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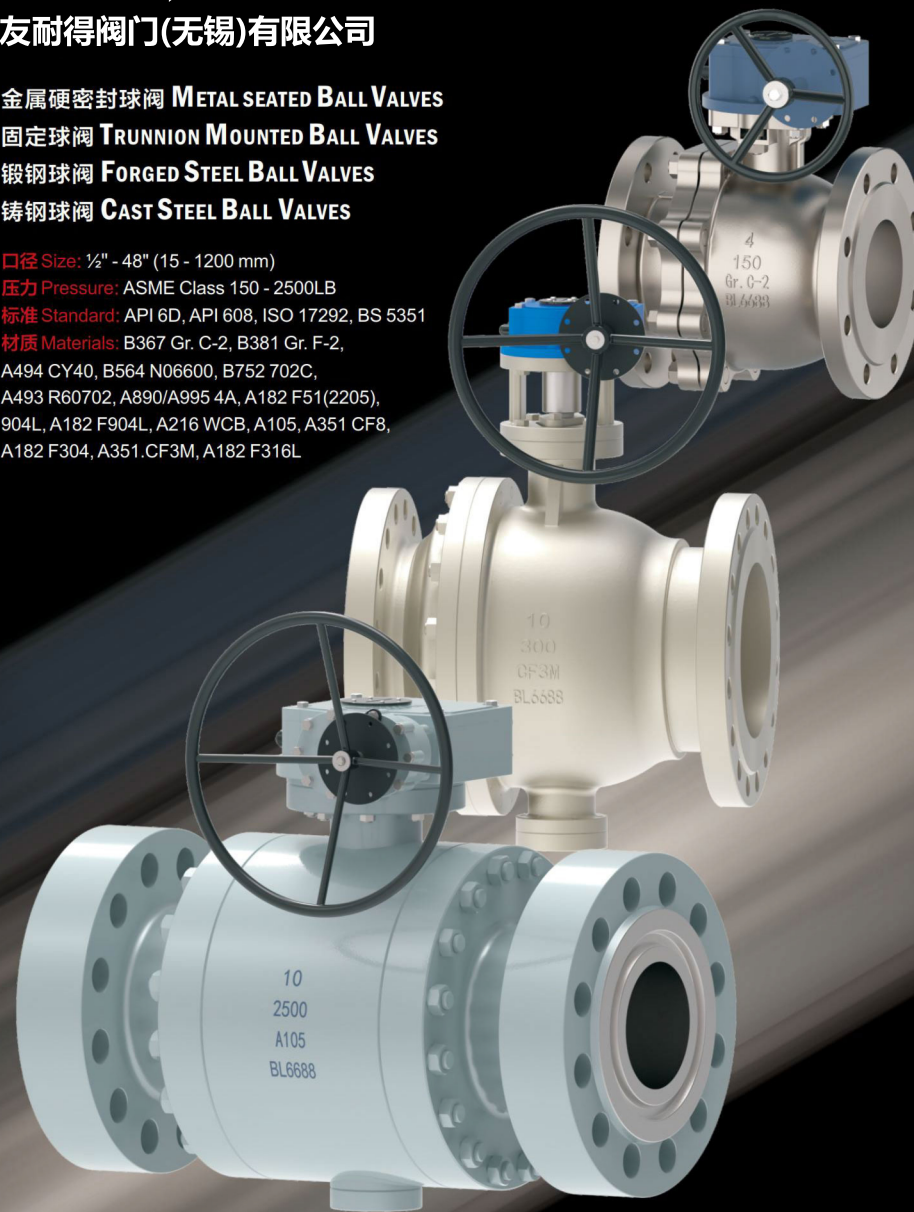
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# YOONAD VALVE (WUXI) CO.,LTD

友耐得阀门(无锡)有限公司

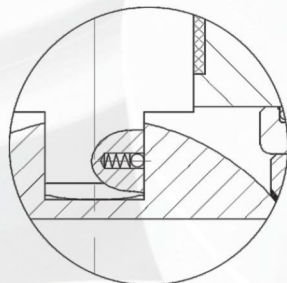
金属硬密封球阀 METAL SEALED BALL VALVES  
 固定球阀 TRUNNION MOUNTED BALL VALVES  
 锻钢球阀 FORGED STEEL BALL VALVES  
 铸钢球阀 CAST STEEL BALL VALVES

口径 Size: ½" - 48" (15 - 1200 mm)  
 压力 Pressure: ASME Class 150 - 2500LB  
 标准 Standard: API 6D, API 608, ISO 17292, BS 5351  
 材质 Materials: B367 Gr. C-2, B381 Gr. F-2,  
 A494 CY40, B564 N06600, B752 702C,  
 A493 R60702, A890/A995 4A, A182 F51(2205),  
 904L, A182 F904L, A216 WCB, A105, A351 CF8,  
 A182 F304, A351.CF3M, A182 F316L



金属阀座球阀的特点 Highlights for Metal Seated Ball Valve

- 浮动或固定结构
  - 整体1-pc、分体式2-pc或3-pc结构
  - 全通径或缩径
  - 防脱阀杆
  - 防静电
  - 防火安全
  - ISO 5211顶部法兰
  - 内腔泄压
- Floating or Trunnion Structure
  - 1-pc, Split 2-pc or 3-pc Constructure
  - Full Bore or Reduced Bore
  - Blow-out Proof Stem
  - Anti-static
  - Fire Safe
  - ISO 5211 Top Flange
  - Self Cavity Pressure Relief



防静电 Anti-static

设计特征 Design Features

密封材料 Sealing Material

高纯柔性石墨具有耐高温、强度高、摩擦系数小、开闭力矩小、密封性能可靠、使用寿命长等优点。  
High purity flexible graphite which has merit of high temperature resistance, good strength, small friction coefficient, small open/close torque, reliable sealing performance, long service.

高温下保护阀门 Protecting Valves under High Temperature

金属阀座球阀采用柔性石墨密封结构，可吸收部件产生的热膨胀。这样可以保证球阀在高温条件下灵活开启和关闭。  
The metal seated ball valve adopt flexible graphite sealing structure which will absorb the thermal expansion come from components. Thus can guarantee the ball valve open and close flexibly under high temperature condition.

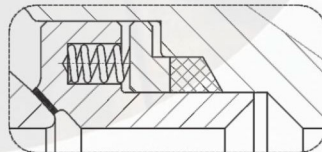
自我清洁阀座 Self-clean Seat

金属阀座球阀通常应用于结晶颗粒工况。一些颗粒容易结晶并粘在表面，导致阀门无法打开和关闭。我们改进了阀座，采用自清洁设计，可以自动去除表面的结晶颗粒，确保阀门能够轻松打开和关闭，并保持良好的密封性能。  
Metal seated ball valve is usually applied to crystalline partical working condition. Some particle easily crystallize and stick in the surface, causing the valve cannot open and close. We improve the seat with self-clean design, which can automatically remove the crystalline particle from the surface to make sure the valve can open and close easily also maintain good sealing performance.

防尘阀座 Dust Proof Seat

我们在阀座弹簧的前后放置密封防尘，以确保阀门能够轻松打开和关闭，并保持良好的密封性能。

We put seal-dust in front and back of seat spring to make sure the valve can open and close easily also maintain good sealing performance.



自我清洁阀座 Self-clean Seat  
防尘阀座 Dust Proof Seat

阀杆防脱 Blow-out Proof Stem

阀杆防脱落的设计可以防止阀杆在正常压力下飞出。  
Blow-out proof stem design can protect against failure under excess pressure.

碟形弹簧设计 Belleville Spring Design

当密封面在工作过程中受到磨损时，这种弹簧可以确保密封圈有足够的预紧力，以保持良好的密封性能。  
When the sealing surface is abrasive wear during operating, this type spring can ensure the sealing ring have enough preload to maintain good sealing performance.

