51.97	1320	33.70	856	35.43	900			19894	9024
34"32	850*800	32.68	830	30.67	779	64.02	1626	64.02	1626	55.12	1400	36.22	920	35.43	900			24140	10950
36"32	900*800	34.41	874	30.67	779	67.99	1727	67.99	1727	59.69	1516	37.20	945	39.37	1000			26550	12043
40"36	1000*900	38.43	976	34.41	874	75.98	1930	75.98	1930	64.06	1627	38.78	985	39.37	1000			33216	15067

Metal-Seated Trunnion Mounted Ball Valve

Dimension&Weight



Class 400 Full bore -TM

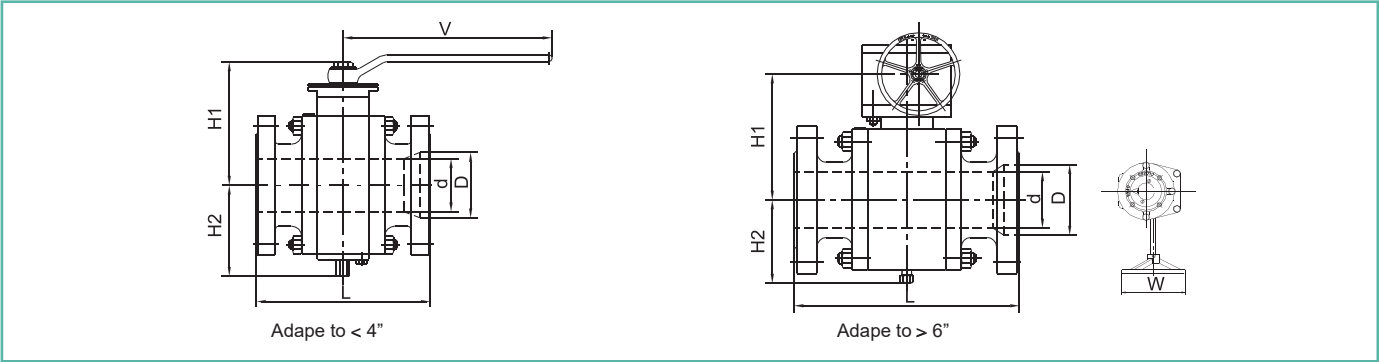
Size		D		L						H1		H2		W		V		Weight	
				RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.93	49	11.50	292	11.50	292	11.61	295	10.43	265	6.42	163	15.75	400			106	48
3	80	2.91	74	14.02	356	14.02	356	14.13	359	10.83	275	7.05	179	15.75	400			198	90
4	100	3.94	100	15.98	406	15.98	406	17.13	435	12.40	315	8.62	219	23.62	600			276	125
6	150	5.91	150	19.49	495	19.49	495	19.61	498	22.05	560	8.19	208	23.62	600			816	370
8	200	7.91	201	23.50	597	23.50	597	23.62	600	27.17	690	9.65	245	23.62	600			1499	680
10	250	9.92	252	26.50	673	26.50	673	26.61	676	24.92	633	12.05	306	23.62	600			2271	1030
12	300	11.93	303	30.00	762	30.00	762	30.12	765	26.18	665	13.74	349	29.92	760			2976	1350
14	350	13.15	334	32.52	826	32.52	826	32.64	829	24.37	619	15.75	400	27.56	700			4078	1850
16	400	15.16	385	35.51	902	35.51	902	35.63	905	29.06	738	17.72	450	29.92	760			4740	2150
18	450	17.17	436	38.50	978	38.50	978	38.62	981	30.83	783	19.76	502	35.43	900			6250	2835
20	500	19.17	487	41.50	1054	41.50	1054	41.73	1060	33.39	848	22.28	566	35.43	900			8025	3640
22	550	21.18	538	45.00	1143	45.00	1143	45.39	1153	37.56	954	23.31	592	39.37	1000			11728	5320
24	600	23.19	589	48.50	1232	48.50	1232	48.86	1241	40.04	1017	25.63	651	39.37	1000			15829	7180
28	700	26.93	684	55.00	1397	55.00	1397	55.51	1410	41.65	1058	27.83	707	39.37	1000			21032	9540
30	750	28.94	735	60.00	1524	60.00	1524	60.51	1537	44.69	1135	29.53	750	39.37	1000			23192	10520
32	800	30.67	779	65.00	1651	65.00	1651	65.63	1667	48.70	1237	30.94	786	43.54	1106			24802	11250
34	850	32.68	830	70.00	1778	70.00	1778	70.63	1794	51.34	1304	32.52	826	43.54	1106			28307	12840
36	900	34.41	874	74.02	1880	74.02	1880	73.82	1875	56.81	1443	35.51	902	43.54	1106			32518	14750
40	1000	38.43	976	85.43	2170	85.43	2170	85.43	2170	60.43	1535	38.86	987	43.54	1106			41226	18700

