

# BALL VALVE SERIES 球阀系列



# GB FLOATING BALL VALVE

## 国标浮动球阀

### 结构特点 Structure characteristics

浮动软密封不锈钢球阀用于PN16~PN63的各种管路上，用于截断或接通管路中的介质，选用不同的材质，可分别适用于水、蒸汽、油品、液化气、天然气、煤气、醋酸、氧化性介质、尿素等多种介质。

a、在各种阀门中，球阀的流动阻力最小，全径球阀打开时，球体通道、阀体通道和连接管径相等并成一直径，介质几乎可以毫无损失的流过。

b、球阀旋转90°即可全关全开，启闭迅速。与相同规格的闸阀、截止阀比较，球阀体积小、重量轻、便于管道安装。

Soft floating seal stainless steel ball valve used for PN16 ~ PN63 various piping, used to truncate or on line in the medium, choose no material, can be respectively suitable for water, steam, oil, liquefied petroleum gas, natural gas, coal gas, acetic acid, oxidizing medium, urea, and other media.

A, in all kinds of valve, ball valve flow resistance of the smallest, full bore ball valve is opened, the sphere channels, the body and connected to equal diameter and diameter, flow medium can be almost no losses.

B, ball valve can be rotated 90° seated fully open, opening and closing fast. Compared with the same specifications of the gate valve, globe valve, ball valve, small volume, light weight, easy to pipeline installation.

### 标准与规范 Standards and norms

设计标准 Design standard	结构长度 Face to Face	法兰连接尺寸 Flange End	试验与检验 Test & Check	压力-温度 Pressure-Temp.
GB/T 12237 API6D	GB/T 12221	JB/T 79 HG20592	JB/T 9092 GB/T 13927	GB/T 12224 ASME B16.34

### 性能参数 performance parameters

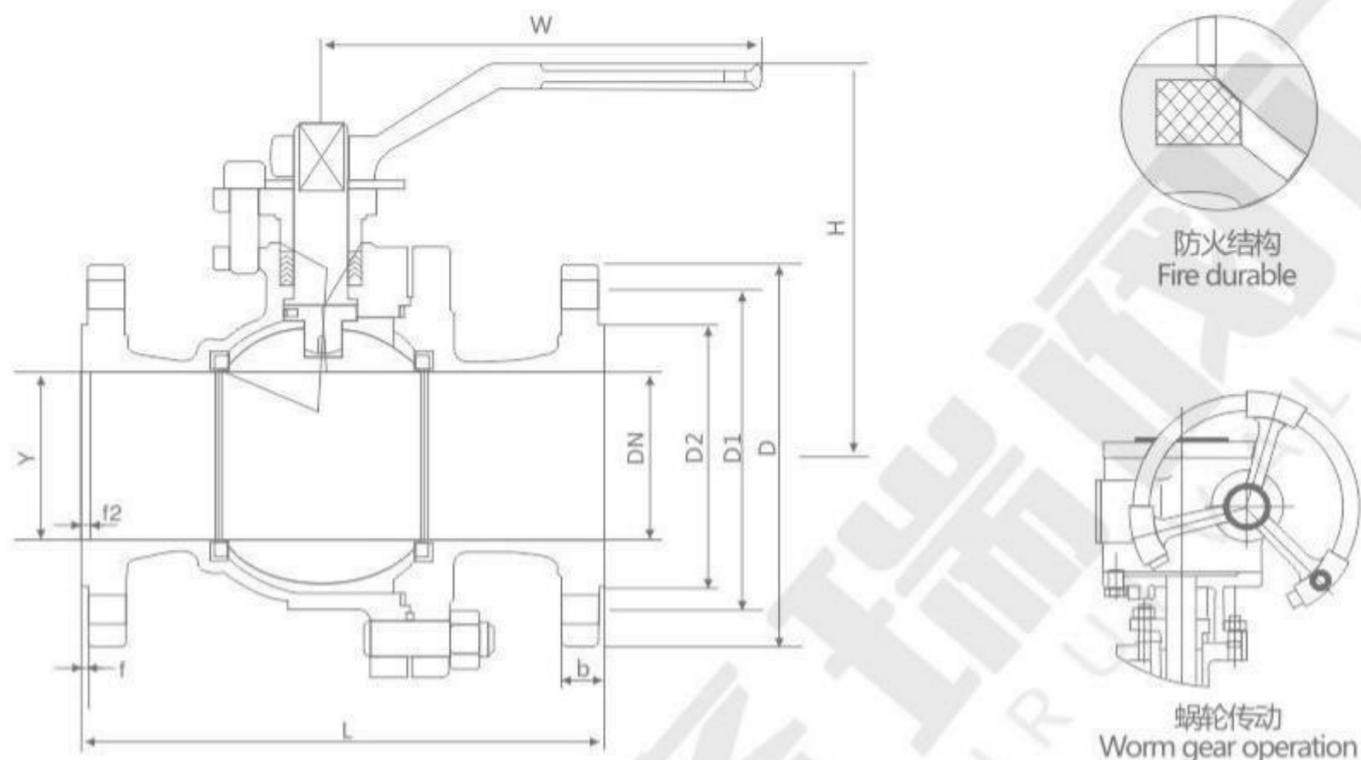
序号 NO.	项目名称 Project name	项目名称 Project name			
		PN16	PN25	PN40	PN64
1	公称压力 ( MPa )	1.6	2.5	4.0	6.4
2	壳体强度试验压力 ( MPa ) Shell strength test pressure	常温下公称压力的1.5倍 1.5 Times the nominal pressure at room temperature			
3	高压密封试验压力 ( MPa ) High pressure seal test pressure	常温下公称压力的1.1倍 1.1 Times the nominal pressure at room temperature			
4	常温下工作压力 ( MPa ) Operating pressure at room temperature	≤1.6	≤2.5	≤4.0	≤6.4

### 主要零件材料 Materials for Main Parts

名称 Name	材料 Material								
阀体/阀盖 Body/Bonnet	CF8	CF3	CF8M	CF3M	WCB	LCB	WC6	WC9	C5
球体 Ball	CF8	CF3	CF8M	CF3M	WCB Hcr	CF8	CF8	CF8	CF8
阀杆 Stem	F304	F304L	F316	F316L	2CR13	F304	F304	F304	F304
阀座 Seat	PTFE/PPL/304								
填料/垫片 Packing/Gasket	PTFF				石墨 Graphite				
螺栓 Bolt	不锈钢 Stainless Steel				35CrMoA				
螺母 Nut	不锈钢 Stainless Steel				45、35CrMoA				
手柄 Handle	铸钢 Cast Steel								

# GB FLOATING BALL VALVE 国标浮动球阀

Q41/641/941F-16C/P/R/RL



主要外形和连接尺寸 Main external and connection dimension

单位Unit:mm

公称通径 DN	主要外形和连接尺寸 Main external and connecting dimensions									WT (kg)
	L	D	D1	D2	b	f	Z-Φd	H	W	
	Q41F-16C		Q41F-16P	Q641F-16C	Q641F-16P	Q9B41F-16C		Q9B41F-16P		
15	130	95	65	45	14	2	4-Φ14	78	140	3
20	140	105	75	55	14	2	4-Φ14	84	160	4
25	150	115	85	65	14	2	4-Φ14	95	180	5
32	165	135	100	78	17	2	4-Φ18	150	250	9
40	180	145	110	85	17	2	4-Φ18	150	300	11
50	200	160	125	100	18	2	4-Φ18	170	350	15
65	220	180	145	120	19	2	4-Φ18	195	350	19
80	250	195	160	135	20	2	8-Φ18	215	400	27
100	280	215	180	155	21	2	8-Φ18	250	500	38
125	320	245	210	185	22	3	8-Φ18	265	600	58
150	360	280	240	210	24	3	8-Φ23	270	800	81
200	400	335	295	265	26	3	12-Φ23	330	800	95
250	533	405	355	320	28	3	12-Φ25	450	1300	140

# GB FLOATING BALL VALVE

## 国标浮动球阀

Q41/341/641/941P-25~64/

JB/T 79.2-1994 JB/T 79.1-1994

主要外形和连接尺寸 Main external and connection dimension

单位Unit:mm

公称通径 DN	主要外形和连接尺寸Main external and connecting dimensions										WT (kg)					
	L	D	D1	D2	b	Y	f2	Z-Φd	H	W						
	Q41F-25		Q41F-25P		Q641F-25		Q641F-25P		Q9B41F-25		Q9B41F-25P					
15	130	95	65	45	16	-	-	4-Φ14	103	100	3					
20	140	105	75	55	16	-	-	4-Φ14	112	160	4					
25	150	115	85	65	16	-	-	4-Φ14	123	160	6					
32	165	135	100	78	18	-	-	4-Φ18	150	250	10					
40	180	145	110	85	18	-	-	4-Φ18	156	250	14					
50	200	160	125	100	20	-	-	4-Φ18	172	350	20					
65	220	180	145	120	22	-	-	8-Φ18	197	350	25					
80	250	195	160	135	22	-	-	8-Φ18	222	450	30					
100	280	230	190	160	24	-	-	8-Φ23	253	450	40					
125	320	270	220	188	28	-	-	8-Φ25	275	600	65					
150	360	300	250	218	30	-	-	8-Φ25	286	800	85					
200	400	360	310	278	34	-	-	12-Φ25	340	1200	100					
250	533	425	370	332	36	-	-	12-Φ30	470	1400	165					
	Q41F-40		Q41F-40P		Q341F-40		Q341F-40P		Q641F-40		Q641F-40P		Q9B41F-40		Q9B41F-40P	
15	130	95	65	45	16	40	4	4-Φ14	103	100	3					
20	140	105	75	55	16	51	4	4-Φ14	112	160	4					
25	150	115	85	65	16	58	4	4-Φ14	123	160	6					
32	180	135	100	78	18	66	4	4-Φ18	150	250	10					
40	200	145	110	85	18	76	4	4-Φ18	156	250	14					
50	220	160	125	100	20	88	4	4-Φ18	172	350	20					
65	250	180	145	120	22	110	4	8-Φ18	197	350	25					
80	280	195	160	135	22	121	4	8-Φ18	222	450	30					
100	320	230	190	160	24	150	4.5	8-Φ23	253	450	40					
125	400	270	220	188	28	176	4.5	8-Φ25	275	600	65					
150	400	300	250	218	30	204	4.5	8-Φ25	286	800	85					
200	550	375	320	282	38	260	4.5	12-Φ30	340	1200	100					
250	568	445	385	345	42	313	4.5	12-Φ34	470	1400	165					
	Q41F-63		Q41F-63P		Q341F-63		Q341F-63P		Q641F-63		Q641F-63P		Q9B41F-63		Q9B41F-63P	
15	140	105	75	55	18	40	4	4-Φ14	105	130	3.1					
20	155	125	90	68	20	51	4	4-Φ18	125	130	4.9					
25	180	135	100	78	22	58	4	4-Φ18	135	160	7.2					
32	200	150	110	82	24	66	4	4-Φ23	150	160	8.7					
40	220	165	125	95	24	76	4	4-Φ23	165	230	12.1					
50	250	175	135	105	26	88	4	4-Φ23	175	230	16.7					
65	280	200	160	130	28	110	4	8-Φ23	200	400	28.2					
80	320	210	170	140	30	121	4	8-Φ23	210	400	36					
100	350	250	200	168	32	150	4.5	8-Φ25	250	700	66					
125	455	295	240	202	36	176	4.5	8-Φ30	295	1100	98					
150	495	340	280	240	38	204	4.5	8-Φ34	340	1500	142					

# API FLANGED FLOATING BALL VALVE

## 美标法兰浮动球阀

### 设计 Design

派利球阀为提供最大的操作寿命和可靠性而设计和生产的，所有的球阀都符合美国石油学会标准API608和API6D的求和英标BS 5351与美国机械工程师协会标准ASME B16.34一致。阀门由完整的阀体、阀盖和内件组成。

Paili ball valve are designed and manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of API Standard API 600&API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers Standard ASME B 16.34. Valves are available in a complete range of body/bonnet materials and trims.

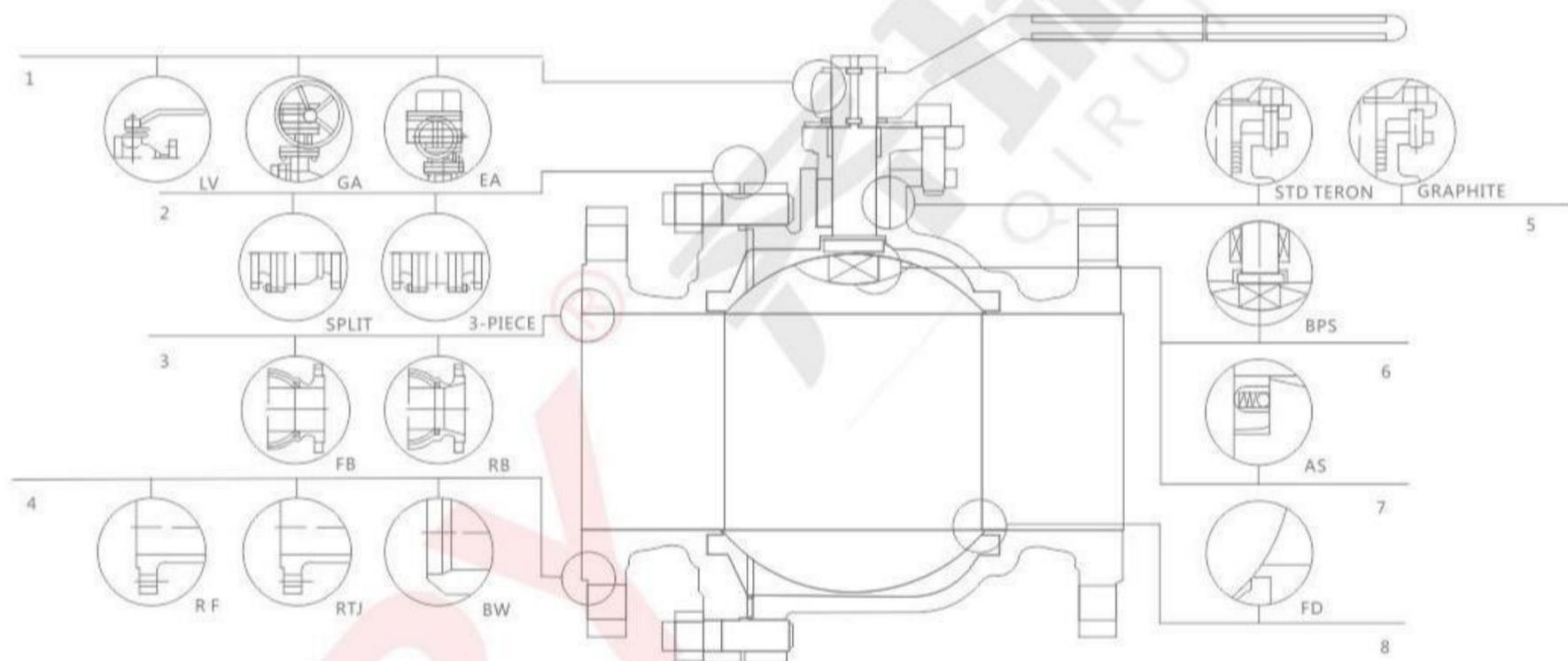
### 材料范围 Rang of Materials

阀体/阀盖的材料包括碳含量的九个等级，低合金和不锈钢，在特殊的适用中，他们可用合金和不锈钢的其他等级。有许多内件供不同的环境下使用，填料和垫片的选择也为各种环境所具备。

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels. For special applications they can be supplied in other grades of alloy and stainless steel. There's a full range of trim materials to match any service. Optional packing and gasket materials are available for a full range of service conditions.

### 阀门的商标可以按照客户的要求修改 Available Modifications For Trademark Cast Steel Valves

- |            |                                |              |  |
|------------|--------------------------------|--------------|--|
| * 内件变化     | * Trim changes                 | * 压力调节       | * Pressure Equalizing                    |
| * 连接方式改变   | * End connection Modifications | * 静电弹簧/防火标准  | * AS or FD                               |
| * 填料和垫片的改变 | * Packing and Gasket Changes   | * 客户的特殊铸造要求  | * Customer specified Coatings            |
| * 固定式操作    | * Operator Mounting            | * 焊接端的内孔改变   | * Weld End Bore Changes                  |
| * 加长手柄     | * Handwheel Extensions         | * 氧/氢气的清洁及包装 | * Oxygen & Chlorine Cleaning & Packaging |



#### 1、操作 Operating

用手柄更容易操作，同样也可以用蜗轮、电动、气动、液动，他们用于更艰难的环境下

Extended lever for easy operation. Also available with gearing, motor actuator, pneumatic or hydraulic actuators for more difficult services.

#### 2、阀体-阀盖 BODY&BONNET

不采3片式12"以下的阀体、阀盖，用这种结构更方便于外部零件的修理和替换

Split or 3-piece, split body&bonnet for 12" & Small Disassembles easily for repair or replacement of internal components.

#### 3、通径 BORE

全通径和缩径全通径适用于大的流量介质，也可请扫管路

Full and reduced full diameters are suitable for large flow media, also please sweep the pipe

#### 4、连接方式 End Connections

可采用法兰连接、环连接、对接焊管件

Flange connection, ring connection and butt welding fitting can be used

#### 5、填料 Packing

标准填料一般采用特氟龙材质，保证填料在高循环的压缩和严峻的操作环境下，石墨填料适合高温条件下使用

STD Packing Multiple V-TEFLON packing, combined with live loading, maintains packing compression under high-cycle and severe service applications. Graphite packing use situation for high-temperature.