可靠的中部法兰密封性能 Reliable Sealing Performance of Middle Flange of Valve

可靠的密封性能，中间金属+石墨缠绕垫片，用于阀体和阀盖的中间密封。  
Reliable Sealing Performance of Middle Metal + graphite spiral wound gasket for middle sealing of body and bonnet.

防火安全设计 Fire Safe Design

金属对金属密封结构和用于阀杆和阀座填料的柔性石墨材料。可靠的防火密封性能！  
Metal to metal sealed structure and flexible graphite material for packing of stem and seat. Reliable sealing performance in fire!

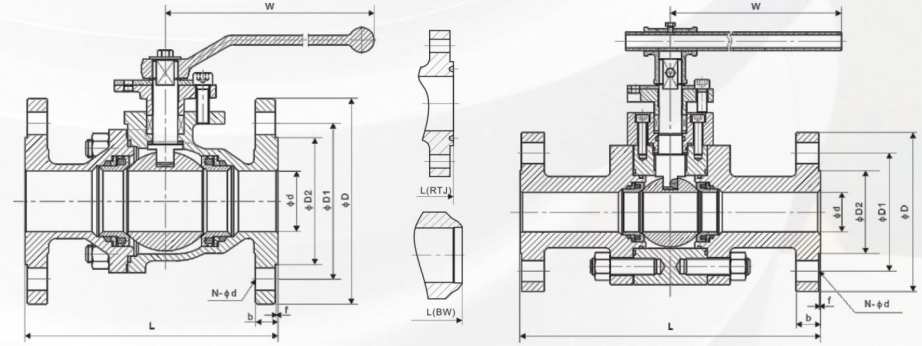
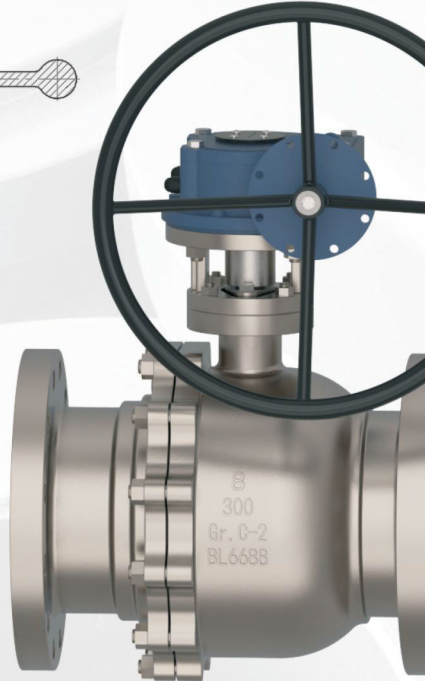
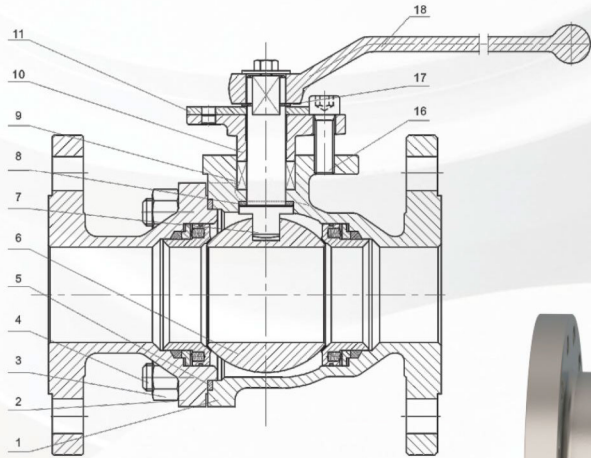
球体和阀座经过固溶处理 Solid Solution Treated Ball & Seat

球阀和阀座毛坯还经过固溶或退火处理，以消除应力，确保材料的机械性能，并减少因加工应力不均匀而引起的变形。我们根据工作条件，采用HOVF和等离子熔覆等先进的加工技术对球阀和阀座进行处理。  
The ball and valve seat blanks are subjected to solid solution or annealing treatment to eliminate stress, ensure the mechanical properties of the material, and reduce deformation caused by uneven processing stress. We use advanced processing techniques such as HOVF and plasma cladding to treat the ball and valve seat according to working conditions.

涂层材料 Coating Material	碳化钨 Tungste Carbide	碳化铬 Chromium Carbide	镍60 Ni60	因科耐尔 Inconel 625	司太立 STL NO.6	司太立 STL NO.20
硬度Hardness	HRC68-72	HRC55-68	HRC55-60	HRC38-40	HRC38-43	HRC50-56
适用温度Applicable 温度Temperature	≤450℃	≤880℃	≤450℃	≤660℃	≤680℃	≤680℃
涂层厚度 Coating Thickness	0.15-1 mm					
强度Strength	70MPa					

可靠性密封性能 Relialbe Sealing Performance

采用高精度数控磨床对滚珠和阀座进行完全匹配，使滚珠和阀座表面具有较高的圆度和光洁度。  
Using high precision CNC grinding machine to match the ball and seat completely mach and get high circular and finish degree for the surface of ball and seat.



球阀系列BALL VALVE SERIES A

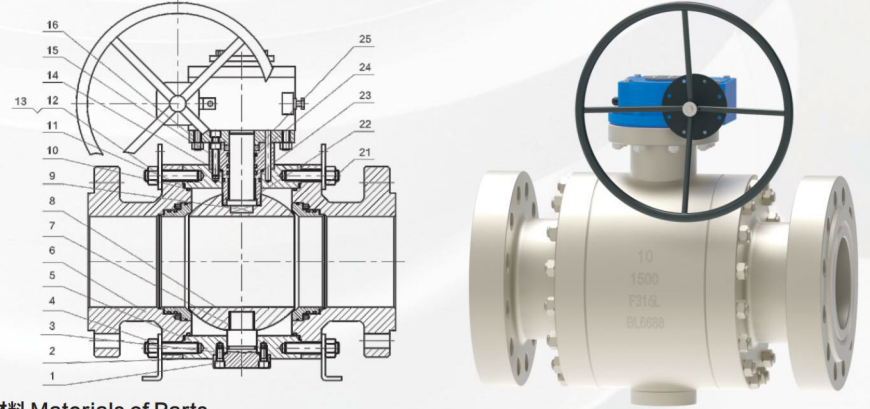
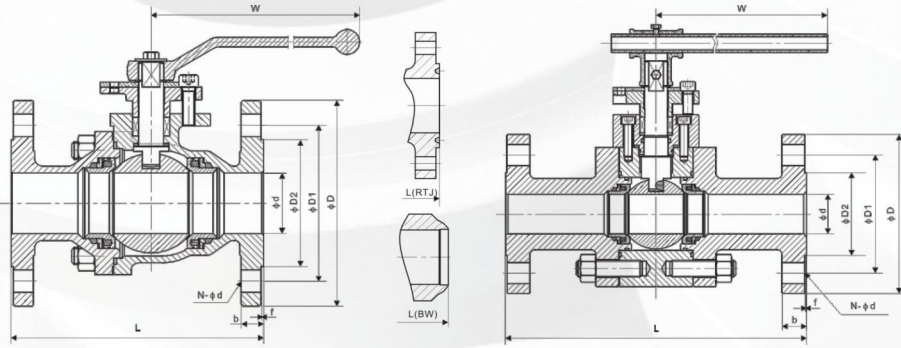
球阀系列BALL VALVE SERIES A

