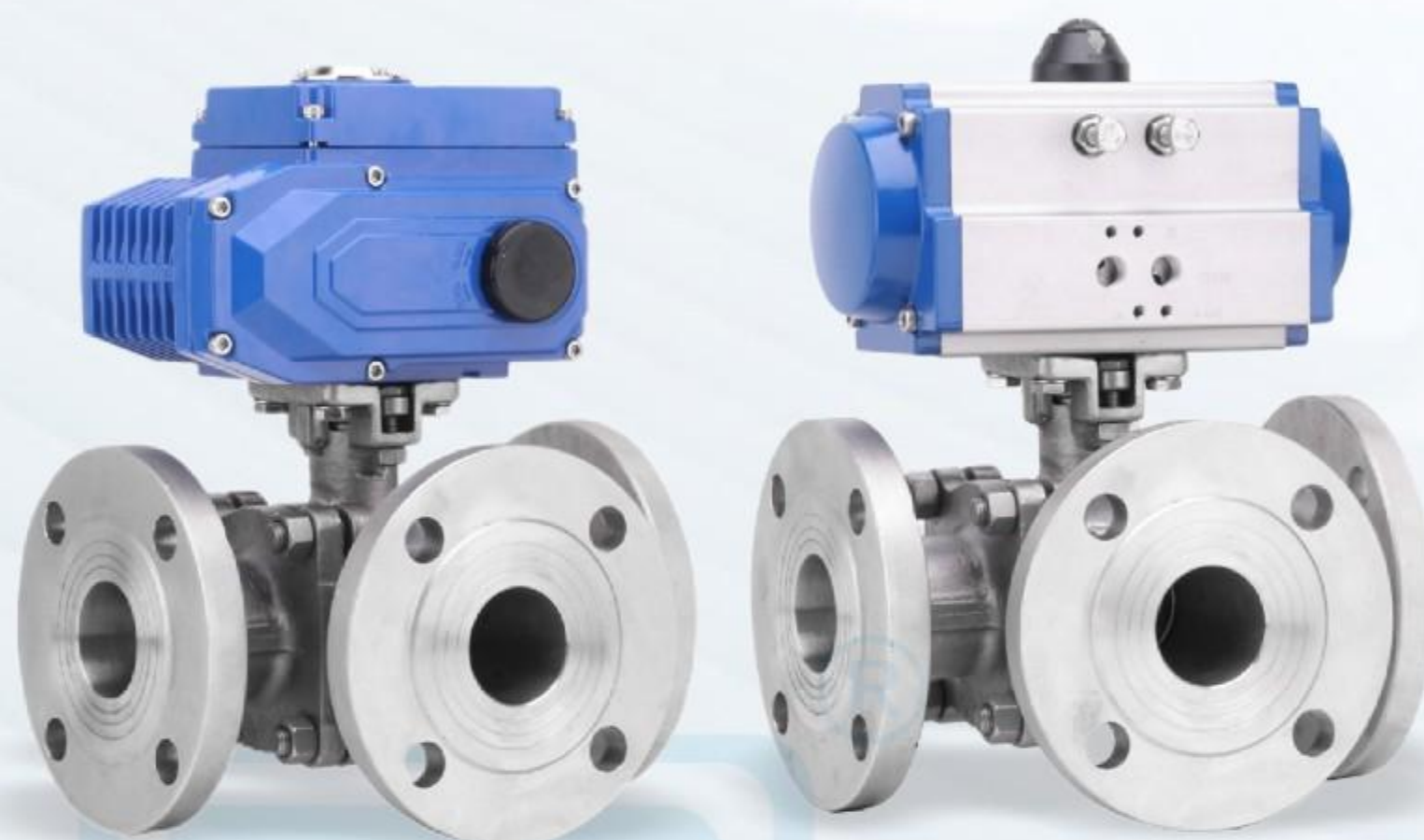




三通法兰球阀系列

3-WAY FLANGE BALL VALVE SERIES

— 产品概述

该系列 O 型三通球阀具有流通能力大、结构紧凑、密封性能好、寿命长等特点，经济实用、易于维护。广泛应用于石油、化工、天然气、电力、冶金、食品、制药等要求严密切断的场合，也可适用于水、蒸汽、油品、液化气、天然气、煤气等介质。另外可根据客户的需求选择特殊硬化处理，适用于 -196~400℃，提供更安全、更广泛的应用。

— 产品特点

1. 阀体采用精密铸造或锻造，结构紧凑、外观美观。O 型三通球阀阀芯、阀杆做旋转运动，转动阀芯时阀芯阀座始终紧密接触，具有极强的剪切能力；
2. 可设计阀座由圆柱弹簧或蝶簧预载，具有自动补偿、自密封和阀门中空自动泄压功能，适用于高温、高压场合；
3. 阀球旋转设计能够保证阀球运行平稳，减少操作扭矩；
4. 密封有软硬密封可选择，密封表面可硬化处理，适用于多种工况；
5. 阀门中空自动泄压设计，阀门腔体停留介质温度升高而引起异常升压时，不需通过安全阀，而仅靠阀座功能就可自动泄压，提高阀门在输送液体介质时安全性；
6. 紧急注脂救护，在有些特殊场合，由于介质中的异物或火灾造成阀座密封意外失效，注脂阀提供了与注脂枪快速连接，方便快捷地将密封脂注入到阀座密封部位，缓解泄漏；
7. 球阀有防静电结构、防阀杆吹出结构设计；
8. 加长型阀杆设计，可适用于低温场合；
9. 三通球阀任一通口均可用作入口而无泄漏，并可根

据工况需要制成 L 型或 T 型通道，使安装更加方便；

10. 在系统卸压后无需拆下整个阀体就能进行检查和维修；

11. 三通球阀分为 L 型和 T 型，L 型适用于介质的流向切换，能使相互垂直的两个通道连通，T 型适用于介质的分流，合流或流向切换；

12. 两阀座密封三通球阀结构紧凑、外形美观、密封性能好，它实现对管道介质流向的切换、也能使相互垂直的两个通道连通或关闭；

13. 四阀座密封三通球阀造型美观、结构合理、不仅可实现介质流向的切换，也可使三个通道相互连通，灵活控制管路中介质的合流或分流。

14. 四通球阀任一通口均可用作入口而无泄漏，并可根

据工况需要制成各种型通道，使安装更加方便；

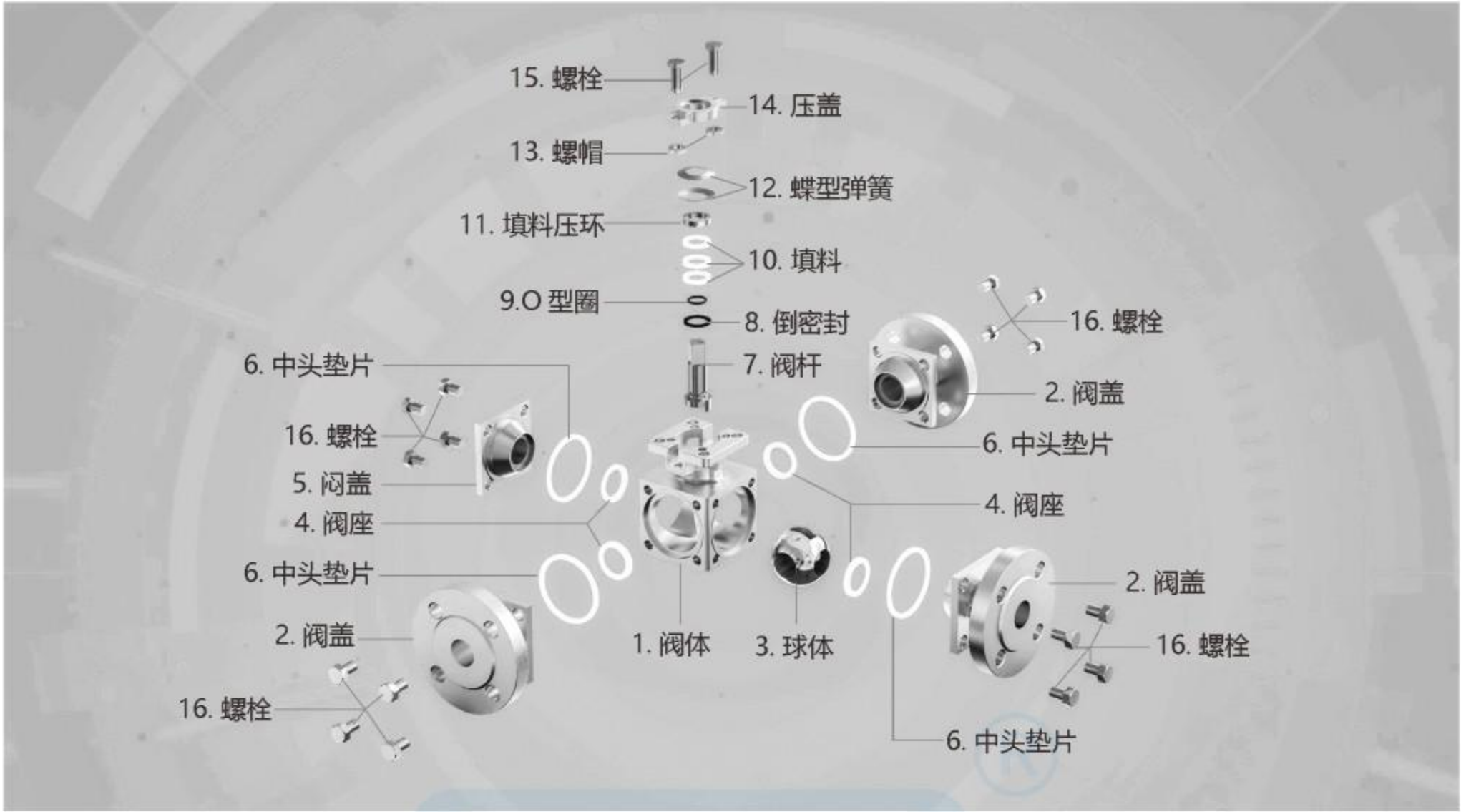
15. 四阀座密封四通球阀造型美观、结构合理、不仅可实现介质流向的切换，也可使四个通道相互连通，灵活控制管路中介质的合流或分流。

— Product description

The series O-type Three-way ball valve have characteristics of large circulation capacity, compact structure, good sealing performance, long life, etc., economical and practical, easy to maintain. It is widely used in petroleum, chemical, natural gas, electric power, metallurgy, food, pharmaceutical and other occasions with strict requirements. It can also be applied to water, steam, oil, liquefied gas, natural gas, coal gas and other media. In addition, special hardening treatment can be selected according to customer needs, suitable for -196 ~ 400 °C, providing safer and more extensive applications.

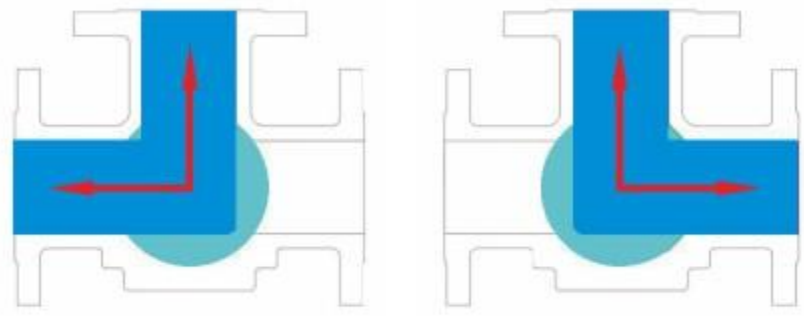
— Features

1. The valve body adopts precision casting or forging, with compact structure and beautiful appearance. The spool and stem of the O-type three-way ball valve make and valve seat are always in close contact with each other, which has a strong shearing ability;
2. The valve seat can be designed to be Preload by cylindrical spring or butterfly spring, with automatic compensation, self-sealing and automatic pressure relief in the valve cavity, suitable for high temperature and high pressure occasions;
3. The rotating design of the valve ball can ensure the smooth operation of the valve ball and reduce the operating torque;
4. There are optional soft and hard seals, and the sealing surface can be hardened, suitable for a variety of working conditions;
5. The automatic pressure relief design of the valve middle cavity. When the medium temperature of the valve body cavity rises and causes abnormal pressure increase, it does not need to pass the safety valve, but can automatically relieve pressure only by the function of the valve seat, which improves the safety of the valve when conveying liquid medium.
6. Emergency fat injection rescue, in some special occasions, due to foreign objects in the medium or fire caused by the accidental failure of the valve seat seal, the grease injection valve provides a quick connection with the grease injection gun, which is convenient and quick to inject the sealing grease into the valve seat sealing part To mitigate the leak;
7. Ball valve Antistatic design, Anti-flying design of valve stem;
8. The elongated stem design is suitable for low temperature applications;
9. Three-way ball valve Any port can be used as an inlet without leakage It can be made into L-shaped or T-shaped channels according to the working conditions, which makes installation more convenient;
10. Inspection and maintenance can be performed without removing the entire valve body after the system is relieved of pressure;
11. Three-way ball valves are divided into L-type and T-type. L-type is suitable for medium flow switching, which can connect two channels perpendicular to each other. T-type is suitable for medium splitting, confluence or flow direction switching;
12. The two-seat sealed three-way ball valve has a compact structure, beautiful appearance, and good sealing performance. It can switch the flow direction of the pipeline medium, and can also connect or close the two perpendicular channels;
13. The four-seat sealed three-way ball valve has a beautiful shape and reasonable structure, which can not only realize the switching of the medium flow direction, but also make the three channels communicate with each other, and flexibly control the merge or split flow of the medium in the pipeline;
14. Any port of the four-way ball valve can be used as an inlet without leakage, and can be made into various types of channels according to the working conditions, making the installation more convenient;
15. The four-seater sealed four-way ball valve has a beautiful shape and reasonable structure, which can not only realize the switching of the medium flow direction, but also make the four channels communicate with each other, and flexibly control the merge or split flow of the medium in the pipeline.

