

Structural Features

Floating ball valve is manufactured by Germany advanced technology for our quality product, it has an updated design features. It can be meet the general industry standard for safe and convenient requirements.

1. Switch Indication for Handle Operated Floating Ball Valve

As the moving parts of valve, ball, valve stem and handle are an assembly unit. The head of valve stem is shaped a diploid, thus to easily distinguish whether valve is in the 'Open' position or 'Close' position from handle position. When handle or stem diploid is in parallel with the pipe axis, valve is in 'Open' position; when handle or stem diploid is vertical to the pipe axis, valve is in 'Close' position.

2. Valve Locking Device

To prevent misoperation, the fully opened or closed position of valve can be locked up, especially when valves are mounted outdoors or when valves are not allowed to be opened or closed by technical process. To prevent misoperation by other persons, it seems very important to have valve position locked up. Thereby, lockhole locating ab is designed if requested by users to meet the technological requirements of users.

3. Anti-blowout Structure of Valve Stem

When medium passes through the valve, the pressure in valve body may possibly push the stem out, or when the valve is in repair, if there is pressure in the middle cavity, the stem or medium seems to easily fly out upon disassembling the valve, which can cause injuries to human beings. To prevent these possibilities, a dummy club is placed at the lower part of the stem. In this way, even if there is fire, packing and thrust bearing are burnt or packing is damaged due to other causes, the pressure of medium in valve body will make the dummy club of valve stem in close contact with the upper seal face of valve body, thus to prevent medium leaking out from the damaged packing position.

4. Anti-static Device

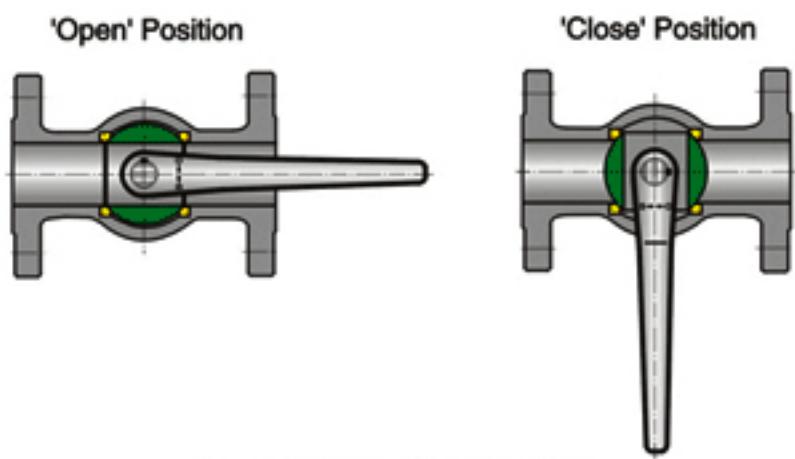
When operating the valve, the friction between the ball and the non-metal seat, like PTFE etc. will produce electrostatic charge that can be accumulated on the ball. To prevent static spark, an antistatic device is placed on the valve to derive the electric charge accumulated on the ball from the static channel between the ball and the stem, or between the stem and valve body.

5. Fire-safe Protection Structure

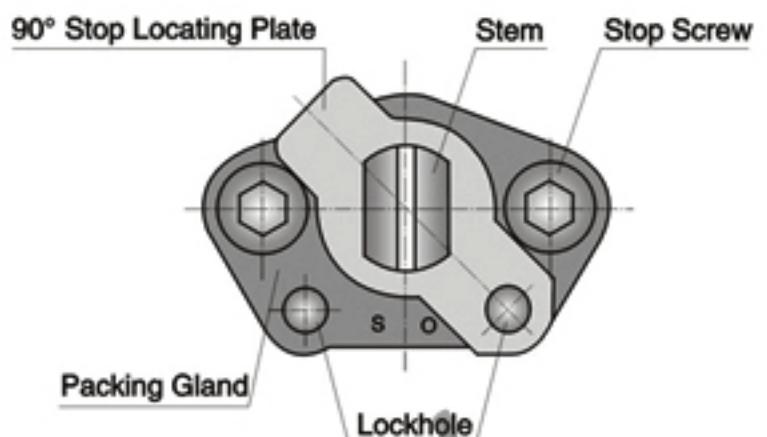
In case of fire, the non-metal packing or seat (non-fireproof material) will be burnt, the considerable medium leakage may possibly cause fire spread. Here, the fire protection structure functions to prevent medium from mass leakage. As shown in the figure, once the seat is burnt, the ball will directly contact the metal face on valve body, thus to prevent medium leaking out from the burnt seat. The design of fire protection and antistatic structure shall conform to the requirements of API607, JB/T6899 and the second part of BS6755.

6. Middle Flange Leak-tight Structure

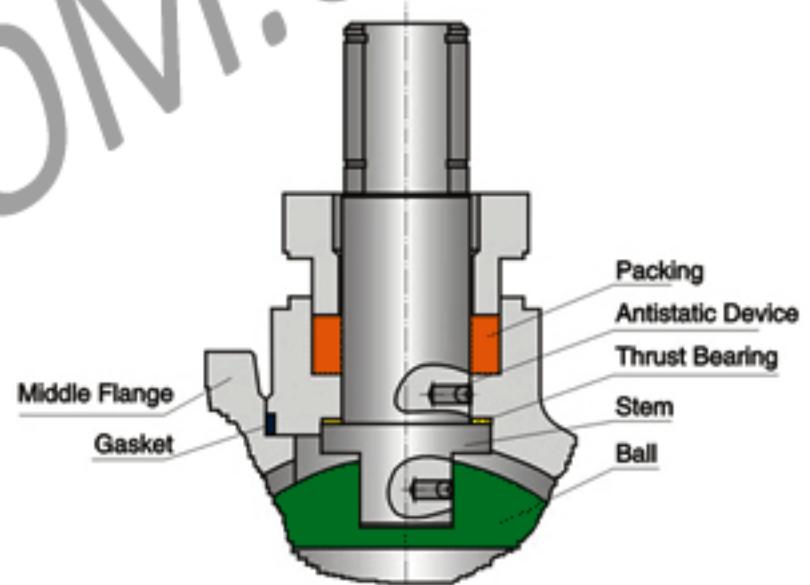
The connection between valve body and the left body is sealed by gasket. To prevent seal leakage resulted from fire, high temperature or vibration etc., the valve body and the left body is designed metal-to-metal contacted, thus to form up a seal flange to ensure leak-tightness.



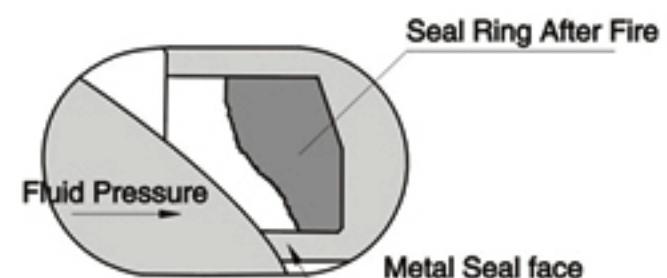
Reasonable Switch Design



90° Switch with Lockhole Positioning Plate



Stem Blow-out Proof Design
Stem Anti-static Design
Middle Flange Leak-tight Structure



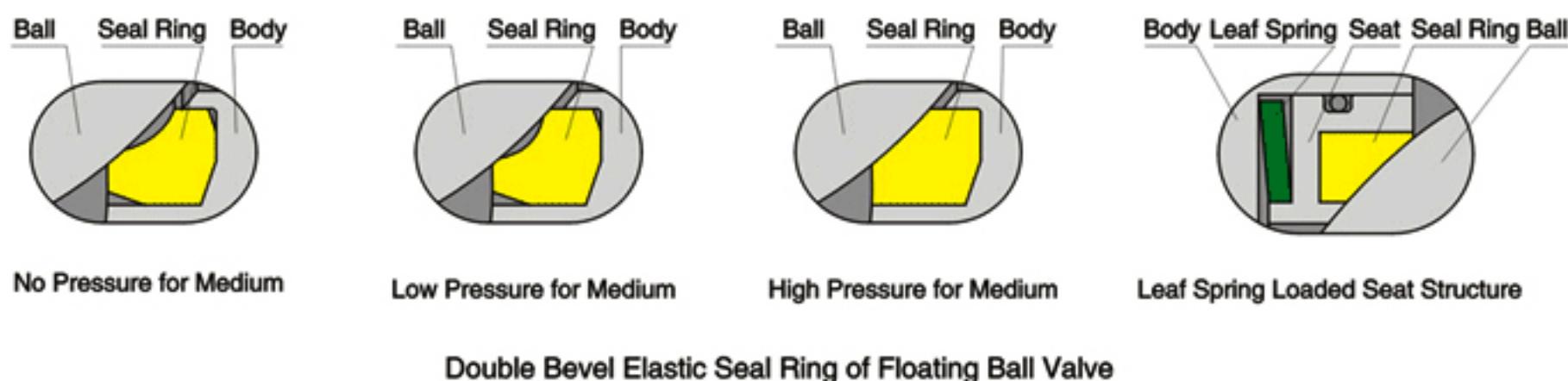
Fire Protection Structure of Float Ball Valve

7. Dependable Seating Structure

The two-way sealing structure embodying the years of our manufacturing experience in ball valves and the internationally advanced technology can release the pressure at valve seat and ensure reliable seal under high or low pressure and vacuum state. When the pressure of medium is low, the contact area between valve seat insert and ball is relatively small, thus providing high sealing load to ensure dependable seating seal. When the pressure of medium is high, the contact area between valve seat insert and ball is relatively large, so that the valve seat insert can endure the considerable medium thrust and cannot be damaged.

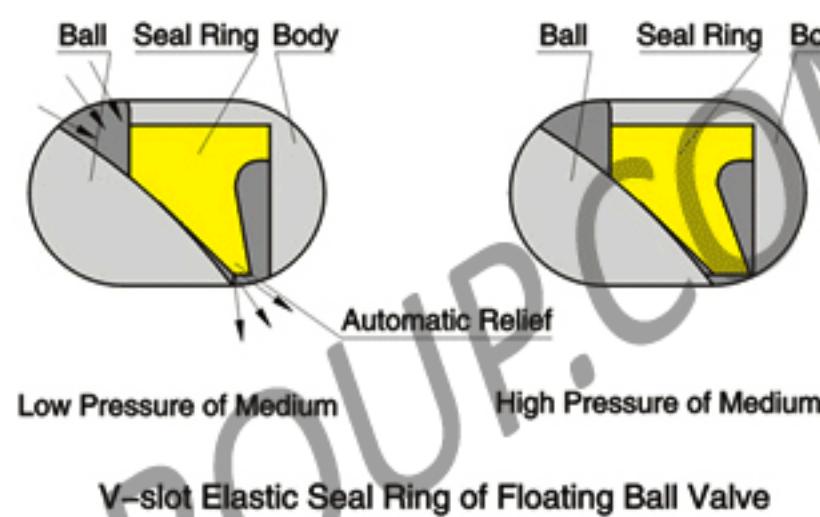
Regarding ball valves of very low working pressure, in consideration that the pressure of medium cannot guarantee the dependable seal of valve seat, and that the pretightening force will decrease after a long time of service, so we apply leaf spring loaded seating structure for valves working under low and ultralow pressure or under vacuum conditions, thus to ensure persistent and dependable seal.

The seating structure of medium and high temperature ball valves use PPL for seal ring that can serve a temperature of 300°C. Ball valves with metal seal and high temperature resisting materials can be used to deal with even higher temperature. This structure takes the function of one-way seal.



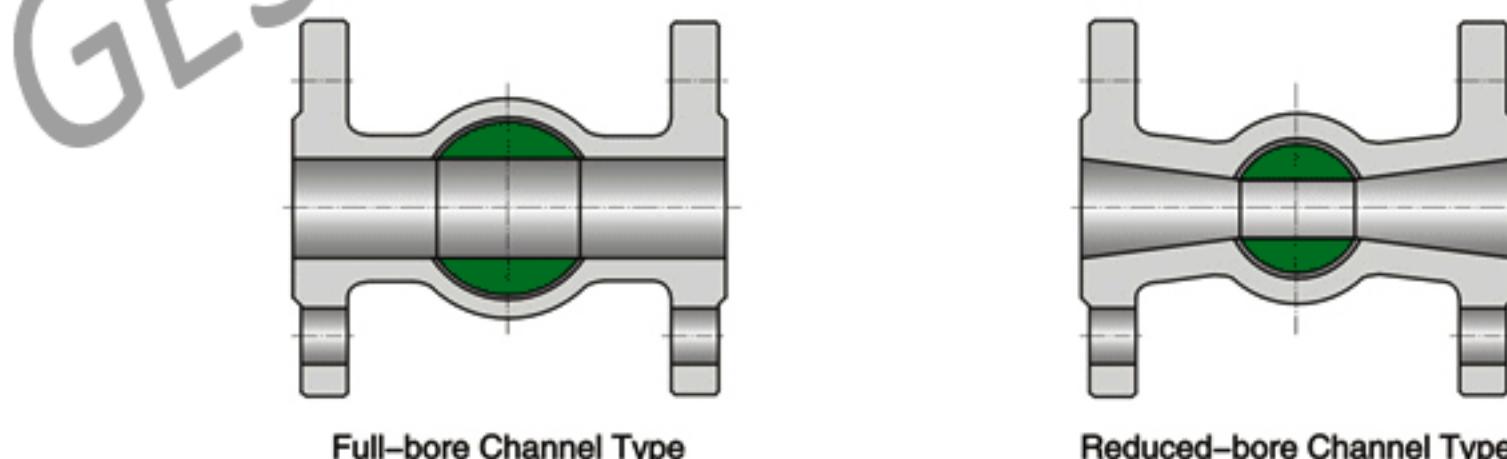
8. Self-relieving Structure

In case of abnormal rise of pressure in the middle cavity of valve resulted from the medium left there suffered from changes of pipeline pressure or medium temperature, automatic pressure relief of valve seat can be effected under the pressure of the medium itself, thus to guarantee the safety of valve.

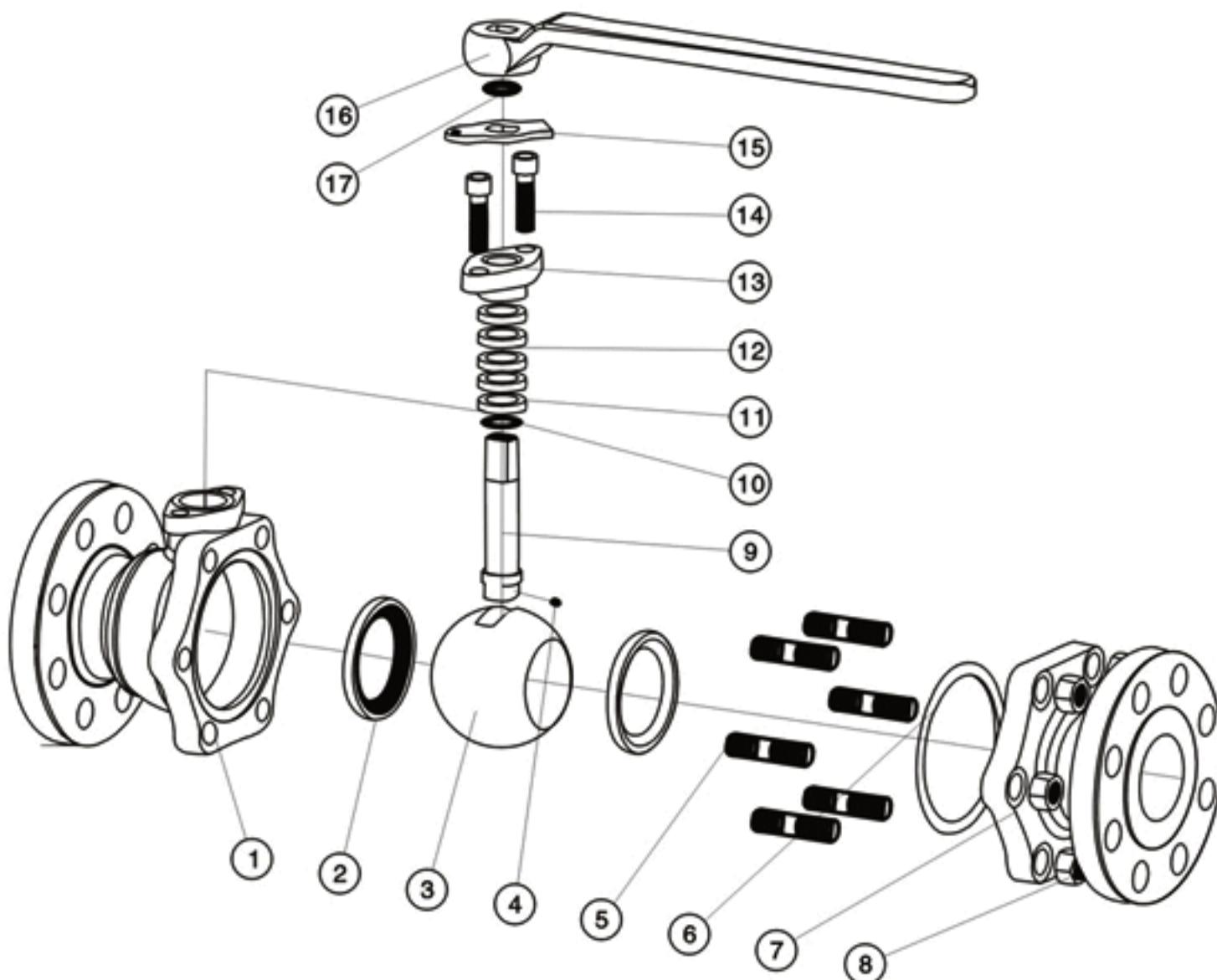


9. Full and Reduced Bore

We have ball valves both full bore and reduced bore types to meet users' different requirements. Full-bore ball valves have the same inside diameter as pipeline, with the lowest fluid resistance for the convenience of cleaning the pipeline. The reduced bore ball valves only 70% weight if compare with full-bore ball valve with the same diameter, effectively reduce the cost and price, and its fluid resistance coefficient is only 1/7 of the globe valve with the same diameter, so that reduced-bore valves are widely used abroad.

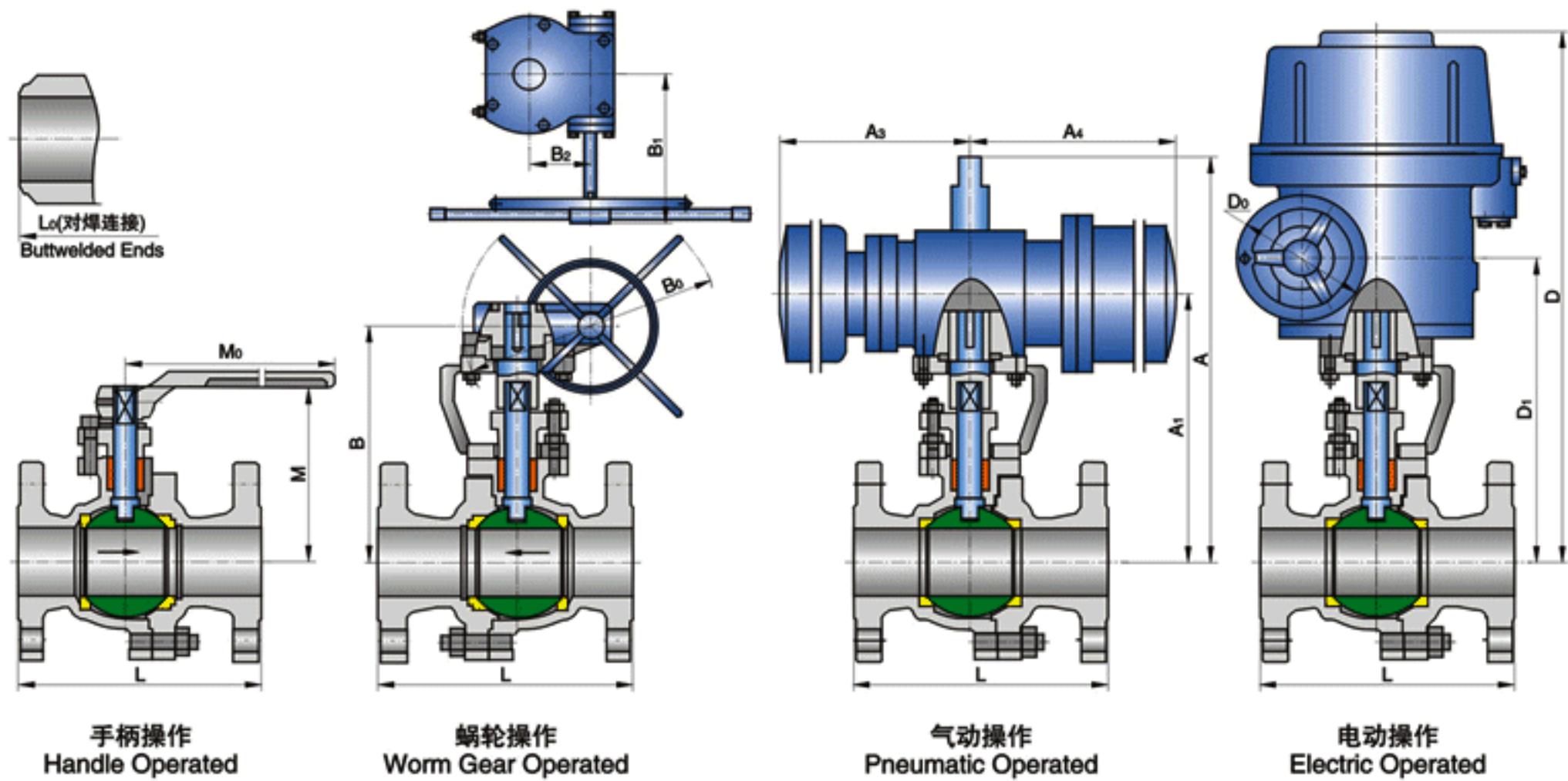


阀门结构示意图(浮动球阀) Valve Structural Schematic Drawing (Floating Ball Valve)



主要零部件材料 The Material of Main Parts

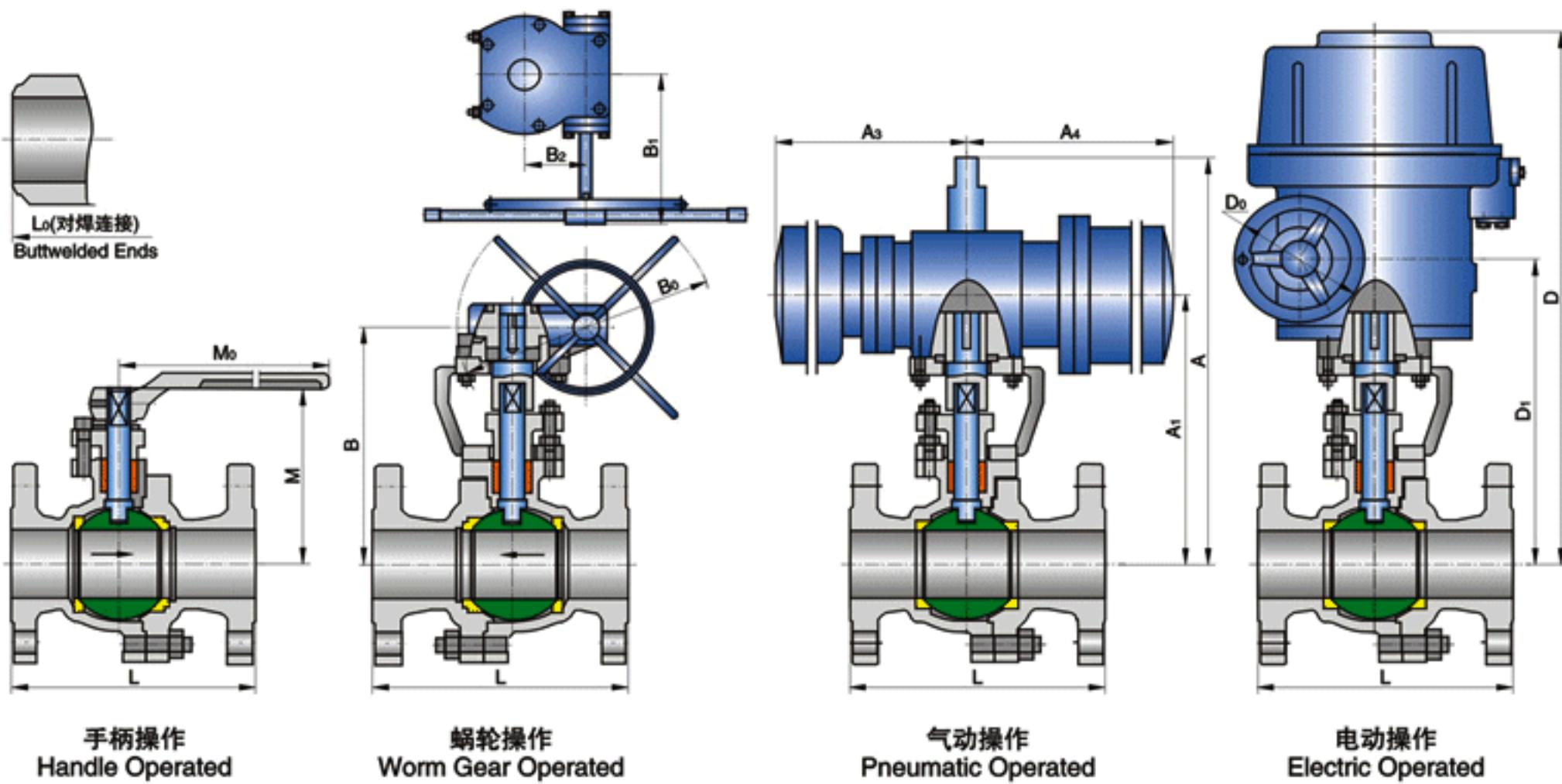
序号 NO.	零件系列 Parts Name	碳钢系列 Carbon Steel Series	不锈钢系列 Stainless Steel Series	低温钢系列 Low Temperature Steel Series	抗硫系列Anti-Sulphur Series	
					碳钢系列 Carbon Steel	不锈钢系列 SS Series
1	阀体 Body	A216 WCB	A351 CF8、CF8M、CF3、CF3M	A352 LCB、LCC	GB/T12229、A216 WCB	A351 CF8M
2	阀座 Seat	PTFE、RPTFE、烧结碳纤维、金属+橡胶组件	PTFE, RPTFE, Braided Graphite Fiber, Steel+Rubber Assembly			
3	球体 Ball	A105+HCr/ENP	A351 CF8、CF8M、CF3、CF3M	A352 LCB、LCC+ENP	A105+HCr/ENP	A351 CF8M+ENP
4	弹簧 Spring			INCONEL X-750		
5	螺柱 Stud	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B8M
6	垫片 Gasket		柔性石墨+不锈钢 Soft Graphite+SS			
7	螺母 Nut	A194 2H	A194 8M	A194 4	A194 2HM	A194 8M
8	阀盖 Bonnet	A216 WCB	A351 CF8、CF8M、CF3、CF3M	A352 LCB、LCC	GB/T12229、A216 WCB	A351 CF8M
9	阀杆 Stem	A182 F6a	A182 F304、316	A182 F6a	A182 F304	A182 F316
10	轴衬 Bush Bearing		金属衬PTFE; 烧结碳纤维 Metal+PTFE; Braided Graphite Fibre			
11	填料垫 Packing Seat	A182 F6a	SS	A182 F6a	A182 F6a	SS
12	填料 Packing		柔性石墨、PTFE Soft Graphite, PTFE			
13	填料压盖 Gland Packing	A216 WCB	A351 CF8、CF8M	A351 CF8	GB/T12229、A216 WCB	A351 CF8M
14	螺钉 Screw	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B8M
15	定位片 Locating Plate			GB/T700 Q235A+Zn(Cr)		
16	挡圈 Circlip			GB/T1222 65Mn		
17	手柄 Handle			A216 WCB		



主要外形尺寸 Main Outline Dimensions

PN1.6MPa Class 150

DN (mm)	NPS (in)	L	L0	手动 Handle		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg) (RF)		
		RF	BW	M	Mo	B	B0	B1	B2	A	A1	A3	A4	D	D1	D0	手动 Handle	气动 Pneumatic	电动 Electric
15	1/2	108	140	59	130	-	-	-	-	200	122	326	136	-	-	-	2.5	10	-
20	3/4	117	152	63	130	-	-	-	-	204	126	326	136	-	-	-	3	15.7	-
25	1	127	165	75	160	-	-	-	-	257	162	347	181	-	-	-	5	19.5	-
40	1 1/2	165	190	95	230	-	-	-	-	264	169	420	181	-	-	-	7	42.8	-
50	2	178	216	107	230	-	-	-	-	340	209	426	257	472	377	190	10	46.9	32
65	2 1/2	191	241	142	400	-	-	-	-	370	239	426	257	486	391	190	15	50.5	35.6
80	3	203	283	152	400	-	-	-	-	389	258	590	257	579	484	190	19	70	44
100	4	229	305	178	650	-	-	-	-	594	337	523	287	595	500	190	33	92.7	55
125	5	356	381	252	1050	-	-	-	-	646	437	610	378	650	500	400	58	160.7	93
150	6	394	457	272	1050	292	400	350	115.5	646	437	610	378	739	589	400	93	183.5	128
200	8	457	521	342	1410	398	600	350	115.5	781	537	885	530	799	649	400	160	276	195

