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双精阀门集团
SHANGHAI SHUANGJING VALVE GROUP CO., LTD



精于品质
精于服务

GOOD AT QUALITY
GOOD AT SERVICE

硬密封球阀 HARD SEAL BALL VALVE

SOJN®
上海双精阀门集团有限公司
SHANGHAI SHUANGJING VALVE GROUP CO., LTD

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COMPANY PROFILE
企业简介

2014
创建于/年
Created in / year

5000+
注册资金/万元
Registered capital/ten thousand yuan



上海双精阀门集团有限公司是一家集产品研发、设计、制造、销售、维护一体化阀门智造企业。

本公司加强质量管理，对产品进行了技术改造，改进了工艺流程，不断的优化了产品结构，提高了产品的科技含量，从而使产品质量稳步提高，结构合理、性能可靠，我司的产品以优越的质量赢得各界用户的依赖和好评。

企业始终坚持不断创新的精神，贯彻诚信为本，客户至上的经营理念，将不断应用新技术、新工艺、新材料，积极开发新品种为广大用户提供优质的阀门产品和更完善的售后服务。竭诚欢迎新老客户与我们携手合作，谱写明日新的辉煌篇章！

Shanghai Shuangjing Valve Group Co., Ltd. is an intelligent valve manufacturing enterprise integrating product development, design, manufacturing, sales and maintenance.

Our company has strengthened quality management, carried out technical transformation on products, improved process flow, continuously optimized product structure, and improved the technological content of products, so as to steadily improve product quality, reasonable structure, and reliable performance. Our products have won the trust and praise of users from all walks of life with superior quality.

The enterprise has always adhered to the spirit of continuous innovation, implemented the business philosophy of honesty and customer first, will continue to apply new technologies, new processes and new materials, and actively develop new varieties to provide users with high-quality valve products and better after-sales services. We sincerely welcome new and old customers to cooperate with us to write a new and brilliant chapter for tomorrow!

主导产品 Leading products

高平台球阀、气动阀、电动阀、手动球阀、闸阀、截止阀、止回阀、过滤器、排气阀、水暖阀门等管道配套阀门系列产品。

High platform ball valve, pneumatic valve, electric valve, manual ball valve, gate valve, globe valve, check valve, filter, exhaust valve, plumbing valve and other pipeline supporting valve series products.

主要生产标准 Main production standards

按国标、美标、德标、日标、欧标等进行设计、生产和验收。

The main production standards are: design, production and acceptance according to the national standard, American standard, German standard, Japanese standard, European standard, etc.

主要材质 Main material

碳钢、不锈钢、低温钢、合金钢、耐高温、超高温特殊钢等；还可根据使用介质及温度不同选型特殊工况使用材料。

Carbon steel, stainless steel, low temperature steel, alloy steel, high temperature resistant, ultra-high temperature special steel, etc.; materials can also be selected for special working conditions according to different media and temperatures.

连接方式/驱动方式 Connection method / drive method

连接方式有：法兰、螺纹、焊接、承插等。
驱动方式有：手动、 蜗轮传动、气动、液动、电动等。

Connection methods are: flange, thread, welding, socket and so on.
The driving methods are: manual, worm gear transmission, pneumatic, hydraulic, electric and so on.

SHUANGJING VALVE

HONORS QUALIFICATIONS
荣誉资质

提高全员的质量意识，强化科学的质量管理，生产让顾客满意的产品，
提供周密的突出“服务”是我们坚定不移的方针。

It is our unswerving policy to improve the quality awareness of all employees, strengthen scientific quality management, produce products that satisfy customers, and provide careful and outstanding "services".

营业执照
Business License

防爆合格证
Explosion-proof certificate

企业等级证书
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金属硬密封球阀概述 Overview of metal hard seal ball valve

球阀是50年代问世的一种阀门，在半个多世纪的时间里，球阀已发展成为一种主要的阀类。球阀主要用于截断或接通介质，也可用于流体的调节与控制，V型球阀能够进行计较精确的流量调节与控制，而三通球阀则用于分配介质和改变介质的流向。
与其它阀类相比，球阀具有如下的一些优点：

1.流体阻力小，球阀是所有发类中流体阻力最小的一种，即使是缩径球阀，其流体阻力也相当小。
2.开关迅速、方便，只要阀杆转动90°，球阀就完成了全开或全关动作，很容易实现快速启闭。
3.密封性能好，球阀阀座密封圈一般采用聚四氟乙烯等弹性材料制造，易于保证密封，而且球阀的密封力随着介质压力的增加而增大。
4.阀杆密封可靠。球阀启闭时阀杆只作旋转运动，因此阀杆的填料密封不易被破坏，而且阀杆倒密封的密封力随着介质压力的增加而增大。
5.球阀的启闭只做90°转动，故容易实现自动化控制和远距离控制，球阀可配置气动装置、电动装置、液动装置、气液联动装置或电液联动装置。
6.球阀通道平整光滑，不易沉积介质，可以进行管线通球。

Ball valve is a kind of valve that came out in the 1950s. In more than half a century, ball valve has developed into a major kind of valve. Ball VALVE IS MAINLY USED TO TRUNCate OR connect the MEDIUM, can also be used for fluid regulation and control, V ball valve can be calculated accurate flow regulation and control, and three-way ball valve is used to distribute the medium and change the flow of the medium. Compared with other valves, ball valves have the following advantages:

1. Fluid resistance is small, ball valve is one of the least fluid resistance in all kinds of hair, even reduced diameter ball valve, its fluid resistance is quite small.2. The switch is quick and convenient. As long as the valve stem rotates 90°, the ball valve will complete the fully open or fully closed action, which is easy to realize fast opening and closing.3. Good sealing performance, ball valve seat ring is generally made of PTFE and other elastic materials, easy to ensure sealing, and the ball valve sealing force increases with the increase of medium pressure.4. Reliable stem seal. Ball valve open and close when the stem only for rotary movement, so the stem packing seal is not easy to be destroyed, and the stem sealing force with the increase of medium pressure and increase.5. The opening and closing of the ball valve only do 90° rotation, so it is easy to achieve automatic control and remote control, ball valve can be configured with pneumatic device, electric device, hydraulic device, gas-liquid linkage device or electro-hydraulic linkage device.6 ball valve channel smooth, not easy to deposit medium, can be pipeline ball.

公称压力或压力级 Nominal pressure or pressure level		PN10~420,Class150~2500,JIS10~20K
公称通经或口径 The nominal meridian or caliber		DN6~1200,NPS1/4~48
适用温度 Suitable temperature		-196°C~540°C
驱动方式 Drive way		手动、蜗轮蜗杆传动、气动、电动、液动、气液联动、电液联动 Manual, worm gear and worm drive, pneumatic, electric, hydraulic, gas-liquid linkage, electro-hydraulic linkage
标准与规范 Standards and Specifications	**设计与制造** Design and Manufacture	API 6D《管线阀门》 API 608《法兰、螺纹和焊接连接的金属球阀》 ASME B16.34《法兰、螺纹和焊接连接的阀门》 ANSI/AWWAC507《6英寸至48英寸球阀》 BFCI 70-2《控制阀门阀座泄漏》 MSS SP-72《法兰和对焊连接的一般用球阀》 ISO 17292《石油、石化及相关工业用金属球阀》 BS 5351《石油、石化及相关工业钢制球阀》 BS 6364《低温阀门》 NACE MR0175《用于石油和天然气工业的抗硫化氢的材料》 GB/T 12237《石油、石化及相关工业用的钢制球阀》 GB/T 21385《金属密封球阀》 GB/T 19672《管线阀门技术要求》 ISO 5211《部分回转阀门驱动装置的连接》
	连接端尺寸 Connecting end dimensions	ASME B16.5《管道法兰和法兰管件》 ASMEB16.47《大直径钢制法兰NPS26至NPS60》 ISO 7005-1《金属法兰第1部分钢制法兰》 GB/T9112~9124《钢制管法兰》 GB/T13402《大直径钢制管法兰》 HG/T20592《钢制管法兰（PN系列）》 HG/T 20615《钢制管法兰（Class系列）》 SH 3406《石油化工钢制管法兰》 JB/T74~90《管路法兰》 JISB2238《钢制管法兰通则》 ASMEB16.25《对接焊端》 ASMEB16.11《承插焊和螺纹连接的锻造管件》 BS 12627《工业阀门钢制阀门的对焊端》 BS 12760《阀门钢制阀门的承插焊端》
	结构长度 The length of the structure	ASMEB16.10《阀门的结构长度》 ISO 5752《法兰连接金属阀门结构长度》 BS 558《工业阀门法兰连接管道系统用金属阀门的结构长度》 BS 12982《工业阀门对焊端阀门的结构长度》 GB/T 12221《金属阀门结构长度》
	试验与检验 Test and inspection	API 598《阀门的检查与试验》 API 6D《管线阀门》 API 607《转1/4周软阀座阀门的耐火试验》 API 6FA《阀门耐火试验规范》 GB/T 13927《工业阀门压力试验》 GB/T 26480《阀门的检验与试验》 JB/T6899《阀门的耐火试验》 BS 6755 第1篇《阀门的试验第1篇产品压力试验的要求规范》 BS 6755第2篇《阀门的试验第2篇燃烧试验的要求规范》 BS 12569《工业阀门化工和石油化工加工工业用阀门要求和试验》 MSS SP-82《阀门压力试验方法》 MSS SP-61《钢阀门的压力试验》

Overview of metal hard seal ball valve 金属硬密封球阀概述

用途 Use

通常情况下，球阀阀座材料采用非金属材料，例如PTFE，因此限制了球阀的应用。通用球阀不能应用于高温工况和介质为颗粒状及除灰系统。针对这种情况，经过多年的努力研究开发出了金属硬密封球阀。金属硬密封球阀适用于Class50~Class2500，PN16~PN160的各种管道上，用于截断或接通管路中的介质，选用不同的材质，可分别适用于非腐蚀性介质、弱腐蚀性介质、硝酸、醋酸、氧化性介质、苛刻工况。金属硬密封球阀的驱动方式为手动、蜗轮蜗杆传动、气动或电动。金属硬密封球阀一般采用法兰连接，也可采用对焊连接、承插焊连接、螺纹连接及对夹连接。

Typically, ball valve seats are made of non-metallic materials, such as PTFE, which limits the application of ball valves. Universal ball valves can not be used in high temperature conditions and medium for granular and ash removal systems. In view of this situation, after years of hard research and development of metal sealing ball valve. Metal hard seal ball valve is suitable for Class50~Class2500, PN16~PN160 on all kinds of pipelines, used to cut off or connect the pipeline medium, choose different materials, can be respectively suitable for non-corrosive medium, weak corrosive medium, nitric acid, acetic acid, oxidizing medium, harsh working conditions. Metal hard seal ball valve drive mode for manual, worm gear drive, pneumatic or electric. Metal hard seal ball valves are generally connected by flanges, and can also be connected by butt welding, socket welding, thread connection and clamp connection.

采用先进的球体和阀座硬化技术
Advanced ball and seat hardening technology

金属硬密封球阀的球体与阀座完全采用金属对金属的密封方式，为了确保阀门在各种温度和压力下的可靠密封，针对用户的不同使用工况和要求，可以采用多种先进的球体和阀座的硬化技术，包括超音速喷涂、镍基喷焊、表面特殊硬化、硬质合金喷焊以及采用高强度高硬度陶瓷材料等，球体和阀座的表面硬度一般可以达到HRC60以上，最高可达HRC74以上。密封面材料耐温一般可以540°。最高可达980°C。材料的结合强度可以达到10000PSI以上。密封面材料还具有很好的耐摩擦、耐冲击等性能。金属硬密封球阀能够适用于绝大多数的苛刻工况条件。

The ball and seat of the ball valve are completely sealed by metal to metal. In order to ensure the reliable sealing of the valve at various temperatures and pressures, according to different working conditions and requirements of the user, a variety of advanced ball and seat hardening technology can be used. Including supersonic spraying, nickel-based spray welding, special surface hardening, carbide spray welding and the use of high strength and high hardness ceramic materials, the surface hardness of the ball and seat can reach HRC60 or above, the highest can reach HRC74 or above. Sealing surface material temperature can generally be 540°. Up to 980°C. The binding strength of the material can reach more than 10,000 psi. Sealing surface material also has good friction resistance, impact resistance and other properties. Metal hard seal ball valve can be applied to the vast majority of harsh working conditions.

金属硬密封球阀的结构设计特点
Metal hard seal ball valve structure design characteristics

金属硬密封球阀除了具有防止误码操作、防止阀杆飞出、设置驱动装置安装平台等结构特点外，还具有如下的特点。

The metal hard seal ball valve has the following characteristics in addition to the structural features of preventing the bit error operation, preventing the stem from flying out, setting the driving device installation platform and so on.

自然的防静电结构设计
Advanced ball and seat hardening technology

金属硬密封球阀的阀体、阀座、球体等金属零件紧密封接触，自然形成了静电通道。因此，金属硬密封球阀不需要设置专门的防静电装置。

Metal hard seal ball valve body, seat, ball and other metal parts close seal contact, natural formation of electrostatic channel. Therefore, the metal hard seal ball valve does not need to set up special antistatic device.

安全的防火结构设计 Safe fire structural design

密封面采用金属对金属密封结构，填料采用柔性石墨，垫片采用不锈钢+柔性石墨结构。因此，阀门即使在火灾情况下也能确保可靠的密封。

The sealing surface adopts metal to metal sealing structure, the filler adopts flexible graphite, and the gasket adopts stainless steel + flexible graphite structure. As a result, the valve ensures a reliable seal even in case of fire.

防止阀门在高温下的涨死
Prevent the valve from swelling to death at high temperature

高温工况下由于热膨胀而容易引起球体与阀座的涨死，从而导致阀门无法开启。金属硬密封球阀采用了蝶簧或弹簧加载的专利密封结构，在高温下零部件的热膨胀可以被蝶簧或弹簧所吸收，故能够保证阀门在高温下不会被涨死，并能够在高温下灵活启闭。

Under high temperature conditions due to thermal expansion and easy to cause the ball and seat swelling death, resulting in the valve can not be opened. The metal hard seal ball valve adopts the patented seal structure of butterfly spring or spring loading, THE thermal expansion of parts at high temperature can be absorbed by butterfly spring or spring, so it can ensure that the valve will not be swollen at high temperature, and can be opened and closed flexibly at high temperature.