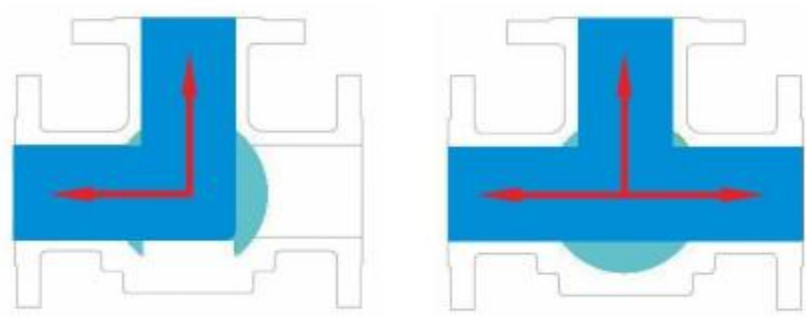


主要零件材料 Material parts materials

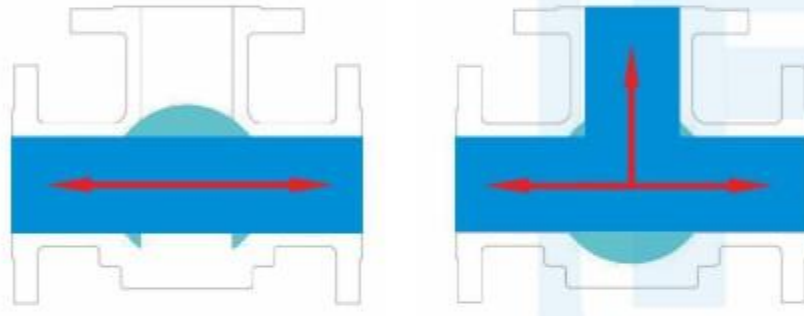
NO.	零件名称 PART NAME	材料 MATERIAL
1	阀体 Body	WCB、CF8、CF8M、CF3M 等
2	阀盖 Bonnet	WCB、CF8、CF8M、CF3M 等
3	球体 Ball body	SS304、SS316、SS316L、SS316L + STL 等
4	阀座 Seat	PTFE、PPL、金属密封等 (Metal seal, etc.)
5	阀盖 Cover board	WCB、CF8、CF8M、CF3M
6	中头垫片 Middle head gasket	PTFE、PPL、金属垫片 (Metal gasket)
7	阀杆 Stem	304、SS316、316L、17-4PH、S20910
8	倒密封 Inverted seal	PTFE、PPL、不锈钢缠绕石墨 (Stainless steel wound graphite)
9	O 型圈 O-ring	氟橡胶 (VITON)
10	填料 Filler	PTFE、PPL、柔性石墨 (Flexible graphite)
11	填料压环 Filling clamping ring	SS304
12	蝶形弹簧 Butterfly spring	SS304
13	螺帽 NUT	2H、SS304
14	压盖 Gland of valve	CF8
15	螺栓 Screw	B7、SS304
16	螺栓 Screw	B7、SS304



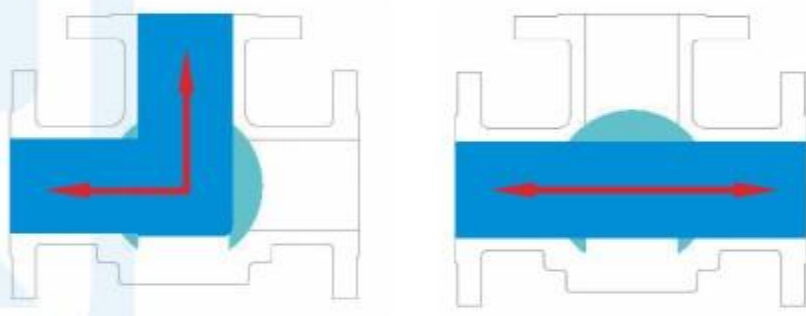
L 型三通球阀



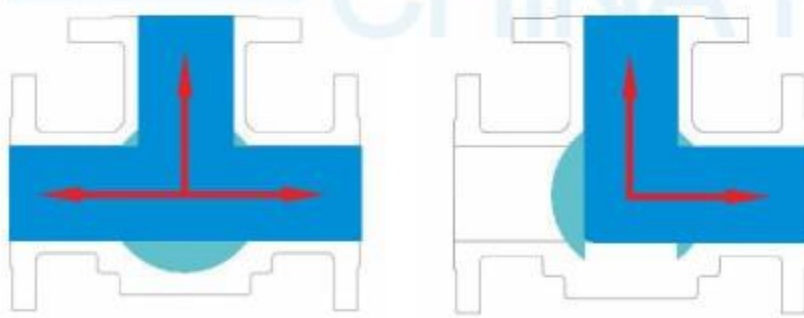
T 型三通球阀 NO.1



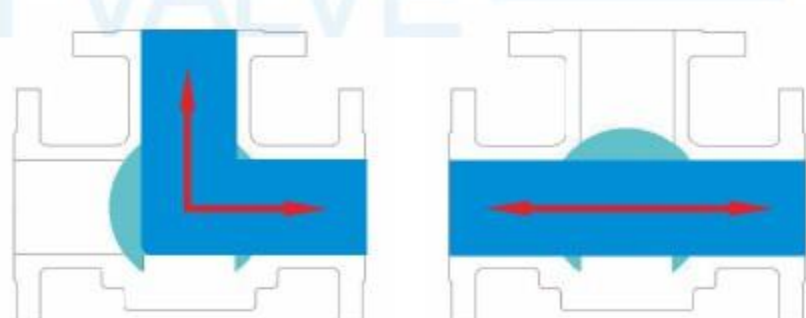
T 型三通球阀 NO.2



T 型三通球阀 NO.3



T 型三通球阀 NO.4



T 型三通球阀 NO.5

产品技术参数 Product Specifications

公称压力 Nominal pressure	PN1.6~42MPa、ANSI150LB~2500LB
公称通径 Nominal diameter (mm)	DN15~DN400
连接形式 Connection Type	法兰 Flange、螺纹 Thread、对焊 Butt welding、承插焊 Socket welding ISO快装、KF真空Vacuum、真空法兰Vacuum flange
阀体材料 Body material	LCB、WCB、CF8、CF8M、CF3、CF3M 等
阀座形式 Valve seat form	软阀座、金属阀座 (密封面硬化处理) Soft seat、metal seat (hardened sealing surface)
适用温度 Proper temperature	软阀座: -20~ + 200℃ 金属阀座: -196~ + 400℃ Soft seat: -20~ + 200℃ Metal seat: -196~ + 400℃
泄漏等级 Leakage level	ANSI VI
设计标准 Design standards	GB/T12237、ASME B16.34
结构长度 Structure length	GB/T12221、ASME B16.10
检测标准 Testing standards	GB/T13927、API598
操作方式 Operation method	手动、气动、电动等 Manual、pneumatic、electric、etc.
可选项 Optional	防静电设计、防火设计、禁油处理、禁铜处理、球面特殊处理、 按客户要求涂漆 Anti-static design、fire protection design、oil-free treatment、Copper Prohibition、Spherical special treatment、Customers request painting

产品结构特点

Product structure design features

阀杆防吹出结构设计(见图1)

阀杆防吹出结构设计，下端大上端小的阀杆在上端盖和螺丝的定位下，即使在阀腔异常的情况下，也能保证阀杆不会被介质吹出。

Valve stem anti-blowing structure design (see picture 1)

Valve stem anti-blowing structure design, the lower end is larger and the upper end is smaller. Under the positioning of the upper end cover and screws, even in the valve cavity is abnormal in the case of, it can also ensure that the valve stem will not be blown out by the medium.

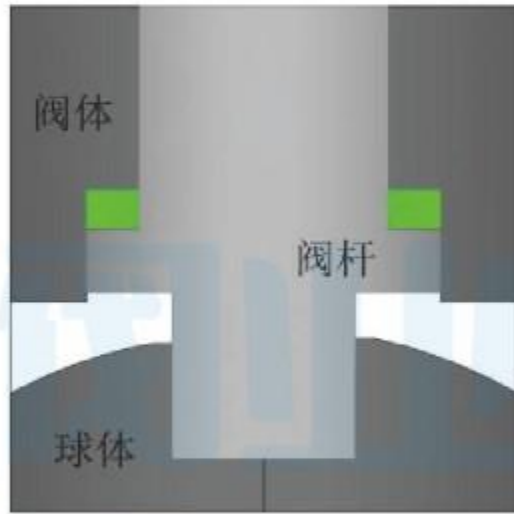


图 1 (picture 1)

防静电设计 (见图 2)

固定球阀通过防静电设计使球体、阀杆、阀体形成静电通道。从而将球体与阀座开关过程中由于摩擦产生的静电通过阀体引到大地，防止静电火花可能引起的火灾或爆炸危险。

Anti-static design (See picture 2)

The fixed ball valve adopts anti-static design to make the ball, stem and valve Thebody forms an electrostatic channel. So that the ball and the seat are switchedDuring the process, static electricity generated by friction is led to the groundthrough the valve body, Prevent the risk of fire or explosion caused by static sparks.

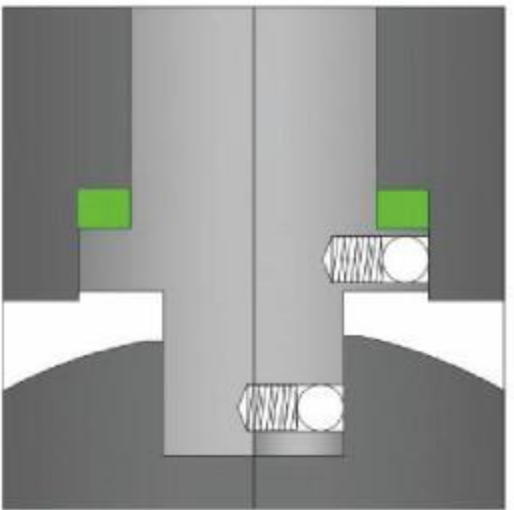


图 2 (picture 2)

KV值 rated

SIZE	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400
Kv	21	38	72	112	170	275	380	512	941	1451	2220	3590	5130	7360	8750	11800

软密封力矩表 Soft seal torque table

SIZE	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400
PN16	6	10	20	26	32	50	100	130	250	500	680	970	1620	2620	3820	5720
PN25	10	14	22	30	36	60	120	160	280	600	800	1360	2280	3740	5480	8300
PN40	14	20	48	60	70	100	200	300	500	900	1170	1992	3380	5600	8220	12600
PN63	30	60	100	130	160	200	400	600	800	1200	1780	3000	5120	8580	12640	19500
PN100	38	70	136	200	260	380	760	920	1540	1310	3780	6560	10500	14400	19720	29000
PN160	48	88	170	250	306	476	900	1150	1926	2096	4639	8232	11820	20274	28282	37732
CL150	10	14	26	36	44	60	120	160	270	600	940	1560	2210	3310	5390	6328
CL300	19	28	60	90	110	140	280	440	620	1050	1460	2400	3472	4776	6448	10278
CL600	38	70	136	200	260	380	720	920	1540	1310	3780	6560	10500	14400	19720	29000
CL900	48	88	170	250	306	476	900	1150	1926	2096	4639	8232	11820	20274	28282	37732
CL1500	64	110	230	285	342	592	1126	1436	2408	3810	7630	14430	21980	32206	49036	59260
CL2500	98	165	345	430	520	1178	1472	3154	3930	4912	11002	23572	26444	40150	63747	79800