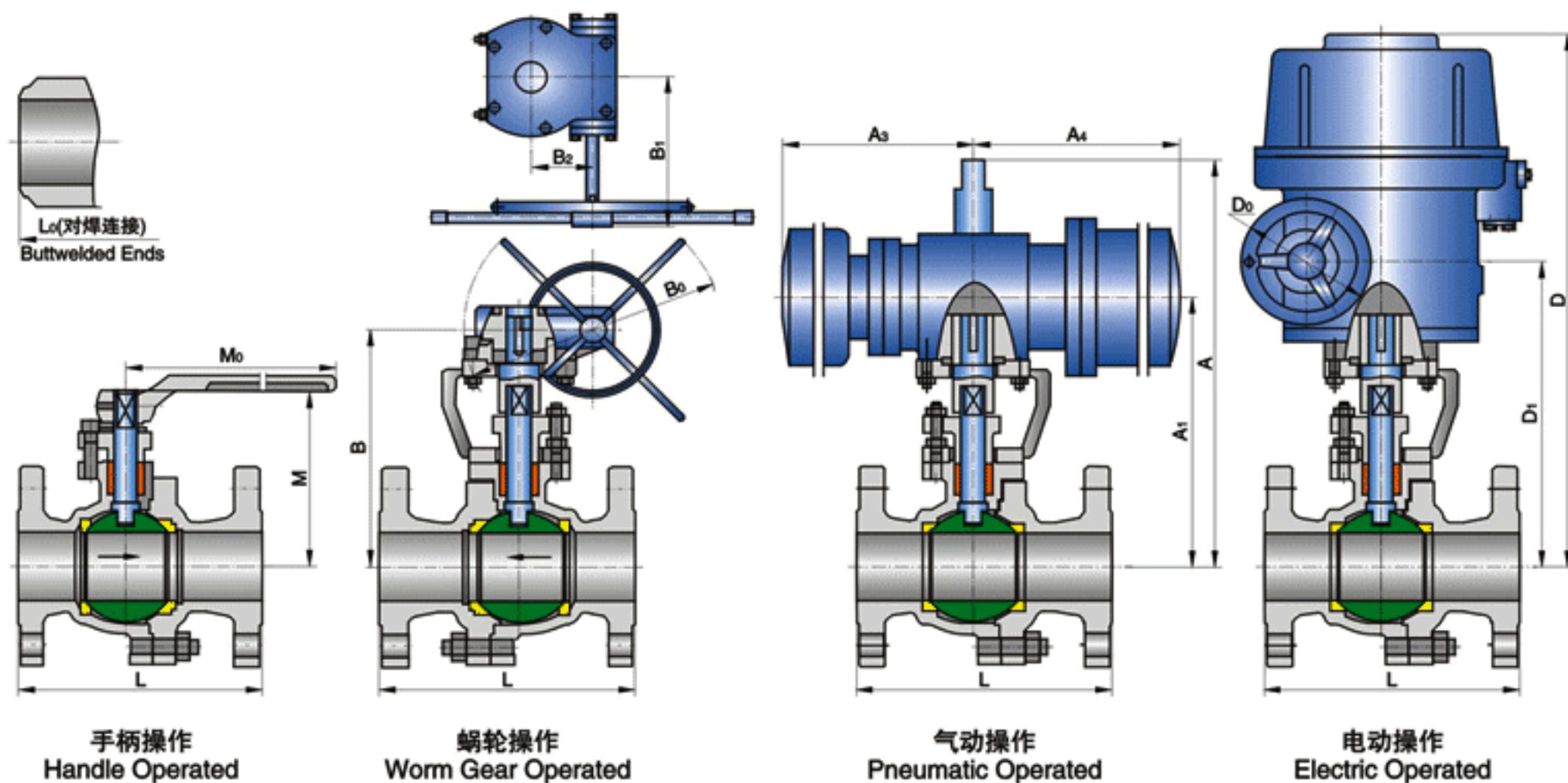


主要外形尺寸 Main Outline Dimensions

PN2.5/4.0MPa Class 300

mm

DN (mm)	NPS (in)	手动 Handle		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric				重量 Weight(kg) (RF)				
		L	L ₀	R _F	B _W	M	M ₀	B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	手动 Handle	气动 Pneumatic
15	1/2	140	140	59	130	-	-	-	-	-	200	122	326	136	-	-	-	3	10	-
20	3/4	152	152	63	130	-	-	-	-	-	204	126	326	136	-	-	-	4	15.7	-
25	1	165	165	75	160	-	-	-	-	-	257	162	347	181	-	-	-	6	20	-
40	1 1/2	190	190	95	230	-	-	-	-	-	264	169	420	181	-	-	-	11	40.9	-
50	2	216	216	107	230	-	-	-	-	-	340	209	426	257	472	377	190	15	43.9	29
65	2 1/2	241	241	142	400	-	-	-	-	-	379	248	426	257	486	391	190	24	51.9	37
80	3	283	283	152	400	-	-	-	-	-	452	295	590	257	579	484	190	30	68	42
100	4	305	305	178	650	-	-	-	-	-	594	375	523	287	595	500	190	55	99.4	77
125	5	381	381	252	1050	-	-	-	-	-	646	437	610	378	650	500	400	81	177.5	116
150	6	403	403	272	1050	292	400	350	115.5	744	500	610	378	739	589	400	118	207.5	143	
200	8	502	521	342	1410	398	600	421	171	920	615	885	530	799	649	400	200	381	235	



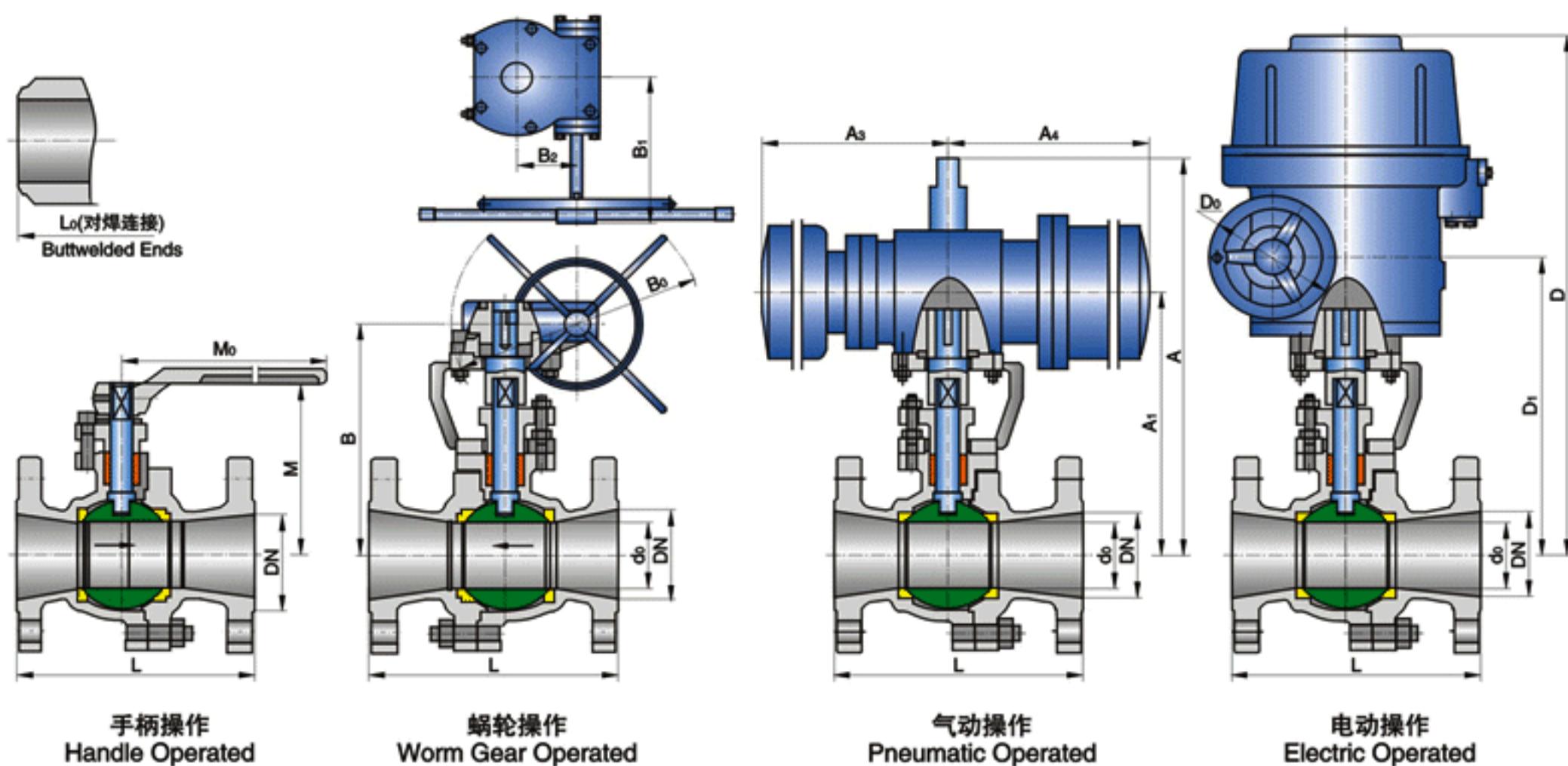
主要外形尺寸 Main Outline Dimensions

PN6.4/10.0MPa Class 400/600

DN (mm)	NPS (in)	L	Lo	手动 Handle		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg) (RF)			
				RF	BW	M	Mo	B	B0	B1	B2	A	A1	A3	A4	D	D1	D0	手动 Handle	气动 Pneumatic
15	1/2	165	165	59	160	-	-	-	-	-	200	122	283	136	-	-	-	8	17.2	-
20	3/4	190	190	63	160	-	-	-	-	-	204	145	283	181	-	-	-	11	21	-
25	1	216	216	75	230	-	-	-	-	-	241	146	283	181	-	-	-	15	24	-
40	1 1/2	241	241	95	400	-	-	-	-	-	264	169	350	181	-	-	-	19	32	-
50	2	292	292	142	400	-	-	-	-	-	340	209	590	257	472	377	190	25	68	60
65	2 1/2	330	330	154	650	-	-	-	-	-	379	248	590	257	599	391	190	32	75	67
80	3	356	356	184	650	292	400	350	115.5	452	295	523	287	599	449	190	48	101.3	83	
100	4	406 (432)	406 (432)	209	1050	398	600	421	171	584	375	610	378	632	472	190	76	177.5	111	

注：表中()括号内尺寸为PN10.0(Class600)的结构长度。

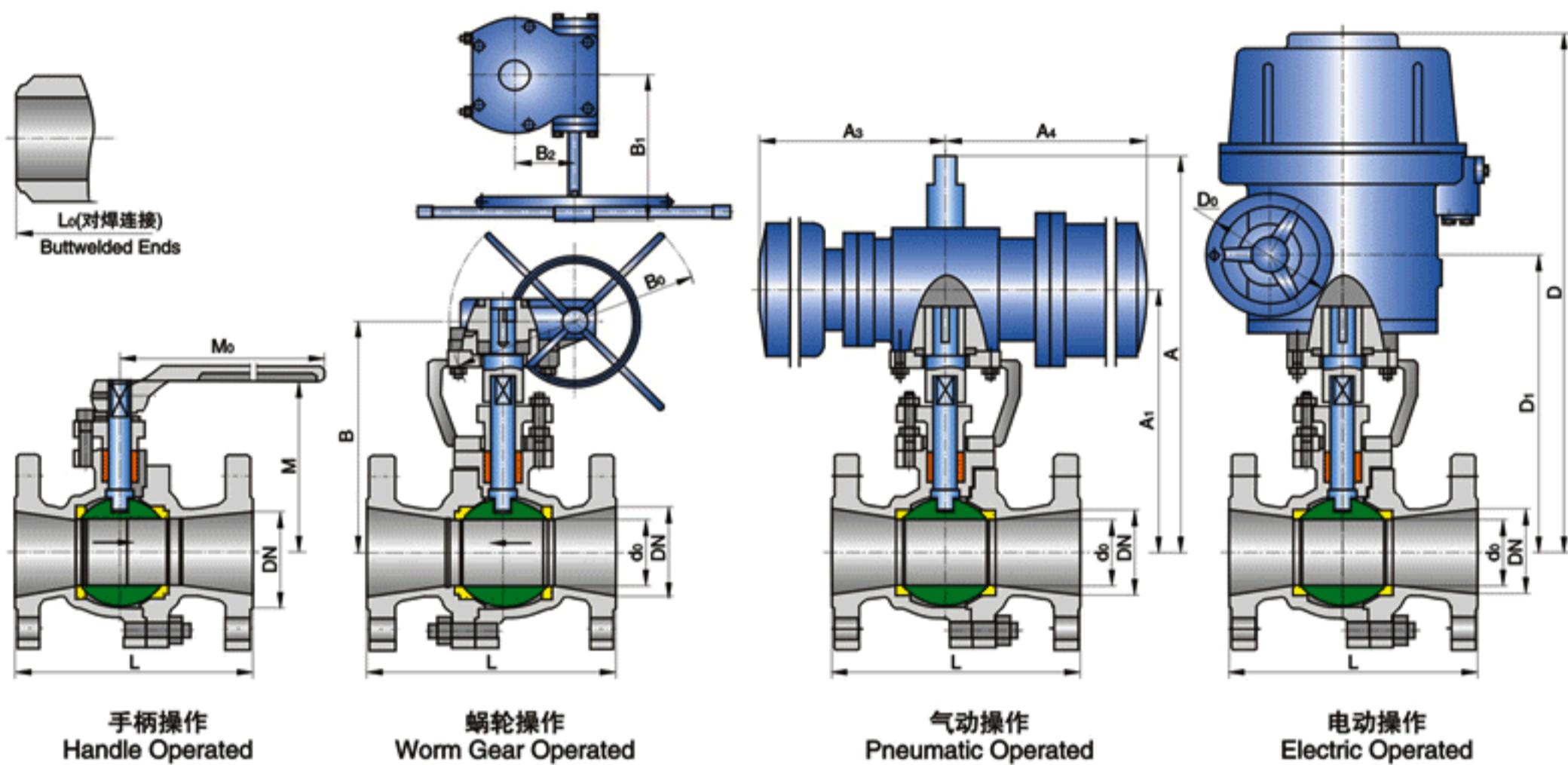
Note: Dimensions marked with bracket () are face to face dimensions of valves rated PN10.00 (Class600).



主要外形尺寸 Main Outline Dimensions

PN1.6MPa Class 150

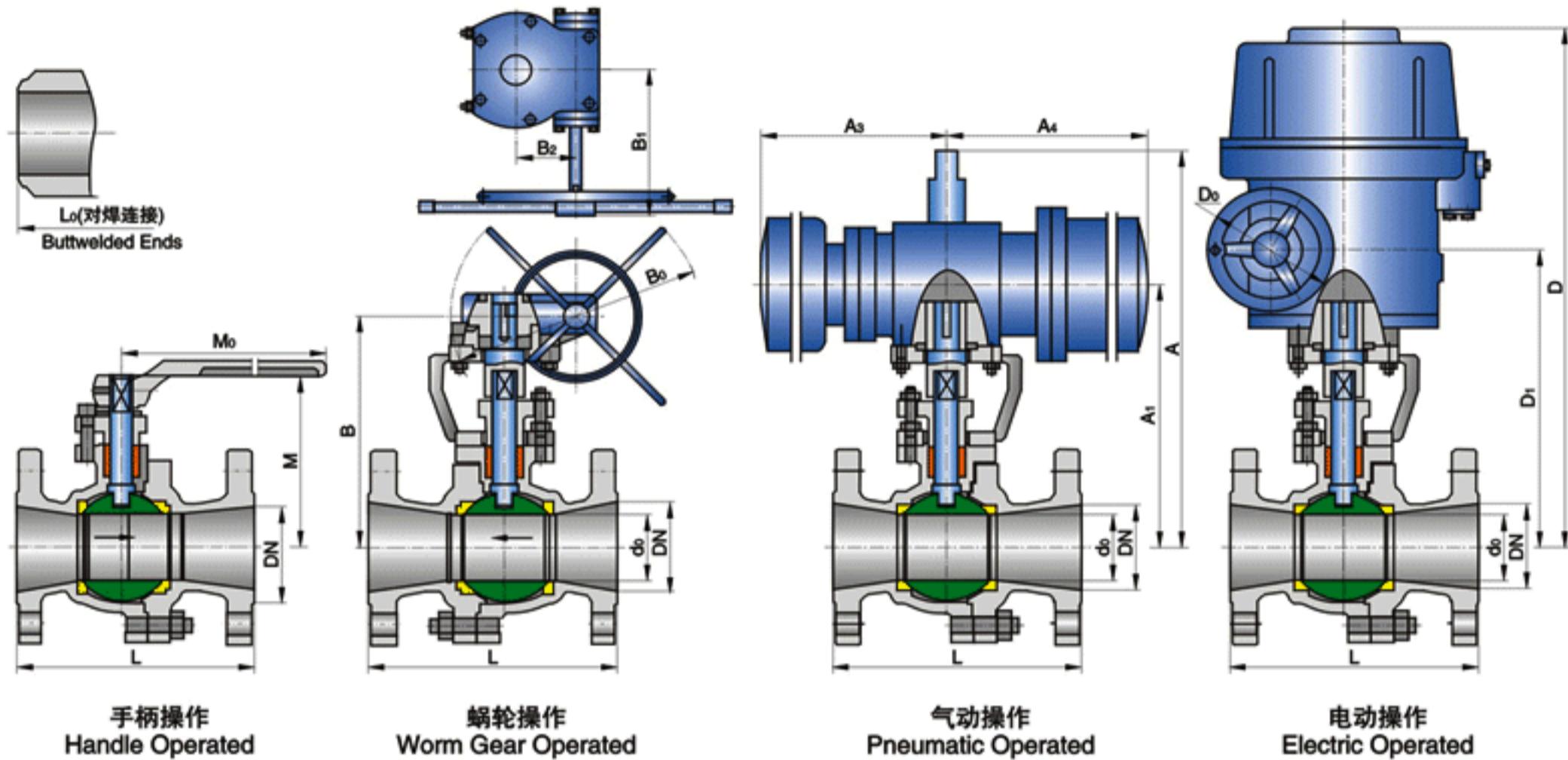
DN (mm)	NPS (in)	d ₀	L	L ₀	手动 Handle		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg) (RF)		
			RF	BW	M	M ₀	B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	手动 Handle	气动 Pneumatic	电动 Electric
20	3/4 × 1/2	15	117	152	59	130	-	-	-	-	200	122	326	136	-	-	-	3	10	-
25	1 × 3/4	20	127	165	63	130	-	-	-	-	204	126	326	136	-	-	-	4	15.7	-
40	1 1/2 × 1 1/4	32	165	190	75	160	-	-	-	-	257	162	347	181	-	-	-	7	21	-
50	2 × 1 1/2	40	178	216	95	230	-	-	-	-	264	169	420	181	-	-	-	9	40.9	-
65	2 1/2 × 2	50	191	241	107	230	-	-	-	-	340	209	426	257	472	377	190	14	45.9	31
80	3 × 2 1/2	65	203	283	142	400	-	-	-	-	370	239	426	257	486	391	190	19	50.9	36
100	4 × 3	80	229	305	152	400	-	-	-	-	389	258	590	257	579	484	190	25	68	42
125	5 × 4	100	356	381	178	650	-	-	-	-	594	337	523	287	595	500	190	32	87.4	49
150	6 × 4	100	394	457	178	650	-	-	-	-	594	337	523	287	595	500	190	40	95.4	57
200	8 × 6	150	457	521	272	1050	292	400	350	115.5	646	437	610	378	739	589	400	84.0	186.5	119



主要外形尺寸 Main Outline Dimensions

PN2.5/4.0MPa Class 300

DN (mm)	NPS (in)	d ₀	L	L ₀	手动 Handle		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg) (RF)				
					RF	BW	M	M ₀	B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	手动 Handle	气动 Pneumatic	电动 Electric
20	3/4 × 1/2	15	152	152	59	130	-	-	-	-	-	-	200	122	326	136	-	-	-	3	10	-
25	1 × 3/4	20	165	165	63	130	-	-	-	-	-	-	204	126	326	136	-	-	-	4	15.7	-
40	1 1/2 × 1 1/4	32	190	190	75	160	-	-	-	-	-	-	257	162	347	181	-	-	-	7	21	-
50	2 × 1 1/2	40	216	216	95	230	-	-	-	-	-	-	264	169	420	181	-	-	-	9	40.9	-
65	2 1/2 × 2	50	241	241	107	230	-	-	-	-	-	-	340	209	426	257	472	377	190	14	45.9	31
80	3 × 2 1/2	65	283	283	142	400	-	-	-	-	-	-	379	248	426	257	486	391	190	19	50.9	36
100	4 × 3	80	305	305	152	400	-	-	-	-	-	-	452	295	590	257	579	484	190	25	68	42
125	5 × 4	100	381	381	178	650	-	-	-	-	-	-	594	375	523	287	595	500	190	32	87.4	49
150	6 × 4	100	403	403	178	650	-	-	-	-	-	-	594	375	523	287	595	500	190	40	95.4	57
200	8 × 6	150	502	521	272	1050	292	400	350	115.5	744	500	610	378	739	589	400	84.0	186.5	119		



主要外形尺寸 Main Outline Dimensions

PN6.4/10.0MPa Class 400/600

mm

DN (mm)	NPS (in)	d ₀	L	L ₀	手动 Handle				蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric				重量 Weight(kg) (RF)		
			RF	BW	M	M ₀	B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	手动 Handle	气动 Pneumatic	电动 Electric	mm		
20	3/4 × 1/2	15	190	190	59	160	-	-	-	-	200	122	283	136	-	-	-	8	15	-			
25	1 × 3/4	20	216	216	63	160	-	-	-	-	204	145	283	181	-	-	-	11	22.7	-			
40	1 1/2 × 1 1/4	32	241	241	75	230	-	-	-	-	241	146	283	181	-	-	-	15	29	-			
50	2 × 1 1/2	40	292	292	95	400	-	-	-	-	264	169	350	181	-	-	-	19	33	-			
65	2 1/2 × 2	50	330	330	142	400	-	-	-	-	340	209	590	257	472	377	190	25	39	60			
80	3 × 2 1/2	65	356	356	154	650	-	-	-	-	379	248	590	257	599	391	190	48	91	83			
100	4 × 3	80	406 (432)	406 (432)	184	650	292	400	350	115.5	452	295	523	287	599	449	190	76	119	111			
150	6 × 4	100	495 (559)	495 (559)	209	1050	398	600	421	171	584	375	610	378	632	472	190	85	187.5	120			

注：表中()括号内尺寸为PN10.0(Class600)的结构长度。

Note: Dimensions marked with bracket () are face to face dimensions of valves rated PN10.00 (Class600).

Structural Features of Trunnion Ball Valve

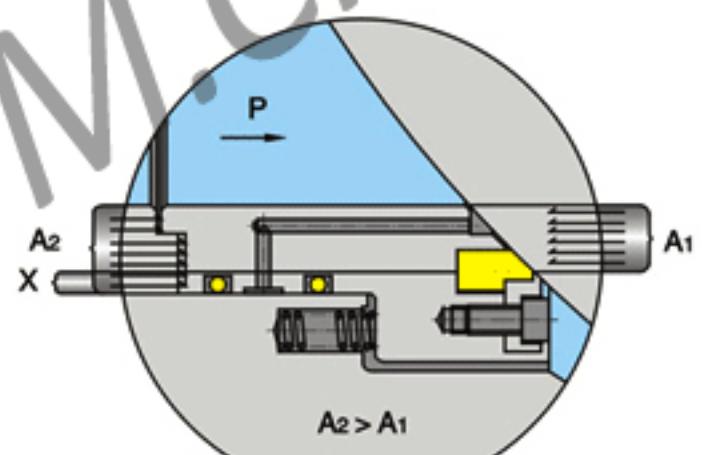
Trunnion ball valves are mainly used in the industries of natural gas, oil products, chemicals, metallurgy, urban construction, environmental protection, pharmaceuticals, foodstuff and etc. Among them, the sulfur-resisting series products are applicable for seriously corrosive natural gas pipeline containing hydrogen sulphide mediums and impurities.

1. Distinctive Seating Structure

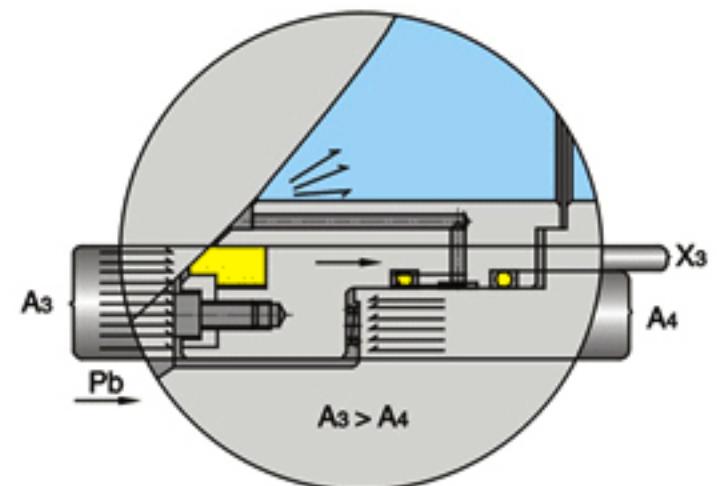
According to the extent of pressure, medium properties and sealing requirements, fixed ball valves may be made to front seal structure, back seal structure, or front-back dual seal structure.

●Front Seal Structure

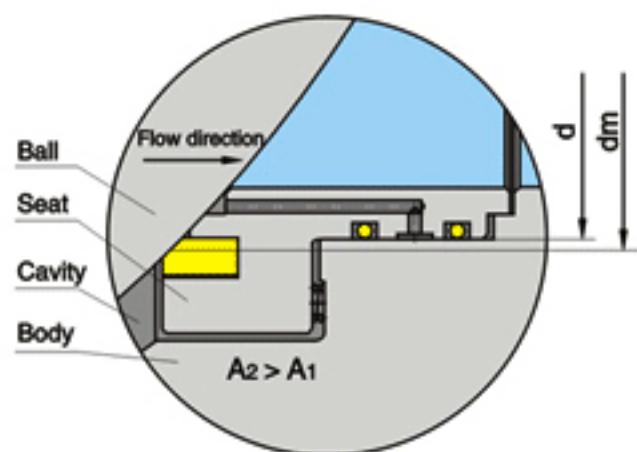
The front seal structure of valve seat gives the functions of two way seal and self-relieving function at middle cavity. As shown in the figure, the sealing socket inlaid with appropriate polymeric material (high molecular material of NYLON, MOLON, DELRIN or PEEK) is float. With spring loaded, when closed, the sealing face remains always in close contact with the ball, thus to ensure leak-tightness under whatever high or low differential pressure. Upstream: valve seat moves axially along with the valve, the upstream (inlet) pressure P applied to A_2 produces a directional force on A_1 . As A_2 is larger than A_1 , $A_2 - A_1 = X$, so the pressure on X will push the valve seat toward the ball to actualize close seal at upstream. Downstream: in case the pressure inside valve cavity P_b rises, the force acted upon A_3 will be greater than that upon A_4 , $A_3 - A_4 = X_2$. The differential pressure formed up on X_2 will overcome the spring force and make valve seat separated from ball, and then, the valve seat will be closed to the ball again under spring action.



Inlet Side



Outlet Side



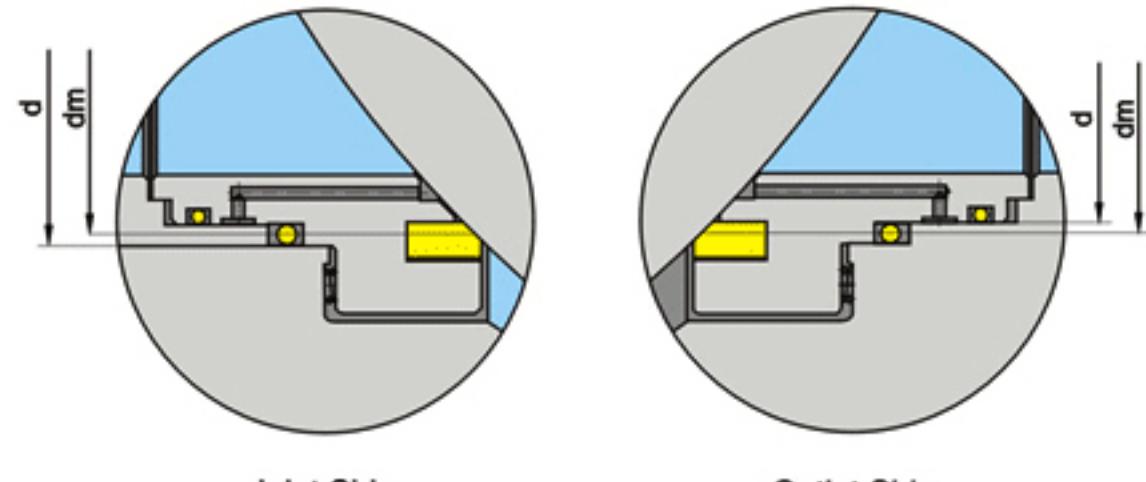
Outlet Side

●Back Seal Structure

The piston effect at valve seat produced by the area difference between ' d ' and ' d_m ' (see figure on the right) will make seating seal ring and ball closely contacted and sealed under the medium action at the middle cavity of valve body.

●Front-back Seal Structure

At the inlet inside, the piston effect at valve seat produced by the area difference between ' d ' and ' d_m ' will make seating seal ring and ball closely contacted and sealed under the medium action at upstream. At the outlet side, the piston effect produced by the area difference between ' d_0 ' and ' d_m ' will make seating seal ring and ball closely contacted and sealed under the action of medium pressure at the middle cavity of valve body.



Inlet Side

Outlet Side

Front-Back Seal Structure

2. Self-relieving Structure

In case of abnormal rise of pressure at middle cavity, ball valve of single seal structure is provided with self-relieving function, while ball valve of dual seal structure uses the auxiliary pressure relief device on valve body to carry out pressure relief.

3. First Aid of Seal

The valve is designed with an auxiliary seating emergency seal system, as shown in the figure. In case of soft seal damaged, or failure of seal in an emergency circumstances, emergency seal may be effected by injecting in sealant through auxiliary sealing system. If needed, emergency seal assembly can be used to rinse and lubricate the seating area. Plus, valve stem can also be designed with an auxiliary emergency sealing system.

4. Fireproof Structure

If requested by working conditions and users, ball valve may be designed to fireproof. The fireproofing design of ball valve is to the standards of API607 and JB/T6899. In case of soft seal ring burnt in fire, the fire protection structure of ball valve functions to prevent medium from mass leakage, thus to avoid fire spreading.

5. Antistatic Structure

When operating the valve, the friction between the ball and seat will produce electrostatic charge that can be accumulated on the ball. To prevent static spark, an antistatic device is placed on the valve to derive the electric charge accumulated on the ball (as shown in the figure).

6. Locking Device

To prevent misoperation and the unexpected open or close caused by the unpredicted circuit vibration, a locking device is designed at the fully opened and closed positions of hand operated ball valve. This design is proven especially good and effective in the production line of inflammable mediums of petroleum and chemicals, or when valves are mounted outdoors.