优异的密封性能 Excellent sealing performance

采用独特的球阀研磨工艺，通过球体与研磨器具在空间不同方位的旋转，使球体表面达到极高的圆度和光洁度，阀门的密封性能完全达到或超过标准要求。

Under high temperature conditions due to thermal expansion and easy to cause the ball and seat swelling death, resulting in the valve can not be opened. The metal hard seal ball valve adopts the patented seal structure of butterfly spring or spring loading, THE thermal expansion of parts at high temperature can be absorbed by butterfly spring or spring, so it can ensure that the valve will not be swollen at high temperature, and can be opened and closed flexibly at high temperature.

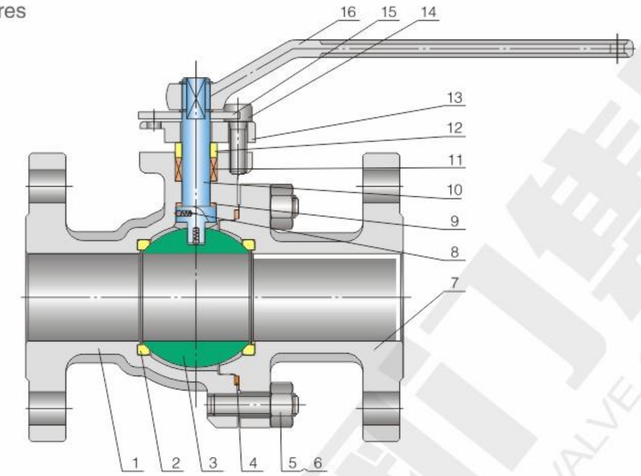
双阻断及泄放功能 Double blocking and release function

硬密封固定球阀的两个阀座能独立切断进口端和出口端的介质，实现双阻断功能。当球阀关闭时，即使阀门进出口两端同时受压，阀门中腔和两端通道也可以被相互阻断，中腔内的剩余介质可以通过泄放W排出。硬密封浮动球阀采用球后阀座密封结构。一般采用单向密封，并在阀体上标有流向。如用户有特殊要求，可以采用双向密封的专利结构。

Under high temperature conditions due to thermal expansion and easy to cause the ball and seat swelling death, resulting in the valve can not be opened. The metal hard seal ball valve adopts the patented seal structure of butterfly spring or spring loading, THE thermal expansion of parts at high temperature can be absorbed by butterfly spring or spring, so it can ensure that the valve will not be swollen at high temperature, and can be opened and closed flexibly at high temperature.

浮动球阀主要材料表 Main Material List of Floating Ball Valve

主要结构图形 Major Features



主要参数 Main Parameter Specification

设计和制造 Design and Manufacture：API 6D、ASME B16.34、API 608、MSS-SP-72(BS5351)
结构长度尺寸 End to End Dimension：API 6D、ASME B16.10
法兰连接尺寸 Flange Connection Dimension：ASME B16.5
对焊端尺寸 BW Connection Dimension：ASME B16.25
检查和试验 Test and Inspection：API 6D、API 598
防火设计 Fire-safe Design：API 607/6Fa
防静电设计和防爆阀杆 Anti-static Design & Anti Blow-out Stem

主要材料Main Material

序号 No.	名称 Part Name	材料 Material
1	左阀体 Left Body	A216-WCB、WCC，A352-LCB、LCC，A351-CF8、CF8M、CF3、CF3M、CN7M、CF8C、CD4MCu、CN-3MN
2	阀座 Seat	PTFE、RPTFE、PEEK、PPLL、POM、KARBATE、NYLON、MOLON、DEVLON
3	球 Ball	A105+ENP，A350 LF2+ENP，A182 F6、F304、F304L、F316、F316L、F51、F53，ALLOY-20，SS321
4	垫片 Gasket	Flexble Graphite+304，Flexble Graphite+316，PTFE
5	螺柱 Bolt	A194-2H、2MH、8、8M
6	螺母 Nut	A193-B7、B7M、B8、B8M
7	右阀体 Right Body	A216-WCB、WCC，A352-LCB、LCC，A351-CF8、CF8M、CF3、CF3M、CN7M、CF8C、CD4MCu、CN-3MN
8	小弹簧 Small Spring	SS304，SS316
9	止推垫片 Thrust Washer	PTFE、RPTFE、Stainless Steel+N
10	阀杆 Stem	A276-T410、304、304L、316、316L、321，ALLOY-20，1045+ENP，A182-F51、F53，4140+ENP，17-4PH
11	填料 Packing	Flexible Graphite，PTFE
12	填料压套 Gland	A276-304、304L、316、316L、321，ALLOY-20，A182-F51、F53
13	填料压盖 Gland Flange	A216-WCB、A351-CF8
14	螺钉 Screw	A193-B7，B8
15	定位板 Limited Plate	1025，Stainless Steel
16	手柄 Wrench	A216-WCB

Performance Specification for Floating Ball Valves 浮动球阀性能及规范

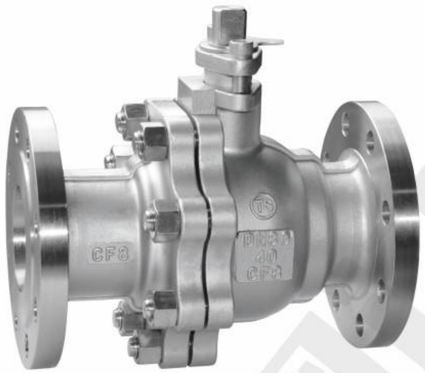
型号材料及主要参数 Model, material and main parameters

主要零件材料 Main component materials	阀体 valve body	WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L
	阀杆 valve stem	2Cr13	1Cr18Ni9Ti	0Cr18Ni9 (304)	0Cr19Nil0 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)
	球体 A sphere	2Cr13+镍基合金 (或钨钴合金)	1Cr18Ni9Ti +镍基合金 (或钨钴合金)	0Cr18Ni9 +镍基合金 (或钨钴合金)	0Cr19Nil0 +镍基合金 (或钨钴合金)	1Cr18Ni12Mo2Ti +镍基合金 (或钨钴合金)	0Cr17Ni12Mo2 +镍基合金 (或钨钴合金)	00Cr17Ni14Mo2 +镍基合金 (或钨钴合金)
	阀座 valve seat	2Cr13+硬质合金	1Cr18Ni9Ti +硬质合金	0Cr18Ni9 +硬质合金	0Cr19Nil0 +硬质合金	1Cr18Ni12Mo2Ti +硬质合金	0Cr17Ni12Mo2 +硬质合金	00Cr17Ni14Mo2 +硬质合金
	垫片 gasket	304+柔性石墨缠绕垫片 304+ flexible graphite winding gasket			304L+柔性石墨缠绕垫片 304+ flexible graphite winding gasket	316+柔性石墨缠绕垫片 316+ flexible graphite winding gasket		316L+柔性石墨缠绕垫片 316+ flexible graphite winding gasket
	填料 packing	柔性石墨 Flexible graphite						
适用工况 Applicable conditions	适用介质 Applicable medium	非腐蚀性介质或弱腐蚀性介质 Non-corrosive media or weakly corrosive media	硝酸类腐蚀性介质 Corrosive media such as nitric acid		强氧化性介质 Strong oxidizing medium	醋酸类腐蚀性介质 Acetic acid corrosive medium		尿素类腐蚀性介质 Corrosive media such as urea
	适用温度 Suitable temperature	≤425℃	≤540℃		≤425℃	≤540℃		≤455℃

产品性能规范 Product performance specification

压力等级 pressure rating		公称压力 Nominal pressure					磅级 Class			
		1.6	2.5	4.0	6.4	10.0	150	300	400	600
试验压力 Test pressure	壳体试验 Shell test	2.4	3.75	6.0	9.6	15.0	3.03	7.5	10.2	15.0
	密封试验 Sealing test	1.76	2.75	4.4	7.04	11.0	2.2	5.5	7.48	11.0
适用规范 Applicable specifications	设计制造按 Design and manufacture press	GB12237-89 AP16D JPI7S-48								
	法兰尺寸按 Flange dimensions according to	JB79-59,GB9113,HG20592-97 ANSIB16.5 JIS B2212-2214								
	结构长度按 Structure length press	GB12221-89 ANSIB16.10 JIS B2002								
	检验试验按 Inspection test press	JB/T9092-99 API598								
蜗轮蜗杆传动球阀 Worm gear worm drive ball valve		在相应的手动型号的Q后插入“3”表示，示例：Q341H Insert "3" after Q of the corresponding manual model, for example: Q341H								
气动球阀 Pneumatic ball valve		在相应的手动型号的Q后插入“6”表示，示例：Q641H Insert 6 after Q of the corresponding manual model, for example, Q641H								
电动球阀 Electric ball valve		在相应的手动型号的Q后插入“9”表示，示例：Q941H Insert "9" after Q of the corresponding manual model, for example: Q941H								
缩径球阀 Reducing valve		在相应的手动型号的Q后插入“S”表示，示例：SQ941H Insert "S" after Q of the corresponding manual model, for example: SQ941H								
驱动方式 Drive way		涡轮传动 气动 电动 气液联动等 Turbine drive pneumatic electric gas liquid linkage								

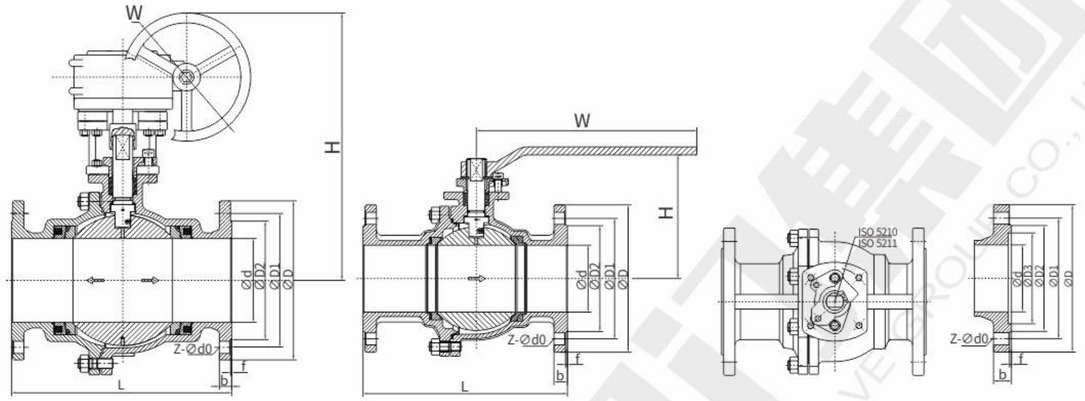
国标硬密封浮动球阀 GB National Standard Hard Seal Floating Ball Valve



主要尺寸及重量 Main dimensions and weight

公称压力 Nominal pressure	DN	L	d	D	D1	D2	D3	b	f	Z-Φd0	W		H	
											手动 manual	蜗轮 Worm gear	手动 manual	蜗轮 Worm gear
PN16	15	130	14	95	65	45	-	14	2	4-14	160	-	59	-
	20	130	19	105	75	55	-	14	2	4-14	180	-	63	-
	25	140	25	115	85	65	-	14	2	4-14	180	-	75	-
	32	165	32	135	100	78	-	16	2	4-18	200	-	95	-
	40	165	38	145	110	85	-	16	3	4-18	220	-	107	-
	50	203	51	160	125	100	-	16	3	4-18	240	-	155	-
	65	222	64	180	145	120	-	18	3	4-18	300	-	164	-
	80	241	76	195	160	135	-	20	3	8-18	350	-	182	-
	100	305	102	215	180	155	-	20	3	8-18	420	320	226	405
	125	356	127	245	210	185	-	22	3	8-18	560	320	230	420
	150	394	152	280	240	210	-	24	3	8-23	800	350	250	470
	200	457	203	335	295	265	-	26	3	12-23	1200	350	280	550

GB National Standard Hard Seal Floating Ball Valve 国标硬密封浮动球阀



DN125-DN250　　DN15-DN100　　DN40-DN100 法兰/flange

主要尺寸及重量 Main dimensions and weight

公称压力 Nominal pressure	DN	L	d	D	D1	D2	D3	b	f	Z-Φd0	W		H	
											手动 manual	蜗轮 Worm gear	手动 manual	蜗轮 Worm gear
PN25-40	15	140	14	95	65	45	40	16	3	4-14	160	-	85	-
	20	152	19	105	75	55	51	16	3	4-14	180	-	90	-
	25	165	25	115	85	65	58	16	2	4-14	180	-	99	-
	32	178	32	135	100	78	66	18	2	4-18	200	-	105	-
	40	190	38	145	110	85	76	18	2	4-18	220	-	126	-
	50	216	51	160	125	100	88	20	2	4-18	240	-	142	-
	65	241	64	180	145	120	110	22	3	8-18	300	-	165	-
	80	283	76	195	160	135	121	22	3	8-18	350	-	178	390
	100	305	102	230	190	160	150	24	3	8-23	420	320	230	420
	125	381	127	270	220	188	176	28	3	8-25	560	320	280	450
	150	403	152	300	250	218	204	32	3	8-25	800	350	310	500
	200	502	203	375	320	282	260	38	3	12-30	1200	350	350	570

注：1、本表法兰尺寸按GB/T 9112~9124标准尺寸。根据用户要求，法兰尺寸也可按HG/T 20592及JB/T 74~90标准尺寸设计制造。
2、长度也可按原一机部标准设计制造。
3、设计与制造按GB/T12237标准，结构长度按GB/T12221-05标准，压力温度按GB9131标准，试验检验按GB/T13927 JB/T9092标准。

Note: 1. Flange size in this table is according to GB/T 9112~9124 standard size. According to user requirements, flange size can also be designed and manufactured according to HG/T 20592 and JB/T 74~90 standard size.2, the length can also be designed and manufactured according to the original standard.3. Design and manufacture according to GB/T12237 standard, structure length according to GB/T12221-05 standard, pressure and temperature according to GB9131 standard, test and inspection according to GB/T13927 JB/T9092 standard.