部件材料 Materials of Parts

序号 No	部件名称 Part Name	材料 Material		
		钛Titanium Gr.2	蒙乃尔Monel 400	SS316
1	阀体Body	B367 Gr. C-2	蒙乃尔Monel 400	A351 CF8M
2	阀盖Bonnet	B367 Gr. C-2	蒙乃尔Monel 400	A351 CF8M
3	螺栓Bolt	A193 B8M	A193 B8M	A193 B8M
4	螺母Nut	A194 8M	A194 8M	A194 8M
5	垫片Gasket	钛Titanium+石墨Graphite	蒙乃尔Monel+石墨Graphite	316+石墨Graphite
6	球体Ball	B381 Gr. F-2+CRWC	B564 N04400	A182 F316+STL
7	阀杆Stem	B381 Gr. F-2	B564 N04400	A182 F316
8	止推垫Thrust washer	PPL	PPL	PPL
9	填料Packing	石墨Graphite	石墨Graphite	石墨Graphite
10	填料压盖Packing Gland	A351 CF8M	A351 CF8M	A351 CF8M
11	定位片Positioning Piece	CF8	CF8	CF8
12	阀座Seat	B381 Gr. F-2+CRWC	B564 N04400	A182 F316+STL
13	弹簧Spring	因科耐尔Inconel X 750	因科耐尔Inconel X 750	SS316
14	弹簧座Spring Seat	B381 Gr. F-2	B564 N04400	A182 F316
15	密封圈Sealing Ring	石墨Graphite	石墨Graphite	石墨Graphite

尺寸 Dimensions

口径 Size	尺寸 Dimensions(mm)										重量Weight(kg)	
	L			d	D	D1	D2	b	f	N-φd	W	普通 General
Class 150												
1/2"	108	/	140	13	90	60.5	35	9	2	4-φ16	140	2.3
3/4"	117	/	152	19	100	70	43	10	2	4-φ16	140	3
1"	127	/	165	25	110	79.5	51	11	2	4-φ16	140	4.5
1 1/4"	140	/	178	32	115	89	64	11	2	4-φ16	180	5.5
1 1/2"	165	/	190	38	125	98.5	73	13	2	4-φ16	180	7
2"	178	191	216	50	150	120.5	92	14.5	2	4-φ19	200	9.5
3"	203	216	283	75	190	152.5	127	17.5	2	4-φ19	300	19
4"	229	241	305	100	230	190.5	157	22.5	2	8-φ19	650	33
Class 300												
1/2"	140	/	140	13	95	66.5	35	13	2	4-φ16	140	2.5
3/4"	152	/	152	19	115	82.5	43	14.5	2	4-φ19	140	3.5
1"	165	/	165	25	125	89	51	16	2	4-φ19	140	5.5
1 1/4"	178	/	178	32	135	98.5	64	17.5	2	4-φ19	180	8
1 1/2"	190	/	190	38	155	114.5	73	19.5	2	4-φ22	180	10.5
2"	216	132	216	50	165	127	92	21	2	8-φ19	200	15
3"	283	298	283	75	210	168.5	127	27	2	8-φ22	300	30
4"	305	321	305	100	255	200	157	30.5	2	8-φ22	650	55
Class 600												
1/2"	165	/	165	13	95	66.5	35	14.5	7	4-φ16	140	3.5
3/4"	190	/	190	19	115	82.5	43	16	7	4-φ19	140	6.5
1"	216	/	216	25	125	89	51	17.5	7	4-φ19	180	8.8
1 1/4"	229	/	229	32	135	98.5	64	21	7	4-φ19	200	10.5
1 1/2"	241	/	241	38	155	114.5	73	22.5	7	4-φ22	250	13.5
2"	292	295	292	50	165	127	92	26	7	8-φ19	300	△
3"	356	359	356	75	210	168.5	127	32	7	8-φ22	650	△



球阀系列 BALL VALVE SERIES

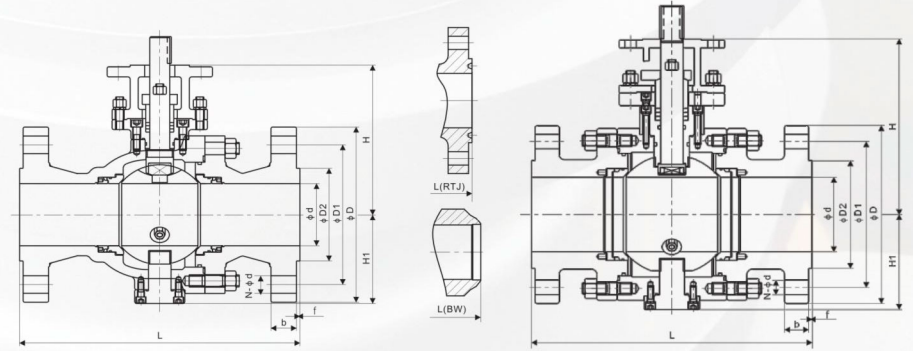
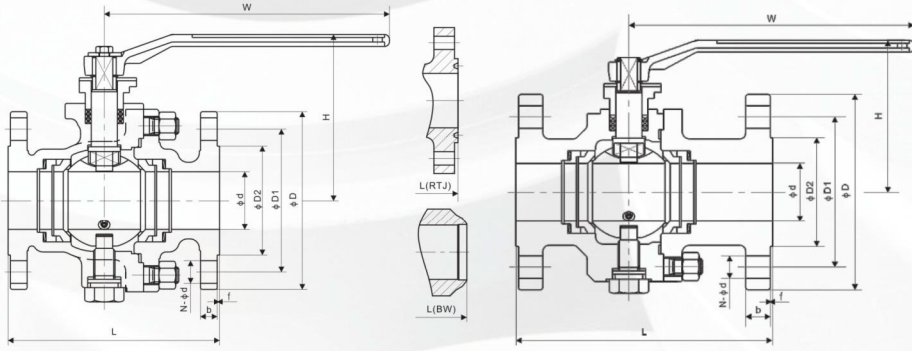
球阀系列 BALL VALVE SERIES

尺寸 Dimensions

口径 Size	尺寸 Dimensions(mm)										重量 Weight(kg) 普通 General
	L			d	D	D1	D2	b	f	N-φd	
	RF	RTJ	BW								
Class 150											
4"	229	241	305	100	230	190.5	157	22.5	2	8-φ19	33
6"	394	406	457	150	280	241.5	216	24	2	8-φ22	96
8"	457	470	521	201	345	298.5	270	27	2	8-φ22	160
Class 300											
4"	305	321	305	100	255	200	157	30.5	2	8-φ19	55
6"	403	419	457	150	320	270	216	35	2	12-φ22	118
8"	502	818	521	201	380	330	270	40	2	12-φ25	200
Class 600											
4"	432	435	432	100	275	216	157	38.5	7	8-φ25	△
6"	559	562	559	150	355	292	216	48	7	12-φ29	△
8"	660	664	660	201	420	349	270	56	7	12-φ32	△

