

诚招全国代理商，加盟通用阀门共创辉煌！  
National Recruitment Agents, Join General Valve To Create Brilliant!

© 通用阀门(General valve) 版权所有 采用生态纸印刷 Adopt ecological to print  
通用阀门保留随时更改，恕不另行通知的权利。  
general valve reserves the rights to change the contents without notice.

**浙江通用阀门有限公司**  
Zhejiang General Valve Industrial Co.,Ltd

地址：浙江省温州市滨海工业园区纬九支路A508地块  
电话：0577-86968888 0577-85802888  
传真：0577-85822999  
<http://www.general-group.cn>  
邮箱：sales@general-group.cn

Address: A508 Block, Weijiu Branch Rd, Binhai Industrial Park,  
Wenzhou 325025 Zhejiang China  
Tel: +86 0577-86968888 +86 0577-85802888  
Fax: +86 0577-85822999  
MSN: sales@general-group.cn  
<http://www.general-valve.net>  
E-mail: sales@general-group.cn

诚邀全国代理商



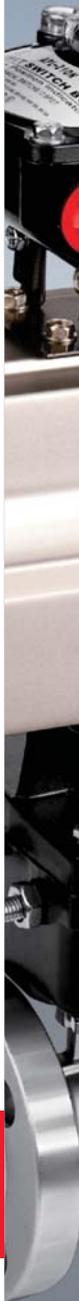
"扫一扫" 了解更多  
Scan, Learn More



# PROVIDES THE HIGH QUALITY FLUID CONTROL SOLUTIONS

提供高品质流体控制解决方案

**浙江通用阀门有限公司**  
Zhejiang General Valve Industrial Co.,Ltd



## 企业简介

浙江通用阀门有限公司是一家创办于2003年集设计、生产、销售为一体的科技型、外向型、规模型高中压专业球阀制造企业。坐落于浙江温州滨海经济开发区纬九支路A508地块（一道十四路）。占地总面积20000m<sup>2</sup>，建筑面积14000m<sup>2</sup>。公司拥有各类数控加工中心等主要精良装备及现代化检验、检测设备200余台（套），是高新技术企业、“省科技型企业”、“优秀创新型企 业”、国家“出口产品绿色通道企业”。

公司严格按照国际ISO、ANSI、英国BS、德国DIN、法国NF、日本JIS、JPI、俄罗斯ГОСТ、中国GB、JB以及企业标准，采用先进的CAD、CAM设计及有限元分析、先进的制造工艺和完善的检测手段。生产的公称口径：DN15mm~+DN750mm（1/2"~30"）；公称压力：PN1.0Mpa~42.0Mpa（150Lb~2500Lb）；工作温度-204℃~+816℃的软密封、硬密封，浮动、固定，全焊接、管线等各种球阀产品。广泛应用于国内石油天然气、石化、钢铁、冶金、电站、化工、制药、水力、液化气管道、建筑、消防等行业管网系统，并远销美洲、加拿大、欧盟、独联体国家、中东、东南亚等30多个国家和地区，受到用户的广泛青睐和赞誉，在国内外赢得了良好的口碑。

公司已先后通过了DNV ISO9001A国际质量体系认证、欧共体CE认证、压力管道安全注册TS认证、环境管理ISO14001体系认证、职业健康安全管理体系GB/T 28001体系认证。并拥有包括新型硬密封球阀在内32项专利。

我们向国内外新老客户郑重承诺：提供质量上乘、货真价实、100%合格的产品，目标是创建一流的国际阀门品牌；以最优良的服务，提供最有价值的产品，我们最终目的是与国内外新老客户一起实现双赢！



Provides the  
high quality fluid  
control solutions

## COMPANY PROFILES

Zhejiang General Valve industrial Co., Ltd. was founded in 2003, is a set design, production and sales of high-tech, export-oriented, professional scale high pressure ball valve manufacturing enterprise. Located in Binhai Economic Development Zone, Wenzhou, Zhejiang branch A508 Weijiu plots (a 14th Rd). Covering a total area of 20000m<sup>2</sup>, construction area of 14000m<sup>2</sup>. The company has a well-equipped and modern main types of CNC machining centers, inspection, testing equipment more than 200 pieces (sets). Tech enterprises, "the provincial science and technology enterprises" and "outstanding innovative enterprises" national "green channel export enterprises".

Our company is in strict accordance with international ISO, ANSI, British BS, German DIN, French NF, Japanese JIS, JPI, Russia ГОСТ, Chinese GB, JB and corporate standards, the use of advanced CAD, CAM design and finite element analysis advanced manufacturing processes and improved detection methods. Production DN: DN15mm ~ DN750mm (1/2" ~ 30"); nominal pressure: PN1.0Mpa ~ 42.0Mpa (150Lb ~ 2500Lb); soft seat, metal seat, floating, trunnion, full welded ball valves temperature -204 °C ~ +816 °C, and other pipeline products. which are widely used in oil and gas, petrochemical, steel, metallurgy, power, chemical, pharmaceutical, water, gas pipeline, construction, fire and other industries pipeline system and exported to America, Canada, the EU, the CIS countries, the Middle East, Southeast Asia more than 30 countries and regions, widely favored by users and praised at home and abroad and have won a good reputation.

We have passed the DNV ISO9001 an international quality system certification, CE certification, registration TS pressure pipeline safety certification, ISO14001 environmental management system certification, occupational health and safety management GB / T 28001 certification. And gained 32 patents including the newly developed metal seat ball valves.

We promise to new and old customers at home and abroad: to provide high quality, genuine, 100% qualified products, the goal is to create a first-class international valve brand; most excellent service to provide the most valuable products aimed at home and abroad and new old customers to achieve win-win!





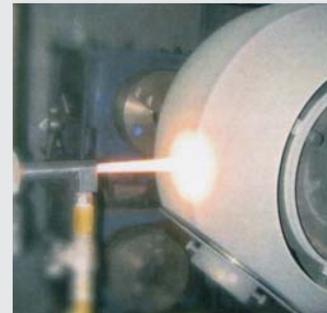
## 质量保证

"真诚无价" 这是通用人提出的响亮口号。诚信虽然是无形的，但通用却把诚信当成资源来开发，并搭建了以诚信为核心要素之一的企业文化平台，确定了 "以诚信打造精品、以诚信立足市场、以诚信取信社会、以诚信铸就名牌、以诚信赢得未来" 的经营理念。

## QUALITY ASSURANCE

"Honesty is priceless" This is a resounding slogans raised by our people. Although honesty is invisible, General valve consider it as resources to develop integrity and in good faith to build a corporate culture of one of the core elements of the platform, determine the "honesty build quality, in good faith based on the market, in order to win the trust of the community in good faith to build ap brand integrity, honesty win the future"business philosophy.





## 生产设备

公司拥有高精度的数控车床及进口加工中心等国内领先的高新设备，并聚集了一批科研精英及高级技工队伍，充分利用新技术、新工艺、新材料，以保证产品的稳定性和可靠性，从而创造出至臻的产品品质。



## PRODUCTION EQUIPMENT

Our company owns high precision CNC machine tools and imported machining center these domestic leading high-tech equipment, and gathered a batch of scientific research elite and senior technicians, make the most of new technologies, new processes, new materials, in order to ensure product stability and reliability, so as to create the best quality product.



## 办公环境

企业在不断发展过程中，  
建立完善的现代企业管理制度，  
内部各机构资源优化，合理配合，  
分工合作，协调统一，已形成一个高效运行的企业团队。

## OFFICE

General Valve Is In The Process Of Continuous Development, To Establish  
A Perfect Modern Enterprise Management System, Our Internal Institutions  
Resource Is Optimized And Reasonable Cooperated, Division Of Labor Cooperation,  
Harmonious And Unified, Has Formed A Team Of Efficient Operation Of The Enterprise.



<b>硬密封球阀</b> <b>Metal Seat Ball Valve</b>	<b>01-09</b>
硬密封浮动球阀 Metal Seat Floating Ball Valve	
硬密封固定球阀 Metal Seat Trunnion Ball Valve	
工程数据 Engineering Data	
<b>固定球阀</b> <b>Trunnion Ball Valve</b>	<b>10-21</b>
铸钢固定球阀 Cast Steel Trunnion Ball Valve	
卸灰球阀 Cinder Ball Valve	
上装式固定球阀 Top entry Trunnion ball valve	
锻钢固定球阀 Forged Steel Trunnion Ball Valve	
<b>浮动球阀</b> <b>Floating Ball Valve</b>	<b>22-28</b>
铸钢浮动球阀 Cast Steel Floating Ball Valve	
锻钢浮动球阀 Forged Steel Floating Ball Valve	
工程数据 Engineering Data	
<b>全焊接球阀</b> <b>Full Welded Ball Valve</b>	<b>29-34</b>
工程数据 Engineering Data	
<b>低温球阀</b> <b>Cryogenic Ball Valve</b>	<b>35</b>
<b>闸截止系列</b> <b>Gate globe &amp; check valve series</b>	<b>36</b>
<b>蝶阀系列</b> <b>Butterfly valve series</b>	<b>37</b>
<b>其他产品</b> <b>Other Products</b>	<b>38-39</b>
ASME B16.5-2009 美标法兰尺寸 ASME B16.5-2009 American Standard Flange Dimensions	<b>40-42</b>
GB/T 9113-2010 国标法兰尺寸 GB/T 9113-2010 National Standard Flange Dimensions	<b>43-47</b>

## 硬密封球阀系列

# METAL SEAT BALL VALVE SERIES





## 设计特征 Design features

### 阀杆防吹出和上密封结构 blow-out proof Stem and seal structure

通用硬密封球阀阀杆采用下装式和设置带止推垫的上密封结构。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(如图1)。

our metal seat ball valves' stem adopted bottom entry and set the inverted sealing structure with the thrust pad. With the body cavity pressure increasing, the valve stem can be ensured not to be blown out of the body and has a good sealing effect (figure 1).

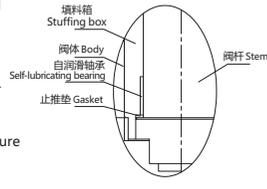


图1 阀杆防吹出结构  
(Figure 1 blow-out proof stem)

### 无条件防火、防静电结构 Unconditional fire prevention, anti-static structure

防火设计是通用球阀标准的设计。通用的金属球阀所有的密封组件都是由防火性能最佳的柔性石墨或金属材料制成，能实现无条件防火安全。同时，由于阀杆、球体、阀体之间始终保持金属接触，形成通路，避免了开关时摩擦静电电荷的聚积(如图2、3、4)。

Fire safe design is our ball valves' standard design. All our metal ball valve sealing components are made by excellent fireproof performance of flexible graphite or metal materials, which can realize the unconditional fire safety. At the same time, because of the valve stem, sphere, always keep the metal contact & formed conductive path, it avoided friction electrostatic charge accumulation when the switch open & close. (Figure 2, 3, 4).

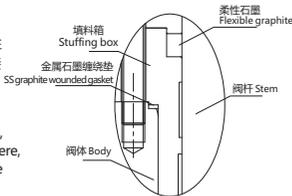


图2 阀杆、填料箱防火结构  
(Figure 2 stem, stuffing box fireproof structure)

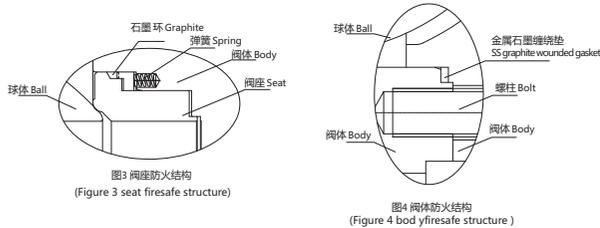


图3 阀座防火结构  
(Figure 3 seat fireproof structure)

图4 阀体防火结构  
(Figure 4 body fireproof structure)

### 先进的球体和阀座硬化技术 The advanced ball and seat hardening technology

针对用户不同使用工况和要求，通用硬密封球阀采用了多种先进的球体和阀座硬化技术，包括表面硬化处理、堆焊硬质合金、超音速喷涂 (HVOF)、镍基喷焊以及采用高强度高硬度陶瓷材料等。

For users of different operating conditions and requirements, our metal seat ball valve uses a variety of advanced sphere and valve seat hardening technology, including case hardening Processing, welding carbide, supersonic spraying (HVOF) spray, nickel base welding, and with high strength and high hardness of the ceramic materials, etc.



### 优异的密封性能 Excellent sealing performance

通用硬密封球阀首先将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。再将球体与阀座配磨，使两者间的密封性达到或超过标准要求。

Our metal seat ball valves' sphere and the grinding apparatus rotated in different direction, making the sphere surface to achieve high roundness and smooth finish. Then let the sphere and valve seat match grinding, making the sealing meet or exceed the standard.



### 多种阀座结构设计 A variety of seat structure design

通用硬密封浮动球阀标准设计为单向密封结构，固定硬密封球阀标准设计为双阻断泄放结构 (DBB)，如需其它结构请在采购合同予以说明。通用硬密封球阀采用具有弹性、具有自动补偿功能的阀座密封结构，保证阀门在高温、有磨损、有腐蚀的工况正常工作。同时对于含颗粒的恶劣工况下，细小的颗粒或粉尘会进入阀座的补偿机构，影响机构的正常工作，我们设计了具有防尘功能阀座(如图5、6、7)。

our metal seat floating ball valve standard design is one-way seal structure, metal seat trunnion ball valve standard design for double block & bleed structure (DBB), please make it clear in the order for other structure. Our metal seat ball valve adopts flexible seating, which has the function of automatic compensation structure, guarantee the normal work of the valve under the high temperature, wear and corrosion condition. At the same time for bad working conditions, the tiny particles or dust will enter the seats Compensation mechanism, affect the normal operation of the organization, mechanism, we designed dustproof seat (Figure 5, 6, 7).

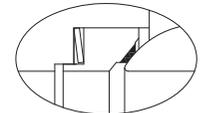


图5 浮动球阀阀座结构  
(Figure 5 floating ball valve upstream seat structure)

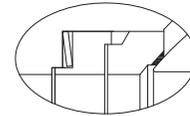


图6 固定球阀阀座结构  
(Figure 6 trunnion ball valve seat structure)



图7 阀座防尘结构  
(Figure 7 dustproof seat structure)

### 硬质颗粒介质的磨损和冲刷问题 Hard particle medium wear and erosion problems

对于含硬质颗粒介质的高压介质，当阀门密封不良或开关的瞬间是最容易引起磨损和冲刷问题的，通用硬密封球阀通过以下几个措施来减缓磨损或冲刷：

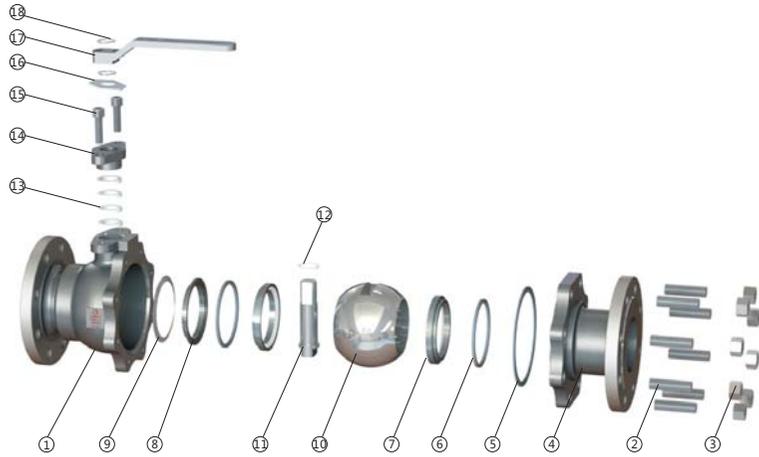
- (1) 提高阀门启闭速度，快速从全开启状态切换到全关闭状态；
- (2) 在开启前通过旁通对阀前、阀后的压力进行平衡；
- (3) 适当增大球体直径；
- (4) 在球体和阀座最容易磨损的部位喷焊耐磨材料；
- (5) 在介质通过的部位增加耐磨材料，以增强阀门的抗磨能力。

For high pressure medium containing hard solid particles, when the valve is sealed or switch moment is the most likely to lead to wear and erosion problems, our metal seat ball valves can be slow down wear or wash by the following measures:

- (1) improve the valve opening and closing speed, quickly switch from full open to full close state;
- (2) Balanced the valve pressure by the bypass valve before opening;
- (3) the appropriate increasing of sphere diameter.
- (4) spray welding wear-resisting material in the part of sphere & seat that most probably got worn;
- (5) increase the wear resistant material in the area of media go through, in order to enhance antiwear ability of the valve.