注：黑色部分为浮动式三通四通球阀力矩表，红色部分为固定式三通四通球阀力矩表。

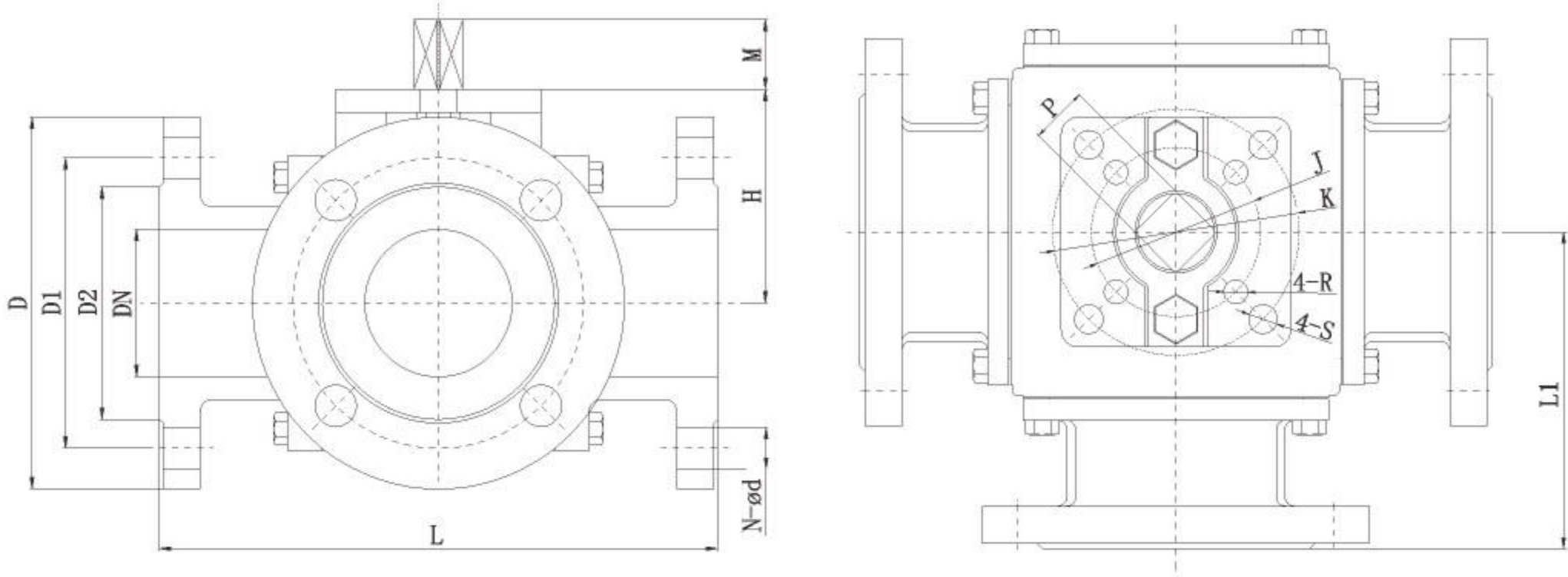
Note: The black part is the torque table of the floating three-way four-way ball valve, and the red part is the torque table of the fixed three-way four-way ball valve.

硬密封力矩表 Hard seal torque table

SIZE	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400
PN16-L 型	18	22	31	42	62	88	126	192	308	572	858	1320	1738	2805	4103	6138
PN16-T 型	34	42	59	80	118	167	239	365	585	1087	1630	2508	3302	5329	7796	11662
PN25-L 型	20	25	40	75	83	115	176	264	396	803	1320	2035	2453	4015	5880	8899
PN25-T 型	38	47	76	142	158	218	334	502	752	1526	2508	3866	4660	7628	11172	16900
PN40-L 型	22	33	59	112	132	165	264	451	676	1265	2156	2750	3619	6006	8816	13508
PN40-T 型	42	63	112	213	251	313	502	857	1284	2403	4096	5225	6876	11411	16750	25665
PN63-L 型	27	46	77	165	211	286	429	726	1023	2090	3245	4620	6116	9427	12738	22715
PN63-T 型	51	87	146	313	400	543	815	1379	1944	3971	6165	8778	11620	17900	24200	43100
PN100-L 型	33	60	115	213	330	286	517	946	1452	2178	3157	5874	10186	14982	19700	35200
PN100-T 型	63	114	218	405	627	543	982	1797	2759	4138	5998	11160	19353	28466	37400	66800
PN160-L 型	42	93	170	297	429	429	781	1419	2145	3432	4928	8635	17050	24700	33000	59800
PN160-T 型	80	178	323	564	815	815	1484	2696	4075	6521	9363	16406	32395	46900	62700	113600
CL150-L 型	19	23	37	62	68	103	143	225	341	671	1078	1595	2035	3685	5192	7843
CL150-T 型	36	44	70	118	129	196	272	427	648	1275	2048	3030	3866	6999	9865	14902
CL300-L 型	24	35	71	129	154	235	324	605	825	1628	2651	3971	4917	7645	10296	18579
CL300-T 型	46	66	125	245	293	446	616	1150	1567	3093	5037	7545	9342	14525	19562	35300
CL600-L 型	33	60	115	213	330	286	517	946	1452	2178	3157	5874	10186	14982	19700	35200
CL600-T 型	63	114	218	405	627	543	982	1797	2759	4138	5998	11160	19353	28466	37400	66800
CL900-L 型	42	93	170	297	429	429	781	1419	2145	3432	4928	8635	17050	24700	33000	59800
CL900-T 型	80	178	323	564	815	815	1484	2696	4075	6521	9363	16406	32395	46900	62700	113600

注：黑色部分为浮动式三通四通球阀力矩表，红色部分为固定式三通四通球阀力矩表。

Note: The black part is the torque table of the floating three-way four-way ball valve, and the red part is the torque table of the fixed three-way four-way ball valve.



GB PN16 主要外形尺寸表 Main dimensions table

Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	M	H	J	K	P	R	S
DN15	150	75	45	65	95	4-ø 14	13	58	42	50	11	6	7
DN20	160	80	58	75	105	4-ø 14	16	61	50	70	14	7	9
DN25	180	90	68	85	115	4-ø 14	16	72	50	70	14	7	9
DN32	200	100	78	100	140	4-ø 18	16	81	50	70	14	7	9
DN40	220	110	88	110	150	4-ø 18	19	103	70	102	17	9	11
DN50	240	120	102	125	165	4-ø 18	19	113	70	102	17	9	11
DN65	260	130	122	145	185	8-ø 18	19	120	70	102	17	9	11
DN80	280	140	138	160	200	8-ø 18	24	162	125	140	22	14	18
DN100	320	160	158	180	220	8-ø 18	24	184	125	140	22	14	18
DN125	380	190	188	210	250	8-ø 18	29	215	140	165	27	18	22
DN150	440	220	212	240	285	8-ø 22	29	250	140	165	27	18	22
DN200	550	275	268	295	340	12-ø 22	38	334		165	36		22
DN250	670	335	320	355	405	12-ø 26		380		165			
DN300	720	360	378	410	460	12-ø 26		405		165			
DN350	890	445	438	470	520	16-ø 26		450		254			
DN400	1000	500	490	525	580	16-ø 30		490		254			

GB PN25~40 主要外形尺寸表Main dimensions table

Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	M	H	J	K	P	R	S
DN15	150	75	45	65	95	4-ø 14	13	58	42	50	11	6	7
DN20	160	80	58	75	105	4-ø 14	16	61	50	70	14	7	9
DN25	180	90	68	85	115	4-ø 14	16	72	50	70	14	7	9
DN32	200	100	78	100	140	4-ø 18	16	81	50	70	14	7	9
DN40	220	110	88	110	150	4-ø 18	19	103	70	102	17	9	11
DN50	240	120	102	125	165	4-ø 18	19	113	70	102	17	9	11
DN65	290	145	122	145	185	8-ø 18	19	120	70	102	17	9	11
DN80	310	155	138	160	200	8-ø 18	24	162	125	140	22	14	18
DN100	350	175	162	190	235	8-ø 22	24	184	125	140	22	14	18
DN125	400	200	188	220	270	8-ø 26	29	215	140	165	27	18	22
DN150	480	240	218	250	300	8-ø 26	29	250	140	165	27	18	22
DN200	PN25	600	300	268	310	12-ø 26	38	334		165	36		22
	PN40	600	300	285	320	12-ø 30	38	334		165	36		22
DN250	PN25	730	365	335	370	12-ø 30		380		165			
	PN40	730	365	345	385	12-ø 33		380		165			
DN300	PN25	850	425	395	430	16-ø 30		405		165			
	PN40	850	425	410	450	16-ø 33		405		165			
DN350	PN25	980	490	450	490	16-ø 33		450		254			
	PN40	980	490	465	510	16-ø 36		450		254			
DN400	PN25	1100	550	505	550	16-ø 36		490		254			
	PN40	1100	550	535	585	16-ø 39		490		254			

ASME CLASS150 主要外形尺寸表 Main dimensions table

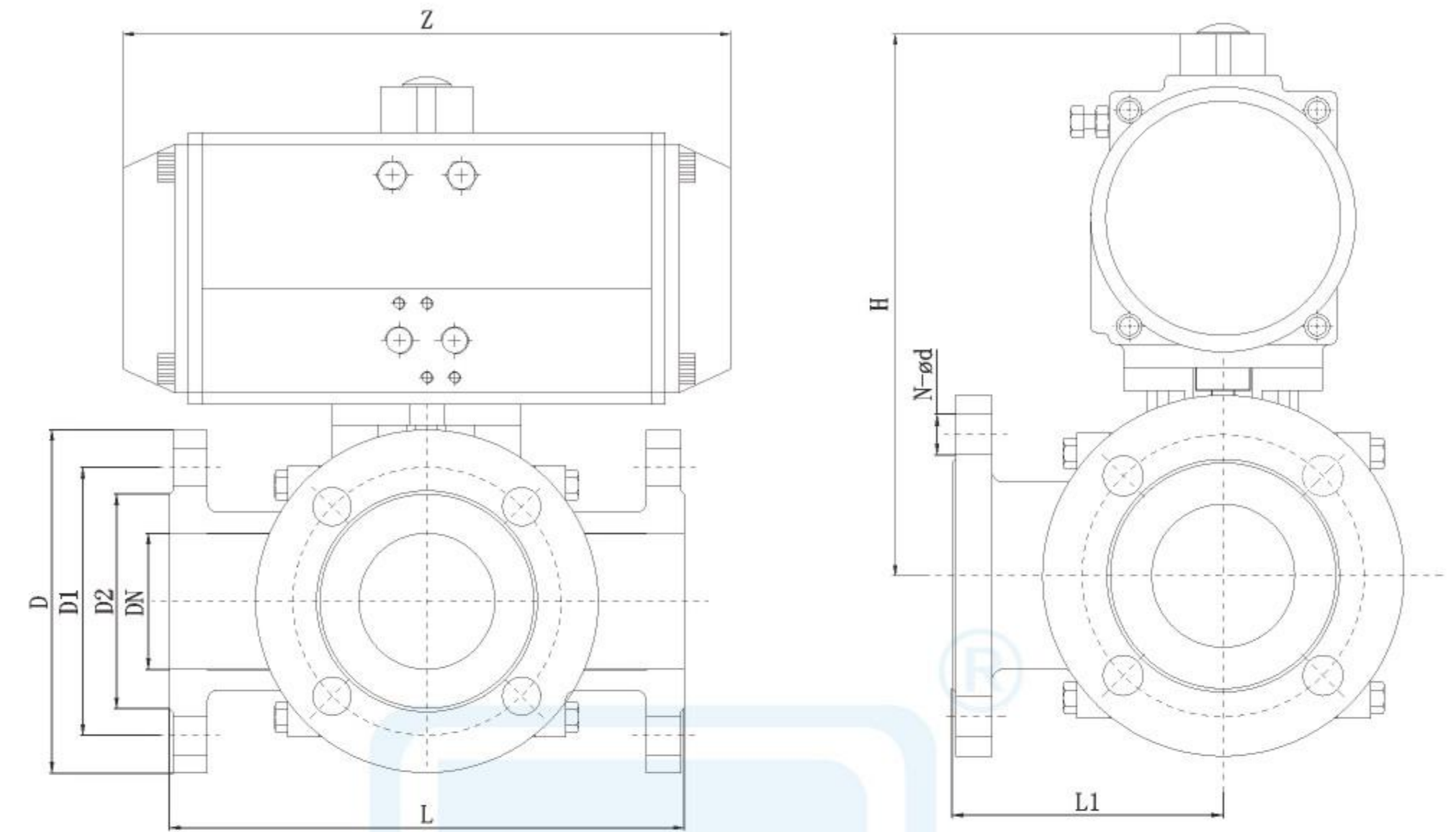
Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	M	H	J	K	P	R	S
NPS1/2	150	75	34.9	60.3	90	4-ø 16	13	58	42	50	11	6	7
NPS3/4	160	80	42.9	69.9	100	4-ø 16	16	61	50	70	14	7	9
NPS1	180	90	50.8	79.4	110	4-ø 16	16	72	50	70	14	7	9
NPS1-1/4	200	100	63.5	88.9	115	4-ø 16	16	81	50	70	14	7	9
NPS1-1/2	220	110	73.0	98.4	125	4-ø 16	19	103	70	102	17	9	11
NPS2	240	120	92.1	120.7	150	4-ø 19	19	113	70	102	17	9	11
NPS2-1/2	260	130	104.8	139.7	180	4-ø 19	19	120	70	102	17	9	11
NPS3	280	140	127.0	152.4	190	4-ø 19	24	162	125	140	22	14	18
NPS4	320	160	157.2	190.5	230	8-ø 19	24	184	125	140	22	14	18
NPS5	380	190	185.7	215.9	255	8-ø 22	29	215	140	165	27	18	22
NPS6	440	220	215.9	241.3	280	8-ø 22	29	250	140	165	27	18	22
NPS8	550	275	269.9	298.5	345	8-ø 22	38	334		165	36		22
NPS10	670	335	323.8	362.0	405	12-ø 26		380		165			
NPS12	720	360	381.0	413.8	485	12-ø 26		405		165			
NPS14	890	445	412.8	476.3	535	12-ø 29		450		254			
NPS16	1000	500	469.9	539.8	595	16-ø 29		490		254			