Class 400 Reduced bore -TM

Size		D		d		L						H1		H2		W		V		Weight	
						RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2'1-1/2	50*40	1.93	49	1.50	38	11.50	292	11.50	292	11.61	295	8.11	206	5.71	145	15.75	400			88	40
3'2	80*50	2.91	74	1.93	49	14.02	356	14.02	356	14.13	359	10.43	265	6.42	163	15.75	400			168	78
4'3	100*80	3.94	100	2.91	74	15.98	406	15.98	406	17.13	435	10.83	275	7.05	179	15.75	400			231	105
6'4	150*100	5.91	150	3.94	100	19.49	495	19.49	495	19.61	498	12.40	315	8.62	219	23.62	600			617	280
8'6	200*150	7.91	201	5.91	150	23.50	597	23.50	597	23.62	600	22.05	560	8.19	208	23.62	600			1235	560
10'8	250*200	9.92	252	7.91	201	26.50	673	26.50	673	26.61	676	27.17	690	9.65	245	23.62	600			1653	750
12'10	300*250	11.93	303	9.92	252	30.00	762	30.00	762	30.12	765	24.92	633	12.05	306	23.62	600			2315	1050
14'12	350*300	13.15	334	11.93	303	32.52	826	32.52	826	32.64	829	26.18	665	13.74	349	29.92	760			3483	1580
16'14	400*350	15.16	385	13.15	334	35.51	902	35.51	902	35.63	905	24.37	619	15.75	400	27.56	700			4431	2010
18'16	450*400	17.17	436	15.16	385	38.50	978	38.50	978	38.62	981	29.06	738	17.72	450	29.92	760			5401	2450
20'18	500*450	19.17	487	17.17	438	41.50	1054	41.50	1054	41.73	1060	30.83	783	19.76	502	35.43	900			6702	3040
22'20	550*500	21.18	538	19.17	487	45.00	1143	45.00	1143	45.39	1153	33.39	848	22.28	566	35.43	900			10053	4580
24'20	600*500	23.19	589	19.17	487	48.50	1232	48.50	1232	48.86	1241	37.56	954	23.31	592	39.37	1000			13999	6350
28'24	700*600	26.93	684	23.19	589	55.00	1397	55.00	1397	55.51	1410	40.04	1017	25.63	651	39.37	1000			17670	8015
30'28	750*700	28.94	735	26.93	684	60.00	1524	60.00	1524	60.51	1537	41.65	1058	27.83	707	39.37	1000			22156	10050
32'30	800*750	30.67	779	28.94	735	65.00	1651	65.00	1651	65.63	1667	44.69	1135	29.53	750	39.37	1000			22222	10080
34'32	850*800	32.68	830	30.67	779	70.00	1778	70.00	1778	70.63	1794	48.70	1237	30.94	786	43.54	1106			24295	11020
36'32	900*800	34.41	874	30.67	779	74.02	1880	74.02	1880	73.82	1875	51.34	1304	32.52	826	43.54	1106			27337	12400
40'36	1000*900	38.43	976	34.41	874	85.43	2170	85.43	2170	85.43	2170	56.81	1443	35.51	902	43.54	1106			36486	16550