美标硬密封浮动球阀 API Hard Seal Floating Ball Valve



主要尺寸及重量

公称压力	DN	NPS	L		d	D	D1	D2	b	f	Z-Φd0	W		H	
			RF	RJ								手动	蜗轮	手动	蜗轮
Class150 PN20	15	1/2	108	119	14	89	60.5	35	11.5	1.6	4-15	140	-	85	-
	20	3/4	117	130	19	98	70	43	11.5	1.6	4-15	140	-	90	-
	25	1	127	140	25	108	79.5	51	11.5	1.6	4-15	150	-	99	-
	32	1 1/4	140	153	32	117	89	64	13	1.6	4-15	180	-	105	-
	40	1 1/2	165	178	38	127	98.5	73	14.5	1.6	4-15	200	-	126	-
	50	2	178	191	51	152	120.5	92	16	1.6	4-19	250	-	140	-
	65	2 1/2	190	203	64	178	139.5	105	17.5	1.6	4-19	300	-	165	-
	80	3	203	216	76	190	152.5	127	19.5	1.6	4-19	350	-	178	-
	100	4	229	242	102	229	190.5	157	24	1.6	8-19	500	305	230	380
	125	5	356	369	127	254	216	186	24	1.6	8-22	800	305	280	405
	150	6	394	407	152	279	241.5	216	25.5	1.6	8-22	800	305	310	460
	200	8	457	470	203	343	298.5	270	29	1.6	8-22	1000	305	350	550
	250	10	533	546	254	406	362	324	31	1.6	12-25	-	400	-	706

主要尺寸及重量 Main dimensions and weight

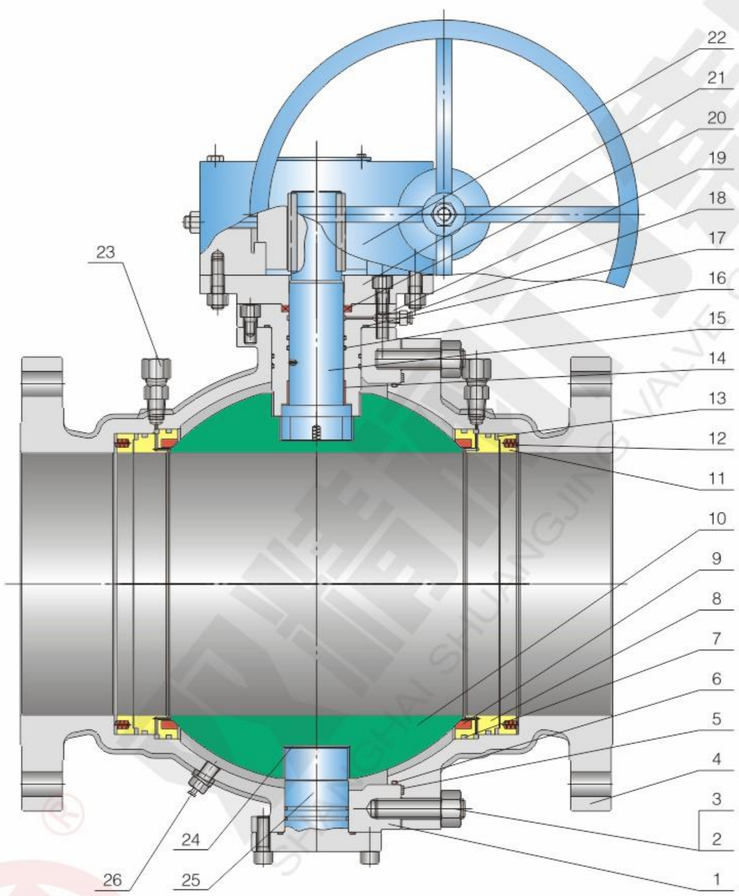
公称压力	DN	NPS	L		d	D	D1	D2	b	f	Z-Φd0	W		H	
			RF	RJ								手动	蜗轮	手动	蜗轮
Class300 PN50	15	1/2	140	151	14	95	66.5	35	14.5	1.6	4-15	140	-	85	-
	20	3/4	152	165	19	117	82.5	43	16	1.6	4-19	140	-	90	-
	25	1	165	178	25	124	89	51	17.5	1.6	4-19	150	-	99	-
	32	11/4	178	191	32	133	98.5	64	19.5	1.6	4-19	180	-	105	-
	40	11/2	190	203	38	156	114.5	73	21	1.6	4-22	200	-	126	-
	50	2	216	232	51	165	127	92	22.5	1.6	8-19	250	-	142	-
	65	21/2	241	257	64	190	149	105	25.5	1.6	8-22	300	-	165	-
	80	3	283	299	76	210	168.5	127	29	1.6	8-22	350	-	178	330
	100	4	305	321	102	254	200	157	32	1.6	8-22	500	305	230	380
	125	5	381	397	127	279	235	186	35	1.6	8-22	800	305	280	420
	150	6	403	419	152	318	270	216	37	1.6	12-22	800	305	310	480
	200	8	502	518	203	381	330	270	41.5	1.6	12-25	1000	305	350	560
Class600 PN100	15	1/2	165	164	14	95	66.5	35	14.5	6.4	4-15	140	-	79	-
	20	3/4	190	190	19	118	82.5	43	16	6.4	4-19	140	-	83	-
	25	1	216	216	25	124	89	51	17.5	6.4	4-19	200	-	114	-
	32	11/4	229	229	32	133	98.5	64	21	6.4	4-19	200	-	120	-
	40	11/2	241	241	38	156	114.5	73	22.5	6.4	4-22	250	-	125	-
	50	2	292	295	51	165	127	92	25.5	6.4	8-19	300	-	156	-
	65	21/2	330	333	64	190	149	105	29	6.4	822	350	-	172	-
	80	3	356	359	76	210	168	127	32	6.4	8-22	500	305	220	370
	100	4	432	435	102	273	216	157	38.5	6.4	8-25	650	305	250	400
Class900 PN150	15	1/2	216	216	14	121	82.5	35	22.5	6.4	4-23	150	-	98	-
	20	3/4	229	229	20	130	88.9	43	25.5	6.4	4-23	150	-	105	-
	25	1	254	254	25	149	101.6	51	29	6.4	4-26	200	-	110	-
	32	11/4	279	279	32	159	111.1	64	29	6.4	4-26	250	-	120	-
	40	11/2	305	305	38	178	123.8	73	32	6.4	4-29	250	-	125	-
	50	2	368	371	50	216	165.1	92	38.5	6.4	8-26	350	-	160	-
Class1500 PN260	15	1/2	216	216	14	121	82.5	35	22.5	6.4	4-23	182	-	98	-
	20	3/4	229	229	20	130	88.9	43	25.5	6.4	4-23	200	-	105	-
	25	1	254	254	25	149	101.6	51	29	6.4	4-26	250	-	110	-
	32	11/4	279	279	32	159	111.1	64	29	6.4	4-26	300	-	120	-
	40	11/2	305	305	38	178	123.8	73	32	6.4	4-29	350	-	130	-
	50	2	368	371	50	216	165.1	92	38.5	6.4	8-26	500	-	160	-

注：1、RF表示突面法兰，RJ表示环连接面法兰。
2、本表法兰尺寸按ASMEB16.5标准。根据用户要求，法兰尺寸也可按GB/T9112~9124、HG/T20615和SH3406设计制造。

Note: 1. RF stands for flanges with protruding surfaces, RJ stands for flanges with ring connecting surfaces.2. Flange size of this table is according to ASMEB16.5 standard. According to user's requirement, flange size can also be designed and manufactured according to GB/T9112~9124, HG/T20615 and SH3406.

固定球阀主要材料表 Main Material List of Fixed Ball Valve

主要结构图形 Major Features



主要参数 Main Parameter Specification

设计和制造 Design and Manufacture：API 6D、ASME B16.34(BS5351)、API 608、MSS-SP-72
结构长度尺寸 End to End Dimension：API 6D、ASME B16.10
法兰连接尺寸 Flange Connection Dimension：ASME B16.5, NPS≥26" Per as ASME B16.47
对焊端尺寸 BW Connection Dimension：ASME B16.25
检查和试验 Test and Inspection：API 6D、API 598
防火设计 Fire-safe Design：API 607/6Fa
防静电设计和防爆阀杆 Anti-static Design & Anti Blow-out Stem

Main Material List of Fixed Ball Valve 固定球阀主要材料表

主要材料 Main Material

序号 No.	名称 Part Name	材料 Material
1	左阀体 Left Body	A216-WCB、WCC，A352-LCB，A351-CF8、CF8M、CF3、CF3M、CN7M、CF8C、CD4MCu、CN-3MN
2	螺母 Nut	A194-2H、2HM、8、8M
3	螺柱 Bolt	A193-B7、B7M、B8、B8M
4	右阀体 Right Body	A216-WCB、WCC，A352-LCB，A351-CF8、CF8M、CF3、CF3M、CN7M、CF8C、CD4MCu、CN-3MN
5	垫片 Gasket	SS304、SS316+Flexible Graphite Spiral Wound
6	O型圈 O-Ring	NBR、VITON
7	O型圈 O-Ring	VITON
8	阀座圈 Seat Ring	A105+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，ALLOY-20
9	阀座 Seat	PTFE、RPTFE、NYLON、PEEK、PPL、POM、KARBATE、MOLON、DEVLON
10	球 Ball	A105+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，ALLOY-20
11	压环 Compression ring	A105、F304、F316、F6、F321、F51、F53
12	弹簧 Spring	SS304，Inconel、1566+ENP
13	密封圈 Sealing Ring	Flexble Graphite
14	复合轴承 Bearing	1045+RPTFE、SS304+RPTFE、SS316+RPTFE
15	阀杆 Stem	1045+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，ALLOY-20、4140+ENP、17-4PH
16	O型圈 O-Ring	VITON
17	密封圈 Sealing Ring	SS304、SS316+Flexible Graphite Spiral Wound
18	注油阀 Oil Cup	1025、SS304
19	填料箱 Stuffing Box	A105+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，ALLOY-20
20	填料 Packing	Flexible Graphite
21	连接盘 Connecting Plate	1025、A216-WCB、A351 CF8
22	齿轮 Gear	
23	注脂阀 Grease fitting	1025、SS304、SS316、F51、F53
24	垫圈 Adujsting Ring	PTFE、1045+RTPFE、Stainless Steel+RTPFE
25	固定轴 Trunnion	1045+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，ALLOY-20、4140+ENP、17-4PH
26	丝堵和放泄阀 Drain Valve and Plug	1025，SS304、SS316、F51、F53、ALLOY-20

固定球阀性能及规范 Performance and specification of fixed ball valve

GB Fixed ball valve 国标固定球阀

型号材料及主要参数 Model, material and main parameters

主要零件材料 Main component materials	阀体 valve body	WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L
	阀杆 valve stem	2Cr13	1Cr18Ni9Ti	0Cr18Ni9 (304)	0Cr19Ni10 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)
	球体 A sphere	2Cr13+镍基合金 (或钨钴合金)	1Cr18Ni9Ti +镍基合金 (或钨钴合金)	0Cr18Ni9 +镍基合金 (或钨钴合金)	0Cr19Ni10 +镍基合金 (或钨钴合金)	1Cr18Ni12Mo2Ti +镍基合金 (或钨钴合金)	0Cr17Ni12Mo2 +镍基合金 (或钨钴合金)	00Cr17Ni14Mo2 +镍基合金 (或钨钴合金)
	阀座 valve seat	2Cr13+硬质合金	1Cr18Ni9Ti +硬质合金	0Cr18Ni9 +硬质合金	0Cr19Ni10 +硬质合金	1Cr18Ni12Mo2Ti +硬质合金	0Cr17Ni12Mo2 +硬质合金	00Cr17Ni14Mo2 +硬质合金
适用工况 Applicable conditions	适用介质 Applicable medium	非腐蚀性介质或弱腐蚀性介质 Non-corrosive media or weakly corrosive media	硝酸类腐蚀性介质 Corrosive media such as nitric acid		强氧化性介质 Strong oxidizing medium	醋酸类腐蚀性介质 Acetic acid corrosive medium		尿素类腐蚀性介质 Corrosive media such as urea
	适用温度 Suitable temperature 常温型 The normal temperature type	≤180℃						
	适用温度 Suitable temperature 高温型 High temperature type	≤425℃	≤540℃		≤425℃	≤540℃		≤455℃



主要性能及规范 Main performance and specification

公称压力 (MPa) Nominal pressure	最高使用压力 Maximum service pressure (Mpa)	试验压力（MPa） Test pressure 壳体 shell	高压液密封 High pressure liquid seal	低压液密封 Low pressure liquid seal	压力级 Pressure level	最高使用压力 Maximum service pressure (Mpa)	试验压力（MPa） Test pressure 壳体 shell	高压液密封 High pressure liquid seal	低压液密封 Low pressure liquid seal
1.6	1.6	2.4	1.76	0.6	Class150	1.94	2.94	2.16	0.6
2.5	2.5	3.75	2.75	0.6	Class300	5.1	7.67	5.62	0.6
4.0	4.0	6.0	4.4	0.6	Class600	10.2	15.3	11.23	0.6
6.4	6.4	9.6	7	0.6	Class900	15.1	23	16.85	0.6
10.0	10.0	15	11	0.6	Class1500	25.1	37.5	27.5	0.6

