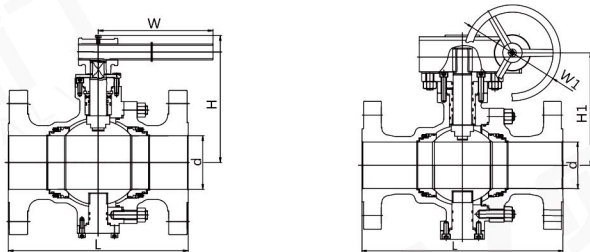


硬密封固定球阀

Metal seat trunnion ball valve



ANSI应用规范 ANSI application specification

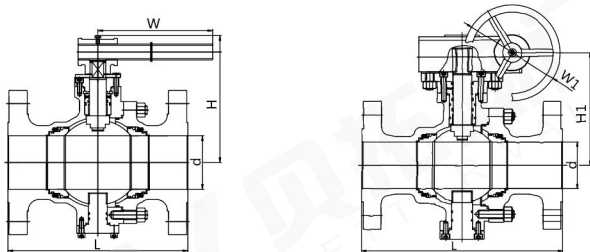
标准 Standard	ANSI系列 ANSI Series	标准 Standard	ANSI系列 ANSI Series
温度-压力额定值 Temperature-pressure ratings	ASME B16.34	试验标准 Inspection & testing	API 6D、API 598
设计标准 Design	API 6D、ISO 14313	抗硫材料要求 sulfur resistant material	NACE MR 0175/0103、ISO 15156
结构长度标准 Face to face	API 6D、ASME B16.10		
法兰连接端标准 End flange	ASME B16.5、ASME B16.47		

主要尺寸 Dimensions

CLASS											CLASS										
全通径 Full Bore											全通径 Full Bore										
NPS	d	RF	RTJ	BW	H	H1	W	W1			NPS	d	RF	RTJ	BW	H	H1	W	W1		
150Lb	2	49	178	191	216	107	-	230	-		300Lb	2	49	216	232	216	107	-	230	-	
	3	74	203	216	283	152	-	400	-			3	74	283	298	283	152	-	400	-	
	4	100	229	241	305	178	-	650	-			4	100	305	321	305	178	-	650	-	
	6	150	394	406	457	272	378	1050	400			6	150	403	419	457	272	378	1050	400	
	8	201	457	470	521	-	421	-	400			8	201	502	518	521	-	421	-	400	
	10	252	533	546	559	-	482	-	400			10	252	568	584	559	-	482	-	400	
	12	303	610	622	635	-	549	-	600			12	303	648	664	635	-	549	-	600	
	14	334	686	699	762	-	582	-	600			14	334	762	778	762	-	582	-	800	
	16	385	762	775	838	-	687	-	800			16	385	838	854	838	-	687	-	800	
	18	436	864	876	814	-	730	-	800			18	436	914	930	914	-	730	-	800	
	20	487	914	927	991	-	772	-	800			20	487	991	1010	991	-	772	-	800	
	24	589	1067	1080	1143	-	995	-	800			24	589	1143	1165	1143	-	995	-	800	
	26	633	1143	-	1245	-	1022	-	800			26	633	1245	1270	1245	-	1022	-	800	
	28	684	1245	-	1346	-	1088	-	800			28	684	1346	1372	1346	-	1088	-	800	
	30	735	1295	-	1397	-	1153	-	800			30	735	1397	1422	1397	-	1153	-	800	
400Lb	32	779	1372	-	1524	-	1223	-	800			32	779	1524	1553	1524	-	1223	-	800	
	2	49	292	295	292	107	-	400	-		600Lb	2	49	292	295	292	107	-	400	-	
	3	74	356	359	356	152	-	650	-			3	74	356	359	356	152	-	650	-	
	4	100	406	410	406	178	-	650	-			4	100	432	435	432	178	-	1050	-	
	6	150	495	498	495	272	383	1050	400			6	150	559	562	559	-	389	-	400	
	8	201	597	600	597	-	447	-	600			8	201	660	663	660	-	449	-	600	
	10	252	673	686	673	-	480	-	600			10	252	787	790	787	-	497	-	600	
	12	303	762	765	762	-	517	-	800			12	303	838	841	838	-	550	-	800	
	14	334	826	829	826	-	588	-	800			14	334	889	892	889	-	582	-	800	
	16	385	902	905	902	-	639	-	800			16	385	991	994	991	-	687	-	800	
	18	436	978	981	978	-	710	-	800			18	436	1092	1095	1092	-	730	-	800	
	20	487	1054	1060	1054	-	744	-	800			20	487	1194	1200	1194	-	780	-	800	
	24	589	1232	1241	1232	-	869	-	800			24	589	1397	1407	1397	-	995	-	800	
	26	633	1308	1321	1308	-	908	-	800			26	633	1448	1461	1448	-	1038	-	800	
	28	684	1397	1410	1397	-	974	-	800			28	684	1549	1562	1549	-	1088	-	800	
	30	735	1524	1537	1524	-	1013	-	800			30	735	1651	1664	1651	-	1157	-	800	
	32	779	1651	1667	1651	-	1079	-	800												