Dimension&Weight

Metal-Seated Trunnion Mounted Ball Valve

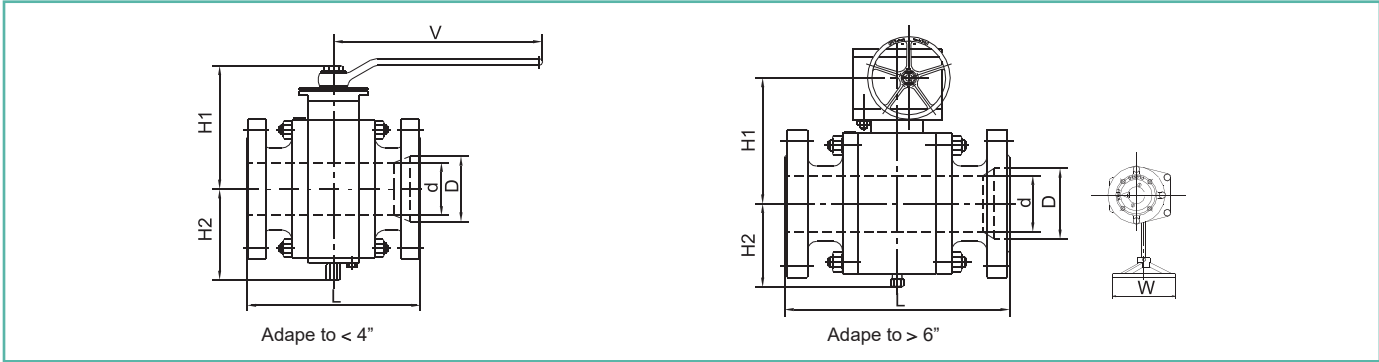


Class 600 Full bore -TM

Size		D		L						H1		H2		W		V		Weight	
				RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.93	49	11.50	292	11.50	292	11.61	295	10.43	265	6.42	163	15.75	400			106	48
3	80	2.91	74	14.02	356	14.02	356	14.13	359	10.83	275	7.05	179	15.75	400			198	90
4	100	3.94	100	17.01	432	17.01	432	17.13	435	12.40	315	8.62	219	23.62	600			331	150
6	150	5.91	150	22.01	559	22.01	559	22.13	562	22.05	560	8.19	208	23.62	600			970	440
8	200	7.91	201	25.98	660	25.98	660	26.14	664	27.17	690	9.65	245	23.62	600			1786	810
10	250	9.92	252	30.98	787	30.98	787	31.14	791	24.92	633	12.05	306	23.62	600			2723	1235
12	300	11.93	303	32.99	838	32.99	838	33.11	841	26.18	665	13.74	349	29.92	760			3571	1620
14	350	13.15	334	35.00	889	35.00	889	35.12	892	24.37	619	15.75	400	29.92	760			4486	2035
16	400	15.16	385	39.02	991	39.02	991	39.17	995	29.06	738	17.72	450	29.92	760			5688	2580
18	450	17.17	436	42.99	1092	42.99	1092	43.11	1095	30.83	783	19.76	502	35.43	900			7496	3400
20	500	19.17	487	47.01	1194	47.01	1194	47.24	1200	33.39	848	22.28	566	35.43	900			9612	4360
22	550	21.18	538	50.98	1295	50.98	1295	51.38	1305	37.56	954	23.31	592	39.37	1000			14065	6380
24	600	23.19	589	55.00	1397	55.00	1397	55.39	1407	40.04	1017	25.63	651	39.37	1000			18959	8600
28	700	26.93	684	60.98	1549	60.98	1549	61.50	1562	41.65	1058	27.83	707	39.37	1000			25000	11340
30	750	28.94	735	65.00	1651	65.00	1651	65.51	1664	44.69	1135	29.53	750	39.37	1000			27822	12620
32	800	30.67	779	70.00	1778	70.00	1778	70.63	1794	48.70	1237	30.94	786	43.54	1106			29762	13500
34	850	32.68	830	75.98	1930	75.98	1930	76.61	1946	51.34	1304	32.52	826	43.54	1106			33951	15400
36	900	34.41	874	82.01	2083	82.01	2083	82.56	2097	56.81	1443	35.51	902	43.54	1106			39021	17700
40	1000	38.43	976	85.43	2170	85.43	2170	85.43	2170	60.43	1535	38.86	987	43.54	1106			49383	22400