部件材料 Materials of Parts

序号 No	部件名称 Part Name	材料 Material		
		SS316	超级双相钢 Super Duplex	904L
1	内六角 Hexagon	A193 B8M	A193 B8M	A193 B8M
2	端盖 End Cap	B381 Cr. F-2	A182 F904L	A182 F316L
3	金属垫 Metal Gasket	Inconel 625+石墨 Graphite	Inconel 625+石墨 Graphite	316L+石墨 Graphite
4	支撑脚 Support Foot	A3+ENP	A3+ENP	A3+ENP
5	阀体 Body	B381 Cr. F-2	A182 F904L	A182 F316L
6	阀盖 Bonnet	B381 Cr. F-2	A182 F904L	A182 F316L
7	轴承 Bearing	钛 Titanium	904L	316L
8	球体 Ball	B381 Cr. F-2	A182 F904L	A182 F316L
9	阀杆 Stem	B381 Cr. F-2	A182 F904L	A182 F316L
10	O型圈 O-ring	VITON	VITON	VITON
11	金属垫 Metal Gasket	Inconel 625+石墨 Graphite	Inconel 625+石墨 Graphite	316L+石墨 Graphite
12	螺栓 Bolt	A193 B8M	A193 B8M	A193 B8M
13	螺母 Nut	A194 8M	A194 8M	A194 8M
14	填料座 Packing Seat	B381 Cr. F-2	A182 F904L	A182 F316L
15	内六角 Hexagon	A193 B8M	A193 B8M	A193 B8M
16	连接盘 Connecting Plate	B381 Cr. F-2	A182 F904L	A182 F316L
17	阀座 Seat	B381 Cr. F-2	A182 F904L	A182 F316L
18	防尘挡圈 Dust Retaining Ring	石墨 Graphite	石墨 Graphite	石墨 Graphite
19	弹簧 Spring	Inconel X 750	Inconel X 750	Inconel X 750
20	O型圈 O-ring	VITON	VITON	VITON
21	吊耳 Ear	A3+ENP	A3+ENP	A3+ENP
22	轴承 Bearing	Titanium	904L	316L
23	轴承 Bearing	Titanium	904L	316L
24	O型圈 O-ring	VITON	VITON	VITON
25	填料 Packing	石墨 Graphite	石墨 Graphite	石墨 Graphite

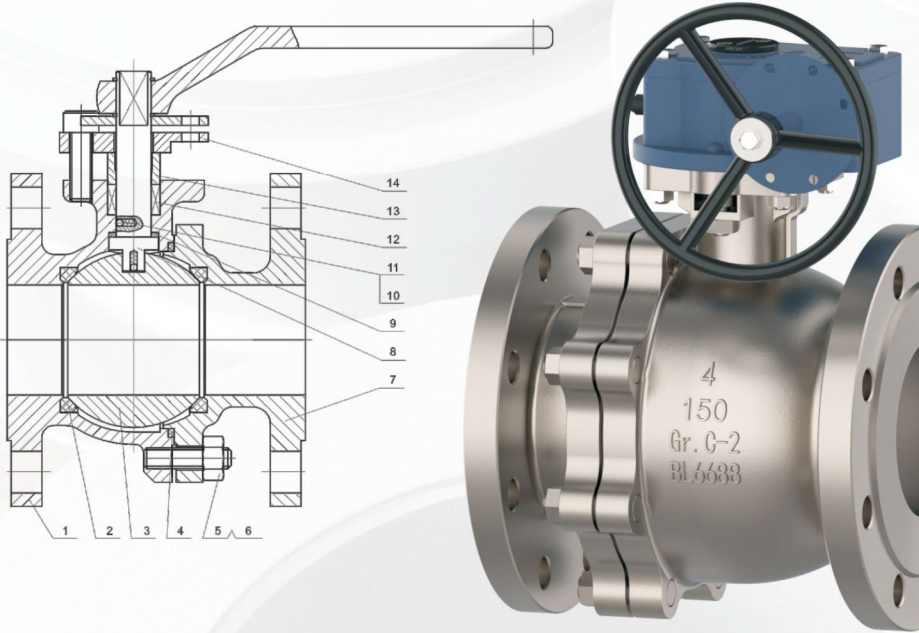


尺寸 Dimensions

口径 Size	尺寸 Dimensions(mm)											重量 Weight(kg)
	L			d	D	D1	D2	b	f	N-φd	W	普通 General
	RF	RTJ	BW									
Class 150												
2"	178	191	216	50	150	120.5	92	14.5	2	4-φ19	200	14
3"	203	216	283	75	190	152.5	127	17.5	2	4-φ19	300	26
4"	229	271	305	100	230	190.5	157	22.5	2	8-φ19	650	45
Class 300												
2"	216	232	216	50	165	127	92	21	2	8-φ19	200	17
3"	283	298	283	75	210	168.5	127	27	2	8-φ22	300	35
4"	305	321	305	100	255	200	157	30.5	2	8-φ22	650	55
Class 600												
2"	292	295	292	50	165	127	92	26	7	8-φ19	300	28
3"	356	359	356	75	210	168.5	127	32	7	8-φ22	300	55
Class 900												
2"	368	371	368	50	215	165	124	38.5	7.92	8-φ25	650	△
3"	381	384	381	75	240	190.5	156	38.5	7.92	8-φ25	800	△

尺寸 Dimensions

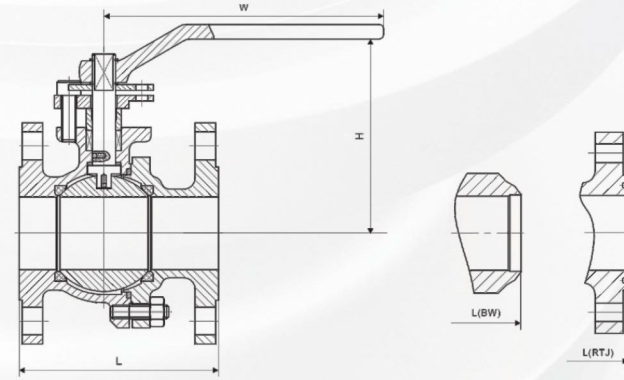
口径 Size	尺寸 Dimensions(mm)											重量 Weight(kg)
	L			d	D	D1	D2	b	f	N-φd	普通 General	
	RF	RTJ	BW									
Class 150												
6"	394	406	457	150	280	241.5	216	24	2	8-φ22	120	
8"	457	470	521	201	345	298.5	270	27	2	8-φ22	300	
10"	533	546	559	252	405	362	324	29	2	12-φ25	315	
12"	610	622	635	303	485	432	381	30.5	2	12-φ25	500	
14"	686	699	762	334	535	476	413	33.5	2	12-φ29	670	
16"	762	775	838	385	595	540	470	35	2	16-φ29	900	
18"	864	876	914	436	635	578	533	38.5	2	16-φ32	1080	
20"	914	927	991	487	700	635	587	41.5	2	20-φ32	1560	
Class 300												
6"	403	419	457	150	320	270	216	35	2	12-φ22	160	
8"	502	518	521	201	380	330	270	40	2	12-φ25	260	
10"	568	584	559	252	445	387.5	324	46.5	2	16-φ29	380	
12"	648	664	635	303	520	451	381	49.5	2	16-φ32	570	
14"	762	778	762	334	585	514.5	413	52.5	2	20-φ32	750	
16"	838	854	838	385	650	571.5	470	56	2	20-φ35	1120	
18"	914	930	914	436	710	682.5	533	59	2	24-φ35	1460	
20"	991	1010	991	487	775	686	584	62	2	24-φ35	2030	
Class 600												
4"	432	435	432	100	275	216	157	38.5	7	8-φ25	102	
6"	559	562	559	150	355	292	216	48	7	12-φ29	250	
8"	660	664	660	201	420	349	270	56	7	12-φ32	430	
10"	787	791	787	252	510	432	324	64	7	16-φ35	680	
12"	838	841	838	303	560	489	381	67	7	20-φ35	985	
14"	889	892	889	334	605	527	413	70	7	20-φ39	1002	
16"	991	994	991	385	685	603	470	77	7	20-φ41	1160	
18"	1092	1095	1092	436	745	654	533	83	7	20-φ44	1611	
20"	1194	1200	1194	487	815	724	584	89	7	24-φ44	2985	
Class 900												
4"	457	460	457	100	290	235	181	45	7.92	8-φ32	△	
6"	610	613	610	150	380	317.5	241	56	7.92	12-φ32	△	
8"	737	740	797	201	470	393.5	305	64	7.92	12-φ39	△	
10"	838	841	838	252	545	470	362	70	7.92	16-φ39	△	
12"	965	968	965	303	610	533.5	419	79.5	7.92	20-φ39	△	
14"	1029	1038	1029	322	640	559	467	86	11.13	20-φ42	△	
16"	1130	1140	1130	373	705	616	524	89	11.13	20-φ45	△	
18"	1219	1232	1219	423	785	686	594	102	12.7	20-φ51	△	
20"	1321	1334	1321	471	855	749.5	648	108	12.7	20-φ54	△	