# 硬密封浮动球阀

## Metal seat floating ball valve

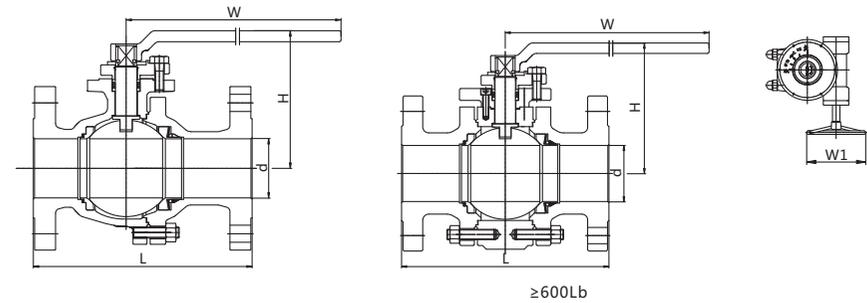


### 主要零件材料 major parts material

序号 NO.	零件 Part	碳钢材质 Carbon Steel	酸性工况 Acidic Conditions	不锈钢材质 Stainless Steel
1	阀体 Body	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8
2	螺栓 Bolt	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
3	螺母 Nut	ASTM A194 2H	ASTM A194 2HM	ASTM A194 8
4	阀盖 Bonnet	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8
5	垫片 Gasket	304+石墨缠绕垫 Graphite wounded Gasket+304		
6	密封环 Seat Ring	柔性石墨 Flexible Graphite	柔性石墨 Flexible Graphite	柔性石墨 Flexible Graphite
7	阀座 Seat	ASTM A182 F304+WC	ASTM A182 F304+WC	ASTM A182 F304+WC
8	弹簧座 ring joint gasket	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304
9	蝶簧 Disc Spring	17-7PH	INCONEL X-750	ANSI 1566
10	球体 Ball	ASTM A182 F304+STL	ASTM A182 F304+STL	ASTM A182 F304+STL
11	阀杆 Stem	17-4PH	17-4PH	17-4PH
12	止推垫 Stop Washer	不锈钢 SS	不锈钢 SS	不锈钢 SS
13	填料 Packing	石墨 Graphite	石墨 Graphite	石墨 Graphite
14	填料压板 Gland Flange	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8
15	螺钉 Screw	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
16	定位片 Positioning Plate	碳钢 CS	不锈钢 SS	
17	手柄 Level	碳钢 CS	碳钢 CS	不锈钢 SS
18	卡簧 circlip	ANSI 1566	ANSI 1566	ANSI 1566

# 硬密封浮动球阀

## Metal seat floating 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	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		
法兰连接标准 End flange	ASME B16.5, ASME B16.47		

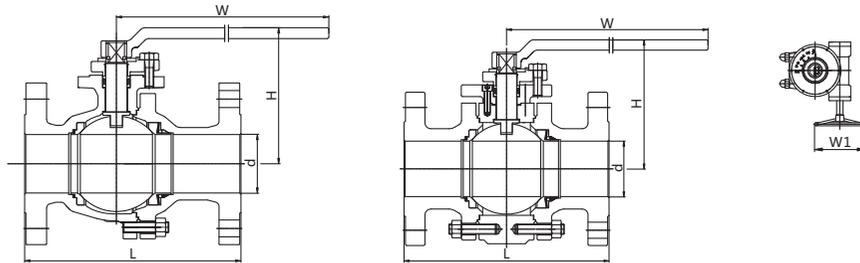
### 主要尺寸 Dimensions

CLASS	全通径 Full Bore							CLASS	全通径 Full Bore						
	NPS	d	L	H	H1	W	W1		NPS	d	L	H	H1	W	W1
150lb	1/2	13	108	85	-	140	-	300lb	1/2	13	140	85	-	140	-
	3/4	19	117	90	-	140	-		3/4	19	152	90	-	140	-
	1	25	127	99	-	150	-		1	25	165	99	-	150	-
	1-1/4	32	140	105	-	180	-		1-1/4	32	178	105	-	180	-
	1-1/2	38	165	126	-	200	-		1-1/2	38	191	126	-	200	-
	2	49	178	140	-	250	-		2	49	216	140	-	250	-
	2-1/2	62	191	165	-	300	-		2-1/2	62	241	165	-	300	-
	3	74	203	178	-	350	-		3	74	283	178	330	350	305
	4	100	229	230	380	500	305		4	100	305	230	380	500	305
	5	125	356	280	405	800	305		5	125	381	280	420	800	305
600lb	6	150	394	310	460	800	305	6	150	403	310	480	800	305	
	8	201	457	350	550	1000	305	8	201	502	350	560	1000	305	
	1/2	13	165	79	-	140	-	1/2	13	216	98	-	150	-	
	3/4	19	190	83	-	140	-	3/4	19	229	105	-	150	-	
	1	25	216	114	-	200	-	1	25	254	110	-	200	-	
	1-1/4	32	229	120	-	200	-	1-1/4	32	279	120	-	250	-	
	1-1/2	38	241	125	-	250	-	1-1/2	38	305	125	-	250	-	
	2	49	292	156	-	300	-	2	49	368	150	-	350	-	
	2-1/2	62	330	172	-	350	-								
	3	74	356	220	370	500	305								
1500lb	4	100	432	250	400	650	305								
	1/2		216	98	-	182	-								
	3/4		229	105	-	200	-								
	1		254	110	-	250	-								
	1-1/4		279	120	-	300	-								
	1-1/2		305	130	-	350	-								
2		368	160	-	500	-									

## 硬密封浮动球阀

Metal seat floating ball valve

Zhejiang General Valve  
Industrial Co.,Ltd



### GB应用规范 GB application specification

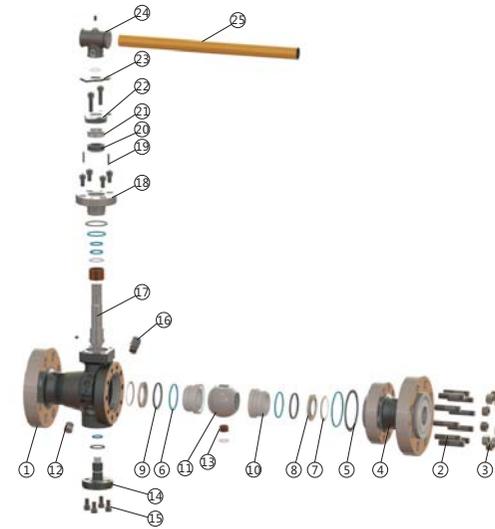
标准 Standard	GB系列 GB Series	标准 Standard	GB系列 GB Series
温度-压力额定值 Temperature-pressure ratings	GB/T 12224	试验标准 Inspection & testing	GB/T 13927、JB/T 9092
设计标准 Design	GB/T 12237、JB/T 7745	抗硫材料要求 sulfur resistant material	SY/T 0599、GB/T 20972
结构长度标准 Face to face	GB/T 12221		
连接端标准 End	JB/T 79、GB/T 9113、HG/T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

### 主要尺寸 Dimensions

PN	全口径 Full Bore							PN	全口径 Full Bore						
	NPS	d	L	H	H1	W	W1		NPS	d	L	H	H1	W	W1
1.6MPa	1/2	13	130	85	-	140	-	2.5~4.0MPa	1/2	13	130	85	-	140	-
	3/4	19	140	90	-	140	-		3/4	19	140	90	-	140	-
	1	25	150	99	-	150	-		1	25	150	99	-	150	-
	1-1/4	32	165	105	-	180	-		1-1/4	32	165	105	-	180	-
	1-1/2	38	180	126	-	200	-		1-1/2	38	180	126	-	200	-
	2	49	200	140	-	250	-		2	49	200	140	-	250	-
	2-1/2	62	220	165	-	300	-		2-1/2	62	220	165	-	300	-
	3	74	250	178	-	350	-		3	74	250	178	330	350	305
6.3MPa	4	100	280	230	380	500	305	4	100	320	230	380	500	305	
	5	125	320	280	405	800	305	5	125	400	280	420	800	305	
	6	150	360	310	460	800	305	6	150	400	310	480	800	305	
	8	201	400	350	550	1000	305	8	201	550	350	560	1000	305	
	1/2	13	165	79	-	140	-	10.0MPa	1/2	13	165	79	-	140	-
	3/4	19	190	83	-	140	-		3/4	19	190	83	-	140	-
	1	25	216	114	-	200	-		1	25	216	114	-	200	-
	1-1/4	32	229	120	-	200	-		1-1/4	32	229	120	-	200	-
1-1/2	38	241	125	-	250	-	1-1/2		38	241	125	-	250	-	
2	49	292	156	-	300	-	2		49	292	156	-	300	-	
2-1/2	62	330	172	-	350	-	2-1/2		62	330	172	-	350	-	
3	74	356	220	370	500	305	3		74	356	220	390	500	305	
4	100	432	250	400	650	305	4	100	432	250	440	650	305		

## 硬密封固定球阀

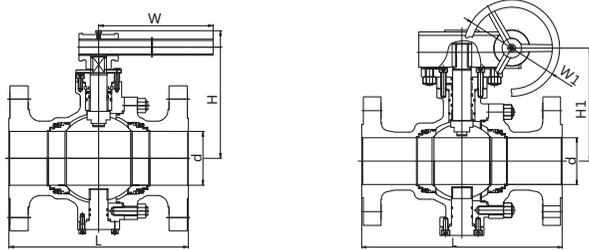
Metal seat trunnion ball valve



### 主要零件材料 major parts material

序号 NO.	零件 Part	标准材质 Material	酸性工况 Acidic Conditions	不锈钢材质 Stainless Steel
1	阀体 Body	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8
2	螺栓 Bolt	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
3	螺母 Nut	ASTM A194 2H	ASTM A194 2HM	ASTM A194 8
4	阀盖 Bonnet	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8
5	垫片 Gasket	304+石墨缠绕垫 Graphite Wound Gasket+304		
6	O型圈 O-ring	氟橡胶 Fluororubber		
7	弹簧 Spring	17-7PH	INCONEL X-750	INCONEL X-750
8	弹簧座 Ring joint gasket	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304
9	密封环 Seat Ring	石墨 Graphite	石墨 Graphite	石墨 Graphite
10	阀座 Seat	ASTM A182 F304+WC	ASTM A182 F304+WC	ASTM A182 F304+WC
11	球体 Ball	ASTM A182 F304+STL	ASTM A182 F304+STL	ASTM A182 F304+STL
12	排污阀 Drain plug	碳钢 CS	不锈钢 SS	碳钢 CS
13	自润滑轴承 Self-lubricating bearing	304+PTFE	304+PTFE	304+PTFE
14	下轴 Trunnion	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304
15	螺钉 Screw	ASTM A193 B7	ASTM A193 B7M	ASTM A193 B8
16	排气阀 Vent plug	碳钢 CS	不锈钢 SS	碳钢 CS
17	阀杆 Stem	17-4PH	17-4PH	17-4PH
18	填料箱 Stuffing box	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304
19	销 Pin	ANSI 1566	ANSI 1566	ANSI 1566
20	填料 Packing	石墨 Graphite	石墨 Graphite	石墨 Graphite
21	填料压套 Packing gland	碳钢 CS	碳钢 CS	不锈钢 SS
22	填料压板 Gland Flange	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8
23	定位片 Positioning plate	碳钢 CS	碳钢 CS	不锈钢 SS
24	手柄接头 Lever adapter	碳钢 CS	碳钢 CS	不锈钢 SS
25	手柄 Level	碳钢 CS	碳钢 CS	不锈钢 SS

硬密封固定球阀  
Metal seat trunnion ball valve



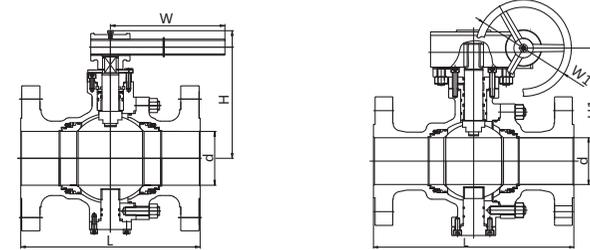
ANSI应用规范 ANSI application specification

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, API598
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		全口径 Full Bore										CLASS		全口径 Full Bore														
NPS	d	RF	RTJ	BW	H	H1	W	W1	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	-	2	49	216	232	216	107	-	230	-
	3	74	203	216	283	152	-	400	-	3	74	283	298	283	152	-	400	-	3	74	283	298	283	152	-	400	-	
	4	100	229	241	305	178	-	650	-	4	100	305	321	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	6	150	403	419	457	272	378	1050	400	
	8	201	457	470	521	-	421	-	400	8	201	502	518	521	-	421	-	400	8	201	502	518	521	-	421	-	400	
	10	252	533	546	559	-	482	-	400	10	252	568	584	559	-	482	-	400	10	252	568	584	559	-	482	-	400	
	12	303	610	622	635	-	549	-	600	12	303	648	664	635	-	549	-	600	12	303	648	664	635	-	549	-	600	
	14	334	686	699	762	-	582	-	600	14	334	762	778	762	-	582	-	800	14	334	762	778	762	-	582	-	800	
	16	385	762	775	838	-	687	-	800	16	385	838	854	838	-	687	-	800	16	385	838	854	838	-	687	-	800	
	18	436	864	876	814	-	730	-	800	18	436	914	930	914	-	730	-	800	18	436	914	930	914	-	730	-	800	
	20	487	914	927	991	-	772	-	800	20	487	991	1010	991	-	772	-	800	20	487	991	1010	991	-	772	-	800	
	24	589	1067	1080	1143	-	995	-	800	24	589	1143	1165	1143	-	995	-	800	24	589	1143	1165	1143	-	995	-	800	
26	633	1143	-	1245	-	1022	-	800	26	633	1245	1270	1245	-	1022	-	800	26	633	1245	1270	1245	-	1022	-	800		
28	684	1245	-	1346	-	1088	-	800	28	684	1346	1372	1346	-	1088	-	800	28	684	1346	1372	1346	-	1088	-	800		
30	735	1295	-	1397	-	1153	-	800	30	735	1397	1422	1397	-	1153	-	800	30	735	1397	1422	1397	-	1153	-	800		
32	779	1372	-	1524	-	1223	-	800	32	779	1524	1553	1524	-	1223	-	800	32	779	1524	1553	1524	-	1223	-	800		
400Lb	2	49	292	295	292	107	-	400	-	2	49	292	295	292	107	-	400	-	2	49	292	295	292	107	-	400	-	
	3	74	356	359	356	152	-	650	-	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	-	4	100	432	435	432	178	-	1050	-	
	6	150	495	498	495	272	383	1050	400	6	150	559	562	559	-	389	-	400	6	150	559	562	559	-	389	-	400	
	8	201	597	600	597	-	447	-	600	8	201	660	663	660	-	449	-	600	8	201	660	663	660	-	449	-	600	
	10	252	673	686	673	-	480	-	600	10	252	787	790	787	-	497	-	600	10	252	787	790	787	-	497	-	600	
	12	303	762	765	762	-	517	-	800	12	303	838	841	838	-	550	-	800	12	303	838	841	838	-	550	-	800	
	14	334	826	829	826	-	588	-	800	14	334	889	892	889	-	582	-	800	14	334	889	892	889	-	582	-	800	
	16	385	902	905	902	-	639	-	800	16	385	991	994	991	-	687	-	800	16	385	991	994	991	-	687	-	800	
	18	436	978	981	978	-	710	-	800	18	436	1092	1095	1092	-	730	-	800	18	436	1092	1095	1092	-	730	-	800	
	20	487	1054	1060	1054	-	744	-	800	20	487	1194	1200	1194	-	780	-	800	20	487	1194	1200	1194	-	780	-	800	
	24	589	1232	1241	1232	-	869	-	800	24	589	1397	1407	1397	-	995	-	800	24	589	1397	1407	1397	-	995	-	800	
26	633	1308	1321	1308	-	908	-	800	26	633	1448	1461	1448	-	1038	-	800	26	633	1448	1461	1448	-	1038	-	800		
28	684	1397	1410	1397	-	974	-	800	28	684	1549	1562	1549	-	1088	-	800	28	684	1549	1562	1549	-	1088	-	800		
30	735	1524	1537	1524	-	1013	-	800	30	735	1651	1664	1651	-	1157	-	800	30	735	1651	1664	1651	-	1157	-	800		
32	779	1651	1667	1651	-	1079	-	800	32	779	1880	-	-	-	-	-	800	32	779	1880	-	-	-	-	-	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		
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	-	5										

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, teronangular 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℃的工况。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。  
1. 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  
2. 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  
3. 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。  
4. 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 ~ 0.8 mm.

硬密封球阀参考扭矩

Metal seat Ball Valve Reference Torque

口径 Size		硬密封浮动球阀扭矩 Metal seat floating ball valve's torque									
NPS	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	-	-

口径 Size		硬密封固定球阀扭矩 Metal seat trunnion ball valve's torque									
NPS	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

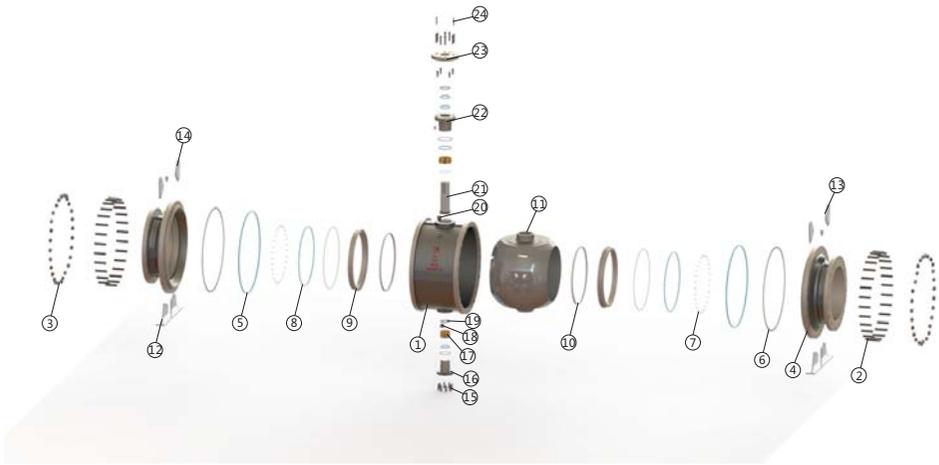




# 固定球阀

## Trunnion ball valve

Zhejiang General Valve Industrial Co.,Ltd

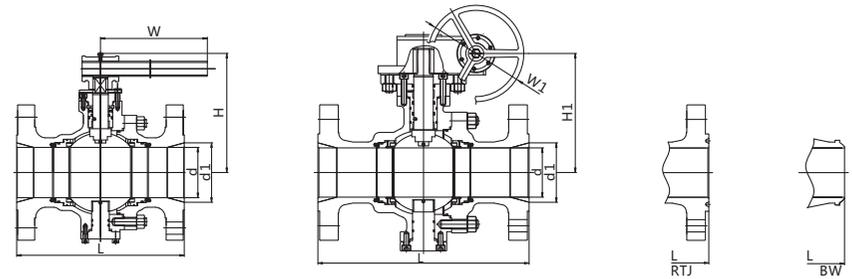



### 主要零件材料 Major parts material

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 wounded 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		

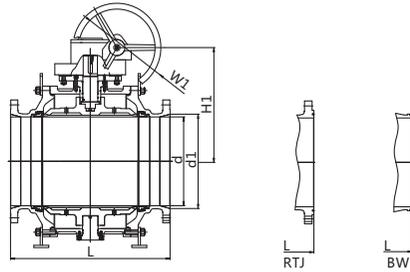
### 主要尺寸 Dimensions

CLASS	全口径 Full Bore								缩径 Reduce Bore									
	NPS	d	L			H	H1	W	W1	NPS	d	L			H	H1	W	W1
			RF	RTJ	BW							RF	RTJ	BW				
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	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
	10	252	568	584	559	-	482	-	400	12x10	303x252	648	664	635	-	482	-	400
400Lb	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
	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
600Lb	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

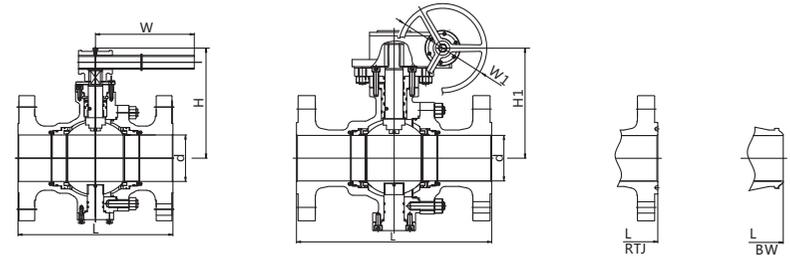
Cast steel trunnion ball valve

Zhejiang General Valve Industrial Co.,Ltd



# 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		

## 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		

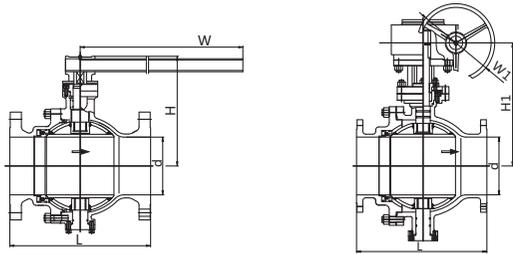
## 主要尺寸 Dimensions

CLASS	全口径 Full Bore								缩径 Reduce Bore									
	NPS	d	L		H	H1	W	W1	NPS	d	L		H	H1	W	W1		
		RF	RTJ	BW							RF	RTJ	BW					
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	814	-	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
300Lb	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
	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
400Lb	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
	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
600Lb	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						-		-	800
	30	735	1651	1664	1651	-	1157	-	800						-		-	800