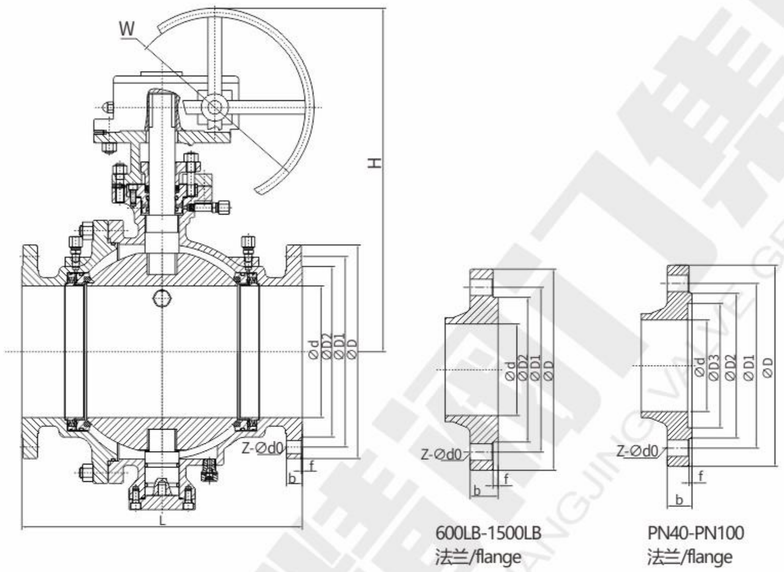
适用规范 Applicable specifications	设计制造按 Design and manufacture press	GB12237-89 AP16D JPI7S-48
	法兰尺寸按 Flange dimensions according to	JB79-59,GB9113,HG20592-97 ANSIB16.5 JIS B2212-2214
	结构长度按 Structure length press	GB12221-89 ANSIB16.10 JIS B2002
	检验试验按 Inspection test press	JB/T9092-99 API598
蜗轮蜗杆传动球阀 Worm gear worm drive ball valve		在相应的手动型号的Q后插入“3”表示，示例：Q341H Insert "3" after Q of the corresponding manual model, for example: Q341H
气动球阀 Pneumatic ball valve		在相应的手动型号的Q后插入“6”表示，示例：Q641H Insert 6 after Q of the corresponding manual model, for example, Q641H
电动球阀 Electric ball valve		在相应的手动型号的Q后插入“9”表示，示例：Q941H Insert "9" after Q of the corresponding manual model, for example: Q941H
缩径球阀 Reducing valve		在相应的手动型号的Q后插入“S”表示，示例：SQ941H Insert "S" after Q of the corresponding manual model, for example: SQ941H

主要尺寸及重量 Main dimensions and weight

公称压力 Nominal pressure	DN	L 法兰 flange	L 对焊 Butt welding	d	D	D1	D2	D3	b	f	Z-Φd0	H	H1	W
PN16	50	220	-	50	160	125	100	-	16	3	4-18	-	-	-
	65	241	-	65	180	145	120	-	18	3	4-18	-	-	-
	80	283	-	80	195	160	135	-	20	3	8-18	-	-	-
	100	305	-	100	215	180	155	-	20	3	8-18	-	-	-
	125	356	-	125	245	210	185	-	22	3	8-18	-	-	-
	150	394	457	150	280	240	210	-	24	3	8-23	392	193	300
	200	457	521	200	335	295	265	-	26	3	12-23	492	240	300
	250	533	559	250	405	355	320	-	30	3	12-25	548	293	300
	300	610	635	300	460	410	375	-	30	4	12-25	688	340	400
	350	686	762	350	520	470	435	-	34	4	16-25	722	372	400
	400	762	838	400	580	525	485	-	36	4	16-30	722	415	400
	450	864	914	450	640	585	545	-	40	4	20-30	804	462	500
	500	914	991	500	705	650	608	-	44	4	20-34	952	511	600
	600	1067	1143	600	840	770	717	-	48	5	20-41	1154	601	750
	700	1245	1346	700	910	840	788	-	50	5	24-41	1200	680	750

国标固定球阀 GB Fixed ball valve

主要参数 The main parameters



600LB-1500LB
法兰/flange

PN40-PN100
法兰/flange

主要尺寸及重量 Main dimensions and weight

公称压力 Nominal pressure	DN	L 法兰 flange	L 对焊 Butt welding	d	D	D1	D2	D3	b	f	Z-Φd0	H	H1	W
PN25-40	50	220	-	50	160	125	100	88	20	3	4-18	-	-	-
	65	241	-	65	180	145	120	110	22	3	8-18	-	-	-
	80	283	-	80	195	160	135	121	22	3	8-18	-	-	-
	100	305	-	100	230	190	160	150	24	3	8-23	-	-	-
	125	381	-	125	270	220	188	176	28	3	8-25	-	-	-
	150	403	457	152	300	250	218	204	30	3	8-25	402	192	300
	200	502	521	203	375	320	282	260	38	3	12-30	498	246	300
	250	568	559	254	445	385	345	313	42	3	12-34	655	303	400
	300	648	635	305	510	450	408	364	46	4	16-34	658	348	400
	350	762	762	337	570	510	465	422	52	4	16-34	686	378	400
	400	838	838	387	655	585	535	474	58	4	16-41	880	429	600
	450	914	914	438	680	610	560	524	60	4	20-41	1050	518	750
	500	991	991	489	755	670	612	576	62	4	20-48	1110	540	750
	600	1143	1143	591	890	795	730	678	62	5	20-54	1400	650	750

注：本表法兰尺寸按GB/T 9112~9124标准尺寸。根据用户要求，法兰尺寸也可按HG/T 20592及JB/T 74~90标准尺寸设计制造。

Note: The flange size of this table is according to GB/T 9112~9124 standard size. According to user requirements, flange size can also be designed and manufactured according to HG/T 20592 and JB/T 74~90 standard size.

API Fixed ball valve 美标固定球阀



规格主要尺寸 Specifications Main Dimensions

公称压力 Nominal pressure	DN	NPS	L RF	L 对焊 Butt welding	d	D	D1	D2	b	f	Z-Φd	H	H1	W
Class150 PN20	50	2	178	216	51	152	120.5	92	16	1.6	4-19	-	-	-
	65	2½	190	241	64	178	139.5	105	18	1.6	4-19	-	-	-
	80	3	203	283	76	190	152.5	127	19	1.6	4-19	-	-	-
	100	4	229	305	102	229	190.5	157	24	1.6	8-19	330	135	300
	125	5	356	381	127	254	216	186	24	1.6	8-22	360	165	300
	150	6	394	457	152	279	241.5	216	25.5	1.6	8-22	392	193	300
	200	8	457	521	203	343	298.5	270	29	1.6	8-22	492	240	300
	250	10	533	559	254	406	362	324	31	1.6	12-25	548	293	300
	300	12	610	635	305	483	432	381	32	1.6	12-25	688	340	400
	350	14	686	762	337	533	476	413	35	1.6	12-29	722	372	400
	400	16	762	838	387	597	540	470	37	1.6	16-29	722	415	400
	450	18	864	914	438	635	578	533	40	1.6	16-32	804	462	500
	500	20	914	991	489	699	635	584	43	1.6	20-32	952	511	600
	600	24	1067	1143	591	813	749.5	692	48	1.6	20-35	1154	601	750
	650	26	1143	1245	633	786	744.5	711	40	1.6	36-22	1300	700	750
	700	28	1245	1346	684	837	795.5	762	43	1.6	40-22	1550	780	750
	750	30	1295	1397	735	887	846	813	43	1.6	44-22	1650	830	750
	800	32	1372	1524	779	941	900	864	44	1.6	48-22	1740	870	750
	900	36	1524	1727	874	1057	1009.5	972	51	1.6	44-26	1950	970	750

美标固定球阀 API Fixed ball valve

规格主要尺寸 Specifications Main Dimensions

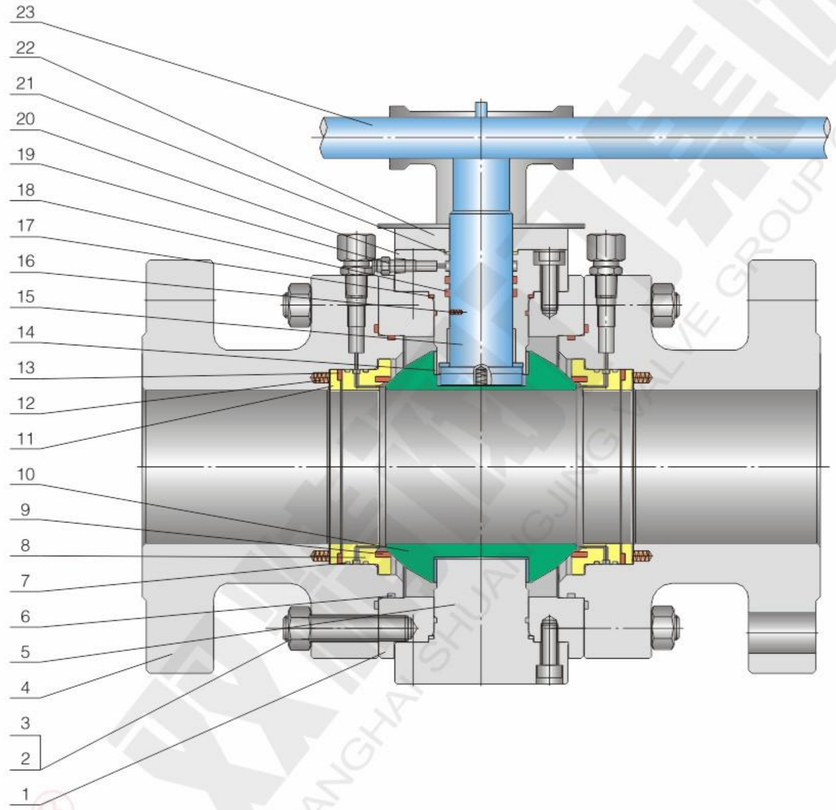
公称压力 Nominal pressure	DN	NPS	L			d	D	D1	D2	b	f	Z-Φd	H	H1	W
			RF	RJ	对焊 Butt welding										
Class300 PN50	50	2	216	-	216	51	165	127	92	23	1.6	8-22	-	-	-
	65	2½	241	-	241	64	190	149	105	26	1.6	8-22	-	-	-
	80	3	283	-	283	76	210	168.5	127	29	1.6	8-22	-	-	-
	100	4	305	-	305	102	254	200	157	32	1.6	8-22	340	140	300
	125	5	318	-	381	127	279	235	186	35	1.6	8-22	370	170	300
	150	6	403	-	457	152	318	270	216	37	1.6	12-22	402	192	300
	200	8	502	-	521	203	381	330	270	41.5	1.6	12-25	498	246	300
	250	10	568	-	559	254	445	387.5	324	48	1.6	16-29	655	303	400
	300	12	648	-	635	305	521	451	381	51	1.6	16-32	658	348	400
	350	14	762	-	762	337	584	514.5	413	54	1.6	20-32	686	378	400
	400	16	838	-	838	387	648	571.5	470	58	1.6	12-35	880	429	600
	450	18	914	-	914	438	711	628.5	533	61	1.6	24-35	1050	518	750
	500	20	991	-	991	489	775	686	584	64	1.6	24-35	1110	540	750
	600	24	1143	-	1143	591	914	813	692	70	1.6	24-41	1400	650	750
	650	26	1245	-	1245	633	867	803.5	737	87	1.6	32-35.5	1500	750	750
	700	28	1346	-	1346	684	921	857	787	87	1.6	36-35.5	1600	800	750
	750	30	1397	-	1397	735	991	921	845	92	1.6	36-39	1720	860	750
	800	32	1524	-	1524	779	1054	978	902	102	1.6	32-42	1800	900	750
	900	36	1727	-	1727	874	1172	1089	1010	102	1.6	32-45	2200	1020	600
Class600 PN110	50	2	292	295	292	51	165	127	92	26	6.4	8-19	240	95	300
	65	2½	330	333	330	64	190	149	105	29	6.4	8-22	290	115	300
	80	3	356	359	356	76	210	168	127	32	6.4	8-22	340	136	300
	100	4	432	435	432	102	273	216	157	38	6.4	8-25	358	152	300
	125	5	508	511	508	127	330	266.5	186	45	6.4	8-29	400	180	300
	150	6	559	562	559	152	356	292	216	48	6.4	12-29	445	209	400
	200	8	660	664	660	203	419	349	270	56	6.4	12-32	498	263	400
	250	10	787	791	787	254	508	432	324	64	6.4	16-35	653	312	400
	300	12	838	841	838	305	559	489	381	67	6.4	20-35	665	354	500
	350	14	889	892	889	334	603	527	413	70	6.4	20-38	738	389	600
	400	16	991	994	991	385	686	603	470	77	6.4	20-41	920	440	750
	450	18	1092	1095	1092	436	743	654	533	83	6.4	20-44	1100	530	750
	500	20	1194	1200	1194	487	813	724	584	89	6.4	24-44	1200	560	750
	600	24	1397	1407	1397	589	940	838	692	102	6.4	24-52	1480	670	750

注：1、RF表示突面法兰, RJ表示环连接法兰。
2、对于NPS≤24的阀门本表法兰尺寸按ASMEB165标准。根据用户要求,法兰尺寸也可按HG20615,GB/T 9112~9124, SH3046设计制造。
3、对于NPS≥26的阀门本表法兰尺寸按ASME B16.47标准的B系列API 6.5标准及GB/T13402标准，根据用户要求，法兰尺寸也可按ASMEB 1M7的A系列及MSSSP-44标准。
4、设计与制造按API 608标准,结构长度按ASME B16.10标准,压力温度按ANSI B16.34标准，试验检验按API 598标准。

Note: 1. RF stands for protruding flange, RJ stands for ring connecting flange.
2. For valves with NPS≤24, flange size in this table is according to ASMEB165 standard. According to user requirements, flange size can also be designed and manufactured according to HG20615,GB/T 9112~9124, Sh3046.
3. For valves with NPS≥26, the flange size in this table is in accordance with API 6.5 of ASME B16.47 standard and GB/T13402 standard. According to user requirements, the flange size can also be in accordance with ASMEB 1M7 series A and MSSSP-44 standard.
4. Design and manufacture according to API 608 standard, structure length according to ASME B16.10 standard, pressure and temperature according to ANSI B16.34 standard, test and inspection according to API 598 standard.