球阀系列BALL VALVE SERIES A

部件材料 Materials of Parts

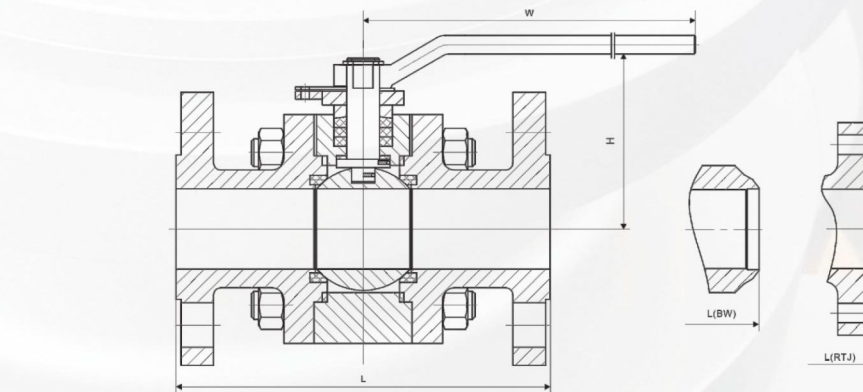
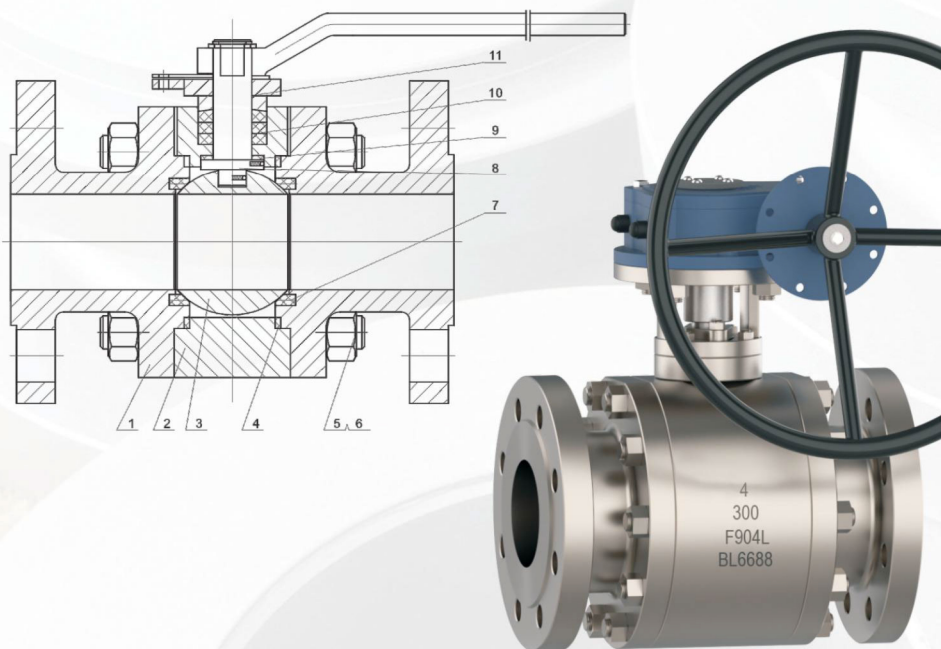
序号 No	部件名称 Part Name	材料 Material		
		钛Titanium	ALLOY 20	254SMO
1	阀体Body	B367 Gr.C-2	A351 CN7M	A351 CK3MCuN
2	阀座圈Seat ring	PTFE	PTFE	PTFE
3	球体Ball	B381 Gr.F-2	B462 N08020	A182 F44
4	垫片Gasket	钛Titanium+石墨Graphite	Alloy20+石墨Graphite	254SMO+石墨Graphite
5	螺栓Bonnet bolt	A193 B8M	A193 B8M	A193 B8M
6	螺母Bonnet Nut	A194 8M	A194 8M	A194 8M
7	阀盖Bonnet	B381 Gr.C-2	A351 CN7M	A351 CK3MCuN
8	阀杆Stem	B381 Gr.F-2	B462 N08020	A182 F44
9	密封圈Sealing Ring	PTFE	TPFE	TPFE
10	球体Ball	B381 Gr.F-2	B462 N08020	A182 F44
11	弹簧Spring	Inconel X750	Inconel X750	Inconel X750
12	填料Packing	PTFE/石墨Graphite	PTFE/石墨Graphite	PTFE/石墨Graphite
13	压盖Gland Bushing	B348 Gr.2	B462 N08020	A182 F44
14	压盖法兰Gland flange	A351 CF8M	A351 CF8M	A351 CF8M



尺寸 Dimensions

口径 Size	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
Class 150													
L(RF)	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	in
	108	117	127	165	178	190	203	229	394	457	533	610	mm
L(BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.75	3.50	4.12	6.12	7.25	8.00	10.00	11.00	13.50	16.50	in
	55	55	70	90	105	155	185	205	255	280	345	420	mm
W	5	5	6	8	14	16	20	20	24	32	32	32	in
	130	130	160	200	350	400	500	500	600	800	800	800	mm
重量(kg)	2.3	3	4.5	7	9.5	15	19	33	93	160	200	280	RF
Weight	1.8	2.8	3.7	6.2	8.5	14	21	35	98	170	225	295	BW
Class 300													
L(RF)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	in
	140	152	165	190	216	241	283	305	403	502	568	648	mm
L(BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.75	3.50	4.12	6.12	7.25	8.00	10.00	11.00	13.50	16.50	in
	55	55	70	90	105	153	187	206	255	280	345	420	mm
W	5	5	6	8	14	16	20	20	24	32	32	32	in
	130	130	160	200	350	400	500	500	600	800	800	800	mm
重量(kg)	2.5	3.5	5.5	10.5	14.5	23.5	30	55	118	200	250	330	RF
Weight	1.8	2	3.2	5.5	8.7	15	18	36	85	152	182	232	BW
Class 600													
L	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	-	-	-	in
(RF/BW)	165	190	216	241	292	330	356	432	559	-	-	-	mm
L(RTJ)	-	-	-	-	11.62	13.12	14.12	17.12	22.12	-	-	-	in
	-	-	-	-	295	333	359	435	562	-	-	-	mm
H	2.38	2.38	3.00	4.00	4.75	6.88	8.38	9.25	11.38	-	-	-	in
	61.5	61.5	78	101	120	174	212	234	289	-	-	-	mm
W	5	6	8	14	16	20	24	24	32	-	-	-	in
	130	160	200	350	400	500	600	600	800	-	-	-	mm
重量(kg)	3.3	4.5	7.2	13.5	19	31	39	71	153	-	-	-	RF
Weight	2.6	3.1	4.8	8	3	22	27	53	120	-	-	-	BW