ASME CLASS300 主要外形尺寸表 Main dimensions table

Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	M	H	J	K	P	R	S
NPS1/2	150	75	34.9	66.7	95	4-ø 16	13	58	42	50	11	6	7
NPS3/4	160	80	42.9	82.6	115	4-ø 19	16	61	50	70	14	7	9
NPS1	180	90	50.8	88.9	125	4-ø 19	16	72	50	70	14	7	9
NPS1-1/4	200	100	63.5	98.4	135	4-ø 19	16	81	50	70	14	7	9
NPS1-1/2	220	110	73.0	114.3	155	4-ø 22	19	103	70	102	17	9	11
NPS2	240	120	92.1	127.0	165	8-ø 19	19	113	70	102	17	9	11
NPS2-1/2	290	145	104.8	149.2	190	8-ø 22	19	120	70	102	17	9	11
NPS3	310	155	127.0	168.3	210	8-ø 22	24	162	125	140	22	14	18
NPS4	350	175	157.2	200.0	255	8-ø 22	24	184	125	140	22	14	18
NPS5	400	200	185.7	235.0	280	8-ø 22	29	215	140	165	27	18	22
NPS6	480	240	215.9	269.9	320	12-ø 22	29	250	140	165	27	18	22
NPS8	600	300	269.9	330.2	380	12-ø 26	38	334		165	36		22
NPS10	730	365	323.8	387.4	445	16-ø 29		380		165			
NPS12	850	425	381.0	450.8	520	16-ø 32		405		165			
NPS14	980	490	412.8	514.4	585	20-ø 32		450		254			
NPS16	1100	550	469.9	571.5	650	20-ø 35		490		254			



JIS 10K 主要外形尺寸表 Main dimensions table

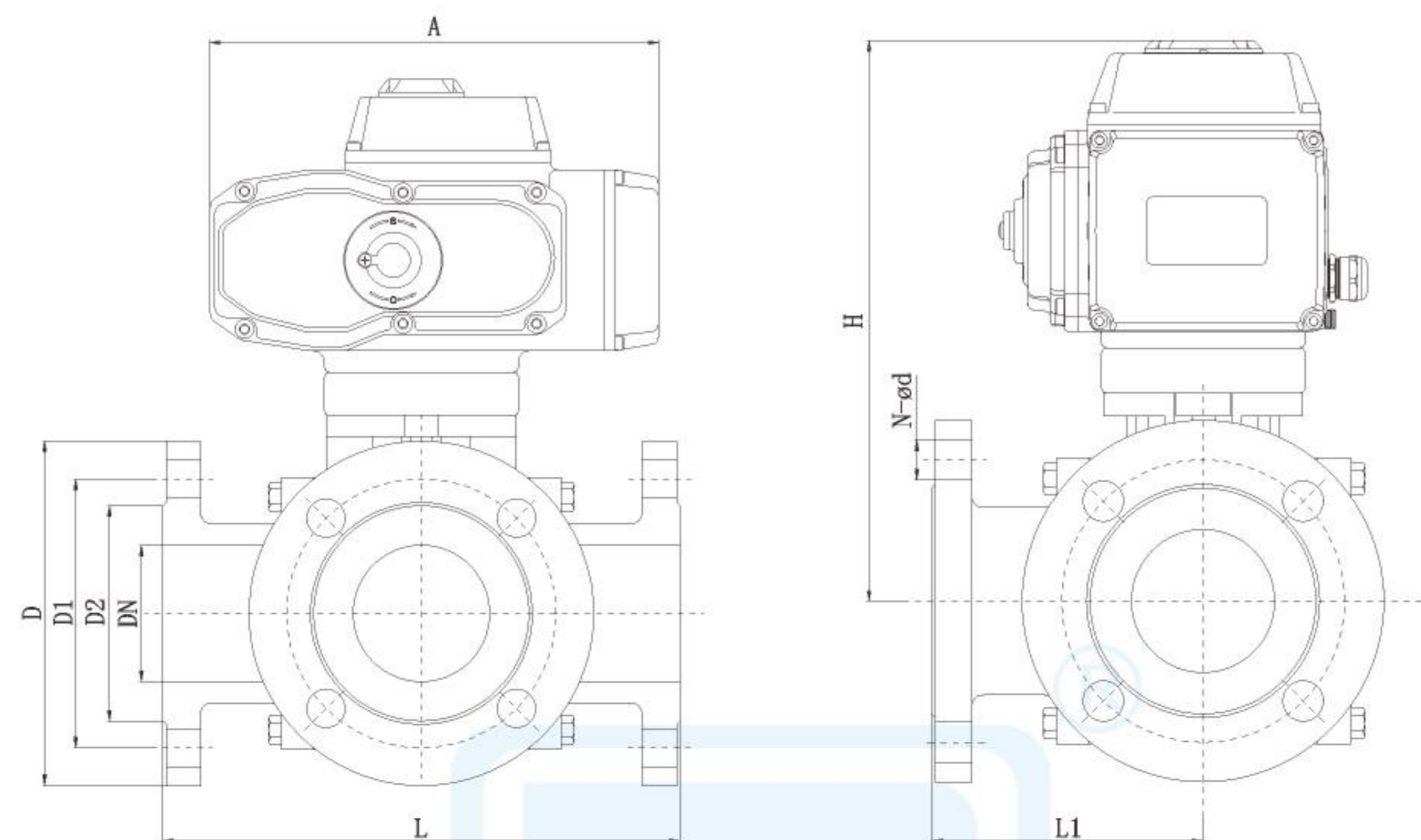
Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	M	H	J	K	P	R	S
15A	150	75	51	70	95	4-ø 15	13	58	42	50	11	6	7
20A	160	80	56	75	100	4-ø 15	16	61	50	70	14	7	9
25A	180	90	67	90	125	4-ø 19	16	72	50	70	14	7	9
32A	200	100	76	100	135	4-ø 19	16	81	50	70	14	7	9
40A	220	110	81	105	140	4-ø 19	19	103	70	102	17	9	11
50A	240	120	96	120	155	4-ø 19	19	113	70	102	17	9	11
65A	260	130	116	140	175	4-ø 19	19	120	70	102	17	9	11
80A	280	140	126	150	185	8-ø 19	24	162	125	140	22	14	18
100A	320	160	151	175	210	8-ø 19	24	184	125	140	22	14	18
125A	380	190	182	210	250	8-ø 23	29	215	140	165	27	18	22
150A	440	220	212	240	280	8-ø 23	29	250	140	165	27	18	22
200A	550	275	262	290	330	12-ø 23	38	334		165	36		22
250A	670	335	324	355	400	12-ø 25		380		165			
300A	720	360	368	400	445	16-ø 25		405		165			
350A	890	445	413	445	490	16-ø 25		450		254			
400A	1000	500	475	510	560	16-ø 27		490		254			

GB PN16 主要外形尺寸表 Main dimensions table

Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	双作用 (DA)		单作用 (SR)	
							H	Z	H	Z
DN15	150	75	46	65	95	4-ø 14	150	147	170	168
DN20	160	80	56	75	105	4-ø 14	170	168	190	204
DN25	180	90	65	85	115	4-ø 14	190	184	210	262
DN32	200	100	76	100	140	4-ø 18	210	204	235	268
DN40	220	110	84	110	150	4-ø 18	240	262	290	296
DN50	240	120	99	125	165	4-ø 18	270	268	315	390
DN65	260	130	118	145	185	8-ø 18	215	296	360	454
DN80	280	140	132	160	200	8-ø 18	390	454	420	525
DN100	320	160	156	180	220	8-ø 18	450	525	475	532
DN125	380	190	184	210	250	8-ø 18	500	532	530	610
DN150	440	220	211	240	285	8-ø 22	570	610	606	722
DN200	550	275	266	295	340	12-ø 22	690	722	726	830



GB PN16 主要外形尺寸表 Main dimensions table

Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	A	H	SIZE
DN15	150	75	46	65	95	4-ø 14	165	200	SPD05
DN20	160	80	56	75	105	4-ø 14	165	210	SPD05
DN25	180	90	65	85	115	4-ø 14	212	240	SPD10
DN32	200	100	76	100	140	4-ø 18	212	250	SPD10
DN40	220	110	84	110	150	4-ø 18	259	310	SPD20
DN50	240	120	99	125	165	4-ø 18	259	320	SPD20
DN65	260	130	118	145	185	8-ø 18	259	335	SPD40
DN80	280	140	132	160	200	8-ø 18	259	365	SPD60
DN100	320	160	156	180	220	8-ø 18	284	420	SPD100
DN125	380	190	184	210	250	8-ø 18	284	440	SPD200
DN150	440	220	211	240	285	8-ø 22	284	470	SPD200
DN200	550	275	266	295	340	12-ø 22	500	700	SPD400



主要零件材料 Material parts materials

序号 Serial number	零件名称 Part Name	材料 material
1	阀体 Body	CF8、CF8M、CF3M
2	阀盖 Bonnet	CF8、CF8M、CF3M
3	球体 Ball body	SS304、SS316、SS316L
4	阀座 Seat	PTFE、PPL
5	阀杆 Stem	SS304、SS316、SS316L
6	倒密封 Inverted seal	PTFE、PPL
7	O型圈 O-ring	氟橡胶 VITON
8	填料 Filler	PTFE、PPL
9	填料压套 Filling clamping ring	SS304
10	蝶形弹簧 Butterfly spring	SS304
11	螺帽 NUT	SS304
12	压盖 Gland of valve	CF8
13	螺栓 Screw	SS304

产品技术参数 Product Specifications

公称压力 Nominal pressure	1000WOG
公称通径 Nominal diameter	DN15~DN50
连接方式 Connection method	BSPT、BSP、NPT、DIN、JIS、RC、G
阀体材料 Body material	CF8、CF8M、CF3M 等
阀座形式 Valve seat form	PTFE、PPL
适用温度 proper temperature	软阀座: -20~ + 200℃ Soft seat: -20~ + 200℃
泄漏等级 Leakage level	ANSI VI
检测标准 Testing standards	GB/T13927、API598
操作方式 Operation method	手动、气动、电动等 Manual, pneumatic, electric, etc.
可选项 Optional	防静电设计、禁油处理、禁铜处理、球面特殊处理 Anti-static design、oil-free treatment、Copper Prohibition、Spherical special treatment

产品结构特点

Product structure design features

阀杆防吹出结构设计(见图1)

阀杆防吹出结构设计, 下端大上端小的阀杆在上端盖和螺丝的定位下, 即使在阀腔异常的情况下, 也能保证阀杆不会被介质吹出。

Valve stem anti-blowing structure design (see picture 1)

Valve stem anti-blowing structure design, the lower end is larger and the upper end is smaller Under the positioning of the upper end cover and screws, even in the valve cavity is abnormal In the case of, it can also ensure that the valve stem will not be blown out by the medium.