Main Material List of Forged Floating Ball Valve 锻造浮动球阀主要材料表

主要结构图形 Major Features



主要参数 Main Parameter Specification

设计和制造 Design and Manufacture：API 6D、ASME B16.34(BS5351)、API 608、MSS-SP-72
结构长度尺寸 End to End Dimension：API 6D、ASME B16.10
法兰连接尺寸 Flange Connection Dimension： ASME B16.5
对焊端尺寸 BW Connection Dimension：ASME B16.25
检查和试验 Test and Inspection：API 6D、API 598
防火设计 Fire-safe Design：API 607/6Fa
防静电设计和防爆阀杆 Anti-static Design & Anti Blow-out Stem

锻造浮动球阀主要材料表 Main Material List of Forged Floating Ball Valve

主要材料 Main Material

序号 No.	名称 Part Name	材料 Material
1	阀体 Body	A105，A350-LF2，A182-F304、F304L、F316、F316L、F51、F53
2	螺柱 Stud	ASTM A193 B7、B7M、B8
3	螺母 Nut	ASTM A194 2H、2HM、8
4	连接体 Adapter	A105，A350-LF2，A182-F304、F316、F304L、F316L、F51、F53
5	固定轴 Trunnion	1045+ENP，ASTM A182 F6、F304、F316、F51、F53
6	O型圈 O-ring	Viton、NBR
7	O型圈 O-ring	Viton、NBR
8	阀座圈 Seat ring	A105+ENP，A351 LF2、F6、F304、F316、F51、F53
9	阀座 Seat	PTFE、RPTFE、PPL、PEEK、NYLON
10	球体 Ball	A105+ENP，A351 LF2、F6、F304、F316、F51、F53
11	压环 Ring	A105，A351 LF2、F6、F304、F316、F51、F53
12	弹簧 Spring	SS304、17-4PH、Incone
13	密封圈 Sealing Ring	SS304+Graphite
14	复合轴承 Bearing	1045+RPTFE、SS304+RPTFE、SS316+RPTFE
15	阀杆 Stem	1045+ENP，ASTM A182 F6，F304、F316、F51、F53
16	弹簧 Spring	SS304、17-4PH、Incone
17	垫片 Gasket	Flexible Graphite、PTFE
18	O型圈 O-ring	Viton、NBR
19	注油阀 Oil Cup	1025、SS304
20	填料箱 Stuffing Box	A105，A350-LF2，A182-F304、F316、F304L、F316L、F51、F53
21	填料 Packing	Flexible Graphite、PTFE
22	压板 Gland	ASTM A105、ASTM A216 WCB、ASTM A351 CF8
23	手柄 Wrench	ASTM A216 WCB

Performance and specification of forged floating ball valve 锻造浮动球阀性能及规范

型号材料及主要参数 Model, material and main parameters

主要零件材料 Main component materials	阀体 valve body	WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L
	阀杆 valve stem	2Cr13	1Cr18Ni9Ti	0Cr18Ni9 (304)	0Cr19Ni10 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)
	球体 A sphere	2Cr13+镍基合金 (或钨钴合金)	1Cr18Ni9Ti +镍基合金 (或钨钴合金)	0Cr18Ni9 +镍基合金 (或钨钴合金)	0Cr19Ni10 +镍基合金 (或钨钴合金)	1Cr18Ni12Mo2Ti +镍基合金 (或钨钴合金)	0Cr17Ni12Mo2 +镍基合金 (或钨钴合金)	00Cr17Ni14Mo2 +镍基合金 (或钨钴合金)
	阀座 valve seat	2Cr13+硬质合金	1Cr18Ni9Ti +硬质合金	0Cr18Ni9 +硬质合金	0Cr19Ni10 +硬质合金	1Cr18Ni12Mo2Ti +硬质合金	0Cr17Ni12Mo2 +硬质合金	00Cr17Ni14Mo2 +硬质合金
	垫片 gasket	304+柔性石墨缠绕垫片 304+ flexible graphite winding gasket			304L+柔性石墨缠绕垫片 304+ flexible graphite winding gasket	316+柔性石墨缠绕垫片 316+ flexible graphite winding gasket		316L+柔性石墨缠绕垫片 316+ flexible graphite winding gasket
	填料 packing	柔性石墨 Flexible graphite						
适用工况 Applicable conditions	适用介质 Applicable medium	非腐蚀性介质或弱腐蚀性介质 Non-corrosive media or weakly corrosive media	硝酸类腐蚀性介质 Corrosive media such as nitric acid		强氧化性介质 Strong oxidizing medium	醋酸类腐蚀性介质 Acetic acid corrosive medium		尿素类腐蚀性介质 Corrosive media such as urea
	适用温度 Suitable temperature	≤425℃	≤540℃		≤425℃	≤540℃		≤455℃

产品性能规范 Product performance specification

		公称压力 Nominal pressure					磅级 Class			
压力等级 pressure rating		1.6	2.5	4.0	6.4	10.0	150	300	400	600
试验压力 Test pressure	壳体试验 Shell test	2.4	3.75	6.0	9.6	15.0	3.03	7.5	10.2	15.0
	密封试验 Sealing test	1.76	2.75	4.4	7.04	11.0	2.2	5.5	7.48	11.0
适用规范 Applicable specifications	设计制造按 Design and manufacture press	GB12237-89 AP16D JPI7S-48								
	法兰尺寸按 Flange dimensions according to	JB79-59,GB9113,HG20592-97 ANSIB16.5 JIS B2212-2214								
	结构长度按 Structure length press	GB12221-89 ANSIB16.10 JIS B2002								
	检验试验按 Inspection test press	JB/T9092-99 API598								
蜗轮蜗杆传动球阀 Worm gear worm drive ball valve		在相应的手动型号的Q后插入“3”表示，示例：Q341H Insert "3" after Q of the corresponding manual model, for example: Q341H								
气动球阀 Pneumatic ball valve		在相应的手动型号的Q后插入“6”表示，示例：Q641H Insert 6 after Q of the corresponding manual model, for example, Q641H								
电动球阀 Electric ball valve		在相应的手动型号的Q后插入“9”表示，示例：Q941H Insert "9" after Q of the corresponding manual model, for example: Q941H								
缩径球阀 Reducing valve		在相应的手动型号的Q后插入“S”表示，示例：SQ941H Insert "S" after Q of the corresponding manual model, for example: SQ941H								
驱动方式 Drive way		涡轮传动 气动 电动 气液联动等 Turbine drive pneumatic electric gas liquid linkage								

主要尺寸及重量 Main dimensions and weight	金属硬密封锻造浮动球阀的主要尺寸及重量参见浮动球阀，金属硬密封锻造浮动球阀的连接法兰尺寸及结构长度与浮动球阀相同。 The main dimensions and weight of the metal hard seal forged floating ball valve refer to the floating ball valve, the connecting flange of the metal hard seal forged floating ball valveThe dimensions and structure length are the same as the floating ball valve.

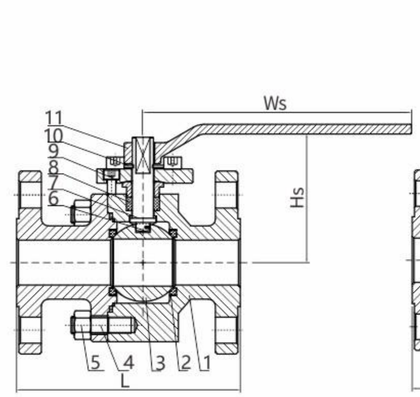
国标锻钢球阀 GB Forged Steel Ball Valve



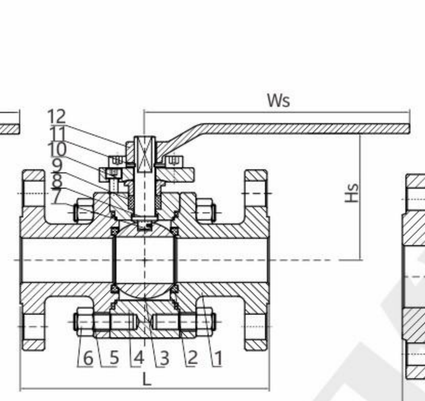
主要连接尺寸 Main connection dimensions　　JB/T 79.1-1994

公称压力 PN	公称通径 DN	尺寸Size（mm）										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
1.6MPa	40	165	145	110	85	-	16	4-18	230	135	-	-
	50	203	160	125	100	-	16	4-18	260	150	-	-
	65	222	180	145	120	-	18	4-18	350	180	-	-
	80	241	195	160	135	-	20	8-18	500	195	-	-
	100	305	215	180	155	-	20	8-18	650	245	310	420
	125	356	245	210	185	-	22	8-18	800	270	330	440
	150	394	280	240	210	-	24	8-23	1000	295	390	470
	200	457	335	295	265	-	26	12-23	-	-	440	510
	250	533	405	355	320	-	30	12-25	-	-	490	560
	300	610	460	410	375	-	30	12-25	-	-	530	600
	350	686	520	470	435	-	34	16-25	-	-	620	670
	400	762	580	525	485	-	36	16-30	-	-	675	720
	450	864	640	585	545	-	40	20-30	-	-	740	790
	500	914	705	650	608	-	44	20-34	-	-	825	870
	600	1067	840	770	718	-	48	20-41	-	-	920	960
2.5MPa	40	190	145	110	85	-	18	4-18	230	135	-	-
	50	216	160	125	100	-	20	4-18	260	150	-	-
	65	241	180	145	120	-	22	8-18	350	180	-	-
	80	283	195	160	135	-	22	8-18	500	195	-	-
	100	305	230	190	160	-	24	8-23	650	245	310	420
	125	381	270	220	188	-	28	8-25	800	270	330	440
	150	403	300	250	218	-	30	8-25	1000	295	390	470
	200	502	360	310	278	-	34	12-25	-	-	440	510
	250	568	425	370	332	-	36	12-30	-	-	490	560
	300	648	485	430	390	-	40	16-30	-	-	530	600
	350	762	550	490	448	-	44	16-034	-	-	620	670
	400	838	610	550	505	-	48	16-34	-	-	675	720
	450	914	660	600	555	-	50	20-34	-	-	740	790
	500	991	730	660	610	-	52	20-41	-	-	825	870
	600	1143	840	770	718	-	56	20-41	-	-	920	960

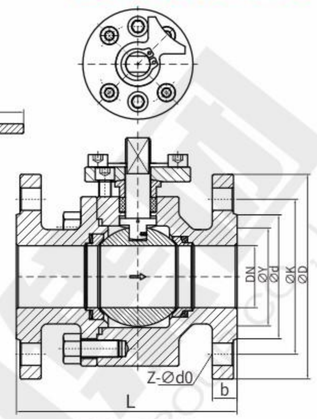
GB Forged Steel Ball Valve 国标锻钢球阀



2PC锻钢球阀



3PC锻钢球阀

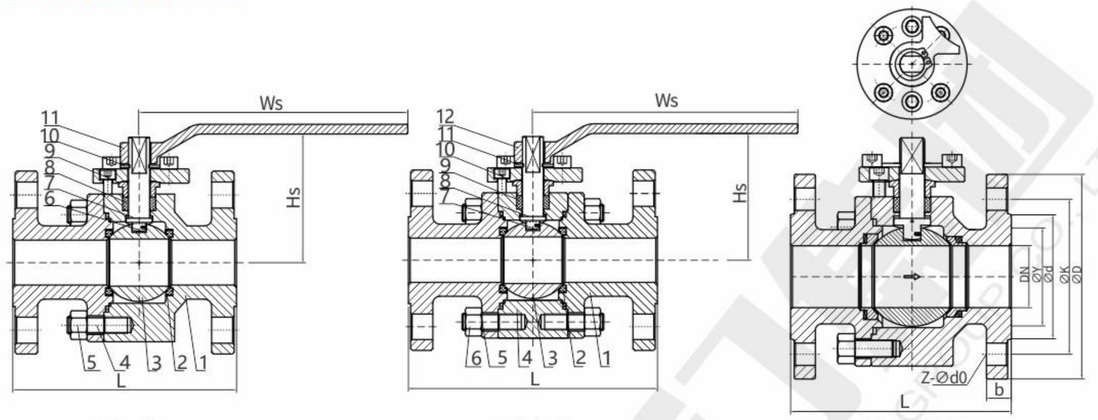


2PC锻钢硬密封球阀

主要连接尺寸 Main connection dimensions　　JB/T 79.2-1994

公称压力 PN	公称通径 DN	尺寸Size（mm）										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
4.0MPa	40	190	145	110	85	76	18	4-18	230	135	-	-
	50	216	160	125	100	88	20	4-18	260	150	-	-
	65	241	180	145	120	110	22	8-18	350	180	-	-
	80	283	195	160	135	121	22	8-18	500	195	-	-
	100	305	230	190	160	150	24	8-23	800	250	320	430
	125	381	270	220	188	176	28	8-25	1000	280	340	450
	150	403	300	250	218	204	30	8-25	1200	300	405	480
	200	502	375	320	282	260	38	12-30	-	-	450	530
	250	568	445	385	345	313	42	12-34	-	-	505	590
	300	648	510	450	408	364	46	16-34	-	-	545	620
	350	762	570	510	465	422	52	16-34	-	-	640	690
	400	838	655	585	535	474	58	16-41	-	-	690	740
	450	914	680	610	560	524	60	20-41	-	-	760	810
	500	991	755	670	612	576	62	20-48	-	-	850	900
6.3MPa	40	241	165	125	95	76	24	4-23	260	140	-	-
	50	292	175	135	105	88	26	4-23	260	160	-	-
	65	330	200	160	130	110	28	8-23	350	180	-	-
	80	356	210	170	140	121	30	8-23	500	220	-	-
	100	406	250	200	168	150	32	8-25	800	250	320	430
	125	400	295	240	202	176	36	8-30	1000	295	340	450
	150	495	340	280	240	204	38	8-34	1200	340	405	480
	200	597	405	345	300	260	44	12-34	-	-	450	530
	250	673	470	400	352	313	48	12-41	-	-	505	590
	300	762	530	460	412	364	54	16-41	-	-	545	620
	350	826	595	525	475	422	60	16-41	-	-	640	690
	400	902	670	585	525	474	66	16-48	-	-	690	740
	500	1054	800	705	640	576	70	20-54	-	-	760	810