硬密封固定球阀

Metal seat trunnion ball valve



GB应用规范 GB application specification

标准 Standard	GB系列 GB Series	标准 Standard	GB系列 GB Series
温度-压力额定值 Temperature-pressure ratings	GB/T 12224	试验标准 Inspection & testing	GB/T 13927、JB/T 9092
设计标准 Design	GB/T 12237、JB/T 7745	抗硫材料要求 sulfur resistant material	SY/T 0599、GB/T 20972
结构长度标准 Face to face	GB/T 12221		
法兰连接端标准 End	JB/T 79、GB/T 9113、HG/T 20592		

主要尺寸 Dimensions

PN	DN	d	L	H	H1	W	W1	PN	DN	d	L	H	H1	W	W1
1.6/2.0MPa	50	49	178	107	-	230	-	2.5-5.0MPa	50	49	216	107	-	230	-
	65	62	191	125	-	400	-		65	62	241	125	-	400	-
	80	74	203	152	-	400	-		80	74	283	152	-	400	-
	100	100	229	178	-	650	-		100	100	305	178	-	650	-
	150	150	394	272	378	1050	400		150	150	403	272	378	1050	400
	200	201	457	-	421	-	400		200	201	502	-	421	-	400
	250	252	533	-	482	-	400		250	252	568	-	482	-	400
	300	303	610	-	549	-	600		300	303	648	-	549	-	600
	350	334	686	-	582	-	600		350	334	762	-	582	-	600
	400	385	762	-	687	-	800		400	385	838	-	687	-	800
	450	436	864	-	730	-	800		450	436	914	-	730	-	800
	500	487	914	-	772	-	800		500	487	991	-	772	-	800
	550	538	991	-	865	-	800		550	538	1092	-	865	-	800
	600	589	1067	-	995	-	800		600	589	1143	-	995	-	800
	650	633	1143	-	1022	-	800		650	633	1245	-	1022	-	800
700	684	1245	-	1088	-	800	700	684	1346	-	1088	-	800		
750	735	1295	-	1153	-	800	750	735	1397	-	1153	-	800		
800	779	1372	-	1223	-	800	800	779	1524	-	1223	-	800		
6.3MPa	50	49	292	107	-	400	-	10.0MPa	50	49	292	107	-	400	-
	65	62	356	142	-	400	-		65	62	330	125	-	650	-
	80	74	406	152	-	650	-		80	74	356	152	-	650	-
	100	100	495	178	-	650	-		100	100	432	178	-	1050	-
	150	150	597	272	383	1050	400		150	150	559	-	389	-	400
	200	201	673	-	447	-	600		200	201	660	-	449	-	600
	250	252	762	-	480	-	600		250	252	787	-	497	-	600
	300	303	826	-	517	-	800		300	303	838	-	550	-	800
	350	334	902	-	589	-	800		350	334	889	-	582	-	800
	400	385	978	-	639	-	800		400	385	991	-	687	-	800
	450	436	1054	-	710	-	800		450	436	1092	-	730	-	800
	500	487	1232	-	744	-	800		500	487	1194	-	780	-	800
	550	538	1308	-	807	-	800		550	538	1295	-	843	-	800
	600	589	1397	-	869	-	800		600	589	1397	-	995	-	800
	650	633	1524	-	908	-	800		650	633	1448	-	1038	-	800
700	684	1651	-	974	-	800	700	684	1549	-	1088	-	800		
750	735	1778	-	1013	-	800	750	735	1651	-	1157	-	800		
800	779	1880	-	1079	-	800									

硬密封常见的磨损机理如下：

Metal seat common wear mechanism is as follows:

粘着磨损 Adhesive wear	阀座与球体间的微焊现象	Micro welding between seat and ball
腐蚀磨损 Corrosive wear	阀座或球体的整体腐蚀、点状腐蚀、晶间腐蚀、应力腐蚀	Uniform corrosion, tubercular corrosion, terorangular corrosion stress corrosion of seat or ball
冲蚀磨损 Erosion wear	流动介质对阀座或球体的一种显微切削现象	A kind of micro-cutting of flow media towards seat or ball
应力磨损 Stress wear	热应力、机械应力交变形成的密封面疲劳现象	Thermal stress mechanical stress formed by alternating sealing surface fatigue
摩擦氧化 Oxide wear	阀座与球体摩擦后氧化、球体与流动介质之间发生化学反应	After oxidation between seat and ball, the chemical reactions between ball and flow media

密封面常见硬化处理工艺：

Seal face common hardening treatment process:

- 超音速喷涂（HVOF）：采用超音速火焰粉末喷涂的方法在阀门零件表面上获得碳化铬/碳化钨硬化涂层。碳化钨硬化层适用温度可达540℃。碳化铬硬化涂层可达到540℃~590℃的工作。此硬化技术可获得高硬度、耐高温、耐磨损、耐冲击等特性，硬度可达58~80HRC，硬化厚度为0.2~0.25mm。Supersonic spraying (HVOF): adopts the method of super speed between flame powder coating on the surface of the valve parts for chromium carbide/sclerosis of tungsten carbide coating. Tungsten carbide hardening layer temperature can reach 540 °C, chromium carbide Hardening coating can reach 540 °C ~ 590 °C condition. The hardening technology can obtain high hardness, high temperature resistance, wear resistance, impact resistance and other properties, hardness can reach 58 to 80 HRC, hardening of the thickness of 0.2 ~ 0.25 mm.
- 离子渗氮，此硬化技术应用广泛，对基体要求不高，硬化方便快捷，硬化层不易脱落，适用工况较广，不受介质特性的影响，处理后硬度可达到50~64HRC，硬化后厚度为0.15~0.5mm。Ion nitriding, the hardening technology is widely used, the substrate requirement is not high, convenient and quick, hardening layer falls off not easily, has a wide applicable condition, is not affected by dielectric properties, hardness can be achieved after the treatment the thickness of 50-64 HRC, hardened is 0.15 ~ 0.5 mm.
- 堆焊，堆焊硬质合金，如STL等。硬度可达38~45，硬化厚度为≥1.6mm。Overlaying, welding carbide, such as the STL. Hardness up to 38 ~ 45, hardening of the thickness of 1.6 mm or more.
- 喷焊，喷焊硬质合金、镍基合金。此方式类似HVOF，将金属粉末喷焊到密封表面以获得硬化涂层，硬度可达50~60HRC，硬化厚度为0.8~1.5mm。Spray welding, hard alloy, nickel base alloy spray welding, similar to HVOF, the metal powder spray welding to the sealing surface for hardening coating, hardness can be up to 50 ~ 60 HRC, hardening of the thickness of 0.8 ~ 1.5 mm.

硬密封球阀参考扭矩

Metal seat Ball Valve Reference Torque

硬密封浮动球阀扭矩 Metal seat floating ball valve's torque											
通径 Size	DN	Class150	Class300	Class600	Class900	Class1500	PN1.6	PN2.5	PN4.0	PN6.3	PN10.0
1/2	15	28	40	68	100	140	24	32	40	60	68
3/4	20	40	64	96	140	200	36	48	60	80	96
1	25	64	100	160	260	400	56	72	92	140	160
1-1/4	32	96	140	240	400	600	88	112	128	200	240
1-1/2	40	140	200	360	480	720	128	160	180	280	360
2	50	200	280	440	720	1080	160	220	260	340	440
2-1/2	65	320	400	660	-	-	240	340	380	520	660
3	80	480	640	1200	-	-	360	520	600	800	1200
4	100	720	1120	2400	-	-	520	760	1040	1360	2400
5	125	1120	2400	-	-	-	1000	1280	2200	-	-
6	150	2160	4000	-	-	-	1960	2480	3600	-	-
8	200	3840	8400	-	-	-	3440	4400	7200	-	-
硬密封固定球阀扭矩 Metal seat trunnion ball valve's torque											
通径 Size	DN	Class150	Class300	Class600	Class900	Class1500	PN1.6	PN2.5	PN4.0	PN6.3	PN10.0
2	50	-	-	280	400	620	-	-	-	-	280
2-1/2	65	-	-	480	680	1060	-	-	-	-	480
3	80	-	-	1120	1280	2000	-	-	-	-	920
4	100	440	800	1360	1920	3000	400	560	680	960	1360
6	150	720	1160	2200	3120	4800	640	880	1040	1400	2200
8	200	1360	1920	3200	4400	6800	1200	1520	1800	2400	3200
10	250	2000	3400	6800	9600	14800	1800	2520	3000	5200	6800
12	300	3320	5600	11200	16000	24800	3000	4200	5000	8000	11200
14	350	5600	9600	16800	23600	36400	5000	7000	8400	14800	16800
16	400	8800	12400	23200	32400	-	8000	10400	11200	15600	23200
18	450	10400	19200	30000	42000	-	9400	12800	17200	23200	30000
20	500	14800	24400	38000	-	-	13200	18400	22000	-	-
24	600	19200	30000	46000	-	-	17200	24000	37200	-	-
26	650	32800	48000	66000	-	-	29600	40000	44000	-	-
28	700	38400	60000	-	-	-	-	-	-	-	-
30	750	48000	76000	-	-	-	-	-	-	-	-
32	800	56000	88000	-	-	-	-	-	-	-	-
34	850	64000	112000	-	-	-	-	-	-	-	-
36	900	80000	140000	-	-	-	-	-	-	-	-

固定球阀系列

TRUNNION BALL VALVE SERIES



固定球阀

Trunnion ball valve



设计特征 Design features

阀杆防吹出和倒密封结构

Blow-out proof stem and the seal structure

阀杆采用下装式和设置带止推垫的倒密封结构。在阀腔压力升高的时候，既可保证阀杆不被介质冲出阀体外又有好的密封效果；同时避免了阀杆与填料箱硬摩擦，减轻其操作扭矩。(如图1)

Stem with bottom entry and set the inverted sealing structure with the thrust pad. When the body cavity pressure increases, the valve stem can be ensured not to be out of the body and has good sealing effect; At the same time avoided the stem and packing box metal to metal friction & reduce the operating torque (Figure 1).