#### 6、阀杆防脱 BPS

防止阀杆脱落，一个压力安全的阀杆设计应该是有防脱结构，在正常压力下不易飞出

To prevent stem shedding, a pressure-safe stem design should be designed with a trip-proof design that does not fly out under normal pressure

#### 7、静电弹簧 AS

这种连接总是在球体和阀杆/阀体之间运动卸载最终在操作时静止

This connection always moves the ball and stem/body and the unloading eventually stops during operation

#### 8、防火标志 FD

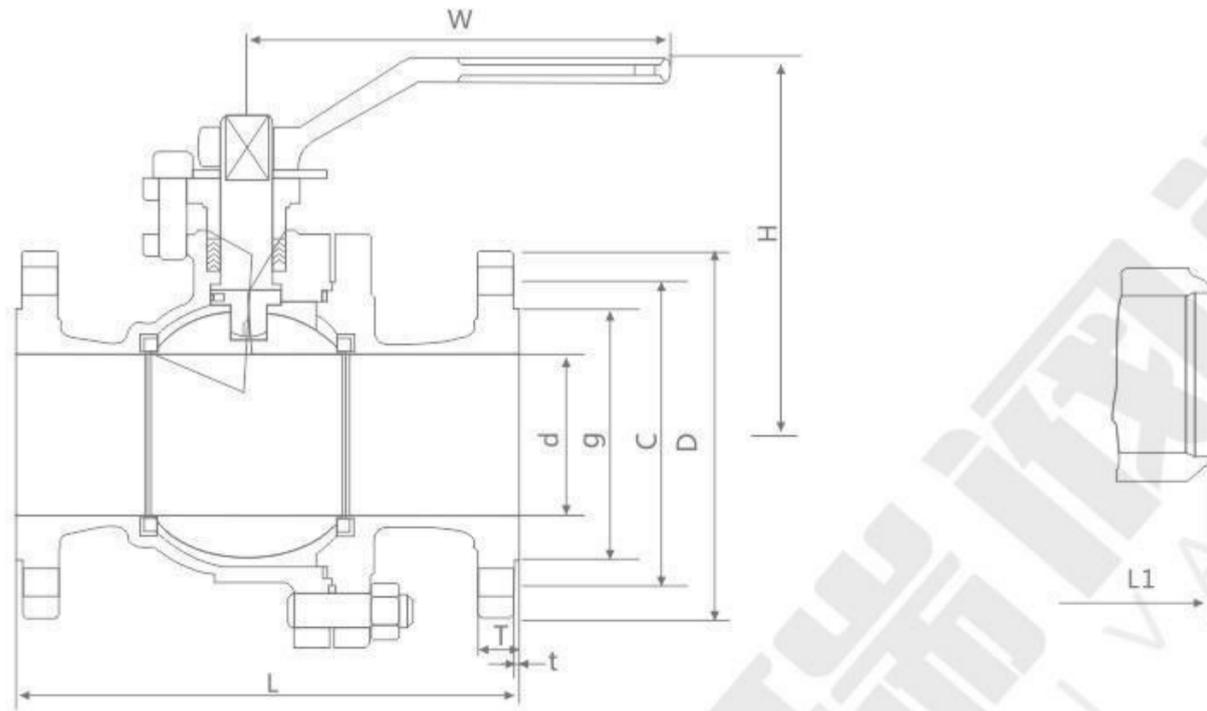
根据API607或BS6755来设计，确保他们在发生火灾时的操作适用性，其次金属密封面当主要的密封面被火破坏时就像是一层隔离墙，符合API607的阀门带石墨填料和垫片

Fire Durable. Designed according to API607 or BS6755 to ensure their operability in case of fire, the metal sealing surface ACTS as a barrier when the main sealing surface is damaged by fire, and API607 compliant valves with graphite packing and gaskets

# API FLANGED FLOATING BALL VALVE

## 美标法兰浮动球阀

Q41F-150Lb



### 应用标准

球阀符合API 608/API 6D标准  
球阀符合ISO 10434/ISO 14313标准  
防火标志采用API 607 标准  
防静电采用API 608标准  
符合ASME B 16.34标准  
结构长度符合ASME B 16.10标准  
法兰尺寸符合ASME B 16.5标准  
对接焊符合ASME B 16.25标准  
试验与检验符合API 598/API 6D标准

### Applicable standards

BALL VALVES, API 608/API 6D  
BALL VALVES, ISO 10434/ISO 14313  
FIRE DURABLE, API 607  
ANTI-STATIC, API 608  
VALVES, ASME B 16.34  
FACE TO FACE, ASME B 16.10  
END FLANGES, ASME B 16.5  
BUTTWELDING ENDS, ASME B 16.25  
INSPECTION AND TEST, API 598/API 6D

### 设计描述

全通径设计  
螺栓连接  
浮动结构  
防脱阀杆  
防火设计  
静电装置  
切断装置  
ISO5211 固定盘  
法兰/焊接端  
蜗轮操作

### Design description:

FULL PORT DESIGN  
BB, BOLTED BONNET, SPLIT BODY  
FLOATING BALL TYPE  
BLOW-OUT PROOF STEM  
FIRE DURABLE CONSTRUCTION  
ANTI-STATIC DEVICE  
STOPPER DEVICE  
ISO5211 MOUNTING PAD  
FLANGED OR BUTT WELDING ENDS  
AVAILABLE WITH BG OPERATOR

### 各部件材质 Materials of parts

序号 NO	零件名称 Part Name	ASTM材质 ASTM Material		
		碳钢Carbon Steel	CF8M	CF8
1	阀体Body	A216-WCB	A351-CF8M	CF8
2	阀盖Bonnet	A216-WCB	A351-CF8M	CF8
3	球Ball	A182-F304 )	A182-F316	F304
4	阀杆Stem	A276-304	A276-316	F304
5	阀座Seat seat		R.PTFE	
6	垫片Gasket	石墨+3042 ) Graphite+3042 )	PTFE	PTFE
7	阀盖螺栓Valve cover bolt	A193-B7	A193-B8M	A193-B8M
8	阀盖螺母Valve cover nut	A194-2H	A194-8M	A194-8M
9	填料Packing		PTFE	PTFE
10	填料压板Packing press plate	A216-WCB	CF8	CF8
11	填料螺栓Packing bolt	A193-B7	A193-B8M	A193-B8M
12	定位片Positioning sheet	碳钢Carbon Steel	F304	F304
13	手柄Handle		碳钢Carbon Steel	

注释：1、A105+ENP 可选择的 Note:1).A105+ENP optional

2、缠绕石墨垫片 2).Spiral wound construction.

# API FLANGED FLOATING BALL VALVE

## 美标法兰浮动球阀

主要连接尺寸 Main connection dimensions

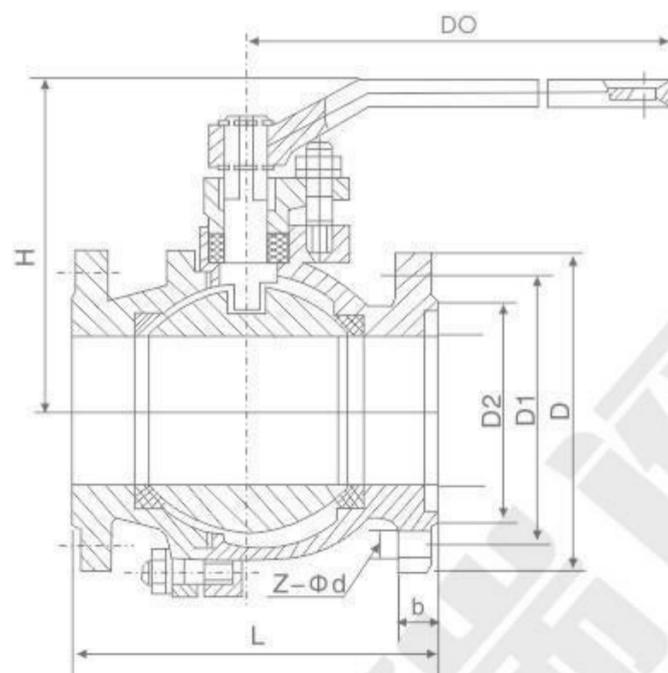
公称压力 Nominal pressure	Size	Dimensions(mm)									
	DN	d	L	D	C	g	T	t	H	W	n-Φ
class 150Lb	1/2"	15	108	89	60.5	35	12.7	1.6	87.5	142	4-15
	3/4"	20	117	98	70.0	43	12.7	1.6	87.5	142	4-15
	1"	25	127	108	79.5	51	13	1.6	91.5	142	4-15
	1 1/4"	32	140	117	89	64	14.5	1.6	107	190	4-15
	1 1/2"	40	165	127	98.5	73	15	1.6	128	200	4-15
	2"	50	178	152	120.5	92	16	1.6	136	200	4-19
	2 1/2"	65	190	178	139.5	105	18	1.6	158	300	4-19
	3"	80	203	190	152.5	127	19	1.6	196	350	4-19
	4"	100	229	229	190.5	157	24	1.6	212	700	4-19
	5"	125	256	254	215.9	186	24	1.6	252	1100	8-22
	6"	150	394	279	241.5	261	26	1.6	272	1100	8-22
	8"	200	457	343	298.5	270	29	1.6	342	1500	8-22
	10"	250	533	406	362	324	30	1.6	345	1500	12-25
	12"	305	610	483	432	381	32	1.6	385		12-25
	14"	337	686	535	476	413	35	1.6	430		12-29
	16"	387	762	597	540	470	37	1.6	470		16-29
18"	489	914	698	635	582	43	1.6	590		16-32	

主要连接尺寸 Main connection dimensions

公称压力 Nominal pressure	Size	Dimensions(mm)									
	DN	d	L	D	C	g	T	t	H	W	n-Φ
class 300Lb	1/2"	15	140	95	66.5	35	15	1.6	87.5	142	4-15
	3/4"	20	152	117	82.5	43	16	1.6	87.5	142	4-15
	1"	25	165	124	89.0	51	18	1.6	91.5	142	4-19
	1 1/4"	32	178	133	98.5	64	19	1.6	107	190	4-19
	1 1/2"	40	190	156	114.5	73	21	1.6	128	200	4-22
	2"	50	216	165	127	92	23	1.6	136	200	8-19
	2 1/2"	65	241	190	149	105	26	1.6	158	300	8-22
	3"	80	283	210	168.5	127	29	1.6	202	350	8-22
	4"	100	305	254	200	157	32	1.6	218	700	8-22
	5"	125	381	279	235	186	35	1.6	252	1100	8-22
	6"	150	403	318	270	216	37	1.6	272	1100	12-22
	8"	200	502	381	330	270	41	1.6	342	1500	12-25
	10"	250	568	444	387.5	324	48	1.6	345	1500	16-29
class 600Lb	1/2"	15	165	95	66.5	35	15	6.4	59	160	4-16
	3/4"	20	190	117	82.5	43	16	6.4	63	160	4-19
	1"	25	216	124	89.0	51	18	6.4	75	230	4-19
	1 1/4"	32	229	133	98.5	64	21	6.4	85	300	4-19
	1 1/2"	40	241	156	114.5	73	22.3	6.4	95	400	4-22
	2"	50	292	165	127	92	25.4	6.4	107	700	8-19
	4"	100	432	273	216	157.2	38	6.4	178	1100	8-25
	5"	125	491	330	267	186	44.5	6.4	225	1100	8-29
	6"	152	559	356	282	216	47.2	6.4	250	1500	12-29
8"	203	660	419	349	282	55.7	6.4	294	1500	12-32	

# JIS BALL VALVE

## 日标球阀



### 执行标准 Execution standard

设计标准 Design standard	结构长度 Face to Face	法兰连接尺寸 Flange End	压力-温度 Pressure-Temp.	试验与检验 Test & Check
BS 5351	JIS B2002	JIS B2212 B2214	JIS B2201	JIS B2003

### 规格主要尺寸 Main size

DN		10K							
mm	in	L	D	D1	D2	B	Z-Φd	H	D0
15	½"	108	95	70	52	12	4-Φ15	59	130
20	¾"	117	100	75	58	14	4-Φ15	63	130
25	1"	127	125	90	70	14	4-Φ19	75	160
32	1¼"	140	135	100	80	16	4-Φ19	75	160
40	1½"	165	140	105	85	16	4-Φ19	95	230
50	2"	178	155	120	100	16	4-Φ19	107	230
65	2½"	190	175	140	120	18	4-Φ19	142	400
80	3"	203	185	150	130	18	8-Φ19	152	400
100	4"	229	210	175	155	18	8-Φ19	178	700
125	5"	356	250	210	185	20	8-Φ23	252	1100
150	6"	394	280	240	215	22	8-Φ23	272	1100
200	8"	457	330	290	265	22	12-Φ23	342	1500
		20K							
15	½"	140	95	70	52	14	4-Φ15	59	130
20	¾"	152	100	75	58	16	4-Φ15	63	130
25	1"	165	125	90	70	16	4-Φ19	75	160
32	1¼"	178	135	100	80	18	4-Φ19	75	160
40	1½"	190.5	140	105	85	18	4-Φ19	95	230
50	2"	216	155	120	100	18	8-Φ19	107	230
65	2½"	241	175	140	120	20	8-Φ19	142	400
80	3"	283	200	160	135	22	8-Φ22	152	400
100	4"	305	225	185	160	24	8-Φ22	178	700
125	5"	381	270	225	195	26	8-Φ22	252	1100
150	6"	403	305	260	230	28	12-Φ22	272	1100
200	8"	502	350	305	275	30	12-Φ25	342	1500

# FIXED BALL VALVE

## Q47F/Y/H型固定式球阀

### 结构特点及用途

#### Structural characteristics and uses

1、操作省力：球体由上下轴承支撑，减少摩擦，消除了由于进口压力推动球体与密封座形成的巨大密封负荷而造成过大的扭矩。

1、 Operation: ball bearings supported by the up and down, to reduce friction, eliminate the pressure as imports to promote the formation of the sphere and the great seal sealed seat load caused by excessive torque.

2、密封性能可靠（见图1）：PTFE弹性材料密封圈嵌于不锈钢阀座内，金属阀座尾端没有弹簧，保证密封圈足够的预紧力，阀门在使用过程中密封面摩擦损时，在弹簧作用下阀门继续保证良好密封性能。

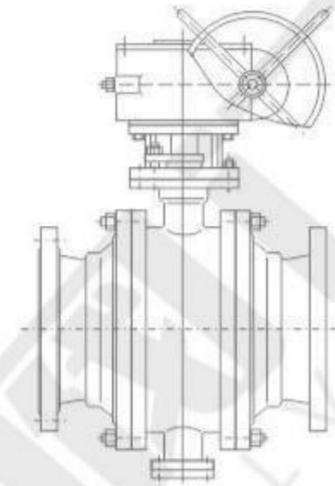
2、 Sealing performance and reliable (see Figure 1): PTFE elastic material embedded in stainless steel valve seat ring, the metal spring seat no end, to ensure adequate preload ring, valve sealing surface in the course of friction loss When the valve under the action of the spring to ensure good sealing performance.

3、防火结构（见图2）：为防止由于骤热或火灾的出现，使聚四氟乙烯密封圈烧毁，发生较大泄漏，而助长火势，在球体与阀座间设置防火密封环，在密封圈烧毁时，在弹簧力作用下，将阀座密封环迅速推向球体上，形成金属与金属密封，起到一定程度的密封效果。耐火试验符合API 6FA和API 607标准要求。

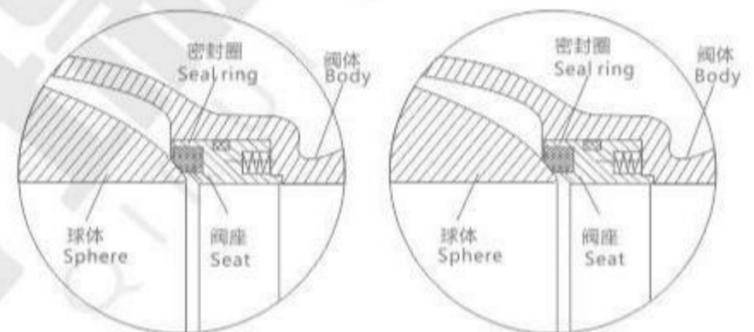
3、 Fire structure (see Figure 2): In order to prevent the sudden appearance of heat or fire to burn PTFE seals, large leak occurred, and contribute to the fire, the fire ball and set the seal ring between the valve seat, in the ring when burned, under the action of the spring force will quickly push the ball valve seat seal ring, the formation of metal to metal seal, play a certain degree of sealing effect. The fireproof experiment conforms to API 6FA and the API 607 standard requests.

4、自动泄压功能（见图3）：当阀门中腔停滞的介质压力异常升高超过弹簧的预紧力时，阀座后退脱离球体，达到自动泄压的效果，卸压后阀座自动复位。

4、 Automatic pressure relief function (see Figure 3): When the valve is in a stagnant medium pressure in the cavity increased over the spring preload, the seat back from the ball, to the effect of automatic pressure relief, pressure relief valve seat after automatically reset.



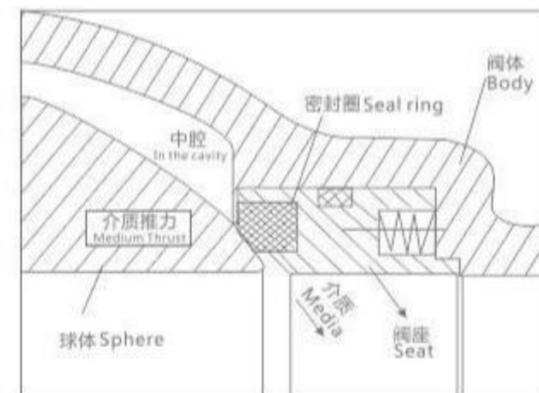
图一 Figure 1



平常时的密封  
Usual seals when

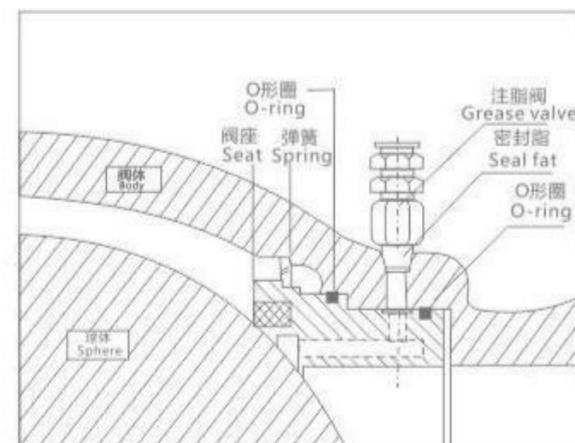
软密封烧损时的密封  
Burning of soft seal when the seal

图二 Figure 2



自动卸压功能  
Automatic pressure relief feature

图三 Figure 3



图四 Figure 4

# FIXED BALL VALVE

## Q47F/Y/H型固定式球阀

5、排泄管路：阀体上下均设置排泄孔，可检查阀座是否发生泄漏，在工作中，阀门处于全开或全关时，卸掉中腔压力，可直接更换填料；可以排放中腔滞留物，减少介质对阀门的污染。

辅助密封设置系统（客户需要请在订购时说明）

5、 Discharge tube: the upper and lower body were set to vent, to check whether the leak valve seat, at work, the valve is fully open or fully closed, the removal of the pressure in the cavity can directly replace the packing; to emissions cavity left in reducing pollution of medium on the valve.