国标锻钢球阀 GB Forged Steel Ball Valve



2PC锻钢球阀　　3PC锻钢球阀　　2PC锻钢硬密封球阀

JB/T 79.2-1994

主要连接尺寸 Main connection dimensions

公称压力 PN	公称通径 DN	尺寸Size（mm）										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
10.0MPa	40	241	165	125	95	76	26	4-23	260	160	-	-
	50	292	195	145	112	88	28	4-25	350	180	-	-
	65	330	220	170	138	110	32	8-25	500	200	-	-
	80	356	230	180	148	121	34	8-25	800	240	310	410
	100	432	265	210	172	150	38	8-30	1000	270	340	450
	125	508	310	250	210	176	42	8-34	1200	320	360	505
	150	559	350	290	250	204	46	12-34	-	-	425	555
	200	660	430	360	312	260	54	12-41	-	-	470	625
	250	787	500	430	382	313	60	12-41	-	-	525	645
	300	838	585	500	442	364	70	16-48	-	-	565	715
	350	889	665	560	498	422	76	16-54	-	-	670	770
	400	991	715	620	558	474	80	16-54	-	-	720	840
16.0MPa	40	305	175	125	92	76	32	4-27	350	160	-	-
	50	368	215	165	132	88	36	8-25	500	180	-	-
	65	419	245	190	152	110	44	8-30	800	200	-	-
	80	381	260	205	168	121	46	8-30	1000	240	310	410
	100	457	300	240	200	150	48	8-34	1200	270	340	450
	125	559	355	285	238	176	60	8-41	-	-	360	505
	150	610	390	318	270	204	66	12-41	-	-	425	560
	200	737	480	400	345	260	78	12-48	-	-	530	630
	250	838	580	485	425	313	88	12-54	-	-	570	720
	300	965	665	570	510	364	100	16-54	-		680	780
20.0MPa	40	305	170	124	90	56	34	4-27	500	180	-	-
	50	368	210	160	128	70	40	8-25	650	200	-	-
	65	419	260	203	165	97	48	8-30	800	220	-	-
	80	470	290	230	190	116	54	8-34	1000	260	320	420
	100	546	360	292	245	138	66	8-41	1200	290	360	470
	125	673	385	318	270	170	76	12-41	-	-	380	530
	150	705	440	360	305	190	82	12-48	-	-	440	580
	200	832	535	440	380	245	92	12-54	-	-	550	650
	250	991	670	572	508	319	110	16-58	-	-	590	740
25.0MPa	40	305	180	124	92	68.28	32	4-29.5	500	180	-	-
	50	368	215	165	124	95.25	38.5	8-26	650	200	-	-
	65	419	245	190.5	137	107.95	41.5	8-29.5	800	220	-	-
	80	470	265	203	168	136.52	48	8-32.5	1000	260	320	420
	100	546	310	241.5	194	161.92	54	8-35.5	1200	290	360	470
	125	673	375	292	229	193.68	73.5	8-42	-	-	380	530
	150	705	395	317.5	248	211.12	83	12-39	-	-	440	580
	200	832	485	393.5	318	269.88	92	12-45	-	-	550	650

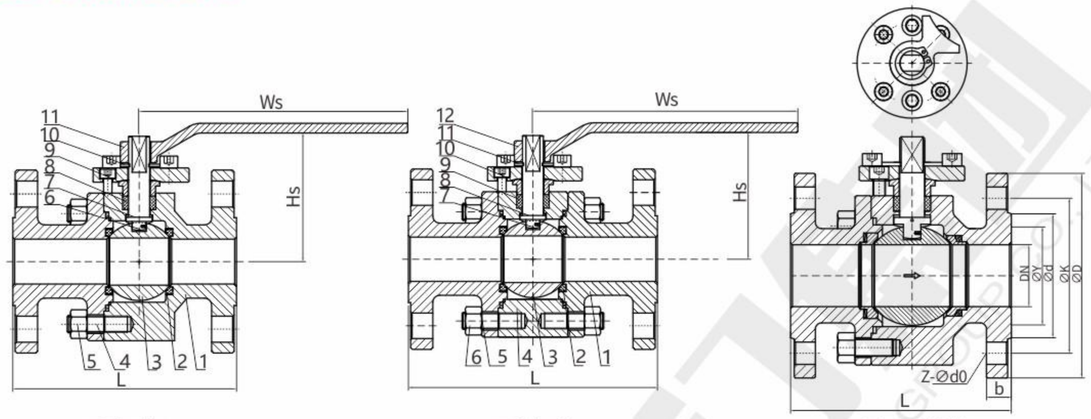
API forged steel ball valve 美标锻钢球阀



主要连接尺寸 Main connection dimensions

公称压力 PN	公称通径 DN	尺寸Size（mm）										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
Class 150	11/2"	165	125	98.4	73	-	12.7	4-16	230	135	-	-
	2"	178	150	120.7	92	-	14.3	4-19	260	150	-	-
	21/2"	190	180	139.7	105	-	15.9	4-19	350	180	-	-
	3"	203	190	152.4	127	-	17.5	4-19	500	195	-	-
	4"	229	230	190.5	157	-	22.3	8-19	650	245	310	420
	5"	356	255	215.9	186	-	22.3	8-22.5	800	270	330	440
	6"	394	280	241.3	216	-	23.9	8-22.5	1000	295	390	470
	8"	457	345	298.5	270	-	27.0	8-22.5	-	-	440	510
	10"	533	405	362	324	-	28.6	12-25.5	-	-	490	560
	12"	610	485	431.8	381	-	30.2	12-25.5	-	-	530	600
	14"	686	535	476.3	413	-	33.4	12-28.5	-	-	620	670
	16"	762	595	539.8	470	-	35.0	16-28.5	-	-	675	720
	18"	864	635	577.9	533	-	38.1	16-32	-	-	740	790
	20"	914	700	635	584	-	41.3	20-32	-	-	825	870
	24"	1067	815	749.3	692	-	46.3	20-35	-	-	920	960
Class 300	11/2"	190	155	114.3	73	-	19.1	4-22.5	230	135	-	-
	2"	216	165	127	92	-	20.7	8-19	260	150	-	-
	21/2"	241	190	149.2	105	-	23.9	8-22.5	350	180	-	-
	3"	282	210	168.3	127	-	27.0	8-22.5	500	195	-	-
	4"	305	255	200	157	-	30.2	8-22.5	800	250	320	430
	5"	356	280	235	186	-	33.4	8-22.5	1000	280	340	450
	6"	403	320	269.9	216	-	35.0	12-22.5	1200	300	405	480
	8"	502	380	330.2	270	-	39.7	12-25.5	-	-	450	530
	10"	568	445	387.4	324	-	46.1	16-28.5	-	-	505	590
	12"	648	520	450.8	381	-	49.3	16-32	-	-	545	620
	14"	762	585	514.4	413	-	52.4	20-32	-	-	640	690
	16"	838	650	571.5	470	-	55.6	20-35	-	-	690	740
	18"	914	710	628.6	533	-	58.8	24-35	-	-	760	810
	20"	991	775	685.8	584	-	62.0	24-35	-	-	850	900

美标锻钢球阀 API forged steel ball valve



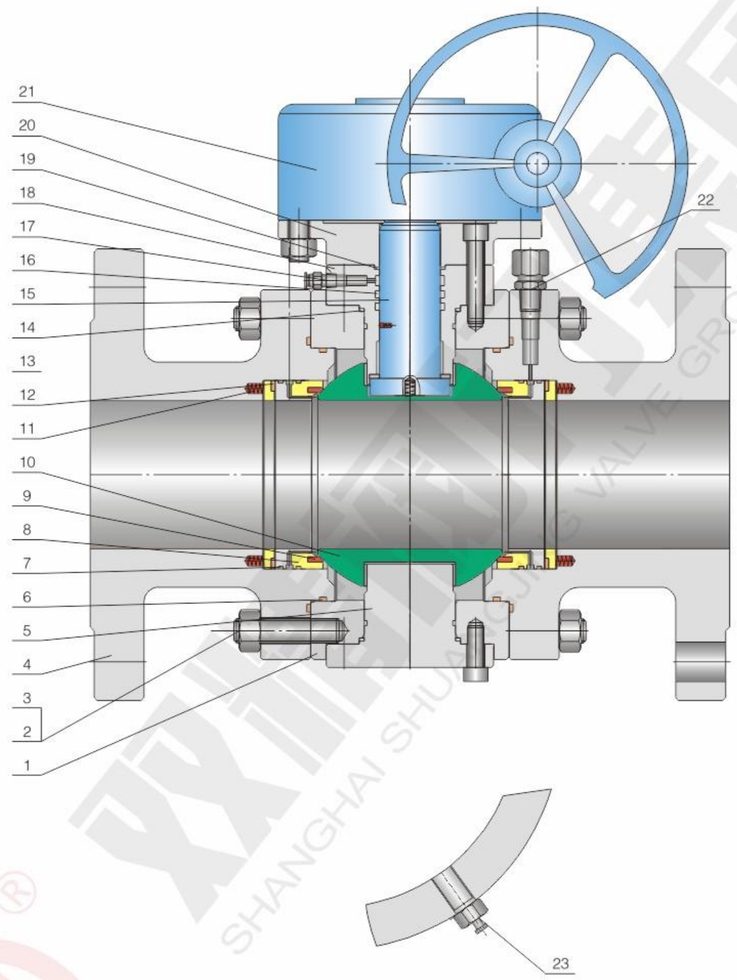
2PC锻钢球阀　　3PC锻钢球阀　　2PC锻钢硬密封球阀

主要连接尺寸 Main connection dimensions

公称压力 PN	公称通径 DN	尺寸Size（mm）										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
Class 600	11/2"	241	155	114.3	90	68.263	22.3	4-22.5	260	160	-	-
	2"	292	165	127	108	82.550	25.4	8-19	350	180	-	-
	21/2"	330	190	149.2	127	101.600	28.6	8-22.5	500	200	-	-
	3"	356	210	168.3	146	123.825	31.8	8-22.5	800	240	310	410
	4"	432	275	215.9	175	149.225	38.1	8-25.5	1000	270	340	450
	5"	508	330	266.7	210	180.975	44.5	8-28.5	1200	320	360	505
	6"	559	355	292.1	241	211.138	47.7	12-28.5	-	-	425	555
	8"	660	420	349.2	302	269.876	55.6	12-32	-	-	470	625
	10"	787	510	431.8	356	323.851	63.5	16-35	-	-	525	645
	12"	838	560	489.0	413	381.001	66.7	20-35	-	-	565	715
	14"	889	605	527.0	457	419.101	69.9	20-38	-	-	670	770
	16"	991	685	603.2	508	469.901	76.2	20-41	-	-	720	840
	18"	1092	745	654.0	575	533.401	82.6	20-44.5	-	-	780	920
	20"	1194	815	723.9	635	584.201	88.9	24-44.5	-	-	850	995
Class 900	11/2"	305	180	123.8	73	-	31.8	4-28.5	350	160	-	-
	2"	368	215	165.1	92	-	38.1	8-25.5	500	180	-	-
	21/2"	419	245	190.5	105	-	41.3	8-28.5	800	200	-	-
	3"	381	240	190.5	156	123.82	38.1	8-25.5	1000	240	310	410
	4"	457	290	235.0	181	149.22	44.5	8-32	1200	270	340	450
	5"	559	350	279.4	216	180.98	50.8	8-35	-	-	360	505
	6"	610	380	317.5	241	211.12	55.6	12-32	-	-	425	560
	8"	737	470	393.7	308	269.88	63.5	12-38	-	-	530	630
	10"	838	545	469.9	362	323.85	69.9	16-38	-	-	570	720
	12"	965	610	533.4	419	381.00	79.4	20-38	-	-	680	780
	14"	1029	640	558.8	467	419.10	85.8	20-41	-	-	800	905
	16"	1130	705	616.0	524	469.90	88.9	20-44.5	-	-	910	1010
Class 1500	11/2"	305	180	123.8	92	68.28	31.8	4-28.5	500	180	-	-
	2"	368	215	165.1	124	95.25	38.1	8-25.5	650	200	-	-
	21/2"	419	245	190.5	137	107.95	41.3	8-28.5	800	220	-	-
	3"	470	265	203.2	168	136.52	47.7	8-32	1000	260	320	420
	4"	546	310	241.3	194	161.92	54.0	8-35	1200	290	360	470
	5"	673	375	292.1	229	193.68	73.1	8-41	-	-	380	530
	6"	705	395	317.5	248	211.12	82.6	12-38	-	-	440	580
	8"	832	485	393.7	318	269.88	92.1	12-45	-	-	550	650

Main Material List of Forged Fixed Ball Valve 锻造固定球阀主要材料表

主要结构图形 Major Features



主要参数 Main Parameter Specification

设计和制造 Design and Manufacture：API 6D、ASME B16.34(BS5351)、API 608、MSS-SP-72

结构长度尺寸 End to End Dimension：API 6D、ASME B16.10

法兰连接尺寸 Flange Connection Dimension： ASME B16.5, NPS≥26" Per as ASME B16.47

对焊端尺寸 BW Connection Dimension：ASME B16.25

检查和试验 Test and Inspection：API 6D、API 598

防火设计 Fire-safe Design：API 607/6Fa

防静电设计和防爆阀杆 Anti-static Design & Anti Blow-out Stem

锻造固定球阀主要材料表 Main Material List of Forged Fixed Ball Valve

主要材料 Main Material

序号 No.	名称 Part Name	材料 Material
1	阀体 Body	A105，A350-LF2，A182-F304、F304L、F316、F316L、F321、F51、F53
2	螺母 Nut	A194-2H、2HM、8、8M
3	螺柱 Bolt	A193-B7、B7M、B8、B8M
4	连接体 Adapter	A105，A350-LF2，A182-F304、F304L、F316、F316L、F321、F51、F53
5	固定轴 Trunnion	1045+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，4140+ENP、17-4PH
6	O型圈 O-Ring	NBR、VITON
7	O型圈 O-Ring	VITON
8	阀座圈 Seat Ring	A105+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53
9	阀座 Seat	PTFE、RPTFE、NYLON、PEEK、PPL、POM、KARBATE、MOLON、DEVLON
10	球 Ball	A105+ENP，A350-LF2+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53
11	弹簧 Spring	SS304，Inconel、1566+ENP
12	密封圈 Sealing Ring	Flexble Graphite
13	复合轴承 Bearing	1045+RPTFE、SS304+RPTFE、SS316+RPTFE
14	密封圈 Sealing Ring	SS304、SS316+Flexible Graphite Spiral Wound
15	阀杆 Stem	1045+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53，4140+ENP、17-4PH
16	O型圈 O-Ring	NBR、VITON
17	注油阀 Oil Cup	1025、SS304
18	填料箱 Stuffing Box	A105+ENP，A182-F6、F304、F304L、F316、F316L、F321、F51、F53
19	填料 Packing	Flexible Graphite
20	连接盘 Connecting Plate	1025、A216-WCB、A351 CF8
21	齿轮 Gear	
22	注脂阀 Grease fitting	1025、SS304、SS316、F51、F53
23	丝堵和放泄阀 Drain Valve and Plug	1025，SS304、SS316、F51、F53、ALLOY-20