防静电结构

Anti-static structure

防静电结构是通用固定球阀的标准设计。我们在球体与阀杆、阀杆与填料箱、填料箱与阀体间设置了导电的弹簧装置，使得阀体在每次的启闭过程中产生的静电通过该装置导入大地。避免了因静电引燃易燃易爆介质，确保了人身和系统的安全。(如图1)

Anti-static structure is the standard design of our trunnion ball valve. We set the conductive spring mechanisms between the peroid and the valve stem, valve stem and packing box, packing box and the body, making the body in every time of opening and closing process of static electricity through the device into the earth. Avoided ignition flammable and explosive medium, caused by electrostatic and ensured the safety of people and the system (Figure 1).

防火结构

Fire safe structure

防火设计是通用固定球阀标准的设计。当现场发生火灾时，聚四氟乙烯、橡胶等密封材料在被破坏的情况下，通用固定球阀能够借助第二道柔性石墨垫等防火密封材料或球体与阀座紧密接触实现紧急密封。(如图2、3)

Fire safe design is our trunnion ball valves' standard structure. When there is a fire, such as ptfе, rubber sealing material being destroyed Cases, our trunnion ball valve can be with the help of the second fire sealing material such as flexible graphite gasket or the sphere has close contact with the valve seat to realize emergency sealing. (Figure 2, 3).

紧急注脂密封

Emergency grease injection for the seal

金属对金属和紧急注脂(DN≥100)等辅助密封结构，当现场发生火灾时，聚四氟乙烯、橡胶等密封材料在被破坏的情况下或密封件损坏的情况下可以实现对阀杆或阀座紧密密封。有效控制阀门的外漏和内漏。(如图4)

注：NPS≥6(DN150)以上固定球阀，在阀杆和阀座上均有注脂装置；对于4(DN100)≤NPS<6(DN150)，在阀座上有注脂装置。

Metal to metal and emergency greasing (DN 100 or higher) and other auxiliary sealing structure, when there is a fire, such as ptfе, rubber sealing material under the condition of the damaged or broken seal can be achieved on the valve stem or tight seating. Within the effective control of the valve leakage both in & outside. (Figure 4).

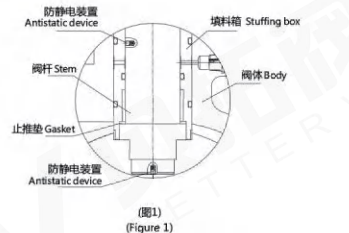
Note: NPS 6 (DN100) or more > NPS 6 (DN150), there are greasing device in the valve stem & seat. For NPS 4 (DN100) or less < NPS 6 (DN150), there is greasing device in the seat.

双阻塞与泄放阀

Double block and bleed valve

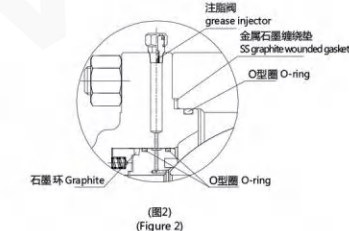
通用的固定球阀一般采用DBB密封结构。固定球阀的两个阀座能独立切断进口端和出口端的介质，实现双阻塞功能。当球阀关闭时，即使阀门两端同时受压，阀门中腔和两端仍然被相互阻断，中腔的剩余介质和气体可以通过排气阀和排污阀排出阀体。(如图5)

DBB structure is commonly used in our trunnion ball valve sealing. Two trunnion ball valve seats can be cut off the inlet and the outlet medium independently, realize the function of double blocking. When the ball valve is closed, even if the pressure at the same time on both ends of the valve, the valve on both ends of the lumen and is still blocked by each other and the surplus medium and the air can be out through vent plug and drain plug. (Figure 5).



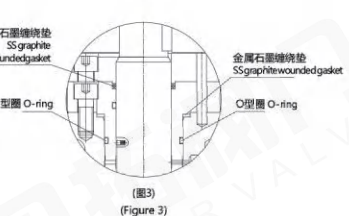
(图1)

(Figure 1)



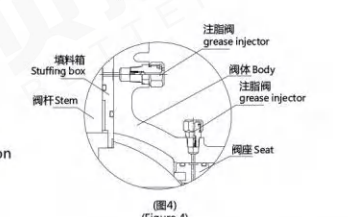
(图2)

(Figure 2)



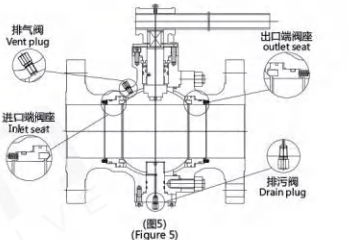
(图3)

(Figure 3)



(图4)

(Figure 4)



(图5)

(Figure 5)

固定球阀

Trunnion ball valve

阀体中腔的自动泄压功能

Automatic pressure relief function of the body lumen

当球阀处于关闭状态时，滞留在阀体中腔的液体和气体介质由于温度升高而膨胀，导致阀体中腔压力异常升高时，通用固定球阀设计了自动泄压功能，当中腔压力超过额定压力1.33倍时，中腔内的介质能依靠本身的作用将阀座推离球体而自动泄压，从而保证阀门的安全。(如图6)

When ball closed, liquid and gas entrapped in the valve body lumen medium expansion due to temperature increase, lumen pressure from lead to the valve body Abnormal force rises, our trunnion ball valve design the function of automatic relief, cavity pressure is 1.33 times more than the rated pressure its medium can rely on itself separate seat from the sphere and realize automatic pressure relief, so as to ensure the safety of the valve. (Figure 6).