Metal-Seated Trunnion Mounted Ball Valve

Dimension&Weight



Class 900 Full bore -TM

Size		D		L						H1		H2		W		V		Weight	
				RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.93	49	14.49	368	14.49	368	14.61	371	12.20	310	4.53	115	19.69	500			220	100
3	80	2.91	74	15.00	381	15.00	381	15.12	384	11.10	282	4.69	119	15.75	400			331	150
4	100	3.94	100	17.99	457	17.99	457	18.11	460	15.75	400	7.87	200	23.62	600			485	220
6	150	5.91	150	24.02	610	24.02	610	24.13	613	18.98	482	8.78	223	29.92	760			1168	530
8	200	7.91	201	29.02	737	29.02	737	29.13	740	19.76	502	12.87	327	29.92	760			1351	613
10	250	9.92	252	32.99	838	32.99	838	33.11	841	20.83	529	14.69	373	31.50	800			2394	1086
12	300	11.93	303	37.99	965	37.99	965	38.11	968	36.81	935	13.15	334	35.43	900			6085	2760
14	350	12.68	322	40.51	1029	40.51	1029	40.87	1038	37.99	965	13.78	350	39.37	1000			6834	3100
16	400	14.69	373	44.49	1130	44.49	1130	44.88	1140	44.09	1120	18.90	480	39.37	1000			11376	5160
18	450	16.65	423	47.99	1219	47.99	1219	48.50	1232	46.54	1182	20.71	526	43.54	1106			16182	7340
20	500	18.54	471	52.01	1321	52.01	1321	52.52	1334	49.45	1256	22.80	579	43.54	1106			19892	9023