## 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	-	1013	-	800	700	684	1549	-	1088	-	800		
750	735	1778	-	974	-	800	750	735	1651	-	1157	-	800		
800	779	1880	-	1079	-	800									

**卸灰球阀**  
Cinder ball valve



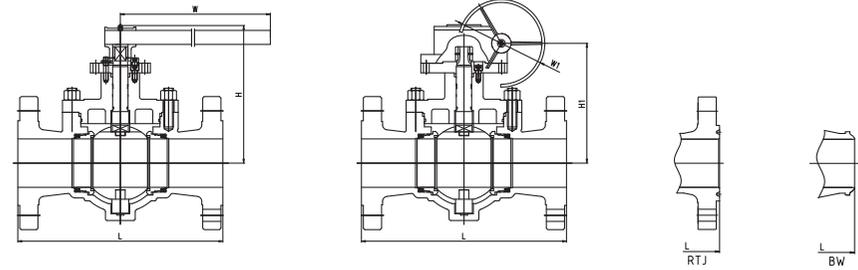
**GB应用规范 GB application specification**

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	-
结构长度标准 Face to face	GB/T 12221	抗硫材料要求 sulfur resistant material	-
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
0.25MPa	50	49	216	107	-	230	-	0.6MPa	50	49	216	107	-	230	-
	65	241	125	-	400	-	65		241	125	-	400	-		
	80	283	152	-	400	-	80		283	152	-	400	-		
	100	305	178	-	650	-	100		305	178	-	650	-		
	125	356	300	-	1050	-	125		356	300	-	1050	-		
	150	394	330	-	1050	-	150		394	330	-	1050	-		
	200	457	-	398	-	600	-		200	457	-	398	-	600	-
	250	533	-	495	-	600	-		250	533	-	495	-	600	-
	300	610	-	580	-	800	-		300	610	-	580	-	800	-
	350	686	-	625	-	800	-		350	686	-	625	-	800	-
1.0MPa	400	762	-	670	-	800	-	400	762	-	670	-	800	-	
	450	864	-	698	-	800	-	450	864	-	698	-	800	-	
	500	914	-	840	-	800	-	500	914	-	840	-	800	-	
	50	216	107	-	230	-	1.6MPa	50	216	107	-	230	-		
	65	241	125	-	400	-		65	241	125	-	400	-		
	80	283	152	-	400	-		80	283	152	-	400	-		
	100	305	178	-	650	-		100	305	178	-	650	-		
	125	356	300	-	1050	-		125	356	300	-	1050	-		
	150	394	330	-	1050	-		150	394	330	-	1050	-		
	200	457	-	398	-	600		-	200	457	-	398	-	600	-
250	533	-	495	-	600	-		250	533	-	495	-	600	-	
300	610	-	580	-	800	-		300	610	-	580	-	800	-	
350	686	-	625	-	800	-		350	686	-	625	-	800	-	
400	762	-	670	-	800	-	400	762	-	670	-	800	-		
450	864	-	698	-	800	-	450	864	-	698	-	800	-		
500	914	-	840	-	800	-	500	914	-	840	-	800	-		

**上装式固定球阀**  
Top entry 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		

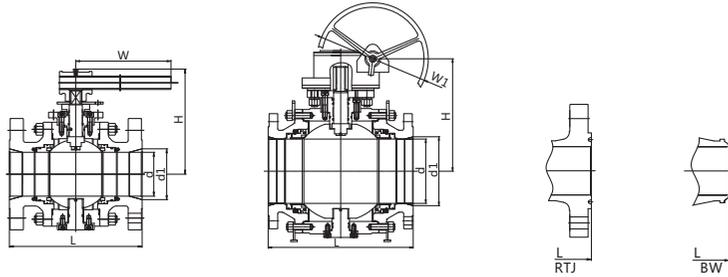
**主要尺寸 Dimensions**

CLASS	NPS	d	L			H	H1	W	W1	CLASS	NPS	d	L			H	H1	W	W1
			RF	RTJ	BW								RF	RTJ	BW				
150Lb	2	49	292	295	292	212	-	450	-	300Lb	2	49	292	295	292	212	-	450	-
	3	74	356	359	356	228	-	600	-		3	74	356	359	356	228	-	600	-
	4	100	432	435	432	272	-	600	-		4	100	432	435	432	272	-	1000	-
	6	150	559	562	559	-	333	-	350		6	150	559	562	559	-	345	-	500
	8	201	660	664	660	-	384	-	500		8	201	660	664	660	-	385	-	700
	10	252	787	791	787	-	424	-	500		10	252	787	791	787	-	426	-	700
	12	303	838	841	838	-	467	-	700		12	303	838	841	838	-	473	-	700
	14	334	889	892	889	-	517	-	700		14	334	889	892	889	-	530	-	700
	16	385	991	994	991	-	549	-	700		16	385	991	994	991	-	537	-	700
	18	436	1092	1095	1092	-	577	-	700		18	436	1092	1095	1092	-	597	-	700
600Lb	20	487	1194	1200	1194	-	626	-	700	20	487	1194	1200	1194	-	663	-	700	
	24	589	1397	1406	1397	-	696	-	700	24	589	1397	1406	1397	-	721	-	700	
	2	49	292	295	292	212	-	450	-	900Lb	2	49	368	371	368	215	-	600	-
	3	74	356	359	356	228	-	600	-		3	74	381	384	381	193	-	1000	-
	4	100	432	435	432	250	-	1000	-		4	100	457	460	457	-	291	-	500
	6	150	559	562	559	-	336	-	700		6	150	610	613	610	-	313	-	700
	8	201	660	664	660	-	395	-	700		8	201	737	740	730	-	378	-	700
	10	252	787	791	787	-	415	-	700		10	252	838	841	838	-	430	-	700
	12	303	838	841	838	-	461	-	700		12	303	965	968	965	-	493	-	700
	2	49	368	371	368	179	-	600	-		2500Lb	2	42	451	454	451	-	250	-
3	74	470	473	470	201	-	1000	-	3			62	578	584	578	-	305	-	700
4	100	546	549	546	-	295	-	700	4			87	673	683	673	-	360	-	700
6	144	705	711	705	-	333	-	700	6	133		914	927	914	-	430	-	700	
8	192	832	841	832	-	410	-	700	8	179		1022	1038	1022	-	513	-	700	
10	239	991	1000	991	-	460	-	700											
12	287	1130	1146	1130	-	511	-	700											

# 锻钢固定球阀

Forged steel trunnion ball valve

Zhejiang General Valve Industrial Co.,Ltd



## 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	全口径 Full Bore										缩径 Reduce Bore									
	NPS	d	L			H	H1	W	W1	NPS	d	L			H	H1	W	W1		
		RF	RTJ	BW							RF	RTJ	BW							
150Lb	2	49	178	191	216	200	-	265	-	3x2	74x49	203	216	283	200	-	265	-		
	3	74	203	216	283	300	-	285	-	4x3	100x74	229	241	305	300	-	285	-		
	4	100	229	241	305	315	-	285	-	6x4	150x100	394	406	457	315	-	285	-		
	6	150	394	406	457	-	335	-	300	8x6	201x150	457	470	521	-	335	-	300		
	8	201	457	470	521	-	405	-	300	10x8	252x201	533	546	559	-	405	-	300		
	10	252	533	546	559	-	427	-	300	12x10	303x252	610	622	635	-	427	-	300		
	12	303	610	622	635	-	465	-	500	14x12	334x303	686	699	762	-	465	-	500		
	14	334	686	699	762	-	506	-	600	16x14	385x334	762	775	838	-	506	-	600		
	16	385	762	775	838	-	622	-	600	18x16	436x385	864	876	914	-	622	-	600		
	18	436	864	876	914	-	666	-	600	20x18	487x436	914	927	991	-	666	-	600		
	20	487	914	927	991	-	730	-	600	24x20	589x487	1067	1080	1143	-	730	-	600		
	24	589	1067	1080	1143	-	895	-	800	28x24	684x589	1245	-	1346	-	833	-	800		
	26	633	1143	-	1245	-	900	-	800	30x24	735x589	1295	-	1397	-	833	-	800		
	28	684	1245	-	1346	-	935	-	800	32x26	779x633	1372	-	1524	-	895	-	800		
	30	735	1295	-	1397	-	1010	-	800	34x28	830x684	1473	-	1626	-	900	-	800		
	32	779	1372	-	1524	-	1060	-	800	36x30	874x735	1524	-	1727	-	1010	-	800		
34	830	1473	-	1626	-	1077	-	800												
36	874	1524	-	1727	-	1115	-	800												
300Lb	2	49	216	232	216	206	-	265	-	3x2	74x49	283	298	283	206	-	265	-		
	3	74	283	298	283	315	-	400	-	4x3	100x74	305	321	305	315	-	400	-		
	4	100	305	321	305	330	-	750	-	6x4	150x100	403	419	457	330	-	750	-		
	6	150	403	419	457	-	345	-	300	8x6	201x150	502	518	521	-	345	-	300		
	8	201	502	518	521	-	415	-	300	10x8	252x201	568	584	559	-	415	-	300		
	10	252	568	584	559	-	427	-	400	12x10	303x252	648	664	635	-	427	-	400		
	12	303	648	664	635	-	465	-	500	14x12	334x303	762	778	762	-	465	-	500		
	14	334	762	778	762	-	519	-	600	16x14	385x334	838	854	838	-	519	-	600		
	16	385	838	854	838	-	638	-	600	18x16	436x385	914	930	914	-	638	-	600		
	18	436	914	930	914	-	683	-	600	20x18	487x436	991	1010	991	-	683	-	600		
	20	487	991	1010	991	-	748	-	600	24x20	589x487	1143	1165	1143	-	748	-	600		
	24	589	1143	1165	1143	-	854	-	800	28x24	684x589	1346	1372	1346	-	854	-	800		
	26	633	1245	1270	1245	-	917	-	800	30x24	735x589	1397	1422	1397	-	854	-	800		
	28	684	1346	1372	1346	-	958	-	800	32x26	779x633	1524	1553	1524	-	917	-	800		
	30	735	1397	1422	1397	-	1035	-	800	34x28	830x684	1626	1654	1626	-	958	-	800		
	32	779	1524	1553	1524	-	1087	-	800	36x30	874x735	1727	1756	1727	-	1035	-	800		
34	830	1626	1654	1626	-	1104	-	800												
36	874	1727	1756	1727	-	1143	-	800												

# 锻钢固定球阀

Forged steel trunnion ball valve

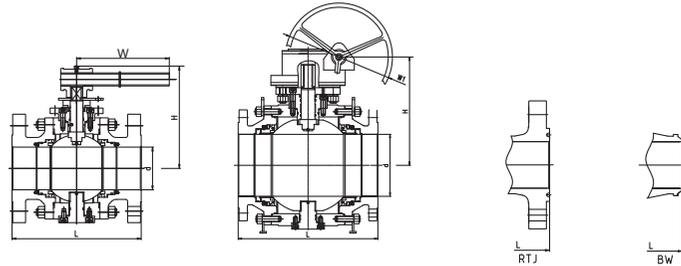


CLASS	全口径 Full Bore										缩径 Reduce Bore									
	NPS	d	L			H	H1	W	W1	NPS	d	L			H	H1	W	W1		
		RF	RTJ	BW							RF	RTJ	BW							
400Lb	2	49	292	295	292	206	-	265	-	3x2	74x49	356	359	356	206	-	265	-		
	3	74	356	359	356	315	-	400	-	4x3	100x74	406	410	406	315	-	400	-		
	4	100	406	410	406	330	-	750	-	6x4	150x100	495	498	495	330	-	750	-		
	6	150	495	498	495	-	345	-	300	8x6	201x150	597	600	597	-	345	-	300		
	8	201	597	600	597	-	415	-	300	10x8	252x201	673	676	673	-	415	-	300		
	10	252	673	686	673	-	427	-	400	12x10	303x252	762	765	762	-	427	-	400		
	12	303	762	765	762	-	465	-	500	14x12	334x303	826	829	826	-	465	-	500		
	14	334	826	829	826	-	519	-	600	16x14	385x334	902	905	902	-	519	-	600		
	16	385	902	905	902	-	638	-	600	18x16	436x385	978	981	978	-	638	-	600		
	18	436	978	981	978	-	683	-	600	20x18	487x436	1054	1060	1054	-	683	-	600		
	20	487	1054	1060	1054	-	748	-	600	24x20	589x487	1232	1241	1232	-	748	-	600		
	24	589	1232	1241	1232	-	854	-	800	28x24	684x589	1397	1410	1397	-	854	-	800		
	26	633	1308	1321	1308	-	917	-	800	30x24	735x589	1524	1537	1524	-	854	-	800		
	28	684	1397	1410	1397	-	958	-	800	32x26	779x633	1651	1667	1651	-	917	-	800		
	30	735	1524	1537	1524	-	1035	-	800	34x28	830x684	1778	1794	1778	-	958	-	800		
	32	779	1651	1667	1651	-	1087	-	800	36x30	874x735	1880	1895	1880	-	1035	-	800		
34	830	1778	1794	1778	-	1104	-	800												
36	874	1880	1895	1880	-	1143	-	800												
600Lb	2	49	292	295	292	206	-	400	-	3x2	74x49	356	359	356	206	-	400	-		
	3	74	356	359	356	315	-	750	-	4x3	100x74	432	435	432	315	-	750	-		
	4	100	432	435	432	330	-	1000	-	6x4	150x100	559	562	559	330	-	1000	-		
	6	150	559	562	559	-	345	-	300	8x6	201x150	660	663	660	-	345	-	300		
	8	201	660	663	660	-	415	-	300	10x8	252x201	787	790	787	-	415	-	300		
	10	252	787	790	787	-	427	-	500	12x10	303x252	838	841	838	-	427	-	500		
	12	303	838	841	838	-	465	-	600	14x12	334x303	889	892	889	-	465	-	600		
	14	334	889	892	889	-	519	-	600	16x14	385x334	991	994	991	-	519	-	600		
	16	385	991	994	991	-	638	-	600	18x16	436x385	1092	1095	1092	-	638	-	600		
	18	436	1092	1095	1092	-	683	-	600	20x18	487x436	1194	1200	1194	-	683	-	600		
	20	487	1194	1200	1194	-	748	-	600	24x20	589x487	1397	1407	1397	-	748	-	600		
	24	589	1397	1407	1397	-	854	-	800	28x24	684x589	1549	1562	1549	-	854	-	800		
	26	633	1448	1461	1448	-	917	-	800	30x24	735x589	1651	1664	1651	-	854	-	800		
	28	684	1549	1562	1549	-	958	-	800											
	30	735	1651	1664	1651	-	1035	-	800											
	900Lb	2	49	368	371	368	119	-	460	-	3x2	74x49	381	384	381	119	-	460	-	
3		74	381	384	381	133	-	1000	-	4x3	100x74	457	460	457	133	-	1000	-		
4		100	457	460	457	176	-	1500	-	6x4	150x100	610	613	610	176	-	1500	-		
6		150	610	613	610	-	183	-	300	8x6	201x150	737	740	737	-	183	-	300		
8		201	737	740	737	-	193	-	400	10x8	252x201	838	841	838	-	193	-	400		
10		252	838	841	838	-	235	-	500	12x10	303x252	965	968	965	-	235	-	500		
12		303	965	968	965	-	280	-	600	14x12	322x303	1029	1039	1029	-	280	-	600		
14		322	1029	1039	1029	-	312	-	600	16x14	373x322	1130	1140	1130	-	312	-	600		
16		373	1130	1140	1130	-	365	-	600	18x16	432x373	1219	1232	1219	-	365	-	600		
18		423																		

# 锻钢固定球阀

Forged steel trunnion ball valve

Zhejiang General Valve Industrial Co.,Ltd



## 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	200	-	265	-	2.5-5.0MPa	50	49	216	206	-	265	-	
	65	62	191	276	-	265	-		65	62	241	297	-	350	-	
	80	74	203	300	-	285	-		80	74	283	315	-	400	-	
	100	100	229	315	-	285	-		100	100	305	330	-	750	-	
	150	150	394	-	335	-	300		150	150	403	-	345	-	300	
	200	201	457	-	405	-	300		200	201	502	-	415	-	300	
	250	252	533	-	427	-	300		250	252	568	-	427	-	400	
	300	303	610	-	465	-	500		300	303	648	-	465	-	500	
	350	334	686	-	506	-	600		350	334	762	-	519	-	600	
	400	385	762	-	622	-	600		400	385	838	-	638	-	600	
	450	436	864	-	666	-	600		450	436	914	-	683	-	600	
	500	487	914	-	730	-	600		500	487	991	-	748	-	600	
	550	538	991	-	833	-	800		550	538	1092	-	854	-	800	
	600	589	1067	-	895	-	800		600	589	1143	-	917	-	800	
	650	633	1143	-	900	-	800		650	633	1245	-	934	-	800	
	700	684	1245	-	935	-	800		700	684	1346	-	958	-	800	
750	735	1295	-	1010	-	800	750	735	1397	-	1035	-	800			
800	779	1372	-	1060	-	800	800	779	1524	-	1087	-	800			

# 锻钢固定球阀

Forged steel trunnion ball valve



## 主要尺寸 Dimensions

PN	DN	d	L	H	H1	W	W1	PN	DN	d	L	H	H1	W	W1		
6.3MPa	50	49	292	206	-	265	-	10.0MPa	50	49	292	206	-	400	-		
	65	62	356	297	-	350	-		65	62	330	297	-	350	-		
	80	74	406	315	-	400	-		80	74	356	315	-	750	-		
	100	100	495	330	-	750	-		100	100	432	330	-	1000	-		
	150	150	597	-	345	-	300		150	150	559	-	345	-	300		
	200	201	673	-	415	-	300		200	201	660	-	415	-	300		
	250	252	762	-	427	-	400		250	252	787	-	427	-	500		
	300	303	826	-	465	-	500		300	303	838	-	465	-	600		
	350	334	902	-	519	-	600		350	334	889	-	519	-	600		
	400	385	978	-	638	-	600		400	385	991	-	638	-	600		
	450	436	1054	-	683	-	600		450	436	1092	-	683	-	600		
	500	487	1232	-	748	-	600		500	487	1194	-	748	-	600		
	550	538	1308	-	854	-	800		550	538	1295	-	854	-	800		
	600	589	1397	-	917	-	800		600	589	1397	-	917	-	800		
	650	633	1524	-	934	-	800		650	633	1448	-	934	-	800		
	700	684	1651	-	958	-	800		700	684	1549	-	958	-	800		
750	735	1778	-	1035	-	800	750	735	1651	-	1035	-	800				
800	779	1880	-	1087	-	800	800	779	1778	-	1087	-	800				
15.0MPa	50	49	368	119	-	460	-	25.0MPa	50	49	368	119	-	460	-		
	65	62	419	124	-	650	-		65	62	419	124	-	650	-		
	80	74	381	133	-	1000	-		80	74	470	133	-	1000	-		
	100	100	457	176	-	1500	-		100	100	546	176	-	1500	-		
	150	150	610	-	183	-	300		150	144	705	-	192	-	400		
	200	201	737	-	193	-	400		200	192	832	-	238	-	500		
	250	252	838	-	235	-	500		250	239	991	-	274	-	600		
	300	303	965	-	280	-	600		300	287	1130	-	318	-	600		
	350	322	1029	-	312	-	600		350	315	1257	-	483	-	600		
	400	373	1130	-	365	-	600		400	360	1384	-	534	-	600		
	450	423	1219	-	414	-	600										
	500	471	1321	-	459	-	600										
	550	522	1422	-	507	-	800										
	600	570	1549	-	547	-	800										
	42.0MPa	50	42	451	-	239	-		400								
		65	52	508	-	246	-		400								
80		62	578	-	265	-	500										
100		87	673	-	282	-	500										
150		131	814	-	523	-	600										
200		179	1022	-	615	-	700										
250		223	1270	-	685	-	760										
300	265	1422	-	704	-	760											

# 软密封浮动球阀系列

## SOFT SEAT FLOATING BALL VALVE SERIES



## 浮动球阀

### Floating ball valve



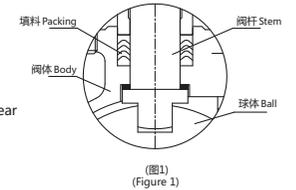
### 设计特征 Design features

#### 阀杆防吹出设计

##### Blow-out proof stem design

阀杆与球体是独立的，阀杆是从阀体侧面装入。在阀杆靠近球体端为T形结构，它受阀体上凸台保护，确保在任何压力下阀杆不被吹出，并在内压的作用下起到上密封作用(如图1)。

The stem and ball are separated, stem is side loaded from the valve body. From the stem near the ball end is T structure, it is protected by the convex in the body, ensure that the valve stem is not blown out under any pressure, and has the sealing effect under the action of internal pressure. ( Figure 1)

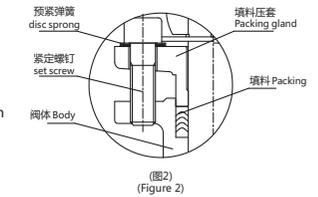


#### 动载压盖设计

##### Dynamic load gland design

可以根据客户需要，设计动载压板设计。能保证压盖对填料持续的压力从而保证阀杆填料部位持久密封，防止介质逃逸泄漏(如图2)。

We can do it according to customers' needs, design dynamic pressure plate which can guarantee gland flange's constant pressure to the packing and ensure the valve stem packing Persistent sealed to prevent escape of medium leakage(Figure 2).