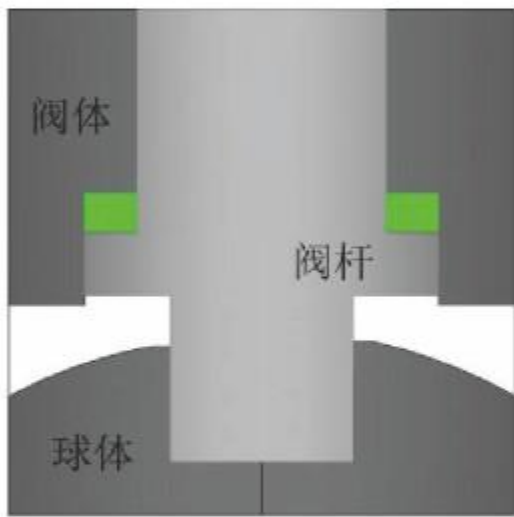


图 1 (picture 1)

防静电设计 (见图2)

固定球阀通过防静电设计使球体、阀杆、阀体形成静电通道。从而将球体与阀座开关过程中由于摩擦产生的静电通过阀体引到大地, 防止静电火花可能引起的火灾或爆炸危险。

Anti-static design (See picture 2)

The fixed ball valve adopts anti-static design to make the ball, stem and valve Thebody forms an electrostatic channel. So that the ball and the seat are switchedDuring the process, static electricity generated by friction is led to the groundthrough the valve body, Prevent the risk of fire or explosion caused by static sparks.

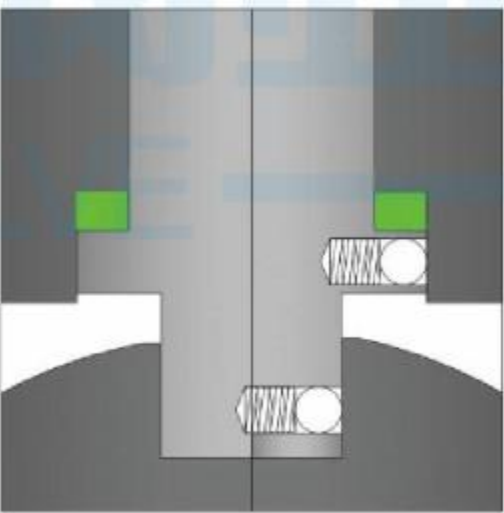


图 2 (picture 2)

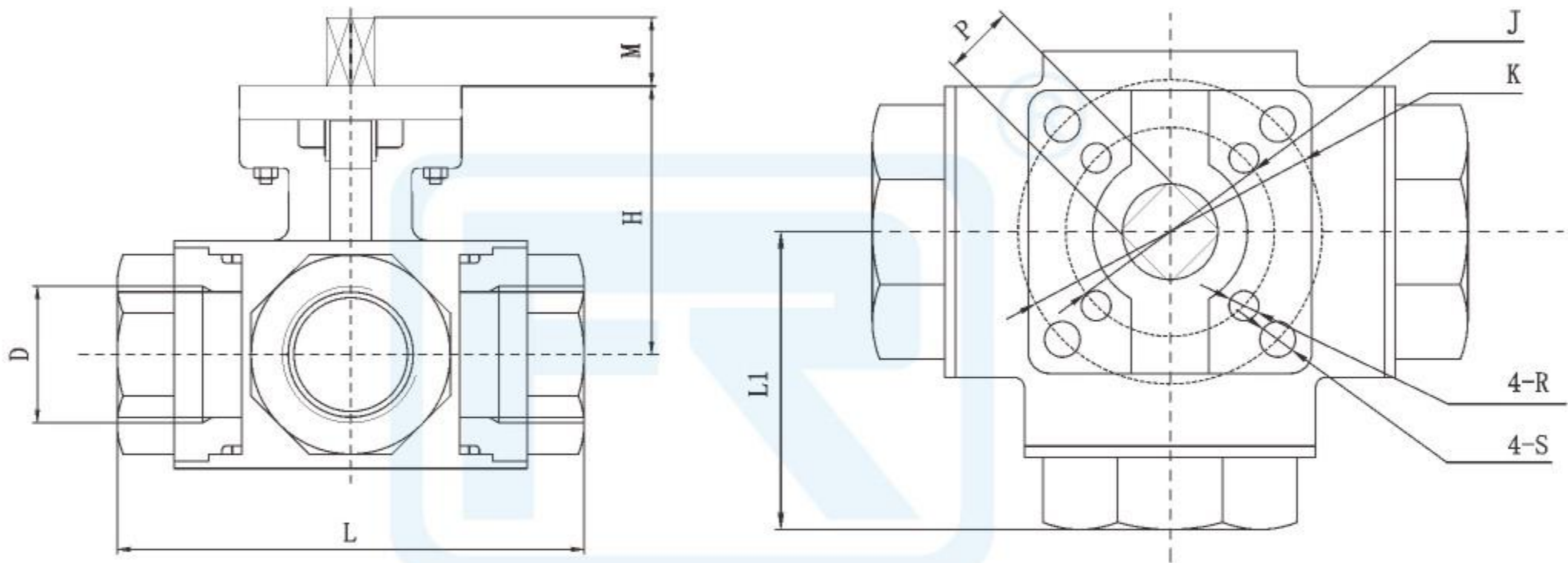
KV值 rated

SIZE	DN15	DN20	DN25	DN32	DN40	DN50
Kv	13	21	38	72	112	170

软密封力矩表 Soft seal torque table

N.m

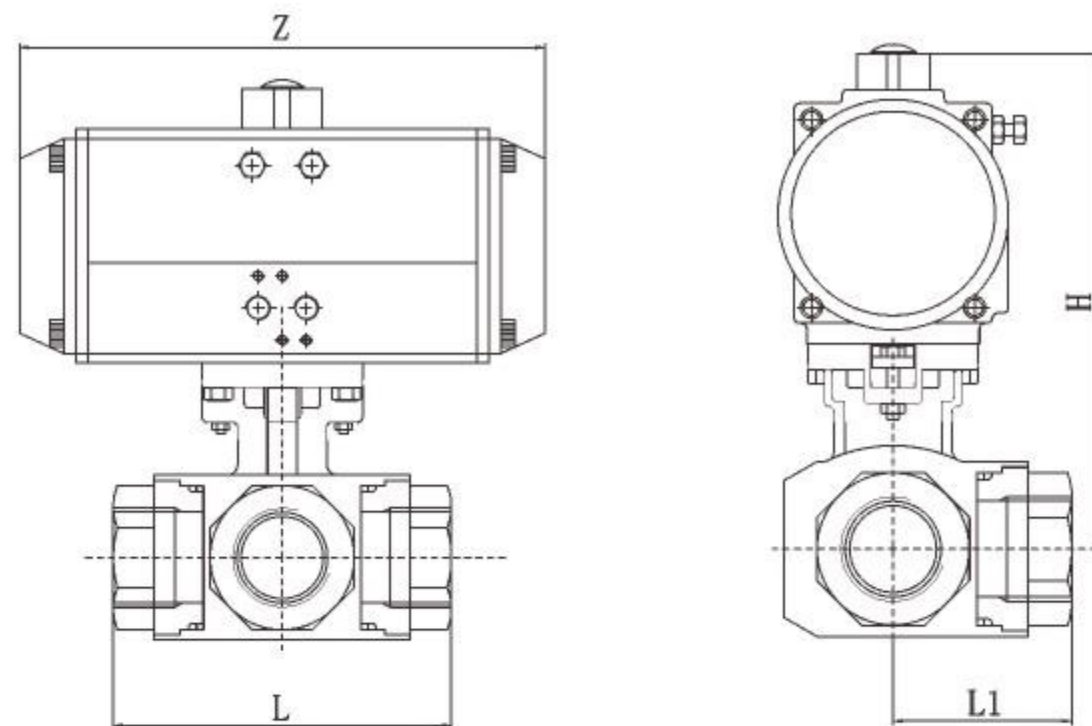
SIZE	DN15	DN20	DN25	DN32	DN40	DN50
PN16	4	6	10	20	26	32
PN25	7	10	14	22	30	36
PN40	11	14	20	48	60	70
PN63	16	30	60	100	130	160



1000WOG 主要外形尺寸表 Main dimensions table

Unit: mm

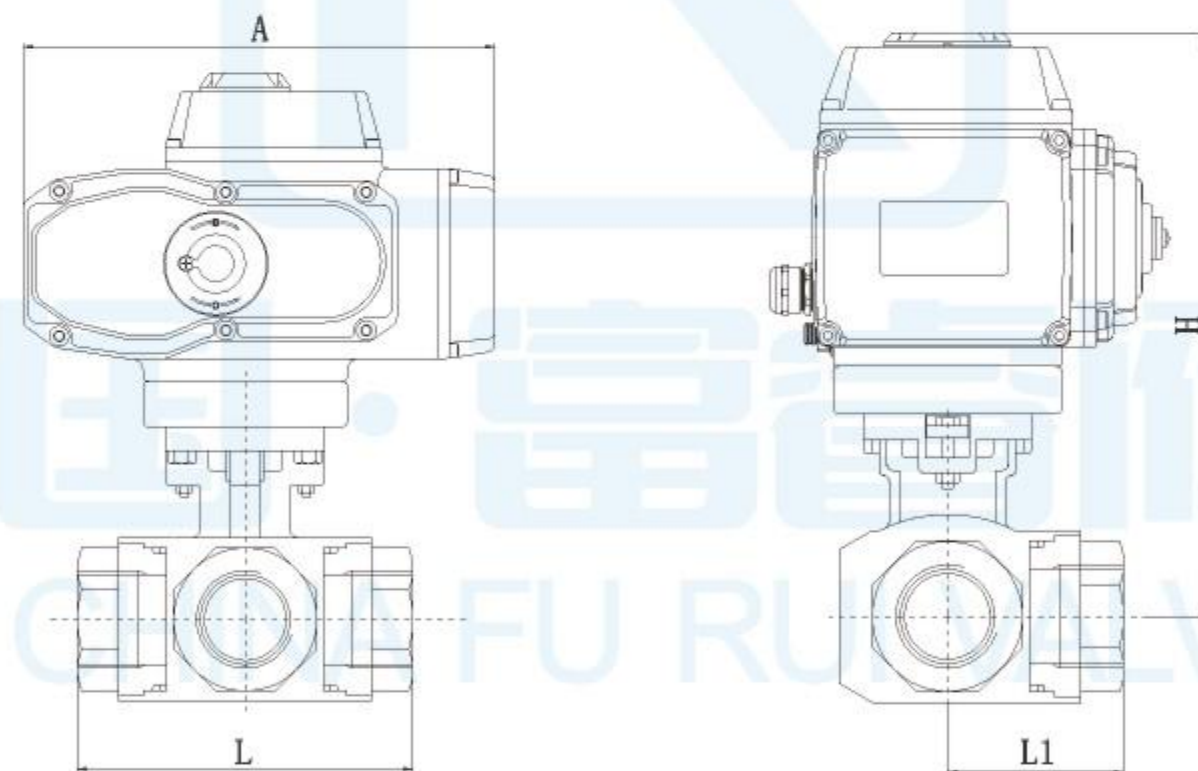
SIZE		D	L	L1	H	M	P	J	K	R	S
DN15	1/2"	12	79	39.5	48.5	10	9	42	50	6	7
DN20	3/4"	16	86	43	53.5	10	9	42	50	6	7
DN25	1"	20	101	50.5	60	13	11	42	50	6	7
DN32	1-1/4"	25	114	57	67.5	13	11	42	50	6	7
DN40	1-1/2"	32	136	68	74	16	14	50	70	7	9
DN50	2"	38	152	76	82.5	16	14	50	70	7	9