7. Full and Reduced Bore Structure

To meet the different requirements of users, we have full and reduced bore ball valves series (as shown in the figure). The inside diameter of full-bore ball valve is in conformity with that of the pipe for the convenience of cleaning, while reduced-bore series ball valve is comparatively lighter in weight, but its fluid resistance is only 1/7 of that of globe valve of the same caliber. So, reduced-bore ball valves boast of broader prospects.

8. Discharge Device on Valve Body

If requested by users or by the system, discharge valve may be mounted on the body of ball valve. In case the two ends of valve have been sealed, the pressure in valve will be released through the discharge valve on the body. Besides the function of DBB, this discharge valve also functions to rinse and blow out the deposits inside valve body.

9. Corrosion Resistance

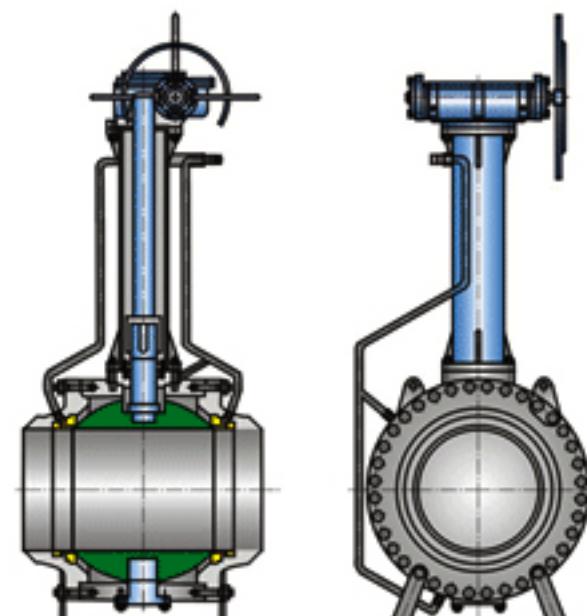
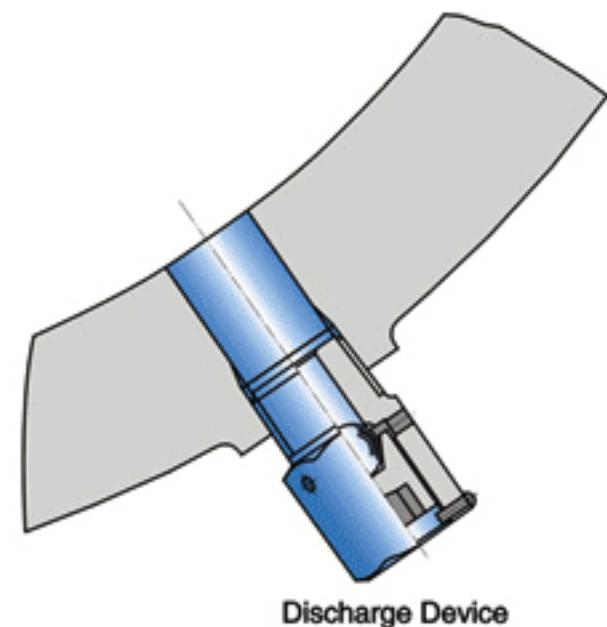
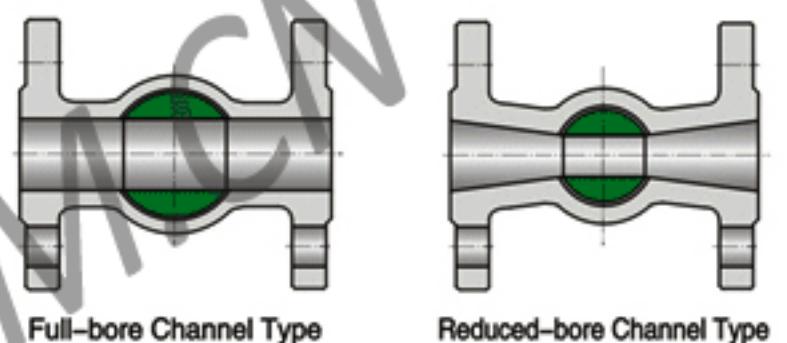
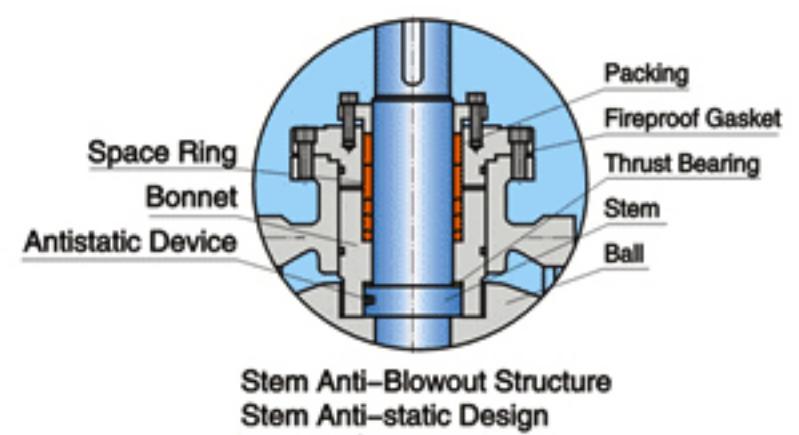
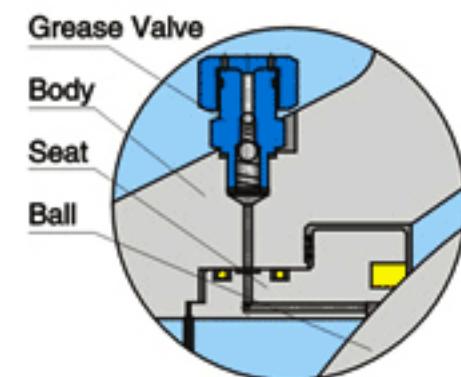
Corrosion allowance is left for the design of body thickness, the stem, fixed shaft, ball, seat and bottom cover of carbon steel valve are all chemical plated in surface to ASTM B733 and B656. Use of paint from international co. to deal with all kinds of conditions.

10. Sulfide Stress Cracking Resistance

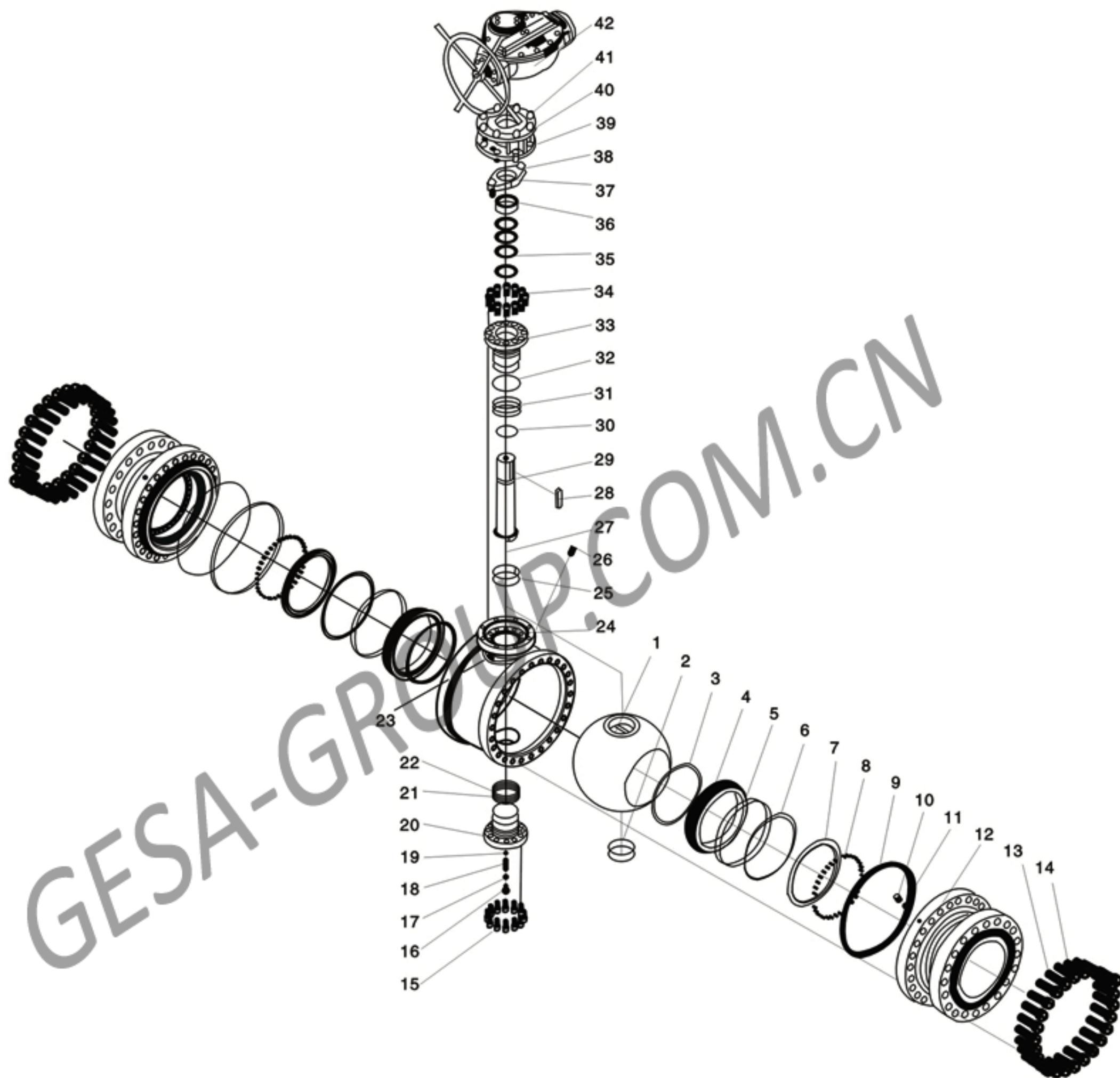
The materials exposed to fluid of our sulfur resisting ball valves, including fastening components, are all selected to NACE MR0175. Rigorous quality control and inspection is implemented in the manufacturing process to make our products conformed to the standard and suitable for vulcanizing conditions.

11. Extension Stem Device

Extension stem may be provided for underground ball valves, which include extension of stem, greasing valve and discharge valve. As shown in the figure on the right, the users shall specify the requirements and length to be extended (The length is generally the distance from the center of valve channel to the center of operating device).



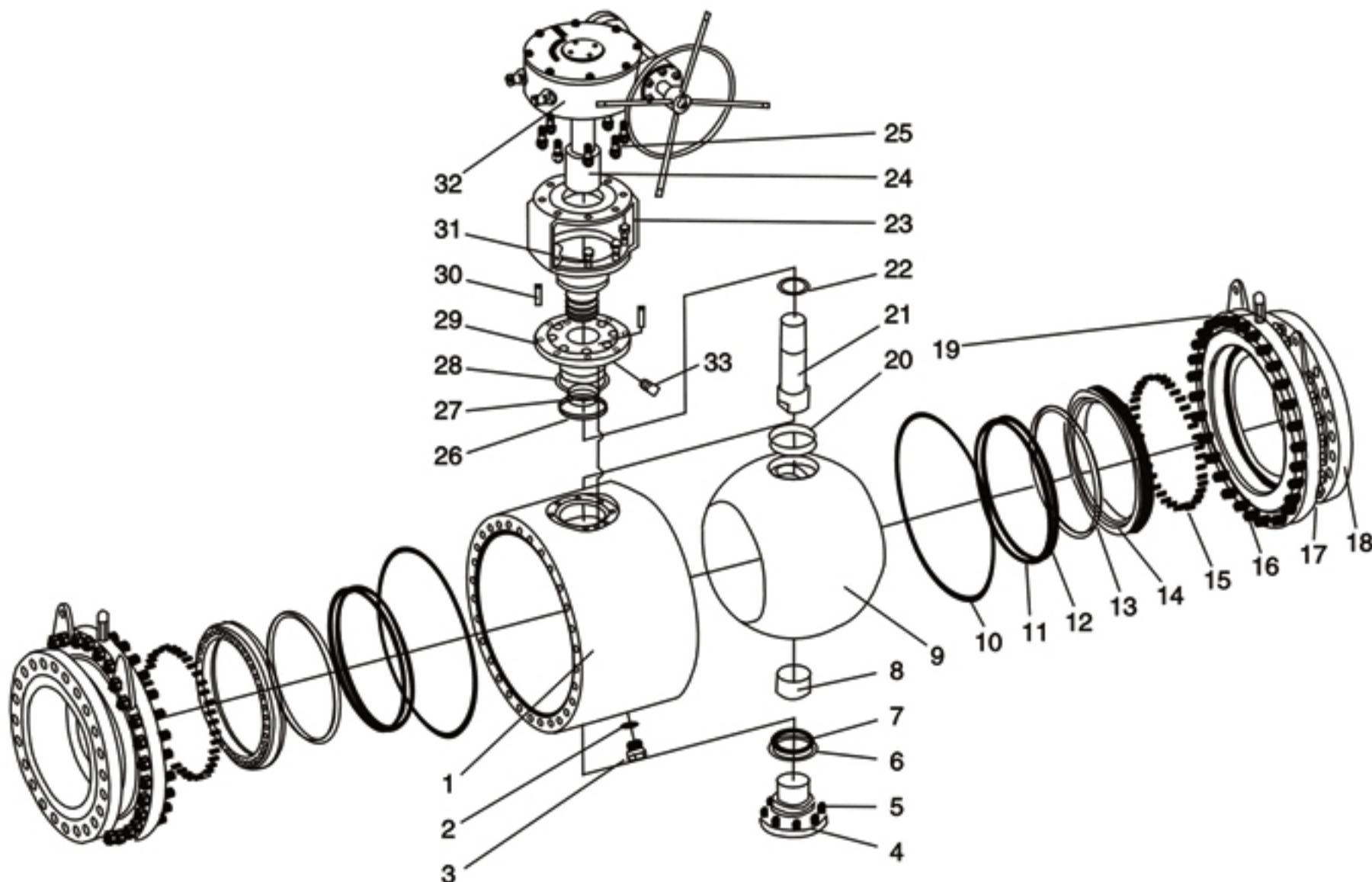
阀门结构示意图 (铸钢球阀) Valve Structural Schematic Drawing (Cast Steel Ball Valve)



主要零部件材料 The Material of Main Parts

序号 No.	零件系列 Parts Name	普通碳钢系列 Carbon Steel Series	不锈钢系列 Stainless Steel Series	低温钢系列 Low Temperature Steel Series	抗硫系列Anti-Sulphur			
					GB标准 GB Standard	NACE标准 NACE Standard		
1	球体Ball	A105+HCr/ENP	A351 CF8、CF8M、CF3、CF3M	A352 LCB、LCC+ENP	A105+HCr/ENP	A351 CF8M+ENP		
2	轴衬Bush Bearing	金属衬PTFE、烧结碳纤维 Metal +PTFE,Braided Graphite Fibre						
3	密封圈Sealing Ring	PTFE、RPTFE、烧结碳纤维、高分子聚合物NYLON、MOLON、DELRIN或PEEK						
4	阀座Seat	A105+HCr/ENP	A182 F304、A182 F316	A182 F6a	A105+HCr/ENP	A182 F316		
5	O型圈O Ring	氟橡胶 VITON						
6	防火垫Fire Safe Gasket	柔性石墨+不锈钢 Soft Graphite+ SS						
7	支撑圈Supporting Ring	A105+HCr/ENP	A182 F304、316	A182 F6a	A105+HCr/ENP	A182 F316		
8	弹簧Spring	INCONEL X-750						
9	O型圈O Ring	氟橡胶 VITON						
10	注脂阀Sealant Injection Valve	同壳体材料(阀座注脂) The same as body material						
11	垫片Gasket	柔性石墨+不锈钢 Soft Graphite+ SS						
12	阀盖Bonnet	A216 WCB	A351 CF8、CF8M、CF3、CF3M	A352 LCB、LCC	A216 WCB	A351 CF8M		
13	螺柱Stud	193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B7M		
14	螺母Nut	A194 2H	A194 8M	A194 4	A194 2HM	A194 2HM		
15	螺钉Screw	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B7M		
16	螺塞Plug	A29 1025	SS	SS	A29 1025	SS		
17	垫片Gasket	垫片Gasket	RPTFE	RPTFE	RPTFE	RPTFE		
18	螺钉Screw	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B7M		
19	球体Ball	A105+HCr/ENP	A182 F304					
20	底盖Bottom cover	A105+HCr/ENP	A182 F304、A182 F316	A29 4140+ENP	A105+A182 F316、HCr/ENP			
21	垫片Gasket	柔性石墨+不锈钢 Soft Graphite+SS						
22	O型圈O Ring	氟橡胶 VITON						
23	注脂阀Sealant Injection Valve	同壳体材料(阀座注脂) The same as body material						
24	阀体Body	A216 WCB	A351、CF8、CF8M、CF3、CF3M	A352 LCB、LCC	GB/T12229、A216 WCB	A351 CF8M		
25	轴衬Bush Bearing	金属衬PTFE、烧结碳纤维 Metal+PTFE,Braided Graphite Fibre						
26	排污阀Drainage Valves	同壳体材料 The same as body material						
27	弹簧Spring	A276 304						
28	键Key	GB/T699 45						
29	阀杆Stem	A29 4140+ENP	A182 F304、A182 F316	A182 F6a	A182 F304	A182 F304		
30	止推轴承Thrust bearing	金属衬PTFE、烧结碳纤维 Metal+PTFE,Braided Graphite Fibre						
31	O型圈O Ring	氟橡胶 VITON						
32	垫片Gasket	柔性石墨+不锈钢 Soft Graphite+ SS						
33	压盖Cover	A105+HCr/ENP	A182 F304、A182 F316	A182 F6a	A105+HCr/ENP	A182 F316		
34	螺钉Screw	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B7M		
35	填料Packing	柔性石墨、PTFE Soft Graphite, PTFE						
36	填料压套Packing Gland	A182 F6a	A182 F304、316	A182 F304	A182 F6	A182 F316		
37	压板Gland Flange	A216 WCB	A351 CF8、CF8M	A351 CF8	A216 WCB	A351 CF8M		
38	螺栓Bolt	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B7M		
39	螺栓Bolt	A193 B7	A193 B8、B8M	A320 L7	A320 L7	A193 B7M		
40	支架Yoke	A216 WCB	A351 CF8	A352 LCB	A216 WCB	A351 CF8		
41	螺栓Bolt	A193 B7	A193 B8、B8M	A320 L7	A193 B7M	A193 B7M		
42	驱动方式Driving Manner	蜗轮蜗杆、电动、气动、电液联动、气液联动 Lever, Wormgear, Electric, Pneumatic, Electro-hydraulic, Gas Over Oil etc.						

阀门结构示意图(锻钢球阀) Valve Structural Schematic Drawing (Forged Steel Ball Valve)



主要零部件材料 The Material of Main Parts

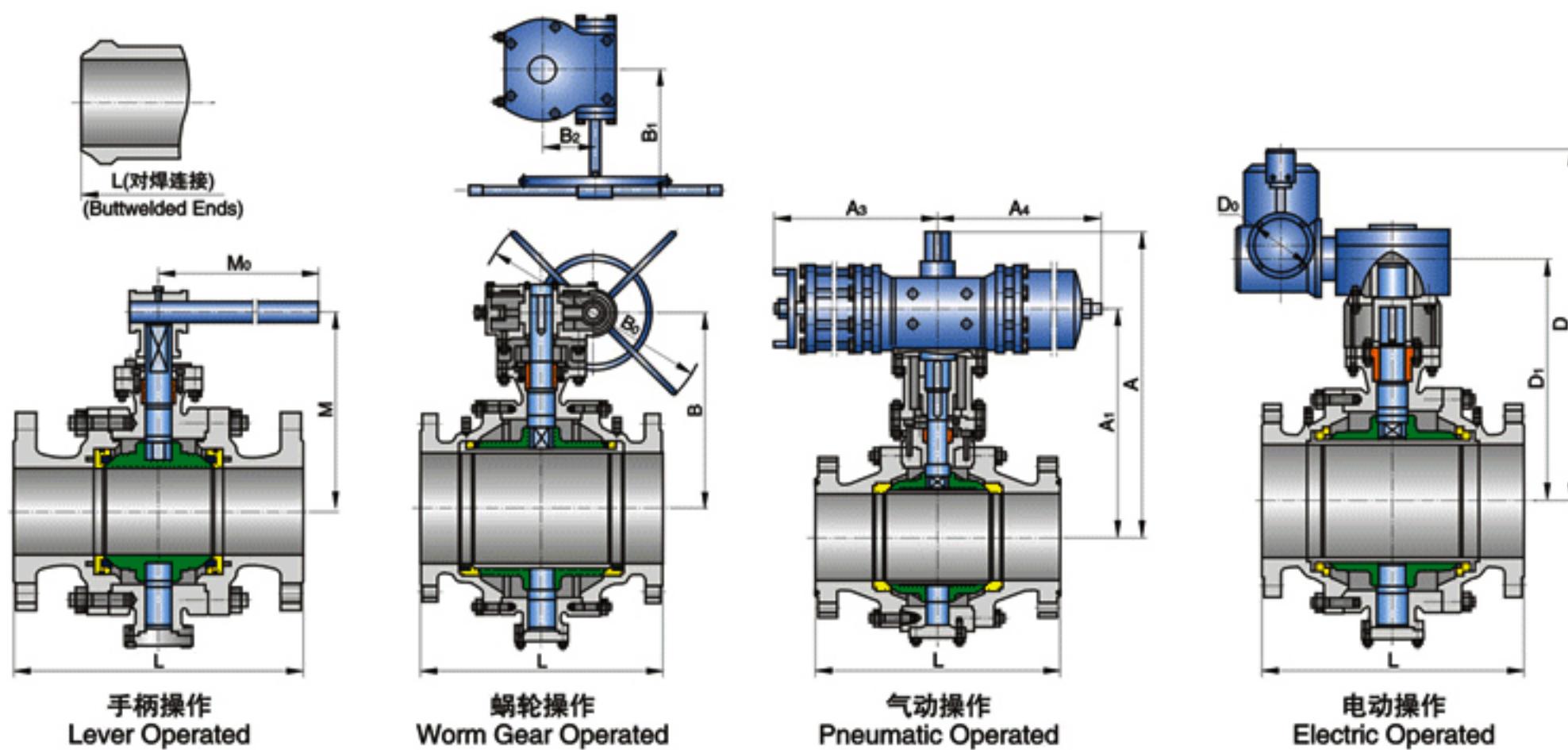
序号 NO.	零件名称 Parts Name	材料 Material		
		碳钢Carbon Steel	不锈钢SS	低温钢 Low Temperature Steel
1	阀体Body	ASTM A105	A182 F304	A350 LF2
2	垫片Gasket	柔性石墨+SS Soft Graphite+SS		
3	排泄阀 Drain Valve	A29 1025	A182 F304	SS
4	底盖 Bottom Cover	ASTM A105	A182 F304	A350 LF2
5	螺柱Stud	A193 B7	A193 B8	A320 L7
6	垫片Gasket	柔性石墨+SS Soft Graphite+SS		
7	O型圈O Ring	氟橡胶 VITON		
8	下轴衬Bottom Bush Bearing	PTFE+CS	PTFE+SS	PTFE+SS
9	球体Ball	ASTM A105+ENP	A182 F304	A182 F304
10	中法兰垫片 Middle Flange Gasket	柔性石墨+SS Soft Graphite+SS		
11	O型圈O Ring	氟橡胶 VITON		
12	防火圈 Fire Safe Ring	柔性石墨 Soft Graphite		
13	密封圈 Sealing Ring	PTFE、NYLON、PEEK、MOLON、PCTFE		
14	阀座Seat	ASTM A105+ENP	A182 F304	A182 F304
15	弹簧Spring	INCONEL X-750		
16	螺柱Stud	A193 B7	A193 B8	A320 L7
17	螺母Nut	A194 2H	A194 8	A194 7

序号 NO.	零件名称 Parts Name	材料 Material		
		碳钢Carbon Steel	不锈钢SS	低温钢 Low Temperature Steel
18	阀盖Bonnet	ASTM A105	A182 F304	A350 LF2
19	注脂阀Sealant Injection Valve	A29 1025	SS	SS
20	上轴衬 Top Bush Bearing	PTFE+CS	PTFE+SS	PTFE+SS
21	阀杆Stem	A182 F6a	A182 F304	A182 F304
22	平面轴衬 Flat Bush Bearing	PTFE+CS	PTFE+SS	PTFE+SS
23	支架Yoke	A216 WCB		
24	连接套 Connecting Set	ANSI 1025		
25	螺栓Stud	A193 B7		
26	O型圈O Ring	氟橡胶 VITON		
27	O型圈O Ring	氟橡胶 VITON		
28	垫片Gasket	柔性石墨+SS Soft Graphite+SS		
29	压盖 Cover	ASTM A105	A182 F304	A350 LF2
30	定位销 Locating Pin	A182 F6a		
31	螺栓Stud	A193 B7		
32	蜗轮蜗杆装置 Worm Gear	-		
33	阀杆注脂阀 Sealant Injection Valve	A29 1025	SS	SS

注：1、根据工况介质温度压力选用不同的密封圈材料；2、除了表中列出的材料，可根据用户要求选材。

Notes: 1. Use different materials for the seal ring according to the temperature and pressure of the industrial media.

2. The materials can be chosen upon the user's requirements, besides the materials listed in the table.



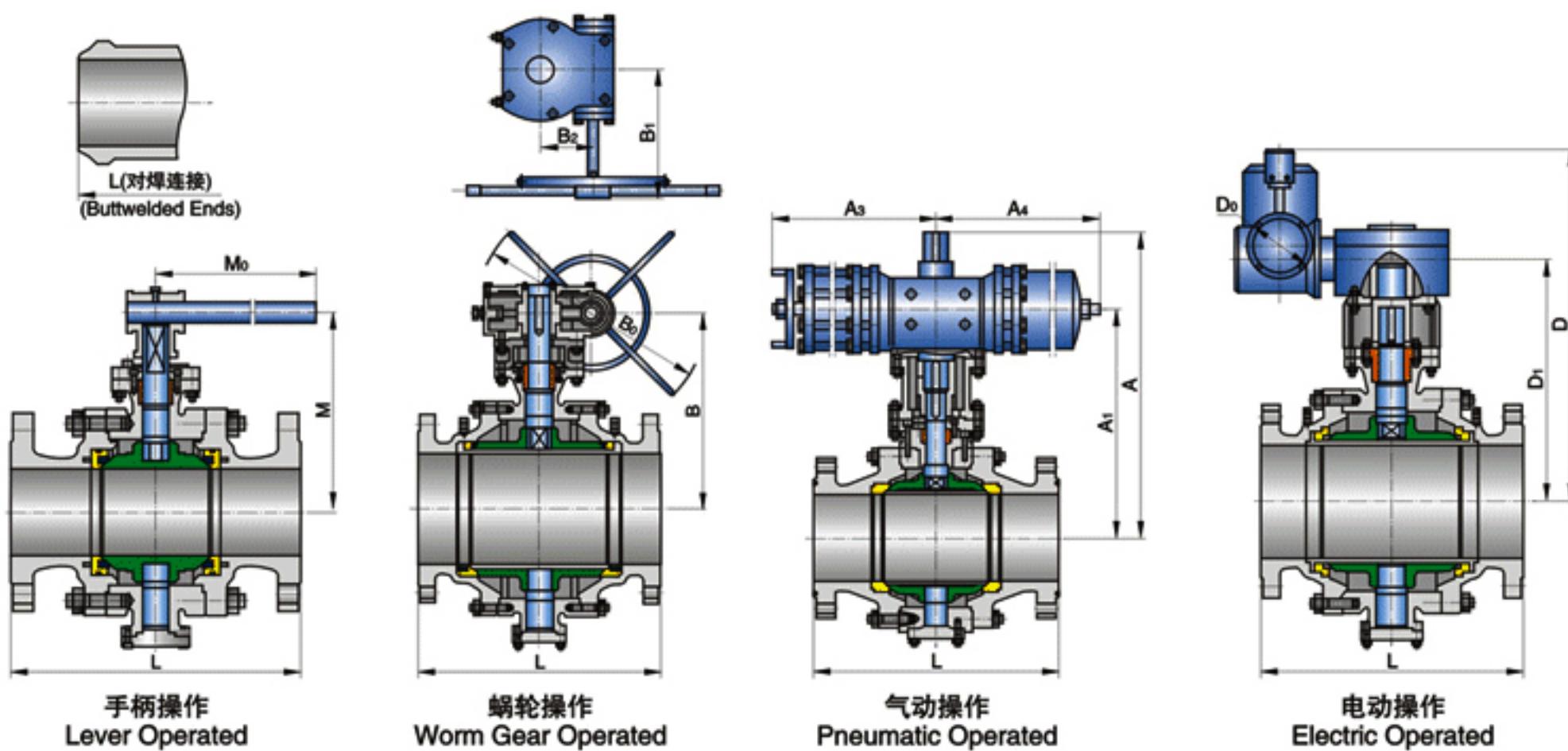
主要外形尺寸 Main Outline Dimensions

PN1.6MPa Class 150

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	M0	B	B0	B1	B2	A	A1	A3	A4	D	D1	D0	RF	BW
50	2	178	216	191	49	107	230	-	-	-	-	217	174	89	181	-	-	-	12	11
65	2 1/2	191	241	203	62	125	400	-	-	-	-	308	248	148	257	-	-	-	16	15.3
80	3	203	283	216	74	152	400	-	-	-	-	318	258	148	257	-	-	-	22	21.3
100	4	229	305	241	100	178	650	-	-	-	-	407	322	287	287	-	-	-	35	34
125	5	356	381	-	125	252	1050	-	-	-	-	480	395	287	287	-	-	-	58	55.4
150	6	394	457	406	150	272	1050	378	400	200	106	562	457	378	378	554	337	508	74	72
200	8	457	521	470	201	-	-	421	400	200	108	700	595	378	378	606	421	508	205	201
250	10	533	559	546	252	-	-	482	400	200	108	735	630	378	378	667	482	508	322	310
300	12	610	635	622	303	-	-	549	600	330	144	858	728	530	530	734	549	508	460	447
350	14	686	762	699	334	-	-	582	600	330	144	1013	883	530	530	784	582	508	576	536
400	16	762	838	775	385	-	-	687	800	370	220	1319	1154	680	680	889	687	508	864	814
450	18	864	914	876	436	-	-	730	800	370	220	1389	1224	680	680	981	730	305	1280	1210
500	20	914	991	927	487	-	-	772	800	370	220	1459	1294	680	680	1023	772	305	1600	1500
600	24	1067	1143	1080	589	-	-	995	800	515	279	1060	915	1455	1455	1268	995	305	3540	3000
650	26	1143	1245	-	633	-	-	1022	800	515	279	1234	1089	1455	1455	1334	1071	305	3930	3240
700	28	1245	1346	-	684	-	-	1088	800	515	279	1140	980	1665	1665	1459	1155	305	4500	3710
750	30	1295	1397	-	735	-	-	1153	800	515	279	1195	1035	1665	1665	1515	1211	305	5370	4530
800	32	1372	1524	-	779	-	-	1223	800	570	368	1338	1149	1960	1960	1649	1316	458	5940	4870
850	34	1473	1626	-	830	-	-	1307	800	570	368	-	-	-	-	1694	1361	458	6615	5305
900	36	1524	1727	-	874	-	-	1374	800	570	368	-	-	-	-	1766	1433	458	7540	6010
1000	40	1753	1956	-	976	-	-	1468	960	575	220	-	-	-	-	1854	1521	458	9320	7400
1050	42	1855	2083	-	1020	-	-	1532	960	575	220	-	-	-	-	2036	1586	610	14450	12150
1200	48	2134	2388	-	1166	-	-	1670	960	575	220	-	-	-	-	2185	1735	610	19200	16000
1350	54	-	-	-	1312	-	-	1858	960	575	220	-	-	-	-	2330	1880	610	-	-
1400	56	2388	2388	-	1360	-	-	1920	960	630	295	-	-	-	-	2395	1945	610	29400	24500
1500	60	2540	2540	-	1458	-	-	2070	960	630	295	-	-	-	-	2504	2054	610	36000	30000