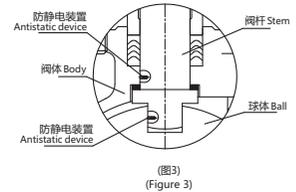


#### 防静电装置设计

##### Antistatic device design

防静电设计是通用浮动球阀的标准设计。在阀杆与球体、阀杆与阀体间装有导电通路装置，它能使阀体、阀杆、球体三者间形成通路，能避免阀门开关时摩擦的静电的聚积。这些静电对某些工况时来说是非常危险(如图3)。

Antistatic is the standard design of our floating ball valve. there is conductive device between the stem and ball, valve stem and valve body, It can make the valve body, valve stem, sphere formed conductive path, which can avoid the valve switch friction electrostatic accumulation. The static electricity for some working conditions is very dangerous(Figure 3).

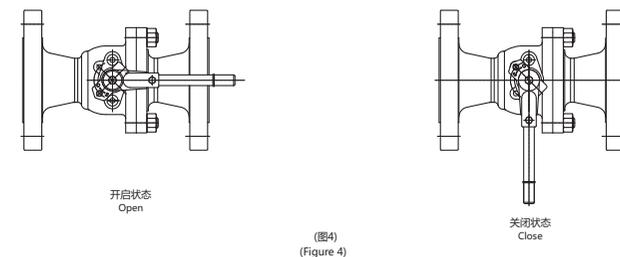


#### 开关定位设计

##### Switch positioning design

球体、阀杆、手柄是阀门的运动部件，也是一个装配单元，开关定位设计也是通用浮动球阀的标准设计。将阀杆旋转的范围限定在90度范围内。使用都可根据手柄与阀杆轴线是否同轴来确定阀门的开关状态。必要时可以定位片加锁防止误操作(如图4)！

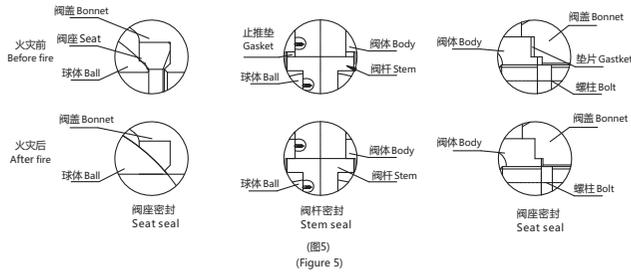
Sphere, the valve stem and level are the moving parts of the valve, and an assembly unit, switch position design is also our floating ball standard design. Rotate the valve stem of the limit in the range of 90 degrees. It can be according to the handle and the stem axis coaxial to determine the state of the valve. when necessary, adding positioning lock to prevent wrong operation(Figure 4).



防火安全设计  
Fire safe design

防火安全设计是通用浮动球阀的标准设计,均符合API 607要求。当发生火灾时,当非金属材料被高温破坏或分解后,球体在介质压力下失去与阀体防火结构接触,实现金属与金属的密封。从而最大限度的切断了介质,减少介质的内漏(如图5)。

Fire safe design is our floating ball valves' standard design, all conforms to the requirements of API 607. When there is a fire, and the nonmetal sealing, material have been damaged by the high temperature or decomposition, the sphere under medium pressure lose contact with the body of fire safe structure, implementation of metal to metal seal. To cut off the medium to the greatest extent, reduce the leakage of the medium(Figure 5).

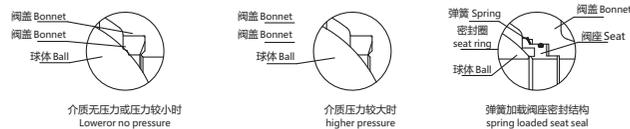


(图5)

可靠的阀座密封设计  
Reliable seating design

公司根据多年的生产经验和国外先进技术交流基于PTFE的“冷流”和热膨胀特性。我公司软密封浮动球阀的阀座被设计为挠性唇式阀座,装配前后唇缘的形状发生变化,储存材料弹性变形能,当温度升高或压力升高时,进一步吸收弹性变形能;当温度或压力下降时,泄放弹性变形能获得记忆特性。对中、高温阀门密封副,采用对位聚苯(PPL)作为阀座可用于300℃温度(如图6)。

Based on years of production experience and advanced foreign technology company communication based on the cold flow and thermal expansion properties of PTFE. Our company's soft seat floating ball valve seat is designed to be flexible lip type seat, lip edge shape change before and after the assembly, elastic storage materials deformation energy, when the temperature or pressure increase, further elastic deformation energy absorption; When the temperature or pressure drop, the discharge of flexibility deformation energy for memory characteristics. For medium and high temperature valve seal, use the counterpoint polystyrene (PPL) as the seat can be used to 300 °C The temperature(Figure 6).

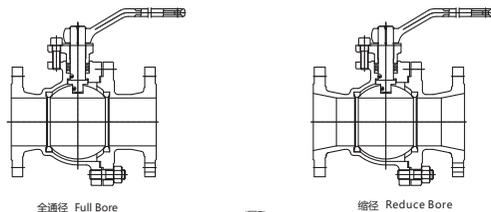


(图6)

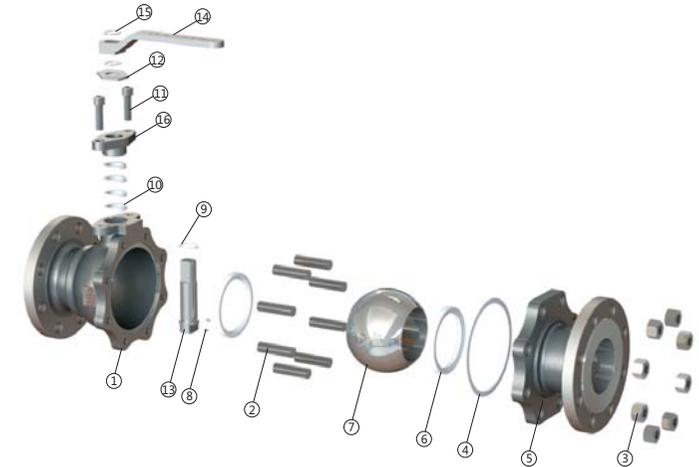
全通径和缩径设计  
Full bore and reduce bore design

通用浮动的球阀有全通径和缩径两个系列,以满足客户的不同需要。全通径阀门的通道内径与管径一致,便于管道清扫。而缩径球阀的重量只有相同口径球阀的70%左右,能有效采购成本,同时阻力系数也只有相同口径截止阀的1/7,故得到广泛的应用(如图7)。

Our floating ball valve are full bore and reduce bore structure, to meet different needs of customers. Full bore valves' channel inner diameter and pipe diameter are consistent, which is easy to clean. And reduce bore ball valves' weight is only about 70% of the same caliber ball valve, effectively reduce procurement cost, at the same time, resistance coefficient and only 1/7 of the same caliber cut-off valve, so they are widely used (Figure 7).



(图7)

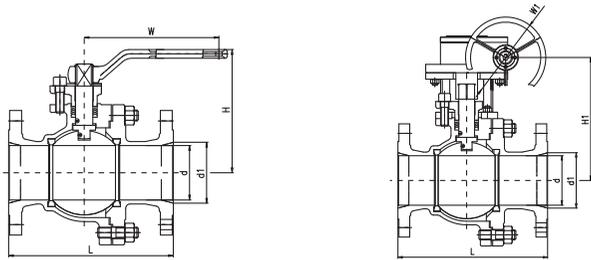


主要零件材料 major parts material

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 7M
4	垫片 Gasket	304+石墨缠绕垫 Graphite wounded Gasket+304			
5	阀盖 Bonnet	ASTM A216 WCB	ASTM A3 51 CF8	ASTM A216 WCB	ASTM A352 LCB
6	阀座 Seat	PTFE/RPTFE/NYLON/PEEK			
7	球体 Ball	A105N+ENP	ASTM A182 F304	A105N+ENP	ASTM A182 F304
8	防静电装置 Antistatic device	组合件 Assembly			
9	止推垫 Stop washer	PTFE	PTFE	PTFE	PTFE
10	填料 Packing	石墨 Graphite			
11	螺钉 Screw	ASTM A193 B7	ASTM A193 B8	ASTM A193 B7M	ASTM A193 L7M
12	定位片 Positioning plate	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
13	阀杆 Stem	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F6a	ASTM A182 F304
14	手柄 Level	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
15	卡簧 circlip	碳钢 CS	不锈钢 SS	碳钢 CS	不锈钢 SS
16	填料压板 Gland Flange	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB	ASTM A352 LCB

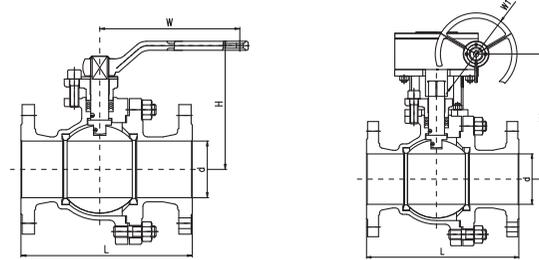
# 铸钢浮动球阀

## Cast steel floating ball valve



# 铸钢浮动球阀

## Cast steel floating 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		

### 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

CLASS	全口径 Full Bore							缩径 Reduce Bore						
	NPS	d	L	H	H1	W	W1	NPS	d1xd	L	H	H1	W	W1
150Lb	1/2	13	108	85	-	140	-	3/4X1/2	19x13	117	85	-	140	-
	3/4	19	117	90	-	140	-	1X3/4	25x19	127	90	-	140	-
	1	25	127	99	-	150	-	1-1/2X1	38x25	165	99	-	150	-
	1-1/4	32	140	105	-	180	-	2X1-1/2	49x38	178	126	-	200	-
	1-1/2	38	165	126	-	200	-	2-1/2X2	62x49	191	140	-	250	-
	2	49	178	140	-	250	-	3X2	74x62	203	165	-	300	-
	2-1/2	62	191	165	-	300	-	4X3	100x74	229	178	-	350	-
	3	74	203	178	-	350	-	6X4	150x100	394	230	-	500	-
	4	100	229	230	-	500	-	8X6	201x150	457	310	460	800	305
	6	150	394	310	460	800	305	10X8	252x201	533	350	550	1000	305
300Lb	1/2	13	140	85	-	140	-	3/4X1/2	19x13	152	85	-	140	-
	3/4	19	152	90	-	140	-	1X3/4	25x19	165	90	-	140	-
	1	25	165	99	-	150	-	1-1/2X1	38x25	191	99	-	150	-
	1-1/4	32	178	105	-	180	-	2X1-1/2	49x38	216	126	-	200	-
	1-1/2	38	191	126	-	200	-	2-1/2X2	62x49	241	140	-	250	-
	2	49	216	140	-	250	-	3X2	74x62	283	165	-	300	-
	2-1/2	62	241	165	-	300	-	4X3	100x74	305	178	-	350	-
	3	74	283	178	-	350	-	6X4	150x100	403	230	-	500	-
	4	100	305	230	-	500	-	8X6	201x150	502	310	460	800	305
	6	150	403	310	460	800	305	10X8	252x201	568	350	550	1000	305
600Lb	1/2	13	165	79	-	140	-	3/4X1/2	19x13	190	79	-	140	-
	3/4	19	190	83	-	140	-	1X3/4	25x19	216	83	-	140	-
	1	25	216	114	-	200	-	1-1/2X1	38x25	229	114	-	200	-
	1-1/4	32	229	120	-	200	-	2X1-1/2	49x38	292	125	-	250	-
	1-1/2	38	241	125	-	250	-	2-1/2X2	62x49	330	156	-	300	-
	2	49	292	156	-	300	-	3X2	74x62	356	172	-	350	-
	2-1/2	62	330	172	-	350	-	4X3	100x74	432	220	370	500	305
	3	74	356	220	370	500	305							
	4	100	432	250	400	650	305							

### 主要尺寸 Dimensions

PN	DN	d	L	H	H1	W	W1	PN	DN	d	L	H	H1	W	W1
15	13	130	85	-	140	-	15	13	130	85	-	140	-	-	-
20	19	140	90	-	140	-	20	19	140	90	-	140	-	-	-
25	25	150	99	-	150	-	25	25	150	99	-	150	-	-	-
32	32	165	105	-	180	-	32	32	165	105	-	180	-	-	-
40	38	180	126	-	200	-	40	38	180	126	-	200	-	-	-
50	49	200	140	-	250	-	50	49	200	140	-	250	-	-	-
65	62	220	165	-	300	-	65	62	220	165	-	300	-	-	-
80	74	250	178	-	350	-	80	74	250	178	-	350	-	-	-
100	100	280	230	-	500	-	100	100	320	230	-	500	-	-	-
125	125	320	280	-	800	-	125	125	400	280	-	800	-	-	-
150	150	360	310	460	800	305	150	150	400	310	460	800	305	-	-
200	201	400	350	550	1000	305	200	201	550	350	550	1000	305	-	-
15	13	130	85	-	140	-	15	13	140	79	-	140	-	-	-
20	19	140	90	-	140	-	20	19	152	83	-	140	-	-	-
25	25	150	99	-	150	-	25	25	165	114	-	200	-	-	-
32	32	180	105	-	180	-	32	32	178	120	-	200	-	-	-
40	38	200	126	-	200	-	40	38	190	125	-	250	-	-	-
50	49	220	142	-	250	-	50	49	216	156	-	300	-	-	-
65	62	250	165	-	300	-	65	62	241	172	-	350	-	-	-
80	74	280	178	-	350	-	80	74	283	220	-	500	-	-	-
100	100	320	230	-	500	-	100	100	305	250	-	650	-	-	-
125	125	400	280	-	800	-									
150	150	400	310	480	800	305									
200	201	520	350	560	1000	305									

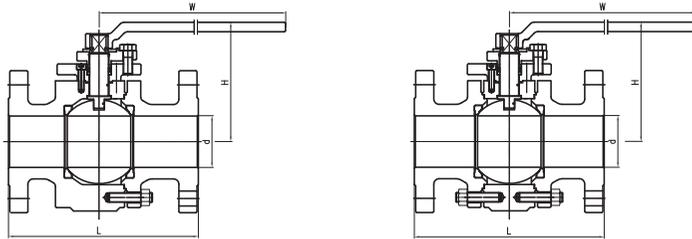
# 锻钢浮动球阀

## Forged Steel floating ball valve



# 工程数据

## Engineering data



### 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		

### 主要尺寸 Dimensions

CLASS	全通径					缩径				
	NPS	d	L	H	W	NPS	d	L	H	W
150Lb (1.6~2.0MPa)	1/2	13	108	75	130	1/2X3/8	7	108	75	130
	3/4	19	117	75	130	3/4X1/2	13	117	75	130
	1	25	127	90	160	1X3/4	19	127	75	130
	1-1/4	32	140	100	200	1-1/4X1	25	140	90	160
	1-1/2	38	165	115	240	2X1-1/2	38	178	115	240
	2	49	178	145	300	2-1/2X2	49	191	145	300
	2-1/2	62	191	160	300	3X2	62	203	145	300
	3	74	203	165	300	4X3	74	229	165	300
	4	100	229	230	500	6X4	100	394	230	500
	6	150	394	310	1000	8X6	150	457	310	1000
300Lb (2.5~5.0MPa)	8	201	457	385	1400	10X8	201	533	385	1400
	1/2	13	140	75	130	1/2X3/8	7	140	75	130
	3/4	19	152	75	130	3/4X1/2	13	152	75	130
	1	25	165	90	160	1X3/4	19	165	75	130
	1-1/4	32	178	100	200	1-1/4X1	25	178	90	160
	1-1/2	38	191	115	240	2X1-1/2	38	191	115	240
	2	49	216	145	300	2-1/2X2	49	216	145	300
	2-1/2	62	241	160	300	3X2	62	241	145	300
	3	74	283	165	300	4X3	74	283	165	300
	4	100	305	230	500	6X4	100	305	230	500
600Lb (6.4~10.0MPa)	6	150	403	310	1000	8X6	150	403	310	1000
	1/2	13	165	80	130	1/2X3/8	165	80	130	
	3/4	19	190	80	130	3/4X1/2	190	80	130	
	1	25	216	100	200	1X3/4	216	100	200	
	1-1/4	32	229	110	240	1-1/4X1	229	110	240	
	1-1/2	38	241	140	300	2X1-1/2	292	140	300	
	2	49	292	150	300	2-1/2X2	330	150	300	
	2-1/2	62	330	210	450	3X2	356	210	450	
	3	74	356	250	800	4X3	432	250	800	
	4	100	432	304	800	6X4	559	304	800	
900Lb (15.0MPa)	1/2	13	216	90	160	1/2X3/8	216	90	160	
	3/4	19	229	100	160	3/4X1/2	229	100	160	
	1	25	254	105	240	1X3/4	254	105	240	
	1-1/4	32	279	120	240	1-1/4X1	279	120	240	
	1-1/2	38	305	150	300	2X1-1/2	368	150	300	
	2	49	368	210	500					
1500Lb (25.0MPa)	1/2	13	216	90	160	1/2X3/8	216	90	160	
	3/4	19	229	100	160	3/4X1/2	229	100	160	
	1	25	254	105	240	1X3/4	254	105	240	
	1-1/4	32	279	120	240	1-1/4X1	279	120	240	
	1-1/2	38	305	150	300	2X1-1/2	368	150	300	
	2	49	368	210	500					