1000WOG 主要外形尺寸表 Main dimensions table

Unit: mm

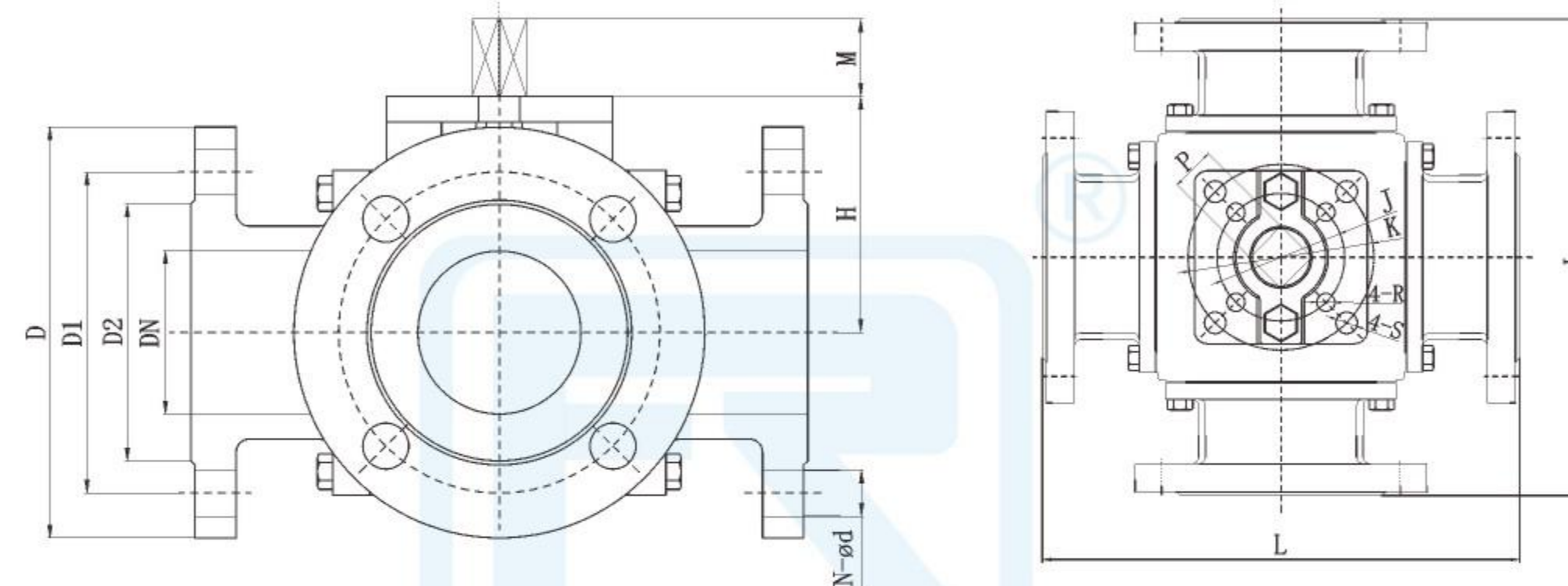
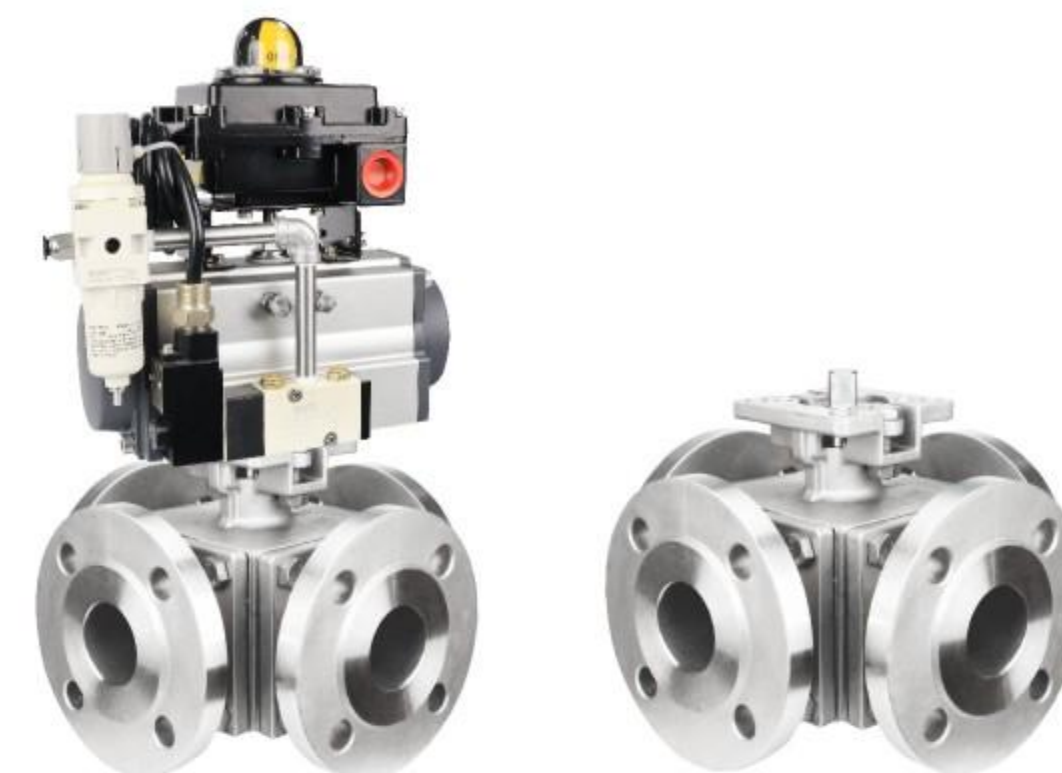
SIZE	L	L1	双作用 (DA)		单作用 (SR)	
			H	Z	H	Z
DN15	1/2"	75	135	147	150	168
DN20	3/4"	85	160	168	170	184
DN25	1"	100	180	184	190	204
DN32	1-1/4"	115	190	204	200	262
DN40	1-1/2"	124	210	262	225	268
DN50	2"	147	230	268	265	296



1000WOG 主要外形尺寸表 Main dimensions table

Unit: mm

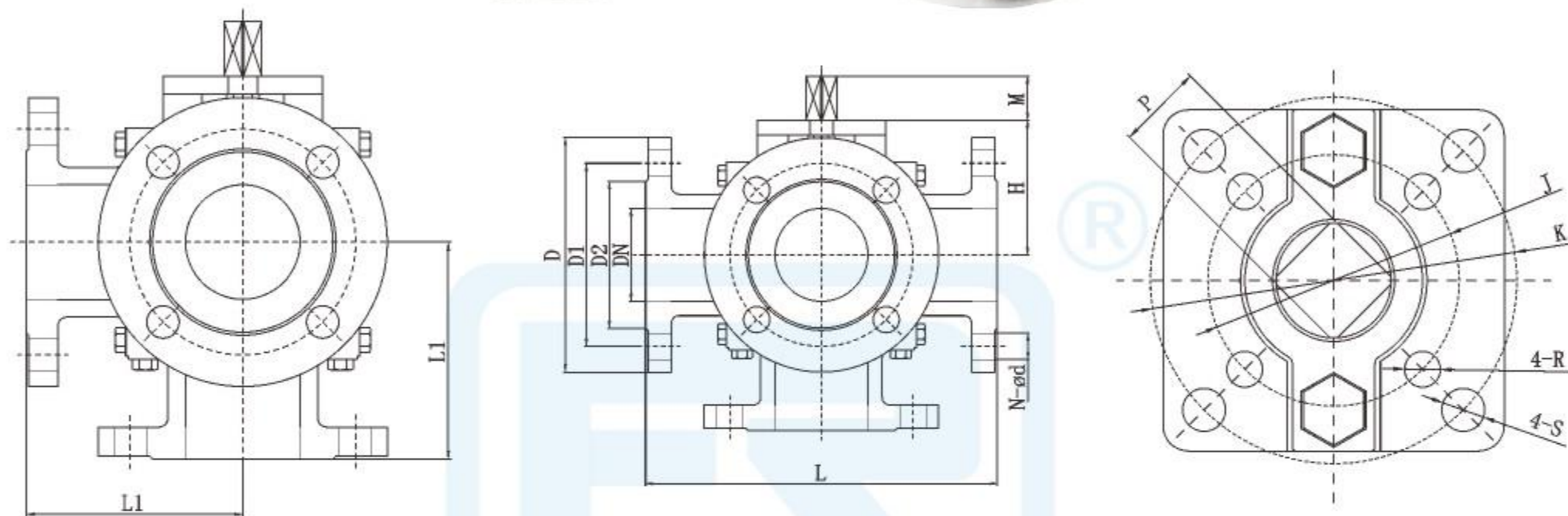
SIZE	L	L1	A	H
DN15	1/2"	75	37.5	165
DN20	3/4"	85	42.5	165
DN25	1"	100	50	165
DN32	1-1/4"	115	57.5	212
DN40	1-1/2"	124	62	212
DN50	2"	147	75	259



GB PN16 主要外形尺寸表 Main dimensions table

Unit: mm

SIZE	L	D2	D1	D	N-ød	M	H	J	K	P	R	S
DN15	150	45	65	95	4-ø 14	13	58	42	50	11	6	7
DN20	160	58	75	105	4-ø 14	16	61	50	70	14	7	9
DN25	180	68	85	115	4-ø 14	16	72	50	70	14	7	9
DN32	200	78	100	140	4-ø 18	16	81	50	70	14	7	9
DN40	220	88	110	150	4-ø 18	19	103	70	102	17	9	11
DN50	240	102	125	165	4-ø 18	19	113	70	102	17	9	11
DN65	260	122	145	185	8-ø 18	19	120	70	102	17	9	11
DN80	280	138	160	200	8-ø 18	24	162	125	140	22	14	18
DN100	320	158	180	220	8-ø 18	24	184	125	140	22	14	18
DN125	380	188	210	250	8-ø 18	29	215	140	165	27	18	22
DN150	440	212	240	285	8-ø 22	29	250	140	165	27	18	22
DN200	550	268	295	340	12-ø 22	38	334	165	36			22



GB PN16 主要外形尺寸表 Main dimensions table

Unit: mm

SIZE	L	L1	D2	D1	D	N-ø d	M	H	J	K	P	R	S
DN15	150	75	45	65	95	4-ø 14	13	58	42	50	11	6	7
DN20	160	80	58	75	105	4-ø 14	16	61	50	70	14	7	9
DN25	180	90	68	85	115	4-ø 14	16	72	50	70	14	7	9
DN32	200	100	78	100	140	4-ø 18	16	81	50	70	14	7	9
DN40	220	110	88	110	150	4-ø 18	19	103	70	102	17	9	11
DN50	240	120	102	125	165	4-ø 18	19	113	70	102	17	9	11
DN65	260	130	122	145	185	8-ø 18	19	120	70	102	17	9	11
DN80	280	140	138	160	200	8-ø 18	24	162	125	140	22	14	18
DN100	320	160	158	180	220	8-ø 18	24	184	125	140	22	14	18
DN125	380	190	188	210	250	8-ø 18	29	215	140	165	27	18	22
DN150	440	220	212	240	285	8-ø 22	29	250	140	165	27	18	22
DN200	550	275	268	295	340	12-ø 22	38	334		165	36		22

WATER TREATMENT

Filtering Process

水处理过滤过程

过滤式五通阀 因其特殊的五通口及水道结构·将过滤工程/逆洗工程/顺洗工程合为一套自动控制五通间，广泛的运用于水资源回收循环再利用的过滤系统，如雨水回收、产业制程废水回收循环系统，冷凝水回收等系统，节约水资源使废水回收再利用，帮助减少制程中所排放的废水。

过滤式五通阀以一体成型的主结构及中芯轴浮动钢球为设计理念，结构稳固，定位精准确实，内置钢球及主结构均选用不锈钢材质，内衬选用摩擦系低的铁氟龙，均属于耐磨主抗腐蚀之原料。屋外防水型，设备使用寿命长，低损耗。

通用设备：泳池过滤，废水过滤，鱼池养殖，全屋前置净水，砂滤系统.....