双隔离与排放阀

Double isolation and bleed valve

对于某些特定的工况（如燃气管道）要求以及客户的要求，通用可以设计DIB-1或者双阀座双向密封功能（DIB-2）的固定球阀（如图7）。即使一个阀座密封失效，阀门仍能正常工作，保证阀门的密封可靠性。

For some specific working conditions (such as gas pipeline) requirements and customer requirements, we can design the function of DIB-1 or two-way seating (DIB - 2) trunnion ball valve.

Even if a seat seal failed, the valve can still work normally, to ensure that the valve seal reliability (Figure 7).

支撑板式和固定轴式

Support plate and the fixed shaft

通用固定球阀可以根据客户和工况需要选择支撑板式和固定轴式两种结构。固定轴式固定球阀常用结构，其特点就是球体靠上下两根轴将其固定，使它不能产生位移。特点加工简单，适用性强(如图8)。而支撑板式与固定轴式的不同之处在于球体是靠上下两个支撑板将其固定住，特点是加工精度要求高，启闭力矩相对更小，更适合大口径、高压场合(如图9)。

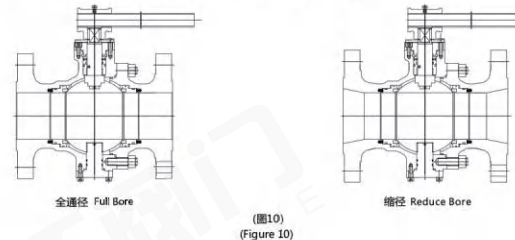
our trunnion ball valve can be according to the needs of customers and its working condition choose support plate and a fixed axis type two kinds of structure. Fixed shaft trunnion ball valve structure commonly used, Its characteristic is the sphere by fluctuation two shafts should be fixed, it does not produce displacement. The characteristics of simple processing, high applicability. The support plate and fixed Shaft of the difference between a sphere is to rely on two support plates should be fixed, features a high machining accuracy, open-close torque is relatively smaller and more Suitable for large caliber, high-pressure situations (Figure 8) (Figure 9).

全通径和缩径结构

Full bore and reduce bore structure

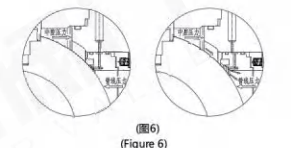
为满足客户不同的要求，通用球阀设计有全通径和缩径两个系列。全通径不仅流阻小，也便于管道的清扫。而缩径多用于对流量要求不高场合，重量比相同口径的全通径球阀轻30%左右，有效降低了生产成本和价格。得到了越来越多的应用(如图10)。

To meet the different requirements of customers, our ball valves design with full bore and reduce bore. Full bore ball valves flow resistance is small, also facilitate pipeline swept. While reduce bore ball valves used in ordinary flow requirements, weight lighter than full bore ball valves of the same size by about 30%, effectively reduce the production cost and lower the price, which are more and more widely used (Figure 10).



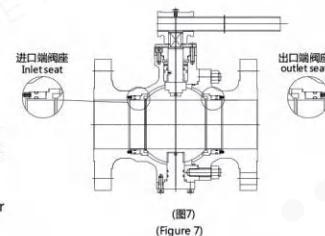
(图10)

(Figure 10)



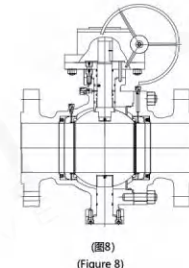
(图6)

(Figure 6)



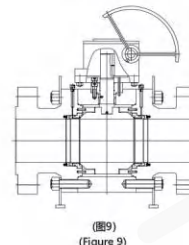
(图7)

(Figure 7)



(图8)

(Figure 8)

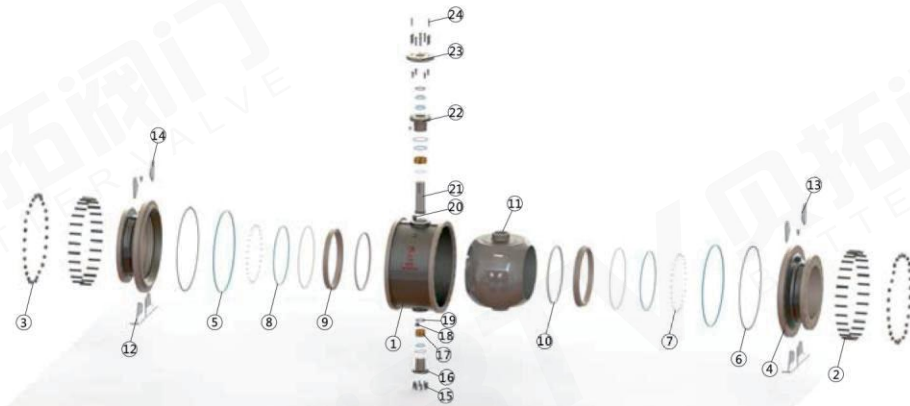


(图9)

(Figure 9)