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Above "L" column in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



主要外形尺寸 Main Outline Dimensions

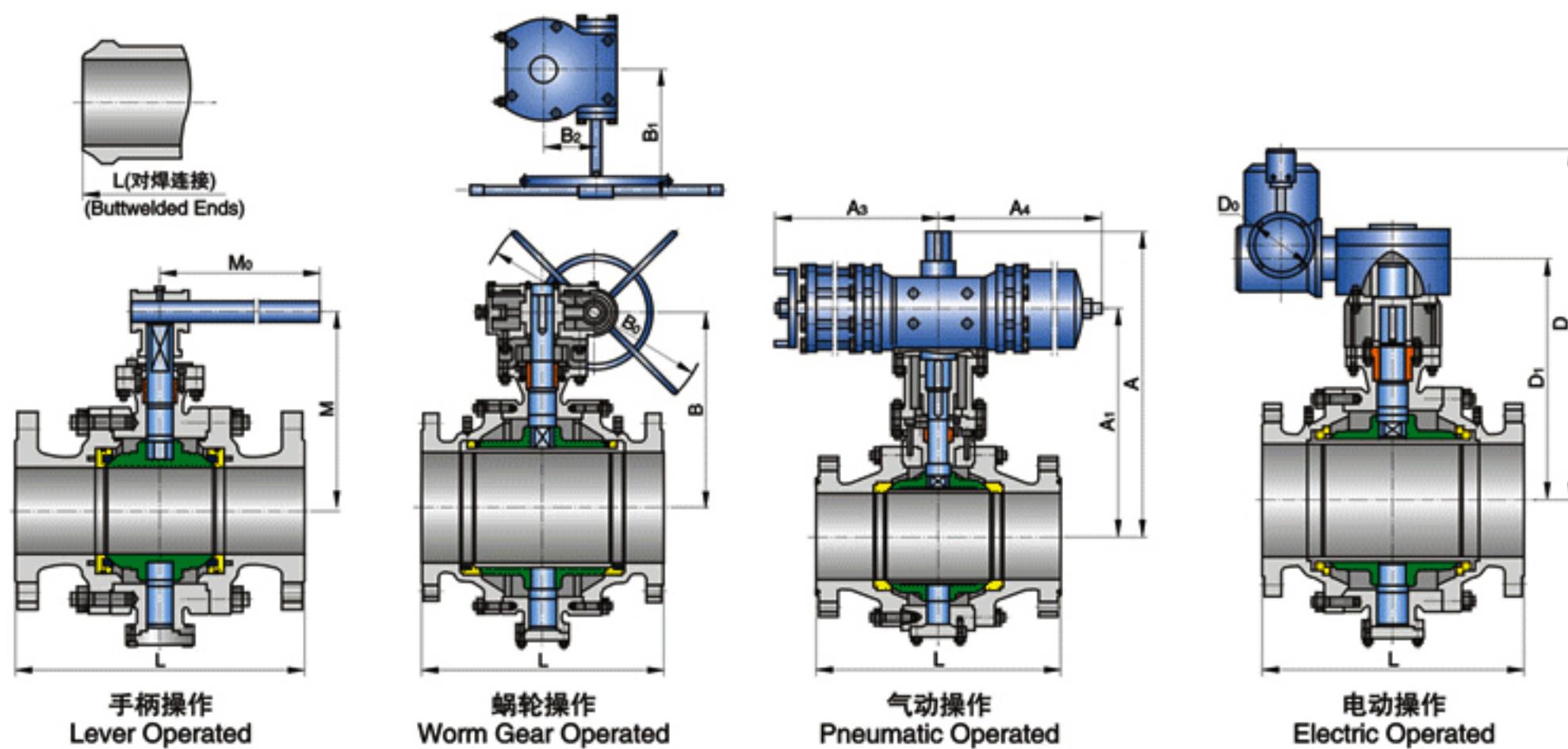
PN2.5/4.0MPa Class 300

mm

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	M _o	B	B _o	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D _o	RF	BW
50	2	216	216	232	49	107	230	-	-	-	-	234	174	148	257	-	-	-	15	11
65	2 1/2	241	241	257	62	125	400	-	-	-	-	308	248	148	257	-	-	-	24	18
80	3	283	283	298	74	152	400	-	-	-	-	343	258	287	287	-	-	-	30	22
100	4	305	305	321	100	178	650	-	-	-	-	407	322	287	287	-	-	-	55	45
125	5	381	381	-	125	252	1050	-	-	-	-	500	395	378	378	-	-	-	87	69
150	6	403	403	419	150	272	1050	378	400	200	106	562	457	378	378	522	337	508	118	98
200	8	502	521	518	201	-	-	421	400	200	108	700	595	378	378	606	421	508	255	225
250	10	568	559	584	252	-	-	482	600	330	144	760	630	530	530	667	482	508	370	330
300	12	648	635	664	303	-	-	549	600	330	144	858	728	530	530	751	549	508	533	493
350	14	762	762	778	334	-	-	582	800	370	220	1048	883	680	680	784	582	305	640	600
400	16	838	838	854	385	-	-	687	800	370	220	1319	1154	680	680	938	687	305	1030	930
450	18	914	914	930	436	-	-	730	800	370	220	1369	1224	1455	1455	981	730	305	1542	1402
500	20	991	991	1010	487	-	-	772	800	515	279	1459	1294	1455	1455	1045	772	305	2100	1900
600	24	1143	1143	1165	589	-	-	995	800	515	279	1075	915	1665	1665	1268	995	305	3430	2860
650	26	1245	1245	1270	633	-	-	1022	800	515	279	1249	1089	1665	1665	1375	1071	305	4340	3620
700	28	1346	1346	1372	684	-	-	1088	800	515	279	1140	980	1665	1665	1459	1155	305	4960	4140
750	30	1397	1397	1422	735	-	-	1153	800	570	368	1195	1035	1960	1960	1515	1211	305	5950	4960
800	32	1524	1524	1553	779	-	-	1223	800	570	368	1338	1149	1960	1960	1649	1316	458	6760	5640
850	34	1626	1626	1654	830	-	-	1307	800	570	368	-	-	-	-	1694	1361	458	8280	6900
900	36	1727	1727	1756	874	-	-	1374	960	575	220	-	-	-	-	1883	1433	458	9640	8040
1000	40	1930	1930	-	976	-	-	1468	960	575	220	-	-	-	-	1971	1521	458	11730	9680
1050	42	2032	2032	-	1020	-	-	1532	960	630	295	-	-	-	-	2036	1586	610	16300	13700
1200	48	2388	2388	-	1166	-	-	1670	960	630	295	-	-	-	-	2255	1735	610	20160	16800
1350	54	-	-	-	1312	-	-	1858	960	630	295	-	-	-	-	2400	1880	610	-	-
1400	56	2642	2642	-	1360	-	-	1920	960	630	295	-	-	-	-	2465	1945	610	30860	25720
1500	60	2946	2946	-	1458	-	-	2070	960	630	295	-	-	-	-	2574	2054	610	37800	31500

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Above "L" column in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



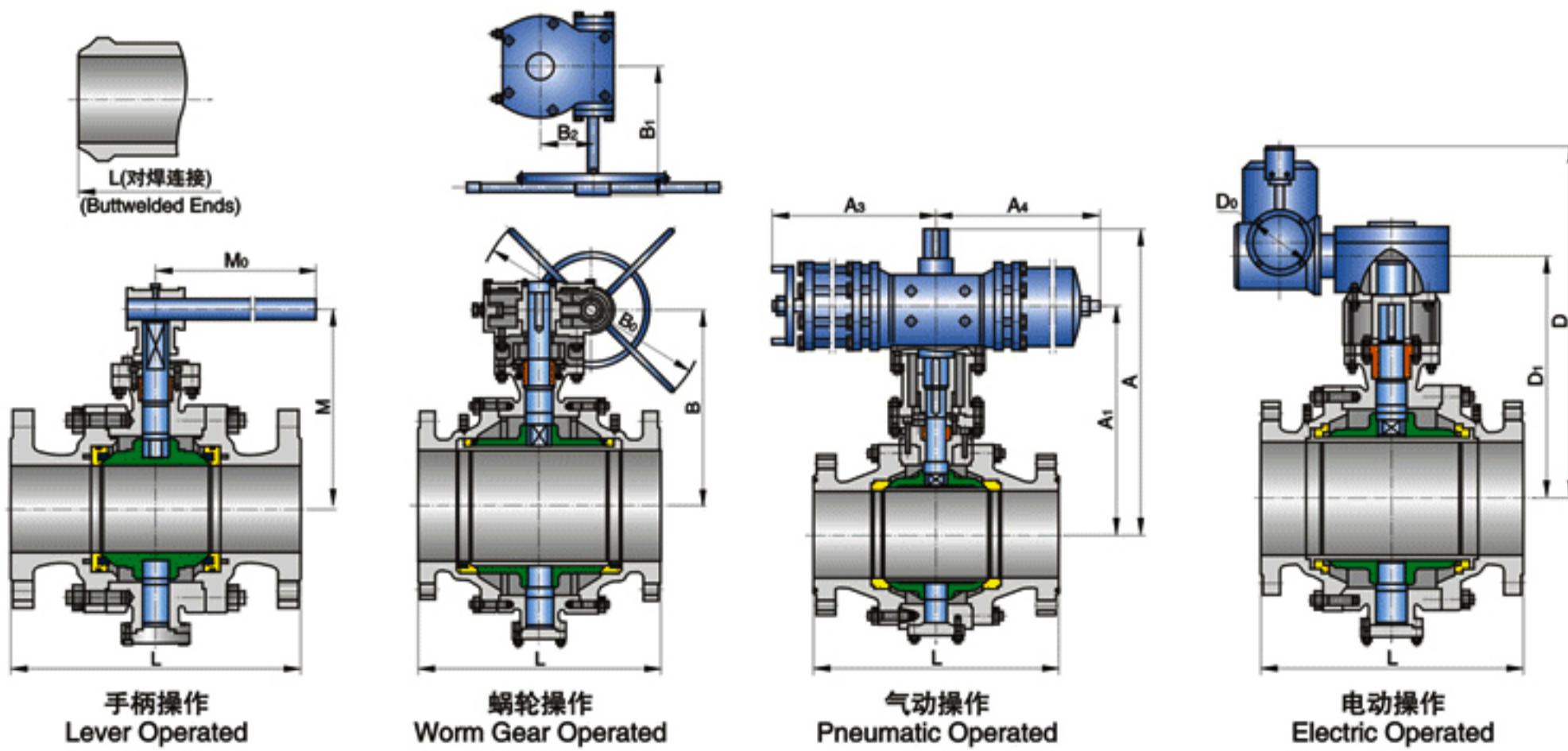
主要外形尺寸 Main Outline Dimensions

PN6.4MPa Class 400

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	Bo	B1	B2	A	A1	A3	A4	D	D1	D0	RF	BW
50	2	292	292	295	49	107	400	-	-	-	-	234	174	148	257	-	-	-	23	19
65	2½	330	330	333	62	142	400	-	-	-	-	308	248	148	257	-	-	-	35	27
80	3	356	356	359	74	152	650	-	-	-	-	343	258	287	287	-	-	-	49	39
100	4	406	406	410	100	178	650	-	-	-	-	407	322	287	287	-	-	-	91	71
125	5	457	457	-	125	252	1050	303	400	200	108	500	395	378	378	-	-	-	127	87
150	6	495	495	498	150	272	1050	383	400	200	108	562	457	378	378	522	337	508	192	152
200	8	597	597	600	201	-	-	447	600	330	144	725	595	530	530	606	421	508	355	285
250	10	673	673	676	252	-	-	480	600	330	144	760	630	530	530	684	482	508	640	530
300	12	762	762	765	303	-	-	517	800	370	220	943	728	680	680	751	549	508	880	730
350	14	826	826	829	334	-	-	588	800	370	220	1048	883	680	680	784	582	305	1100	910
400	16	902	902	905	385	-	-	639	800	370	220	1299	1154	1455	1455	938	687	305	1540	1310
450	18	978	978	981	436	-	-	710	800	515	279	1369	1224	1455	1455	981	730	305	1960	1640
500	20	1054	1054	1060	487	-	-	744	800	515	279	1459	1294	1455	1455	1045	772	305	2800	2210
600	24	1232	1232	1241	589	-	-	869	800	515	279	1075	915	1665	1665	1299	995	305	3930	3280
650	26	1308	1308	1321	633	-	-	908	800	515	279	1249	1089	1665	1665	1375	1071	305	4990	4160
700	28	1397	1397	1410	684	-	-	974	800	570	368	1140	980	1665	1665	1459	1155	305	5700	4760
750	30	1524	1524	1537	735	-	-	1013	800	570	368	1195	1035	1960	1960	1515	1211	305	6840	5700
800	32	1651	1651	1667	779	-	-	1079	800	570	368	1338	1149	1960	1960	1649	1316	458	7770	6480
850	34	1778	1778	1794	830	-	-	1164	960	575	220	-	-	-	-	1694	1361	458	9510	7930
900	36	1880	1880	1895	874	-	-	1201	960	575	220	-	-	-	-	1883	1433	458	11080	9240
1000	40	-	-	-	976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1050	42	-	-	-	1020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1200	48	-	-	-	1166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1350	54	-	-	-	1312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1400	56	-	-	-	1360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1500	60	-	-	-	1458	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Above "L" column in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



主要外形尺寸 Main Outline Dimensions

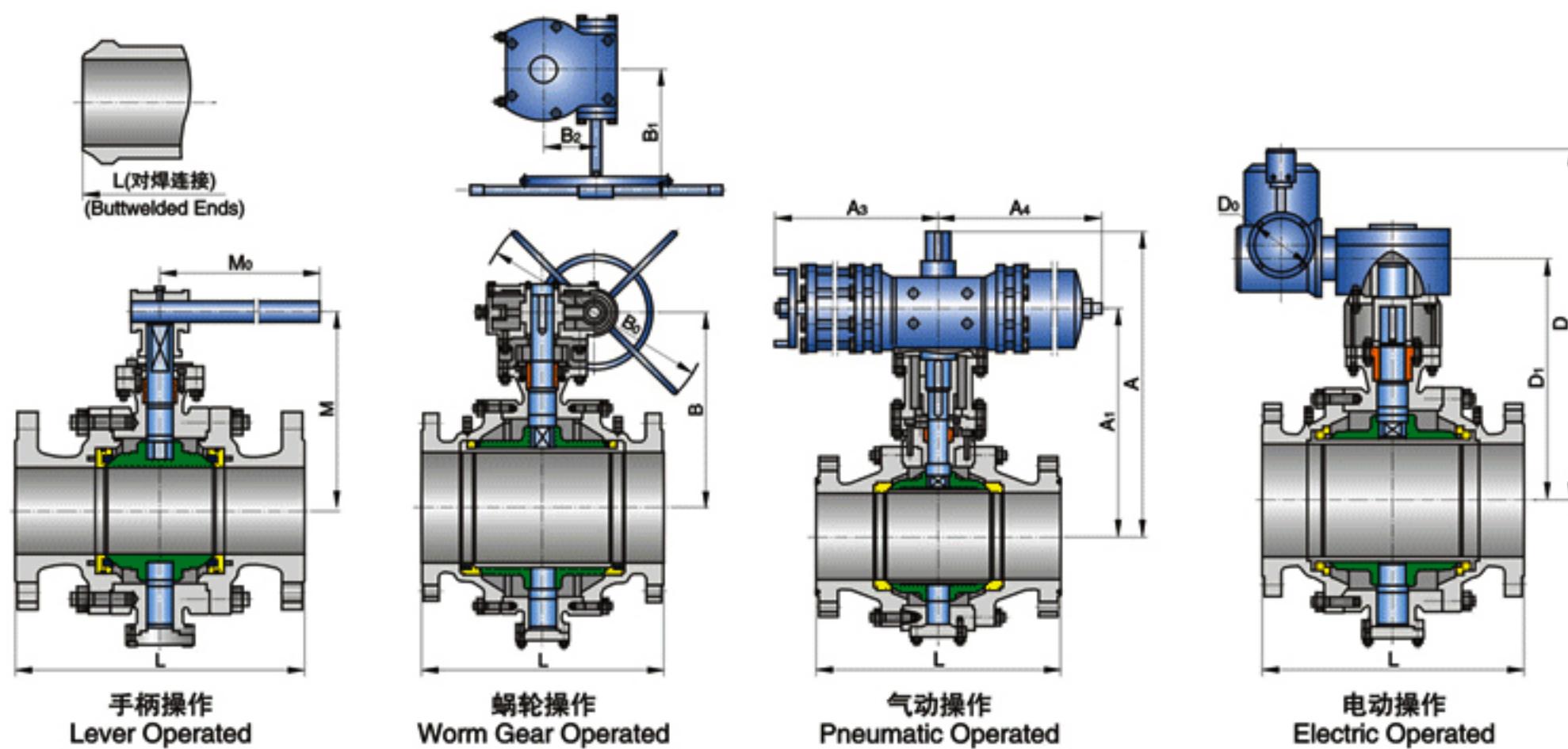
PN10.0MPa Class 600

mm

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	RF	BW
50	2	292	292	295	49	107	400	-	-	-	-	234	174	148	257	-	-	-	35	29
65	2 1/2	330	330	333	62	125	650	-	-	-	-	333	248	287	287	-	-	-	38	31
80	3	356	356	359	74	152	650	-	-	-	-	343	258	287	287	-	-	-	55	45
100	4	432	432	435	100	178	1050	-	-	-	-	407	322	287	287	-	-	-	102	78
125	5	508	508	-	125	-	-	-	-	-	-	500	395	378	378	-	-	-	160	120
150	6	559	559	562	150	-	-	389	400	200	108	562	457	378	378	522	337	508	232	182
200	8	660	660	664	201	-	-	449	600	330	144	725	595	530	530	606	421	508	390	310
250	10	787	787	791	252	-	-	497	600	330	144	760	630	530	530	684	482	508	710	590
300	12	838	838	841	303	-	-	550	800	370	220	893	728	680	680	751	549	508	960	790
350	14	889	889	892	334	-	-	582	800	370	220	1048	883	1455	1455	784	582	305	1700	1490
400	16	991	991	994	385	-	-	687	800	370	220	1319	1154	1455	1455	960	687	305	1970	1720
450	18	1092	1092	1095	436	-	-	730	800	515	279	1384	1224	1665	1665	1003	730	305	2180	1830
500	20	1194	1194	1200	487	-	-	780	800	515	279	1459	1294	1665	1665	1045	772	305	3250	2770
600	24	1397	1397	1407	589	-	-	995	800	515	279	1075	915	1665	1665	1328	995	305	4880	4030
650	26	1448	1448	1461	633	-	-	1038	800	515	279	1249	1089	1960	1960	1375	1071	305	5830	4840
700	28	1549	1549	1562	684	-	-	1088	800	570	368	1140	980	1960	1960	1459	1155	305	6700	5610
750	30	1651	1651	1664	735	-	-	1157	800	570	368	-	-	-	-	1661	1211	305	7450	6210
800	32	1778	1778	1794	779	-	-	1190	800	570	368	-	-	-	-	1766	1316	458	8470	7060
850	34	1930	1930	1946	830	-	-	1246	960	575	220	-	-	-	-	1794	1361	458	10360	8640
900	36	2083	2083	2099	874	-	-	1292	960	575	220	-	-	-	-	1883	1433	458	12080	10070
1000	40	2337	2337	-	976	-	-	1361	960	575	220	-	-	-	-	1971	1521	458	15420	12850
1050	42	2387	2387	-	1020	-	-	1423	960	575	220	-	-	-	-	2036	1586	610	18180	15150
1200	48	2540	2540	-	1166	-	-	1568	960	630	295	-	-	-	-	2255	1735	610	25260	21050
1350	54	-	-	-	1312	-	-	1680	960	630	295	-	-	-	-	2400	1880	610	-	-
1400	56	2667	2667	-	1360	-	-	1730	960	630	295	-	-	-	-	2465	1945	610	38670	32230
1500	60	2950	2950	-	1458	-	-	1866	960	630	295	-	-	-	-	2574	2054	610	47360	39470

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Above "L" column in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



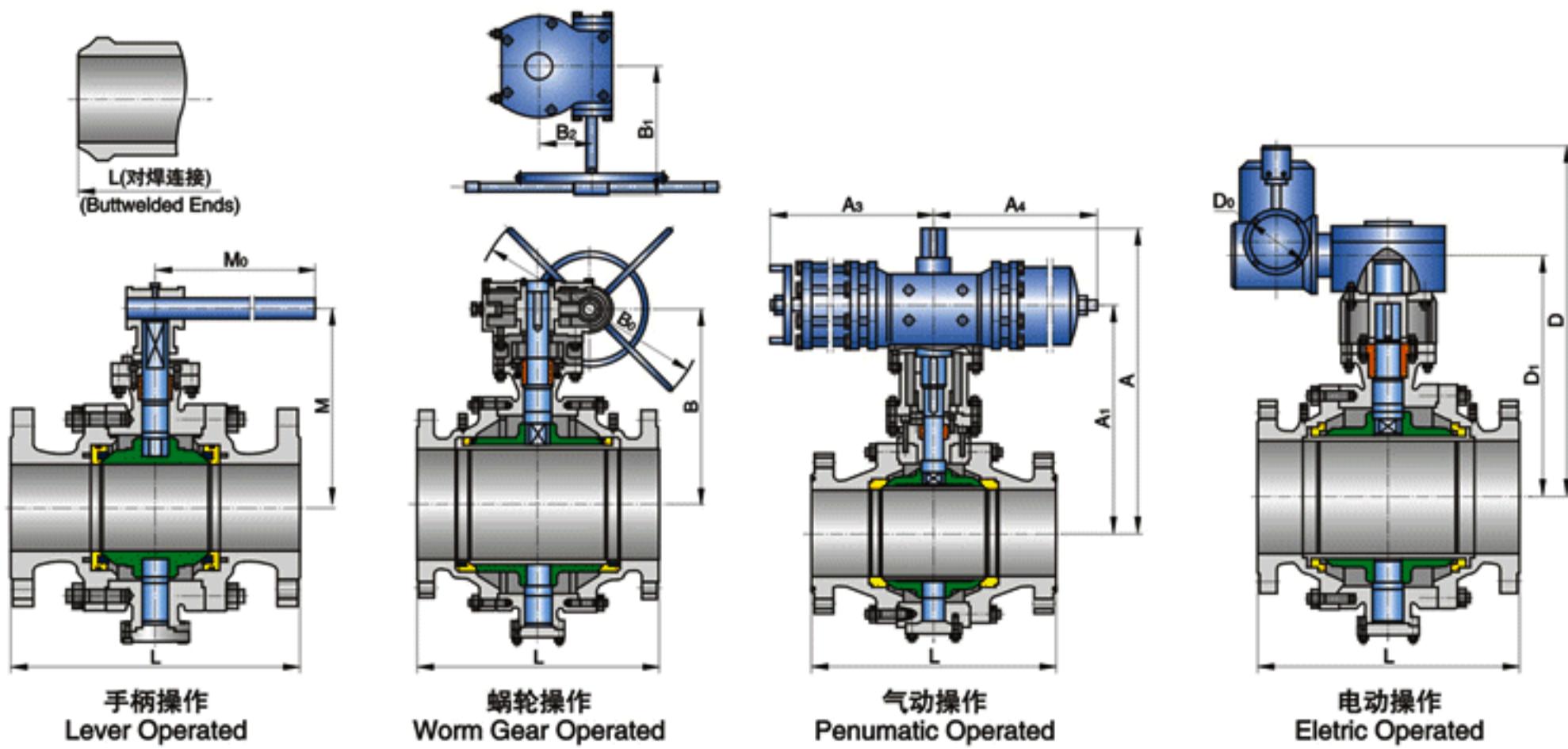
主要外形尺寸 Main Outline Dimensions

PN15.0MPa Class 900

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	Bo	B1	B2	A	A1	A3	A4	D	D1	D0	RF	BW
50	2	368	368	371	49	123	650	-	-	-	-	234	174	148	257	-	-	-	50	40
65	2 1/2	419	419	422	62	136	800	-	-	-	-	308	248	148	257	-	-	-	75	60
80	3	381	381	384	74	-	-	185	400	200	106	343	258	287	287	-	-	-	92	70
100	4	457	457	460	100	-	-	225	400	200	108	427	322	378	378	-	-	-	146	109
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	610	610	613	150	-	-	389	600	330	144	587	457	530	530	522	337	508	339	264
200	8	737	737	740	201	-	-	449	600	330	144	725	595	530	530	606	421	508	640	540
250	10	838	838	841	252	-	-	497	800	370	220	795	630	680	680	684	482	508	960	800
300	12	965	965	968	303	-	-	550	800	370	220	837	728	1455	1455	822	549	508	1330	1110
350	14	1029	1029	1038	322	-	-	582	800	370	220	1048	883	1455	1455	855	582	305	1640	1370
400	16	1130	1130	1140	373	-	-	687	800	515	279	1314	1154	1665	1665	991	687	305	2240	1910
450	18	1219	1219	1232	423	-	-	730	800	515	279	1384	1224	1665	1665	1003	730	305	2770	2310
500	20	1321	1321	1334	471	-	-	780	800	515	279	1459	1294	1665	1665	1105	772	305	3740	3120
600	24	1549	1549	1568	570	-	-	995	800	515	279	1075	915	1960	1960	1445	995	305	5560	4640
650	26	1651	1651	1674	617	-	-	1038	800	570	368	1249	1089	1960	1960	1521	1071	305	7070	5880
700	28	1753	1753	1775	665	-	-	1088	800	570	368	1140	980	1960	1960	1605	1155	305	8070	6730
750	30	1880	1880	1902	712	-	-	1157	800	570	368	-	-	-	-	1661	1211	305	9680	8070
800	32	2032	2032	2054	760	-	-	1190	960	575	220	-	-	-	-	1766	1316	458	11000	9170
850	34	2159	2159	2188	808	-	-	1246	960	575	220	-	-	-	-	1881	1361	458	13470	11230
900	36	2286	2286	2315	855	-	-	1292	960	575	220	-	-	-	-	1953	1433	458	15700	13090
1000	40	2410	2410	2438	959	-	-	1361	960	630	295	-	-	-	-	1971	1521	458	20040	16700
1050	42	2515	2515	2540	1003	-	-	1423	960	630	295	-	-	-	-	2036	1586	610	23620	19690
1200	48	2620	2620	-	1155	-	-	1568	960	630	295	-	-	-	-	2255	1735	610	32830	27360
1350	54	-	-	-	-	-	-	1680	960	630	295	-	-	-	-	2400	1880	610	-	-
1400	56	2820	2820	-	1337	-	-	1730	960	630	295	-	-	-	-	2465	1945	610	44086	28981
1500	60	2930	2930	-	1438	-	-	1866	960	630	295	-	-	-	-	2574	2054	610	55210	46308

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Above "L" column in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