Performance and specification of forged fixed ball valve 锻造固定球阀性能及规范

型号材料及主要参数 Model, material and main parameters

主要零件材料 Main component materials	阀体 valve body	WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L
	阀杆 valve stem	2Cr13	1Cr18Ni9Ti	0Cr18Ni9 (304)	0Cr19Nil0 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)
	球体 A sphere	2Cr13+镍基合金 (或钨钴合金)	1Cr18Ni9Ti +镍基合金 (或钨钴合金)	0Cr18Ni9 +镍基合金 (或钨钴合金)	0Cr19Nil0 +镍基合金 (或钨钴合金)	1Cr18Ni12Mo2Ti +镍基合金 (或钨钴合金)	0Cr17Ni12Mo2 +镍基合金 (或钨钴合金)	00Cr17Ni14Mo2 +镍基合金 (或钨钴合金)
	阀座 valve seat	2Cr13+硬质合金	1Cr18Ni9Ti +硬质合金	0Cr18Ni9 +硬质合金	0Cr19Nil0 +硬质合金	1Cr18Ni12Mo2Ti +硬质合金	0Cr17Ni12Mo2 +硬质合金	00Cr17Ni14Mo2 +硬质合金
适用工况 Applicable conditions	适用介质 Applicable medium	非腐蚀性介质或弱腐蚀性介质 Non-corrosive media or weakly corrosive media	硝酸类腐蚀性介质 Corrosive media such as nitric acid		强氧化性介质 Strong oxidizing medium	醋酸类腐蚀性介质 Acetic acid corrosive medium		尿素类腐蚀性介质 Corrosive media such as urea
	适用温度 Suitable temperature 常温型 The normal temperature type	≤180℃						
	适用温度 Suitable temperature 高温型 High temperature type	≤425℃	≤540℃		≤425℃	≤540℃		≤455℃

主要性能及规范 Main performance and specification

公称压力 (MPa) Nominal pressure	最高使用压力 Maximum service pressure (Mpa)	试验压力 (MPa) Test pressure 壳体 shell	高压液密封 High pressure liquid seal	低压液密封 Low pressure liquid seal	压力级 Pressure level	最高使用压力 Maximum service pressure (Mpa)	试验压力 (MPa) Test pressure 壳体 shell	高压液密封 High pressure liquid seal	低压液密封 Low pressure liquid seal
1.6	1.6	2.4	1.76	0.6	Class150	1.94	2.94	2.16	0.6
2.5	2.5	3.75	2.75	0.6	Class300	5.1	7.67	5.62	0.6
4.0	4.0	6.0	4.4	0.6	Class600	10.2	15.3	11.23	0.6
6.4	6.4	9.6	7	0.6	Class900	15.1	23	16.85	0.6
10.0	10.0	15	11	0.6	Class1500	25.1	37.5	27.5	0.6

适用规范 Applicable specifications	设计制造按 Design and manufacture press	GB-12237-89 API6D JP17S-48
	法兰尺寸按 Flange dimensions according to	JB79-59, Gb9113, HG20592-97 ANSIB16.5
	结构长度按 Structure length press	GB12221-89 ANSIB16.10
	焊接标准按 Welding standard press	GB12224-89 ANSIB16.25
	检验试验按 Inspection test press	JB/T9092-89 API598
蜗轮蜗杆传动球阀 Worm gear worm drive ball valve		在相应的手动型号的Q后插入“3”表示，示例：Q347Y Insert a "3" after the Q of the corresponding manual model, for example: Q347Y
气动球阀 Pneumatic ball valve		在相应的手动型号的Q后插入“6”表示，示例：Q647Y Insert a "6" after the Q of the corresponding manual model, for example: Q647Y
电动球阀 Electric ball valve		在相应的手动型号的Q后插入“9”表示，示例：Q947Y Insert "9" after Q of the corresponding manual model, for example: Q947Y
缩径球阀 Reducing valve		在相应的全通径球阀的型号前加“S”表示，示例：SQ947Y Add an "s" before the corresponding full-diameter ball valve model, for example: SQ947Y

主要尺寸及重量 Main dimensions and weight

金属硬密封锻造固定球阀的主要尺寸及重量参见固定球阀，金属硬密封锻造固定球阀的连接法兰尺寸及结构长度与固定球阀相同。

Metal hard seal forging fixed ball valve main size and weight refer to the fixed ball valve, metal hard seal forging fixed ball valve connection flange size and structure length is the same as the fixed ball valve.

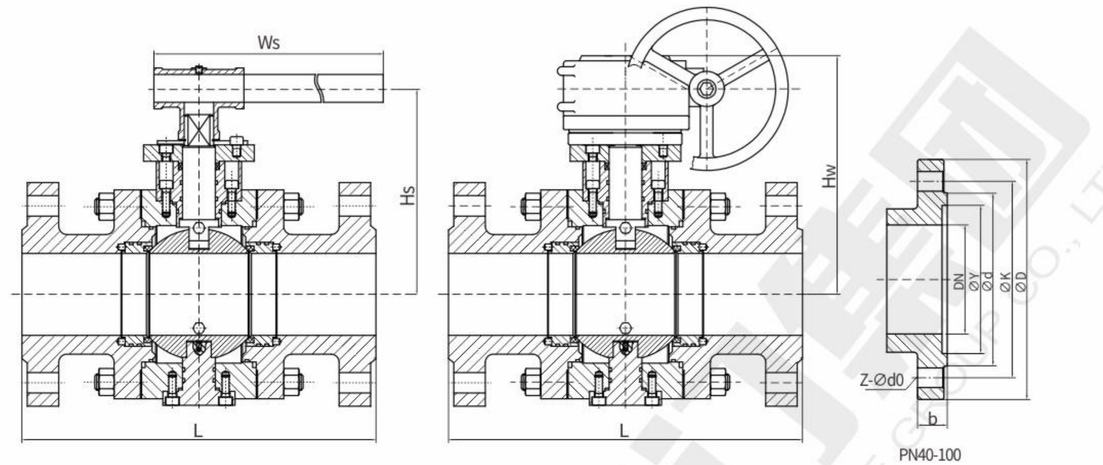
国标锻钢固定金属密封球阀 GB forged steel fixed metal sealed ball valve



主要连接尺寸 Main connection dimensions JB/T79.1

公称压力 PN	公称通径 DN	尺寸Size（mm）								
		L	D	K	d	Y	b	Z-do	Ws	Hw
1.6MPa	150	394	280	240	210	-	22	8-23	1000	470
	200	457	335	295	265	-	24	12-23	-	520
	250	533	405	355	320	-	26	12-25	-	610
	300	610	460	410	375	-	28	12-25	-	650
	350	686	520	470	435	-	32	16-25	-	740
	400	762	580	525	485	-	36	16-30	-	795
	450	864	640	585	545	-	38	20-30	-	860
	500	914	705	650	608	-	42	20-34	-	945
	600	1067	840	770	718	-	46	20-41	-	1040
	700	1245	910	840	788	-	48	24-41	-	1150
	800	1372	1020	950	898	-	50	24-41	-	1280
	900	1524	1120	1050	998	-	52	28-41	-	1430
	1000	1753	1255	1170	1110	-	54	28-48	-	1580
	1200	2032	1485	1390	1325	-	56	32-54	-	1810
	1400	2300	1685	1590	1525	-	60	36-54	-	2010
2.5MPa	150	403	300	250	218	-	30	8-25	1000	470
	200	502	360	310	278	-	34	12-25	-	540
	250	568	425	370	332	-	36	12-30	-	630
	300	648	485	430	390	-	40	16-30	-	650
	350	762	550	490	448	-	44	16-34	-	740
	400	838	610	550	505	-	48	16-34	-	795
	450	914	660	600	555	-	50	20-34	-	860
	500	991	730	660	610	-	52	20-41	-	945
	600	1143	840	770	718	-	56	20-41	-	1040
	700	1346	955	875	815	-	60	24-48	-	1150
	800	1524	1070	990	930	-	64	24-48	-	1305
	900	1727	1180	1090	1025	-	66	28-54	-	1505
	1000	1880	1305	1210	1140	-	68	28-58	-	1615
	1200	2184	1525	1420	1350	-	72	32-58	-	1925
	1400	2300	1750	1640	1560	-	78	36-65	-	2110

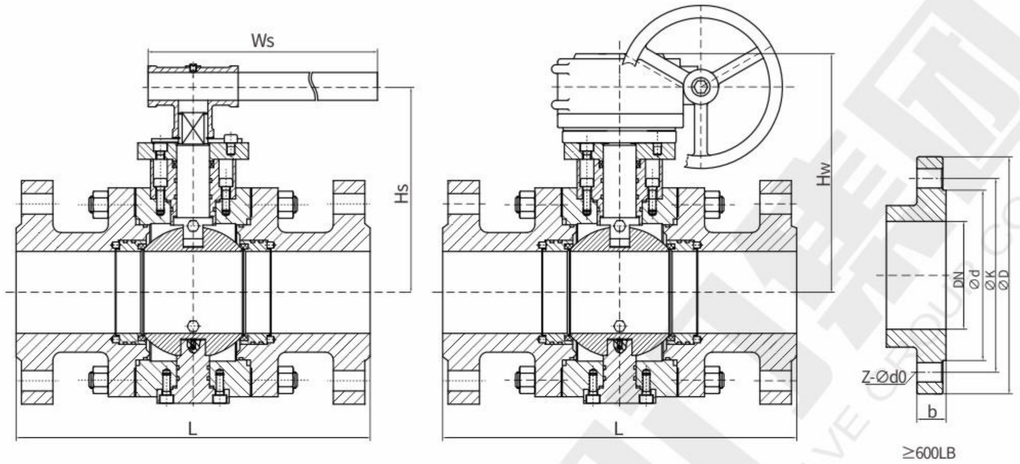
GB forged steel fixed metal sealed ball valve 国标锻钢固定金属密封球阀



主要连接尺寸 Main connection dimensions JB/T 79.2-1994

公称压力 PN(MPa)	公称通径 DN(mm)	尺寸Size（mm）								
		L	D	K	d	Y	b	Z-do	Ws	Hw
4.0MPa	150	403	300	250	218	204	30	8-25	1200	485
	200	502	375	320	282	260	38	12-30	-	580
	250	568	445	385	345	313	42	12-34	-	665
	300	648	510	450	408	364	46	16-34	-	760
	350	762	570	510	465	422	52	16-34	-	820
	400	838	655	585	535	474	58	16-41	-	860
	450	914	680	610	560	524	60	20-41	-	930
	500	991	755	670	612	576	62	20-48	-	980
	600	1143	890	795	730	678	62	20-54	-	1040
	700	1346	995	900	835	768	68	24-54	-	1150
	800	1524	1135	1030	960	876	76	24-58	-	1305
	900	1727	1270	1168	1022	-	105	32-54	-	1505
	1000	1880	1238	1156	1086	-	114	32-44	-	1615
	1200	2184	1467	1372	1302	-	133	32-51	-	1925
	1400		1708	1600	1518	-	154	28-60	-	2110
6.4MPa	150	495	340	280	240	204	38	8-34	1200	485
	200	597	405	345	300	260	44	12-34	-	580
	250	673	470	400	352	313	48	12-41	-	665
	300	762	530	460	412	364	54	16-41	-	760
	350	826	595	525	475	422	60	16-41	-	820
	400	902	670	585	525	474	66	16-48	-	870
	500	1054	800	705	640	576	70	20-54	-	995
	600	1232	930	820	750	678	76	20-58	-	1100
	700	1397	1035	940	800	-	95	28-51	-	1180
	800	1651	1149	1054	914	-	108	28-54	-	1345
	900	1880	1270	1168	1022	-	114	32-54	-	1550
	1000	1981	1270	1175	1092	-	133	32-51	-	1675
	1200	2311	1511	1403	1308	-	152	28-60	-	1945

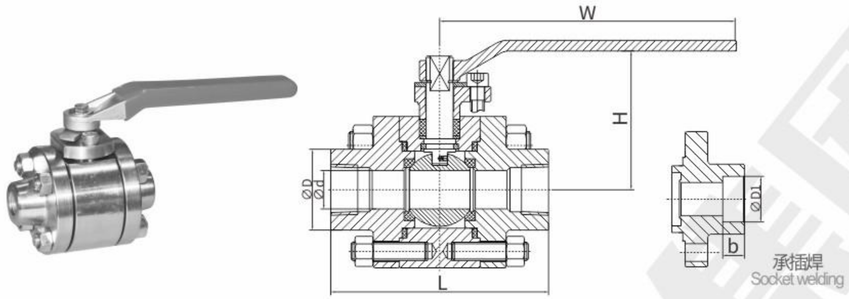
美标锻钢固定金属密封球阀 API forged steel fixed metal sealed ball valve