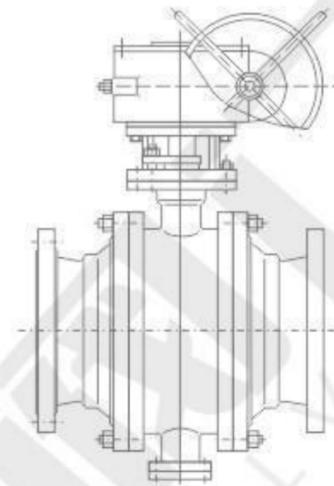
Auxiliary sealing set the system (customer needs when ordering please specify)

6、见图4：本阀门设计有辅助的阀座紧急密封系统，一旦密封受损或出现紧急情况而不能密封时，通过辅助密封系统向密封面注射相应的密封剂即可修复密封面，达到紧急密封。当输送的介质不洁或含有少量颗粒时，为保护密封面，确保达到可靠的密封，还可给这一装置注射相应的清洗剂或润滑剂对密封面进行清洗。

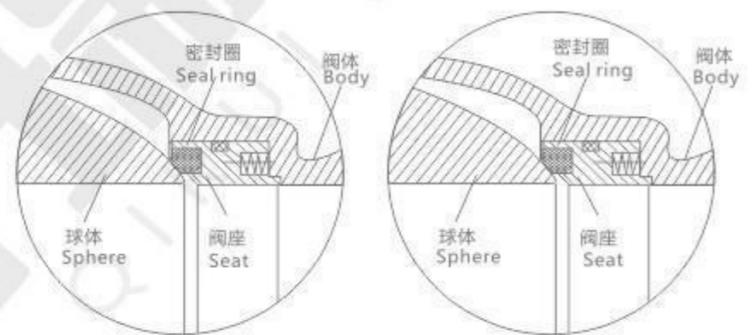
6、 Figure 4: The auxiliary valve seat designed for emergency sealing system, once the seal damage or emergency situations cannot be sealed, through the auxiliary sealing system corresponding to the sealing surface sealant injection sealing surface can be repaired, to an emergency seal. When the transport medium or containing a small amount of contaminated particles, in order to protect the sealing surface and ensure that a reliable seal, the device can also be injected to the appropriate cleaning agents or lubricants on the sealing surface cleaning.

7、广泛适用于食品、医药、石油、化工、天然气、钢铁、环保、造纸等输送管路介质的切断或流通。还可给这一装置注射相应的清洗剂或润滑剂对密封面进行清洗。

7、 Widely used in food, medicine, petroleum, chemical, natural gas, steel, environmental protection, paper and other media to cut off pipeline transportation or circulation. The device can also be injected to the appropriate cleaning agents or lubricants on the sealing surface cleaning.

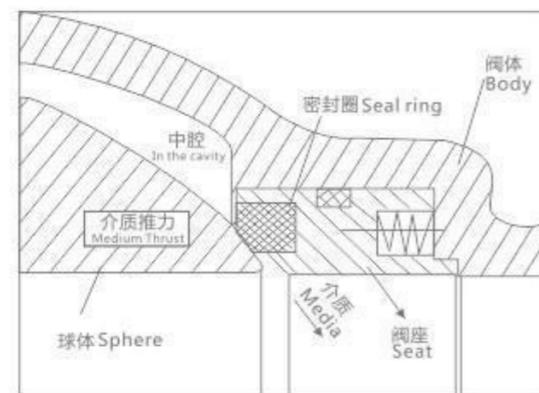


图一 Figure 1



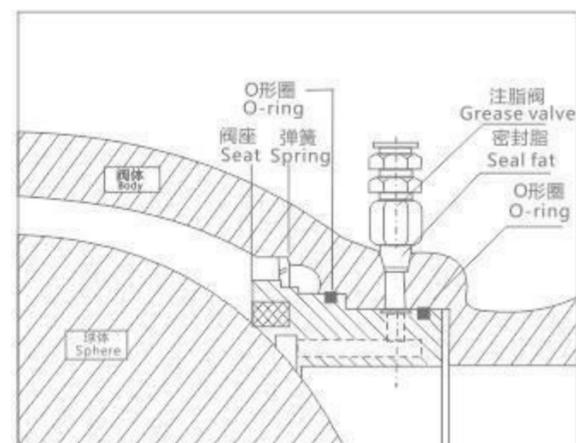
平常时的密封 Usual seals when      软密封烧损时的密封 Burning of soft seal when the seal

图二 Figure 2



自动卸压功能 Automatic pressure relief feature

图三 Figure 3



图四 Figure 4

# FIXED BALL VALVE

## Q47F/Y/H型固定式球阀

### 执行标准 Implementation of standards

- 1、设计和制造 Design and manufacture : GB/T 12237-1989; API 608
- 2、检验和试验 Inspection and test : GB/T 13927-1992; API 598
- 3、法兰连接 Flange connection : JB/T 79.1 ~ 2-1994; ASME/ANSI B 16.5
- 4、结构长度 Structure length : GB/T 12221-1989; ASME/ANSI B 16.10

### 性能规范 Performance Specifications

试验压力 Test pressure

单位 Unit : MPa

公称压力 PN	常温最大工作压力 Max temperature Working pressure	壳体试验压力 Case Test pressure	气密封试验压力 Gas Seals test pressure	高压密封试验压力 High-pressure sealing Test pressure
1.6	1.6	2.4	0.6	1.76
2.5	2.5	3.8	0.6	2.75
4.0	4.0	6.0	0.6	4.4
6.4	6.4	9.6	0.6	7.1
Class 150	2.0	3.0	0.6	2.2
Class 300	5.0	7.5	0.6	5.5

### 使用范围 Terms of Use

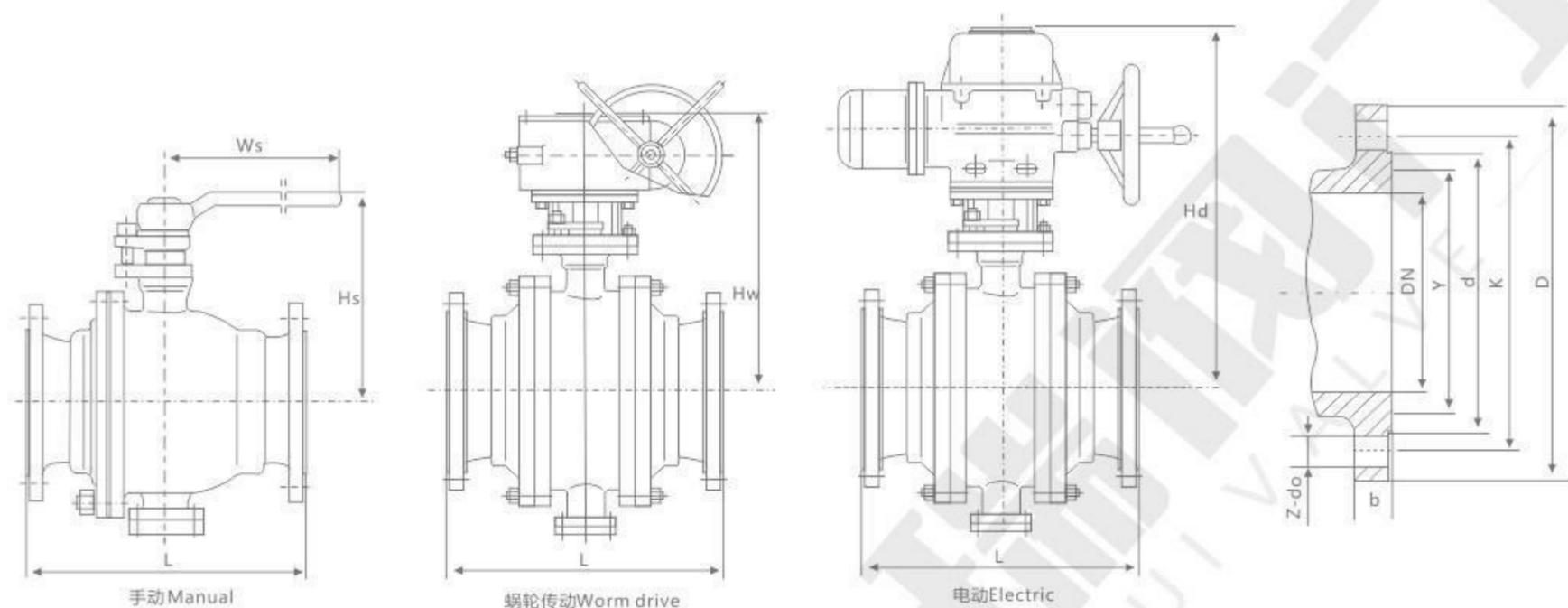
壳体材料 Shell material	阀座材料 Seat material	适用温度 Applicable temperature	适用介质 Applicable media
碳钢 C 型 Carbon Steel C	聚四氟乙烯 PTFE	≤150°C	水、蒸汽、油品等 Water, steam, oil, etc.
	对位聚苯 Counterpoint polystyrene	≤250°C	
铬镍钛钢 P 型 Chrome P-type nickel-titanium steel	聚四氟乙烯 PTFE	≤150°C	硝酸类 Nitric acid
	对位聚苯 Counterpoint polystyrene	≤200°C	
铬镍钼钛钢 R 型 Chrome-nickel steel R-Mo Ti	聚四氟乙烯 PTFE	≤150°C	醋酸类 Acetic acid
	对位聚苯 Counterpoint polystyrene	≤200°C	

### 主要零件材料 Main components material

阀体、阀盖 Body, bonnet	GB	WCB	ZG0Cr18Ni9	ZG0Cr17Ni12Mo2
	ASTM	WCB	CF8	CF8M
球体 Ball body	GB	2Cr13	0Cr18Ni9	0Cr17Ni12Mo2
	ASTM	420	304	316
阀杆 Stem	GB	2Cr13	0Cr18Ni9	1Cr18Ni12Mo2Ti
	ASTM	420	304	316
阀座 Seat	GB	2Cr13/PTFE	0Cr18Ni9/PTFE	0Cr17Ni12Mo2/PTFE
	ASTM	420/PTFE	304/PTFE	316/PTFE
填料 Packing	GB	PTFE	PTFE	PTFE
	ASTM	PTFE	PTFE	PTFE
螺栓 Bolt	GB	35	0Cr18Ni9	0Cr18Ni9
	ASTM	A193 B7	A320-B8	A320-B8
螺母 Nut	GB	45	0Cr18Ni9	0Cr18Ni9
	ASTM	A194 2H	A190-8	A194-8

# FIXED METAL SEAL BALL VALVE

## Q47F/Y/H型固定金属密封球阀



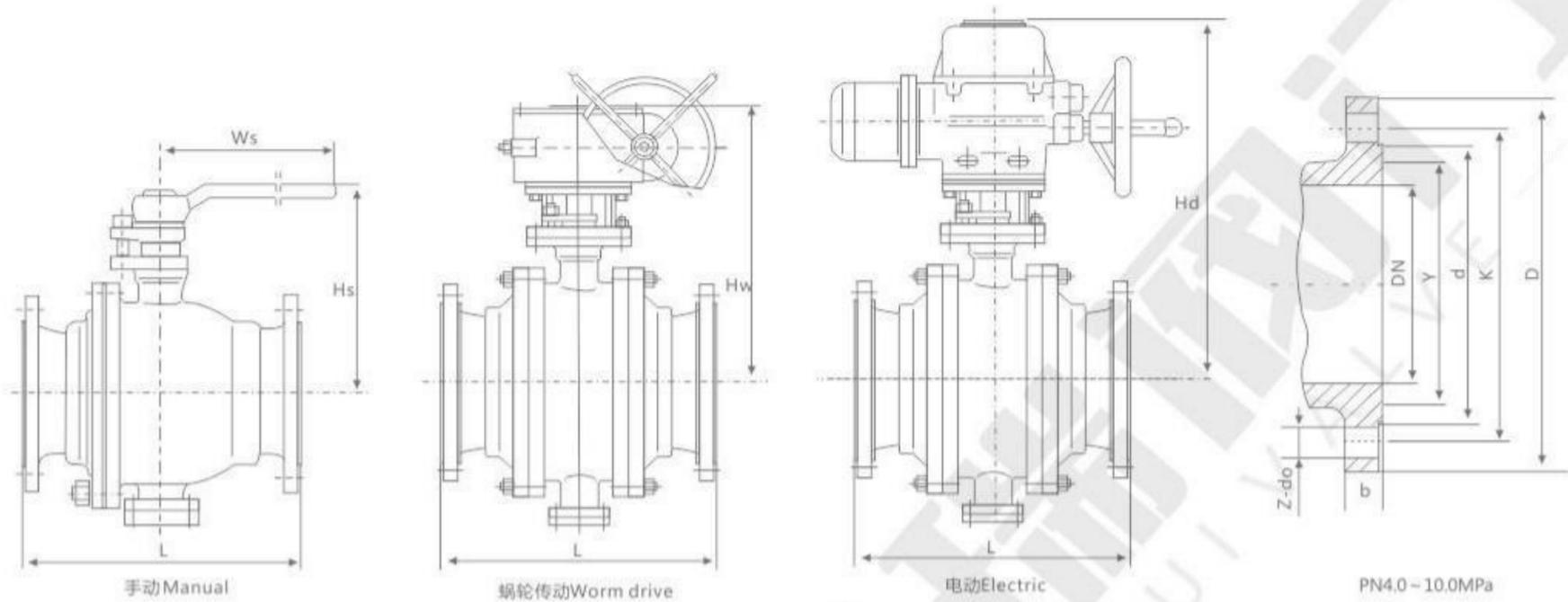
主要连接尺寸 Main connection dimensions

JB/T79.1

公称压力 PN	公称通径 DN	尺寸Size (mm)										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
1.6MPa	150	394	280	240	210	-	22	8-23	1000	305	470	540
	200	457	335	295	265	-	24	12-23	-	-	520	580
	250	533	405	355	320	-	26	12-25	-	-	610	640
	300	610	460	410	375	-	28	12-25	-	-	650	690
	350	686	520	470	435	-	32	16-25	-	-	740	785
	400	762	580	525	485	-	36	16-30	-	-	795	830
	450	864	640	585	545	-	38	20-30	-	-	860	910
	500	914	705	650	608	-	42	20-34	-	-	945	990
	600	1067	840	770	718	-	46	20-41	-	-	1040	1090
	700	1245	910	840	788	-	48	24-41	-	-	1150	1210
	800	1372	1020	950	898	-	50	24-41	-	-	1280	1340
	900	1524	1120	1050	998	-	52	28-41	-	-	1430	1510
	1000	1753	1255	1170	1110	-	54	28-48	-	-	1580	1640
	1200	2032	1485	1390	1325	-	56	32-54	-	-	1810	1910
1400	2300	1685	1590	1525	-	60	36-54	-	-	2010	2115	
2.5MPa	150	403	300	250	218	-	30	8-25	1000	305	470	555
	200	502	360	310	278	-	34	12-25	-	-	540	595
	250	568	425	370	332	-	36	12-30	-	-	630	655
	300	648	485	430	390	-	40	16-30	-	-	650	705
	350	762	550	490	448	-	44	16-34	-	-	740	795
	400	838	610	550	505	-	48	16-34	-	-	795	830
	450	914	660	600	555	-	50	20-34	-	-	860	910
	500	991	730	660	610	-	52	20-41	-	-	945	990
	600	1143	840	770	718	-	56	20-41	-	-	1040	1090
	700	1346	955	875	815	-	60	24-48	-	-	1150	1210
	800	1524	1070	990	930	-	64	24-48	-	-	1305	1340
	900	1727	1180	1090	1025	-	66	28-54	-	-	1505	1600
	1000	1880	1305	1210	1140	-	68	28-58	-	-	1615	1705
	1200	2184	1525	1420	1350	-	72	32-58	-	-	1925	2035
1400	2300	1750	1640	1560	-	78	36-65	-	-	2110	2185	