球阀系列BALL VALVE SERIES A



球阀系列BALL VALVE SERIES A

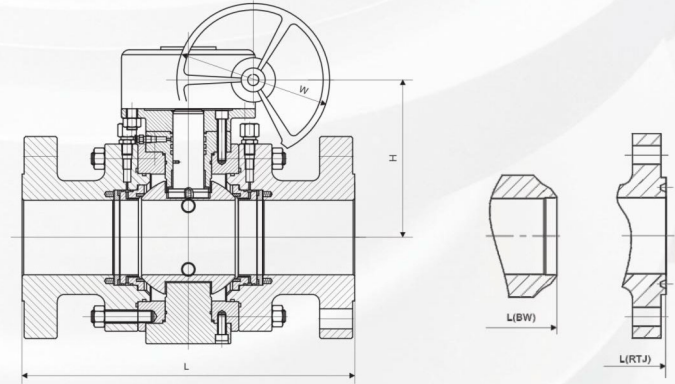
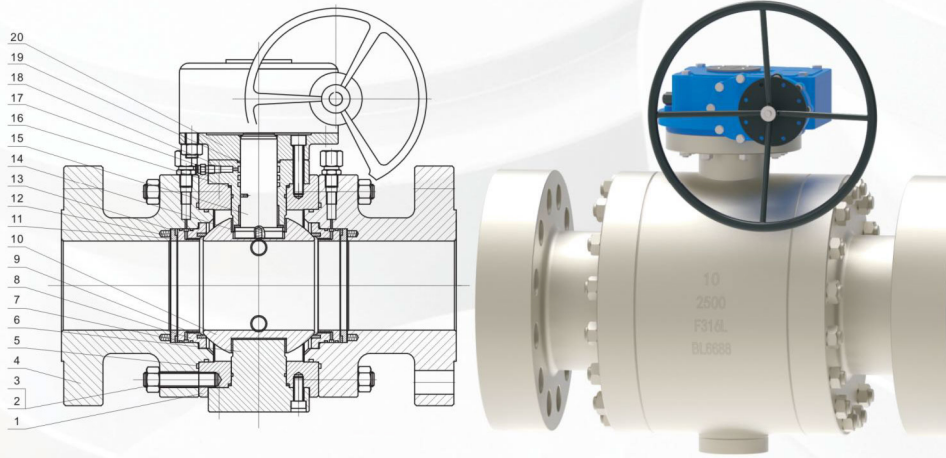
球阀系列BALL VALVE SERIES A

### 部件材料 Materials of Parts

序号 No	部件名称 Part Name	材料 Material		
		904L	镍Nickel200	Incoloy 825
1	阀盖 Bonnet	F904L	B564 N02200	B564 N08825
2	阀体 Body	F904L	B564 N02200	B564 N08825
3	球体 Ball	F904L	B564 N02200	B564 N08825
4	垫片 Gasket	904L+石墨Graphite	镍Nickel200+石墨Graphite	镍基Incoloy 825+石墨Graphite
5	螺栓 Bonnet bolt	A193 B8M	A193 B8M	A193 B8M
6	螺母 Bonnet Nut	A194 8M	A194 8M	A194 8M
7	阀座圈 Seat ring	PTFE	PTFE	PTFE
8	阀杆 Stem	F904L	B564 N02200	B564 N08825
9	密封圈 Sealing Ring	PTFE	TPFE	TPFE
10	填料 Packing	PTFE/石墨Graphite	PTFE/石墨Graphite	PTFE/石墨Graphite
11	压盖法兰 Gland flange	A182 F316	A182 F316	A182 F316

### 尺寸 Dimensions

口径 Size	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in mm
Class 150													
L(RF)	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	in
	108	117	127	165	178	190	203	229	394	457	533	610	mm
L(BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.50	3.38	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	in
	55	55	65	85	100	150	180	235	250	280	320	390	mm
W	8	8	12	12	166	16	24	24	24	24	32	32	in
	200	200	300	300	400	400	600	600	600	600	800	800	mm
重量(kg)	3.1	4.1	6	9.5	12.8	20	26	45	126	216	270	378	RF
Weight	2.6	3.9	5.2	8.7	11.8	19	28	47	131	226	295	393	BW
Class 300													
L(RF)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	in
	140	152	165	190	216	241	283	305	403	502	568	648	mm
L(BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.50	3.38	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	in
	55	55	65	85	100	150	180	235	250	280	320	390	mm
W	8	8	12	12	10	12	14	19	24	24	32	32	in
	200	200	300	300	250	300	350	480	600	600	800	800	mm
重量(kg)	3.5	4.6	6.7	10.5	14.5	22	29	50	141	242	302	423	RF
Weight	2.8	3.1	4.4	5.5	8.7	13.5	17	31	108	194	234	325	BW
Class 600													
L	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	-	-	-	in
(RF/BW)	165	190	216	241	292	330	356	432	559	-	-	-	mm
L(RTJ)	-	-	-	-	11.62	13.12	14.12	17.12	22.12	-	-	-	in
	-	-	-	-	295	333	359	435	562	-	-	-	mm
H	2.25	2.25	2.62	3.50	4.12	6.25	7.50	9.75	10.38	-	-	-	in
	58	58	68	89	105	158	190	247	262	-	-	-	mm
W	8	12	12	16	16	24	24	24	32	-	-	-	in
	200	300	300	400	400	600	600	600	800	-	-	-	mm
重量(kg)	4.5	5.5	8	12.5	18	27	35	61	172	-	-	-	RF
Weight	3.8	4.1	5.6	7	12	18	23	43	139	-	-	-	BW



球阀系列BALL VALVE SERIES A

球阀系列BALL VALVE SERIES A

### 部件材料 Materials of Parts

序号 No	部件名称 Part Name	材料 Material		
		SS316	双相钢S31803	锆Zirconium 702
1	阀体Body	A182 F316L	A182 F51	A493 R607020
2	螺栓Bolt	A193 B8M	A193 B8M	A193 B8M
3	螺母Nut	A194 8M	A194 8M	A194 8M
4	阀盖Bonnet	A182 F316L	A182 F51	A493 R607020
5	垫片Gasket	SS316+石墨Graphite	双相钢S31803+石墨Graphite	锆Zirconium 702+石墨Graphite
6	阀杆Stem	A182 F316L	A182 F51	A493 R607020
7	O型圈O-ring	FKM	FKM	FKM
8	阀座Seat	A182 F316L	A182 F51	A493 R607020
9	阀座镶件Seat Insert	PTFE	PTFE	PTFE
10	球体Ball	A182 F316L+STL	A182 F51+STL	A493 R607020+STL
11	弹簧座Block	A182 F316L	A182 F51	A493 R607020
12	弹簧Spring	S.S	Inconel X750	Inconel X750
13	垫片Gasket	石墨Graphite	石墨Graphite	石墨Graphite
14	轴承Bearing	PTFE	PTFE	PTFE
15	阀杆Stem	A182 F316L	A182 F51	A493 R607020
16	O型圈O-ring	FKM	FKM	FKM
17	注入塞Inject plug	S.S	SS	SS
18	填料箱Stuff Box	A182 F316L	A182 F51	A493 R607020
19	填料Packing	石墨Graphite	石墨Graphite	石墨Graphite
20	压盖法兰盘Plate	A182 F316L	A182 F316L	A182 F316L