### 阀座材料规范 The seat material specification

材料 Material	NYLON	MOLON	DEVLON-API	PTFE	RPTFE(碳纤维) (carbon fiber)	PEEK	PPL
温度范围°C Temperature ratings	-40~80	-40~130	-140~150	-180~121	-180~121	-100~250	-45~300
压力范围CL Pressureratings	150~1500	150~1500	150~1500	150~300	150~300	150~2500	150~300
机械性能 抗拉强度MPa mechanical Tensile strength function	硬度 Hardness	D78-80	D78-80	D54-58	D58-70	D85-90	D80
	抗拉强度MPa Tensile strength	79.92	75-100	79-92	25	15.8	93
	伸长率% Elongation	5.37	58		250	120	30
比重 Proportion	1.02±0.02	1.15	1.14	2.18	2.1~3.0	1.32	1.09~2.1
适用工况 Applicable	高压及烃类工况 High pressure and hydrocarbon Working condition	高压及低温工况 High pressure and low temperature Working condition	高压及烃类工况 High pressure and hydrocarbon Working condition	化学及低温工况 Chemical and low temperature Working condition	化学及低温工况 Chemical and low temperature Working condition	高温高压及蒸汽工况 The working condition of high temperature and high pressure and steam divergence	高温及高腐蚀介质 High temperature and high corrosion medium

### 密封件技术规范 Seal technical specification

材料 Material	VITON	EPDM	NBR	HNBR	25%碳纤维(fiber glass)PTFE	柔性石墨(Flexible graphite)
比重 Proportion	1.85±0.02	0.87	1.31	1.34	2.24	
温度范围 Temperature ratings	-20~200	-51~150	-30~150	-40~150	-196~260	-200~870
硬度 Hardness	D75±5	90±5	D75±5	D75±5	D65±5	D90±5

### 其它密封垫圈

#### Other sealing ring

形式 Type	工况 Working condition	温度范围 Temperature ratings	PH
PTFE	低温及耐腐蚀 Low temperature and corrosion resistance	-200~180	0-14
316+石墨缠绕垫 316+Graphite wounded gasket	100%防火 Fire-safe	-200~650	0-14
石墨+PTFE缠绕垫 316+PTFE Wounded gasket	超低温及耐腐蚀 Ultra-low temperature and corrosion resistance	-200~260	0-14
成型石墨 Preformed graphite	100%防火 Fire-safe	-200~870	0-14

### 操作扭矩 N.M

#### Operating torque N.M

公称 口径 DN	NPS	软密封浮动球阀的操作扭矩, N.M Soft seat floating ball valve operating torque, N.M											
		Class150 PN20	Class300 PN50	Class600 PN110	Class900 PN150	Class1500 PN260	PN16	PN26	PN40	PN63	PN100	JIS10K	JIS20K
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	1 1/4	24	35	60	100	150	22	28	32	50	60	22	32
40	1 1/2	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	2 1/2	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	-	-	-	-	-	-	-	-	-	-	-

### 注释:

- 1.本数据是基于常温设计工况,以150-800磅为聚四氟乙烯、900-1500磅为尼龙、2500磅为PEEK阀座计算的设计扭矩。
- 2.表中列出的扭矩值仅作为本公司产品选择驱动器的参考值,我们推荐选择驱动器时考虑加上1.3~1.5倍的安全系数。对于超低温工况,建设将安全系数考虑为2~3倍。
- 3.实际扭矩可能因介质和内件材料不同而不同,具体就跟我公司技术部联系。

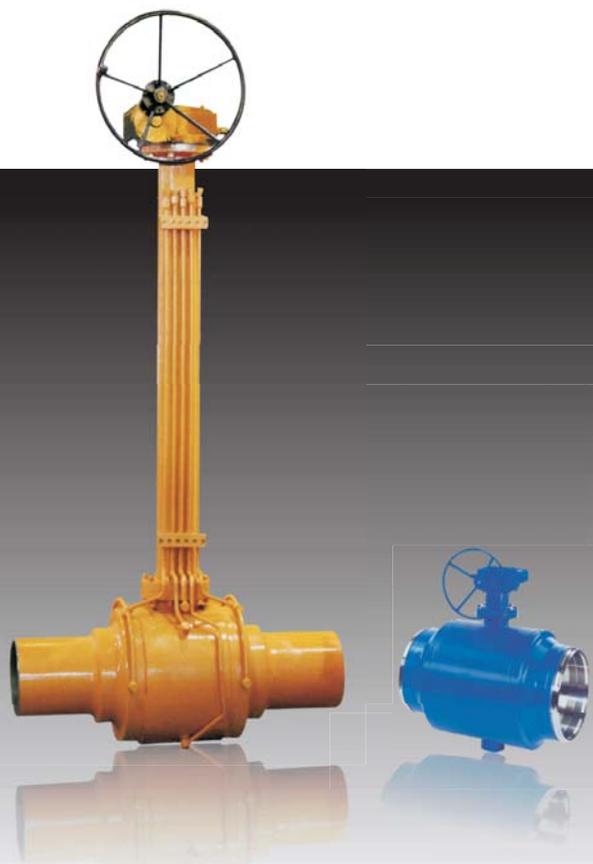
### Note:

1. This data is based on the working condition of normal temperature design, class 150-800 LB for ptfe, class 900-1500 LB for nylon, class 2500 LB for PEEK torque calculation the seat design.
2. Torque values listed in the table only for reference, the company product selection drives we recommend choosing a drive and the safety factor of 1.3 ~ 1.5 times. For cryogenic conditions, construction safety factor to consider for 2 ~ 3 times.
3. The actual torque may varies from medium and internal parts materials, further technology details please contact our technical department.



# 全焊接球阀系列

## FULL WELDED BALL VALVE SERIES



### 全焊接球阀

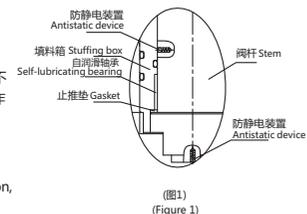
Full welded ball valve

#### 设计特征 Design features

##### 阀杆防吹出和上密封结构 Blow-out proof stem and seal structure

阀杆采用下装式和设置带止推垫的上密封结构。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对硬的摩擦，减轻其操作扭矩（如图1）。

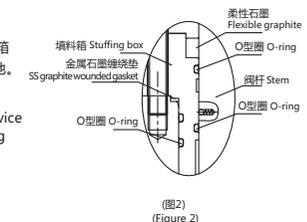
Stem with bottom entry and set the inverted sealing structure with the thrust pad. With the valve pressure increase, it can keep the valve stem from be blown out of the body & has a good sealing effect; meanwhile avoided the stem and packing box metal to metal friction, and reduce the operating torque.



##### 防静电结构 Anti-static structure

防静电结构是通用全焊接球阀的标准设计。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、图2)。

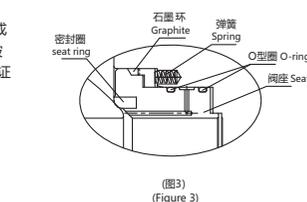
Anti-static structure is the standard of full welded ball valve design. We set conductive device between the ball and stem, Stem and packing box, packing box with the valve body, making the body in each time of opening and closing process of static electricity through the device into the earth. Avoided ignition Flammable and explosive medium caused by electrostatic, ensured the safety of people and system. As shown in figure 1.



##### 防火结构 Fire safe structure

防火设计是通用全焊接球阀标准的设计。我们在阀门所有密封处都设有二道密封（阀杆或阀座还设有紧急注脂密封）。当现场发生火灾时，聚四氟乙烯、橡胶等塑性密封材料在被破坏的情况下，通用全焊接球阀能够借助第二道石墨复合垫或石墨环等防火密封材料依然能保证阀门密封(如图2、图3)。

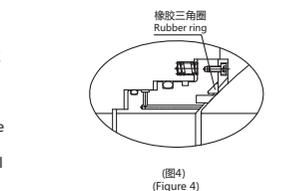
Fire safe design is the standard of full welded ball valves' standard design. We designed two seals in our valves(stem or seat have an emergency greasing seating). When there is a fire, such as ptfе, rubber plastic sealing material in the case of being destroyed, our full welded ball valve can be in the help of the second graphite composite or fire safe sealing materials such as graphite ring still can ensure the valve seal. (Figure 2、3).



##### 三角密封阀座结构 Triangular sealing seat structure

三角圈密封阀座中密封圈加了橡胶三角圈。因而相对于塑料具有更加的弹性，这种弹性很容易弥补由于阀门杆件和加式精度引起的不足。相对于塑料密封圈更能使阀座在很小的压差下获得气泡级“零”泄漏。（此结构为可选择设计结构）(如图4)。

Triangle ring sealing seat seal added rubber in it. So relatively there are more elasticity to the plastic, the elasticity is much easier to make up the deficiency caused by the valve stem and add type precision. Compared with the plastic seal it can make seat under the differential pressure of small bubble level "zero leakage much easier.(you can choose design this structure for structure)(Figure 4).



## 全焊接球阀

Full welded ball valve

Zhejiang General Valve Industrial Co.,Ltd



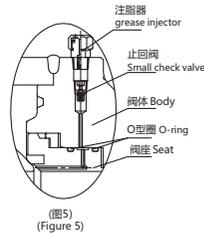
### 注脂结构

#### Greasing Injection structure

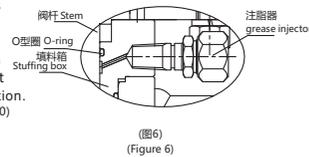
通用全焊接球阀在阀杆和阀座部位设有注脂机构。平时将油脂通过注脂孔注入球体与阀座之间或阀杆上两道O行圈的油槽内。既可防止阀门的内漏又可减少阀门的操作扭矩。当现场发生火灾时，聚四氟乙烯、橡胶等密封材料在被破坏的情况下或密封件损坏的情况下又可以实现对阀杆或阀座第三道紧密密封。起到防火作用又控制了阀门的外漏或内漏。通用全焊接球阀的阀座注脂设计为可带压更换注脂器。考虑到因为误操作或者注脂器损坏的情况下，我们在注脂器前面增加了一个独立的止回阀。让客户能在阀门在正常运转的情况下放心的更换注脂器(如图5、6)。

注：NPS≥6(DN150)以上全焊接球阀，在阀杆和阀座上均有注脂装置；对于4(DN100)≥NPS，也可根据客户需要增加注脂设计。

Our full welded ball valves has grease injection in the valve stem and seat area . In general, injecting grease from greasing holes of the sphere and valve seat or valve stem line two O ring inside the tank, not only to prevent the leakage of valve but also can reduce the valve operating torque. When there is a fire, the ptfе material, rubber sealing material under the condition of the damaged or broken seals Also can realize third tight seal towards stem or seat, and hasa function of fire prevention and control of the valve inner & outside leakage .Our full welded ball valve seat grease injection design which can change with pressure. Considering wrong operation or the damage of the injector, we added a independent check valve in front of the greasing injector which can make it convenient for the customer change the grease injector when the valves are in normal workingcondition. Note: NPS 6 (DN150) above full welded ball valve, the valve stem and seat are on the processing; For 4 (DN100) or larger NPS, can be also according to the customers' needs to add grease injector on the design. (Figure 5、6).



(图5)  
(Figure 5)



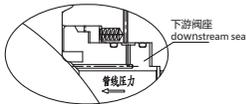
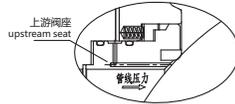
(图6)  
(Figure 6)

### 双阻塞与泄放阀

#### Double block and bleed valve

通用的全焊接球阀一般采用DBB密封结构。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。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7)。

DBB seal structure is commonly used in our full welded ball valves. Two seats can cut off the inlet and the outlet medium independently, so as to realize the function of double blocking. Even if on both ends of the valve compression at the same time, On both ends of the valve lumen and is still blocking each other and the remainder of the lumen medium and gas can be let out by vent plug and drain plug. (Figure 7).



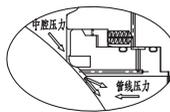
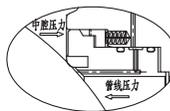
(图7)  
(Figure 7)

### 阀体中腔的自动泄压功能

#### Automatic pressure relief function of the body lumen

当球体处于关闭状态时，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，通用全焊接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向两边推开自动泄压，从而保证阀门的安全(如图8)。

When the ball was shut, the expansion of liquid and gas media due to the temperature rising and lead to an increase abnormal pressure, our full welded ball valve design the function of automatic pressure, when the pressure is 1.33 times more than the rated pressure, the lmedium can depend on itself and push the seat on both sides to open pressure relief automatically, to ensure that the valve s' Security(Figure 8).



(图8)  
(Figure 8)

## 全焊接球阀

Full welded ball valve

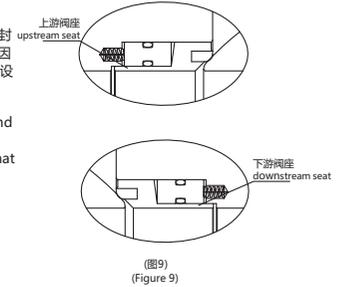


### 双隔离与排放阀(DIB-2)

#### 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，通用可以设计双阀座双向密封功能的全焊接球阀。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。因此在阀体上安装安全阀，在压力过高的情况下，可通过安全阀释放压力。(此功能为可选择设计功能)(如图9)。

For some specific working conditions (such as gas pipeline) requirements and customer requirements, we can design the function of two-way seating for the full welded ball valves. Even if a seat seal failed, the valve can still work normally, to ensure that the valve seal reliability. So we installed the relief valve in the body, when the pressure is too high, it can release the pressure by the relief valve.(this is an optional design) (Figure 9).

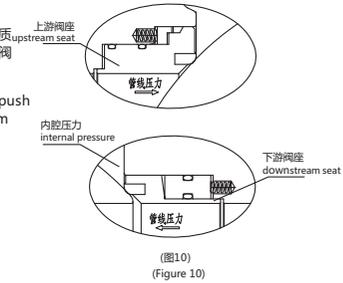


### 双隔离与排放阀(DIB-1)

#### Double isolation and bleed valve

上游阀座采用自泄压阀座设计，介质压力将阀座推向球体形成密封。当中腔压力过高，介质将上游阀座推离球体，将过高的压力泄放在上游。下游端采用双活塞设计，介质压力始终将阀座推向球体，因而下游端始终保持密封状态。(此功能为可选择设计功能)(如图10)。

The upstream seat adopts the pressure relief valve seat design, the media pressure push the seat to the sphere and formed seat seal when the pressure is too high, the medium pushed the upstream seat away from the ball, put on the higher pressure discharge to the upstream. With double piston design of the downstream end,, the medium pressure keeps on pushing the seat to the sphere, therefore, the downstream side always keeps the seal state. (this is an optional design) (Figure 10).



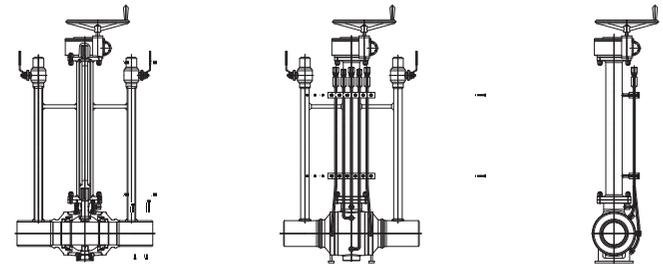
### 阀杆加长及加袖管结构

#### Stem extension and add sleeves structure

我们可根据客户的具体要求对球阀阀杆进行加长(即埋地球阀)，阀杆的加长长度H2无具体的限制规定，但必须在订货时予以明确。

如果客户有袖管(过渡管)要求时，我公司可以满足用户要求，但必须在订货时予以明确，如袖管长度L2、材料、管材等级等内容。我们还可以根据客户要求提供诸如：排放管、泄流管、辅助密封注脂管等，但必须在订货时予以明确(如图11)。

We can according to customer's specific requirements for ball valve stem extension (namely buried ball valve), valve stem extension length H2 no specific restrictions, but must be explicitly with orders. If customers have sleeves (transition tube) requirements, our company can meet user requirements, but must be stated in the order clearly, such as long sleeves of L2, materials, pipe grade, etc. We can also provide according to customers requirements, such as: discharge tube, discharge tube, auxiliary seal on the tube, etc., but must be stated in the order clearly.(Figure 11)

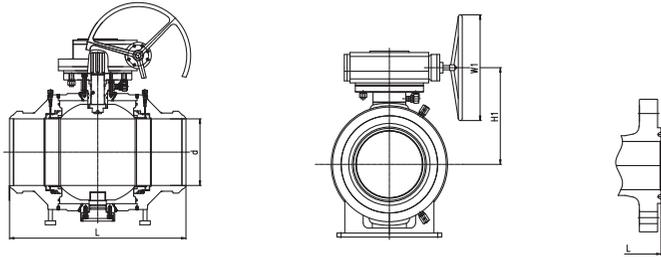


(图11)  
(Figure 11)

# 全焊接球阀

Full welded ball valve

Zhejiang General Valve Industrial Co.,Ltd



### 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 ASME B16.25, ASME B31.8		

### 主要尺寸 Dimensions

CLASS	NPS	d	全口径 Full Bore						
			L			H	W	H1	W1
			RF	RTJ	BW				
150LB	2	49	178	191	216	200	-	265	-
	3	74	203	216	283	300	-	285	-
	4	100	229	241	305	315	-	285	-
	6	150	394	406	457	-	335	-	300
	8	201	457	470	521	-	405	-	300
	10	252	533	546	559	-	427	-	300
	12	303	610	622	635	-	465	-	500
	14	334	686	699	762	-	506	-	600
	16	385	762	775	838	-	622	-	600
	18	436	864	876	814	-	666	-	600
	20	487	914	927	991	-	730	-	600
	24	589	1067	1080	1143	-	895	-	800
	26	633	1143	-	1245	-	900	-	800
	28	684	1245	-	1346	-	935	-	800
	30	735	1295	-	1397	-	1010	-	800
	32	779	1372	-	1524	-	1060	-	800
34	830	1473	-	1626	-	1077	-	800	
36	874	1524	-	1727	-	1115	-	800	
300Lb	2	49	216	232	216	206	-	265	-
	3	74	283	298	283	315	-	400	-
	4	100	305	321	305	330	-	750	-
	6	150	403	419	457	-	345	-	300
	8	201	502	518	521	-	415	-	300
	10	252	568	584	559	-	427	-	400
	12	303	648	664	635	-	465	-	500
	14	334	762	778	762	-	519	-	600
	16	385	838	854	838	-	638	-	600
	18	436	914	930	914	-	683	-	600
	20	487	991	1010	991	-	748	-	600
	24	589	1143	1165	1143	-	854	-	800
	26	633	1245	1270	1245	-	917	-	800
	28	684	1346	1372	1346	-	958	-	800
	30	735	1397	1422	1397	-	1035	-	800
	32	779	1524	1553	1524	-	1087	-	800
34	830	1626	1654	1626	-	1104	-	800	
36	874	1727	1756	1727	-	1143	-	800	

