



## Bypass Valve for Water Treatment Systems

41102 (Old Model No.: F70B)  
41104 (Old Model No.: F70A)  
41202 (Old Model No.: F70D)  
41204 (Old Model No.: F70C)  
41302 (Old Model No.: F70H)

### **WENZHOU RUNXIN MANUFACTURING MACHINE CO.,LTD**

ADD: NO.169, RUNXIN ROAD, SHANFU TOWN, WENZHOU, ZHEJIANG, CHINA.

TEL.:0086-577-88630038, 88576512, 85956057 FAX:0086-577-88633258

E-MAIL: sales@run-xin.com <http://www.run-xin.com>

Rev. A. 1808

## User Manual



Please read this manual in details  
before using this valve and keep it properly  
in order to consult in the future

0WRX.466.517



Catalogue

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Notice

- To ensure normal operation of the valve, please consult with professional installation or repairing personnel before using it.
- If there is any of pipeline engineering and electric works, there must be finished by professional at the time of installation.
- Forbid using valve body or other connectors as support to carry the system.
- Please use this product under the water temperature between 5～50℃ , water pressure ≤0.6MPa. Failure to use this product under such conditions voids the warranty.
- If the water pressure exceeds 0.6MPa, a pressure reducing valve must be installed before the water inlet.
- PPR pipes, corrugated pipes, or UPVC pipes are recommended for pipe installation and aluminum-plastic pipes should be avoided.

※Remark: If the design and specification change, there is no further notice. RUNXIN reserves all the rights for the final explanation.



# 1. Product Overview

## 1.1 Main Application & Applicability

Bypass valve is mainly used for controlling inlet water bypassing in water treatment systems.

Be suitable for the valves of F63, F65, F68, F69, F79, F82 and so on.

When the water softener system needs to be repaired, you can use the bypass function to supply untreated raw water to the outlet.

For residential softener system, extremely softened water is not suitable for drinking. In order to improve the hardness of the water, use the bypass valve and let part of the raw water flow out directly from the outlet, mixing raw water with softened water.

## 1.2.Product Characteristics

### ●Simple structure and reliable sealing

F70A and F70B adopts hermetic head faces with high degree pottery and corrosion resistance for opening and closing. It combines with service, close, bypass and part bypass.

### ●Easy operation

Can rotate or pull the handle to achieve bypass, part bypass and service function.

### ●Install flow meter

F70A/F70B/F70C bypass valve can install flow meter inside. Connecting with the control valve can form a meter type valve with bypass function.

