

国标浮动球阀
GB Floating ball valve

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

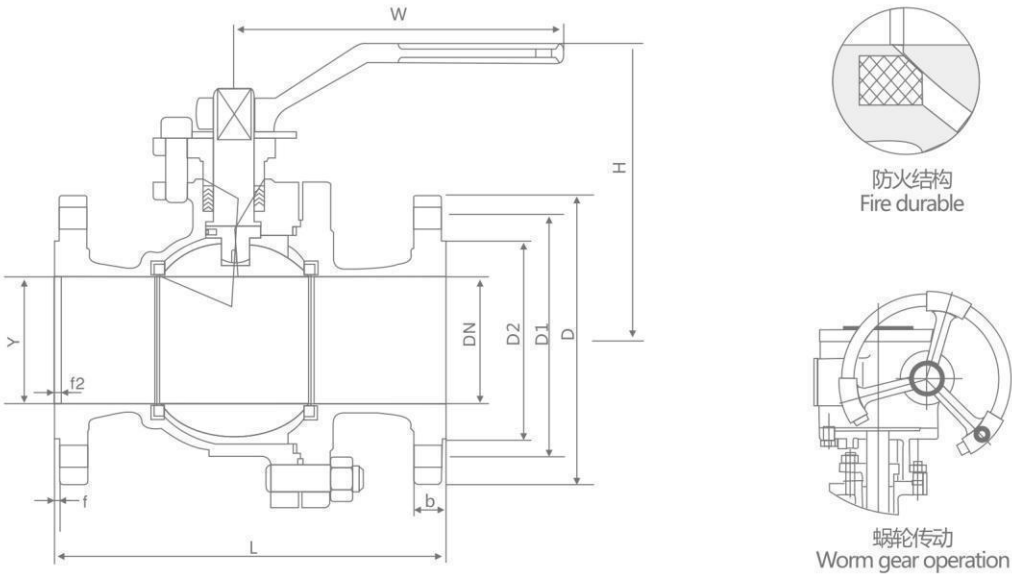
序号 NO.	项目名称 Project name	项目名称 Project name			
		PN16	PN25	PN40	PN64
1	公称压力（MPa）	1.6	2.5	4.0	6.4
2	壳体强度试验压力（MPa） Shell strength test pressure	常温下公称压力的1.5倍 1.5 Times the nominal pressure at room temperature			
3	高压密封试验压力（MPa） High pressure seal test pressure	常温下公称压力的1.1倍 1.1 Times the nominal pressure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

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Q 41 16
641 F-25 C/P/R/RL
941 64



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								
	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
20	140	105	75	55	14	2	4-Φ14	84	160
25	150	115	85	65	14	2	4-Φ14	95	180
32	165	135	100	78	17	2	4-Φ18	150	250
40	180	145	110	85	17	2	4-Φ18	150	300
50	200	160	125	100	18	2	4-Φ18	170	350
65	220	180	145	120	19	2	4-Φ18	195	350
80	250	195	160	135	20	2	8-Φ18	215	400
100	280	215	180	155	21	2	8-Φ18	250	500
125	320	245	210	185	22	3	8-Φ18	265	600
150	360	280	240	210	24	3	8-Φ23	270	800
200	400	335	295	265	26	3	12-Φ23	330	800
250	533	405	355	320	28	3	12-Φ25	450	1300