# 全焊接球阀

Full welded ball valve



### 主要尺寸 Dimensions

CLASS	NPS	d	全口径 Full Bore							
			L			H	W	H1	W1	
			RF	RTJ	BW					
400Lb	2	49	292	295	292	206	-	265	-	
	3	74	356	359	356	315	-	400	-	
	4	100	406	410	406	330	-	750	-	
	6	150	495	498	495	-	345	-	300	
	8	201	597	600	597	-	415	-	300	
	10	252	673	686	673	-	427	-	400	
	12	303	762	765	762	-	465	-	500	
	14	334	826	829	826	-	519	-	600	
	16	385	902	905	902	-	638	-	600	
	18	436	978	981	978	-	683	-	600	
	20	487	1054	1060	1054	-	748	-	600	
	24	589	1232	1241	1232	-	854	-	800	
	26	633	1308	1321	1308	-	917	-	800	
	28	684	1397	1410	1397	-	958	-	800	
	30	735	1524	1537	1524	-	1035	-	800	
	32	779	1651	1667	1651	-	1087	-	800	
34	830	1778	1794	1778	-	1104	-	800		
36	874	1880	1895	1880	-	1143	-	800		
600Lb	2	49	292	295	292	206	-	400	-	
	3	74	356	359	356	315	-	750	-	
	4	100	432	435	432	330	-	1000	-	
	6	150	559	562	559	-	345	-	300	
	8	201	660	663	660	-	415	-	300	
	10	252	787	790	787	-	427	-	500	
	12	303	838	841	838	-	465	-	600	
	14	334	889	892	889	-	519	-	600	
	16	385	991	994	991	-	638	-	600	
	18	436	1092	1095	1092	-	683	-	600	
	20	487	1194	1200	1194	-	748	-	600	
	24	589	1397	1407	1397	-	854	-	800	
	26	633	1448	1461	1448	-	917	-	800	
	28	684	1549	1562	1549	-	958	-	800	
	30	735	1651	1664	1651	-	1035	-	800	
	900Lb	2	49	368	371	368	119	-	460	-
3		74	381	384	381	133	-	1000	-	
4		100	457	460	457	176	-	1500	-	
6		150	610	613	610	-	183	-	300	
8		201	737	740	737	-	193	-	400	
10		252	838	841	838	-	235	-	500	
12		303	965	968	965	-	280	-	600	
14		322	1029	1039	1029	-	312	-	600	
16		373	1130	1140	1130	-	365	-	600	
18		423	1219	1232	1219	-	414	-	600	
20		471	1321	1334	1321	-	459	-	600	
24		570	1549	1549	1568	-	507	-	800	
1500Lb		2	49	368	371	368	-	-	-	-
		3	74	470	473	470	-	-	-	-
		4	100	546	549	546	-	166	-	300
		6	144	705	711	705	-	192	-	400
	8	192	832	841	832	-	238	-	500	
	10	239	991	1000	991	-	274	-	600	
	12	287	1130	1146	1130	-	318	-	600	
	14	315	1257	1276	1257	-	483	-	600	
	16	360	1384	1407	1384	-	534	-	600	
	2500Lb	2	42	451	451	451	-	239	-	400
		3	62	578	578	578	-	265	-	500
		4	87	673	673	673	-	282	-	500
		6	133	914	914	914	-	523	-	600
		8	179	1022	1022	1022	-	615	-	700
		10	223	1270	1270	1270	-	685	-	760
		12	265	1422	1445	1422	-	704	-	760

阀座材料规范  
The seat material specification

材料 Material	NYLON	MOLON	DEVLON-API	PTFE	RPTFE(碳纤维) (carbon fiber)	PEEK	PPL
温度范围°C Temperature ratings	-40~80	-40~130	-140~150	-180~121	-180~121	-100~250	-45~300
压力范围CL Pressure ratings	150~1500	150~1500	150~1500	150~300	150~300	150~2500	150~300
机械性能 mechanical function	硬度 Hardness	D78-80	D78-80	D78-80	D54-58	D58-70	D85-90
	抗拉强度MPa Tensile strength	79.92	75-100	79-92	25	15..8	93
伸长率% Elongation	5.37	58		250	120	30	13.5~16.2
比重 Proportion	1.02±0.02	1.15	1.14	2.18	2.1~3.0	1.32	1.09~2.1
适用工况 Applicable	高压及烃类工况 High pressure and hydrocarbon Working condition	高压及低温工况 High pressure and low temperature Working condition	高压及烃类工况 High pressure and hydrocarbon Working condition	化学及低温工况 Chemical and low temperature Working condition	化学及低温工况 Chemical and low temperature Working condition	高温高压及蒸汽工况 The working condition of high temperature and high pressure and steam divergence	高温及高腐蚀性介质 High temperature andhigh corrosion medium

密封件技术规范  
Seal technical specification

材料 Material	VITON	EPDM	NBR	HNBR	25%玻纤(fiber glass)PTFE	柔性石墨(Flexible graphite)
比重 Proportion	1.85±0.02	0.87	1.31	1.34	2.24	
温度范围 Temperature ratings	-20~200	-51~150	-30~150	-40~150	-196~260	-200~870
硬度 Hardness	D75±5	90±5	D75±5	D75±5	D65±5	D90±5

其它密封垫圈  
Other sealing ring

形式 Type	工况 Working condition	温度范围 Temperature ratings	PH
PTFE	低温及耐腐蚀 Low temperature and corrosion resistance	-200~180	0-14
316+石墨缠绕垫 316+Graphite wounded gasket	100%防火 Fire-safe	-200~650	0-14
316+PTFE缠绕垫 316+PTFE Wounded gasket	超低温及耐腐蚀 Ultra-low temperature and corosion resistance	-200~260	0-14
成型石墨 Preformed graphite	100%防火 Fire-safe	-200~870	0-14

固定球阀参考扭矩 N.M  
Operating torque N.M

NPS	DN	Class150	Class300	Class400	CLASS				PN					
					Class600	Class900	Class1500	Class2500	PN1.6	PN2.5	PN4.0	PN6.4	PN10.0	
2	50	57	99	-	168	228	390	589	25	30	50	100	190	
2-1/2	65	-	-	-	-	-	-	50	60	100	200	360		
3	80	122	212	-	360	512	831	1577	65	80	150	300	460	
4	100	192	335	467	572	946	1524	1965	125	140	250	400	770	
6	150	274	544	650	912	1784	2934	5501	340	400	585	890	1980	
8	200	834	1250	1806	2177	4116	7215	11786	485	680	996	1500	3280	
10	250	1105	1736	2638	3093	5910	11128	13222	810	1140	1690	2560	5250	
12	300	1502	2388	2929	4282	10137	16103	20075	1310	1870	2800	4290	7200	
14	350	1949	3224	3971	7458	14141	24518	-	1910	2740	4110	6230	9860	
16	400	3164	5139	6307	9310	18866	29630	-	2860	4150	6300	9750	14500	
18	450	3793	6194	7609	14639	22400	34392	-	4500	6500	8900	13500	16900	
20	500	4769	7826	9623	20011	28544	40918	-	5860	7800	12000	18660	19000	
24	600	7529	12956	15900	31226	43276	65351	-	8920	13210	20380	31820	42500	
26	650	8693	14394	17727	35184	47580	-	-	-	-	-	-	-	
28	700	9832	15620	20182	38997	52486	-	-	13320	19380	30670	48020	58000	
30	750	11172	18703	23086	41382	56210	-	-	-	-	-	-	-	
32	800	12494	21030	25985	45199	60849	-	-	24000	35420	55300	68830	82000	
34	850	21148	31558	33000	48401	65244	-	-	-	-	-	-	-	
36	900	22987	34170	36045	52262	70355	-	-	34960	66700	82700	134000	-	

- 注 1.本表所列扭矩是基本清洁、常温工况计算。  
2.本表所列的扭矩值供选择执行器时所参考，为了确定执行器的型号和尺寸，我们推荐1.1~1.3的安全系数，对于超低温工况，建议将安全系数考虑为2~3倍。  
3.对于缩径球阀的操作扭矩按其缩口所对应球阀操作扭矩选用。  
4.实际扭矩可能因介质和内件材料不同而不同，具体就跟我公司技术部联系。  
Note 1. Torque is listed on this basic cleaning, working condition of normal temperature calculation.  
2. Torque values listed on this form for reference when selecting actuators, in order to confirm the type and size of actuators, it is recommended that the safety factor of 1.1 ~ 1.3, for ultra-low temperature conditions, recommendations will be Safety factor to consider for 2 ~ 3 times.  
(3) Regarding to reduce bore valve, the operating torque is according to its corresponding size .  
4. The actual torque may varies from medium and internal parts materials, for details,please contact our technical department.

低温球阀  
Cryogenic ball valve

低温球阀是一种低温工况下使用的阀门，通常温度在-40°C以下。其工作介质大部分为易燃、易爆、有毒、渗透性强的物质，诸如乙烯、液氧、液氢、LNG、LPG。其阀门结构和选材有如下要求：工作寿命长；保冷性散热性；异常升压结构设计；阀体壁厚均匀；填料防冻；防火防静电等。

Cryogenic valves is a kind of valves using in low temperature conditions, temperature below -40 °C - usually, its most of the working medium for flammable, explosive, toxic, porous material, such as ethylene, liquid oxygen, liquid hydrogen, LNG, LPG. The valve structure and material selection has the following requirements: working life is long; for cold heat dissipation; abnormal pressure structure design; the body wall thickness uniformity; packing antifreeze; fire retardant anti-static, etc.

应用规范  
Application specification

标准 Standard	ANSI 系列 ANSI Series	GB 系列 GB Series
温度-压力额定值 Temperature-pressure ratings	ASME B16.34	GB/T 12224
设计标准 Design	MSS SP-134, BS6364, SHELL MESC SPE-77/200	GB/T 24925, GB/T 24918
结构长度标准 Face to face	ASME B16.10	GB/T 12221
法兰连接标准 End flange	ASME B16.5	GB/T 9113
试验标准 Inspection & testing	API 598	GB/T 13927, JB/T 9092
防火设计 Fire-safe design	API 607/F6A	JB/T 6899

\*低温阀在常温压力试验合格后，还需进行低温压力试验。After the pressure test at room temperature, low temperature pressure test is also required .

低温球阀盖加长长度 (选自SHELL MESC SPE - 77/200)  
Cryogenic valve cover extended length (from the SHELL MESC SPE - 77/200)

阀门类型 Valve type	阀门尺寸DN (Size DN)								
	15~25	40~50	80~100	150~200	250~300	350~400	450~600	700~800	900~1200
设计温度为-50~-196°C (Temperature -50~-196°C)									
闸阀 Gate valve	100	125	150	175	200	250	300	350	400
截止阀 Gloce valve	100	125	150	175	200	不适用(NA)	不适用(NA)	不适用(NA)	不适用(NA)
球阀 Ball valve	100	125	150	175	200	250	300	350	400
高性能蝶阀 High performance butterfly valve	不适用(NA)	不适用(NA)	150	175	200	250	300	350	400
设计温度为-110~-196°C (Temperature -110~-196°C)									
闸阀 Gate valve	200	250	300	350	400	450	500	550	600
截止阀 Gloce valve	200	250	300	350	400	不适用(NA)	不适用(NA)	不适用(NA)	不适用(NA)
球阀 Ball valve	200	250	300	350	400	450	500	550	600
高性能蝶阀 High performance butterfly valve	不适用(NA)	不适用(NA)	300	350	400	450	500	550	600

低温球阀最小滴水板高度(选自SHELL MESC SPE - 77/200)  
Cryogenic valve minimum drip plate height (from the SHELL MESC SPE - 77/200)

温度°C		阀门尺寸DN (Size DN)								
最大	最小	15~25	40~50	80~100	150~200	250~300	350~400	450~600	700~800	900~1200
-196	-110	100	110	125	150	175	180	220	220	250
-110	-50	80	95	105	120	140	150	170	170	190
-50	-20	45	50	60	65	70	75	80	80	90

适合于所有阀种

常用低温材料使用温度  
Commonly cryogenic materials & its service temperature

铸件	ASTM A352 LCB/LCC	ASTM A352 LC1	ASTM A352 LC2	ASTM A352 LC3	ASTM A351 CF8	ASTM A351 CF8M	ASTM A351 CF3	ASTM A351 CF3M
	-46°C	-59°C	-73°C	-101°C	-254°C	-254°C	-254°C	-254°C
锻件	ASTM A350 LF2	ASTM A350 LF5	ASTM A350 LF9	ASTM A352 LF3	ASTM A182 F304	ASTM A182 316	ASTM A182 F304L	ASTM A182 F316L
	-45.6	-59.4	-73.3	-101.1	-254°C	-254°C	-254°C	-254°C

低温阀门的主要连接尺寸如下图所示，低温阀高度尺寸是其常规阀门基础上加长颈的高度，故不再列表。  
Main size for cryogenic valve ,no list here, the height of cryogenic valve is based on the general valve' s extended neck.

## 闸截止系列

# GATE GLOBE & CHECK VALVE SERIES



## 闸截止系列

Gate globe & check valve series

### Z41H/W/Y铸钢闸阀

公称压力 : 1.6-25MPa/150-1500Lb  
公称口径 : DN50-DN1000/NPS 2-40  
适用温度 : 视阀体/内件材质而定  
连接法兰 : GB/T 9113、ASME B16.5等  
主要材料 : WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

### Cast Steel Gate Valve

Nominal pressure : 1.6-25MPa/150-1500Lb  
Nominal diameter : DN50-DN1000/NPS 2-40  
Suitable temperature : Depending on the body/internal parts material  
Connecting flange : GB/T 9113、ASME B16.5 etc.  
Main material : WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5 etc.

### J41H/W/Y铸钢截止阀

公称压力 : 1.6-25MPa/150-1500Lb  
公称口径 : DN50-DN400/NPS2-16  
适用温度 : 视阀体/内件材质而定  
连接法兰 : GB/T 9113、ASME B16.5等  
主要材料 : WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

### Cast Steel Globe Valve

Nominal pressure : 1.6-25MPa/150-1500Lb  
Nominal diameter : DN50-DN400/NPS2-16  
Suitable temperature : Depending on the body/internal parts material  
Connecting flange : GB/T 9113、ASME B16.5 etc.  
Main material : WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5 etc.

### H44H/W/Y铸钢止回阀

公称压力 : 1.6-25MPa/150-1500Lb  
公称口径 : DN50-DN750/NPS 2-30  
适用温度 : 视阀体/内件材质而定  
连接法兰 : GB/T 9113、ASME B16.5等  
主要材料 : WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

### Cast Steel Check Valve

Nominal pressure : 1.6-25MPa/150-1500Lb  
Nominal diameter : DN50-DN750/NPS 2-30  
Suitable temperature : Depending on the body/internal parts material  
Connecting flange : GB/T 9113、ASME B16.5 etc.  
Main material : WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5 etc.

## 蝶阀系列

# BUTTERFLY VALVE SERIES



## 蝶阀系列

### Butterfly valve series

#### D4(7)3H/F/W三偏心蝶阀

公称压力：0.6-2.5MPa/125-300Lb  
公称口径：DN50-DN600/NPS 2-24  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：铸铁、碳钢、不锈钢

#### Triple Eccentric Butterfly Valve

Nominal pressure : 0.6-2.5MPa/125-300lb  
Nominal diameter : DN50-DN600/NPS 2-24  
Suitable temperature : Depending on the body/internal parts material  
Connecting flange : GB/T 9113、ASME B16.5 etc.  
Main material : Cast iron, carbon steel, stainless steel

#### D4(7)2H/F双偏心蝶阀

公称压力：0.6-2.5MPa/125-300Lb  
公称口径：DN50-DN600/NPS 2-24  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：铸铁、碳钢、不锈钢

#### Double Eccentric Butterfly Valve

Nominal pressure : 0.6-2.5MPa/125-300lb  
Nominal diameter : DN50-DN600/NPS 2-24  
Suitable temperature : Depending on the body/internal parts material  
Connecting flange : GB/T 9113、ASME B16.5 etc.  
Main material : Cast iron, carbon steel, stainless steel

#### D4(7)1X/F中线蝶阀

公称压力：0.6-1.6MPa/125-150Lb  
公称口径：DN50-DN600/NPS 2-24  
适用温度：视阀体/内件材质而定  
连接法兰：GB4216、ASME B16.5等  
主要材料：铸铁、碳钢、不锈钢

#### Center Line Butterfly Valve

Nominal pressure : 0.6-1.6MPa/125-150lb  
Nominal diameter : DN50-DN600/NPS 2-24  
Suitable temperature : Depending on the body/internal parts material  
Connecting flange : GB4216、ASME B16.5 etc.  
Main material : Cast iron, carbon steel, stainless steel



**定制非标球阀及配件**

拥有十余年与欧美客户阀门  
零配件加工合作经验

**Customized Non-standard  
Ball Valve&accessories**

have more than 10 years of experience  
working with Europe and America  
customer for valve parts processing



**J41H/W/Y锻钢截止阀**

公称压力：1.6-25MPa/150-1500Lb  
公称口径：DN8-DN50/NPS1/4-2  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：A105、F304、F304L、F316、F316L、F11、F22等

**Forged Steel Globe Valve**

Nominal pressure: 1.6-25MPa/150-1500Lb  
Nominal diameter: DN8-DN50/NPS1/4-2  
Suitable temperature:  
Depending on the body/internal parts material  
Connecting flange: GB/T 9113, ASME B16.5 etc.  
Main material: A105, F304, F304L, F316, F316L, F11, F22 etc.



**Z44H/W/Y铸钢平行双闸板闸阀**

公称压力：10-42MPa/600-2500Lb  
公称口径：DN50-DN400/NPS 2-16  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

**Parallel Double Disc Cast Steel Gate Valve**

Nominal pressure: 10-42MPa/600-2500Lb  
Nominal diameter: DN50-DN400/NPS 2-16  
Suitable temperature:  
Depending on the body/internal parts material  
Connecting flange: GB/T 9113, ASME B16.5 etc.  
Main material: WCB, CF8, CF8M, CF3, CF3M, WC6, WC9, C5 etc.



**Z40(1)H/W/Y锻钢闸阀**

公称压力：1.6-25MPa/150-1500Lb  
公称口径：DN8-DN50/NPS1/4-2  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：A105、F304、F304L、F316、F316L、F11、F22等

**Forged Steel Gate Valve**

Nominal pressure: 1.6-25MPa/150-1500Lb  
Nominal diameter: DN8-DN50/NPS1/4-2  
Suitable temperature:  
Depending on the body/internal parts material  
Connecting flange: GB/T 9113, ASME B16.5 etc.  
Main material: A105, F304, F304L, F316, F316L, F11, F22 etc.