过滤五通阀配管示例

EXAMPLE OF PIPING FOR FILTERING FIVE WAY VALVE



3Q5W

使用范围: 水处理系统
工作压力: 0.98Mpa (10kgf/cm2)
工作温度: 10C~45C
接续规格: 1-1/2" Threaded type (PT)
2", 3 Flanged end

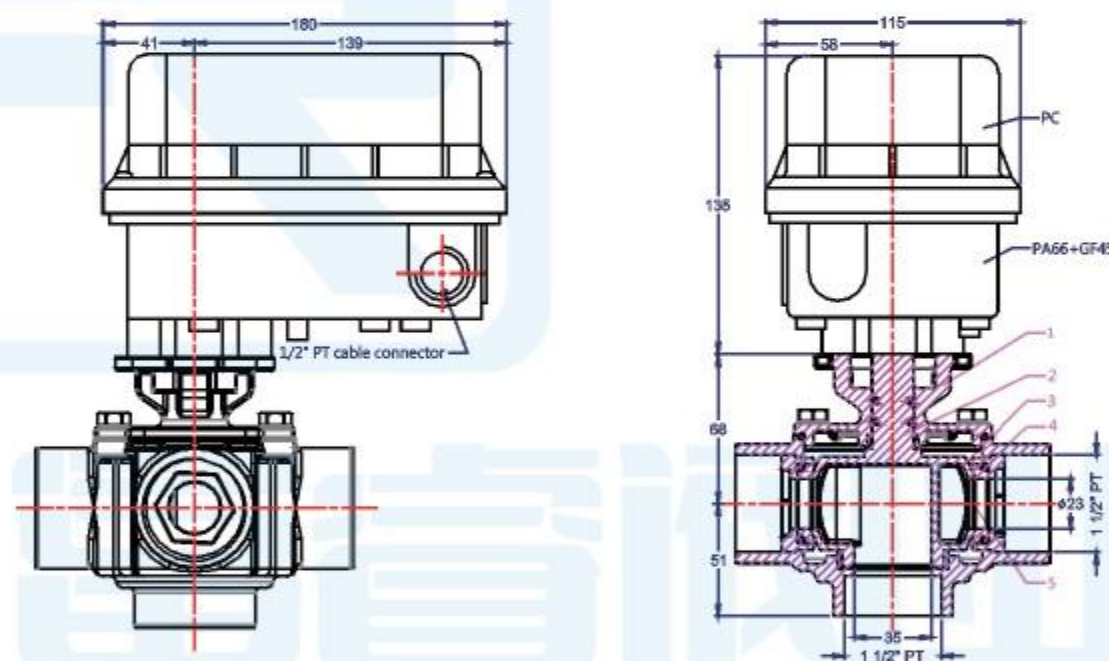


ITEM	PARTS	MATERIAL
1	BODY	CF8 / CF8M
2	STEM	SCS13 / SCS14
3	BALL	SUS304 / SUS316
4	O-RING	NBR
5	SEAT	TEFLON

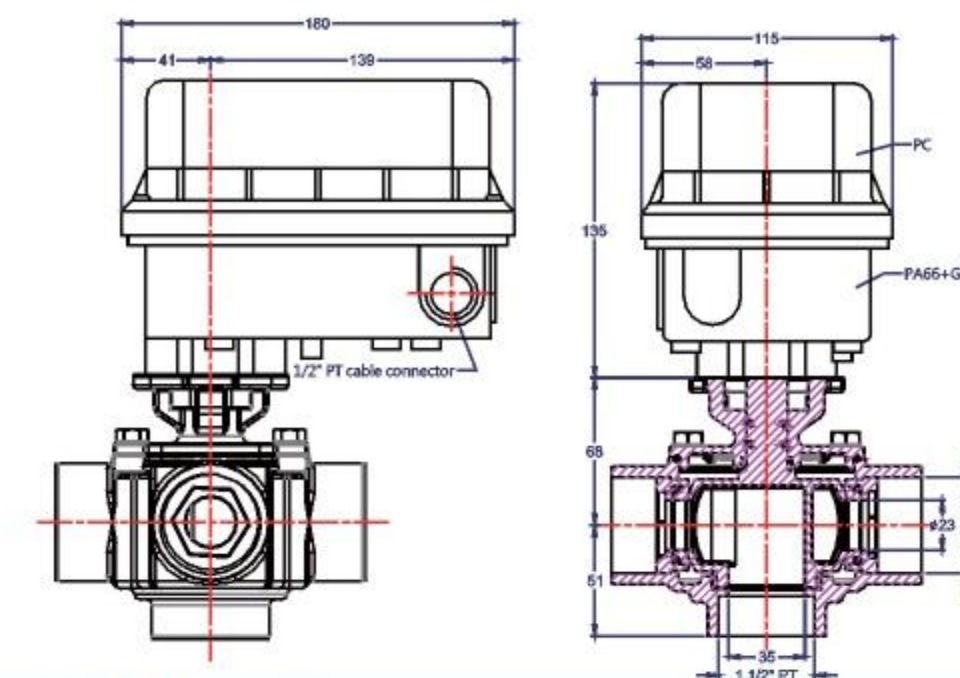
FR37

3Q5W series

日本进口无刷马达机芯



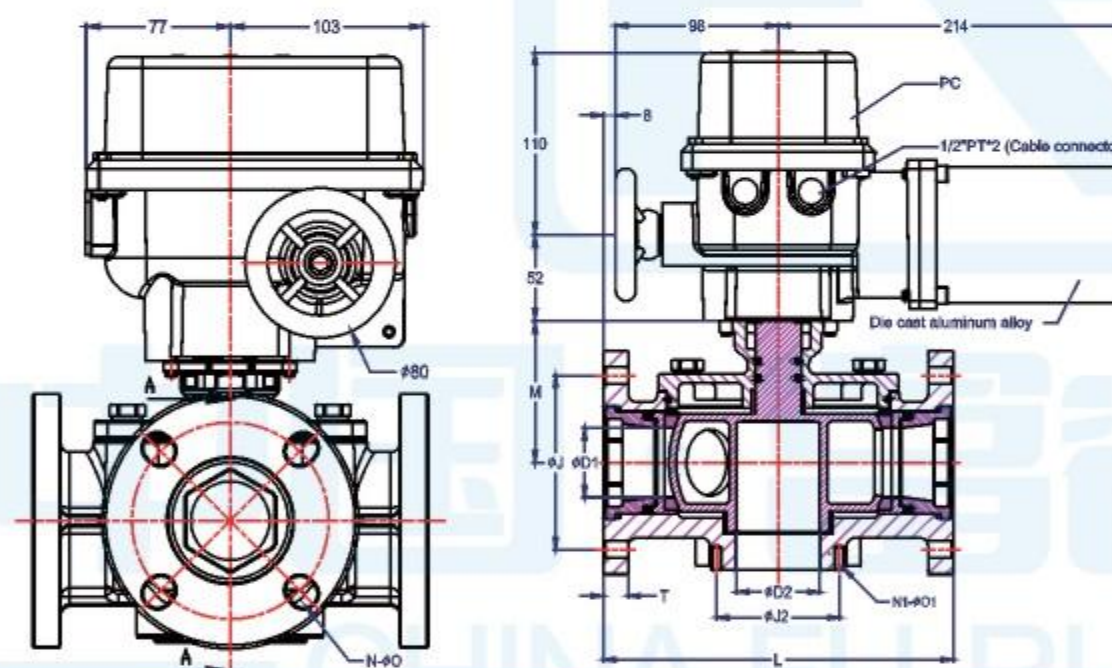
型号	TF 37-3Q5W40
阀体尺寸 (mm)	DN40
供应电压50/60Hz	DC24V/AC220V±10%
控制信号	三位置接点式控制
最大电流	1.5A
运转电流	1A
运转时间 (50Hz)	滤水→逆洗:51SEC, 逆洗→顺洗:38.5EC
运转时间 (60Hz)	滤水→逆洗: 50SEC, 逆洗→顺洗: 37.5SEC
输出功率, 电压, 电流	18W, DC24V, 1A
责任周期	60%
责任周期备注	60%: 0-15min-CO-10min -CO循环运转模式
绝缘等级	E class insulation
防护等级	IP66 (相当屋外防水)
周围环境温度	-10°C to50°C
周围环境湿度	90%RH Max (Non-condensing)
电器连接	1/2 PT cable connector screw terminals
电线接续方法	1.25mm线径
选购加装	空间加热器Heater
净重±1 (kg)	6



FR80

3Q5W series

型号	TS 80A2215-3Q5W40
阀体尺寸 (mm)	DN40
供应电压50/60Hz	DC24V/AC220V±10%
控制信号	三位置接点式控制
最大电流	0.5A
运转电流	0.3A
运转时间 (50Hz)	滤水→逆洗:31SEC, 逆洗→顺洗:24EC
运转时间 (60Hz)	滤水→逆洗:30SEC, 逆洗→顺洗:23SEC
输出功率, 电压, 电流	35W
责任周期	60%
责任周期备注	60%: 0-15min-CO-10min -CO循环运转模式
绝缘等级	E class insulation
防护等级	IP66 (相当屋外防水)
周围环境温度	-10°C to50°C
周围环境湿度	90%RH Max (Non-condensing)
电器连接	1/2 PT cable connector screw terminals
电线接续方法	1.25mm线径
选购加装	空间加热器Heater
净重±1 (kg)	6



FR151

3Q5W series

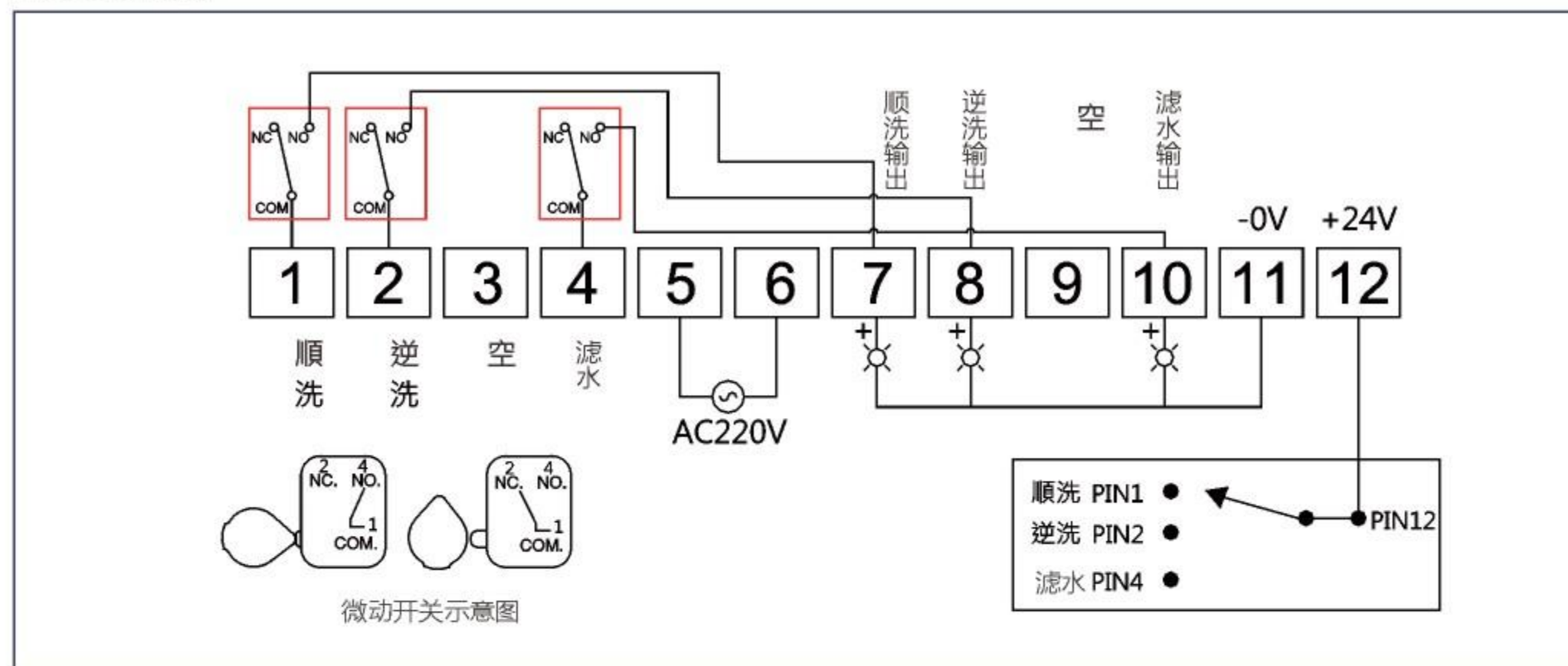
接续规格: 2" JIS 5K
3" JIS 10K

	SIZE	φD1	φJ1	φD2	φJ2	T	N	φO
2	DN50	40	110	50	110	15	4	15
3	DN80	75	150	75	150	16	8	19