Class 900 Reduced bore -TM

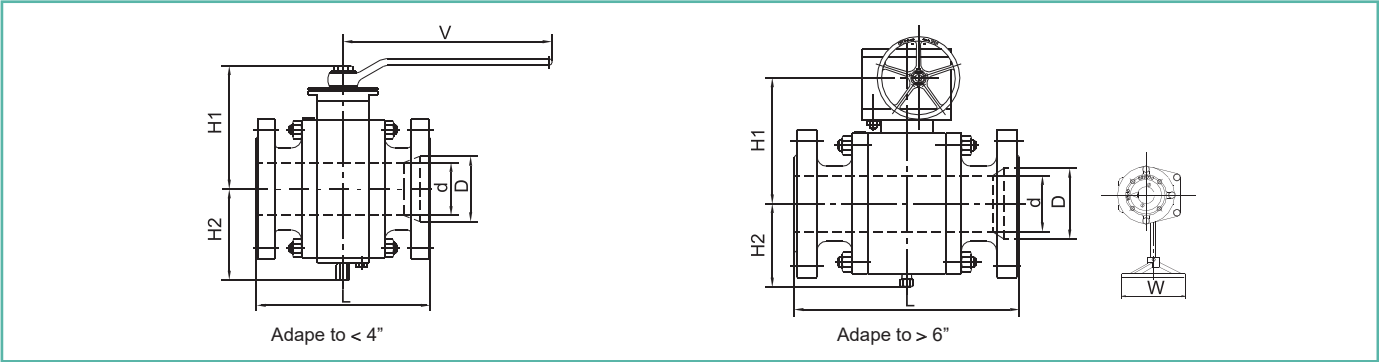
Size		D		d		L						H1		H2		W		V		Weight	
						RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2*1-1/2	50*40	1.93	49	1.50	38	14.49	368	14.49	368	14.61	371	8.54	217	4.69	119	15.75	400			157	71
3*2	80*50	2.91	74	1.93	49	15.00	381	15.00	381	15.12	384	12.20	310	4.53	115	19.69	500			220	100
4*3	100*80	3.94	100	2.91	74	17.99	457	17.99	457	18.11	460	11.10	282	4.69	119	15.75	400			331	150
6*4	150*100	5.91	150	3.94	100	24.02	610	24.02	610	24.13	613	15.75	400	7.87	200	23.62	600			485	220
8*6	200*150	7.91	201	5.91	150	29.02	737	29.02	737	29.13	740	18.98	482	8.78	223	29.92	760			1168	530
10*8	250*200	9.92	252	7.91	201	32.99	838	32.99	838	33.11	841	19.76	502	12.87	327	29.92	760			1351	613
12*10	300*250	11.93	303	9.92	252	37.99	965	37.99	965	38.11	968	20.83	529	14.69	373	31.50	800			2394	1086
14*12	350*300	12.68	322	11.93	303	40.51	1029	40.51	1029	40.87	1038	36.81	935	13.15	334	35.43	900			6085	2760
16*14	400*350	14.69	373	12.68	322	44.49	1130	44.49	1130	44.88	1140	37.99	965	13.78	350	39.37	1000			6834	3100
18*16	450*400	16.65	423	14.69	373	47.99	1219	47.99	1219	48.50	1232	44.09	1120	18.90	480	39.37	1000			11376	5160
20*18	500*450	18.54	471	16.65	423	52.01	1321	52.01	1321	52.52	1334	46.54	1182	20.71	526	43.54	1106			16182	7340

Class 1500 Full bore -TM

Size		D		L						H1		H2		W		V		Weight	
				RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.93	49	14.49	368	14.49	368	14.61	371	12.20	310	4.92	125	19.69	500			271	123
3	80	2.91	74	18.50	470	18.50	470	18.62	473	14.17	360	6.69	170	23.62	600			516	234
4	100	3.94	100	21.50	546	21.50	546	21.61	549	16.93	430	7.09	180	23.62	600			902	409
6	150	5.67	144	27.76	705	27.76	705	27.99	711	21.46	545	12.28	312	29.92	760			1984	900
8	200	7.56	192	32.76	832	32.76	832	33.11	841	27.17	690	15.75	400	29.92	760			2873	1303
10	250	9.41	239	39.02	991	39.02	991	39.37	1000	29.13	740	19.13	486	29.92	760			5538	2512
12	300	11.30	287	44.49	1130	44.49	1130	45.12	1146	31.10	790	21.10	536	29.92	760			7275	3300
14	350	12.40	315	49.49	1257	49.49	1257	50.24	1276	33.58	853	23.27	591	35.43	900			8466	3840
16	400	14.17	360	54.49	1384	54.49	1384	55.39	1407	35.91	912	24.41	620	35.43	900			9524	4320
18	450	15.98	406	60.51	1537	60.51	1537	61.38	1559	37.40	950	26.97	685	39.37	1000			10935	4960
20	500	17.87	454	60.51	1664	60.51	1664	66.38	1686	38.58	980	27.56	700	39.37	1000			12125	5500