# FIXED METAL SEAL BALL VALVE

## Q47F/Y/H型固定金属密封球阀



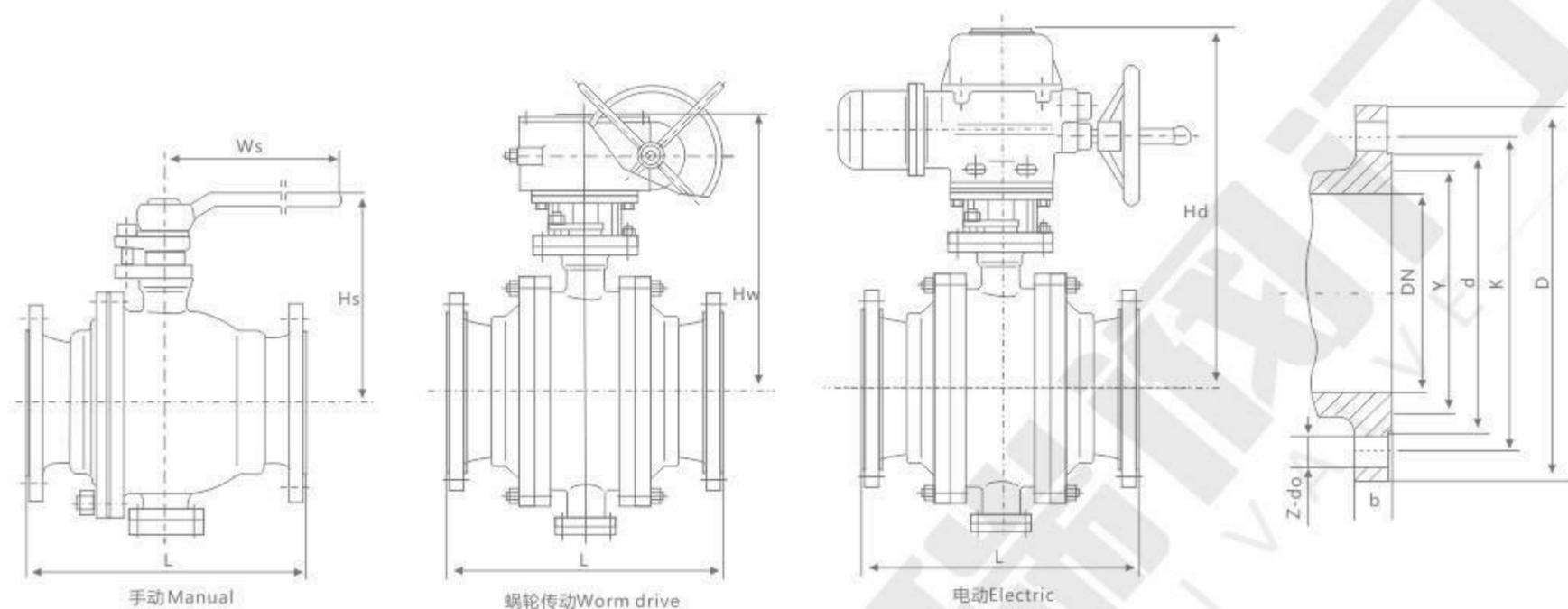
主要连接尺寸 Main connection dimensions

JB/T 79.2-1994

公称压力 PN(MPa)	公称通径 DN(mm)	尺寸 Size ( mm )										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
4.0MPa	150	403	300	250	218	204	30	8-25	1200	360	485	590
	200	502	375	320	282	260	38	12-30	-	-	580	640
	250	568	445	385	345	313	42	12-34	-	-	665	680
	300	648	510	450	408	364	46	16-34	-	-	760	810
	350	762	570	510	465	422	52	16-34	-	-	820	890
	400	838	655	585	535	474	58	16-41	-	-	860	940
	450	914	680	610	560	524	60	20-41	-	-	930	1010
	500	991	755	670	612	576	62	20-48	-	-	980	1130
	600	1143	890	795	730	678	62	20-54	-	-	1040	1090
	700	1346	995	900	835	768	68	24-54	-	-	1150	1210
	800	1524	1135	1030	960	876	76	24-58	-	-	1305	1340
	900	1727	1270	1168	1022	-	105	32-54	-	-	1505	1600
	1000	1880	1238	1156	1086	-	114	32-44	-	-	1615	1705
	1200	2184	1467	1372	1302	-	133	32-51	-	-	1925	2035
1400	-	1708	1600	1518	-	154	28-60	-	-	2110	2185	
6.4MPa	150	495	340	280	240	204	38	8-34	1200	360	485	590
	200	597	405	345	300	260	44	12-34	-	-	580	650
	250	673	470	400	352	313	48	12-41	-	-	665	720
	300	762	530	460	412	364	54	16-41	-	-	760	840
	350	826	595	525	475	422	60	16-41	-	-	820	930
	400	902	670	585	525	474	66	16-48	-	-	870	990
	500	1054	800	705	640	576	70	20-54	-	-	995	1150
	600	1232	930	820	750	678	76	20-58	-	-	1100	1180
	700	1397	1035	940	800	-	95	28-51	-	-	1180	1230
	800	1651	1149	1054	914	-	108	28-54	-	-	1345	1385
	900	1880	1270	1168	1022	-	114	32-54	-	-	1550	1655
	1000	1981	1270	1175	1092	-	133	32-51	-	-	1675	1745
	1200	2311	1511	1403	1308	-	152	28-60	-	-	1945	2075

# FIXED METAL SEAL BALL VALVE

## Q47F/Y/H型固定金属密封球阀



主要连接尺寸 Main connection dimensions

公称压力 PN(MPa)	公称通径 DN(mm)	尺寸Size ( mm )										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
Class 150	2"	178	152	120.7	92	-	14.3	4-19	260	155	-	-
	2 1/2"	190	178	139.7	105	-	15.9	4-19	350	185	-	-
	3"	203	190	152.4	127	-	17.5	4-19	500	205	-	-
	4"	229	229	190.5	157	-	22.3	8-19	650	255	390	500
	5"	356	254	215.9	186	-	22.3	8-22.5	800	285	410	520
	6"	394	279	241.3	216	-	23.9	8-22.5	1000	305	470	540
	8"	457	343	298.5	270	-	27.0	8-22.5	-	-	520	580
	10"	533	406	362	324	-	28.6	12-25.5	-	-	610	640
	12"	610	483	431.8	381	-	30.2	12-25.5	-	-	650	690
	14"	686	533	476.3	413	-	33.4	12-28.5	-	-	740	785
	16"	762	597	539.8	470	-	35.0	16-28.5	-	-	795	830
	18"	864	635	577.9	533	-	38.1	16-32	-	-	860	910
	20"	914	699	635.0	584	-	41.3	20-32	-	-	945	990
	24"	1067	813	749.3	692	-	46.1	20-35	-	-	1040	1090
28"	1245	927	864	800	-	71	28-35	-	-	1150	1210	
32"	1372	1060	978	914	-	81	28-41	-	-	1280	1340	
Class 300	2"	216	165	127	92	-	20.7	8-19	260	155	-	-
	2 1/2"	241	190	149.2	105	-	23.9	8-22.5	350	185	-	-
	3"	282	210	168.3	127	-	27.0	8-22.5	500	205	-	-
	4"	305	254	200	157	-	30.2	8-22.5	800	270	410	530
	5"	381	279	235	186	-	33.4	8-22.5	1000	305	470	560
	6"	403	318	269.9	216	-	35.0	12-22.5	1200	340	485	590
	8"	502	381	330.2	270	-	39.7	12-25.5	-	-	580	640
	10"	568	445	387.4	324	-	46.1	16-28.5	-	-	665	680
	12"	648	521	450.8	381	-	49.3	16-32	-	-	760	810
	14"	762	584	514.4	413	-	52.4	20-32	-	-	820	890
	16"	838	648	571.5	470	-	55.6	20-35	-	-	860	940
	18"	914	711	628.5	533	-	58.8	24-35	-	-	930	1010
	20"	991	775	685.8	584	-	62.0	24-35	-	-	980	1130
	Class 600	2"	292	165	127	108	-	25.4	8-19	350	175	-
2 1/2"		330	190	149.2	127	-	28.6	8-22.5	500	200	-	-
3"		356	210	168.3	146	-	31.8	8-22.5	650	235	-	-
4"		432	273	215.9	175	-	38.1	8-25.5	1000	275	395	550
5"		508	330	266.7	210	-	44.5	8-28.5	1200	325	430	580
6"		559	356	292.1	241	-	47.7	12-28.5	-	-	495	620
8"		660	419	349.2	302	-	55.6	12-32	-	-	595	680
10"		787	508	431.8	356	-	63.5	16-35	-	-	680	740
12"	838	559	489.0	413	-	66.7	20-35	-	-	790	850	

# FORGED STEEL BALL VALVE

## 锻钢球阀

### 结构特点及用途

- 1、抗硫化应力裂化：阀门接触介质的材料都是按美国腐蚀工程师协会 NACE0 1-75的标准进行选择，且按标准进行表面镀镍，能满足硫化环境工况的要求。
- 2、用聚合物或金属作密封材料，在高温、高压工况具有优良的密封性能。
- 3、设置填料箱，防止阀门内腔压力异常升高而使阀杆飞出，增置倒密封结构，能确保填料可靠密封。
- 4、广泛适用于化工、炼油、油气、天然气、钢铁等介质管路。

### Unique feature and use

- 1、Anti-curing stress cracking: The valve contact medium's material is corrodes Engineer according to the US the association NACE0 1-75 standards to carry on the choice, and carries on the superficial nickel plating according to the standard, can satisfy the curing environment operating mode the request.
- 2、Make the packing material with the polymer or the metal, in the high temperature, the high-pressured operating mode has the fine sealing property.
- 3、The establishment stuffing box, prevents the valve cavity pressure anomaly to elevate causes the valve lever to depart, increases ets seals the structure but actually, can guarantee that the padding seals reliably.
- 4、Widely is suitable for medium pipelines and so on chemical industry, refinery, oil gas, natural gas, steel and iron.

### 执行标准 Implementation of standards

- 1、设计和制造Design and manufacture: GB/T 12237-1989; API 608
- 2、检验和试验Inspection and test: GB/T 13927-1992; API 598
- 3、法兰连接Flange connection: JB/T 79.1-1994; ASME/ANSI B 16.5
- 4、结构长度Structure length: GB/T 12221-1989; GB/T 15188.1-1994; ASME/ANSI B 16.10

### 性能规范 Performance Specifications

试验压力 Test pressure

单位 Unit : MPa

使用范围 Terms of use

公称压力 PN	常温最大工作压力 Max temperature Working pressure	壳体试验压力 Case Test pressure	气密封试验压力 Gas Seals test pressure	高压密封试验压力 High-pressure sealing test pressure
1.6	1.6	2.4	0.6	1.76
2.5	2.5	3.8	0.6	2.75
4.0	4.0	6.0	0.6	4.4
6.4	6.4	9.6	0.6	7.1
10.0	10.0	15.0	0.6	11.0
16.0	16.0	24.0	0.6	17.6
20.0	20.0	30.0	0.6	22.0
25.0	25.0	37.5	0.6	27.5
Class 150	2.0	3.0	0.6	2.2
Class 300	5.0	7.5	0.6	5.5
Class 600	10.0	15.0	0.6	11.0
Class 900	15.0	22.5	0.6	16.5
Class 1500	25.0	37.5	0.6	27.5

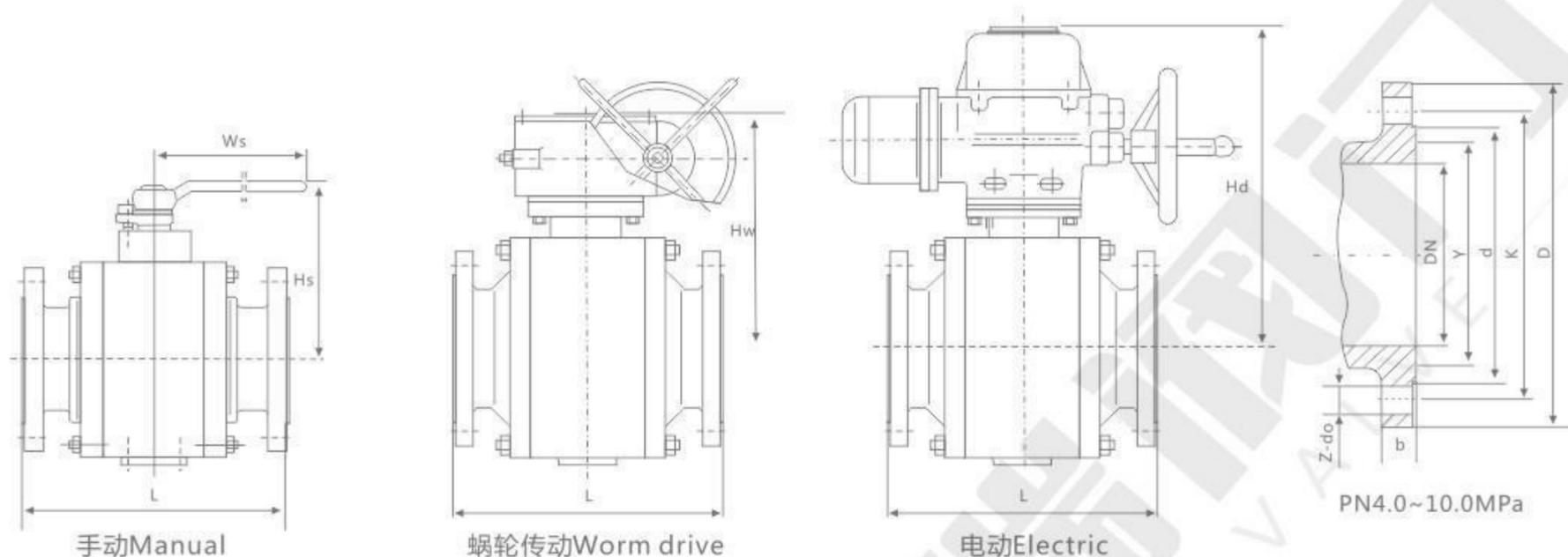
壳体材料 Shell material	阀座材料 Seat Material	适用温度 Applicable medium	适用介质 Applicable temperature
碳钢C型 Carbon Steel C	PTFE PTFE	≤150°C	水、蒸汽、油品等 Water, steam, oil, etc.
	不锈钢 Stainless steel	≤425°C	
铬镍钛钢P型 Chrome P-type nickel-titanium steel	PTFE PTFE	≤150°C	硝酸类 Nitric acid
	不锈钢 Stainless steel	≤200°C	
铬镍钼钛钢R型 Chrome-nickel steel R-Mo Ti	PTFE PTFE	≤150°C	醋酸类 Acetic acid
	不锈钢 Stainless steel	≤200°C	
铬钼钒钢I型 Cr-Mo steel I-V	硬质合金 Hard alloy	≤550°C	蒸汽、冶炼、能源等 Steam, metallurgical, energy, etc.

### 主要零件材料 Main components material

阀体、阀盖、填料箱 Body, bonnet Packing Box	GB	25	1Cr18Ni9Ti	0Cr18Ni12Mo2Ti	15Cr1Mo1V
	ASTM	1025	304	316	F22a
球体Ball	GB	2Cr13/表面特殊处理 Special surface treatment	1Cr18Ni9Ti/表面特殊处理 Special surface treatment	0Cr18Ni12Mo2Ti/表面特殊处理 Special surface treatment	25Cr2Mo1V/表面特殊处理 Special surface treatment
	ASTM	420	304+HF	316+HF	F22a+HF
阀杆、固定轴 Stern, fixed axis	GB	2Cr13	0Cr18Ni9	0Cr17Ni12Mo2	25Cr2Mo1V
	ASTM	420	304	316	F22a
阀座Seat	GB	PTFE 2Cr13	PTFE 0Cr18Ni9	PTFE 0Cr17Ni12Mo2	25Cr2Mo1V
	ASTM	PTFE 420	PTFE 304	PTFE 316	F22a
填料Packing	GB	PTFE 柔性石墨 Flexible Graphite	PTFE 柔性石墨 Flexible Graphite	PTFE 柔性石墨 Flexible Graphite	柔性石墨 Flexible Graphite
	ASTM	PTFE 柔性石墨 Flexible Graphite	PTFE 柔性石墨 Flexible Graphite	PTFE 柔性石墨 Flexible Graphite	柔性石墨 Flexible Graphite
螺栓Bolt	GB	35	0Cr18Ni9	0Cr18Ni9	15Cr1Mo1V
	ASTM	A193 B7	A320-B8	A320-B8	A193 B16
螺母Nut	GB	45	1Cr13	1Cr13	20CrMo
	ASTM	A194 2H	A194-8	A194-8	A194-4