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

单位Unit:mm

公称通径 DN	主要外形和连接尺寸Main external and connecting dimensions									
	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
20	140	105	75	55	16	-	-	4-Φ14	112	160
25	150	115	85	65	16	-	-	4-Φ14	123	160
32	165	135	100	78	18	-	-	4-Φ18	150	250
40	180	145	110	85	18	-	-	4-Φ18	156	250
50	200	160	125	100	20	-	-	4-Φ18	172	350
65	220	180	145	120	22	-	-	8-Φ18	197	350
80	250	195	160	135	22	-	-	8-Φ18	222	450
100	280	230	190	160	24	-	-	8-Φ23	253	450
125	320	270	220	188	28	-	-	8-Φ25	275	600
150	360	300	250	218	30	-	-	8-Φ25	286	800
200	400	360	310	278	34	-	-	12-Φ25	340	1200
250	533	425	370	332	36	-	-	12-Φ30	470	1400
	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
20	140	105	75	55	16	51	4	4-Φ14	112	160
25	150	115	85	65	16	58	4	4-Φ14	123	160
32	180	135	100	78	18	66	4	4-Φ18	150	250
40	200	145	110	85	18	76	4	4-Φ18	156	250
50	220	160	125	100	20	88	4	4-Φ18	172	350
65	250	180	145	120	22	110	4	8-Φ18	197	350
80	280	195	160	135	22	121	4	8-Φ18	222	450
100	320	230	190	160	24	150	4.5	8-Φ23	253	450
125	400	270	220	188	28	176	4.5	8-Φ25	275	600
150	400	300	250	218	30	204	4.5	8-Φ25	286	800
200	550	375	320	282	38	260	4.5	12-Φ30	340	1200
250	568	445	385	345	42	313	4.5	12-Φ34	470	1400
	Q41F-64		Q41F-64P	Q341F-64	Q341F-64P	Q641F-64	Q641F-64P	Q9B41F-64	Q9B41F-64P	
15	140	105	75	55	18	40	4	4-Φ14	105	130
20	155	125	90	68	20	51	4	4-Φ18	125	130
25	180	135	100	78	22	58	4	4-Φ18	135	160
32	200	150	110	82	24	66	4	4-Φ23	150	160
40	220	165	125	95	24	76	4	4-Φ23	165	230
50	250	175	135	105	26	88	4	4-Φ23	175	230
65	280	200	160	130	28	110	4	8-Φ23	200	400
80	320	210	170	140	30	121	4	8-Φ23	210	400
100	350	250	200	168	32	150	4.5	8-Φ25	250	700
125	455	295	240	202	36	176	4.5	8-Φ30	295	1100
150	495	340	280	240	38	204	4.5	8-Φ34	340	1500