### 尺寸 Dimensions

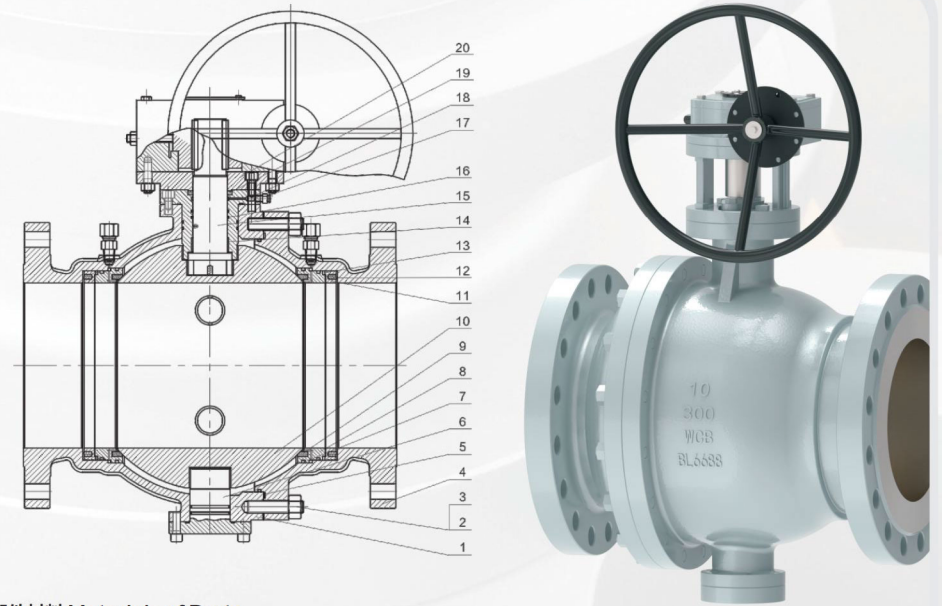
口径Size	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
Class 150																			
L(RF)	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	45.00	49.00	51.00	54.00	60.00	in
L(BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00	mm
H	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	38.50	in
W	16	16	24	24	24	24	32	32	32	32	32	32	40	40	40	40	40	40	mm
重量(kg) Weight	400	400	600	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000	1000	1000	mm
	28	35	55	80	190	290	445	570	780	1520	2300	2500	3950	4890	6300	7100	8950	13500	RF
	25	28	49	71	182	277	553	553	747	1481	2266	2460	3904	4939	6362	8149	9000	13570	BW
Class 300																			
L(RF)	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-	in
L(BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-	mm
H	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	-	in
W	16	16	24	24	24	24	32	32	32	32	32	32	40	40	40	40	40	-	mm
重量(kg) Weight	30	40	60	90	200	325	490	690	900	1810	2620	2860	4430	5430	6810	7655	9590	-	RF
	24	31	49	72	169	280	424	59	872	1665	2440	2635	4075	4880	6225	7115	9230	-	BW

### 尺寸 Dimensions

口径Size	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	in
Class 600																
L	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00	57.00	61.00	in
(RF/BW)	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	mm
L(RTJ)	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38	57.50	61.50	in
	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	mm
H	6.50	7.00	7.88	11.00	12.25	14.00	16.12	18.00	19.25	21.00	24.88	25.62	30.12	31.88	34.62	in
	165	180	200	280	310	355	410	455	490	535	630	650	765	810	880	mm
W	16	24	24	24	32	32	32	32	32	32	40	40	40	40	40	in
重量(kg) Weight	400	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000	1000	mm
	34	53	65	125	245	505	640	910	1380	2250	3400	3850	4900	6700	8300	RF
	27	43	49	95	188	418	495	740	1185	1960	3050	3406	4275	6025	7590	BW

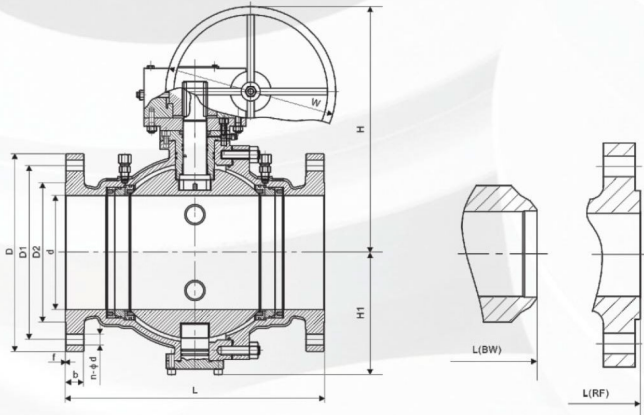
### 尺寸 Dimensions

口径 Size	2	2½	3	4	6	8	10	12	14	16	18	20	24	in mm
<b>Class 900</b>														
L/L1 (RF/BW)	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.00	in
	368	419	381	457	610	737	965	965	1029	1130	1219	1321	1549	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	29.12	38.12	38.12	40.88	44.88	48.50	52.50	61.75	in
	371	422	384	460	613	740	968	968	1038	1140	1232	1334	1568	mm
H	6.72	7.50	8.25	11.38	12.62	15.38	18.50	18.50	20.88	24.00	26.00	27.50	30.75	in
	170	190	210	290	320	390	470	470	530	610	660	700	780	mm
W	24	24	24	32	32	32	32	32	32	40	40	40	40	in
	600	600	600	800	800	800	800	500	800	1000	1000	1000	1000	mm
重量(kg) Weight	45	65	73	135	360	650	1350	1350	1890	3100	4300	4950	7100	RF/RTJ
	37	53	56	98	291	545	1145	1145	1650	2750	3875	4410	6485	BW
<b>Class 1500</b>														
L/L1 (RF/BW)	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	-	-	-	in
	368	419	470	546	705	832	991	1130	1257	1384	-	-	-	mm
L2 (RTJ)	14.62	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38	-	-	-	in
	371	422	473	549	711	841	1000	1146	1276	1407	-	-	-	mm
H	6.75	7.50	8.25	11.38	13.00	15.75	17.38	22.00	25.25	27.12	-	-	-	in
	170	190	210	290	330	400	440	560	640	690	-	-	-	mm
W	24	24	32	32	32	32	32	40	40	40	-	-	-	in
	600	600	800	800	800	800	800	1000	1000	1000	-	-	-	mm
重量(kg) Weight	55	75	95	150	540	880	1360	1980	3100	4650	-	-	-	RF/RTJ
	40	55	65	115	420	685	1025	1555	2600	3930	-	-	-	BW
<b>Class 2500</b>														
L/L1 (RF/BW)	17.75	20.00	22.75	26.50	36.00	40.25	50.00	56.00	-	-	-	-	-	in
	451	508	578	673	914	1022	1270	1422	-	-	-	-	-	mm
L2 (RTJ)	17.88	21.25	23.00	26.88	36.50	40.88	50.88	56.88	-	-	-	-	-	in
	454	540	584	683	927	1038	1292	1445	-	-	-	-	-	mm
H	7.50	9.00	11.00	14.12	15.75	18.88	20.50	26.38	-	-	-	-	-	in
	190	230	280	360	400	480	520	670	-	-	-	-	-	mm
W	24	32	32	32	32	40	40	40	-	-	-	-	-	in
	600	800	800	800	800	1000	1000	1000	-	-	-	-	-	mm
重量(kg) Weight	68	95	120	185	675	1100	1650	2300	-	-	-	-	-	RF/RTJ
	57	74	91	122	555	918	1355	1950	-	-	-	-	-	BW



### 部件材料 Materials of Parts

序号 No	部件名称 Part Name	材料 Material		
		WCB	Inconel 625	Titanium TA2
1	阀体Body	A216 WCB	A494 CW6MC	GB/T6614 ZTA2
2	螺栓Bolt	A193 B7	A193 B8M	A193 B8M
3	螺母Nut	A194 2H	A194 8M	A194 8M
4	阀盖Bonnet	A216 WCB3	A494 CW6MC	GB/T6614 ZTA2
5	垫片Gasket	S. S+石墨Graphite	英科耐尔Inconel 625+石墨Graphite	钛Titanium+石墨Graphite
6	固定轴Fixed shaft	A105	B564 N06625	GB/T25137 F-2
7	O型圈O-ring	Viton	FKM	FKM
8	阀座Seat	A105	B564 N06625	GB/T25137 F-2
9	阀座镶嵌件Seat Insert	PTFE	PTFE	PTFE
10	球体Ball	A105+ENP	B564 N06625	GB/T25137 F-2
11	弹簧座Block	A105	B564 N06625	GB/T25137 F-2
12	弹簧Spring	S. S	Inconel X750	Inconel X750
13	垫片Gasket	石墨Graphite	石墨Graphite	石墨Graphite
14	轴承Bearing	PTFE	PTFE	PTFE
15	阀杆Stem	A276 420	B408 N08800	GB/T2965 TA2
16	O型圈O-ring	Viton	FKM	FKM
17	注入塞Inject plug	C. X	SS	SS
18	填料箱Stuff box	A105	B564 N06625	GB/T25137 F-2
19	填料Packing	石墨Graphite	石墨Graphite	石墨Graphite
20	压盖法兰盘Plate	A216 WCB	A182 F316L	A182 F316L