**Z41H/W/Y自密封闸阀**

公称压力：10-42MPa/600-2500Lb  
公称口径：DN50-DN400/NPS 2-16  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

**Pressure Seal Gate Valve**

Nominal pressure: 10-42MPa/600-2500Lb  
Nominal diameter: DN50-DN400/NPS 2-16  
Suitable temperature:  
Depending on the body/internal parts material  
Connecting flange: GB/T 9113, ASME B16.5 etc.  
Main material: WCB, CF8, CF8M, CF3, CF3M, WC6, WC9, C5 etc.



**J41H/W/Y自密封截止阀**

公称压力：10-42MPa/600-2500Lb  
公称口径：DN50-DN350/NPS 2-14  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

**Pressure Seal Globe Valve**

Nominal pressure: 10-42MPa/600-2500Lb  
Nominal diameter: DN50-DN350/NPS 2-14  
Suitable temperature:  
Depending on the body/internal parts material  
Connecting flange: GB/T 9113, ASME B16.5 etc.  
Main material: WCB, CF8, CF8M, CF3, CF3M, WC6, WC9, C5 etc.



**H44H/W/Y自密封止回阀**

公称压力：10-42MPa/600-2500Lb  
公称口径：DN50-DN400/NPS 2-16  
适用温度：视阀体/内件材质而定  
连接法兰：GB/T 9113、ASME B16.5等  
主要材料：WCB、CF8、CF8M、CF3、CF3M、WC6、WC9、C5等

**Pressure Seal Check Valve**

Nominal pressure: 10-42MPa/600-2500Lb  
Nominal diameter: DN50-DN400/NPS 2-16  
Suitable temperature:  
Depending on the body/internal parts material  
Connecting flange: GB/T 9113, ASME B16.5 etc.  
Main material: WCB, CF8, CF8M, CF3, CF3M, WC6, WC9, C5 etc.



定位器  
locator



手轮  
handwheel



气动三联件  
Pneumatic Triple Pieces



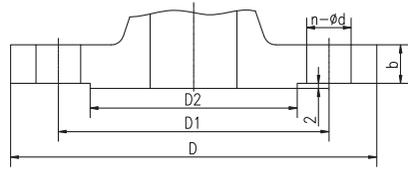
电磁阀  
Solenoid valve



# ASME B16.5-2009 美标法兰尺寸

ASME B16.5-2009 American standard flange dimensions

Zhejiang General Valve Industrial Co.,Ltd



Class  $\le 300\text{Lb}$  RF

## Class 150 RF

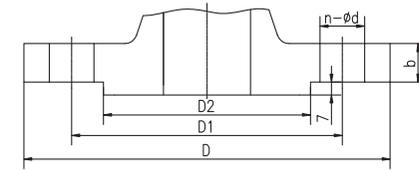
通径		D		D1		D2		b		n	$\phi d$		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	6.00	150	4.75	120.7	3.62	92.1	0.69	17.5	4	3/4	19	3.25	85	3.75	95
2-1/2	65	7.00	180	5.50	139.7	4.12	104.8	0.81	20.7	4	3/4	19	3.50	90	4.00	100
3	80	7.50	190	6.00	152.4	5.00	127.0	0.88	22.3	4	3/4	19	3.50	90	4.00	100
4	100	9.00	230	7.50	190.5	6.19	157.2	0.88	22.3	8	3/4	19	3.50	90	4.00	110
6	150	11.00	280	9.50	241.3	8.50	215.9	0.94	23.9	8	7/8	22	4.00	100	4.50	115
8	200	13.50	345	11.75	298.5	10.62	269.9	1.06	27.0	8	7/8	22	4.25	110	4.75	120
10	250	16.00	405	14.25	362.0	12.75	323.8	1.12	28.6	12	1	25	4.50	115	5.00	125
12	300	19.00	485	17.00	431.8	15.00	381.0	1.19	30.2	12	1	25	4.75	120	5.25	135
14	350	21.00	535	18.75	476.3	16.25	412.8	1.31	33.4	12	1-1/8	29	5.25	135	5.75	145
16	400	23.50	595	21.25	539.8	18.50	469.9	1.38	35.0	16	1-1/8	29	5.25	135	5.75	145
18	450	25.00	635	22.75	577.9	21.00	533.4	1.50	38.1	16	1-1/4	32	5.75	145	6.25	160
20	500	27.50	700	25.00	635	23.00	584.2	1.62	41.3	20	1-1/4	32	6.25	160	6.75	170
24	600	32.00	815	29.50	749.3	27.25	692.2	1.81	46.1	20	1-3/8	35	6.75	170	7.25	185
26	650	34.25	870	31.75	806.4	29.50	749	2.63	66.7	24	1-3/8	35	-	-	-	-
28	700	36.50	925	34.00	863.6	31.50	800	2.75	69.9	28	1-3/8	35	-	-	-	-
30	750	38.75	985	36.00	914.4	33.75	857	2.88	73.1	28	1-3/8	35	-	-	-	-
32	800	41.75	1060	38.50	977.9	36.00	914	3.13	79.4	28	1-5/8	41	-	-	-	-
34	850	43.75	1110	40.50	1028.7	38.00	965	3.19	81.0	32	1-5/8	41	-	-	-	-
36	900	46.00	1170	42.75	1085.8	40.25	1022	3.50	88.9	32	1-5/8	41	-	-	-	-

## Class 300 RF

通径		D		D1		D2		b		n	$\phi d$		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	6.50	165	5.00	127.0	3.62	92.1	0.81	20.7	8	3/4	19	3.50	90	4.00	100
2-1/2	65	7.50	190	5.88	149.2	4.12	104.8	0.94	23.9	8	7/8	22	4.00	100	4.50	115
3	80	8.25	210	6.62	168.3	5.00	127.0	1.06	27.0	8	7/8	22	4.25	110	4.75	120
4	100	10.00	255	7.88	200.0	6.19	157.2	1.19	30.2	8	7/8	22	4.50	115	5.00	125
6	150	12.50	320	10.62	269.9	8.50	215.9	1.38	35.0	12	7/8	22	4.75	120	5.50	140
8	200	15.00	380	13.00	330.2	10.62	269.9	1.56	39.7	12	1	25	5.50	140	6.00	150
10	250	17.50	445	15.25	387.4	12.75	323.8	1.81	46.1	16	1-1/8	29	6.25	160	6.75	170
12	300	20.50	520	17.75	450.8	15.00	381.0	1.94	49.3	16	1-1/4	32	6.75	170	7.25	185
14	350	23.00	585	20.25	514.4	16.25	412.8	2.06	52.4	20	1-1/4	32	7.00	180	7.50	190
16	400	25.50	650	22.50	571.5	18.50	469.9	2.19	55.6	20	1-3/8	35	7.50	190	8.00	205
18	450	28.00	710	24.75	628.6	21.00	533.4	2.31	58.8	24	1-3/8	35	7.75	195	8.25	210
20	500	30.50	775	27.00	685.8	23.00	584.2	2.44	62.0	24	1-3/8	35	8.00	205	8.75	220
24	600	36.00	915	32.00	812.8	27.25	692.2	2.69	68.3	24	1-5/8	41	9.00	230	10.00	255
26	650	38.25	970	34.50	876.3	29.50	749	3.07	77.8	28	1-3/4	44	-	-	-	-
28	700	40.75	1035	37.00	939.8	31.50	800	3.32	84.2	28	1-3/4	44	-	-	-	-
30	750	43.00	1090	39.25	997.0	33.75	857	3.57	90.5	28	1-7/8	48	-	-	-	-
32	800	45.25	1150	41.50	1054.1	36.00	914	3.82	96.9	28	2	51	-	-	-	-
34	850	47.50	1205	43.50	1104.9	38.00	965	3.94	100.1	28	2	51	-	-	-	-
36	900	50.00	1270	46.00	1168.4	40.25	1022	4.07	103.2	32	2-1/8	54	-	-	-	-

# ASME B16.5-2009 美标法兰尺寸

ASME B16.5-2009 American standard flange dimensions



Class  $\ge 400\text{Lb}$  RF

## Class 400 RF

通径		D		D1		D2		b		n	$\phi d$		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	6.50	165	5.00	127.0	3.62	92.1	1.00	25.4	8	3/4	19	4.25	110	4.25	110
2-1/2	65	7.50	190	5.88	149.2	4.12	104.8	1.12	28.6	8	7/8	22	1.75	120	4.75	120
3	80	8.25	210	6.62	168.3	5.00	127.0	1.25	31.8	8	7/8	22	5.00	125	5.00	125
4	100	10.00	255	7.88	200.0	6.19	157.2	1.38	35.0	8	1	25	5.50	140	5.50	140
6	150	12.50	320	10.62	269.9	8.50	215.9	1.62	41.3	12	1	25	6.00	150	6.00	150
8	200	15.00	380	13.00	330.0	10.62	269.9	1.88	47.7	12	1-1/8	29	6.75	170	6.75	170
10	250	17.50	445	15.25	387.4	12.75	323.8	2.12	54.0	16	1-1/4	32	7.50	190	7.50	190
12	300	20.50	520	17.75	450.8	15.00	381.0	2.25	57.2	16	1-3/8	35	8.00	205	8.00	205
14	350	23.00	585	20.25	514.4	16.25	412.8	2.38	60.4	20	1-3/8	35	8.25	210	8.25	210
16	400	25.50	650	22.50	571.5	18.50	469.9	2.50	63.5	20	1-1/2	38	8.75	220	8.75	220
18	450	28.00	710	24.75	628.6	21.00	533.4	2.62	66.7	24	1-1/2	38	9.00	230	9.00	230
20	500	30.50	775	27.00	685.8	23.00	584.2	2.75	69.9	24	1-5/8	41	9.50	240	9.75	250
24	600	36.00	915	32.00	812.8	27.25	692.2	3.00	76.2	24	1-7/8	48	10.50	265	11.00	280
26	650	38.25	970	34.50	876.3	29.50	749	3.50	88.9	28	1-7/8	48	-	-	-	-
28	700	40.75	1035	37.00	939.8	31.50	800	3.75	95.3	28	2	51	-	-	-	-
30	750	43.00	1090	39.25	997.0	33.75	857	4.00	101.6	28	2-1/8	54	-	-	-	-
32	800	45.25	1150	41.50	1054.1	36.00	914	4.25	108.0	28	2-1/8	54	-	-	-	-
34	850	47.50	1205	43.50	1104.9	38.00	965	4.38	111.2	28	2-1/8	54	-	-	-	-
36	900	50.00	1270	46.00	1168.4	40.25	1022	4.50	114.3	32	2-1/8	54	-	-	-	-

## Class 600 RF

通径		D		D1		D2		b		n	$\phi d$		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	6.50	165	5.00	127.0	3.62	92.1	1.00	25.4	8	3/4	19	4.25	110	4.25	110
2-1/2	65	7.50	190	5.88	149.2	4.12	104.8	1.12	28.6	8	7/8	22	1.75	120	4.75	120
3	80	8.25	210	6.62	168.3	5.00	127.0	1.25	31.8	8	7/8	22	5.00	125	5.00	125
4	100	10.75	275	8.50	215.9	6.19	157.2	1.50	38.1	8	1	25	5.75	145	5.75	145
6	150	14.00	355	11.50	292.1	8.50	215.9	1.88	47.7	12	1-1/8	29	6.75	170	6.75	170
8	200	16.50	420	13.75	349.2	10.62	269.9	2.19	55.6	12	1-1/4	32	7.50	190	7.75	195
10	250	20.00	510	17.00	431.8	12.75	323.8	2.50	63.5	16	1-3/8	35	8.50	215	8.50	215
12	300	22.00	560	19.25	489.0	15.00	381.0	2.62	66.7	20	1-3/8	35	8.75	220	8.75	220
14	350	23.75	605	20.75	527.0	16.25	412.8	2.75	69.9	20	1-1/2	38	9.25	235	9.25	235
16	400	27.00	685	23.75	603.2	18.50	469.9	3.00	76.2	20	1-5/8	41	10.00	255	10.00	255
18	450	29.25	745	25.75	654.0	21.00	533.4	3.25	82.6	20	1-3/4	44	10.75	275	10.75	275
20	500	32.00	815	28.50	723.9	23.00	584.2	3.50	88.9	24	1-3/4	44	11.25	285	11.50	290
24	600	37.00	940	33.00	838.2	27.25	692.2	4.00	101.6	24	2	51	13.00	330	13.25	335
26	650	40.00	1015	36.00	914.4	29.50	749	4.25	108.0	28	2	51	-			

## ASME B16.5-2009 美标法兰尺寸

ASME B16.5-2009 American standard flange dimensions

Zhejiang General Valve  
Industrial Co.,Ltd



### Class 900 RF

通径		D		D1		D2		b		n	Φd		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	8.50	215	6.50	165.1	3.62	92.1	1.50	38.1	8	1	25	5.75	145	5.75	145
2-1/2	65	9.62	245	7.50	190.5	4.12	104.8	1.62	41.3	8	1-1/8	29	6.25	160	6.25	160
3	80	9.50	240	7.50	190.5	5.00	127.0	1.50	38.1	8	1	25	5.75	145	5.75	145
4	100	11.50	290	9.25	235.0	6.19	157.2	1.75	44.5	8	1-1/4	32	6.75	170	6.75	170
6	150	15.00	380	12.50	317.5	8.50	215.9	2.19	55.6	12	1-1/4	32	7.50	190	7.75	195
8	200	18.50	470	15.50	393.7	10.62	269.9	2.50	63.5	12	1-1/2	38	8.75	220	8.75	220
10	250	21.50	545	18.50	469.9	12.75	323.8	2.75	69.9	16	1-1/2	38	9.25	235	9.25	235
12	300	24.00	610	21.00	533.4	15.00	381.0	3.12	79.4	20	1-1/2	38	10.00	255	10.00	255
14	350	25.25	640	22.00	558.8	16.25	412.8	3.38	85.8	20	1-5/8	41	10.75	275	11.00	280
16	400	27.75	705	25.24	616.0	18.50	469.9	3.50	88.9	20	1-5/8	41	11.25	285	11.50	290
18	450	31.00	785	27.00	685.8	21.00	533.4	4.00	101.3	20	2	51	12.75	325	13.25	335
20	500	33.75	855	29.50	749.3	23.00	584.2	4.25	108.0	20	2-1/8	54	13.75	350	14.25	360
24	600	41.00	1040	35.50	901.7	27.25	692.2	5.50	139.7	20	2-5/8	67	17.25	440	18.00	455

### Class 1500 RF

通径		D		D1		D2		b		n	Φd		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	8.50	215	6.50	165.1	3.62	92.1	1.50	38.1	8	1	25	5.75	145	5.75	145
2-1/2	65	9.62	245	7.50	190.5	4.12	104.8	1.62	41.3	8	1-1/8	29	6.25	160	6.25	160
3	80	10.50	265	8.00	203.2	5.00	127.0	1.88	47.7	8	1-1/4	32	7.00	180	7.00	180
4	100	12.25	310	9.50	241.3	6.19	157.2	2.12	54.0	8	1-3/8	35	7.75	195	7.75	195
6	150	15.50	395	12.50	317.5	8.50	215.9	3.25	82.6	12	1-1/2	38	10.25	260	10.50	265
8	200	19.00	485	15.50	393.7	10.62	269.9	3.62	92.1	12	1-3/4	44	11.50	290	11.75	300
10	250	23.00	585	19.00	482.6	12.75	323.8	4.25	108.0	12	2	51	13.25	335	13.50	345
12	300	26.50	675	22.50	571.5	15.00	381.0	4.88	123.9	16	2-1/8	54	14.75	375	15.25	385
14	350	29.50	750	25.00	635.0	16.25	412.8	5.25	133.4	16	2-3/8	60	16.00	405	16.75	425

### Class 2500 RF

通径		D		D1		D2		b		n	Φd		L		L1	
NPS	DN	In	mm	In	mm	In	mm	In	mm	No	In	mm	In	mm	In	mm
2	50	9.25	235	6.75	171.4	3.62	92.1	2.00	50.9	8	1-1/8	29	7.00	180	7.00	180
2-1/2	65	10.50	265	7.75	196.8	4.12	104.8	2.25	57.2	8	1-1/4	32	7.75	195	8.00	205
3	80	12.00	305	9.00	228.6	5.00	127.0	2.62	66.7	8	1-3/8	35	8.75	220	9.00	230
4	100	14.00	355	10.75	273.0	6.19	157.2	3.00	76.2	8	1-5/8	41	10.00	255	10.25	260
6	150	19.00	485	14.50	368.3	8.50	215.9	4.25	108.0	8	2-1/8	54	13.50	345	14.00	355
8	200	21.75	550	17.25	438.2	10.62	269.9	5.00	127.0	12	2-1/8	54	15.00	380	15.50	395
10	250	26.50	675	21.25	539.8	12.75	323.8	6.50	165.1	12	2-5/8	67	19.25	490	20.00	510
12	300	30.00	760	24.38	619.1	15.00	381.0	7.25	184.2	12	2-7/8	73	21.25	540	22.00	560

注：(1) 常规400、600、900、1500、2500磅的法兰的凸面高度为7mm,不包括在以上表所给的最小厚度里。

(2) 本表所列L值为建议突面双头螺栓的长度，但不具端部的高度。

(3) 本表所列L1值为建议环连接螺栓长度。

(4) 对于NPS24以上的法兰符合ASME B16.47标准。

Note: (1) 400, 400, 900, 1500, 900 pounds of the convex flange height is 7 mm, not included in the above table gives the minimum thickness.

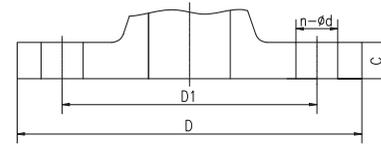
(2) L value is suggested that listed on this surface the length of the stud, but not the height of its end.

(3) the value of L1 listed on this form to suggest ring joint stud length.

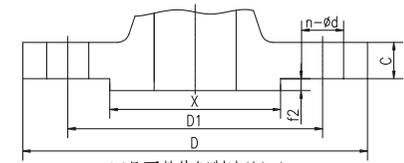
(4) to standard of flange in accordance with ASME B16.47 NPS24 above.