主要外形尺寸 Main Outline Dimensions

Class 1500

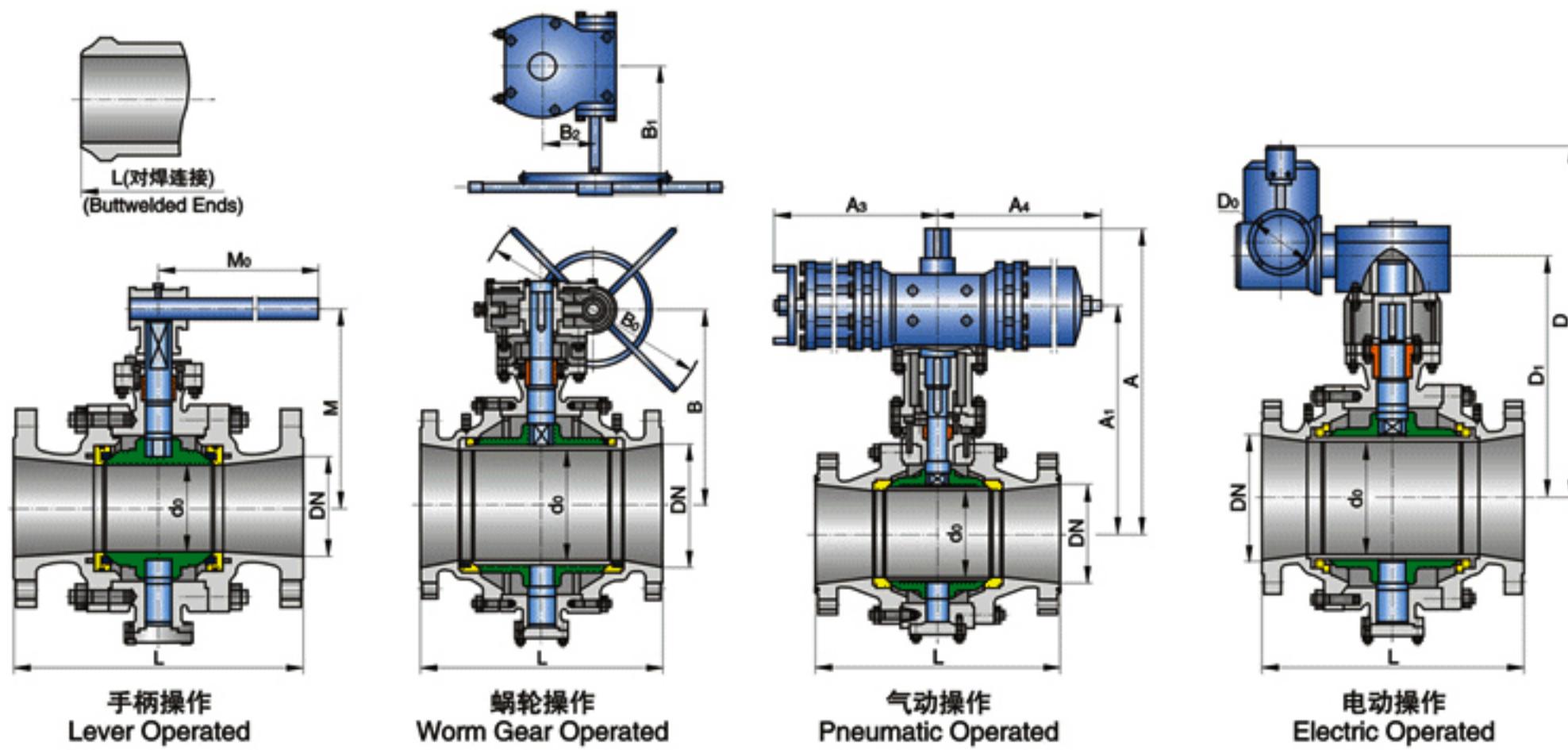
DN (mm)	NPS (in)	L			d	蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	RF	BW
50	2	368	368	371	49	154	400	200	106	259	174	287	287	—	—	—	50	40
65	2½	419	419	422	62	169	400	200	108	333	248	287	287	—	—	—	75	60
80	3	470	470	473	74	187	600	330	144	363	258	378	378	—	—	—	117	82
100	4	546	546	549	100	217	600	330	144	452	322	530	530	—	—	—	216	150
125	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
150	6	705	705	711	144	346	800	370	220	587	457	530	530	522	337	508	532	414
200	8	832	832	841	192	384	800	370	220	760	595	680	680	623	421	508	870	677
250	10	991	991	1000	239	452	800	370	220	739	630	1455	1455	755	482	508	1467	1132
300	12	1130	1130	1146	287	512	800	515	279	837	728	1455	1455	822	549	508	2270	1777
350	14	1257	1257	1276	315	561	800	515	279	1043	883	1665	1665	886	582	508	3240	2589
400	16	1384	1384	1407	360	601	800	515	279	1314	1154	1665	1665	1020	687	508	4645	3782
450	18	1537	1537	1559	371	688	800	515	279	1384	1224	1665	1665	1003	730	305	6035	4812
500	20	1664	1664	1686	416	727	800	570	368	1459	1294	1960	1960	1272	772	305	8077	6555
600	24	1943	1943	1972	498	803	800	570	368	1075—	915	1960	1960	1445	995	305	12357	9900
650	26	2048	2048	2077	540	853	800	570	368	—	—	—	—	1521	1071	305	14179	11409
700	28	2148	2148	2176	584	938	960	575	220	—	—	—	—	1605	1155	305	16314	12422
750	30	2251	2251	2281	625	1070	960	575	220	—	—	—	—	1661	1211	305	19466	14586
800	32	2346	2346	2380	670	1200	960	575	220	—	—	—	—	1766	1316	458	25728	19993
850	34	2450	2450	2454	720	1310	960	630	295	—	—	—	—	1881	1361	458	31416	24766
900	36	2556	2556	2590	762	1430	960	630	295	—	—	—	—	1953	1433	458	38328	30478

Class 2500

DN (mm)	NPS (in)	L			d	蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	RF	BW
50	2	451	451	454	42	174	600	330	144	259	174	287	287	—	—	—	93	70
65	2½	508	508	540	52	198	600	330	144	353	248	378	378	—	—	—	152	—
80	3	578	578	584	62	224	800	370	220	388	258	530	530	—	—	—	215	162
100	4	673	673	683	87	268	800	370	220	452	322	530	530	—	—	—	385	322
150	6	914	914	927	131	371	800	370	220	622	457	680	680	539	337	508	830	755
200	8	1022	1022	1038	179	420	800	515	279	704	595	1455	1455	694	421	508	1435	1105
250	10	1270	1270	1292	223	540	800	515	279	739	630	1455	1455	755	482	508	2220	1720
300	12	1422	1422	1445	265	638	800	515	279	888	728	1665	1665	853	549	305	3050	2370
350	14	1540	1540	1569	241	663	800	515	279	992	883	1455	1455	886	582	305	3350	2610
400	16	1567	1567	1596	276	764	800	570	368	1314	1154	1665	1665	1020	687	305	5375	4397
450	18	1825	1825	1854	311	847	800	570	368	1384	1224	1960	1960	1003	730	305	5800	4870
500	20	1875	1875	1904	343	867	800	570	368	1459	1294	1960	1960	1272	772	305	8612	7035
600	24	2257	2257	2286	413	1060	960	575	220	—	—	—	—	1445	995	305	12747	10875

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Above "L" column in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



主要外形尺寸 Main Outline Dimensions

PN1.6MPa Class 150

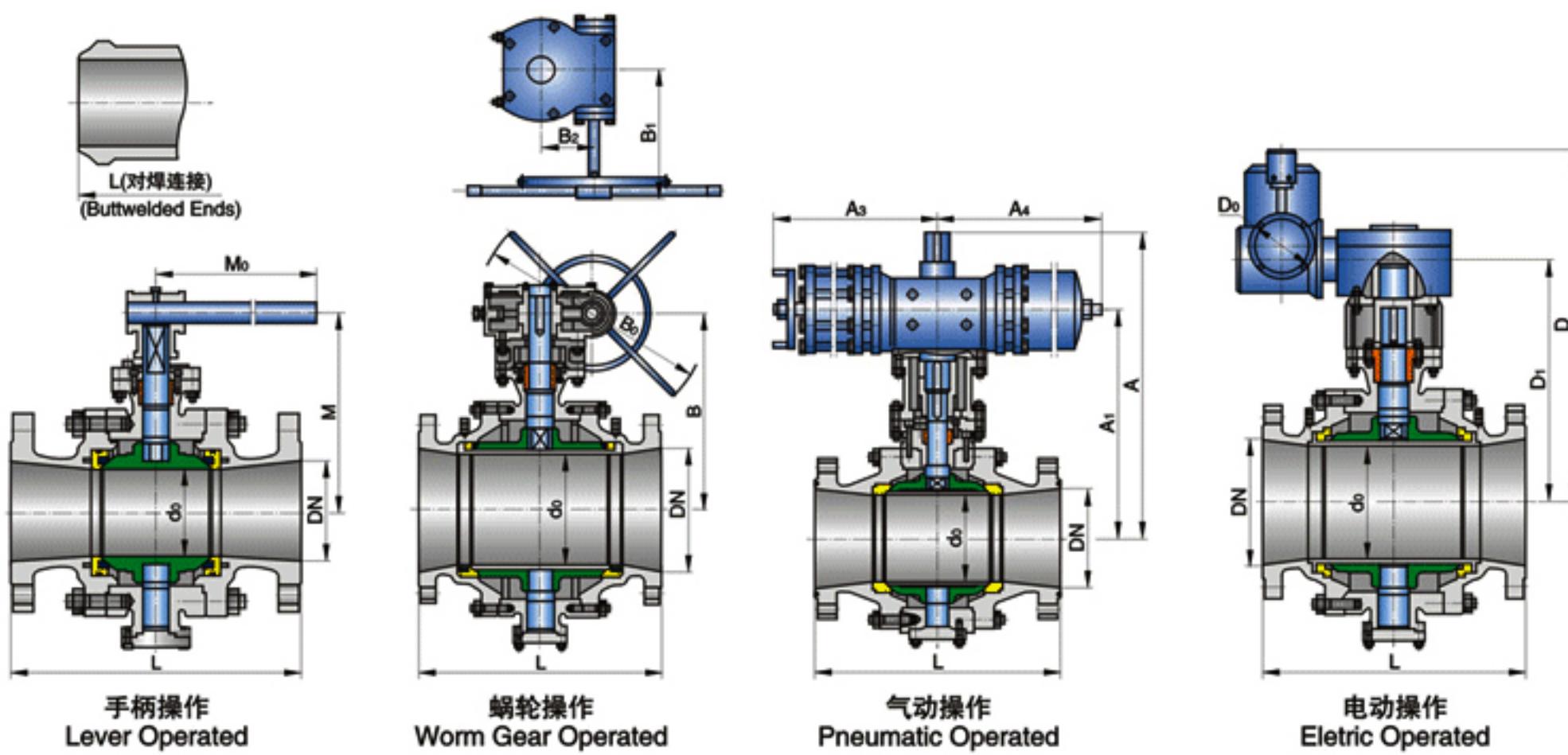
DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Eletic			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	Bo	B1	B2	A	A1	A3	A4	D	D1	D0	RF	BW
80	3×2	203	283	216	49	107	230	-	-	-	-	217	174	89	181	-	-	-	19	15
100	4×3	229	305	241	74	152	400	-	-	-	-	318	258	148	257	-	-	-	32	24
150	6×4	394	457	406	100	178	650	-	-	-	-	407	322	287	287	-	-	-	55	48
200	8×6	457	521	470	150	272	1050	378	400	200	106	562	457	378	378	554	337	508	73	69
250	10×8	533	559	546	201	-	-	421	400	200	108	700	595	378	378	606	421	508	122	110
300	12×10	610	635	622	252	-	-	482	400	200	108	735	630	378	378	667	482	508	310	297
350	14×12	686	762	699	303	-	-	549	600	330	144	858	728	530	530	734	549	508	470	430
400	16×14	762	838	775	336	-	-	607	600	330	144	888	758	530	530	774	589	508	590	540
450	18×16	864	914	876	385	-	-	687	800	370	220	1319	1154	680	680	889	687	508	830	760
500	20×18	914	991	927	435	-	-	713	800	370	220	1354	1180	680	680	909	708	508	1040	940
600	24×20	1067	1143	1080	487	-	-	772	800	370	220	1459	1294	680	680	1023	772	305	1650	1110
750	30×24	1295	1397	-	589	-	-	995	800	515	279	1060	915	1455	1455	1268	995	305	4100	3170
900	36×30	1524	1727	-	735	-	-	1153	800	515	279	1195	1035	1665	1665	1515	1211	305	6450	4820

PN2.5、4.0MPa Class 300

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	Bo	B1	B2	A	A1	A3	A4	D	D1	D0	RF	BW
80	3×2	283	283	298	49	107	230	-	-	-	-	234	174	148	257	-	-	-	28	20
100	4×3	305	305	321	74	152	400	-	-	-	-	343	258	287	287	-	-	-	38	28
150	6×4	403	403	419	100	178	650	-	-	-	-	407	322	287	287	-	-	-	67	54
200	8×6	502	521	517	150	272	1050	378	400	200	106	562	457	378	378	522	337	508	95	83
250	10×8	568	559	584	201	-	-	421	400	200	108	700	595	378	378	606	421	508	144	125
300	12×10	648	635	664	252	-	-	482	400	200	108	760	630	530	530	667	482	508	380	340
350	14×12	762	762	778	303	-	-	549	600	330	144	858	728	530	530	751	549	508	580	540
400	16×14	838	838	854	336	-	-	607	700	330	144	909	758	530	530	774	589	508	780	680
450	18×16	914	914	930	385	-	-	687	800	370	220	1319	1154	680	680	938	687	508	1190	1050
500	20×18	991	991	1010	435	-	-	713	800	370	220	1354	1180	680	680	909	708	508	1880	1690
600	24×20	1143	1143	1165	487	-	-	772	800	370	220	1459	1294	1455	1455	1045	772	305	2750	2180
750	30×24	1397	1397	1422	589	-	-	995	800	515	279	1075	915	1665	1665	1268	995	305	4810	3820
900	36×30	1727	1727	1756	735	-	-	1153	800	515	279	1195	1035	1960	1960	1515	1211	305	8440	6840

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Under "L" Bar in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



主要外形尺寸 Main Outline Dimensions

PN6.4MPa Class 400

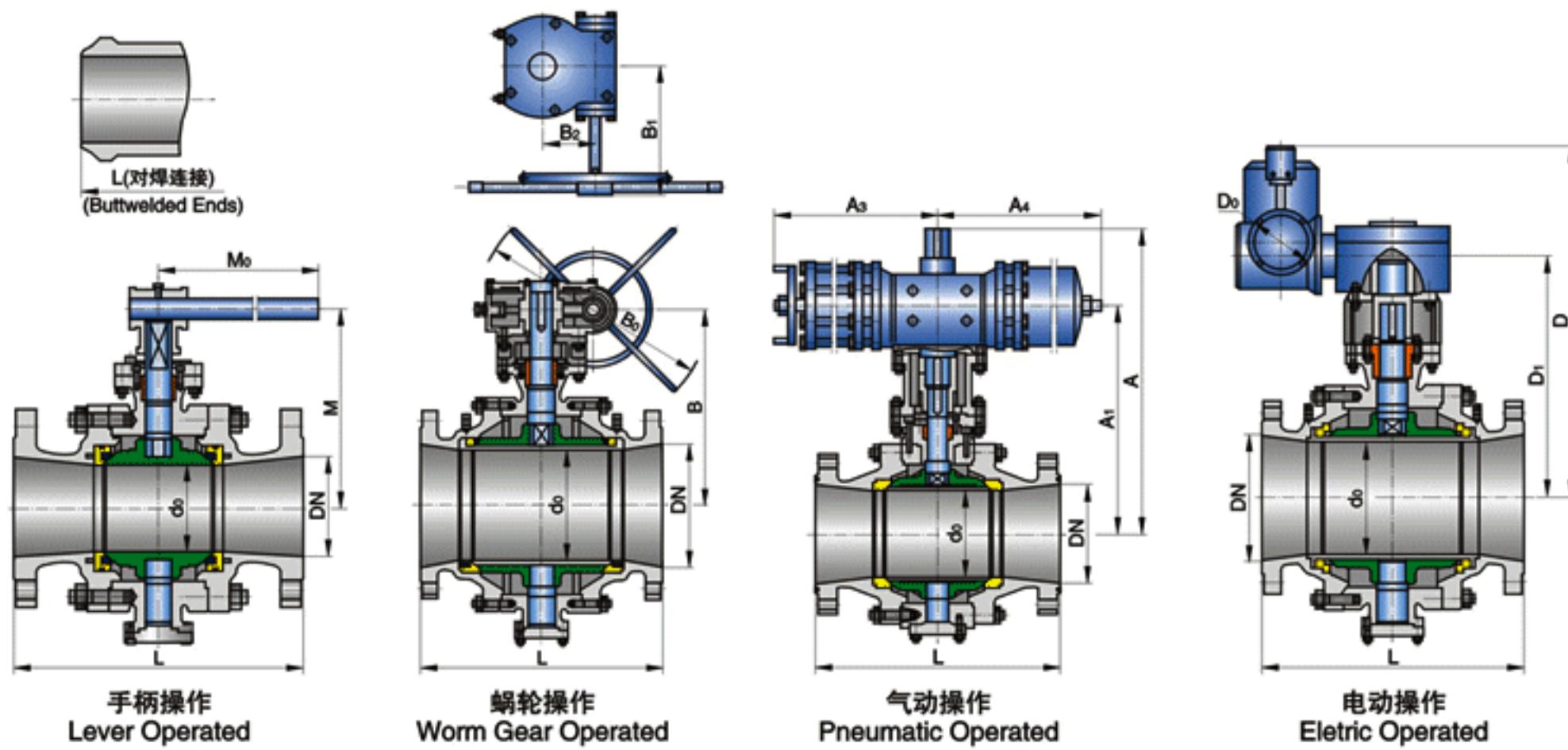
DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	Bo	B1	B2	A	A1	A3	A4	D	D1	Do	RF	BW
80	3×2	356	356	359	49	107	400	—	—	—	—	234	174	148	257	—	—	—	37	26
100	4×3	406	406	410	74	152	650	—	—	—	—	343	258	287	287	—	—	—	66	47
150	6×4	495	495	498	100	178	650	—	—	—	—	407	322	287	287	—	—	—	128	81
200	8×6	597	597	600	150	272	1050	383	400	200	108	562	457	378	378	522	337	508	296	252
250	10×8	673	673	676	201	—	—	447	600	330	144	725	595	530	530	606	421	508	456	384
300	12×10	762	762	765	252	—	—	480	600	330	144	760	630	530	530	667	482	508	648	544
350	14×12	826	826	829	303	—	—	517	800	370	220	943	728	680	680	751	549	508	950	795
400	16×14	902	902	905	303	—	—	517	800	370	220	943	728	680	680	751	549	508	1053	882
450	18×16	978	978	981	385	—	—	639	800	370	220	1299	1154	1455	1455	938	687	305	1512	1265
500	20×16	1054	1054	1060	385	—	—	639	800	370	220	1299	1154	1455	1455	938	687	305	1925	1605
600	24×20	1232	1232	1241	487	—	—	744	800	515	279	1459	1294	1455	1455	1045	772	305	3125	2610
750	30×24	1524	1524	1537	589	—	—	869	800	515	279	1075	915	1665	1665	1268	995	305	5385	4490
900	36×30	1880	1880	1895	735	—	—	1013	800	570	368	1195	1035	1960	1960	1515	1211	305	8960	7470

PN10.0MPa Class 600

DN (mm)	NPS (in)	L			d	手动 Lever		蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	Mo	B	Bo	B1	B2	A	A1	A3	A4	D	D1	Do	RF	BW
80	3×2	356	356	359	49	107	400	—	—	—	—	234	174	148	257	—	—	—	44	34
100	4×3	432	432	435	74	152	650	—	—	—	—	343	258	287	287	—	—	—	89	65
150	6×4	559	559	562	100	178	1050	—	—	—	—	407	322	287	287	—	—	—	160	110
200	8×6	660	660	664	150	—	—	389	400	200	108	500	395	378	378	522	337	508	310	240
250	10×8	787	787	791	201	—	—	449	600	330	144	562	457	378	378	606	421	508	570	500
300	12×10	838	838	841	252	—	—	497	600	330	144	725	595	530	530	684	482	508	850	680
350	14×12	889	889	892	303	—	—	550	800	370	220	760	630	530	530	751	549	508	1180	970
400	16×12	991	991	994	303	—	—	550	800	370	220	760	630	530	530	751	549	508	1390	1140
450	18×16	1092	1092	1095	385	—	—	687	800	370	220	1319	1154	1455	1455	960	687	305	1765	1415
500	20×16	1194	1194	1200	385	—	—	687	800	370	220	1319	1154	1455	1455	960	687	305	2170	1690
600	24×20	1397	1397	1407	487	—	—	780	800	515	279	1459	1294	1665	1665	1045	772	305	3390	2540
750	30×24	1651	1651	1664	589	—	—	995	800	515	279	1075	915	1665	1665	1328	995	305	5910	4470
900	36×30	2083	2083	2099	735	—	—	1157	800	570	368	1195	1035	1960	1960	1661	1211	305	10560	8460

注：表格L栏中，RF表示突面法兰结构长度，BW表示焊接结构长度，RTJ表示环连接形式结构长度。

Note: Under "L" Bar in the chart, RF stands for RF (Raised Flange) structural length; BW stands for BW (Buttwelded Ends) structural length; RTJ stands for RTJ (Ring Joint) structural length.



主要外形尺寸 Main Outline Dimensions

Class 900

DN (mm)	NPS (in)	L			d	手动 Lever				蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		M	M ₀	B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	RF	BW		
80	3×2	381	381	384	49	123	650	—	—	—	—	234	174	148	257	—	—	—	58	48		
100	4×3	457	457	460	74	—	—	185	400	200	106	343	258	287	287	—	—	—	105	90		
150	6×4	610	610	613	100	—	—	225	400	200	108	427	322	378	378	—	—	—	230	162		
200	8×6	737	737	740	150	—	—	389	600	330	144	587	457	530	530	522	337	508	470	370		
250	10×8	838	838	841	201	—	—	449	600	330	144	725	595	530	530	606	421	508	530	410		
300	12×10	965	965	968	252	—	—	497	800	370	220	795	630	680	680	684	482	508	1200	1030		
350	14×12	1029	1029	1038	303	—	—	550	800	370	220	837	728	1455	1455	822	549	508	1695	1440		
400	16×12	1130	1130	1140	303	—	—	550	800	370	220	837	728	1455	1455	822	549	508	1790	1480		
450	18×16	1219	1219	1232	373	—	—	687	800	515	279	1314	1154	1665	1665	991	687	305	2520	2100		
500	20×16	1321	1321	1334	373	—	—	687	800	515	279	1314	1154	1665	1665	991	687	305	2970	2430		
600	24×20	1549	1549	1568	471	—	—	780	800	515	279	1459	1294	1665	1665	1105	772	305	5580	4520		
750	30×24	1880	1880	1902	570	—	—	995	800	515	279	1075	915	1960	1960	1445	995	305	8980	7907		
900	36×30	2286	2286	2315	712	—	—	1157	800	570	368	—	—	—	—	1661	1211	305	15650	13910		

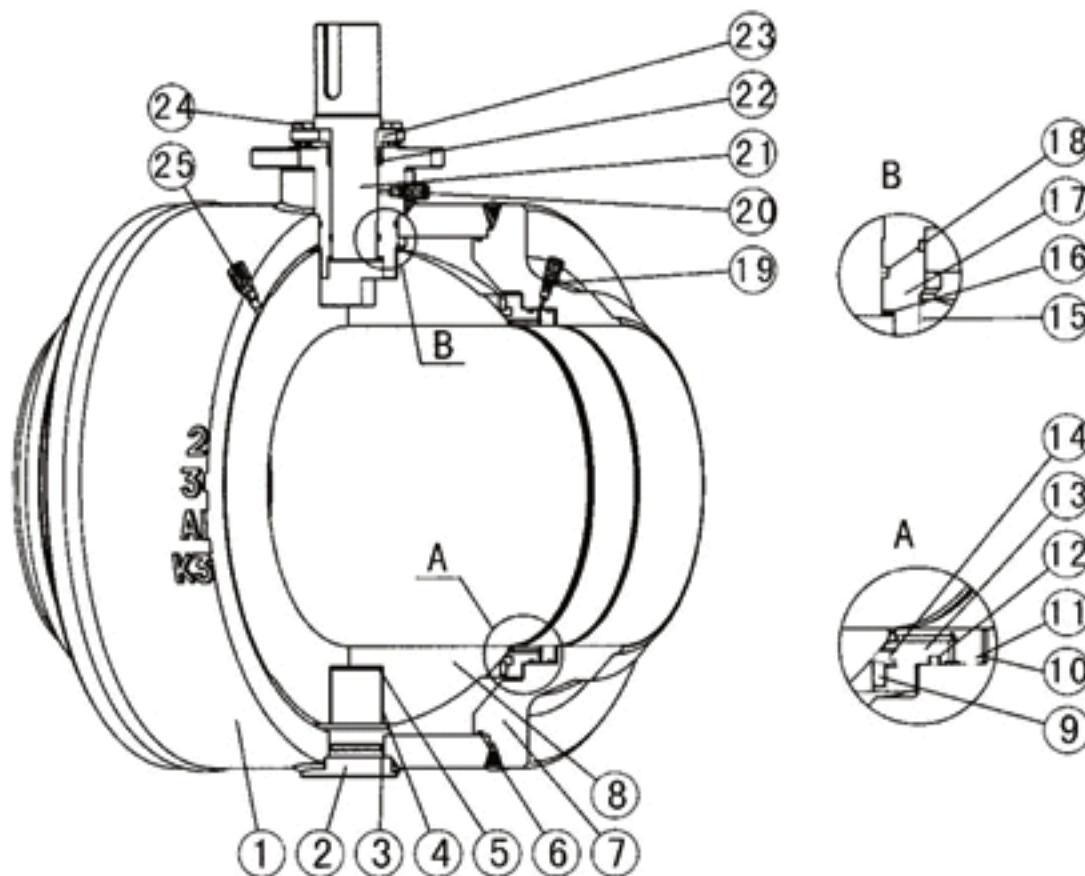
Class 1500

DN (mm)	NPS (in)	L			d	蜗轮蜗杆 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	RF	BW
80	3×2	470	470	473	49	154	400	200	106	259	174	287	287	—	—	—	75	49
100	4×3	546	546	549	74	187	600	330	144	363	258	378	378	—	—	—	130	73
150	6×4	705	705	711	100	217	600	330	144	452	322	530	530	—	—	—	300	181
200	8×6	832	832	841	144	346	800	370	220	587	457	530	530	522	337	508	615	491
250	10×8	991	991	1000	192	384	800	370	220	760	595	680	680	623	421	508	1085	879
300	12×10	1130	1130	1146	239	452	800	370	220	739	630	1455	1455	755	482	508	1850	1547
350	14×12	1257	1257	1276	287	512	800	515	279	837	728	1455	1455	822	549	508	2620	2214
400	16×12	1384	1384	1407	287	512	800	515	279	837	728	1455	1455	822	549	508	2890	2365
450	18×16	1537	1537	1559	360	601	800	515	279	1314	1154	1665	1665	1020	687	305	3856	3156
500	20×16	1664	1664	1686	360	601	800	515	279	1314	1154	1665	1665	1020	687	305	5005	4105
600	24×20	1943	1943	1972	416	727	800	570	368	1459	1294	1960	1960	1272	772	305	11377	9980
750	30×24	2251	2251	2281	498	803	800	570	368	1075	915	1960	1960	1445	995	305	17914	14660
900	36×30	2556	2556	2590	625	1070	960	575	220	—	—	—	—	1661	1211	305	32976	27743

Class 2500

DN (mm)	NPS (in)	L			d	蜗轮蜗杆传动 Worm Gear				气动 Pneumatic				电动 Electric			重量 Weight(kg)	
		RF	BW	RTJ		B	B ₀	B ₁	B ₂	A	A ₁	A ₃	A ₄	D	D ₁	D ₀	RF	BW
80	3×2	578	578	584	42	174	600	330	144	259	174	287	287	—	—	—	165	111
100	4×3	673	673	683	62	224	800	370	220	388	258	530	530	—	—	—	2	

阀门结构示意图(锻焊结构) Valve Structural Schematic Drawing (Forge Welded Structure)



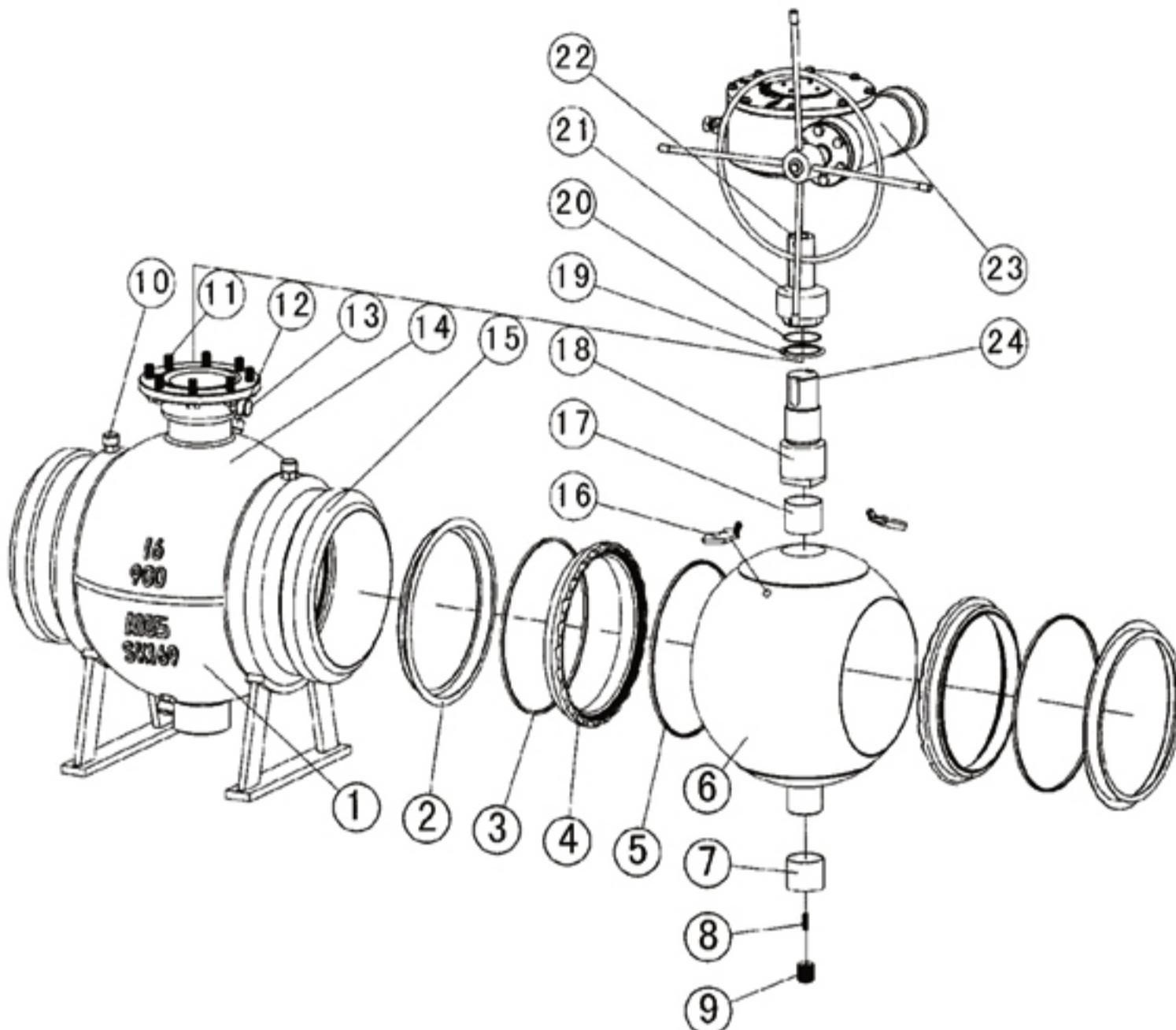
主要零部件材料(锻焊结构) The Material of Main Parts (Forge Welded)