固定球阀

Trunnion ball valve

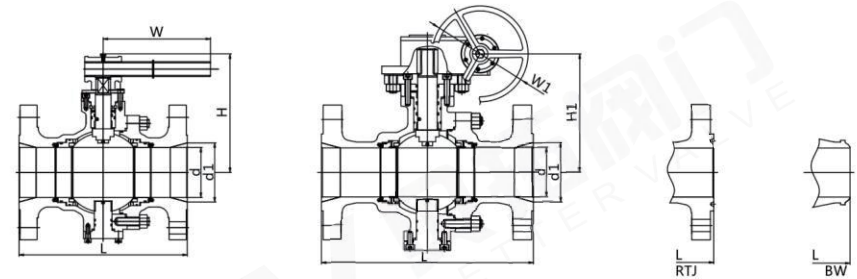


主要零件材料 Major parts material

序号 No.	零件 Part	碳钢材质 Carbon Steel	不锈钢材质 Stainless Steel	酸性工况 Acidic Conditions	低温工况 Low temperature working conditions
1	阀体 Body	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB	ASTM A352 LCB
2	螺栓 Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A193 B7M	ASTM A193 L7M
3	螺母 Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 2HM	ASTM A194 4
4	垫片 Gasket	PTFE/304+石墨缠绕垫 Graphite wound gasket+304/ptfe			
5	阀盖 Bonnet	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB	ASTM A352 LCB
6	阀座 Seat	PTFE/RPTFE/PPL	PTFE/RPTFE/PPL	PTFE/RPTFE/PPL	PTFE/RPTFE/PPL
7	球体 Ball	A105N+ENP	ASTM A182 F304	A105N+ENP	ASTM A182 F304
8	防静电装置 Anti static device	组合件 Assembly			
9	止推垫 Stop washer	PTFE	PTFE	PTFE	PTFE
10	填料 Packing	PTFE/石墨 PTFE/ Graphite			
11	螺栓 Stud	ASTM A193 B7	ASTM A193 B8	ASTM A193 B7M	ASTM A193 L7M
12	螺母 Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 2HM	ASTM A194 4
13	定位片 Positioning plate	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
14	阀杆 Stem	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F6a	ASTM A182 F304
15	手柄 Level	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
16	卡簧 circlip	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
17	填料压板 Gland Flange	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB	ASTM A352 LCB
18	填料压套 Packing gland	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
19	O型圈 O-ring	氟橡胶 Fluororubber			
20	蝶簧 Disc Spring	ANSI 1566	ANSI 1566	ANSI 1566	ANSI 1566

铸钢固定球阀

Cast steel trunnion ball valve



ANSI应用规范 ANSI application specification

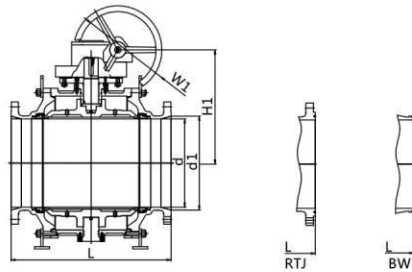
标准 Standard	ANSI系列 ANSI Series	标准 Standard	ANSI系列 ANSI Series
温度-压力额定值 Temperature-pressure ratings	ASME B16.34	试验标准 Inspection & testing	API 6D, API598
设计标准 Design	API 6D, ISO 14313	防火设计 Fire-safe design	API 607/F6A
结构长度标准 Face to face	API 6D, ASME B16.10	抗硫材料要求 sulfur resistant material	NACE MR 0175/0103, ISO 15156
连接端标准 End	ASME B16.5, ASME B16.47		

主要尺寸 Dimensions

CLASS	全通径 Full Bore									缩径 Reduce Bore								
	NPS	d	RF	RTJ	BW	H	H1	W	W1	NPS	d	RF	RTJ	BW	H	H1	W	W1
150Lb	2	49	178	191	216	107	-	230	-	3x2	74x49	203	216	283	107	-	230	-
	3	74	203	216	283	152	-	400	-	4x3	100x74	229	241	305	152	-	400	-
	4	100	229	241	305	178	-	650	-	6x4	150x100	394	406	457	178	-	650	-
	6	150	394	406	457	272	378	1050	400	8x6	201x150	457	470	521	272	378	1050	400
	8	201	457	470	521	-	421	-	400	10x8	252x201	533	546	559	-	421	-	400
	10	252	533	546	559	-	482	-	400	12x10	303x252	610	622	635	-	482	-	400
300Lb	12	303	610	622	635	-	549	-	600	14x12	334x303	686	699	762	-	549	-	600
	2	49	216	232	216	107	-	230	-	3x2	74x49	283	298	283	107	-	230	-
	3	74	283	298	283	152	-	400	-	4x3	100x74	305	321	305	152	-	400	-
	4	100	305	321	305	178	-	650	-	6x4	150x100	403	419	457	178	-	650	-
	6	150	403	419	457	272	378	1050	400	8x6	201x150	502	518	521	272	378	1050	400
	8	201	502	518	521	-	421	-	400	10x8	252x201	568	584	559	-	421	-	400
400Lb	10	252	568	584	559	-	482	-	400	12x10	303x252	648	664	635	-	482	-	400
	12	303	648	664	635	-	549	-	600	14x12	334x303	762	778	762	-	549	-	600
	2	49	292	295	292	107	-	400	-	3x2	74x49	356	359	356	107	-	400	-
	3	74	356	359	356	152	-	650	-	4x3	100x74	406	410	406	152	-	650	-
	4	100	406	410	406	178	-	650	-	6x4	150x100	495	498	495	178	-	650	-
	6	150	495	498	495	272	383	1050	400	8x6	201x150	597	600	597	272	383	1050	400
600Lb	8	201	597	600	597	-	447	-	600	10x8	252x201	673	676	673	-	447	-	600
	10	252	673	686	673	-	480	-	600	12x10	303x252	762	765	762	-	517	-	800
	12	303	762	765	762	-	517	-	800	14x12	334x303	826	829	826	-	588	-	800
	2	49	292	295	292	107	-	400	-	3x2	74x49	356	359	356	107	-	400	-
	3	74	356	359	356	152	-	650	-	4x3	100x74	432	435	432	152	-	650	-
	4	100	432	435	432	178	-	1050	-	6x4	150x100	559	562	559	178	-	1050	-
	6	150	559	562	559	-	389	-	400	8x6	201x150	660	663	660	-	389	-	400
	8	201	660	663	660	-	449	-	600	10x8	252x201	787	790	787	-	449	-	600
	10	252	787	790	787	-	497	-	600	12x10	303x252	838	841	838	-	497	-	600
	12	303	838	841	838	-	550	-	800	14x12	334x303	889	892	889	-	550	-	800