# FORGED STEEL BALL VALVE

## 锻钢球阀



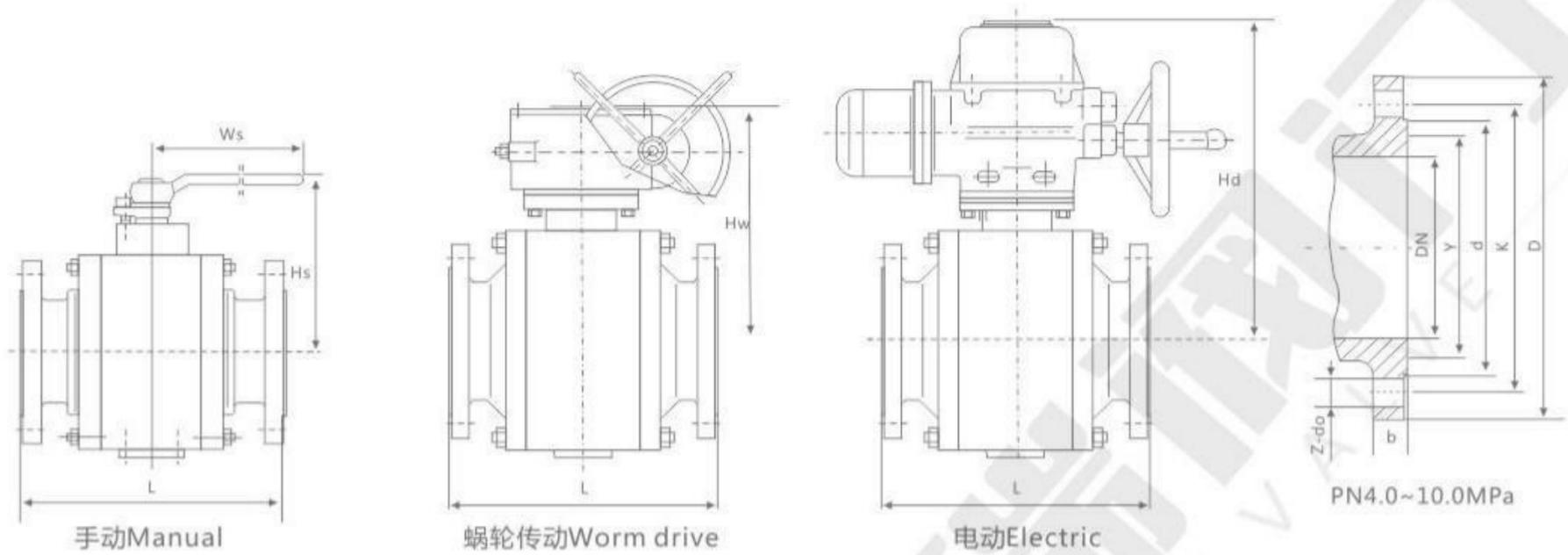
主要连接尺寸 Main connection dimensions

JB/T 79.1-1994

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

# FORGED STEEL BALL VALVE

## 锻钢球阀



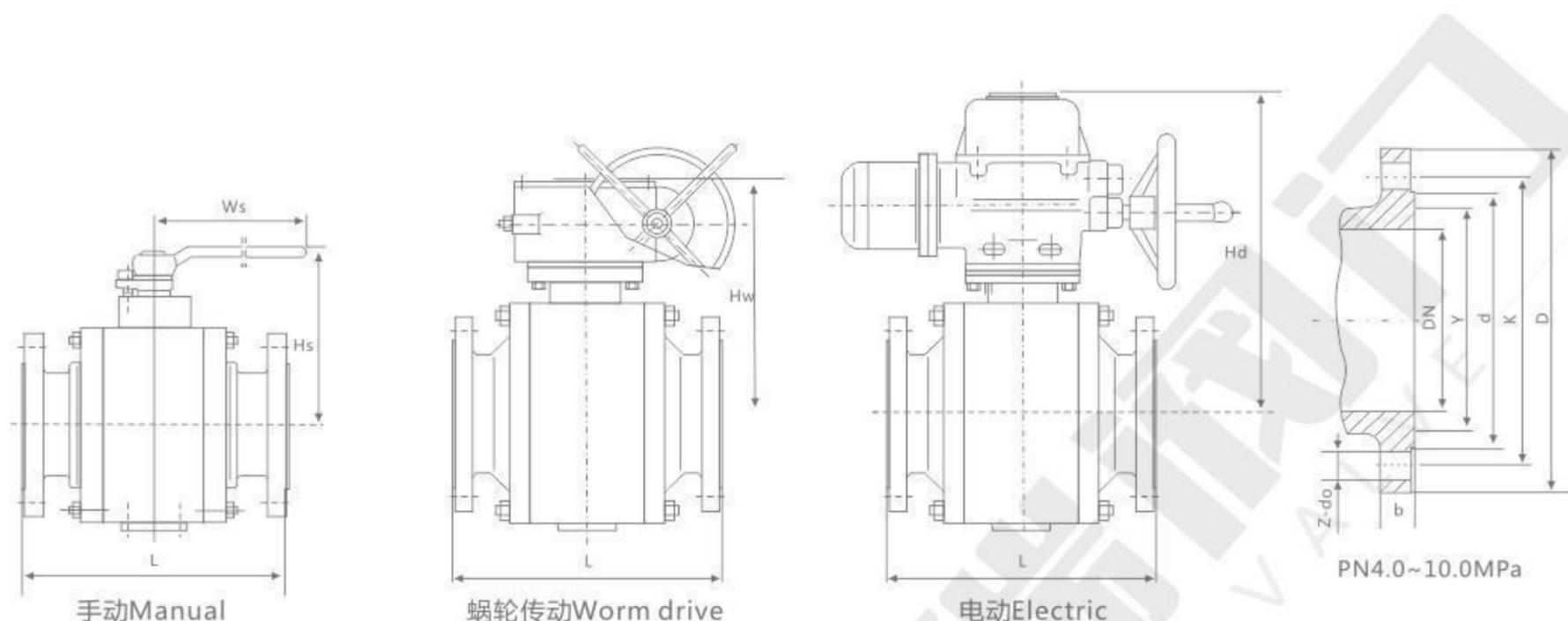
主要连接尺寸 Main connection dimensions

JB/T 79.2-1994

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

# FORGED STEEL BALL VALVE

## 锻钢球阀



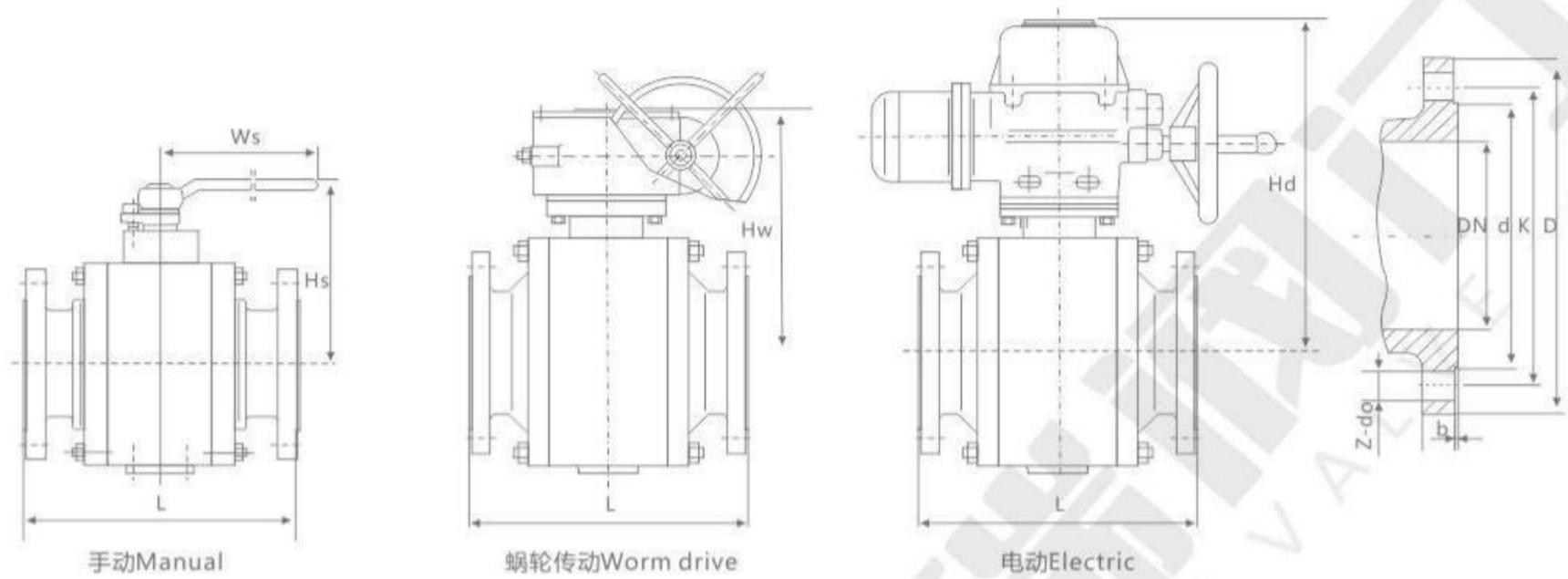
主要连接尺寸 Main connection dimensions

JB/T 79.2-1994

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

# API FORGED STEEL BALL VALVE

## 美标锻钢球阀

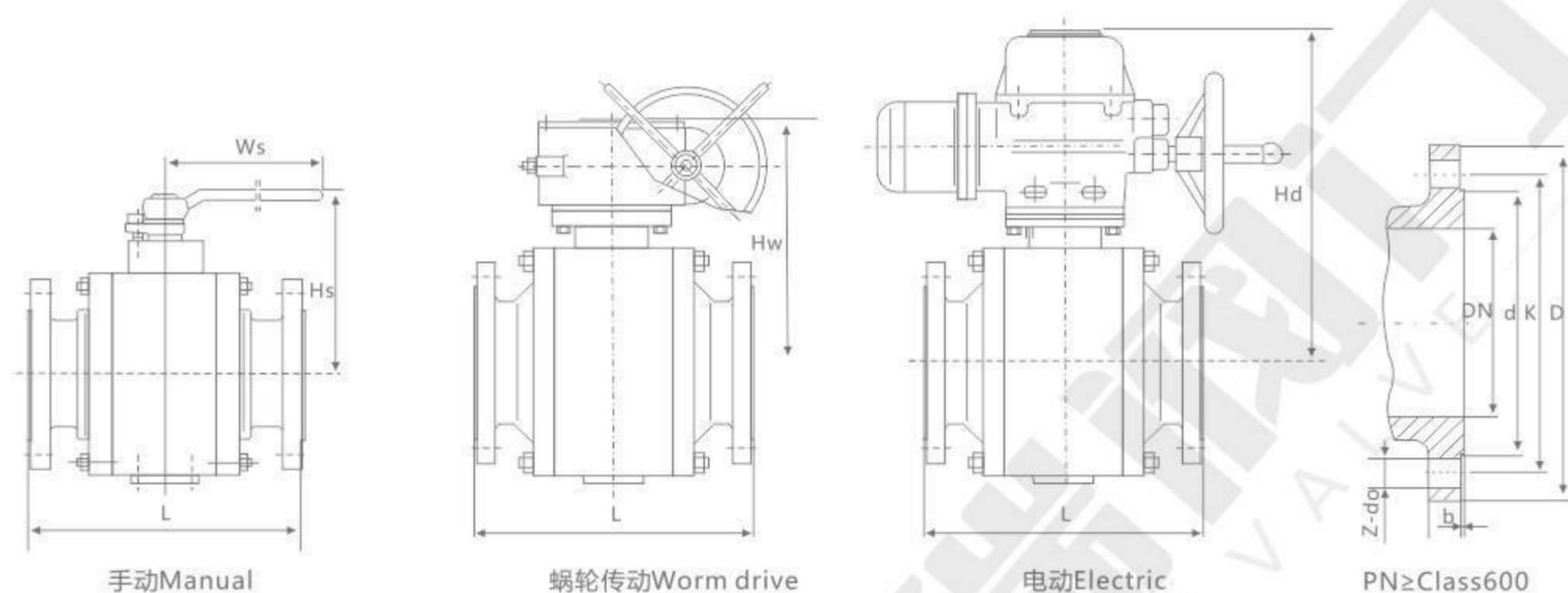


主要连接尺寸 Main connection dimensions

公称压力 PN	公称通径 DN	尺寸Size ( mm )										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
Class 150	1 1/2"	165	125	98.4	73	-	12.7	4-16	230	135	-	-
	2"	178	150	120.7	92	-	14.3	4-19	260	150	-	-
	2 1/2"	190	180	139.7	105	-	15.9	4-19	350	180	-	-
	3"	203	190	152.4	127	-	17.5	4-19	500	195	-	-
	4"	229	230	190.5	157	-	22.3	8-19	650	245	310	420
	5"	356	255	215.9	186	-	22.3	8-22.5	800	270	330	440
	6"	394	280	241.3	216	-	23.9	8-22.5	1000	295	390	470
	8"	457	345	298.5	270	-	27.0	8-22.5	-	-	440	510
	10"	533	405	362	324	-	28.6	12-25.5	-	-	490	560
	12"	610	485	431.8	381	-	30.2	12-25.5	-	-	530	600
	14"	686	535	476.3	413	-	33.4	12-28.5	-	-	620	670
	16"	762	595	539.8	470	-	35.0	16-28.5	-	-	675	720
	18"	864	635	577.9	533	-	38.1	16-32	-	-	740	790
	20"	914	700	635	584	-	41.3	20-32	-	-	825	870
24"	1067	815	749.3	692	-	46.3	20-35	-	-	920	960	
Class 300	1 1/2"	190	155	114.3	73	-	19.1	4-22.5	230	135	-	-
	2"	216	165	127	92	-	20.7	8-19	260	150	-	-
	2 1/2"	241	190	149.2	105	-	23.9	8-22.5	350	180	-	-
	3"	282	210	168.3	127	-	27.0	8-22.5	500	195	-	-
	4"	305	255	200	157	-	30.2	8-22.5	800	250	320	430
	5"	356	280	235	186	-	33.4	8-22.5	1000	280	340	450
	6"	403	320	269.9	216	-	35.0	12-22.5	1200	300	405	480
	8"	502	380	330.2	270	-	39.7	12-25.5	-	-	450	530
	10"	568	445	387.4	324	-	46.1	16-28.5	-	-	505	590
	12"	648	520	450.8	381	-	49.3	16-32	-	-	545	620
	14"	762	585	514.4	413	-	52.4	20-32	-	-	640	690
	16"	838	650	571.5	470	-	55.6	20-35	-	-	690	740
	18"	914	710	628.6	533	-	58.8	24-35	-	-	760	810
	20"	991	775	685.8	584	-	62.0	24-35	-	-	850	900

# API FORGED STEEL BALL VALVE

## 美标锻钢球阀



主要连接尺寸 Main connection dimensions

公称压力 PN	公称通径 DN	尺寸Size (mm)										
		L	D	K	d	Y	b	Z-do	Ws	Hs	Hw	Hd
Class 600	1 1/2"	241	155	114.3	90	68.263	22.3	4-22.5	260	160	-	-
	2"	292	165	127	108	82.550	25.4	8-19	350	180	-	-
	2 1/2"	330	190	149.2	127	101.600	28.6	8-22.5	500	200	-	-
	3"	356	210	168.3	146	123.825	31.8	8-22.5	800	240	310	410
	4"	432	275	215.9	175	149.225	38.1	8-25.5	1000	270	340	450
	5"	508	330	266.7	210	180.975	44.5	8-28.5	1200	320	360	505
	6"	559	355	292.1	241	211.138	47.7	12-28.5	-	-	425	555
	8"	660	420	349.2	302	269.876	55.6	12-32	-	-	470	625
	10"	787	510	431.8	356	323.851	63.5	16-35	-	-	525	645
	12"	838	560	489.0	413	381.001	66.7	20-35	-	-	565	715
	14"	889	605	527.0	457	419.101	69.9	20-38	-	-	670	770
	16"	991	685	603.2	508	469.901	76.2	20-41	-	-	720	840
	18"	1092	745	654.0	575	533.401	82.6	20-44.5	-	-	780	920
20"	1194	815	723.9	635	584.201	88.9	24-44.5	-	-	850	995	
Class 900	1 1/2"	305	180	123.8	73	-	31.8	4-28.5	350	160	-	-
	2"	368	215	165.1	92	-	38.1	8-25.5	500	180	-	-
	2 1/2"	419	245	190.5	105	-	41.3	8-28.5	800	200	-	-
	3"	381	240	190.5	156	123.82	38.1	8-25.5	1000	240	310	410
	4"	457	290	235.0	181	149.22	44.5	8-32	1200	270	340	450
	5"	559	350	279.4	216	180.98	50.8	8-35	-	-	360	505
	6"	610	380	317.5	241	211.12	55.6	12-32	-	-	425	560
	8"	737	470	393.7	308	269.88	63.5	12-38	-	-	530	630
	10"	838	545	469.9	362	323.85	69.9	16-38	-	-	570	720
	12"	965	610	533.4	419	381.00	79.4	20-38	-	-	680	780
	14"	1029	640	558.8	467	419.10	85.8	20-41	-	-	800	905
16"	1130	705	616.0	524	469.90	88.9	20-44.5	-	-	910	1010	
Class 1500	1 1/2"	305	180	123.8	92	68.28	31.8	4-28.5	500	180	-	-
	2"	368	215	165.1	124	95.25	38.1	8-25.5	650	200	-	-
	2 1/2"	419	245	190.5	137	107.95	41.3	8-28.5	800	220	-	-
	3"	470	265	203.2	168	136.52	47.7	8-32	1000	260	320	420
	4"	546	310	241.3	194	161.92	54.0	8-35	1200	290	360	470
	5"	673	375	292.1	229	193.68	73.1	8-41	-	-	380	530
	6"	705	395	317.5	248	211.12	82.6	12-38	-	-	440	580
	8"	832	485	393.7	318	269.88	92.1	12-45	-	-	550	650

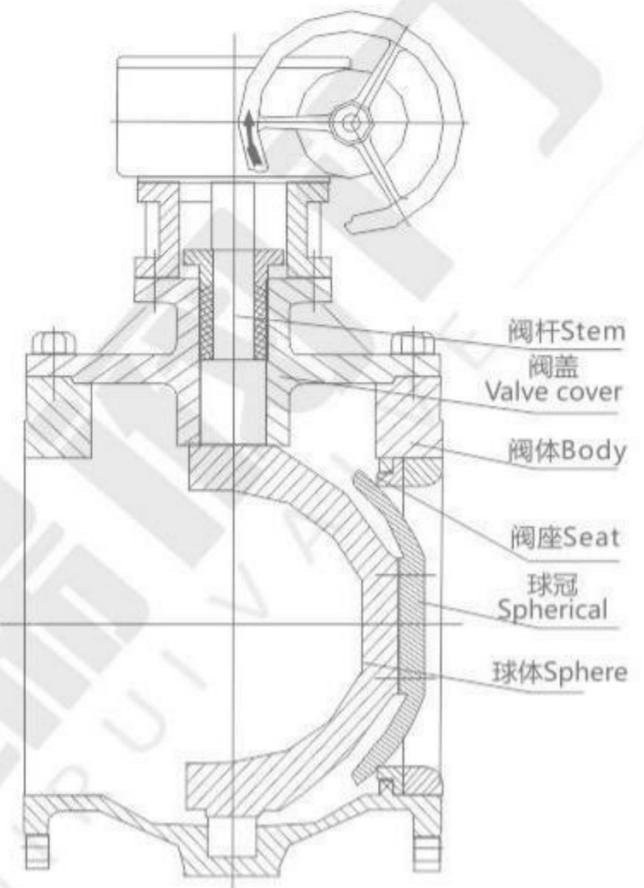
# INSTALL ECCENTRIC BALL VALVE

## 上装偏心半球阀

### 结构特点及用途 Structural characteristics and uses

- 1、压力损失小：全开时水损为零，流道完全畅通，且介质不会沉积阀体中腔内。
- 2、耐颗粒磨损：V形开口的球冠与金属阀座之间具有剪切作用，在关闭过程中，只在最后一刻球冠才靠向阀座，不形成摩擦，且阀座用耐磨的镍合金制成，不易被冲刷磨损，因而适用于含纤维、微小固体颗粒、浆等。
- 3、适合高流速介质：直通流道，坚固的偏心曲轴使之适合高流速且无振动。
- 4、寿命长：无易损部件，由于偏心作用，阀门启闭时密封面间无摩擦，则使用寿命长。
- 5、维修方便：阀门维修时不需从管路上拆下，只要打开阀盖即可进行维修。
- 6、广泛适用于水、污水、含微固体颗粒、水、蒸汽、煤气、天然气、油品等。

- 1、 Pressure loss: full-time water loss is zero, flow completely smooth, medium body will not be deposited in the cavity.
- 2、 Granule abrasion resistance: V-shaped opening of the spherical cap and the shear effect between the metal valve seat, in the closing process, only the crown at the last moment before their eyes the ball valve seat, not the formation of friction and resistant seat grinding of nickel alloys, cannot easily be washed and wear, which applies to contain fiber, small solid particles, pulp, etc.
- 3、 Suitable for high-velocity medium: direct flow, strong eccentric - crank to fit the high velocity and no vibration.
- 4、 Long life: no wearing parts, as eccentric, open and close the valve when the friction between the sealing surface, then the long service life.
- 5、 Easy maintenance: valve repair without removing the road from the tube, simply open the valve cover can be repaired.
- 6、 Widely used in water, sewage, solid particles containing micro-, water, steam, gas, natural gas, oil and so on.