## GB/T 9113-2010 国标法兰尺寸

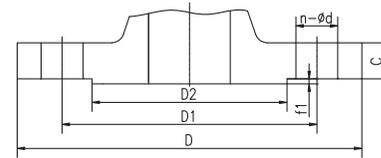
GB/T 9113-2010 national standard flange dimensions



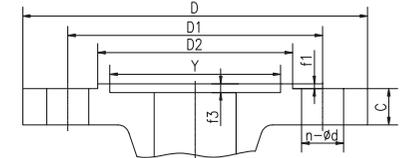
平面 (FF) 整体钢制法兰  
PN2.5~PN25



凹凸面整体钢制法兰(M)



突面 (RF) 整体钢制法兰



凹凸面整体钢制法兰(FM)

### PN2.5

通径	D	D1	D2	X	Y	f1	f2	f3	n	Φd	C
10	75	50	35	-	-	2	-	-	4	11	12
15	80	55	40	-	-	2	-	-	4	11	12
20	90	65	50	-	-	2	-	-	4	11	14
25	100	75	60	-	-	2	-	-	4	11	14
32	120	90	70	-	-	2	-	-	4	14	14
40	130	100	80	-	-	3	-	-	4	14	14
50	140	110	90	-	-	3	-	-	4	14	14
65	160	130	110	-	-	3	-	-	4	18	14
80	160	150	128	-	-	3	-	-	4	18	16
100	210	170	148	-	-	3	-	-	4	18	16
125	240	200	178	-	-	3	-	-	8	18	18
150	265	225	202	-	-	3	-	-	8	18	18
200	320	280	258	-	-	3	-	-	8	18	20
250	375	335	312	-	-	3	-	-	12	18	22
300	440	395	365	-	-	4	-	-	12	22	22
350	490	445	415	-	-	4	-	-	12	22	22
400	540	495	465	-	-	4	-	-	16	22	22
450	595	550	520	-	-	4	-	-	16	22	22
500	645	600	570	-	-	4	-	-	20	22	24
600	755	705	670	-	-	5	-	-	20	26	30
700	860	810	775	-	-	5	-	-	24	26	30
800	975	920	880	-	-	5	-	-	24	30	30
900	1075	1020	980	-	-	5	-	-	24	30	30
1000	1175	1120	1080	-	-	5	-	-	28	30	30
1200	1375	1320	1280	-	-	5	-	-	32	30	32
1400	1575	1520	1480	-	-	5	-	-	36	30	38
1600	1790	1730	1690	-	-	5	-	-	40	30	46
1800	1990	1930	1890	-	-	5	-	-	44	30	46
2000	2190	2130	2090	-	-	5	-	-	48	30	50

括号内尺寸为原标准法兰厚度，对于现有设备或供需双方认可仍可采用括号内的法兰厚度尺寸。

Brackets size as the original standard flange thickness, approved for existing equipment or supply and demand both still can use the flange thickness dimension in brackets.

# GB/T 9113-2010 国标法兰尺寸

GB/T 9113-2010 national standard flange dimensions

Zhejiang General Valve Industrial Co.,Ltd



通径	D	D1	D2	X	Y	f1	f2	f3	n	Φd	C
PN6											
10	75	50	35	-	-	2	-	-	4	11	12
15	80	55	40	-	-	2	-	-	4	11	12
20	90	65	50	-	-	2	-	-	4	11	14
25	100	75	60	-	-	2	-	-	4	11	14
32	120	90	70	-	-	2	-	-	4	14	14
40	130	100	80	-	-	3	-	-	4	14	14
50	140	110	90	-	-	3	-	-	4	14	14
65	160	130	110	-	-	3	-	-	4	14	14
80	160	150	128	-	-	3	-	-	4	18	16
100	210	170	148	-	-	3	-	-	4	18	16
125	240	200	178	-	-	3	-	-	8	18	18
150	265	225	202	-	-	3	-	-	8	18	18
200	320	280	258	-	-	3	-	-	8	18	20
250	375	335	312	-	-	3	-	-	12	18	22
300	440	395	365	-	-	4	-	-	12	22	22
350	490	445	415	-	-	4	-	-	12	22	22
400	540	495	465	-	-	4	-	-	16	22	22
450	595	550	520	-	-	4	-	-	16	22	22
500	645	600	570	-	-	4	-	-	20	22	24
600	755	705	670	-	-	5	-	-	20	26	30
700	860	810	775	-	-	5	-	-	24	26	30(26)
800	975	920	880	-	-	5	-	-	24	30	30(26)
900	1075	1020	980	-	-	5	-	-	24	30	34(26)
1000	1175	1120	1080	-	-	5	-	-	28	30	38(26)
1200	1405	1340	1295	-	-	5	-	-	32	33	42(28)
1400	1630	1560	1510	-	-	5	-	-	36	36	56(32)
1600	1830	1760	1710	-	-	5	-	-	40	36	63(34)
1800	2045	1970	1920	-	-	5	-	-	44	39	69(36)
2000	2265	2180	2125	-	-	5	-	-	48	42	74(38)
PN10											
10	10	90	60	40	34	35	2	4.5	4.0	4	16
15	15	95	65	45	39	40	2	4.5	4.0	4	16
20	20	105	75	58	50	51	2	4.5	4.0	4	18
25	25	115	85	68	57	58	2	4.5	4.0	4	18
32	32	140	100	78	65	66	2	4.5	4.0	4	18
40	40	150	110	88	75	76	3	4.5	4.0	4	18
50	50	165	125	102	87	88	3	4.5	4.0	4	18
65	65	185	145	122	109	110	3	4.5	4.0	8	18
80	80	200	160	138	120	121	3	4.5	4.0	8	20
100	100	220	180	158	149	150	3	5.0	4.5	8	20
125	125	250	210	188	175	176	3	5.0	4.5	8	22
150	150	285	240	212	203	204	3	5.0	4.5	8	24
200	200	340	295	268	259	260	3	5.0	4.5	8	24
250	250	395	350	320	312	313	3	5.0	4.5	12	26
300	300	445	400	370	363	364	4	5.0	4.5	12	26
350	350	505	460	430	421	422	4	5.5	5.0	16	26
400	400	565	515	482	473	472	4	5.5	5.0	16	26
450	450	615	565	532	523	524	4	5.5	5.0	20	28
500	500	670	620	585	575	576	4	5.5	5.0	20	28
600	600	780	725	685	675	676	5	5.5	5.0	20	34
700	700	895	840	800	777	778	5	5.5	5.0	24	35 ( 34 )
800	800	1015	950	905	882	883	5	5.5	5.0	24	38 ( 36 )
900	900	1115	1050	1005	987	988	5	5.5	5.0	28	38 ( 38 )
1000	1000	1230	1160	1110	1092	1094	5	6.5	6.0	28	44 ( 38 )
1200	1200	1455	1380	1330	1292	1294	5	6.5	6.0	32	55 ( 44 )
1400	1400	1675	1590	1535	1492	1494	5	6.5	6.0	36	65 ( 48 )
1600	1600	1915	1820	1760	1692	1694	5	6.5	6.0	40	75 ( 52 )
1800	1800	2115	2020	1960	1892	1894	5	6.5	6.0	44	85 ( 56 )
2000	2000	2325	2230	2170	2092	2094	5	6.5	6.0	48	90 ( 60 )

# GB/T 9113-2010 国标法兰尺寸

GB/T 9113-2010 national standard flange dimensions



通径	D	D1	D2	X	Y	f1	f2	f3	n	Φd	C
PN16											
10	90	60	40	34	35	2	4.5	4.0	4	14	16
15	95	65	45	39	40	2	4.5	4.0	4	14	16
20	105	75	58	50	51	2	4.5	4.0	4	14	18
25	115	85	68	57	58	2	4.5	4.0	4	14	18
32	140	100	78	65	66	2	4.5	4.0	4	18	18
40	150	110	88	75	76	3	4.5	4.0	4	18	18
50	165	125	102	87	88	3	4.5	4.0	4	18	18
65	185	145	122	109	110	3	4.5	4.0	8	18	18
80	200	160	138	120	121	3	4.5	4.0	8	18	20
100	220	180	158	149	150	3	5.0	4.5	8	18	20
125	250	210	188	175	176	3	5.0	4.5	8	18	22
150	285	240	212	203	204	3	5.0	4.5	8	22	22
200	340	295	268	259	260	3	5.0	4.5	12	22	24
250	405	355	320	312	313	3	5.0	4.5	12	26	26
300	460	410	378	363	364	4	5.0	4.5	12	26	28
350	520	470	438	421	422	4	5.5	5.0	16	26	30
400	580	525	490	473	472	4	5.5	5.0	16	30	32
450	640	585	550	523	524	4	5.5	5.0	20	30	40
500	715	650	610	575	576	4	5.5	5.0	20	33	44
600	840	770	725	675	676	5	5.5	5.0	20	36	54
700	910	840	795	777	778	5	5.5	5.0	24	36	58(40)
800	1025	955	900	882	883	5	5.5	5.0	24	39	62(42)
900	1125	1050	1000	987	988	5	5.5	5.0	28	39	64(44)
1000	1255	1170	1115	1092	1094	5	6.5	6.0	28	42	68(45)
1200	1485	1390	1330	1292	1294	5	6.5	6.0	32	48	78(52)
1400	1685	1590	1530	1492	1494	5	6.5	6.0	36	48	84(58)
1600	1930	1820	1750	1692	1694	5	6.5	6.0	40	56	102(64)(52)
1800	2130	2020	1950	1892	1894	5	6.5	6.0	44	56	110(68)(56)
2000	2345	2230	2150	2092	2094	5	6.5	6.0	48	62	124(70)
PN25											
10	90	60	40	34	35	2	4.5	4.0	4	14	16
15	95	65	45	39	40	2	4.5	4.0	4	14	16
20	105	75	58	50	51	2	4.5	4.0	4	14	18
25	115	85	68	57	58	2	4.5	4.0	4	14	18
32	140	100	78	65	66	2	4.5	4.0	4	18	18
40	150	110	88	75	76	3	4.5	4.0	4	18	18
50	165	125	102	87	88	3	4.5	4.0	4	18	20
65	185	145	122	109	110	3	4.5	4.0	8	18	22
80	200	160	138	120	121	3	4.5	4.0	8	18	24
100	235	190	162	149	150	3	5.0	4.5	8	22	24
125	270	220	188	175	176	3	5.0	4.5	8	26	26
150	300	250	218	203	204	3	5.0	4.5	8	26	28
200	360	310	278	259	260	3	5.0	4.5	12	26	30
250	425	370	335	312	313	3	5.0	4.5	12	30	32
300	485	430	395	363	364	4	5.0	4.5	16	30	34
350	555	490	450	421	422	4	5.5	5.0	16	33	38
400	620	550	505	473	472	4	5.5	5.0	16	36	40
450	670	600	555	523	524	4	5.5	5.0	20	36	46
500	730	660	615	575	576	4	5.5	5.0	20	36	48
600	845	770	720	675	676	5	5.5	5.0	20	39	58
700	960	875	820	777	778	5	5.5	5.0	24	42	60 ( 50 )
800	1085	990	930	882	883	5	5.5	5.0	24	48	66 ( 54 )
900	1185	1060	1030	987	988	5	5.5	5.0	28	48	70 ( 58 )
1000	1320	1210	1140	1092	1094	5	6.5	6.0	28	56	74 ( 62 )
1200	1530	1420	1350	1292	1294	5	6.5	6.0	32	56	86 ( 70 )
1400	1755	1640	1560	1492	1494	5	6.5	6.0	36	62	92 ( 76 )
1600	1975	1860	1780	1692	1694	5	6.5	6.0	40	62	112 ( 84 )
1800	2195	2070	1985	1892	1894	5	6.5	6.0	44	70	121 ( 90 )
2000	2425	2300	2210	2092	2094	5	6.5	6.0	48	70	136 ( 96 )

# GB/T 9113-2010 国标法兰尺寸

GB/T 9113-2010 national standard flange dimensions

Zhejiang General Valve Industrial Co.,Ltd



通径	D	D1	D2	X	Y	f1	f2	f3	n	Φd	C
PN40											
10	90	60	40	34	35	2	4.5	4.0	4	14	16
15	95	65	45	39	40	2	4.5	4.0	4	14	16
20	105	75	58	50	51	2	4.5	4.0	4	14	18
25	115	85	68	57	58	2	4.5	4.0	4	14	18
32	140	100	78	65	66	2	4.5	4.0	4	18	18
40	150	110	88	75	76	3	4.5	4.0	4	18	18
50	165	125	102	87	88	3	4.5	4.0	4	18	20
65	185	145	122	109	110	3	4.5	4.0	8	18	22
80	200	160	138	120	121	3	4.5	4.0	8	18	24
100	235	190	162	149	150	3	5.0	4.5	8	22	24
125	270	220	188	175	176	3	5.0	4.5	8	26	26
150	300	250	218	203	204	3	5.0	4.5	8	26	28
200	375	320	285	259	260	3	5.0	4.5	12	30	34
250	450	385	345	312	313	3	5.0	4.5	12	33	38
300	515	450	410	363	364	4	5.0	4.5	16	33	42
350	580	510	465	421	422	4	5.5	5.0	16	36	46
400	660	585	535	473	472	4	5.5	5.0	16	39	50
450	685	610	560	523	524	4	5.5	5.0	20	39	57
500	755	670	615	575	576	4	5.5	5.0	20	42	57
600	890	795	735	675	676	5	5.5	5.0	20	48	72
PN63											
10	100	70	40	34	35	2	4.5	4.0	4	14	20
15	105	75	45	39	40	2	4.5	4.0	4	14	20
20	130	90	58	50	51	2	4.5	4.0	4	18	22
25	140	100	68	57	58	2	4.5	4.0	4	18	24
32	155	110	78	65	66	2	4.5	4.0	4	22	26
40	170	125	88	75	76	3	4.5	4.0	4	22	28
50	180	135	102	87	88	3	4.5	4.0	4	22	26
65	205	160	122	109	110	3	4.5	4.0	8	22	26
80	215	170	138	120	121	3	4.5	4.0	8	22	28
100	250	200	162	149	150	3	5.0	4.5	8	26	30
125	295	240	188	175	176	3	5.0	4.5	8	30	34
150	345	280	218	203	204	3	5.0	4.5	8	33	36
200	415	345	285	259	260	3	5.0	4.5	12	36	42
250	470	400	345	312	313	3	5.0	4.5	12	36	46
300	530	460	410	363	364	4	5.0	4.5	16	36	52
350	600	525	465	421	422	4	5.5	5.0	16	39	56
400	670	585	535	473	472	4	5.5	5.0	16	42	60
PN100											
10	100	70	40	34	35	2	4.5	4.0	4	14	20
15	105	75	45	39	40	2	4.5	4.0	4	14	20
20	130	90	58	50	51	2	4.5	4.0	4	18	22
25	140	100	68	57	58	2	4.5	4.0	4	18	24
32	155	110	78	65	66	2	4.5	4.0	4	22	26
40	170	125	88	75	76	3	4.5	4.0	4	22	28
50	195	145	102	87	88	3	4.5	4.0	4	26	30
65	220	170	122	109	110	3	4.5	4.0	8	26	34
80	230	180	138	120	121	3	4.5	4.0	8	26	36
100	265	210	162	149	150	3	5.0	4.5	8	30	40
125	315	250	188	175	176	3	5.0	4.5	8	33	40
150	355	290	218	203	204	3	5.0	4.5	12	33	44
200	430	360	285	259	260	3	5.0	4.5	12	36	52
250	505	430	345	312	313	3	5.0	4.5	12	39	60
300	585	500	410	363	364	4	5.0	4.5	16	42	68
350	655	560	465	421	422	4	5.5	5.0	16	48	74

# GB/T 9113-2010 国标法兰尺寸

GB/T 9113-2010 national standard flange dimensions



通径	D	D1	D2	X	Y	f1	f2	f3	n	Φd	C
PN160											
10	100	70	40	34	35	2	4.5	4.0	4	14	20
15	105	75	45	39	40	2	4.5	4.0	4	14	20
20	130	90	58	50	51	2	4.5	4.0	4	18	24
25	140	100	68	57	58	2	4.5	4.0	4	18	24
32	155	110	78	65	66	2	4.5	4.0	4	22	28
40	170	125	88	75	76	3	4.5	4.0	4	22	28
50	195	145	102	87	88	3	4.5	4.0	4	26	30
65	220	170	122	109	110	3	4.5	4.0	8	26	34
80	230	180	138	120	121	3	4.5	4.0	8	26	36
100	265	210	162	149	150	3	5.0	4.5	8	30	40
125	315	250	188	175	176	3	5.0	4.5	8	33	44
150	355	290	218	203	204	3	5.0	4.5	12	33	50
200	430	360	285	259	260	3	5.0	4.5	12	36	60
250	515	430	345	312	313	3	5.0	4.5	12	42	68
300	585	500	410	363	364	4	5.0	4.5	16	42	78
PN250											
10	125	85	40	34	35	2	4.5	4.0	4	18	24
15	130	90	45	39	40	2	4.5	4.0	4	18	26
20	135	95	58	50	51	2	4.5	4.0	4	18	28
25	150	105	68	57	58	2	4.5	4.0	4	22	28
32	165	120	78	65	66	2	4.5	4.0	4	22	32
40	185	135	88	75	76	3	4.5	4.0	4	26	34
50	200	150	102	87	88	3	4.5	4.0	8	26	38
65	230	180	122	109	110	3	4.5	4.0	8	26	42
80	255	200	138	120	121	3	4.5	4.0	8	30	46
100	300	235	162	149	150	3	5.0	4.5	8	33	54
125	340	275	188	175	176	3	5.0	4.5	12	33	60
150	390	320	218	203	204	3	5.0	4.5	12	36	68
200	485	400	285	259	260	3	5.0	4.5	12	42	82
250	585	490	345	312	313	3	5.0	4.5	16	48	100
300	690	590	410	363	364	4	5.0	4.5	16	52	120
PN320											
10	125	85	40	34	35	2	4.5	4.0	4	18	24
15	130	90	45	39	40	2	4.5	4.0	4	18	26
20	145	100	58	50	51	2	4.5	4.0	4	22	30
25	160	115	68	57	58	2	4.5	4.0	4	22	34
32	175	130	78	65	66	2	4.5	4.0	4	26	36
40	195	145	88	75	76	3	4.5	4.0	4	26	38
50	210	160	102	87	88	3	4.5	4.0	8	26	42
65	255	200	122	109	110	3	4.5	4.0	8	30	51
80	275	220	138	120	121	3	4.5	4.0	8	30	55
100	335	265	162	149	150	3	5.0	4.5	8	36	65
125	380	310	188	175	176	3	5.0	4.5	12	33	75
150	425	350	218	203	204	3	5.0	4.5	12	39	84
200	525	440	285	259	260	3	5.0	4.5	16	42	103
250	640	540	345	312	313	3	5.0	4.5	16	52	125
PN400											
10	125	125	40	34	35	2	4.5	4.0	4	18	28
15	145	145	45	39	40	2	4.5	4.0	4	22	30
20	160	160	58	50	51	2	4.5	4.0	4	22	34
25	180	180	68	57	58	2	4.5	4.0	4	26	38
32	200	200	78	65	66	2	4.5	4.0	4	26	43
40	220	220	88	75	76	3	4.5	4.0	4	30	48
50	235	235	102	87	88	3	4.5	4.0	8	30	52
65	290	290	122	109	110	3	4.5	4.0	8	33	64
80	305	305	138	120	121	3	4.5	4.0	8	33	68
100	370	370	162	149	150	3	5.0	4.5	8	39	80
125	415	415	188	175	176	3	5.0	4.5	12	39	92
150	475	475	218	203	204	3	5.0	4.5	12	42	105
200	585	585	285	259	260	3	5.0	4.5	16	48	130