铸钢固定球阀

Cast steel trunnion ball valve



ANSI应用规范 ANSI application specification

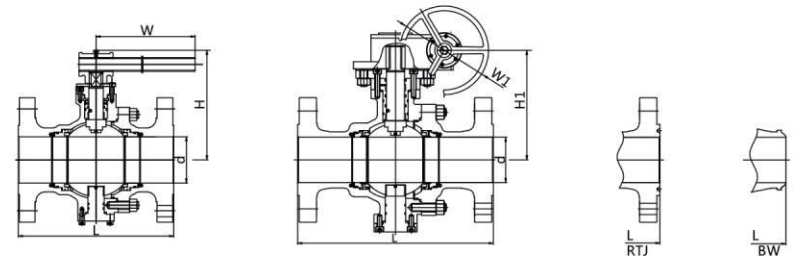
标准 Standard	ANSI系列 ANSI Series	标准 Standard	ANSI系列 ANSI Series
温度-压力额定值 Temperature-pressure ratings	ASME B16.34	试验标准 Inspection & testing	API 6D, API 598
设计标准 Design	API 6D, ISO 14313	防火设计 Fire-safe design	API 607/F6A
结构长度标准 Face to face	API 6D, ASME B16.10	抗硫材料要求 sulfur resistant material	NACE MR 0175/0103, ISO 15156
连接端标准 End	ASME B16.5, ASME B16.47		

主要尺寸 Dimensions

CLASS	全通径 Full Bore										缩径 Reduce Bore									
	NPS	d	RF	RTJ	BW	H	H1	W	W1	NPS	d	RF	RTJ	BW	H	H1	W	W1		
150Lb	14	334	686	699	762	-	582	-	600	16x14	385x334	762	775	838	-	582	-	600		
	16	385	762	775	838	-	687	-	800	18x16	436x385	864	876	914	-	687	-	800		
	18	436	864	876	914	-	730	-	800	20x18	487x436	914	927	991	-	730	-	800		
	20	487	914	927	991	-	772	-	800	24x20	589x487	1067	1080	1143	-	772	-	800		
	24	589	1067	1080	1143	-	995	-	800	28x24	684x589	1245	-	1346	-	995	-	800		
	26	633	1143	-	1245	-	1022	-	800	30x24	735x589	1295	-	1397	-	1022	-	800		
	28	684	1245	-	1346	-	1088	-	800	32x26	779x633	1372	-	1524	-	1088	-	800		
	30	735	1295	-	1397	-	1153	-	800	34x28	830x684	1473	-	1626	-	1153	-	800		
	32	779	1372	-	1524	-	1223	-	800	36x30	874x735	1524	-	1727	-	1223	-	800		
	14	334	762	778	762	-	582	-	800	16x14	385x334	838	854	838	-	582	-	800		
	16	385	838	854	838	-	687	-	800	18x16	436x385	914	930	914	-	687	-	800		
	18	436	914	930	914	-	730	-	800	20x18	487x436	991	1010	991	-	730	-	800		
300Lb	20	487	991	1010	991	-	772	-	800	24x20	589x487	1143	1165	1143	-	772	-	800		
	24	589	1143	1165	1143	-	995	-	800	30x24	735x589	1397	1422	1397	-	995	-	800		
	26	633	1245	1270	1245	-	1022	-	800	32x26	779x633	1524	1553	1524	-	1022	-	800		
	28	684	1346	1372	1346	-	1088	-	800	34x28	830x684	1626	1654	1626	-	1088	-	800		
	30	735	1397	1422	1397	-	1153	-	800	36x30	874x735	1727	1756	1727	-	1153	-	800		
	32	779	1524	1553	1524	-	1223	-	800											
	14	334	826	829	826	-	588	-	800	16x14	385x334	902	905	902	-	588	-	800		
	16	385	902	905	902	-	639	-	800	18x16	436x385	978	981	978	-	639	-	800		
	18	436	978	981	978	-	710	-	800	20x18	487x436	1054	1060	1054	-	710	-	800		
	20	487	1054	1060	1054	-	744	-	800	24x20	589x487	1232	1241	1232	-	744	-	800		
	24	589	1232	1241	1232	-	869	-	800	28x24	684x589	1397	1410	1397	-	869	-	800		
	26	633	1308	1321	1308	-	908	-	800	30x24	735x589	1524	1537	1524	-	908	-	800		
400Lb	28	684	1397	1410	1397	-	974	-	800	32x26	779x633	1651	1667	1651	-	974	-	800		
	30	735	1524	1537	1524	-	1013	-	800	34x28	830x684	1778	1794	1778	-	1013	-	800		
	32	779	1651	1667	1651	-	1079	-	800	36x30	874x735	1880	1895	1880	-	1079	-	800		
	14	334	889	892	889	-	582	-	800	16x14	385x334	991	994	991	-	582	-	800		
	16	385	991	994	991	-	687	-	800	18x16	436x385	1092	1095	1092	-	687	-	800		
	18	436	1092	1095	1092	-	730	-	800	20x18	487x436	1194	1200	1194	-	730	-	800		
	20	487	1194	1200	1194	-	780	-	800	24x20	589x487	1397	1407	1397	-	780	-	800		
	24	589	1397	1407	1397	-	995	-	800	28x24	684x589	1549	1562	1549	-	995	-	800		
	26	633	1448	1461	1448	-	1038	-	800	30x24	735x589	1651	1664	1651	-	1038	-	800		
	28	684	1549	1562	1549	-	1088	-	800											
	30	735	1651	1664	1651	-	1157	-	800											
600Lb																				