Dimension&Weight

Metal-Seated Trunnion Mounted Ball Valve



Class 1500 Reduced bore -TM

Size		D		d		L						H1		H2		W		V		Weight	
						RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2*1-1/2	50*40	1.93	49	1.50	38	14.49	368	14.49	368	14.61	371	12.20	310	4.92	125	19.69	500			245	111
3*2	80*50	2.91	74	1.93	49	18.50	470	18.50	470	18.62	473	14.17	360	6.69	170	23.62	600			485	220
4*3	100*80	3.94	100	2.91	74	21.50	546	21.50	546	21.61	549	16.93	430	7.09	180	23.62	600			714	324
6*4	150*100	5.67	144	3.94	100	27.76	705	27.76	705	27.99	711	21.46	545	12.28	312	29.92	760			1814	823
8*6	200*150	7.56	192	5.67	144	32.76	832	32.76	832	33.11	841	27.17	690	15.75	400	29.92	760			2873	1303
10*8	250*200	9.41	239	7.56	192	39.02	991	39.02	991	39.37	1000	29.13	740	19.13	486	29.92	760			4630	2100
12*10	300*250	11.30	287	9.41	239	44.49	1130	44.49	1130	45.12	1146	31.10	790	21.10	536	29.92	760			6426	2915
14*12	350*300	12.40	315	11.30	287	49.49	1257	49.49	1257	50.24	1276	33.58	853	23.27	591	35.43	900			7551	3425
16*14	400*350	14.17	360	12.40	315	54.49	1384	54.49	1384	55.39	1407	35.91	912	24.41	620	35.43	900			8873	4025
18*16	450*400	15.98	406	14.17	360	60.51	1537	60.51	1537	61.38	1559	37.40	950	26.97	685	39.37	1000			10194	4624
20*18	500*450	17.87	454	15.98	406	65.51	1664	65.51	1664	66.38	1686	38.58	980	27.56	700	39.37	1000			11023	5000

Class 2500 Full bore -TM

Size		D		L						H1		H2		W		V		Weight	
				RF		BW		RTJ											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
2	50	1.65	42	17.76	451	17.76	451	17.87	454	13.88	352.5	6.30	160	19.69	500			503	228
3	80	2.44	62	22.76	578	22.76	578	22.99	584	14.65	372	7.09	180	23.62	600			836	379
4	100	3.43	87	26.50	673	26.50	673	26.89	683	19.45	494	8.27	210	23.62	600			1248	566
6	150	5.16	131	35.98	914	35.98	914	36.50	927	26.69	678	14.96	380	29.92	760			2403	1090
8	200	7.05	179	40.24	1022	40.24	1022	40.87	1038	35.04	890	19.29	490	29.92	760			6195	2810
10	250	8.78	223	50.00	1270	50.00	1270	50.87	1292	37.64	956	19.76	502	35.43	900			9524	4320
12	300	10.43	265	55.98	1422	55.98	1422	56.89	1445	40.28	1023	22.05	560	39.37	1000			11486	5210

Typical application

- 1. Coal chemical industry: coal-to-liquids, coal-to-methanol, coal gasification.
- 2. High sour gas field with abrasive solids.
- 3. Shipbuilding, offshore.
- 4. Oxygen service.
- 5. Photovoltaic industry: polysilicon
- 6. Other working condition in high temperature or with abrasive solids.

Design and production features

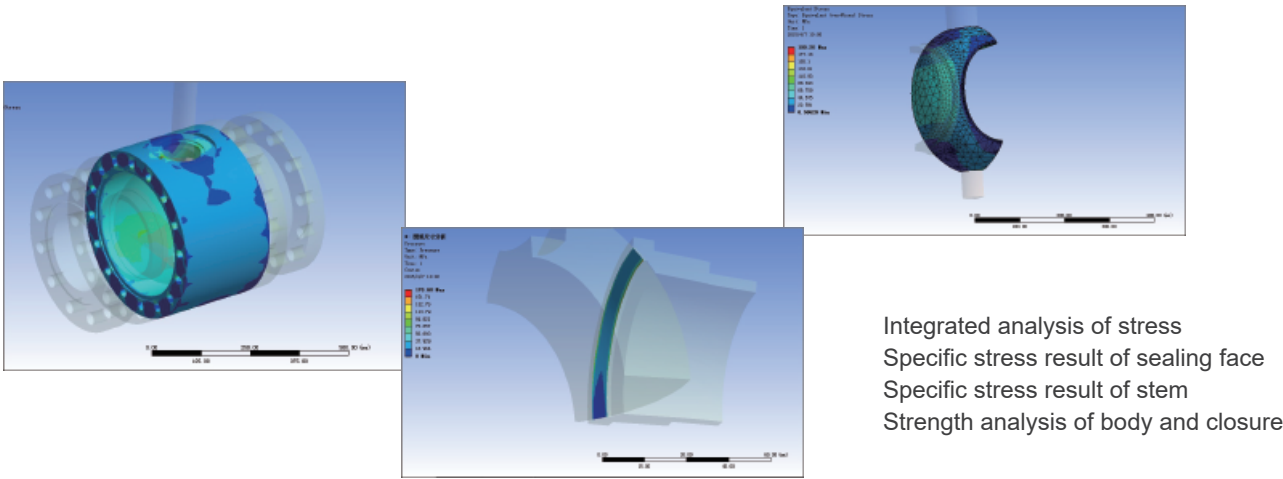
Sealing structure of the seat
Bi-directional sealing of the valve. The seat is able to block the media from both sides of the valve, thus eliminating the limit of installing direction.
Preloading of belleville spring or cylinder spring to ensure sealing in low pressure.
Dust proof structure of the spring.