### 执行标准 Implementation of standards

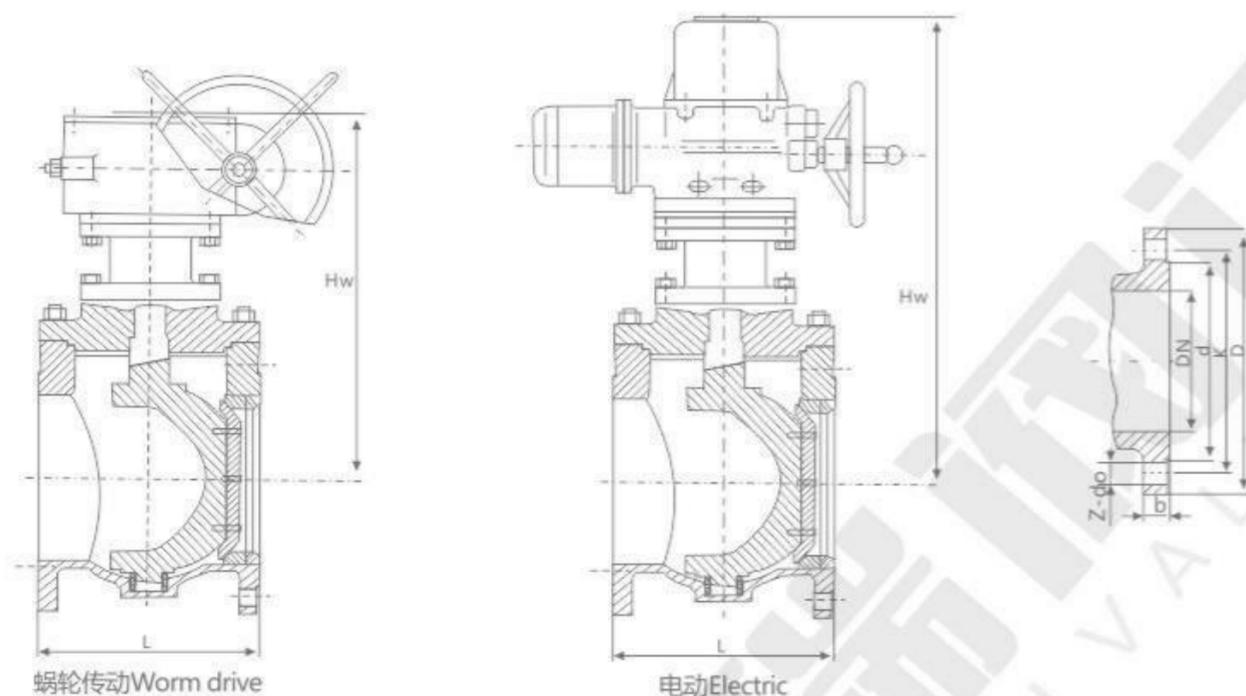
- 1、设计和制造Design and manufacture : GB/T 12237-1989
- 2、检验和试验Inspection and test : GB/T 13927-1992
- 3、法兰连接Flange connection : GB/T 9113.1-2000
- 4、结构长度Structure length : JD-2004

### 主要零件材料 Implementation of standards

阀体Body	灰铸铁Grey cast iron	球墨铸铁Ductile Iron	铸钢Cast steel
阀盖Bonnet	灰铸铁Grey cast iron	球墨铸铁Ductile Iron	铸钢Cast steel
阀杆Stem	2Cr13	2Cr13	2Cr13
阀座Seat	不锈钢Stainless steel	不锈钢Stainless steel	不锈钢Stainless steel
球冠Spherical	球墨铸铁覆盖橡胶、不锈钢 Ductile iron cover rubber, stainless steel	不锈钢Stainless steel	铸钢覆盖橡胶/不锈钢 Rubber covered steel / stainless steel
半球Hemisphere	灰铸铁Grey cast iron	球墨铸铁Ductile Iron	铸钢Cast steel

# INSTALL ECCENTRIC BALL VALVE

## 上装偏心半球阀



JB/T 79.2-1994  
JB/T 82.1-1994

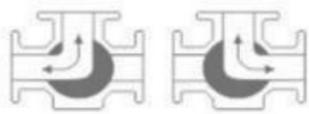
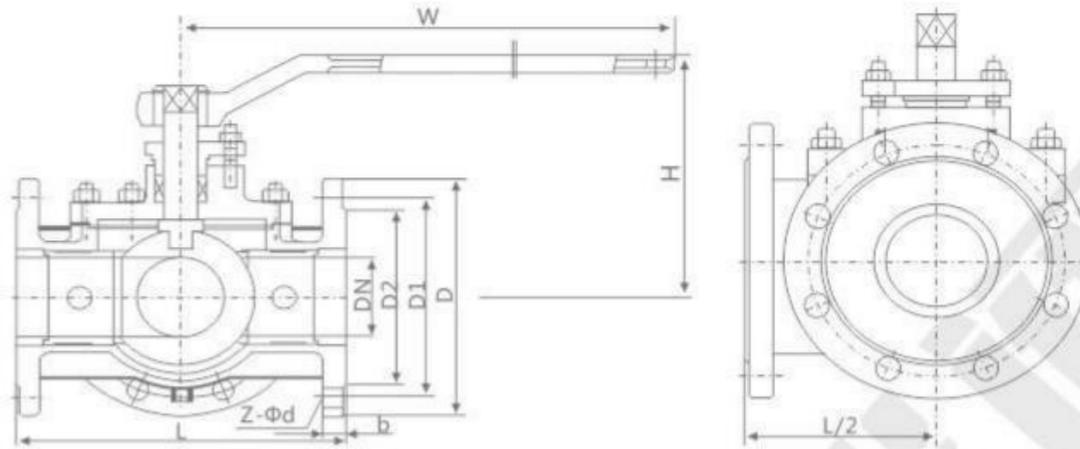
主要连接尺寸 Main connection dimensions

公称压力 PN	公称通径 DN	尺寸 Size ( mm )							
		L	D	K	d	b	Z-do	Hw	Hd
1.0MPa	100	229	215	180	155	22	8-18	330	380
	125	254	245	210	185	24	8-18	345	405
	150	267	280	240	210	24	8-23	370	440
	200	292	335	295	265	24	8-23	405	470
	250	330	390	350	320	26	12-23	480	540
	300	356	440	400	368	28	12-23	520	580
	350	430	500	460	428	28	16-23	570	630
	400	530	565	515	482	30	16-25	630	710
	450	580	615	565	532	30	20-25	690	770
	500	660	670	620	585	32	20-25	740	820
	600	840	780	725	685	36	20-30	840	940
	700	900	895	840	794	34	24-30	960	1040
	800	1000	1015	950	901	36	24-33	1080	1180
	900	1100	1115	1050	1001	38	28-33	1190	1280
	1000	1200	1230	1160	1112	38	28-36	1310	1420
1200	1300	1455	1380	1328	44	32-39	1420	1530	
1400	1500	1675	1590	1530	48	36-42	1540	1650	
1.6MPa	100	229	215	180	155	20	8-18	330	380
	125	254	245	210	185	22	8-18	345	405
	150	267	280	240	210	24	8-23	370	440
	200	292	335	295	265	26	12-23	405	470
	250	330	405	355	320	30	12-25	480	540
	300	356	460	410	375	30	12-25	520	580
	350	430	520	470	435	34	16-25	570	630
	400	530	580	525	485	36	16-30	630	710
	450	580	640	585	545	40	20-30	690	770
	500	660	705	650	608	44	20-34	740	820
	600	840	840	770	718	48	20-41	840	940
	700	900	910	840	788	50	24-41	960	1040
	800	1000	1020	950	898	52	24-41	1080	1180
	900	1100	1120	1050	998	54	28-41	1190	1280
	1000	1200	1255	1170	1110	56	28-48	1310	1420
1200	1300	1485	1390	1325	58	32-54	1420	1530	
1400	1500	1685	1590	1525	60	36-54	1540	1650	

# STAINLESS STEEL FLANGE TEE BALL VALVE

## 不锈钢法兰三通球阀

Q44/644/944/45/645/945F-16C/P



"L"型 L-type



"T"型 T-type

主要外形和连接尺寸 Main external and connection dimension

JB/T79.1

公称直径 DN	主要外形尺寸和连接尺寸(mm) Main external and connection dimensions								WT(kg)
	L	D	D1	D2	b	Z-φd	H	W	
Q44F-16C Q44F-16P Q644F-16C Q644F-16P Q944F-16C Q944F-16P Q45F-16C Q45F-16P Q645F-16C Q645F-16P Q945F-16C Q945F-16P									
15	150	95	65	45	14	4-φ14	95	140	4
20	160	105	75	55	14	4-φ14	105	160	8
25	180	115	85	65	14	4-φ14	113	180	7
32	200	135	100	78	16	4-φ18	135	250	12
40	220	145	110	85	16	4-φ18	142	300	15
50	240	160	125	100	16	4-φ18	165	350	20
65	260	180	145	120	18	4-φ18	175	350	25
80	280	195	160	135	20	8-φ18	190	400	36
100	320	215	180	155	20	8-φ18	225	500	51
125	380	245	210	185	22	8-φ18	245	600	77
150	440	280	240	210	24	8-φ23	265	800	108
200	550	335	295	265	26	12-φ23	305	800	126
250	670	405	355	320	30	12-φ25	370	1300	185

# STAINLESS STEEL FLANGE TEE BALL VALVE

## 不锈钢法兰三通球阀

主要外形和连接尺寸 Main external and connection dimension

JB/T79.1

公称通径 DN	主要外形尺寸和连接尺寸(mm) Main external and connection dimensions								WT(kg)
	L	D	D1	D2	D6	b	Z-Φd	H	
	Q44F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P Q45F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P								
15	150	95	65	45	16	4-Φ14	95	100	4
20	160	105	75	55	16	4-Φ14	105	160	5
25	180	115	85	65	16	4-Φ14	113	160	8
32	200	135	100	78	18	4-Φ18	135	250	13
40	220	145	110	85	18	4-Φ18	142	250	19
50	240	160	125	100	20	4-Φ18	154	350	27
65	260	180	145	120	22	8-Φ18	175	350	33
80	280	195	160	135	22	8-Φ18	190	450	40
100	320	230	190	160	24	8-Φ23	225	450	53
125	380	270	220	188	28	8-Φ25	245	600	86
150	440	300	250	218	30	8-Φ25	265	800	113
200	550	360	310	278	34	12-Φ25	305	1200	133
250	670	425	370	332	36	12-Φ30	370	1400	219

主要外形和连接尺寸 Main external and connection dimension

JB/T79.2

公称通径 DN	主要外形尺寸和连接尺寸(mm) Main external and connection dimensions								WT(kg)
	L	D	D1	D2	D6	b	Z-Φd	H	
	Q44F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P Q45F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P								
15	180	95	65	45	40	16	4-Φ14	100	4
20	190	105	75	55	51	16	4-Φ14	160	5
25	200	115	85	65	58	16	4-Φ14	160	8
32	210	135	100	78	66	18	4-Φ18	250	13
40	230	145	110	85	76	18	4-Φ18	250	19
50	250	160	125	100	88	20	4-Φ18	350	27
80	310	195	160	135	121	22	8-Φ18	450	40
100	350	230	190	160	150	24	8-Φ23	450	53
125	381	270	220	188	176	28	8-Φ25	600	86
150	403	300	250	218	204	30	8-Φ25	800	113
200	502	375	320	282	260	38	12-Φ30	1200	133
250	568	445	385	345	313	42	12-Φ34	1400	219

# FULLY WELDED BALL VALVE

## 全焊接球阀

### 结构

阀门是由全焊的阀体和碳增强特氟隆密封垫组成，可以在频繁操作，有杂质及化学物质情况下长寿命运行。研磨精细的不锈钢球体可以保证多年开闭自如，运行可靠。

采用浮球结构，斜面弹性垫圈保证密封圈紧压在球体之上，即使在压力不稳定的情况下，阀门可以保证严密。

阀杆的防泄漏结构适用两个“O”型圈，使阀杆转动自如且密封严密。

### Structure

The valve is composed of a valve body welded and carbon reinforced Teflon gasket, in frequent operation, impurities and chemical substances under the condition of long service life. Grinding fine stainless steel ball can guarantee for many years to open and close, reliable operation.

Adopt floating ball structure, inclined plane elastic washer to ensure that the sealing ring is pressed on the ball, even in the case of unstable pressure, the valve can ensure tight.

The valve stem leakage structure using two "O"-shaped ring, so that the valve stem rotation and sealing.

### 特性

不需要维护，调整及润滑，易于安装，在低运行费用下长期可靠运行。阀杆可以加长、易于保温。

操作手柄可以拆下，换向安装。

阀体不含沉重且不可靠的铸件。

安装调节机构，非常简便。

### Characteristic

Do not need to maintain, adjust and lubrication, easy to install, in the low operating cost of long-term reliable operation.

Valve stem can be lengthened, easy to heat insulation.

The operating handle can be removed and the reverse is installed.

The body does not contain heavy and unreliable castings.

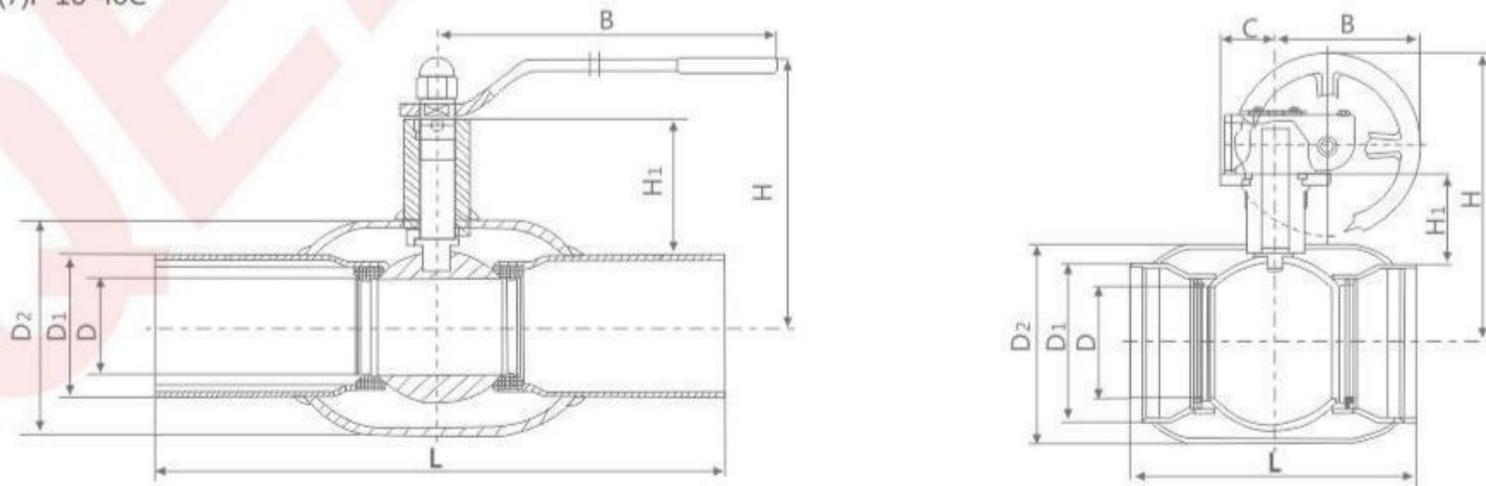
Install regulator, very simple.