美标法兰浮动球阀

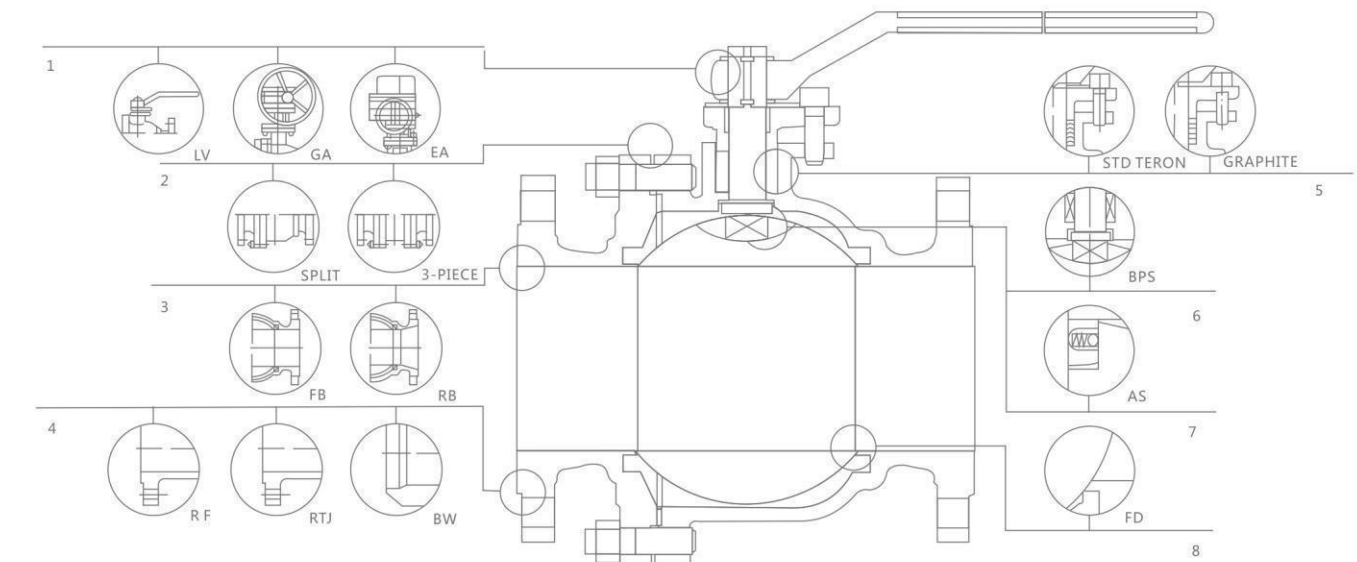
设计 Design

远科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。

Yuanke 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.

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/氯气的清洁及包装 | * 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，也可清扫管路

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.

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

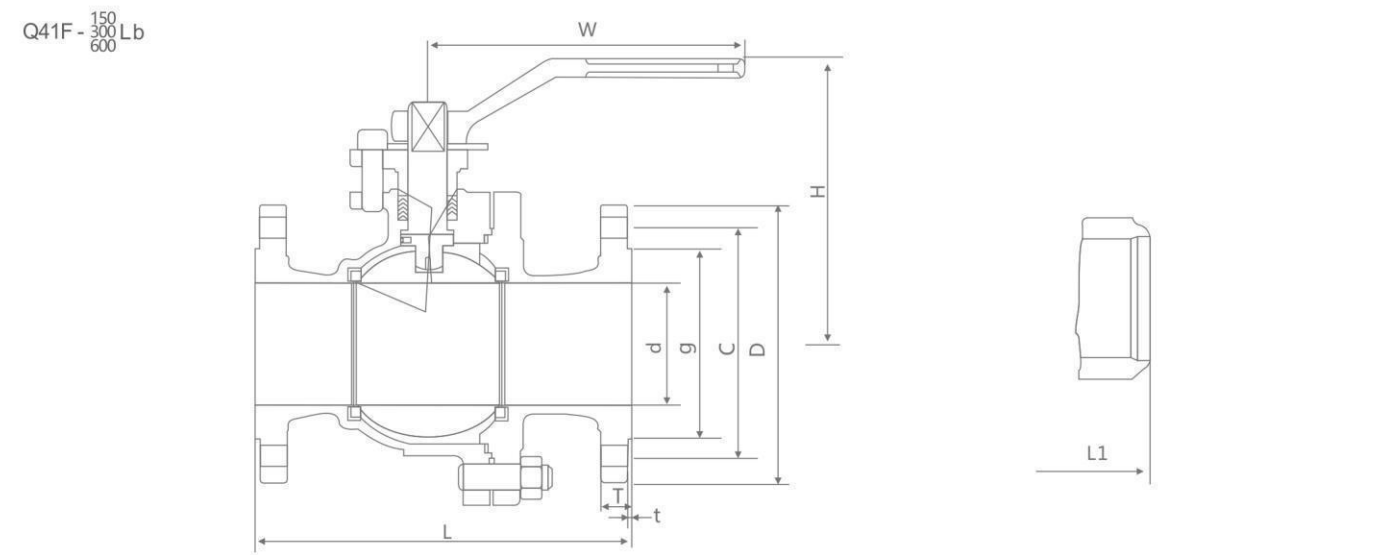
This connection always moves between the ball and stem/body and the unloading eventually stops during operation

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

美标法兰浮动球阀
API Flanged floating ball valve



- 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 , ASM 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-F3041)	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		
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 可选的 Note:1).A105+ENP optional 2、缠绕石墨垫片 2).Spiral wound construction.

美标法兰浮动球阀
API Flanged floating ball valve

主要连接尺寸 Main connection dimensions

公称压力 Nominalpressure	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 Nominalpressure	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
class 600Lb	10"	250	568	444	387.5	324	48	1.6	345	1500	16-29
	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