Live loading packing
The Belleville spring is added on gland flange to minimize need of packing retightening.

Choosing of sealing material
For all the gaskets and packing in relate to the sealing parts, the purity of the graphite is strictly controlled to lower the ignition lost rate and ensure the sealing performance in high temperature.

Design and analysis software

All the designs are verified in accordance with 3D Finite Element Analysis.
Neway has rich application experience in design software such as CAD, Solidworks, NX, Ansys, Fesafe, Cfdesign.



Valve Types		ASME Class			End Connections		Operator	
Symbol	Valve Type	Code	Class(LB)	Pressure	Symbol	End		Lever
BM	2-pcs Casting floating type	1	150	2.0Mpa	R	Raised face flanged end	G	Gear operator
BBM	2-pcs forging floating type	3	300	5.0Mpa	J	RTJ flanged end	M	Electric actuator
BSM	3-pcs forging trunnion mounted type	4	400	6.8Mpa	B	Butt-weld end	P	Pneumatic actuator
		6	600	10.0Mpa	S	Socket weld end	BS	Bare shaft
BSK	2-pcs forging trunnion mounted type(O-ring)	8	800	14.0Mpa	N	Screwed end	H	Hydraulic actuator
		9	900	15.0Mpa	SN	Socket weld/Screwed end	L	Gas over oil actuator
		15	1500	25.0Mpa			C	Gear operator(Operator forces≤350N)
		25	2500	42.0Mpa				

BM/BBM

in	Class 150		Class 300		Class 600		Class 800		Class 900		Class 1500		Class 2500	
	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs
1/4	4.5	3	6	4	8.9	7	10.8	8	12	9	17.5	13	35.6	26
1/2	10	7	14	10	26	19	31	23	33	24	48	35	92	68
3/4	16	12	29	21	52	38	80	59	88	65	140	103	295	218
1	31	23	59	44	146	108	190	140	210	155	350	258	718	529
1-1/2	76	56	146	108	296	218	385	284	430	317	550	406		
2	145	107	273	201	550	406	750	553	830	612				
2-1/2	280	206	530	391	950	701								
3	370	273	680	501	1320	973								
4	720	531	1420	1047	3400	2507								