### ●Variety of connections

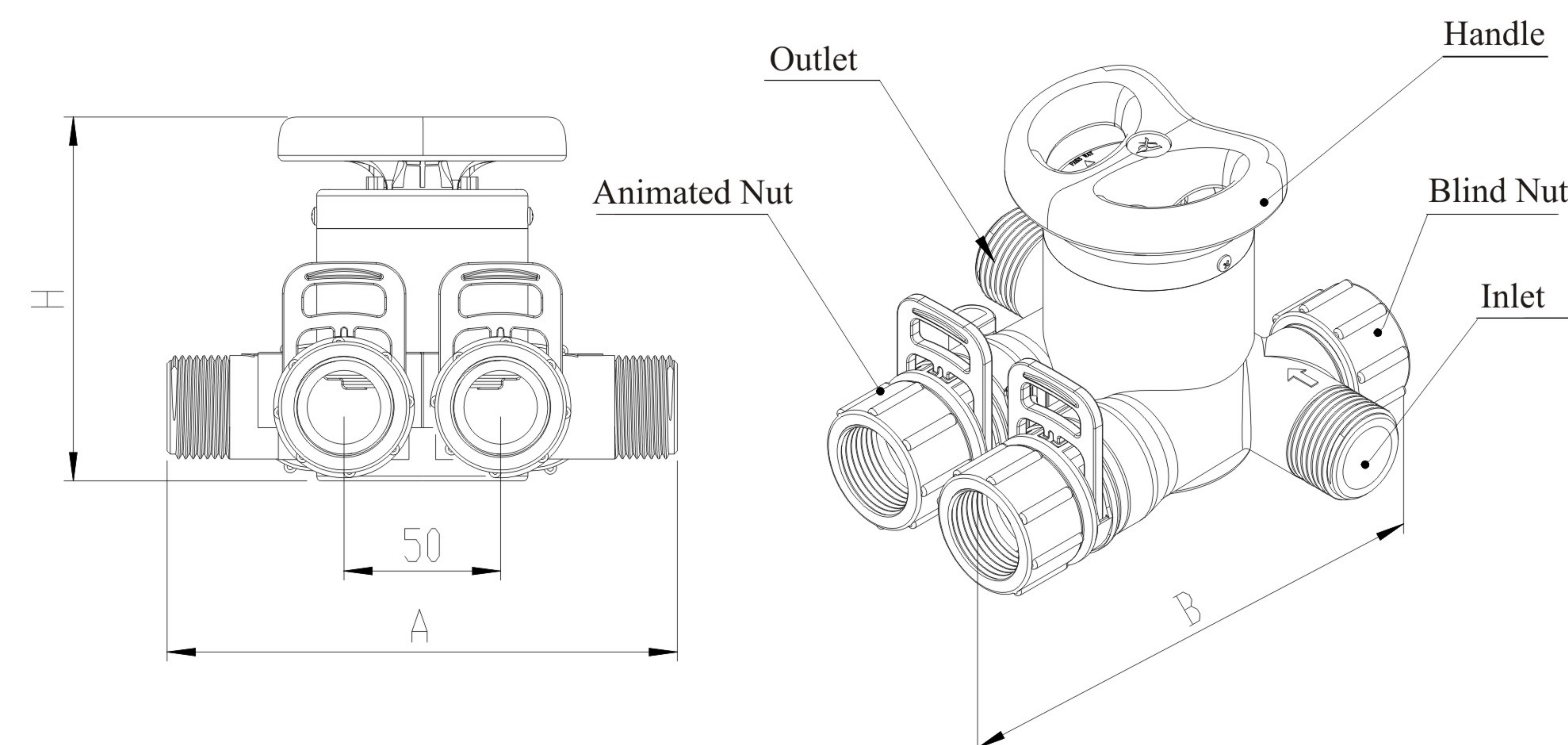
F70A, there are two mutually perpendicular inlets, outlets, based on the need of the inlet and outlet pipeline to connect.

F70C/F70D, there are two kinds of screw threads which are BSPP and NPT for optional.