主要连接尺寸 Main connection dimensions

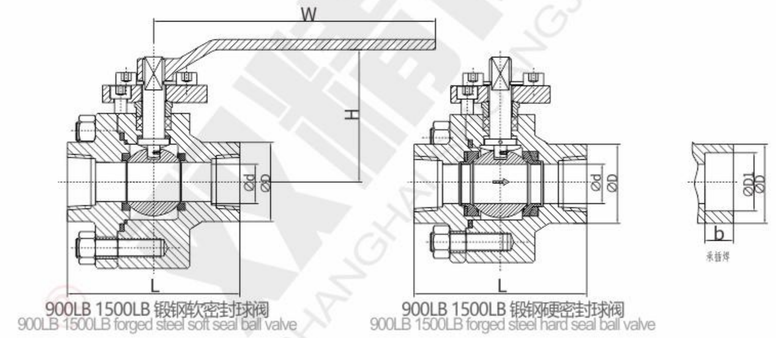
公称压力 PN(MPa)	公称通径 DN(mm)	尺寸Size（mm）								
		L	D	K	d	Y	b	Z-do	Ws	Hw
Class 150	2"	178	152	120.7	92	-	14.3	4-19	260	-
	2 1/2"	190	178	139.7	105	-	15.9	4-19	350	-
	3"	203	190	152.4	127	-	17.5	4-19	500	-
	4"	229	229	190.5	157	-	22.3	8-19	650	390
	5"	356	254	215.9	186	-	22.3	8-22.5	800	410
	6"	394	279	241.3	216	-	23.9	8-22.5	1000	470
	8"	457	343	298.5	270	-	27.0	8-22.5	-	520
	10"	533	406	362	324	-	28.6	12-25.5	-	610
	12"	610	483	431.8	381	-	30.2	12-25.5	-	650
	14"	686	533	476.3	413	-	33.4	12-28.5	-	740
	16"	762	597	539.8	470	-	35.0	16-28.5	-	795
	18"	864	635	577.9	533	-	38.1	16-32	-	860
	20"	914	699	635.0	584	-	41.3	20-32	-	945
	24"	1067	813	749.3	692	-	46.1	20-35	-	1040
	28"	1245	927	864	800	-	71	28-35	-	1150
	32"	1372	1060	978	914	-	81	28-41	-	1280
Class 300	2"	216	165	127	92	-	20.7	8-19	260	-
	2 1/2"	241	190	149.2	105	-	23.9	8-22.5	350	-
	3"	282	210	168.3	127	-	27.0	8-22.5	500	-
	4"	305	254	200	157	-	30.2	8-22.5	800	410
	5"	381	279	235	186	-	33.4	8-22.5	1000	470
	6"	403	318	269.9	216	-	35.0	12-22.5	1200	485
	8"	502	381	330.2	270	-	39.7	12-25.5	-	5809
	10"	568	445	387.4	324	-	46.1	16-28.5	-	665
	12"	648	521	450.8	381	-	49.3	16-32	-	760
	14"	762	584	514.4	413	-	52.4	20-32	-	820
	16"	838	648	571.5	470	-	55.6	20-35	-	860
	18"	914	711	628.5	533	-	58.8	24-35	-	930
	20"	991	775	685.8	584	-	62.0	24-35	-	980
Class 600	2"	292	165	127	108	-	25.4	8-19	350	-
	2 1/2"	330	190	149.2	127	-	28.6	8-22.5	500	-
	3"	356	210	168.3	146	-	31.8	8-22.5	650	-
	4"	432	273	215.9	175	-	38.1	8-25.5	1000	395
	5"	508	330	266.7	210	-	44.5	8-28.5	1200	430
	6"	559	356	292.1	241	-	47.7	12-28.5	-	495
	8"	660	419	349.2	302	-	55.6	12-32	-	595
	10"	787	508	431.8	356	-	63.5	16-35	-	680
	12"	838	559	489.0	413	-	66.7	20-35	-	790

High pressure forged ball valve 高压锻造球阀



Class600，Class800内螺纹连接及承插焊连接锻造球阀 internal thread connection and socket welding connection forging ball valve

公称压力 Nominal pressure	公称尺寸DN Nominal size		Size尺寸 (mm)								
			L		d	D	H	W	NPT	D1	b
			内螺纹 Internal thread	承插焊 Socket welding							
Class600 Class800	15	1/2	100	110	13	32	88	150	1/2	22	10
	20	3/4	100	120	19	38	92	150	3/4	27.3	13
	25	1	120	130	25	48	106	180	1	34	13
	32	1¼	140	160	32	58	124	200	1¼	42.6	13
	40	1½	150	180	38	66	125	250	1½	48.9	13
	50	2	190	200	51	86	162	350	2	61.4	16



900LB 1500LB 锻钢软密封球阀
900LB 1500LB forged steel soft seal ball valve

900LB 1500LB 锻钢硬密封球阀
900LB 1500LB forged steel hard seal ball valve

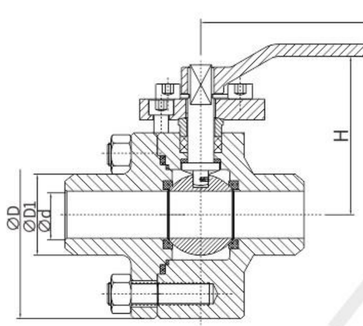
Class900，Class1500内螺纹连接及承插焊连接锻造球阀 internal thread connection and socket welding connection forging ball valve

公称压力 Nominal pressure	公称尺寸DN Nominal size		Size尺寸 (mm)								
			L		d	D	H	W	NPT	D1	b
			内螺纹 Internal thread	承插焊 Socket welding							
Class900 Class1500	15	1/2	100	110	14	35	90	180	1/2	21.9	12
	20	3/4	100	120	19	42	95	200	3/4	27.3	13
	25	1	120	130	23	50	106	220	1	34	13
	32	1¼	140	160	32	58	116	250	1¼	42.8	13
	40	1½	150	180	38	72	150	300	1½	48.9	13
	50	2	190	200	51	86	150	350	2	61.4	16

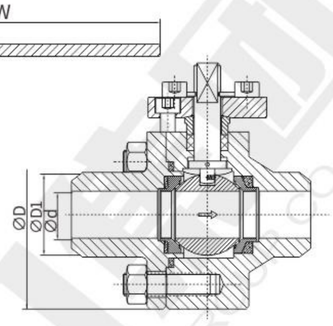
高压锻造球阀 High pressure forged ball valve



Q61N对焊连接高压锻造球阀
Q61N butt welding connects high pressure forged ball valve



Q61N(对焊)高压锻钢 软密封球阀
Q61N(butt welding) high pressure forged steel soft seal ball valve



Q61N(对焊)高压锻钢 硬密封球阀
Q61N(butt welding) high pressure forged steel hard seal ball valve

公称压力 Nominal pressure	公称尺寸DN Nominal size	Size 尺寸 (mm)							重量 weight (kg)
		L	L1	d	D	D1	H	W	
PN160	10	150	60	10	90	18	58	200	4
	15	170	70	14	100	23	62	200	5
	20	190	81	19	110	29	75	250	7
	25	205	95	25	115	36	80	250	8
	32	230	110	32	150	43	96	300	16
	40	260	120	38	170	49	111	400	22
	50	330	140	50	200	61	128	400	35
	65	360	150	64	225	80	180	500	48
	80	375	160	76	268	105	200	600	67
	100	440	186	100	320	118	245	800	116
PN320	10	150	60	10	90	18	58	200	5
	15	170	70	14	100	23	62	200	6
	20	190	81	19	110	29	75	250	7
	25	205	95	25	115	36	80	250	9
	32	230	110	32	150	43	96	300	18
	40	260	120	38	170	49	111	400	24
	50	330	140	50	200	61	128	400	38
	65	345	150	64	225	80	180	500	52
	80	375	160	76	268	105	200	600	72
	100	440	186	100	320	118	245	800	124

Operating torque of floating ball valve 浮动球阀的操作扭矩

浮动球阀的操作扭矩 Floating ball valve operating torque

表中硬密封浮动球阀的操作扭矩是基于常温、清洁介质计算的，在选择驱动装置时，建议驱动装置的驱动扭矩至少是阀门操作扭矩的1.3倍以上。对于高温、低温工况及非清洁的介质，会导致阀门操作扭矩的增大，在驱动装置的选用时应给予充分的考虑。金属硬密封浮动球阀的操作扭矩大约为软密封浮动球阀操作扭矩的4倍。

The OPERATING TORQUE OF THE HARD seal floating ball valve IN THE TABLE IS CALCULATED based on normal temperature and clean media. When selecting the driving device, it is recommended that the driving torque of the driving device should be at least 1.3 times the operating torque of the valve. For high temperature, low temperature conditions and non-clean media, will lead to the increase of valve operating torque, in the selection of driving device should be given full consideration. The operating torque of metal hard seal floating ball valve is about 4 times that of soft seal floating ball valve.

软密封浮动球阀的操作扭矩，N.m Soft-seal floating ball valve operating torque, N.m

DN	NPS	Class150 PN20	Class300 PN50	Class600 PN110	Class900 PN150	Class1500 PN260	PN16	PN25	PN40	PN63	PN100	JIS 10K	JIS 20K
15	1/2	7	10	17	25	35	6	8	10	15	17	6	10
20	3/4	10	16	24	35	50	9	12	15	20	24	9	15
25	1	16	25	40	65	100	14	18	23	35	40	14	23
32	1¼	24	35	60	100	150	22	28	32	50	60	22	32
40	1½	35	50	90	120	180	32	40	45	70	90	32	45
50	2	50	70	110	180	270	40	55	65	85	110	40	65
65	2½	80	100	165	-	-	60	85	95	130	165	60	95
80	3	120	160	300	-	-	90	130	150	200	300	90	150
100	4	180	280	600	-	-	130	190	260	340	600	130	260
125	5	280	600	-	-	-	250	320	550	-	-	250	550
150	6	540	1000	-	-	-	490	620	900	-	-	490	900
200	8	960	2100	-	-	-	860	1100	1800	-	-	860	1800
250	10	1800	-	-	-	-	-	-	-	-	-	-	-



固定球阀的操作扭矩 Operating torque for stationary ball valves

固定球阀的操作扭矩 Fixed ball valve operating torque

表中软密封固定球阀的操作扭矩是基于常温、清洁介质计算的，在选择驱动装置时，建议驱动装置的驱动扭矩至少是阀门操作扭矩的1.3倍以上。对于高温、低温工况及非清洁的介质，会导致阀门操作扭矩的增大，在驱动装置的选用时应给予充分的考虑。金属硬密封固定球阀的操作扭矩大约为软密封固定球阀操作扭矩的3~4倍。

The operating torque of the soft seal fixed ball valve in the table is calculated based on normal temperature and clean media. When selecting the driving device, it is recommended that the driving torque of the driving device should be at least 1.3 times the operating torque of the valve. For high temperature, low temperature conditions and non-clean media, will lead to the increase of valve operating torque, in the selection of driving device should be given full consideration. The operating torque of the metal hard seal fixed ball valve is about 3~4 times that of the soft seal fixed ball valve.

软密封固定球阀的操作扭矩，N.m Soft seal fixed ball valve operating torque, N.m

DN	NPS	Class150 PN20	Class300 PN50	Class600 PN110	Class900 PN150	Class1500 PN260	Class2500 PN420	PN16	PN25	PN40	PN63	PN100	PN160	JIS 10K	JIS 20K
40	1½	-	-	-	-	100	160	-	-	-	-	-	-	-	-
50	2	-	-	70	100	155	250	-	-	-	-	70	105	-	-
65	2½	-	-	120	170	265	420	-	-	-	-	120	180	-	-
80	3	-	-	280	320	500	800	-	-	-	-	230	340	-	-
100	4	110	200	340	480	750	1200	100	140	170	240	340	500	100	170
125	5	180	290	550	780	1200	1900	160	220	260	350	550	820	160	260
150	6	340	480	800	1100	1700	2700	300	380	450	600	800	1150	300	450
200	8	500	850	1700	2400	3700	5900	450	630	750	1300	1700	2500	450	750
250	10	830	1400	2800	4000	6200	9900	750	1050	1250	2000	2800	4200	750	1250
300	12	1400	2400	4200	5900	9100	-	1250	1750	2100	2900	4200	6200	1250	2100
350	14	2200	3100	5800	8100	-	-	2000	2600	2800	3700	5800	-	2000	2800
400	16	2600	4800	7500	10500	-	-	2350	3200	4300	5800	7500	-	2350	4300
450	18	3700	6100	9500	-	-	-	3300	4600	5500	-	-	-	3300	5500
500	20	4800	7500	11500	-	-	-	4300	6000	6800	-	-	-	4300	6800
600	24	8200	12000	16500	-	-	-	7400	10000	11000	-	-	-	7400	11000
650	26	9600	15000	-	-	-	-	-	-	-	-	-	-	-	-
700	28	12000	19000	-	-	-	-	-	-	-	-	-	-	-	-
750	30	14000	22000	-	-	-	-	-	-	-	-	-	-	-	-
800	32	16000	28000	-	-	-	-	-	-	-	-	-	-	-	-
900	36	20000	35000	-	-	-	-	-	-	-	-	-	-	-	-

SOJN® 上海双精阀门集团有限公司
SHANGHAI SHUANGJING VALVE GROUP CO., LTD

售后服务和质量保证承诺
AFTER SALES SERVICE AND QUALITY ASSURANCE COMMITMENT

一、售前服务
做到技术与销售的无缝对接服务，让用户的每一次采购都有服务的体验。

①进行采购前产品技术沟通和交流，主动给予建议。
②在进行产品型号选择时考虑是否成本最低化工矿效率最大化。
③不能达到工矿要求时，根据客户的特殊要求，安排设计师合理改善。

二、售中服务
尊重每位用户；给用户一份轻松，放心的整体价值服务。

①进行性价比：比价格，比质量，比服务，反思是否有不做到位的地方。
②在合作过程中，依照合同，保质保量准时交货，随时保持与用户联系。
③生产期间，相关技术人员可来我司进行产品监造和检验，同时，我司会提供该产品的结构图及详细文件资料，来做监造文件。
④对特殊工矿或定做的产品，可协商专业技术员亲临现场指导。
⑤我公司在发货前以电话进行产品型号、口径、数量、件数的确认。

三、售后服务
完善的服务铸就完美的企业让客户无后顾之忧。

①按合同要求提供产品的合格证、生产许可证、检验报告、安装说明书等。
②顾客在验收产品过程中，如出现与合同要求不符时，我司接到顾客通知后两小时内给予处理。
③我司提供十二个月的产品质保期，时间从验收合格之日起计算。
④在正确安装和使用下，出现产品质量问题，本公司将负责到底。

四、包修包换承诺
①在正常的储运、安装、保养、使用条件下，因产品的质量问题不能正常使用时，提供三保四包：保质、保量、保及时、包修、包换、包退、包损失。
②在接到质量信息反馈时，将在48小时内提出处理意见及解决方案。
③可根据用户需求协商提供备品、备件和安装、调试、维修服务。

以上四点是我公司对售后服务的承诺。竭诚欢迎广大用户指导修正，请提出宝贵意见，参照改进。真诚希望我们之间合作愉快。