序号 No.	零件名称 Parts Name	材料 Material		
		碳钢 Carbon Steel	不锈钢 SS	低温钢 Low Temperature Steel
1	阀体 Body	A105	A182 F316	A350 LF3
2	下阀杆座 Lower Stem Seat	A105	A182 F316	A350 LF3
3	O型圈 O-Ring		氟橡胶 VITON	
4	下轴衬 Bushing	PTFE+CS	PTFE+SS	PTFE+SS
5	平面轴衬 Flat Bushing	PTFE+CS	PTFE+SS	PTFE+SS
6	O型圈 O-Ring		氟橡胶 VITON	
7	阀盖 Bonnet	A105	A182 F316	A350 LF3
8	球体 Ball	A105+ENP	A182 F316	A350 LF3
9	压板圈 Pressboard Ring	A105+ENP	A182 F316	A350 LF3
10	弹簧 Spring		INCONEL X-750	
11	防火垫 Fire Safe Ring		柔性石墨 Soft Graphite	
12	O型圈 O-Ring		氟橡胶 VITON	
13	阀座 Seat	A105+ENP	A182 F316	A350 LF3
14	密封圈 Sealing Ring		PTFE、NYLON、PEEK、PCTFE、MOLON	
15	上轴衬 Bushing	PTFE+CS	PTFE+SS	PTFE+SS
16	平面轴衬 Flat Bushing	PTFE+CS	PTFE+SS	PTFE+SS
17	上阀杆座 Upper Stem Seat	A105	A182 F316	A350 LF3
18	O型圈 O-Ring		氟橡胶 VITON	
19	阀座注脂阀 Seat Ring Grease Injecting Valve	A105+ENP	A182 F316	A350 LF3
20	阀杆注脂阀 Stem Grease Injecting Valve	A105+ENP	A182 F316	A350 LF3
21	阀杆 Stem	A29 4140+ENP	A182 F316	A182 F316
22	填料 Packing		柔性石墨 Soft Graphite	
23	压盖 Gland	A105+ENP、A29 4140+ENP	A182 F316	A350 LF3
24	螺钉 Screw	A193 B7	A193 B8	A320 L7
25	泄压阀 Discharge Valve	A29 1025	SS	SS

注：1、可根据不同工况和用户要求选用不同的材料；
2、抗硫阀门按NACE MR0175选材。

Notes: 1. Materials are subject to users' requirements and different industries;
2. Materials of Anti-sulfur valve shall be according to NACE MR0175

阀门结构示意图(板焊或铸焊结构) Valve Structural Schematic Drawing (Plate Welded or Cast Welded)

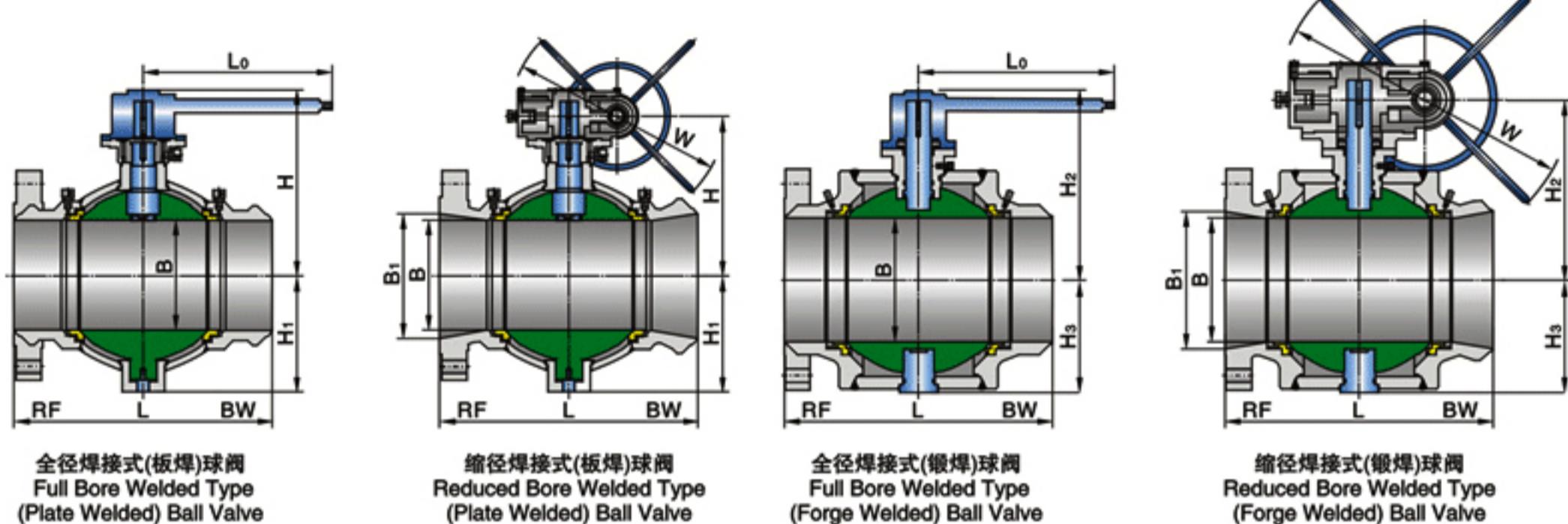


主要零部件材料(板焊或铸焊结构) The Material of Main Parts (Plate Welded and Cast Welded)

序号 No.	零件名称 Parts Name	材料 Material		
		碳钢 Carbon Steel	不锈钢 SS	低温钢 Low Temperature Steel
1	下阀体 Lower Body	A105/A216 WCB	A182 F316/A351 CF8M	A350 LF3/A352 LB
2	板簧 Leaf Spring	INCONEL X-750/17-4PH	Inconel 600/17-4PH	Inconel 600/17-4PH
3	O型圈 O-Ring		氟橡胶 VITON	
4	阀座 Seat	A105+ENP	A182 F316	A350 LF3
5	密封圈 Sealing Ring		PTFE、NYLON、PEEK、PCTFE	
6	球体 Ball	A105+ENP/A216 WCB+ENP	A182 F316/A351 CF8M	A350 LF3/A352 LB
7	下轴衬 Bushing	PTFE+CS	PTFE+SS	PTFE+SS
8	弹簧 Spring		INCONEL X-750	
9	调节螺钉 Adjusting Screw	A193 B7	A182 F316	A350 LF3
10	阀座注脂阀 Seat Grease Injecting Valve	A105+ENP	A182 F316	A350 LF3
11	螺栓 Bolt	A193 B7	A193 B8	A320 L7
12	泄压阀 Discharge Valve	A29 1025	SS	SS
13	阀杆注脂阀 Stem Grease Injecting Valve	A29 1025	SS	SS
14	上阀体 Upper Body	A105/A216 WCB	A182 F316/A351 CF8M	A350 LF3/A352 LB
15	阀盖 Bonnet	A105/A216 WCB	A182 F316/A351 CF8M	A350 LF3/A352 LB
16	棘转机构 Pallet Mechanism		-	
17	上轴衬 Upper Collar	PTFE+CS	PTFE+SS	PTFE+SS
18	阀杆 Stem	A29 4140+ENP	A182 F316	A182 F316
19	垫片 Gasket		PTFE	
20	平面轴衬 Plane Collar		PTFE+SS	
21	连接套 Joint Sleeve		A29 1045	
22	键 Key		A29 1045	
23	蜗轮装置 Worm Gear Device		-	
24	键 Key		A29 1045	

注：1、可根据不同工况和用户要求选用不同的材料；
2、抗硫阀门按NACE MR0175选材；
3、所有内件装入后，将上阀体、下阀体和阀盖进行合拢，
试压检验合格后进行焊接。

Notes: 1. Materials are subject to users' requirements and different working conditions;
2. Materials of Anti-sulfur valve shall be according to NACE MR0175;
3. When all internal parts are assembled, get upper body, lower body and bonnet together closely and then weld it after the pressure test is passed.



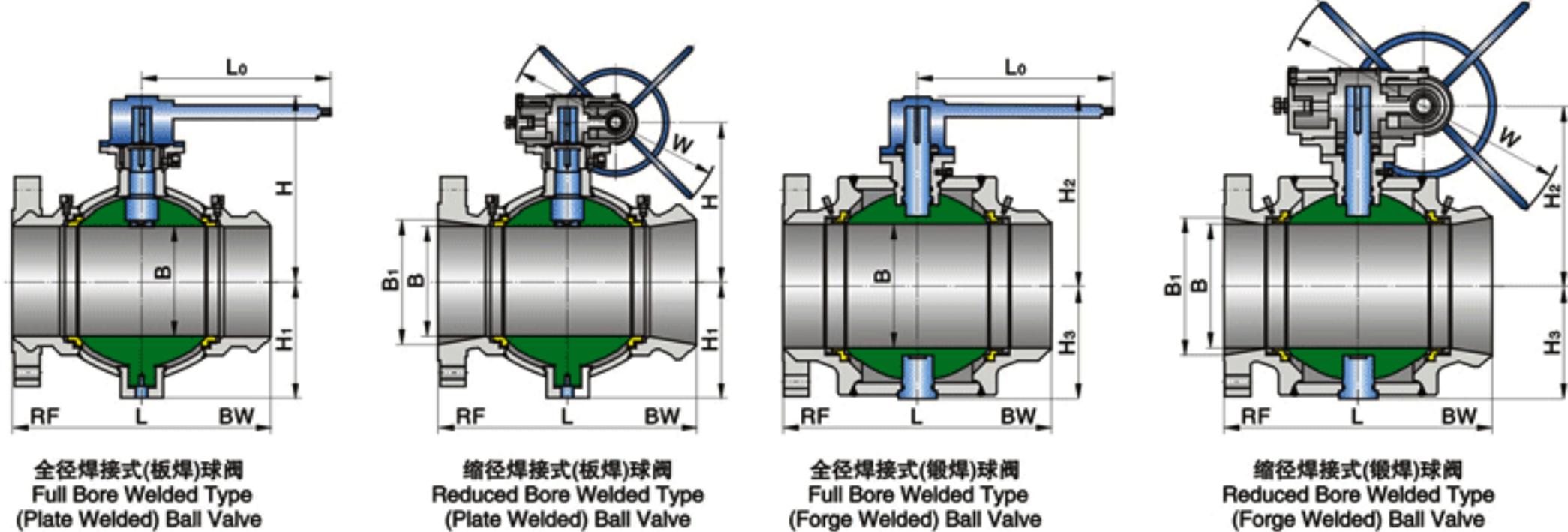
主要外形尺寸 Main Outline Dimensions

Class 150 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	178	216	191	51	-	161	100	155	82	600	-	18	20
80	3	203	283	216	77	-	189	130	195	105	600	-	28	34
100	4	229	305	241	102	-	214	151	230	130	900	-	52	45
150	6	394	457	406	152	-	265	201	251	175	900	-	91	102
200	8	457	521	470	203	-	319	254	337	205	-	450	194	204
250	10	533	559	546	254	-	369	308	385	245	-	450	320	295
300	12	610	635	622	305	-	512	368	414	300	-	450	549	499
350	14	686	762	699	337	-	537	372	447	320	-	600	603	558
400	16	762	838	775	387	-	572	407	545	340	-	600	748	703
450	18	864	914	876	438	-	665	489	513	360	-	600	1055	998
500	20	914	991	927	489	-	705	527	553	455	-	450	1501	1252
550	22	991	1092	1062	540	-	742	566	585	505	-	450	1758	1592
600	24	1067	1143	1080	591	-	778	602	663	555	-	450	2096	1932
650	26	1143	1245	1168	635	-	872	673	685	595	-	600	2903	2540
700	28	1245	1346	1270	686	-	907	708	723	630	-	600	3266	2948
750	30	1295	1397	1321	736	-	949	750	777	665	-	600	4309	3992
800	32	1372	1524	1400	781	-	973	787	923	700	-	700	4390	-
850	34	1473	1626	1502	832	-	1016	817	954	740	-	750	6124	5443
900	36	1524	1727	1552	876	-	1057	858	986	770	-	900	6872	6577
10000	40	1753	1956	-	978	-	1275	1010	1061	880	-	750	-	-
1050	42	1855	2083	-	1022	-	1318	1062	1093	920	-	1000	-	-
1200	48	2134	2388	-	1168	-	1475	1187	1217	980	-	1000	-	-

Class 150 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80×50	3×2	203	283	216	51	77	161	100	155	82	600	-	25	23
100×80	4×3	229	305	241	77	102	189	130	195	105	600	-	45	39
150×100	6×4	394	457	406	102	152	214	151	230	130	600	-	77	68
200×150	8×6	457	521	470	152	203	265	201	251	175	600	-	156	132
250×200	10×8	533	559	546	203	254	319	254	337	205	900	450	281	238
300×250	12×10	610	635	622	254	305	369	308	385	245	900	450	431	381
350×300	14×12	686	762	699	305	337	512	368	414	300	900	450	581	526
400×350	16×14	762	838	775	337	387	537	372	447	320	900	600	658	603
450×400	18×16	864	914	876	387	438	572	407	545	340	-	600	685	771
500×450	20×18	914	991	927	438	489	665	489	513	360	-	600	1093	1043
550×500	22×20	991	1092	1062	489	540	705	527	553	455	-	450	1565	1383
600×550	24×22	1067	1143	1080	540	591	742	566	585	505	-	450	1950	1656
650×600	26×24	1143	1245	1168	591	635	705	527	663	555	-	450	2449	2313
700×650	28×26	1295	1397	1270	635	736	872	673	685	595	-	600	3193	2767
750×700	30×28	1295	1397	1321	686	736	907	708	723	630	-	600	4037	3447
800×750	32×30	1372	1524	1400	736	781	949	750	777	665	-	600	4355	3856
900×850	36×34	1524	1727	1552	832	876	949	750	954	740	-	750	6350	5670
1050×900	42×36	1855	2083	-	876	1022	1057	858	986	880	-	750	-	-



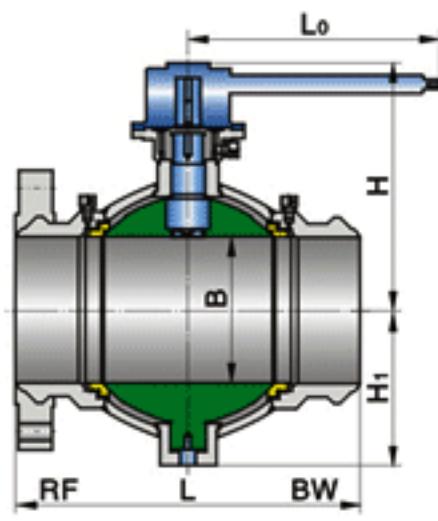
主要外形尺寸 Main Outline Dimensions

Class 300 全径 Full Port

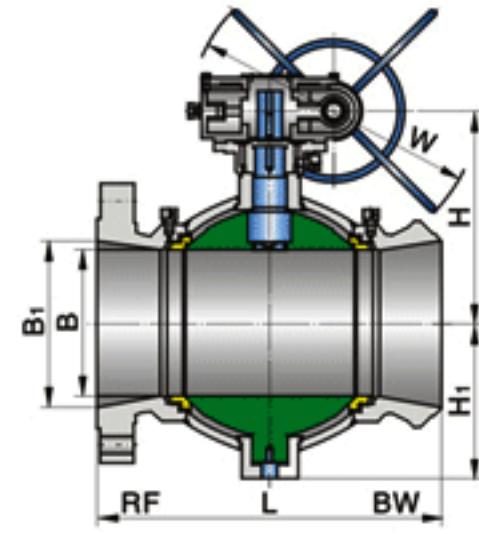
DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	216	216	232	51	-	161	100	155	82	600	-	23	20
80	3	283	283	298	77	-	189	130	195	105	600	-	36	34
100	4	305	305	321	102	-	214	151	230	130	900	-	57	45
150	6	403	403	419	152	-	265	201	251	175	900	-	113	102
200	8	502	521	518	203	-	319	254	337	205	-	450	206	204
250	10	568	559	584	254	-	369	308	385	245	-	450	340	295
300	12	648	635	664	305	-	512	368	414	300	-	450	576	499
350	14	762	762	778	337	-	537	372	447	320	-	600	621	558
400	16	838	838	854	387	-	572	407	545	340	-	600	782	703
450	18	914	914	930	438	-	665	489	513	360	-	600	1225	998
500	20	991	991	1010	489	-	705	527	553	455	-	450	1542	1252
550	22	1092	1092	1114	540	-	742	566	585	505	-	450	1837	1592
600	24	1143	1143	1165	591	-	778	602	663	555	-	450	2445	1932
650	26	1245	1245	1270	635	-	872	673	685	595	-	600	3005	2540
700	28	1346	1346	1372	686	-	907	708	723	630	-	600	3504	2948
750	30	1397	1397	1422	736	-	949	750	777	665	-	600	4536	3992
800	32	1524	1524	1553	781	-	973	787	923	700	-	700	4900	-
850	34	1626	1626	1654	832	-	1016	817	954	740	-	750	6668	5443
900	36	1727	1727	1756	876	-	1057	858	986	770	-	900	7394	7031
1000	40	1956	1956	-	978	-	1275	1010	1061	880	-	750	-	-
1050	42	2083	2083	-	1022	-	1318	1062	1093	920	-	1000	8200	-
1200	48	2170	2388	-	1168	-	1475	1187	1217	980	-	1000	-	-

Class 300 缩径 Reduced Port

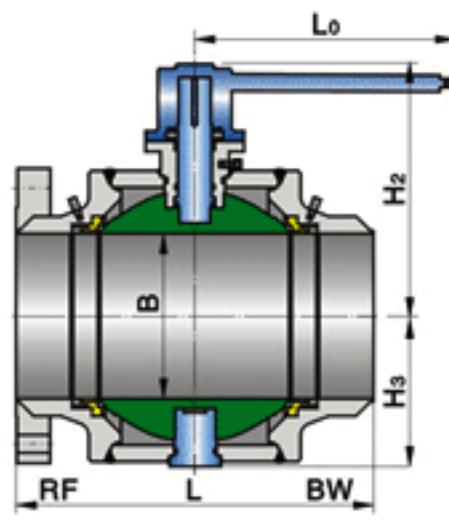
DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80 × 50	3 × 2	283	283	298	51	77	161	100	155	82	600	-	29	23
100 × 80	4 × 3	305	305	321	77	102	189	130	195	105	600	-	43	39
150 × 100	6 × 4	403	403	419	102	152	214	151	230	130	900	-	82	68
200 × 150	8 × 6	502	521	518	152	203	265	201	251	175	900	-	166	132
250 × 200	10 × 8	568	559	584	203	254	319	254	337	205	-	450	295	238
300 × 250	12 × 10	648	635	664	254	305	369	308	385	245	-	450	476	381
350 × 300	14 × 12	762	762	778	305	337	512	368	414	300	-	450	583	526
400 × 350	16 × 14	838	838	854	337	387	537	372	447	320	-	600	753	603
450 × 400	18 × 16	914	914	930	387	438	572	407	545	340	-	600	903	771
500 × 450	20 × 18	991	991	1010	438	489	665	489	513	360	-	600	1406	1043
550 × 500	22 × 20	1092	1092	1114	489	540	705	527	553	455	-	450	1633	1383
600 × 550	24 × 22	1143	1143	1165	540	591	742	566	585	505	-	450	2041	1656
650 × 600	26 × 24	1245	1245	1270	591	635	705	527	663	555	-	450	2608	2313
700 × 650	28 × 26	1346	1346	1372	635	686	872	673	685	595	-	600	3293	2767
750 × 700	30 × 28	1397	1397	1422	686	736	907	708	723	630	-	600	4128	3447
800 × 750	32 × 30	1524	1524	1553	736	781	949	750	777	665	-	600	4604	3992
900 × 850	36 × 34	1727	1727	1756	832	876	949	750	954	740	-	750	6963	5897
1050 × 900	42 × 36	2083	2083	-	876	1022	1057	858	986	880	-	750	7590	-



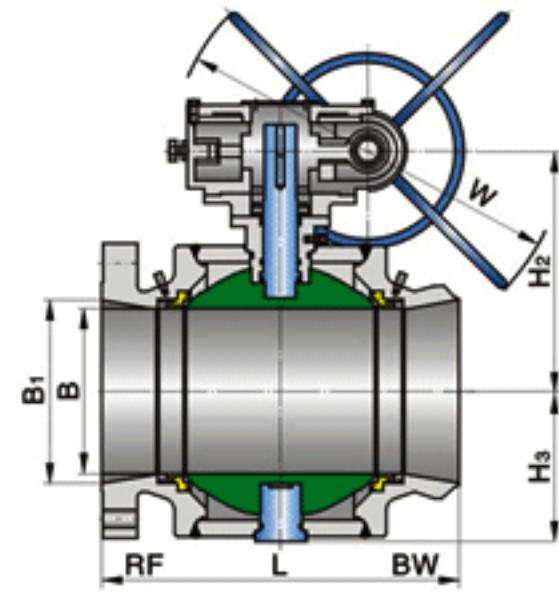
全径焊接式(板焊)球阀
Full Bore Welded Type
(Plate Welded) Ball Valve



缩径焊接式(板焊)球阀
Reduced Bore Welded Type
(Plate Welded) Ball Valve



全径焊接式(锻焊)球阀
Full Bore Welded Type
(Forge Welded) Ball Valve



缩径焊接式(锻焊)球阀
Reduced Bore Welded Type
(Forge Welded) Ball Valve

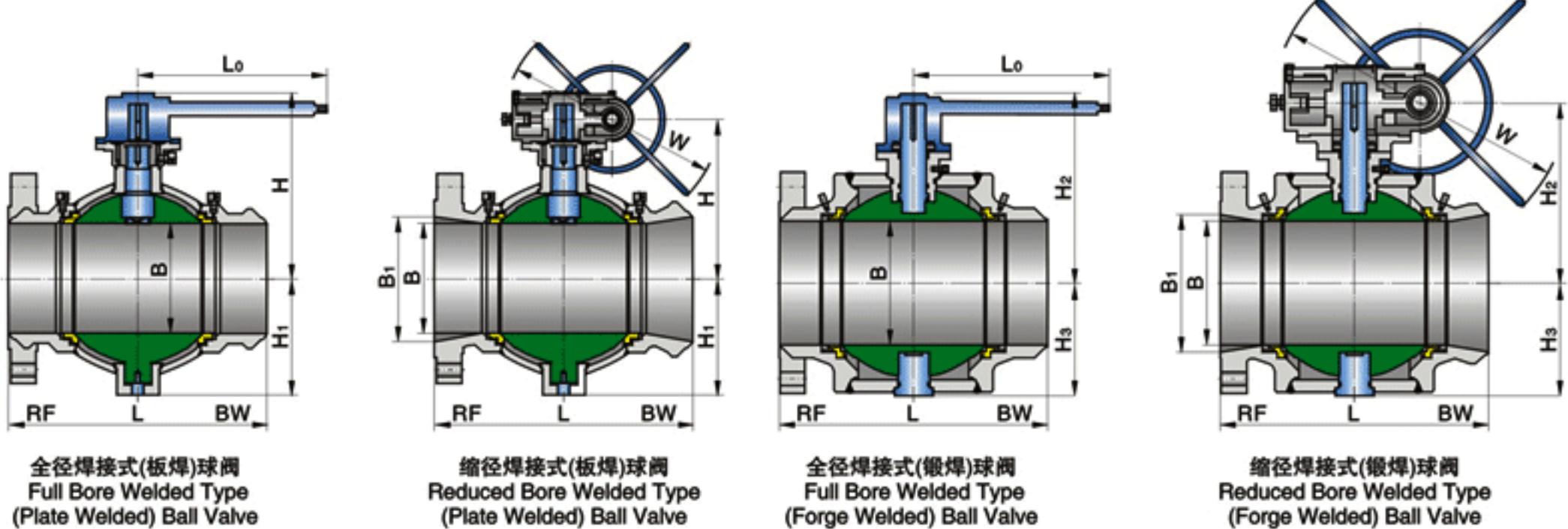
主要外形尺寸 Main Outline Dimensions

Class 400 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	292	292	295	51	-	161	100	155	105	600	-	27	20
80	3	356	356	359	77	-	189	130	195	130	1000	-	39	34
100	4	406	406	410	102	-	214	151	230	164	1000	-	68	45
150	6	495	495	498	152	-	265	201	306	189	-	600	136	102
200	8	597	597	600	203	-	319	254	366	245	-	600	249	204
250	10	673	673	676	254	-	369	308	385	290	-	600	386	295
300	12	762	762	765	305	-	512	368	438	343	-	600	635	499
350	14	826	826	829	337	-	537	402	491	403	-	600	748	558
400	16	902	902	905	387	-	665	453	541	432	-	800	1009	703
450	18	978	978	981	438	-	665	489	573	488	-	800	1293	998
500	20	1054	1054	1060	540	-	762	562	650	525	-	800	1701	1361
550	22	1143	1143	1153	489	-	801	600	737	574	-	800	2155	1792
600	24	1232	1232	1241	591	-	837	636	759	612	-	800	2540	2155
650	26	1308	1308	1321	635	-	872	673	793	649	-	800	3221	2540
700	28	1397	1397	1410	686	-	1041	784	836	686	-	1000	3883	2948
750	30	1524	1524	1537	736	-	1083	826	887	726	-	1000	4808	3992
800	32	1651	1651	1667	781	-	973	787	915	767	-	1000	6150	4559
850	34	1778	1778	1794	832	-	1151	894	951	804	-	1000	6985	5579
900	36	1880	1880	1895	876	-	1192	935	987	838	-	1000	8165	7031
1000	40	1981	1981	-	978	-	1357	1067	1212	936	-	1000	11567	10093
1050	42	2057	2057	-	1022	-	1449	1109	1354	977	-	1000	13041	11227
1200	48	2311	2311	-	1168	-	1681	1300	1555	1113	-	1000	18123	15604

Class 400 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80×50	3×2	356	356	359	51	77	161	100	155	105	600	-	36	23
100×80	4×3	406	406	410	77	102	189	130	195	130	1000	-	57	39
150×100	6×4	495	495	498	102	152	214	151	230	164	1000	-	86	68
200×150	8×6	597	597	600	152	203	265	201	306	189	-	600	192	132
250×200	10×8	673	673	676	203	254	319	254	366	245	-	600	276	238
300×250	12×10	762	762	765	254	305	369	308	385	290	-	600	463	381
350×300	14×12	826	826	829	305	337	512	368	438	343	-	600	676	526
400×350	16×14	902	902	905	337	387	537	402	491	403	-	600	866	603
450×400	18×16	978	978	981	387	438	665	489	541	432	-	800	1089	871
500×450	20×18	1054	1054	1060	438	489	762	562	573	488	-	800	1452	1202
550×500	22×20	1143	1143	1153	540	489	801	600	650	525	-	800	1928	1497
600×550	24×22	1232	1232	1241	489	591	837	636	737	574	-	800	2291	1950
650×600	26×24	1308	1308	1321	591	635	872	673	759	612	-	800	2835	2313
700×650	28×26	1397	1397	1410	635	686	907	784	793	649	-	1000	3515	2767
750×700	30×28	1524	1524	1537	686	736	1083	708	836	686	-	1000	4309	3447
800×750	32×30	1651	1651	1667	736	781	949	750	887	726	-	1000	5216	4241
900×850	36×34	1880	1880	1895	736	876	1151	894	951	804	-	1000	7258	5897
1050×900	42×36	2057	2057	-	876	1022	1357	1067	1212	936	-	1000	10300	-



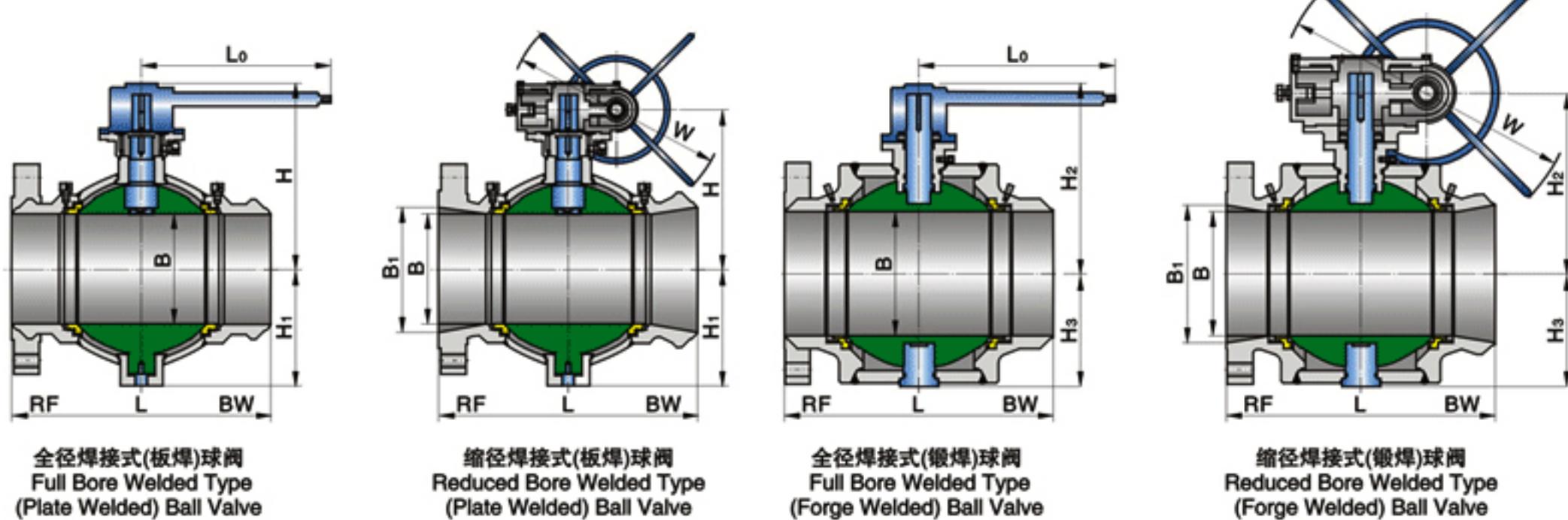
主要外形尺寸 Main Outline Dimensions

Class 600 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	292	292	295	51	-	161	100	155	105	600	-	27	20
80	3	356	356	359	77	-	189	130	195	130	1000	-	39	34
100	4	432	432	435	102	-	214	151	230	164	1000	-	75	45
150	6	559	559	562	152	-	265	201	306	189	-	600	163	102
200	8	660	660	664	203	-	319	254	366	245	-	600	295	204
250	10	787	787	791	254	-	369	308	385	290	-	600	454	295
300	12	838	838	841	305	-	512	368	438	343	-	600	685	499
350	14	889	889	892	337	-	537	402	491	403	-	600	866	558
400	16	991	991	994	387	-	665	489	541	432	-	800	1089	703
450	18	1092	1092	1095	438	-	665	489	573	488	-	800	1340	998
500	20	1194	1194	1200	489	-	762	562	650	525	-	800	1860	1361
550	22	1295	1295	1305	540	-	801	600	737	574	-	800	2449	1792
600	24	1397	1397	1407	591	-	837	636	759	612	-	800	2971	2155
650	26	1448	1448	1461	635	-	872	673	793	649	-	800	3538	2540
700	28	1549	1549	1562	686	-	1041	784	836	686	-	1000	4309	3039
750	30	1651	1651	1664	736	-	1083	826	887	726	-	1000	5443	4137
800	32	1778	1778	1794	781	-	973	787	915	767	-	1000	6840	4559
850	34	1930	1930	1946	832	-	1151	894	951	804	-	1000	7269	5579
900	36	2083	2083	2098	876	-	1192	935	987	838	-	1000	8664	7031
1000	40	2337	2337	2337	978	978	1357	1067	1212	936	-	1000	12143	10433
1050	42	2437	2437	2437	1022	1022	1449	1109	1354	977	-	1000	13835	11567
1200	48	2540	2540	2540	1168	1168	1681	1300	1555	1113	-	1000	19223	16072