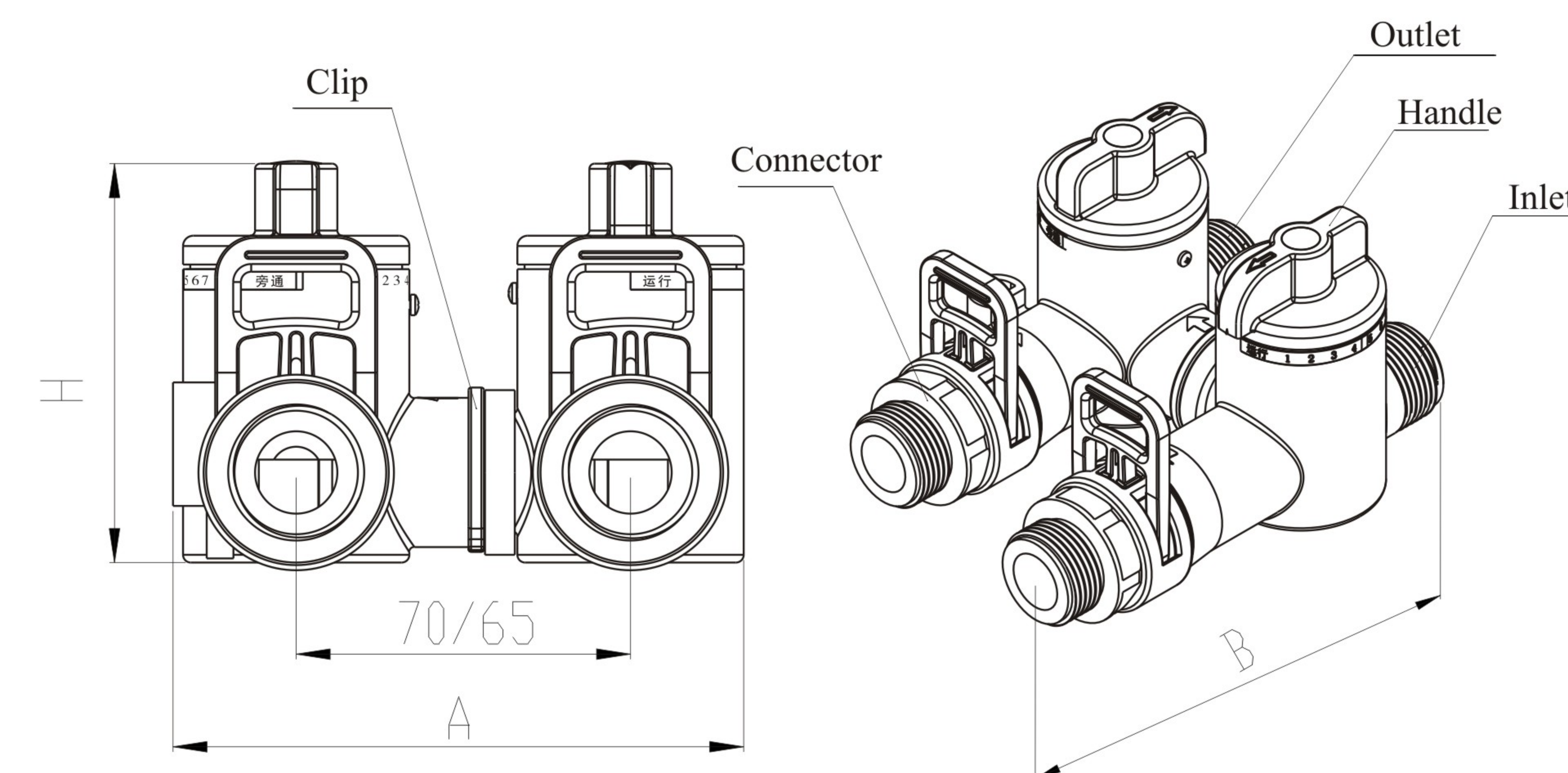
## 1.3. Product Structure and Technical Parameters