铸钢固定球阀

Cast steel trunnion ball valve



GB应用规范 GB application specification

标准 Standard	GB系列 GB Series	标准 Standard	GB系列 GB Series
温度-压力额定值 Temperature-pressure ratings	GB/T 12224	试验标准 Inspection & testing	GB/T 13927, JB/T 9092
设计标准 Design	GB/T 12237, JB/T 7745	防火设计 Fire-safe design	JB/T 6899
结构长度标准 Face to face	GB/T 12221	抗硫材料要求 sulfur resistant material	SY/T 0599, GB/T 20972
连接端标准 End	JB/T 79, GB/T 9113, HG/T 20592		

主要尺寸 Dimensions

PN	DN	d	L	H	H1	W	W1	PN	DN	d	L	H	H1	W	W1
1.6/2.0MPa	50	49	178	107	-	230	-	2.5-5.0MPa	50	49	216	107	-	230	-
	65	62	191	125	-	400	-		65	62	241	125	-	400	-
	80	74	203	152	-	400	-		80	74	283	152	-	400	-
	100	100	229	178	-	650	-		100	100	305	178	-	650	-
	150	150	394	272	378	1050	400		150	150	403	272	378	1050	400
	200	201	457	-	421	-	400		200	201	502	-	421	-	400
	250	252	533	-	482	-	400		250	252	568	-	482	-	400
	300	303	610	-	549	-	600		300	303	648	-	549	-	600
	350	334	686	-	582	-	600		350	334	762	-	582	-	600
	400	385	762	-	687	-	800		400	385	838	-	687	-	800
	450	436	864	-	730	-	800		450	436	914	-	730	-	800
	500	487	914	-	772	-	800		500	487	991	-	772	-	800
6.3MPa	550	538	991	-	865	-	800	10.0MPa	550	538	1092	-	865	-	800
	600	589	1067	-	995	-	800		600	589	1143	-	995	-	800
	650	633	1143	-	1022	-	800		650	633	1245	-	1022	-	800
	700	684	1245	-	1088	-	800		700	684	1346	-	1088	-	800
	750	735	1295	-	1153	-	800		750	735	1397	-	1153	-	800
	800	779	1372	-	1223	-	800		800	779	1524	-	1223	-	800
	50	49	292	107	-	400	-		50	49	292	107	-	400	-
	65	62	356	142	-	400	-		65	62	330	125	-	650	-
	80	74	406	152	-	650	-		80	74	356	152	-	650	-
	100	100	495	178	-	650	-		100	100	432	178	-	1050	-
	150	150	597	272	383	1050	400		150	150	559	-	389	-	400
	200	201	673	-	447	-	600		200	201	660	-	449	-	600
10.0MPa	250	252	762	-	480	-	600		250	252	787	-	497	-	600
	300	303	826	-	517	-	800		300	303	838	-	550	-	800
	350	334	902	-	589	-	800		350	334	889	-	582	-	800
	400	385	978	-	639	-	800		400	385	991	-	687	-	800
	450	436	1054	-	710	-	800		450	436	1092	-	730	-	800
	500	487	1232	-	744	-	800		500	487	1194	-	780	-	800
	550	538	1308	-	807	-	800		550	538	1295	-	843	-	800
	600	589	1397	-	869	-	800		600	589	1397	-	995	-	800
	650	633	1524	-	908	-	800		650	633	1448	-	1038	-	800
	700	684	1651	-	1013	-	800		700	684	1549	-	1088	-	800
	750	735	1778	-	974	-	800		750	735	1651	-	1157	-	800
	800	779	1880	-	1079	-	800								