Class 600 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80 × 50	3 × 2	356	356	359	51	77	161	100	155	105	600	-	36	23
100 × 80	4 × 3	432	432	435	77	102	189	130	195	130	1000	-	68	39
150 × 100	6 × 4	559	559	562	102	152	214	151	230	164	1000	-	113	68
200 × 150	8 × 6	660	660	664	152	203	265	201	306	189	-	600	213	132
250 × 200	10 × 8	787	787	791	203	254	319	254	366	245	-	600	386	238
300 × 250	12 × 10	838	838	841	254	305	369	308	385	290	-	600	522	381
350 × 300	14 × 12	8889	889	892	305	337	512	368	438	343	-	600	744	526
400 × 350	16 × 14	991	991	994	337	387	537	402	491	403	-	600	1009	603
450 × 400	18 × 16	1092	1092	1095	387	438	629	489	541	432	-	800	1179	871
500 × 450	20 × 18	1194	1194	1200	438	489	665	562	573	488	-	800	1588	1202
550 × 500	22 × 20	1295	1295	1305	540	489	762	600	650	525	-	800	2019	1497
600 × 550	24 × 22	1397	1397	1407	591	591	801	636	737	574	-	800	2608	1950
650 × 600	26 × 24	1448	1448	1461	635	635	837	673	759	612	-	800	3175	2313
700 × 650	28 × 26	1549	1549	1562	686	686	872	784	793	649	-	1000	3901	2767
750 × 700	30 × 28	1651	1651	1664	736	736	907	708	836	686	-	1000	4581	3447
800 × 750	32 × 30	1778	1778	1794	832	781	949	750	887	726	-	1000	5806	4241
900 × 850	36 × 34	2083	2083	2098	736	876	1151	894	951	804	-	1000	7983	5897
1050 × 900	42 × 36	2437	2437	2437	876	1022	1357	1067	1212	936	-	1000	10905	-



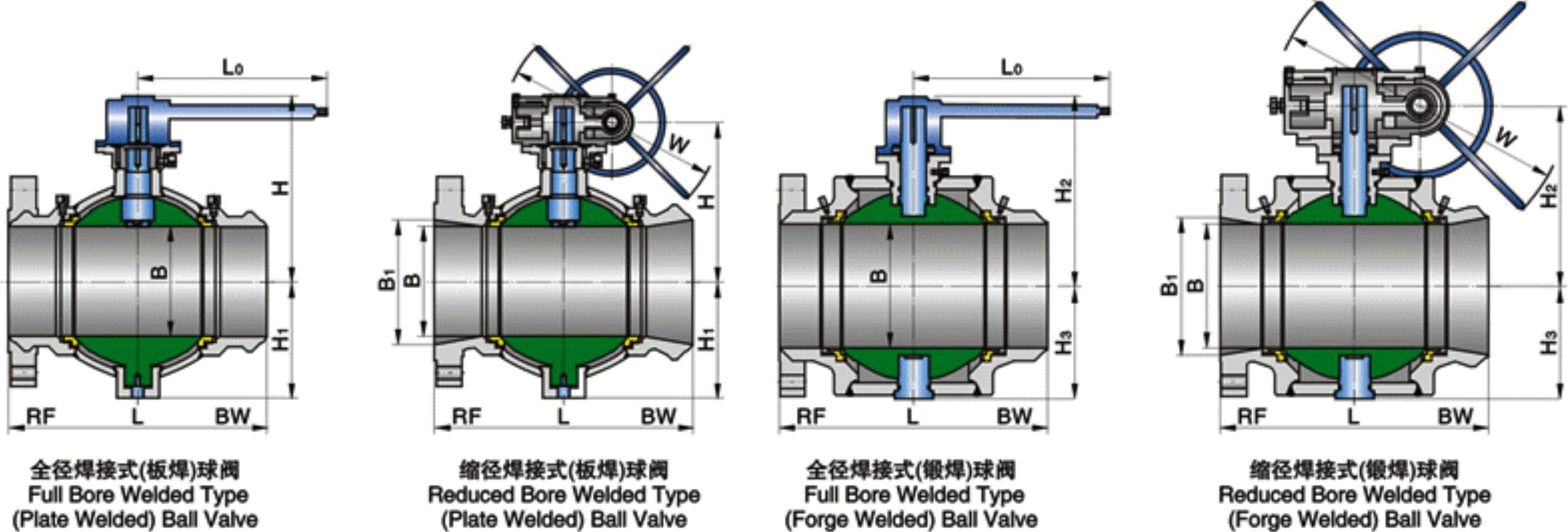
主要外形尺寸 Main Outline Dimensions

Class 900 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	368	368	371	51	-	161	100	162	88	640	-	27	20
80	3	381	381	384	77	-	189	124	181	114	1050	-	64	54
100	4	457	457	460	102	-	248	172	202	150	-	600	113	86
150	6	610	610	613	152	-	276	213	263	204	-	600	238	186
200	8	737	737	740	203	-	319	254	312	254	-	600	549	268
250	10	838	838	841	254	-	470	327	368	306	-	800	601	458
300	12	965	965	968	305	-	512	368	435	368	-	800	1021	612
350	14	1029	1029	1038	324	-	643	442	472	399	-	800	1474	978
400	16	1130	1130	1140	375	-	684	483	547	411	-	1000	1814	1111
450	18	1219	1219	1232	425	-	724	524	571	450	-	1000	2404	1792
500	20	1321	1321	1334	473	-	895	615	608	488	-	1000	3221	2381
600	24	1549	1549	1568	571	-	970	713	749	613	-	1000	4762	2926
650	26	1625	1625	1647	619	-	1027	760	806	665	-	1000	6038	3708
700	28	1727	1727	1749	667	-	1069	810	890	720	-	800	6911	4350
750	30	1803	1803	1825	714	-	1083	826	1020	780	-	800	7938	5216
800	32	1905	1905	1927	762	-	1171	910	1040	820	-	800	9020	5916
850	34	2032	2032	2060	810	-	1207	960	1110	860	-	800	11046	7245
900	36	2182	2182	2213	857	-	1321	1020	1130	938	-	800	11612	7938
1000	40	2410	2410	2438	959	-	1390	1120	1160	1000	-	800	14822	10773
1050	42	2515	2515	2540	1003	-	1480	1200	1200	1080	-	800	17470	12702
1200	48	2620	2620	2850	1155	-	1570	1330	1330	1200	-	800	24282	17650

Class 900 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80×50	3×2	381	381	384	51	77	161	100	162	88	640	-	54	32
100×80	4×3	457	457	460	77	102	189	124	181	114	1050	-	86	68
150×100	6×4	610	610	613	102	152	248	172	202	150	-	600	181	118
200×150	8×6	737	737	740	152	203	276	213	263	204	-	600	386	295
250×200	10×8	838	838	841	203	254	319	254	312	254	-	800	585	329
300×250	12×10	965	965	968	254	305	470	327	368	306	-	800	771	503
350×300	14×12	1029	1029	1038	305	324	512	368	435	368	-	800	1247	762
400×350	16×14	1130	1130	1140	324	375	643	442	472	399	-	800	1656	1043



主要外形尺寸 Main Outline Dimensions

Class 1500 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	368	368	371	51	-	161	100	165	95	800	-	45	20
80	3	470	470	473	77	-	189	124	182	127	-	600	82	54
100	4	546	546	549	102	-	248	172	209	158	-	600	136	86
150	6	705	705	711	146	-	276	213	287	222	-	800	324	186
200	8	832	832	841	194	-	429	278	332	247	-	800	703	488
250	10	991	991	1000	241	-	507	385	426	313	-	1000	907	714
300	12	1130	1130	1146	289	-	554	440	468	353	-	1000	1474	828
350	14	1257	1257	1276	317	-	643	442	496	380	-	1000	1905	1157
400	16	1384	1384	1406	362	-	684	484	536	420	-	800	2449	1338
450	18	1537	1537	1559	407	-	856	576	688	560	-	800	2880	2325
500	20	1664	1664	1686	457	-	895	615	727	600	-	800	4200	2733
600	24	1943	1943	1972	534	-	970	713	803	675	-	800	7371	4264

Class 1500 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80×50	3×2	470	470	473	51	-	161	100	165	95	800	-	68	32
100×80	4×3	546	546	549	77	-	189	124	182	127	-	600	109	68
150×100	6×4	705	705	711	102	-	248	172	209	158	-	600	249	118
200×150	8×6	832	832	841	146	-	276	213	287	222	-	800	465	295
250×200	10×8	991	991	1000	194	-	429	278	332	247	-	800	782	544
300×250	12×10	1130	1130	1146	241	-	507	385	426	313	-	1000	1275	748
350×300	14×12	1257	1257	1276	289	-	554	440	468	353	-	1000	1701	953
400×350	16×14	1384	1384	1406	317	-	643	442	496	380	-	1000	2336	1236

Class 2500 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
50	2	451	451	454	45	-	184	115	178	120	-	600	52	43
80	3	578	578	584	53	-	227	144	206	149	-	600	107	85
100	4	673	673	683	89	-	297	184	258	180	-	800	214	173
150	6	914	914	927	134	-	334	248	341	275	-	800	428	334
200	8	1022	1022	1038	181	-	454	326	420	335	-	1000	950	760
250	10	1270	1270	1292	226	-	508	338	540	432	-	1000	1325	983
300	12	1422	1422	1445	267	-	629	423	638	525	-	1000	2044	1478

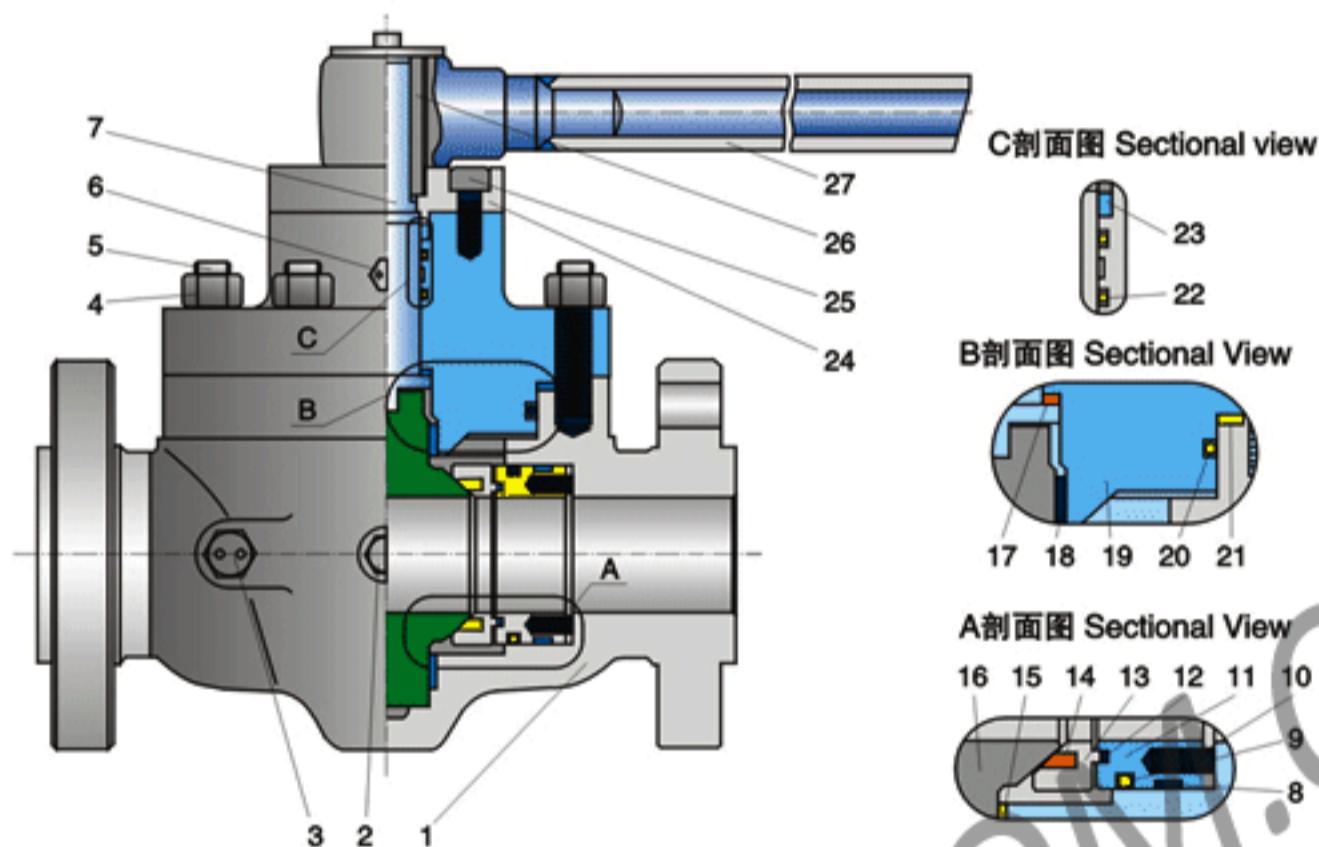
Class 2500 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	H	H ₁	H ₂	H ₃	L ₀	W	重量 Weight (kg)	
		RF	BW	RTJ									RF	BW
80×50	3×2	578	578	584	45	63	184	115	178	120	-	600	71	59
100×80	4×3	673	673	683	53	89	227	144	206	149	-	600	130	98
150×100	6×4	914	914	927	89	134	297	184	258	180	-	800	289	233
200×150	8×6	1022	1022	1038	134	181	334	248	341	275	-	800	588	461
250×200	10×8	1270	1270	1292	181	226	454	326	420	335	-	1000	1142	869
300×250	12×10	1422	1422	1445	226	267	508	338	540	432	-	10		

产品性能规范 Performance Specification

性能规范 Performance Specification		压力等级 Pressure Class													
		150	300	400	600	900	1500	2500							
试验压力 Test Pressure (MPa)	强度试验Strength Test	2.94	7.67	10.20	15.30	22.98	38.30	63.83							
	密封试验Sealing Test	2.16	5.62	7.48	11.23	16.85	28.08	46.81							
	气压试验Air Test	0.6													
适用温度Applicable Temperature	-196°C ~ 550°C (注: 不同工况温度, 选用不同的材质) Different materials for different working conditions.														
适用介质Applicable Medium	水、蒸汽、石油、液化气、天然气等 Water, Steam, Oil, Gas, Liquid Gas, Natural Gas etc														
尺寸范围Size Range	DN50 ~ 1200(NP2" ~ 48"), 可根据客户的特殊要求制造 We can produce according to your special requirements.														
主体/内件材料Body/Trim Material	碳钢、不锈钢、双相不锈钢、镍合金、钛材 Carbon Steel, Stainless Steel, Duplex Stainless Steel, Ni-Alloy Steel, Ti Material														
端部连接Ends Connection	法兰连接、对接焊连接 Flange Connection, Butt-welded Connection														
驱动装置Actuating Device	手动、蜗轮蜗杆传动、电动、气动等 Lever, Gearbox, Electric, Pneumatic etc.														

阀门结构示意图(手动上装式球阀) Valve Structural Schematic Drawing (Manual Top Entry Ball Valve)



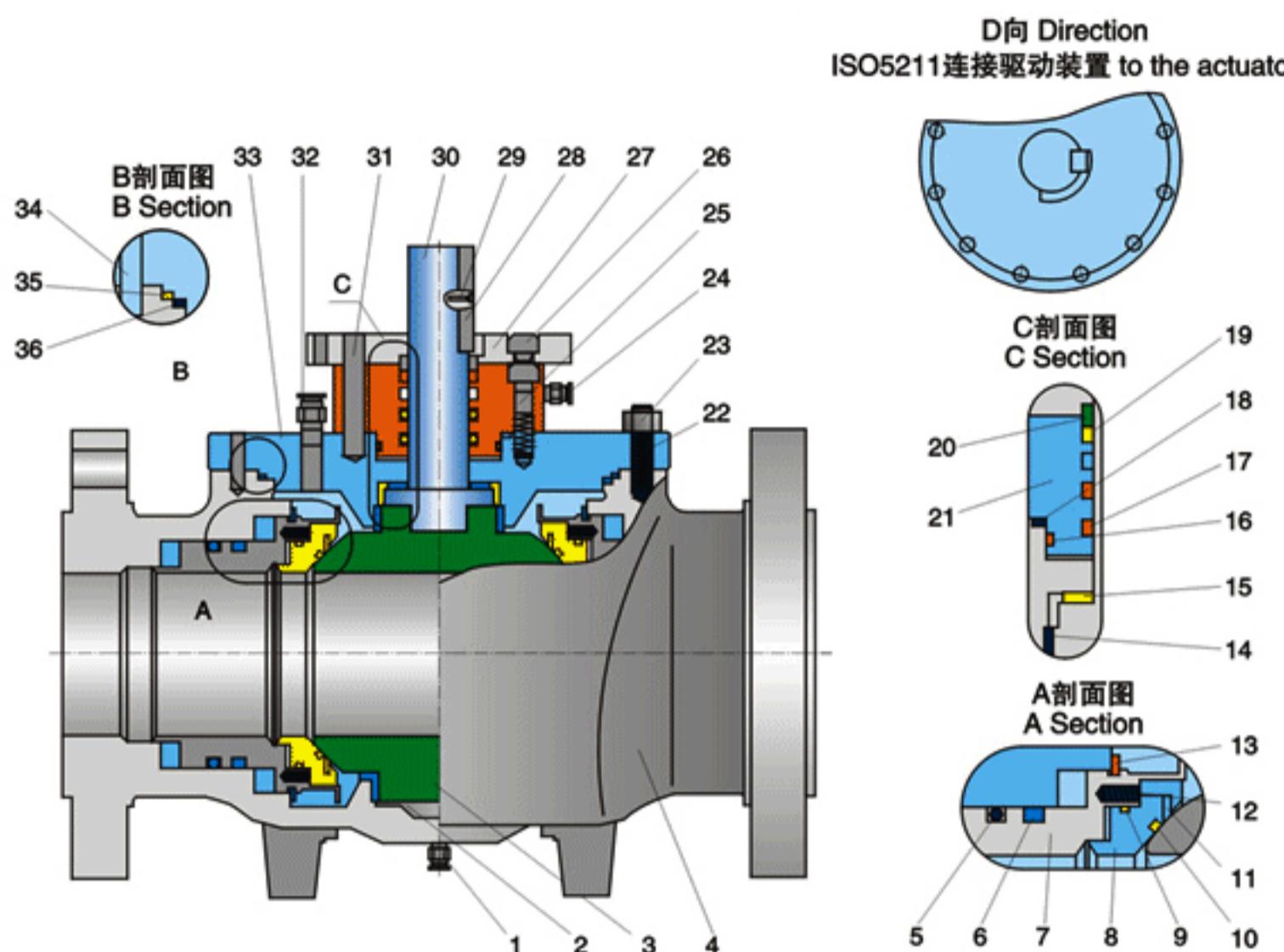
主要零部件材料 The Material of Main Parts

序号 No.	零件名称 Parts Name	材料 Material			序号 NO.	零件名称 Parts Name	材料 Material		
		碳钢Carbon Steel	不锈钢SS	低温钢 Low Temperature Steel			碳钢Carbon Steel	不锈钢SS	低温钢 Low Temperature Steel
1	阀体Body	A216 WCB	A351 CF8M	A352 LCC	15	下轴衬Bushing	PTFE+CS	PTFE+SS	PTFE+SS
2	泄压阀 Drain Valve	A29 1025	SS	SS	16	球体Ball	A105+ENP	A182 F316	A350 LF3
3	注脂阀Sealant Injection Valve	A29 1025	SS	SS	17	平面轴衬 Flat Bushing	PTFE+CS	PTFE+SS	PTFE+SS
4	螺母Nut	A194 2H	A194 8	A194 7	18	上轴衬Bushing	PTFE+CS	PTFE+SS	PTFE+SS
5	螺柱Stud	A193 B7	A193 B8	A320 L7	19	阀盖Bonnet	A216 WCB	A351 CF8M	A352 LCC
6	注脂阀Sealant Injection Valve	A29 1025	SS	SS	20	O型圈O-Ring	氟橡胶 VITON		
7	阀杆Stem	A182 F6a	A182 F316	A182 F316	21	垫片Gasket	柔性石墨+SS Soft Graphite+SS		
8	防火垫 Fire Safe Ring	柔性石墨 Soft Graphite			22	O型圈O-Ring	氟橡胶 VITON		
9	O型圈O-Ring	氟橡胶 VITON			23	填料Packing	柔性石墨 Soft Graphite		
10	弹簧Spring	INCONEL X-750			24	压盖Cover	A29 4140+ENP	A182 F316	A350 LF3
11	支撑圈 Supporting Ring	A29 4140+ENP	A182 F316	A350 LF3	25	螺钉Screw	A193 B7	A193 B8	A320 L7
12	垫片Gasket	柔性石墨+SS Soft Graphite+SS			26	键Key	A29 1045	A29 1045	A29 1045
13	阀座Seat	A105+ENP	A29 4140+ENP	A182 F316	27	手柄Lever	Q235A		
14	密封圈 Sealing Ring	PTFE、NYLON、PEEK、PCTFE、MOLON							

注: 1、可根据不同工况和用户要求选用不同的材料。
2、抗硫阀门接NACE MR0175选材。

Notes: 1. Materials are available according to users' requirements and different working medium
2. Materials for Anti-sulfur valve shall be chosen according to NACE MR0175.

阀门结构示意图(上装式球阀) Valve Structural Schematic Drawing (Top Entry Ball Valve)



主要零部件材料 The Material of Main Parts

序号 No.	零件名称 Parts Name	材料 Material		
		碳钢Carbon Steel	不锈钢SS	低温钢 Low Temperature Steel
1	排泄阀 Drain Valve	A29 1025	SS	SS
2	下轴衬 Bushing	PTFE+CS	PTFE+SS	PTFE+SS
3	球体Ball	A105+ENP	A182 F316	A350 LF3
4	阀杆Stem	A216 WCB	A351 CF8M	A352 LCC
5	O型圈O-Ring	氟橡胶 VITON		
6	防火垫 Fire Safe Ring	柔性石墨 Soft Graphite		
7	支撑圈 Supporting Ring	A29 4140+ENP	A182 F316	A350 LF3
8	阀座Seat	A105+ENP	A182 F316	A350 LF3
9	O型圈O-Ring	氟橡胶 VITON		
10	O型圈O-Ring	氟橡胶 VITON		
11	密封圈 Sealing Ring	PTFE、NYLON、PCTFE、MOLON		
12	弹簧Spring	INCONEL X-750		
13	C型弹簧 C Type Spring	17-4		
14	上轴衬 Bushing	PTFE+CS	PTFE+SS	PTFE+SS
15	平面轴衬 Flat Bush Bearing	PTFE+CS	PTFE+SS	PTFE+SS
16	O型圈O-Ring	氟橡胶 VITON		
17	O型圈O-Ring	氟橡胶 VITON		
18	垫片Gasket	柔性石墨+SS Soft Graphite+SS		

序号 No.	零件名称 Parts Name	材料 Material		
		碳钢Carbon Steel	不锈钢SS	低温钢 Low Temperature Steel
19	填料Packing	柔性石墨 Soft Graphite		
20	压套Gland	A182 F6a	A182 F6a	A350 LF3
21	压盖Cover	A29 4140+ENP	A182 F6a	A320 L7
22	螺柱Stud	A193 B7	A193 B8	A194 7
23	螺母Nut	A194 2H	A194 8	A350 LF3
24	注脂阀Sealant Injection Valve	A29 1025	SS	SS
25	螺钉Screw	A193 B7	A193 B8	A320 L7
26	螺钉Screw	A193 B7	A193 B8	
27	连接盘 Connecting Plate	A105		
28	键Key	A29 1045		
29	螺钉Screw	A193 B7		
30	阀杆Stem	A182 F6a	A182 F316	A182 F316
31	定位销 Locating Pin	A182 F6a		
32	注脂阀Sealant Injection Valve	A29 1025	SS	SS
33	阀盖Bonnet	A216 WCB	A351 CF8M	A352 LCC
34	定位销 Locating Pin	A182 F6a		
35	垫片Gasket	柔性石墨+SS Soft Graphite+SS		
36	O型圈O-Ring	氟橡胶 VITON		

注：1、根据工况介质温度压力选用不同的材料。

2、除了表中列出的材料外，可根据用户要求选材。

3、可提供满足NACE MR-01-75标准(最新版本)适用于酸性气体工况的材料。

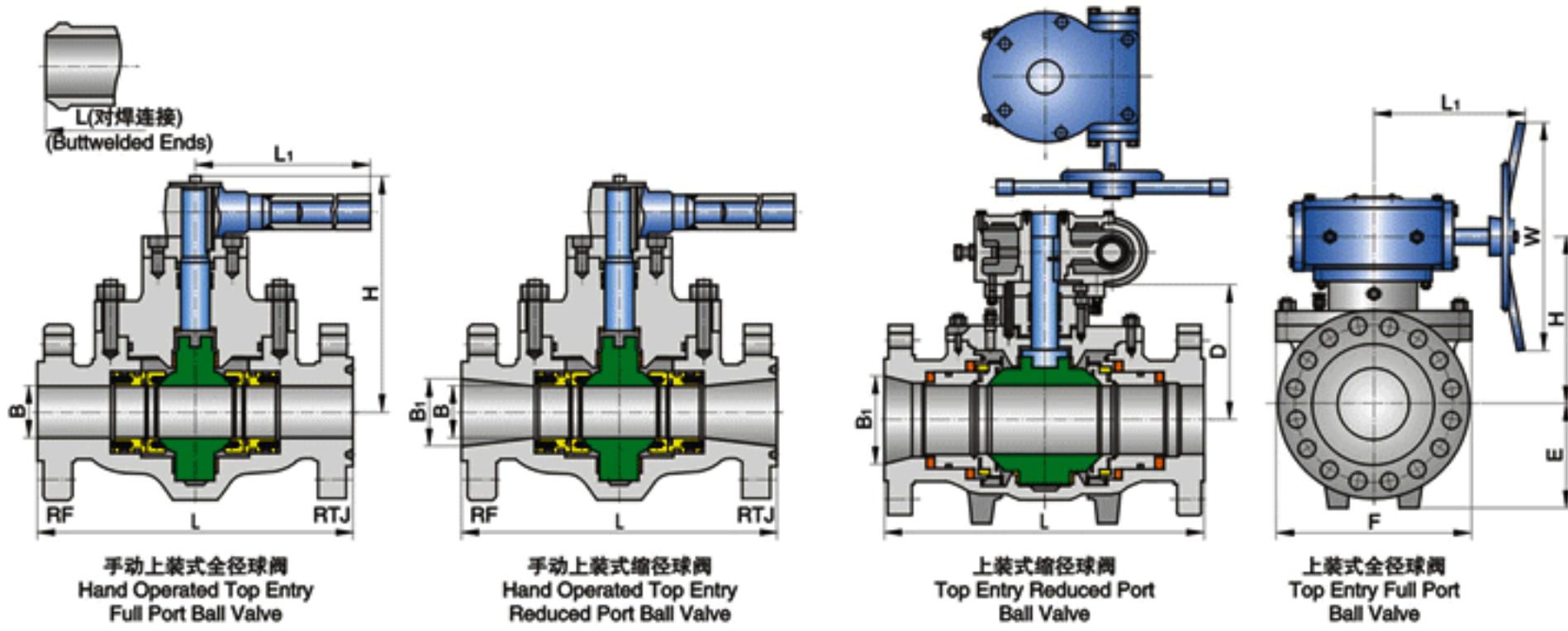
说明：尺寸表中RF：表示阀门端突面法兰连接；BW：表示阀门端部对接焊连接；RTJ：表示阀门端环接面法兰连接。

Note: 1. Materials are chosen according to the temperature & pressure for different working mediums.

2. It can be available to choose the materials according to user's requirements, besides the listed material in the chart.

3. Materials in accordance with NACE MR-01-75(latest edition) are available for sour gas service.

Remarks: RF stands for Raised Flange Connection; BW stands for Butt welded Ends Connection; RTJ stands for Ring Joint Connection.