BSM

in	Class 150		Class 300		Class 600		Class 900		Class 1500		Class 2500	
	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs
1-1/2	120	88	200	147	320	236	560	413	1360	1003	2400	1770
2	140	103	265	195	490	361	810	597	1450	1069	2800	2605
2-1/2	205	151	390	288	702	518	1200	885	2100	1549	4300	3171
3	290	214	530	391	980	723	1600	1180	2800	2065	5640	4159
4	450	332	1080	796	2113	1558	3100	2286	5600	4130	10000	7375
5	913	673	1830	1350	3383	2495	5800	4277	9800	7227	18600	13717
6	1450	1069	2950	2176	5510	4063	8700	6416	15800	11652	32000	23599
8	2880	2124	6000	4425	11320	8348	18000	13274	30000	22124	50000	36873
10	4500	3319	9300	6858	19000	14012	31600	23304	42300	31195	57000	42035
12	8400	6195	14600	10767	31700	23378	54200	39971				
14	9300	6858	18300	13496	37000	27286	61100	45059				
16	14000	10324	31000	22861	65000	47936	116000	85546				
18	17800	13127	36000	26549	73500	54204	128000	94395				
20	19550	14417	39000	28761	77000	56785	139500	102876				
22	23560	17375	46200	34071	86200	63569						
24	26250	19358	51704	38130	93400	68879						

BSK

in	Class 150		Class 300		Class 600		Class 900		Class 1500		Class 2500	
	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs	N.m	Ft/Lbs
1-1/2	81	60	134	99	215	159	376	277	912	637	1608	1186
2	94	69	178	131	329	243	543	400	972	717	1876	1383
2-1/2	138	102	262	193	471	347	804	593	1407	1038	2881	2125
3	195	144	356	263	657	485	1072	791	1876	1383	3779	2787
4	302	223	724	534	1416	1044	2077	1532	3752	2767	6700	4941
5	612	451	1227	905	2267	1672	3886	2866	6566	4842	12462	9190
6	972	717	1977	1458	3692	2723	5829	4299	10586	7807	21440	15811
8	1930	1423	4020	2965	7585	5594	12060	8894	20100	14823	33500	24705
10	3015	2223	6231	4595	12730	9388	21172	15614	28340	20900	38190	28164
12	5628	4150	9782	7214	21239	15663	36314	26780				
14	6321	4662	12261	9042	24790	18282	40937	30190				
16	9380	6917	20770	15317	43550	32117	77720	57316				
18	11926	8795	24120	17788	49245	36316	85760	63240				
20	13099	9660	26130	19270	51590	38046	93465	68927				
22	15785	11641	30954	22827	57754	42591						
24	17587	12970	34642	25547	62578	46149						

NOTE: 1.Torque is calculated based on 100℃.
2.Torque may be changed according to different fluid and trim material.
3.Torque shown in this table is to be used as a guide for actuator selection . A safety factor of 1.3~1.5 is recommended for actuator sizing.

Neway Factory



NEWAY Head Office
Total area: 2,295sqm
Office area: 6,885sqm

Founded in 2014



NEWAY Manufacturing Base
Main products: Ball Valve, Butterfly Valve, Gate Valve, Globe Valve, Check Valve, Control Valve
Building area: 230,000 sqm
Work shop: 140,061 sqm

Founded in 2006
Expanded in 2013



NEWAY Foundry (Suzhou)
Main products: Sand Casting
Building area: 112,500 sqm
Work shop: 98,000 sqm

Founded in 2008
Expanded in 2015



NEWAY Foundry (Dafeng)
Main products: Lost wax investment casting
Building area: 40,000 sqm
Work shop: 20,000 sqm

Founded in 2008



Neway Precision Forging(Liyang),LTD
Main products: Hammer forging, annular forging
Office area: 3,000 sqm
Work shop: 30,000 sqm

Founded in 2017



Neway Flow Control(Suzhou) Co.,Ltd
Main products: Butterfly Valve
Building area: 30,000 sqm
Work shop: 19,000 sqm (first floor)
7,000 sqm (second floor)

Founded in 2020

Product Warranty

Seller will replace without charge or refund the purchase price of products provided by Seller which prove to be defective in material or workmanship, provided in each case that the product is properly installed and is used in the service for which Seller recommends it and that written claim, specifying the alleged defect, is presented to the Seller within 18 months from the date of shipment or 12 months after installation, whichever occurs first. Seller shall in no event bear any labor, equipment, engineering or other costs incurred in connection with repair or replacement. The warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and seller's exclusive liability.