### 主要零件材料 Main components material

序号 No.	零件名称 Part name	材料 Material Science	
1	阀体 Body	碳钢 Carbon steel	ST37.8
2	阀杆室 Stem chamber	碳钢 Carbon steel	Fe52DP
3	球体 Ball	不锈钢 Stainless steel	AISI304
4	阀杆 Stem	不锈钢 Stainless steel	AISI303
5	密封圈 Seal ring	特氟隆 Teflon	PTFE
6	斜面垫圈 Bevel washer	弹簧钢 Spring steel	
7	支撑 Support	不锈钢 Stainless steel	
8	螺丝 Screw	钢 Steel	
9	O形密封圈 O-sealing ring	合成橡胶 Synthetic rubber	FPM
10	垫圈 Gasket	特氟隆 Teflon	PTFE
11	止退垫圈 Floor clip	铸钢 Cast steel	AISI304
12	手柄 Handle	镀锌钢 Galvanized steel	

### 结构图 Structure diagram

QW(3)4(6)1(7)F-16-40C



# FULLY WELDED BALL VALVE

## 全焊接球阀

主要外形尺寸及连接尺寸 Main external and connection dimension

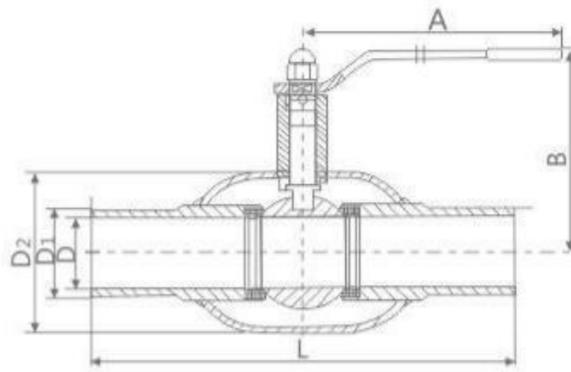
DN	PN	L	D	D1	D2	H	B	C	H1	
10	16	230	10	17.2	33.7	98	145		22	
15		230	10	21.3	33.7	98	145		22	
20		230	15	26.9	42.4	103	145		23	
25		230	20	33.7	48.3	118	145		34	
32		25	260	25	42.4	60.3	121	145		33
40		40	260	32	48.3	76.1	120	190		43
50			300	40	60.3	88.9	127	190		44
65			300	50	76.1	114.3	170	280		71
80			300	65	88.9	139.7	185	280		77
100	16	325	80	114.3	168.3	210	280		102	
125			325	100	139.7	177.8	253	400		101
150			350	125	168.3	219.1	273	600		107
200			400	150	219.1	273	315	900		123
250			530	200	273	355.6	398	1200		122
300			550	250	323.9	457	465	280	193	155
350			650	300	355.6	508	530	325	150	187
400		25	760	350	406.4	610	530	466	175	221
500			914	400	508	680	630	466	175	211
600			1067	500	610	830	762	466	175	259
700			1346	590	711	982	830	507		
800			1524	690	813	1086	910	624		
900			1727	790	914	1245	1025	844		
1000		1750	890	1016	1394	1165	881			
1200		2050	1190	1219	1576	1289	1092			

# FULLY WELDED BALL VALVE

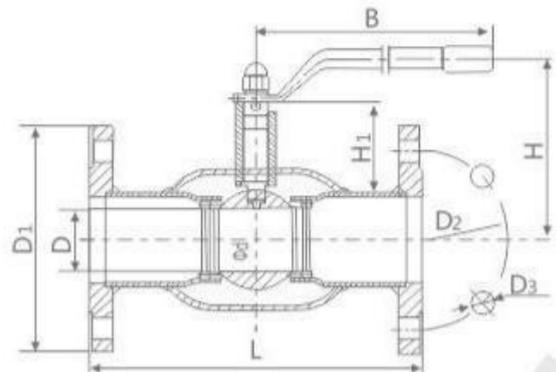
## 全焊接球阀

结构图 Structure diagram

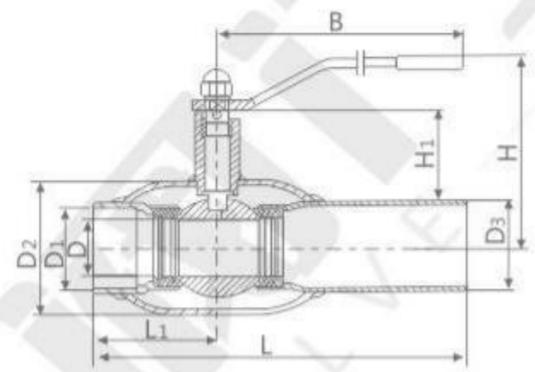
QW(3)4(6)1(7)F-16-40C



全径/焊接 Full diameter/Welding



缩径/法兰 Shrinkage/Flange



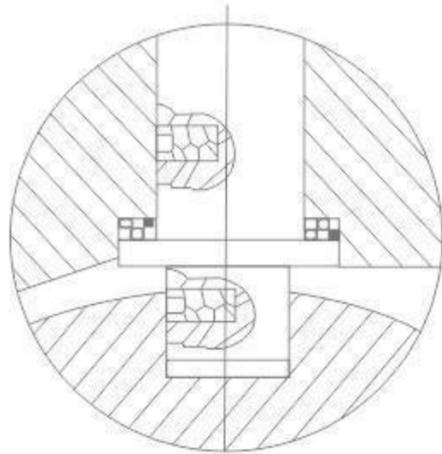
缩径/螺纹&焊接 Shrinkage/Screw & Welding

### 全径/焊接 Full diameter /Welding

DN	PN	L	D	D1	D2	A	H	B	H1	
10	16	210	15	21.7	42.7	129	103	64	22	
15		230	20	27.2	48	159	118	76	23	
20		260	25	34.0	60	159	121	85	34	
25		25	260	32	42.7	76	230	120	95	33
32		40	300	40	48.6	89	230	127	100	43
40		300	50	60.5	114	300	170	159	44	
50		300	65	76.3	140	300	185	170	71	
65	16	300	80	89.1	165	400	210	192	77	
80		325	100	114.3	216	400	253	208	102	
100		350	125	139.8	219	450	273	241	101	
125		490	150	165.2	355	450	300	280	107	
150		580	200	216.3	356	252	325	500	123	
200		550	250	267.4	457	236	345	500	122	
250		630	300	318.5	508	331	465	600	155	
300		762	337	355.6	559	331	530	600	187	
400		25	840	387	406.4	660	360	550	700	221
500		990	490	508.0	830	413	630	800	211	
600		1140	590	610	982	506	830			
700		1346	690	711	1086	605	910			
800		1524	790	813	1245	659	1025			
900	1727	890	914	1433	881	1165				
1000	1950	980	1016	1576	1092	1170				
1200	2250	1180	1219	1939	1092	1180				

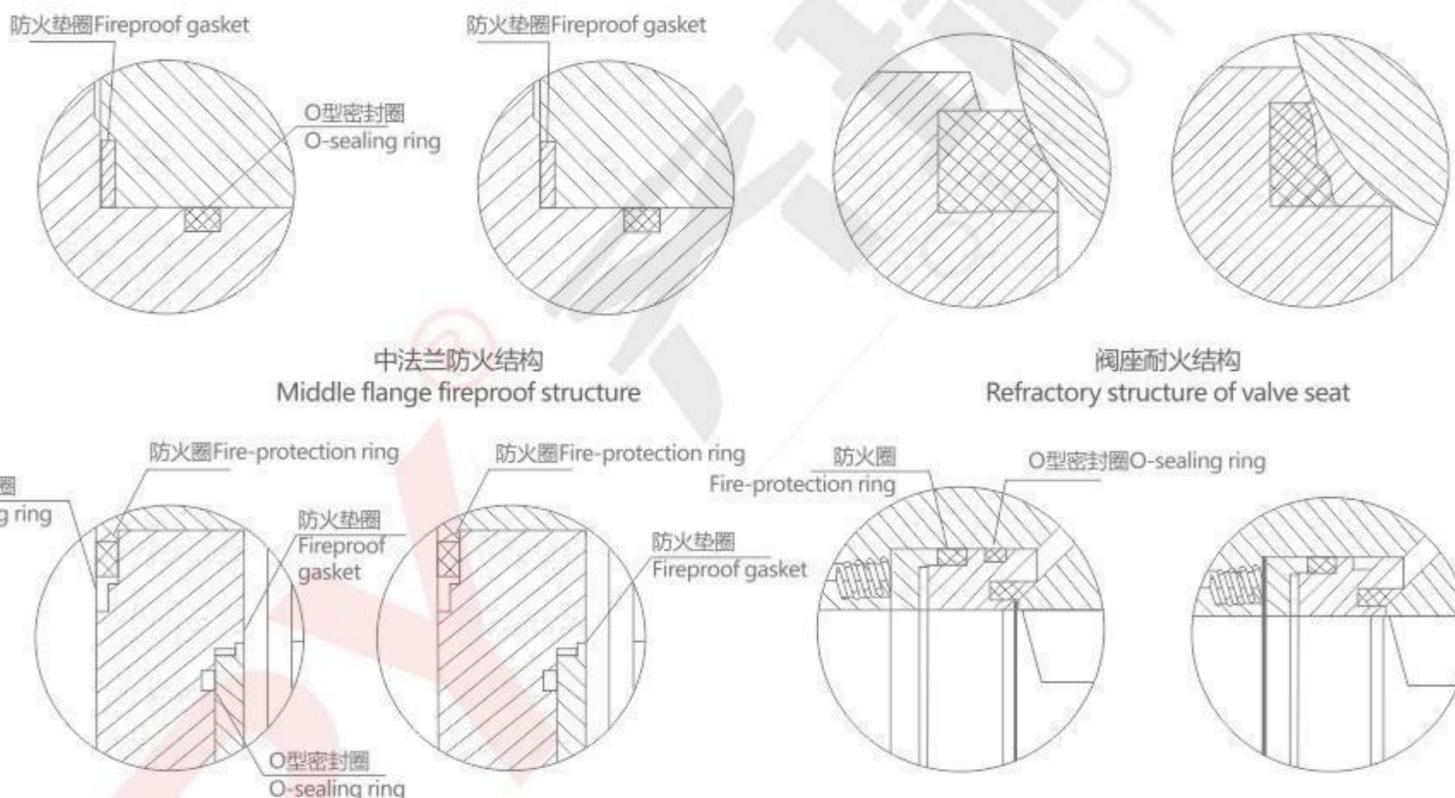
# PIPELINE BALL VALVE

## 管线球阀



### 2、防火结构

在意外发生火灾或异常升温使非金属阀座软化烧损时，特殊设计的阀座支撑金属密封面在弹簧载荷的作用下，与球体形成金属与金属接触，能够起到瞬时密封作用。



### 3、辅助密封结构

阀座及阀杆密封件出现损伤而引起泄漏时，可通过注脂阀注入密封脂，起到暂时密封作用。

### 3、Auxiliary seal structure

Valve seat and valve stem seal damage caused by the leakage, can pass on the valve sealing grease injection, temporary sealing effect.



### 1、防静电结构

当操作阀门，由于球体和阀座之间的摩擦，会产生静电并积聚在球体上，为防止产生静电火花，特在阀门上设置防静电装置，将积聚在球体上的电荷导出。

### 1、Antistatic structure

When operating the valve, due to the friction between ball and seat, will generate static electricity and accumulate on the sphere, to prevent electrostatic spark producing, set in the valve antistatic device, accumulate in the sphere of charge is derived.

### 2、The structure of the fire

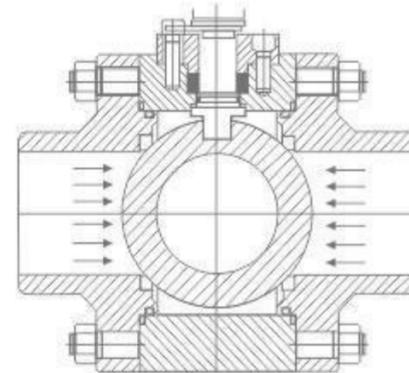
In accidental fire or burning of the abnormal heat up to soften the non-metallic seat, a specially designed valve seat sealing surface under the action of the spring load bearing metal, and sphere form metal to metal contact, can rise the instantaneous sealing function.

### 4、双阻塞与双排放 (DBB) 结构

固定球阀处于全关闭状态时，上下游的阀座使流体完全阻断，阀体中腔的积滞物可以通过排泄装置进行排泄，减少污物对阀门密封面的损伤，延长阀门使用寿命。

### 4、Double block and double emission (DBB) structure

Fixed ball valve is fully closed, the valve on the lower reaches of the valve seat so that the fluid is completely blocked, the valve body in the cavity of the product can be excreted through the drainage device to reduce the dirt on the valve sealing surface damage, extend the service life of the valve.



### 5、阀门开、关位置指示

在蜗轮箱上端面,设有开、关位置指示器,在手轮顺时针转动时,阀门处于关闭位置;当手轮逆时针转动时,阀门处于开启位置。

### 6、上游密封双向阀

固定球阀采用先进的弹簧预紧浮动阀座组件上游密封的设计原理,无论阀门在低压、高压、真空下都能良好地实现密封。每只阀门有两个阀座,两个方向都能密封,因而安装没有方向限制,无论阀门的哪端均可作为上游端是双向阀。

### 7、全通径或缩径结构

可根据需要选用全通径或缩径结构。全通径球阀的通道内与管线内径一致。不但流体阻力最小,也便于管道清扫,而缩径球阀的流体阻力比相同口径的截止阀要低很多,介质阻力比相同口径的截止阀要低很多,重量比相同口径的球阀要轻30%左右,有效的降低了生产成本及价格,因而逐步得到了较广泛的使用。

### 8、操作灵活

采用具有小摩擦系数和良好润滑性的阀杆轴承,大大地减少了阀门的操作扭矩,因此即使在没有提供密封润滑脂的情况下,也能够长期灵活自如地对阀门进行操作。

### 9、多种操作方式

操作方式根据需要可选择手动、气动、电动、气液联动、液动等。

### 10、防止误操作结构

对安装在野外或防止非工作人的错误操作,以及在有些振动较大的场合手柄受到撞击产生误动作。在阀门的全开或全关位置设有锁定孔,用以需要时加锁。起到安全保险作用。

### 11、低温结构

低温球阀采用长颈结构设计,防止低温工况下阀杆填料密封的失效,同时阀座采用自动泄结构,防止房门中腔介质由于升温而出现的异常升压,确保阀门的使用安全。

### 12、埋地式加长杆结构

根据用户的需求,球阀可设计成阀杆加长结构,适用于管线埋地铺设安装的场所。

### 5、 Valves open and close position indicator

End face on the worm gear box,equipped with open and closed position indicator,when the handwheel clockwise,the valve is in closed position;When the handwheel anti-clockwise rotation,the valve is in open position.

### 6、 Upstream sealing two-way valve

Fixed ball valve with advanced spring pre-tight upstream of the valve seat assembly design principle,regardless of the valve in the low pressure,high pressure,vacuum can be a good way to achieve sealing.Each valve has two valve seats,two directions can be sealed.so the installation has no direction,regardless of which side of the valve can be used as a two-way valve.

### 7、 Full size of reduced diameter structure

Can be selected according to the full size of reducing structure.Full bore ball valve in the channel is consistent with the inner diameter of pipeline.Not only the fluid resistance is minimal,but also easy to pipe cleaning,and reducing valve of the same diameter of fluid resistance than the same diameter of the valve to be much lower than the same diameter of the same diameter of the cut-off valve to lower a lot of weight ratio of the same diameter of the valve to light around 30%,effectively reduce the production of the price,and thus gradually get a wider use.

### 8、 Flexible operation

With stem bearing small friction coefficient and good lubricity,greatly reduced the valve operating torque,so even in the case of does not provide a tight seal grease,is also a long-term mobility to operate the valve.

### 9、 All kinds of operating modes

Operation mode according to the need to choose manual,pneumatic,electric,gas-liquid linkage,hydraulic,etc

### 10、 To prevent wrong operation structure

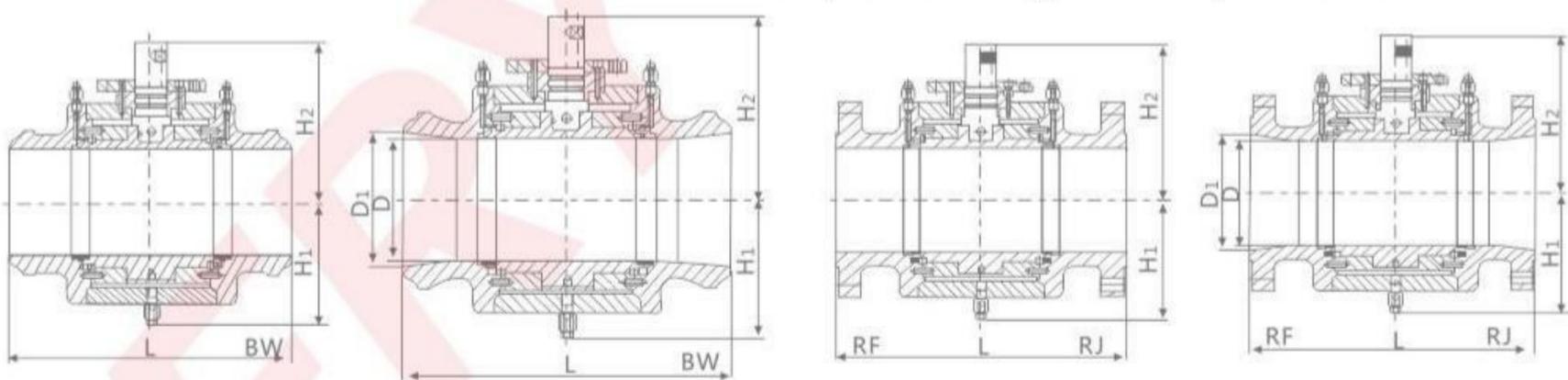
To install in the wild or prevent non-working people mistake operation,as well as in some larger vibration occasions handle hit to produce false action.In the position of the valve fully open or close a locking hole,used to lock when necessary.Have insurance effect.

### 11、 Low temperature structure

Low temperature valve with long neck structure design,prevent failure under low temperature valve with long neck structure design,prevent failure under low temperature conditions and the valve stem seal, valve seat with automatic relief structure design,prevent the abnormal pressure valve in the cavity medium due to heating, to ensure the safe use of the valve.

### 12、 Buried type extension rod structure

According th the needs of users,ball valve can be designed into stem extension structure,suitable for buried pipelines laid the place of installation.