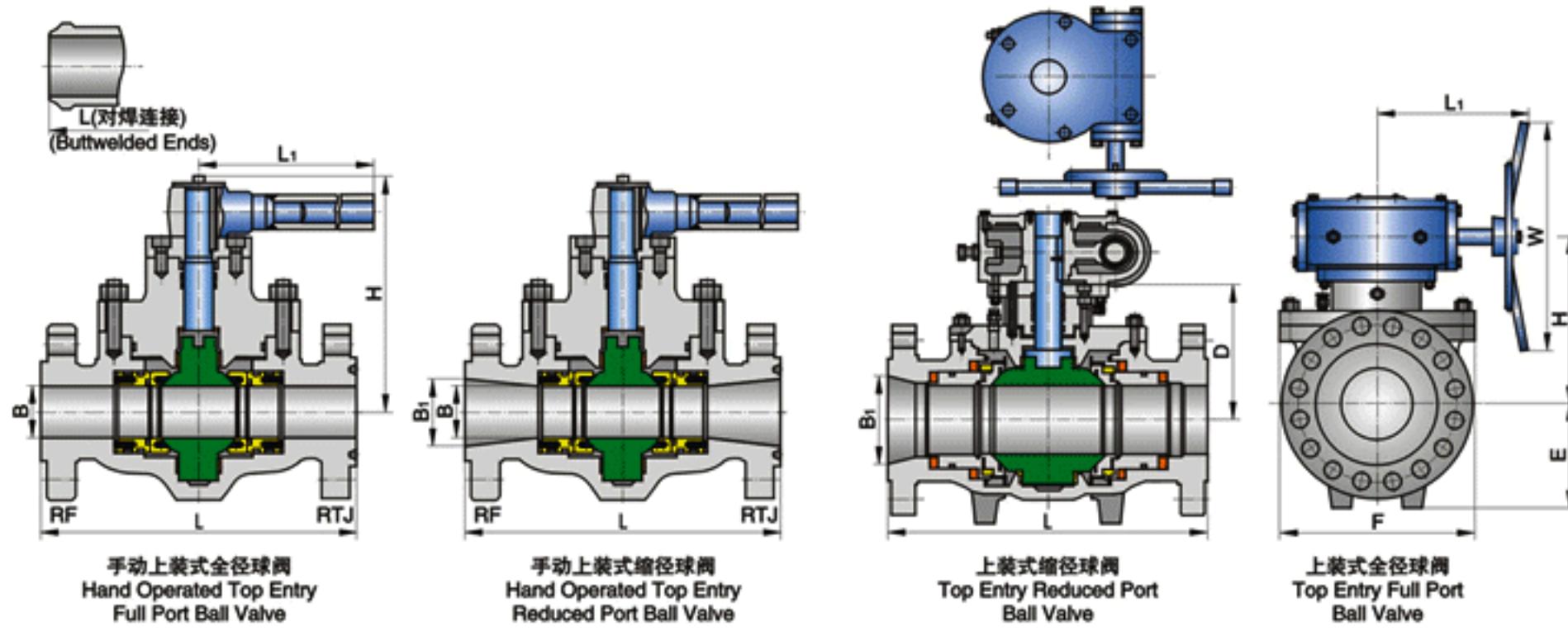
主要外形尺寸 Main Outline Dimensions

Class 150 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50	2	178	191	216	51	51	-	85	180	212	450	-	28
80	3	203	216	283	77	77	-	112	230	228	600	-	55
100	4	229	241	305	102	102	-	145	283	272	600	-	105
150	6	394	406	457	152	152	281	220	325	333	297	350	235
200	8	457	470	521	203	203	320	260	405	384	360	500	430
250	10	533	546	559	254	254	360	311	490	424	360	500	475
300	12	610	622	635	305	305	403	366	570	467	340	700	610
350	14	686	699	762	337	337	453	428	660	517	340	700	795
400	16	762	775	838	387	387	459	450	700	549	545	700	1160
450	18	864	876	914	438	438	502	473	755	577	575	700	1570
500	20	914	927	991	489	489	551	580	870	626	575	700	2000
550	22	991	1062	1092	540	540	578	590	955	653	575	700	2830
600	24	1067	1080	1143	591	591	606	600	1030	696	579	700	3300
650	26	1143	1168	1245	635	635	675	635	1075	765	570	700	3970
700	28	1245	1270	1346	686	686	735	700	1165	825	579	700	4755
750	30	1295	1321	1397	736	736	795	775	1250	865	579	700	5820
800	32	1372	1400	1524	781	781	840	825	1325	1012	605	620	7240
850	34	1473	1502	1626	832	832	875	880	1410	1047	605	620	7960
900	36	1524	1552	1727	876	876	931	930	1475	1103	605	620	9300
1000	40	1753	-	1956	978	978	1015	1025	1640	1170	950	1400	12950
1050	42	1855	-	2083	1022	1022	1065	1080	1710	1220	950	1400	15200
1200	48	2134	-	2388	1168	1168	1180	1225	1940	1335	950	1400	22750

Class 150 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50×40	2×1½	178	191	216	38	51	-	85	180	212	450	-	25
80×50	3×2	203	216	283	51	77	-	85	180	212	450	-	37
100×80	4×3	229	241	305	77	102	-	112	230	228	600	-	75
150×100	6×4	394	406	457	102	152	-	145	283	272	600	-	140
200×150	8×6	457	470	521	152	203	281	220	325	333	297	350	265
250×200	10×8	533	546	559	203	254	320	260	405	384	360	500	480
300×250	12×10	610	622	635	254	305	360	311	490	424	360	500	510
350×250	14×10	686	699	762	254	337	360	311	490	424	360	500	690
350×300	14×12	686	699	762	305	337	403	366	570	467	340	700	820
400×300	16×12	762	775	838	305	387	403	366	570	467	340	700	970
400×350	16×14	762	775	838	387	337	453	428	660	517	340	700	955
450×400	18×16	864	876	914	387	438	450	450	700	549	545	700	1295
500×400	20×16	914	927	991	387	489	459	450	700	549	545	700	1590
500×450	20×18	914	927	991	438	489	502	473	755	577	575	700	1800
600×500	24×20	1067	1080	1143	489	591	551	580	870	626	575	700	2440
750×600	30×24	1295	1321	1397	591	736	606	600	1030	696	579	700	4100
900×750	36×30	1524	1552	1727	736	876	795	775	1250	865	579	700	7200



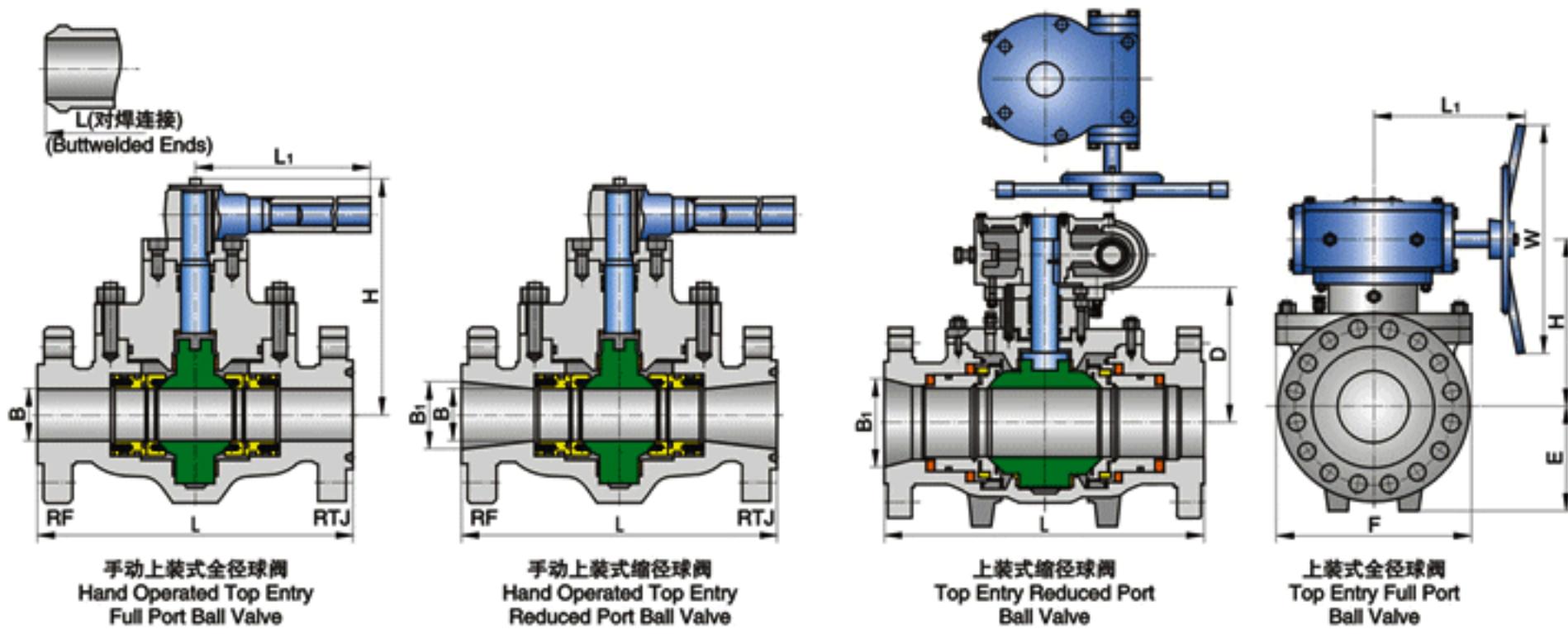
主要外形尺寸 Main Outline Dimensions

Class 300 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50	2	216	216	232	51	51	-	85	180	212	450	-	33
80	3	283	283	298	77	77	-	112	230	228	600	-	64
100	4	305	305	321	102	102	-	145	283	272	1000	-	123
150	6	403	403	419	152	152	281	220	325	345	360	500	275
200	8	502	521	518	203	203	330	260	405	385	340	700	505
250	10	568	559	584	254	254	371	311	490	426	340	700	557
300	12	648	635	664	305	305	418	366	570	473	340	700	715
350	14	762	762	778	337	337	470	428	660	530	545	700	932
400	16	838	838	854	387	387	477	450	700	537	545	700	1360
450	18	914	914	930	438	438	522	473	755	597	575	700	1840
500	20	991	991	1010	489	489	573	580	880	663	579	700	2340
550	22	1092	1092	1114	540	540	600	590	965	690	579	700	3320
600	24	11443	1143	1165	591	591	631	600	1040	721	579	700	3870
650	26	1245	1245	1270	635	635	702	635	1085	874	605	620	4655
700	28	1346	1346	1372	686	686	764	700	1175	919	950	1400	5575
750	30	1397	1397	1422	736	736	827	775	1265	982	950	1400	6825
800	32	1524	1524	1553	781	781	874	825	1340	1029	950	1400	8490
850	34	1626	1626	1654	832	832	910	880	1425	1065	950	1400	9335
900	36	1727	1727	1756	876	876	968	930	1490	1123	950	1400	10900
1000	40	1956	1956	-	978	978	1056	1025	1655	1211	950	1400	15185
1050	42	2083	2083	-	1022	1022	1107	1080	1725	1262	950	1400	17820
1200	48	2170	2170	-	1168	1168	1228	1225	1960	1499	1045	1400	26675

Class 300 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50×40	2×1½	216	216	232	38	51	-	85	180	212	450	-	29
80×50	3×2	283	283	298	51	77	-	85	180	212	450	-	43
100×80	4×3	305	305	321	77	102	-	112	230	228	600	-	88
150×100	6×4	403	403	419	102	152	-	145	283	272	1000	-	164
200×150	8×6	502	521	518	152	203	281	220	325	345	360	500	311
250×200	10×8	568	559	584	203	254	330	260	405	385	340	700	563
300×250	12×10	648	635	664	254	305	371	311	490	426	340	700	598
350×250	14×10	762	762	778	254	337	371	311	490	426	340	700	809
350×300	14×12	762	762	778	305	337	418	366	570	473	340	700	960
400×300	16×12	838	838	854	305	387	418	366	570	473	340	700	1135
400×350	16×14	838	838	854	387	337	470	428	660	530	545	700	1120
450×400	18×16	914	914	930	387	438	477	450	700	537	545	700	1518
500×400	20×16	991	991	1010	387	489	477	450	700	537	545	700	1865
500×450	20×18	991	991	1010	438	489	522	473	755	597	575	700	2110
600×500	24×20	1143	1143	1165	489	591	573	580	880	663	579	700	2860
750×600	30×24	1397	1397	1422	591	736	631	600	1040	721	579	700	4810
900×750	36×30	1727	1727	1756	736	876	827	775	1265	982	950	1400	8440



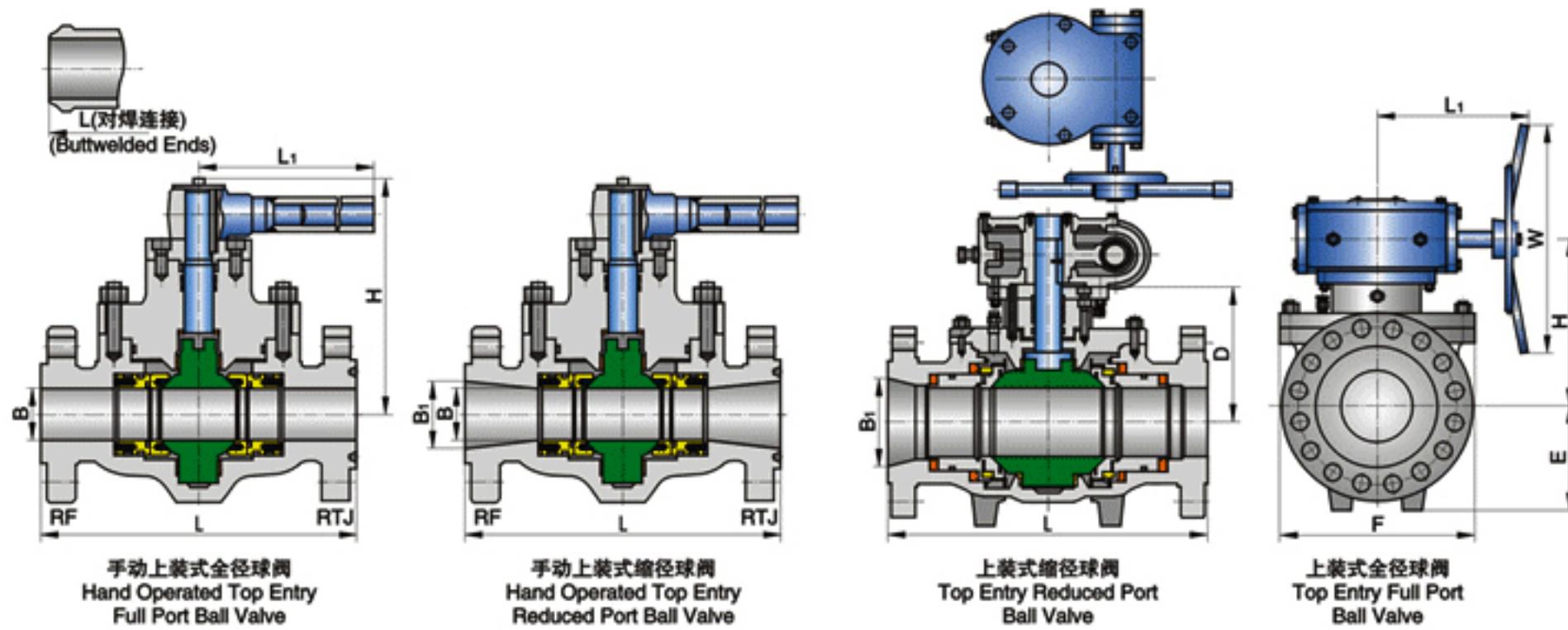
主要外形尺寸 Main Outline Dimensions

Class 600 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50	2	292	292	295	51	51	-	85	180	212	600	-	37
80	3	356	356	359	77	77	-	112	230	228	600	-	72
100	4	432	432	435	102	102	-	145	283	250	1000	-	137
150	6	559	559	562	152	152	281	220	325	336	1000	700	302
200	8	660	660	664	203	203	340	260	415	395	340	700	560
250	10	787	787	791	254	254	355	311	505	415	340	700	710
300	12	838	838	841	305	305	401	366	585	461	545	700	910
350	14	889	889	892	337	337	451	428	680	526	575	700	1190
400	16	991	991	994	387	387	493	450	730	568	575	700	1735
450	18	1092	1092	1095	438	438	539	473	784	629	575	700	2350
500	20	1194	1194	1200	489	489	592	580	900	682	579	700	3000
550	22	1295	1295	1305	540	540	621	590	890	711	579	700	4240
600	24	1397	1397	1407	591	591	653	600	1070	808	950	1400	4950
650	26	1448	1448	1461	635	635	725	635	1115	880	950	1400	5950
700	28	1549	1549	1562	686	686	790	700	1210	945	950	1400	7130
750	30	1651	1651	1664	736	736	850	775	1300	1005	950	1400	8730
800	32	1778	1778	1794	781	781	900	825	1380	1055	950	1400	10850
850	34	1930	1930	1946	832	832	940	880	1460	1095	950	1400	11930
900	36	2083	2083	2099	876	876	1000	930	1535	1155	950	1400	13950
1000	40	2337	2337	2337	978	978	1090	1025	1700	1360	1045	1400	19420
1050	42	2437	2437	2437	1022	1022	1140	1080	1775	1410	1045	1400	22350
1200	48	2540	2540	2540	1168	1168	1270	1225	2015	1570	1080	1400	32340

Class 600 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50×40	2×1½	292	292	295	38	51	-	85	180	212	450	-	33
80×50	3×2	356	356	359	51	77	-	85	180	212	600	-	48
100×80	4×3	432	432	435	77	102	-	112	230	228	1000	-	97
150×100	6×4	559	559	562	102	152	-	145	283	250	1000	-	181
200×150	8×6	660	660	664	152	203	281	220	325	336	340	700	340
250×200	10×8	787	787	791	203	254	340	260	415	395	340	700	625
300×250	12×10	838	838	841	254	305	355	311	505	415	545	700	760
350×250	14×10	889	889	892	254	337	355	311	505	415	545	700	1030
350×300	14×12	889	889	892	305	337	401	366	585	461	545	700	1230
400×300	16×12	991	991	994	305	387	401	366	585	461	545	700	1450
400×350	16×14	991	991	994	387	337	451	428	680	526	575	700	1430
450×400	18×16	1092	1092	1095	387	438	493	450	730	568	575	700	1940
500×400	20×16	1194	1194	1200	387	489	493	450	730	568	575	700	2380
500×450	20×18	1194	1194	1200	438	489	539	473	784	629	579	700	2700
600×500	24×20	1397	1397	1407	489	591	592	580	900	682	579	700	3660
750×600	30×24	1651	1651	1664	591	736	653	600	1070	808	950	1400	6150
900×750	36×30	2083	2083	2099	736	876	850	775	1300	1005	950	1400	10800



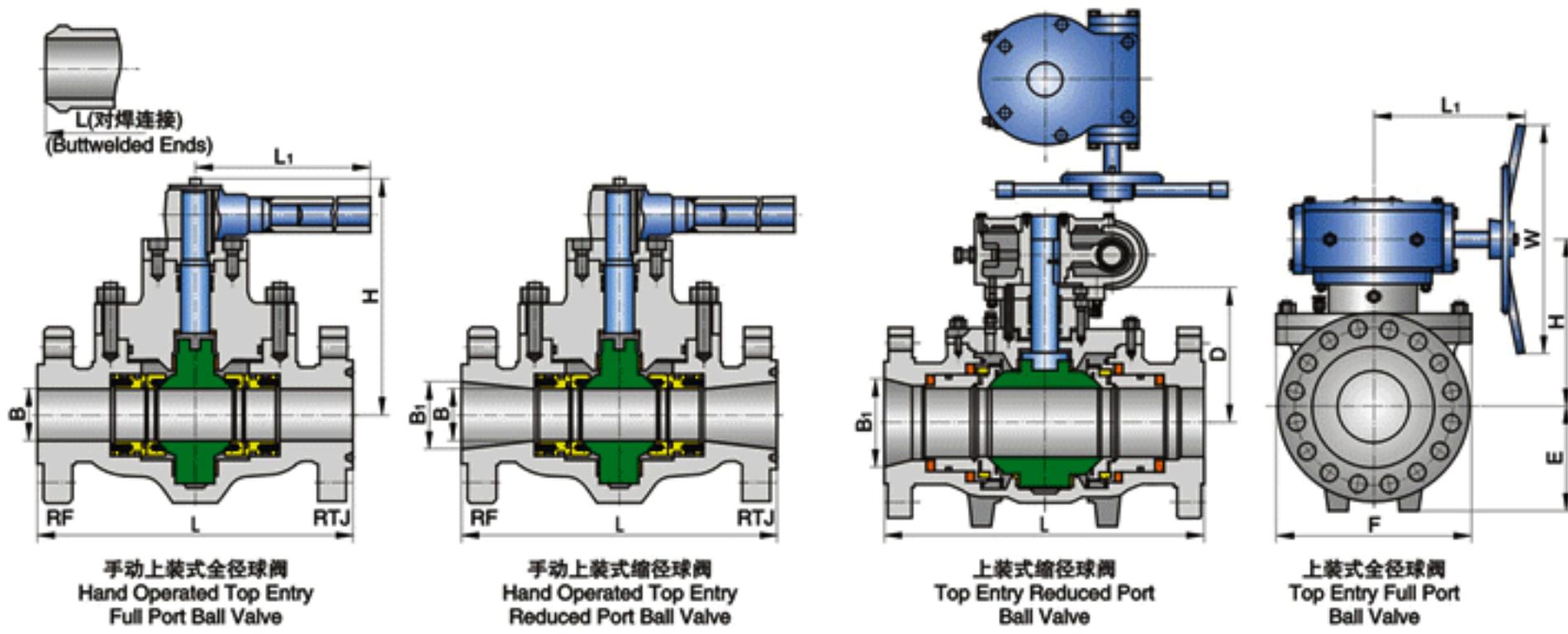
主要外形尺寸 Main Outline Dimensions

Class 900 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50	2	368	368	371	51	51	-	85	195	215	600	-	52
80	3	381	381	384	77	77	-	112	240	193	1000	-	108
100	4	457	457	460	102	102	227	145	295	291	360	-	200
150	6	610	610	613	152	152	258	225	330	313	340	500	456
200	8	737	737	740	203	203	318	260	425	378	545	700	845
250	10	838	838	841	254	254	370	320	525	430	545	700	1070
300	12	965	965	968	305	305	418	375	600	493	575	700	1675
350	14	1029	1029	1038	324	324	470	440	695	545	575	700	1800
400	16	1130	1130	1140	375	375	515	465	750	605	579	700	2650
450	18	1219	1219	1232	425	425	560	485	800	650	579	700	3550
500	20	1321	1321	1334	473	473	620	600	925	775	950	1400	4530
600	24	1549	1549	1568	571	571	680	620	1095	835	950	1400	7450
650	26	1651	1651	1674	619	619	760	655	1145	915	950	1400	8925
700	28	1753	1753	1775	667	667	824	720	1240	979	950	1400	10695
750	30	1880	1880	1902	714	714	886	800	1335	1157	950	1400	13095
800	32	2032	2032	2054	762	762	938	848	1415	1209	1045	1400	16200
850	34	2159	2159	2188	810	810	980	905	1495	1251	1045	1400	17800
900	36	2286	2286	2315	857	857	1042	957	1570	1313	1045	1400	20930

Class 900 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50×40	2×1½	368	368	371	38	51	-	85	195	215	450	-	49
80×50	3×2	381	381	384	51	77	-	85	195	215	600	-	70
100×80	4×3	457	457	460	77	102	-	112	240	193	1000	-	146
150×100	6×4	610	610	613	102	152	227	145	295	291	360	-	273
200×150	8×6	737	737	740	152	203	258	225	330	313	340	500	573
250×200	10×8	838	838	841	203	254	318	260	425	378	545	700	943
300×250	12×10	965	965	968	254	305	370	320	525	430	545	700	1150
350×250	14×10	1029	1029	1038	254	324	370	320	525	430	545	700	1550
350×300	14×12	1029	1029	1038	324	305	418	375	600	493	575	700	1855
400×300	16×12	1130	1130	1140	305	375	418	375	600	493	575	700	2185
400×350	16×14	1130	1130	1140	324	375	470	440	695	545	575	700	2160
450×400	18×16	1219	1219	1232	375	425	515	465	750	605	579	700	2925
500×400	20×16	1321	1321	1334	375	473	515	465	750	605	579	700	3590
500×450	20×18	1321	1321	1334	425	473	560	485	800	650	579	700	4100
600×500	24×20	1549	1549	1568	473	571	620	600	925	775	950	1400	5520
750×600	30×24	1880	1880	1902	571	714	680	620	1095	835	950	1400	9225
900×750	36×30	2286	2286	2315	714	857	886	800	1335	1157	950	1400	15700



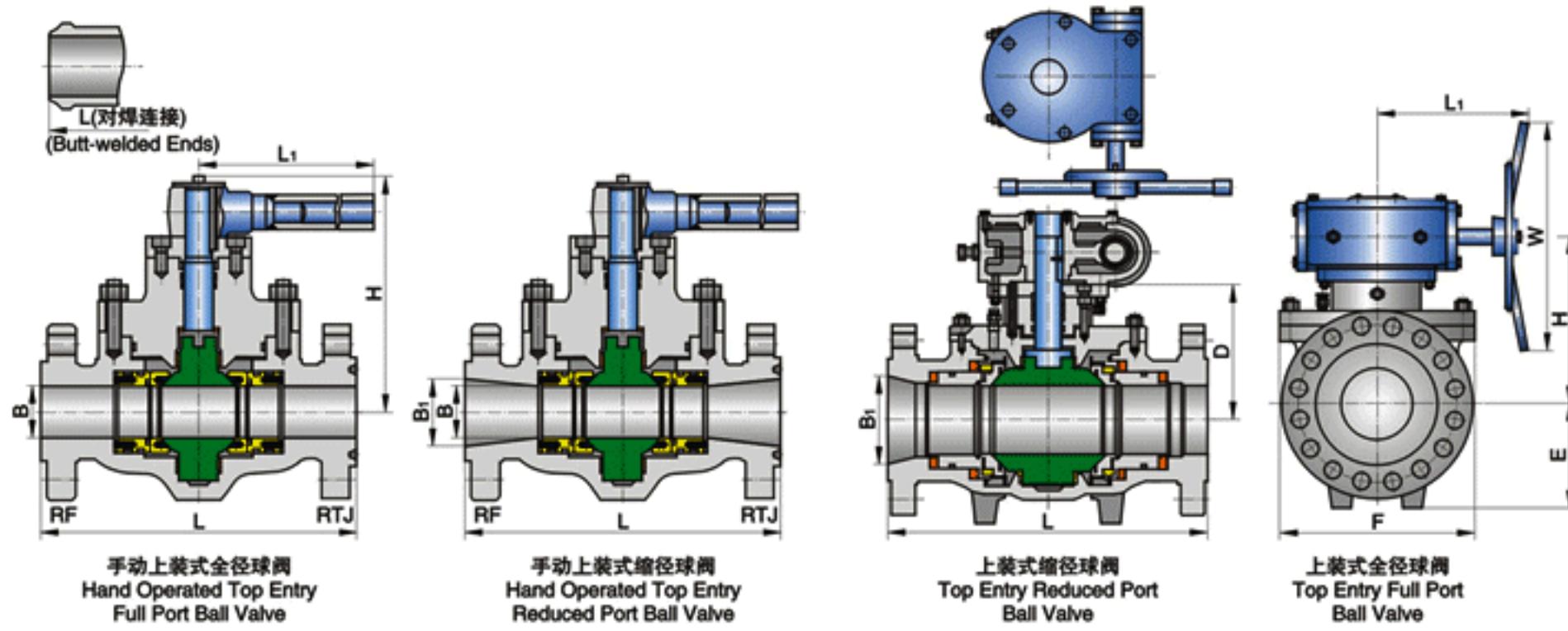
主要外形尺寸 Main Outline Dimensions

Class 1500 全径 Full Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50	2	368	368	371	51	51	-	85	205	179	600	-	52
80	3	470	470	473	77	77	-	120	250	201	1000	-	152
100	4	546	546	549	102	102	240	155	310	295	340	700	280
150	6	705	705	711	146	146	273	240	370	333	545	700	640
200	8	832	832	841	194	194	335	280	455	410	575	700	1180
250	10	991	991	1000	241	241	385	340	565	460	575	700	1500
300	12	1130	1130	1146	289	289	436	400	670	511	575	700	2065
350	14	1257	1257	1276	317	317	485	467	730	575	579	700	2700
400	16	1384	1384	1407	362	362	530	495	790	620	579	700	3980
450	18	1537	1537	1559	407	407	585	520	840	740	950	1400	5325
500	20	1664	1664	1686	457	457	640	639	965	795	950	1400	6800
600	24	2043	2043	2071	534	534	708	640	1145	979	1045	1400	11900

Class 1500 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B ₁	D	E	F	H	L ₁	W	重量 Weight (kg) RF
		RF	BW	RTJ									
50×40	2×1½	368	368	371	38	51	-	85	205	179	450	-	49
80×50	3×2	470	470	473	51	77	-	85	205	179	600	-	98
100×80	4×3	546	546	549	77	102	-	120	250	201	1000	-	205
150×100	6×4	705	705	711	102	146	240	155	310	295	340	700	382
200×150	8×6	832	832	841	146	194	273	240	370	333	545	700	720
250×200	10×8	991	991	1000	194	241	335	280	455	410	575	700	1320
300×250	12×10	1130	1130	1146	241	289	385	340	565	460	575	700	1600
350×250	14×10	1257	1257	1276	241	317	385	340	565	460	575	700	2170
350×300	14×12	1257	1257	1276	317	317	436	400	565	460	575	700	2780
400×300	16×12	1384	1384	1407	289	362	436	400	670	511	575	700	3280
400×350	16×14	1384	1384	1407	317	362	485	467	670	511	579	700	3240



主要外形尺寸 Main Outline Dimensions

Class 2500 全径 Full Port

DN (mm)	NPS (in)	L			B	B1	D	E	F	H	L1	W	重量 Weight(kg) RF
		RF	BW	RTJ									
50	2	451	451	454	44.5	44.5	198	105	270	250	297	300	120
80	3	578	578	584	63.5	63.5	250	127	350	305	340	700	246
100	4	673	673	683	89	89	305	156	400	360	340	700	470
150	6	914	914	927	133	133	355	240	480	430	575	700	937
200	8	1022	1022	1038	181	181	438	280	530	513	575	700	1410
250	10	1270	1270	1292	226	226	530	365	720	620	590	700	2600
300	12	1422	1422	1445	267	267	590	430	860	740	505	620	4200

Class 2500 缩径 Reduced Port

DN (mm)	NPS (in)	L			B	B1	D	E	F	H	L1	W	重量 Weight(kg) RF
		RF	BW	RTJ									
50×40	2×1½	451	451	454	38	44.5	-	93	250	150	600	-	80
80×50	3×2	578	578	584	44.5	63.5	198	105	270	250	297	300	160
100×80	4×3	673	673	683	63.5	89	250	127	350	305	340	700	300
150×100	6×4	914	914	927	89	133	305	156	400	360	340	700	670
200×150	8×6	1022	1022	1038	133	181	355	240	480	430	575	700	1150
250×200	10×8	1270	1270	1292	181	226	438	280	530	513	575	700	2100
300×250	12×10	1422	1422	1445	226	267	530	365	720	620	590	700	3300