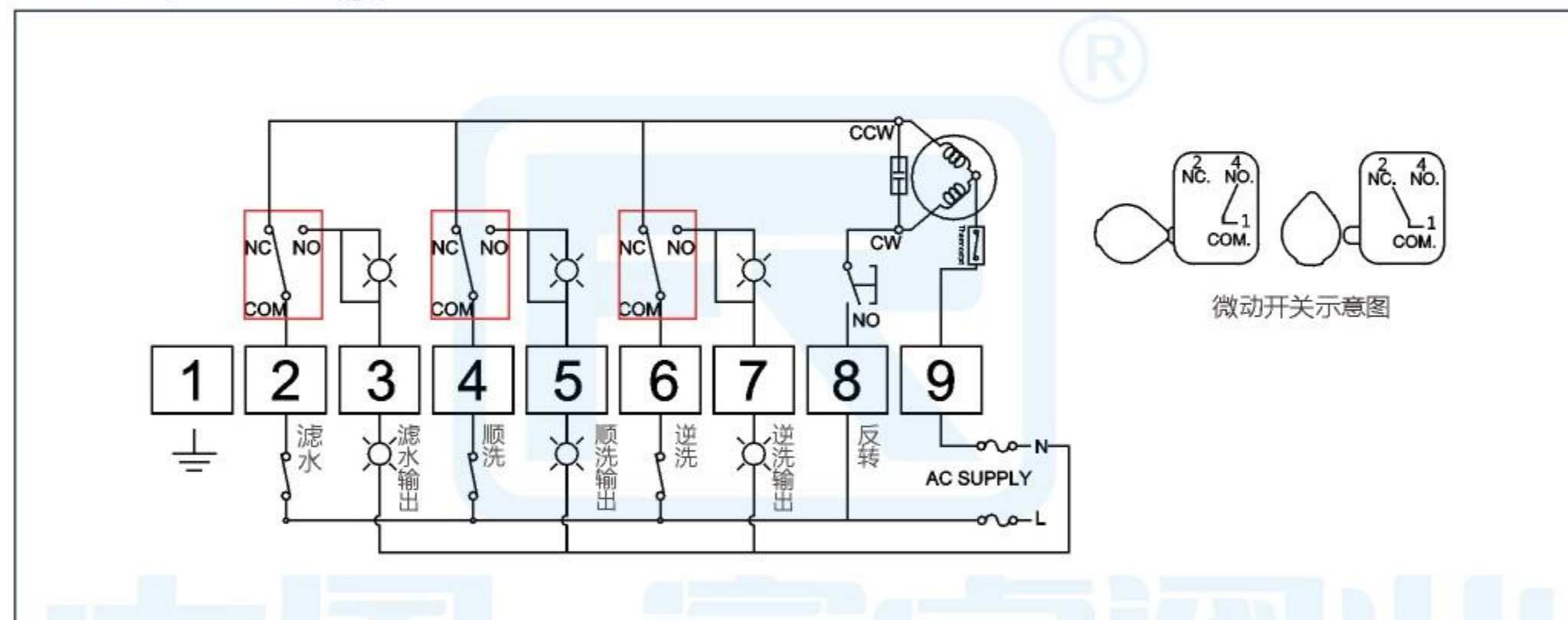
	SIZE	N1	φO1	M	L±2	N.W.
2	DN50	4	M12-P1.75	86	211	17
3	DN80	8	M16-P2	118.5	296	43

型号	TS151A2240-3Q5WXX	TC151A2240-3Q5WXX
阀体尺寸 (mm)	DN40/DN80	DN40/DN80
供应电压50/60Hz	AC220V±10%	AC220V±10%
控制信号	三位置接点式控制	ON-OFF
最大电流	0.6A	1.5A
运转电流	0.5A	1A
运转时间 (50Hz)	滤水→逆洗:87SEC, 逆洗→顺洗:67SEC	滤水→逆洗:87SEC, 逆洗→顺洗:67SEC
运转时间 (60Hz)	滤水→逆洗:80SEC, 逆洗→顺洗:60SEC	滤水→逆洗:80SEC, 逆洗→顺洗:60SEC
消耗功率	80W	80W
责任周期	75%	75%
责任周期备注	75%: 0-75min-CO-25min -CO循环运转模式	请至少24H连转一次
绝缘等级	E class insulation	E class insulation
防护等级	IP66 (相当屋外防水)	IP66 (相当屋外防水)
周围环境温度	-10°C to50°C	-10°C to50°C
周围环境湿度	90%RH Max (Non-condensing)	90%RH Max (Non-condensing)
电器连接	1/2 PT cable connector screw terminals	1/2 PT cable connector screw terminals
电线接续方法	1.25mm线径	1.25mm线径
选购加装	空间加热器Heater	空间加热器Heater
净重±1 (kg)	DN50:17/GN80:43	

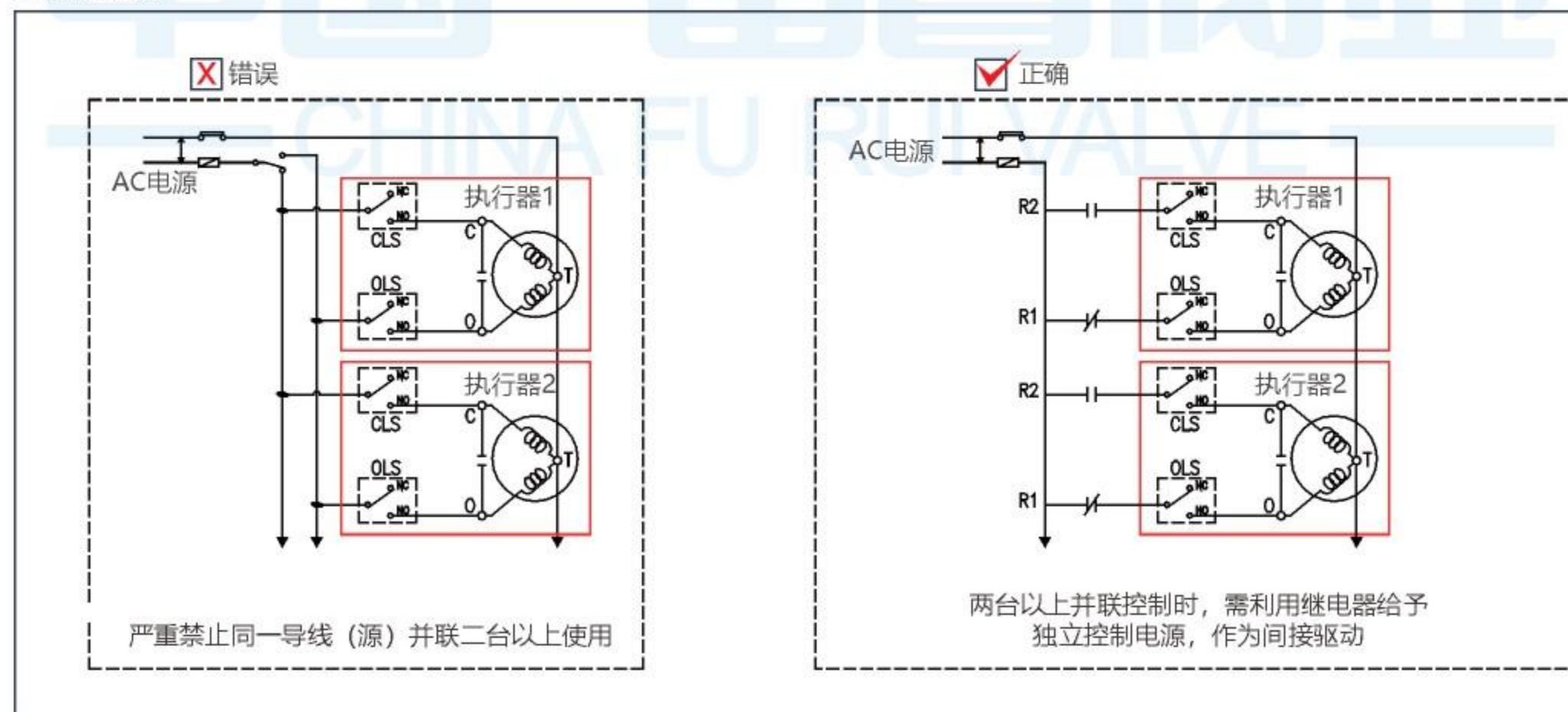
FR373Q5W配线



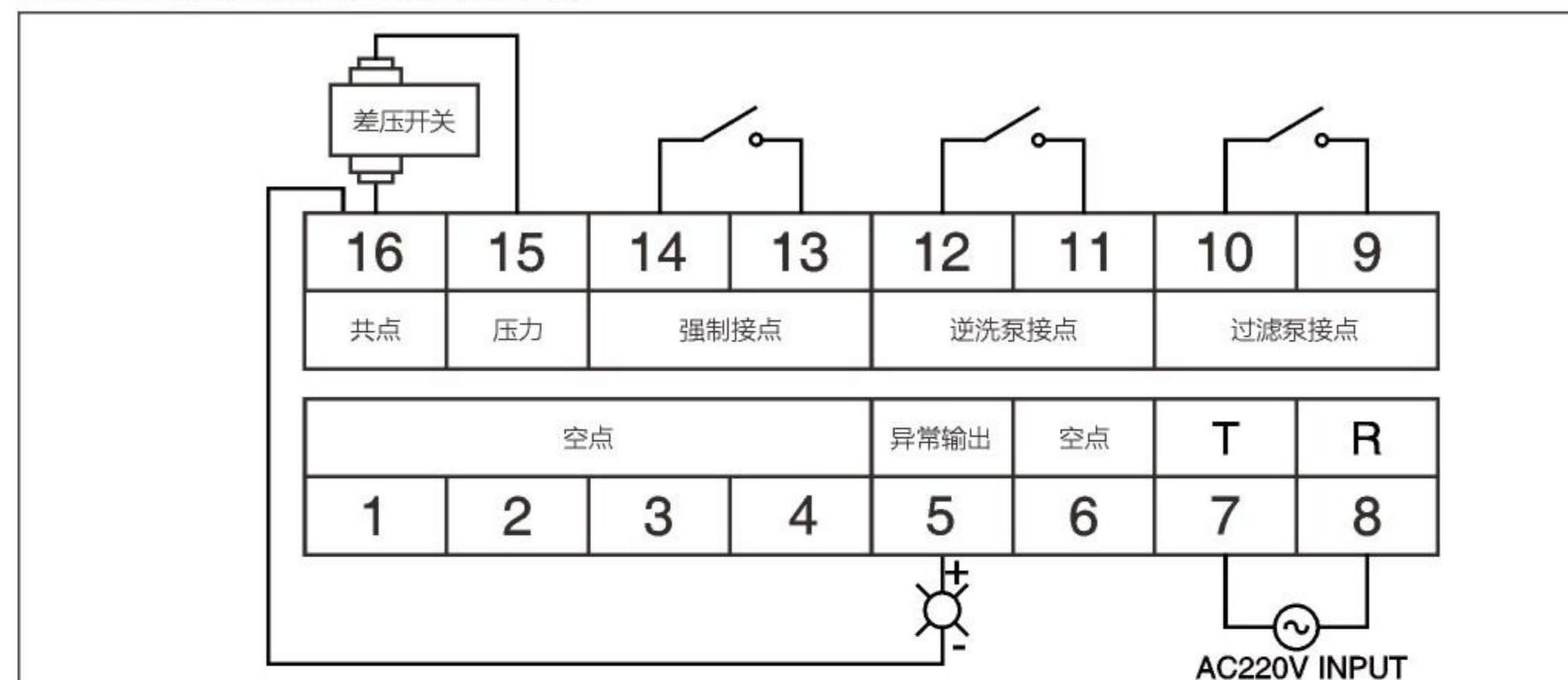
FR 80-3Q5W/FR151-3Q5W配线



并联控制配线



FR151-3Q5W配线 (过滤阀内置自动控制回路系统)



FR151过滤型五通阀提供了两种流程运转模式, 符合各式现场装配。

1. 过滤泵模式

过滤系统进行逆洗工程采用原水为来源时系统可设定为过滤泵模式

2. 逆洗净水泵模式

过滤系统进行逆洗工程, 采用清水为来源时系统可设定为逆洗泵模式

过滤五通阀流程说明

第一段过滤流程:

由系统设定自动过滤, 将原水经由五通阀进入过滤桶内进行过滤工程

(E→B) 水源由原水泵E孔入水源通过B孔, 进入过滤层进行滤水流程。

(D→A) 过滤完成的净水由D孔通过A孔, 将净水带往净水水塔。

第二段逆洗流程:

随着滤材表面堆积的污染物逐渐累积, 系统可设定自动逆洗程序,

藉由流体作用将污染物冲刷干净, 借此达到洗清滤材。

(E→D) 水源由原水泵或清水泵E孔入水源通过D孔, 进入桶内进行逆洗工程。

(B→C) 逆洗完成后的废水同时会通过B孔由C孔排出。

第三段顺洗流程:

借此洗清逆洗后残余的杂质, 目的是避免污水进入净水水塔并且重新布好滤料

(E→B) 水源由原水泵或清水泵E孔入水源通过B孔, 进入桶内进行顺洗工程。

(D→C) 顺洗完成后的废水通过D孔由C孔排放。