尺寸 Dimensions

口径 Size	尺寸 Dimensions(mm)													重量 Weight (kg)
	L		d	D	D1	D2	b	f	N-φd	H	H1	W		
RF	BW													
Class 150														
4	229	305	102	229	190.5	157	24	1.6	8-19	330	135	300	60	
5	356	381	127	254	216	186	24	1.6	8-22	360	165	300	80	
6	394	457	152	279	241.5	216	25.5	1.6	8-22	392	193	300	101	
8	457	521	203	343	298.5	270	29	1.6	8-22	492	240	300	166	
10	533	559	254	406	362	324	31	1.6	12-25	548	293	300	283	
12	610	635	305	483	432	381	32	1.6	12-25	688	340	400	463	
14	686	762	337	533	476	413	35	1.6	12-29	722	372	400	622	
16	762	838	387	597	540	470	37	1.6	16-29	722	415	400	900	
18	864	914	438	635	578	533	40	1.6	19-32	804	462	500	1150	
20	914	991	489	699	635	584	43	1.6	20-32	952	511	600	1360	
24	1067	1143	591	813	749.5	692	48	1.6	20-35	1154	604	750	2514	
26	1143	1245	633	786	744.5	711	40	1.6	36-22	1300	700	750	3200	
28	1245	1346	684	837	795.4	762	43	1.6	40-22	1550	780	750	4000	
30	1295	1397	735	887	846	813	43	1.6	44-22	1650	830	750	4800	
32	1372	1524	779	941	900	864	44	1.6	48-22	1740	870	750	5800	
36	1524	1727	874	1057	1009.5	972	51	1.6	44-26	1950	970	750	8000	
Class 300														
4	305	305	102	254	200	157	32	1.6	8-22	340	140	300	70	
5	381	381	127	279	235	186	35	1.6	8-22	370	170	300	95	
6	403	457	152	318	270	216	37	1.6	12-22	402	192	300	128	
8	502	521	203	381	330	270	41.5	1.6	12-25	498	246	300	234	
10	568	559	254	445	387.5	324	48	1.6	16-29	655	303	400	403	
12	648	635	305	521	415	381	51	1.6	16-32	658	348	400	602	
14	762	762	337	584	514.5	413	54	1.6	20-32	686	378	400	803	
16	838	838	387	648	571.5	470	58	1.6	20-35	880	429	600	1273	
18	914	914	438	711	628.5	533	61	1.6	24-35	1050	518	750	1450	
20	991	991	489	775	686	584	64	1.6	24-35	1110	540	750	1700	
24	1143	1143	591	914	813	692	70	1.6	24-41	1400	650	750	3100	
26	1245	1245	633	867	803.5	737	87	1.6	32-35.5	1500	750	750	4500	
28	1346	1346	684	921	857	787	87	1.6	36-35.5	1600	800	750	6000	
30	1397	1397	735	991	921	845	92	1.6	36-39	1720	860	750	7500	
32	1524	1524	779	1054	978	902	102	1.6	32-42	1800	900	750	9000	
36	1727	1727	874	1172	1089	1010	102	1.6	32-45	2200	1020	800	12000	

尺寸 Dimensions

口径 Size	尺寸 Dimensions(mm)													重量 Weight (kg)
	L			d	D	D1	D2	b	f	N-φd	H	H1	W	
RF	RTJ	BW												
Class 600														
2	292	295	292	49	165	127	92	26	6.4	8-19	240	94	300	32
2 1/2	330	333	330	62	190	149	105	29	6.4	8-22	290	115	300	47
3	356	359	356	74	210	168	127	32	6.4	8-22	340	136	300	68
4	432	435	432	100	273	216	157	38	6.4	8-25	358	152	300	106
5	508	511	508	127	330	266.5	186	45	6.4	8-29	400	180	300	170
6	559	562	559	150	356	292	216	48	6.4	12-29	445	209	400	241
8	660	664	660	201	419	349	270	56	6.4	12-32	498	263	400	444
10	787	791	787	252	508	432	324	64	6.4	16-35	653	312	400	668
12	838	841	838	303	559	489	381	67	6.4	20-35	665	354	500	1050
14	889	892	889	334	603	527	413	70	6.4	20-38	738	389	600	1317
16	991	994	991	385	686	603	470	77	6.4	20-41	920	440	750	1800
18	1092	1095	1092	436	741	654	533	83	6.4	20-44	1100	530	750	2400
20	1194	1200	1194	487	813	724	574	89	6.4	24-44	1200	560	750	3000
24	1397	1407	1397	538	940	838	692	102	6.4	24-52	1480	670	750	5400
Class 900														
2	368	371	368	49	216	165.1	92	38.5	6.4	8-26	250	98	300	45
2 1/2	419	422	419	62	244	190.5	105	41.5	6.4	8-29	300	120	300	55
3	381	384	381	74	241	190.5	127	38.5	6.4	8-26	345	140	300	94
4	457	460	457	100	292	234.9	157	44.5	6.4	8-32	415	162	300	141
5	559	562	559	125	349	279.4	186	51	6.4	8-35	446	188	300	230
6	610	613	610	150	381	317.5	216	56	6.4	12-32	477	213	400	325
8	737	740	737	201	470	393.7	270	63.5	6.4	12-39	520	270	400	580
10	838	841	838	252	545	469.9	324	70	6.4	16-39	628	322	400	850
12	965	968	965	305	610	533.4	381	79.5	6.4	20-39	680	360	500	1330
14	1029	1038	1029	322	640	558.8	413	86	6.4	20-42	750	400	600	1660
16	1130	1140	1130	373	705	615.9	470	89	6.4	20-45	940	460	750	2280
Class 1500														
1 1/2	305	305	305	38	178	123.8	73	32	6.4	4-29	280	100	300	44
2	368	371	368	49	216	165.1	92	38.5	6.4	8-26	320	113	300	67
2 1/2	419	422	419	62	244	190.5	105	41.5	6.4	8-29	340	125	300	80
3	470	473	470	74	267	203.2	127	48	6.4	8-32	385	138	300	130
4	546	549	546	100	311	241.3	157	54	6.4	8-35	415	171	300	192
5	673	676	673	120	375	292.1	186	73.5	6.4	8-42	480	200	400	335
6	705	711	705	144	394	317.5	216	83	6.4	12-39	580	222	400	475
8	832	841	832	192	483	393.7	270	92	6.4	12-45	584	280	400	820
10	991	1000	991	239	585	482.6	324	105	6.4	12-54	650	340	500	1320
12	1130	1146	1130	287	675	571.5	381	124	6.4	16-54	700	370	600	2050
Class 2500														
1 1/2	384	387	384	38	203	146	73	44.5	6.4	4-32	290	105	300	72
2	451	454	451	42	235	171.4	92	51	6.4	8-29	320	120	300	104
2 1/2	508	514	508	52	267	196.8	105	57.5	6.4	8-32	350	130	300	140
3	578	584	578	62	305	228.6	127	67	6.4	8-35	400	150	300	202
4	673	683	673	87	356	273	157	76.5	6.4	8-42	425	180	400	305
5	794	807	794	100	419	323.8	186	92.5	6.4	8-48	500	210	400	530
6	914	927	914	131	483	368.3	216	108	6.4	8-54	590	230	500	760
8	1022	1038	1022	179	550	438.1	270	127	6.4	12-54	610	290	500	1200
10	1270	1292	1270	223	675	539.7	324	165.5	6.4	12-67	660	350	600	2080