Class 150 PN1.6MPa PN2.0MPa

DN	NPS	L			D	D1	H1	H2	重量 Weight(Kg)	
		RF	BW	RJ					RF	BW
100	4	229	305	241	102	/	235	135	51	44
150×100	6×4	394	457	406	102	152	235	135	76	68
150	6	394	457	406	152	1	263	185	93	105
200×150	8×6	457	521	470	152	203	263	185	154	130
200	8	457	521	470	203	/	325	215	192	202
250×200	10×8	533	559	546	203	254	325	215	293	240
250	10	553	559	546	254	/	376	243	322	296
300×250	12×10	610	635	622	254	305	376	243	433	384
300	12	610	636	622	305	/	428	316	548	497
350×300	14×12	686	762	699	305	377	428	316	582	527

# PIPELINE BALL VALVE

## 管线球阀

Class 150 PN1.6MPa PN2.0MPa

DN	NPS	L			D	D1	H1	H2	重量 Weight(Kg)	
		RF	BW	RJ					RF	BW
350	14	686	762	699	337	/	457	330	604	559
400×350	16×14	762	838	775	337	387	457	330	657	604
400	16	762	838	775	387	/	565	360	749	704
450×400	18×16	864	914	876	387	438	568	362	773	686
450	18	864	914	876	438	/	538	363	1056	997
500×450	20×18	914	991	927	438	489	538	362	1095	1042
500	20	914	991	927	489	/	559	458	1503	1254
550×500	22×20	991	1092	1062	489	540	559	458	1568	1385
550	22	991	1092	1062	540	/	578	525	1756	1590
600×550	24×22	1067	1143	1080	540	59	578	525	1954	1658
600	24	1067	1143	1080	591	/	683	565	2097	1935
650×600	26×24	1143	1245	1168	591	635	683	565	2442	2315
650	26	1143	1245	1168	635	/	695	585	2908	2545
700×650	28×26	1295	1397	1270	635	736	695	585	3196	2768
700	28	1245	1346	1270	686	/	743	646	3262	2945
750×700	30×28	1295	1397	1321	686	736	743	646	4038	3446
750	30	1295	1397	1321	736	/	782	675	4305	3994
800×750	32×30	1372	1524	1400	736	781	782	675	4358	3855
800	32	1372	1524	1400	781	/	928	210	4392	4025
850	34	1473	1626	1502	832	/	946	738	6127	5448
900×850	36×34	1524	1727	1552	832	876	946	738	6352	5676
900	36	1524	1727	1552	876	/	982	776	6875	6576
1000	40	1753	1956	/	978	/	1069	885	7014	6805
1050×900	42×40	1855	2083	/	876	1022	988	884	7235	7000
1050	42	1855	2083	/	1022	/	1097	926	7628	7239
1200	48	2134	2388	/	1168	/	1227	990	8257	7925

Class 300 PN2.5MPa PN2.0MPa

DN	NPS	L			D	D1	H1	H2	重量 Weight(Kg)	
		RF	BW	RJ					RF	BW
100	4	305	305	321	102	1	235	135	58	46
150×100	6×4	403	403	419	102	152	235	135	85	72
150	6	403	403	419	152	/	263	185	125	112
200×150	8×6	502	521	518	152	203	263	185	169	138
200	8	502	521	518	203	/	325	215	210	215
250×200	10×8	568	559	584	203	254	325	215	286	243
250	10	568	559	584	254	1	376	243	346	297
300×250	12×10	648	635	664	254	305	376	243	478	385
300	12	648	635	664	305	/	428	316	586	490
350×300	14×12	762	762	778	305	337	428	316	585	527
350	14	762	762	778	337	/	457	330	629	553
400×350	16×14	638	838	854	337	387	457	330	747	615
400	16	838	838	854	387	1	565	360	785	713
450×400	18×16	914	914	930	387	438	568	362	920	783
450	18	914	914	930	438	1	538	362	1265	990
500×450	20×18	991	991	1010	438	489	538	362	1437	1058
500	20	991	991	1010	489	1	559	458	1546	1253
550×500	22×20	1092	1092	1114	489	540	559	458	1546	1387
550	22	1092	1092	1114	540	/	578	525	1830	1593
600×550	24×22	1143	1143	1165	540	591	578	575	2042	1660
600	24	1143	1143	1165	591	/	683	566	2443	1934
650×600	26×24	1245	1245	1220	591	635	683	565	2618	2319
650	26	1245	1245	1270	635	/	695	585	3015	2544
700×650	28×26	1397	1397	1372	635	236	685	585	3291	2768
700	28	1346	1346	1372	686	1	743	646	3514	2958
750×700	30×28	1397	1397	1422	686	736	743	646	4138	3457
750	30	1397	1397	1422	736	/	782	675	4538	3998
800×750	32×30	1524	1524	1553	781	/	928	710	4907	4325
800	32	1524	1524	1553	781	/	928	710	4907	4325
850	34	1626	1626	1654	832	1	946	738	6658	5446
900×850	36×34	1727	1727	1756	832	876	946	738	6965	5893

# PIPELINE BALL VALVE

## 管线球阀

QW(3、6、9)61F-150~1500Lb C、P、R、I、V  
ANSI Class 150/Class300

CLASS	DN	d	L	H	W
150Lb 300Lb	2	2	8.5	7.08	78.78
	3	3	11.125	7.87	15.75
	4	4	12	8.86	19.69
	6	6	18	11.22	
	8	8	20.5	12.40	
	10	10	22	12.99	
	12	12	25	16.93	
	14	13.25	30	18.30	
	16	15.25	33	19.49	
	18	17.25	36	23.03	
20	19.25	39	24.01		
24	23.25	45	25		

PN20/50

CLASS	DN	d	L	H	W
2.0MPa 5.0MPa	50	50	216	180	350
	80	76.2	283	200	400
	100	101.6	305	225	500
	150	152	457	285	
	200	203	521	315	
	250	254	559	330	
	300	305	635	430	
	350	337	762	465	
	400	387	838	495	
	450	438	914	585	
500	489	991	610		
600	591	1143	635		

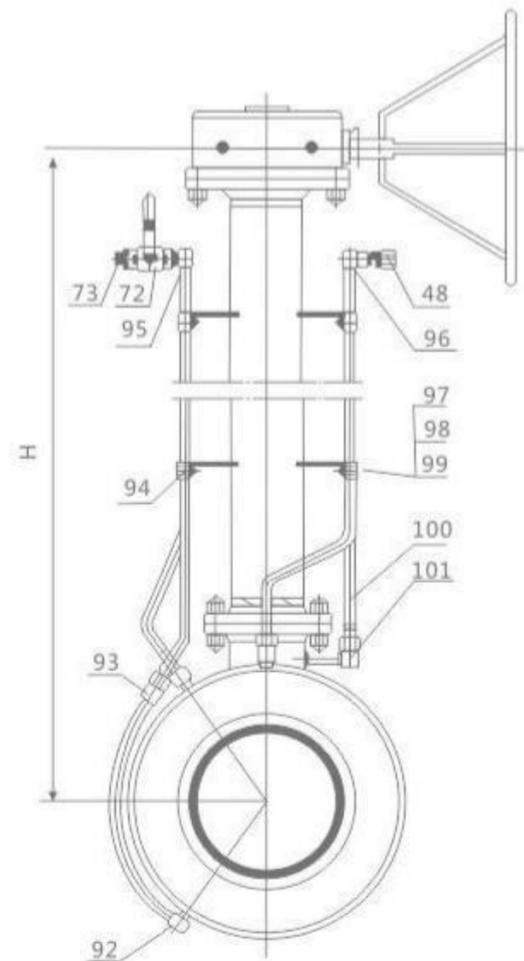
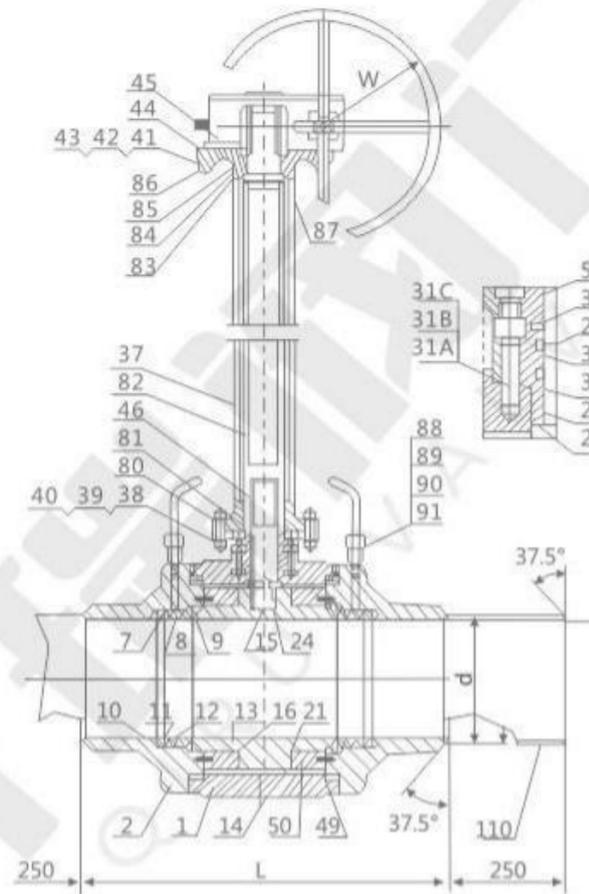
Class600

CLASS	DN	d	L	H	W
600Lb	2	2	11.5	7.08	23.62
	3	3	14	7.87	39.37
	4	4	17	8.86	59.05
	6	6	22	11.22	
	8	8	26	12.40	
	10	10	31	12.99	
	12	12	33	16.93	
	14	13.25	35	18.30	
	16	15.25	39	19.49	
	18	17.25	43	23.03	
20	19.25	47	24.01		
24	23.25	55	25		

PN100

CLASS	DN	d	L	H	W
10.0MPa	50	50	216	180	600
	80	76.2	355.6	200	1000
	100	101.6	431.8	225	1500
	150	152	558	285	
	200	203	660.4	315	
	250	254	787.4	330	
	300	305	838.2	430	
	350	337	889	465	
	400	387	990.6	495	
	450	438	1092.2	585	
500	489	1193.8	610		
600	591	1397	635		

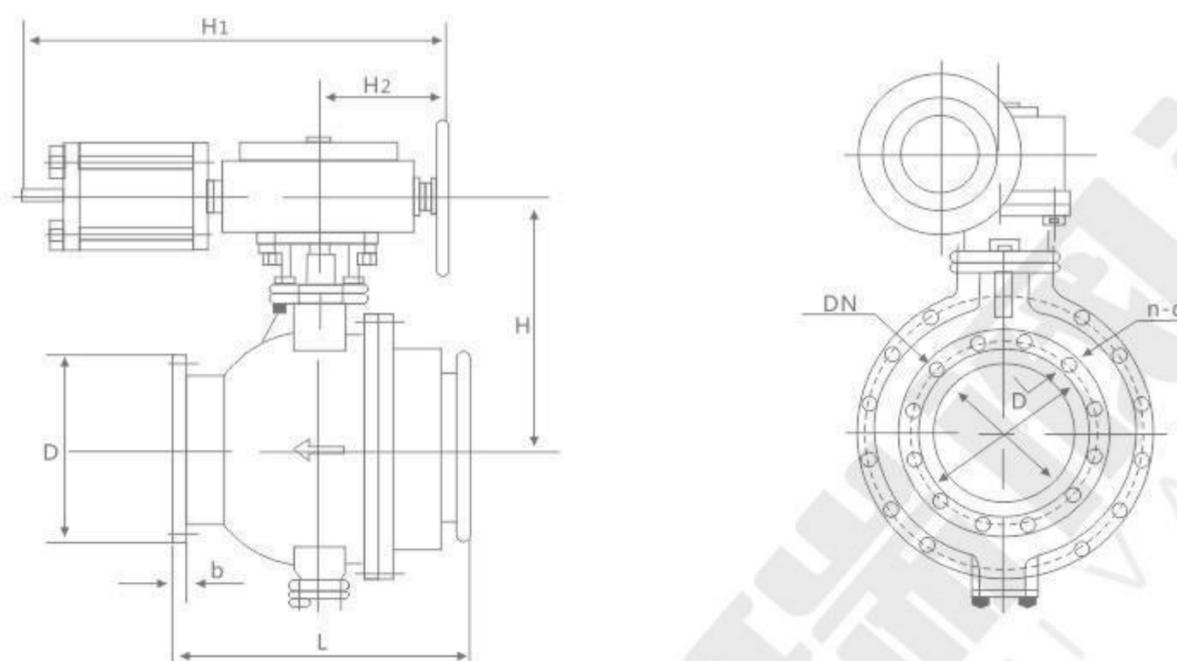
结构图 Structure diagram



# DUST UNLOADING BALL VALVE

## 卸灰球阀

FQ347AF-2.5、6 FQ647AF-2.5、6 FQ947AF-2.5、6



### 卸灰球阀 Cinder ball valve

- 该阀门适用于冶金行业，切断含灰煤气管道，也可用于其它含灰气体管道作切断设备或放散阀。
- 公称压力：0.25MPa、0.6MPa
- 适用介质：空气、粉尘、含灰煤气
- 适用温度：≤250℃
- 球体材料：铸钢不锈钢该阀用0.25MPa气体进行试压5分钟，压降应小于 $3 \times 10^3$ MPa
- 法兰连接尺寸按GB/T 1724.6-1988
- 该阀安装时介质流向应符合阀体上箭头指向。
- 传动方式：气动、电动、液动、电液联动。
- The valve used in metallurgy industry, coal gas pipeline off ash can also be used for other with gray gas pipeline to cut off the device or relief valve.
- Nominal Pressure: 0.25MPa, 0.6MPa
- Suitable medium: air, dust, ash gas
- Suitable Temperature: ≤ 250 °C
- Ball material: stainless steel for the gas valve pressure test with 0.25MPa 5 minutes, the pressure drop should be less than  $3 \times 10^3$ MPa
- Flange dimensions according to GB / T 1724.6-1988
- This valve installs when the medium flows should conform to the valve chest the arrow direction.
- Type of drive: Air operated, electrically operated, the fluid moves, the battery solution linkage.

### 主要连接尺寸 Main connection dimensions

公称通径 DN	尺寸Size ( mm )								重量 Weight ( kg )
	L	D	D1	b	n-d	H	H1	H2	
150	394	285	240	20	8-22	980	1320	1720	200
200	457/500	340	295	20	8-22	1060	1320	720	240
250	533/600	395	355	20	12-22	1100	1320	720	340
300	610/700	445	410	28	12-22	1140	1320	720	450
350	686/800	505	470	28	16-22	1175	1320	720	560
400	762/900	565	525	28	16-22	1350	1580	850	840

# LOW TEMPERATURE BALL VALVE

## DQ41F-16/40P低温球阀

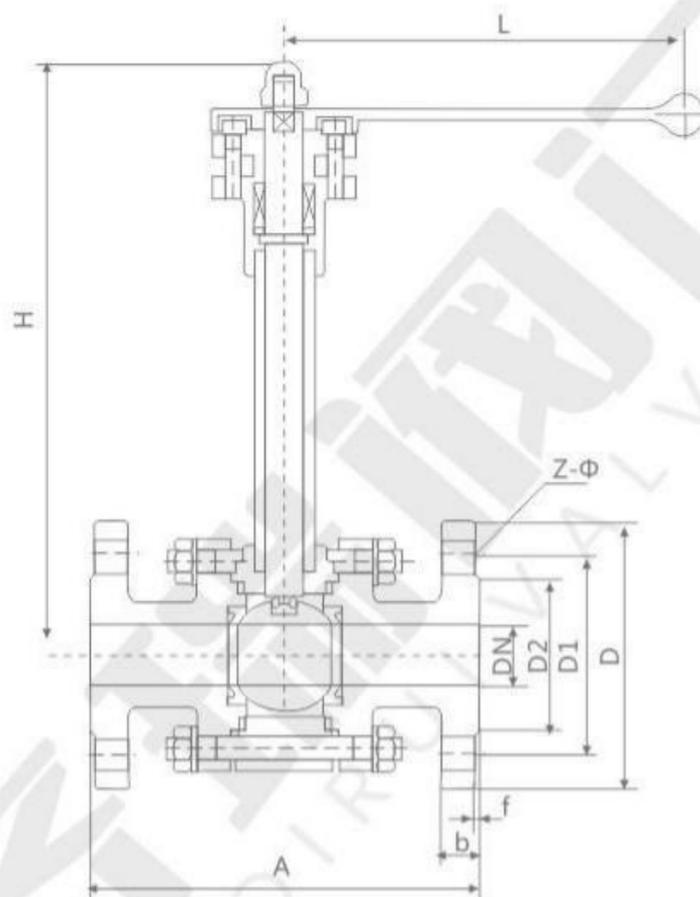
DQ41F-16/40P

### 产品规范

公称压力：1.6MPa  
 公称口径：10mm~200mm  
 适用介质：L02、LN2、LAr、LNG、LC2H4等  
 适用温度：-196~+80℃  
 连接方式：法兰  
 介质流向：由阀门从左向右流动

### Product specification

Nominal pressure: 1.6 MPa  
 Nominal size: 10 mm to 200 mm  
 Applicable medium: L02, LN2, LAr, LNG, LC2H4, etc  
 Applicable temperature: -196 ~ + 80 °C  
 Connection mode: flange  
 Medium flow: the valve flow from left to right



主要外形和连接尺寸 Main external and connection dimension

产品代号	口径 DN (mm)	主要连接尺寸 Main connecting dimensions									重量 (kg)
		A	H	D	D1	D2	Z-Φd	b	f	L	
222Q15AB2A3	15	130	207	95	65	45	4-14	16	2	140	4.2
222Q20AB2A3	20	140	239	105	75	55	4-14	16	2	160	5.6
222Q25AB2A3	25	150	254	115	85	65	4-14	16	2	180	7.2
222Q32AB2A3	32	165	280	135	100	78	4-18	18	2	200	11.3
222Q40AB2A3	40	180	292	145	110	85	4-18	18	2	200	13.8
222Q50AB2A3	50	200	322	160	125	100	4-18	18	3	250	18.6
222Q65AB2A3	65	220	354	180	145	120	4-18	18	3	320	32.8
222Q80AB2A3	80	250	375	195	160	135	8-18	20	3	320	46.2
222Q100AB2A3	100	280	420	215	180	155	8-18	20	3	360	60.3
222Q125AB2A3	125	320	452	245	210	185	8-18	22	3	500	101.6
222Q150AB2A3	150	360	491	280	240	210	8-23	24	3	700	166.2
222Q200AB2A3	200	400	544	335	295	265	12-23	26	3	900	274.6