A. Product dimension (The appearance is just for reference. It is subjected to the real product)

F70A

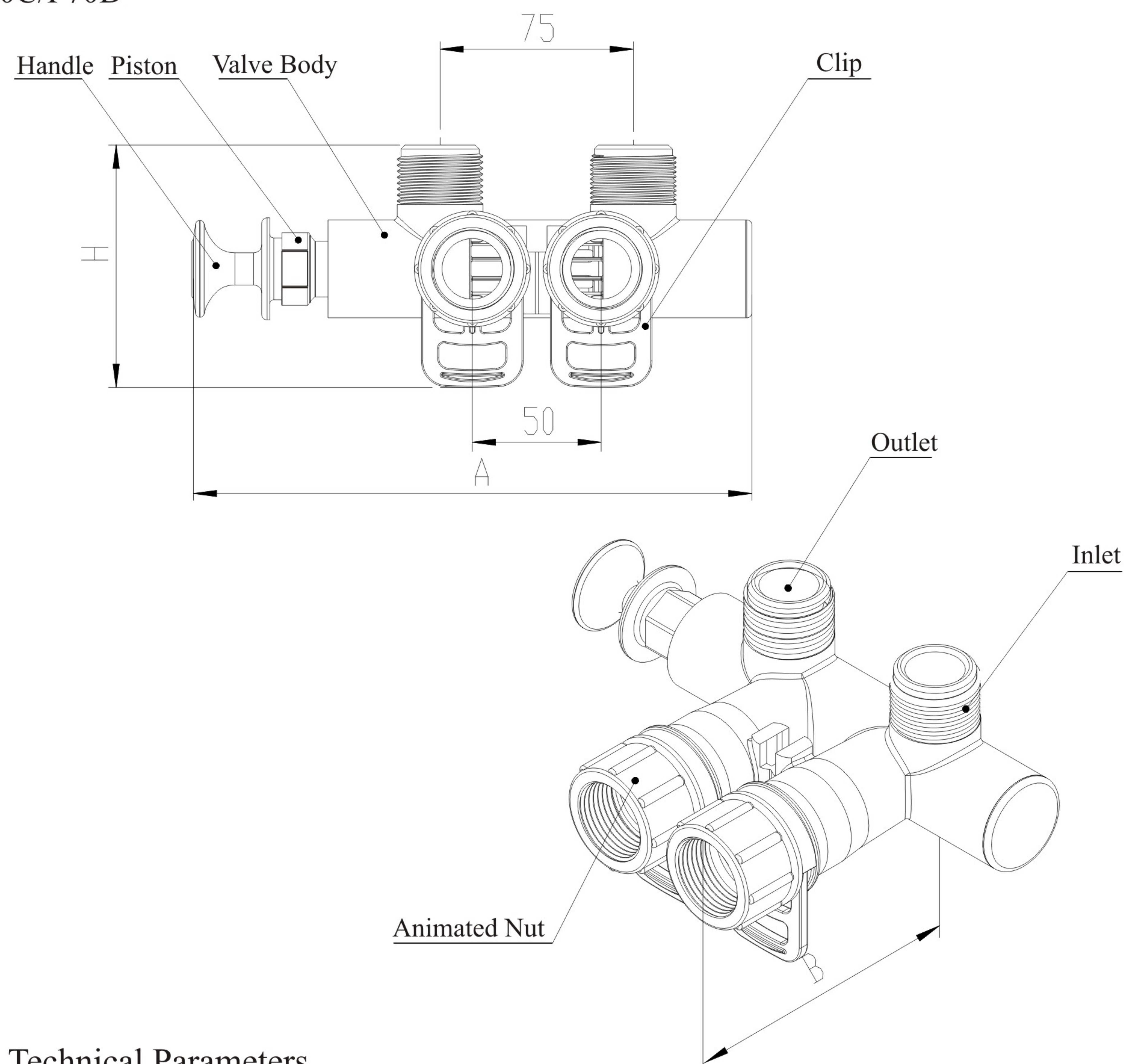


F70B





F70C/F70D



#### B. Technical Parameters

Suitable pressure: 0.6Mpa; Suitable temperature: 5°C ~ 50°C

Model	Inlet/Outlet	A ( mm ) max	B ( mm ) max	H ( mm ) max	Flow Rate m3/h @0.3MPa
F70A/41104	1" M	165	165	118	4.0
F70B/41102	3/4" M	116/111	140	80	2.0
F70C/41204	1" M	218	126	95	4.0
F70D/41202	3/4" M	220	120	90	2.0

Note: M—Male thread

#### 1.4. Installation

Perform installation according to the relevant pipeline regulations and the specifications of Water Inlet, Water Outlet.

Installation steps (Such as F70A with F63 valve, two installation methods)

##### A. Installation Method One:

- ① Put the washers into the female animated nuts, and tighten with inlet and outlet of F63 control valve (as the Figure1-1 shows).
- ② Connect the bypass with water inlet and outlet.

##### B. Installation Method Two:

- ① Shown in Figure 1-2, get out the clips and female animated nuts from bypass.
- ② Put the washers into the female animated nuts, and tighten with inlet and outlet of F63 control valve (Meter type: the impeller is installed into the outlet).
- ③ Bypass valve insert to two female animated nuts in parallel, put the clips back to bypass valve body.
- ④ Connect the bypass with water inlet and outlet.

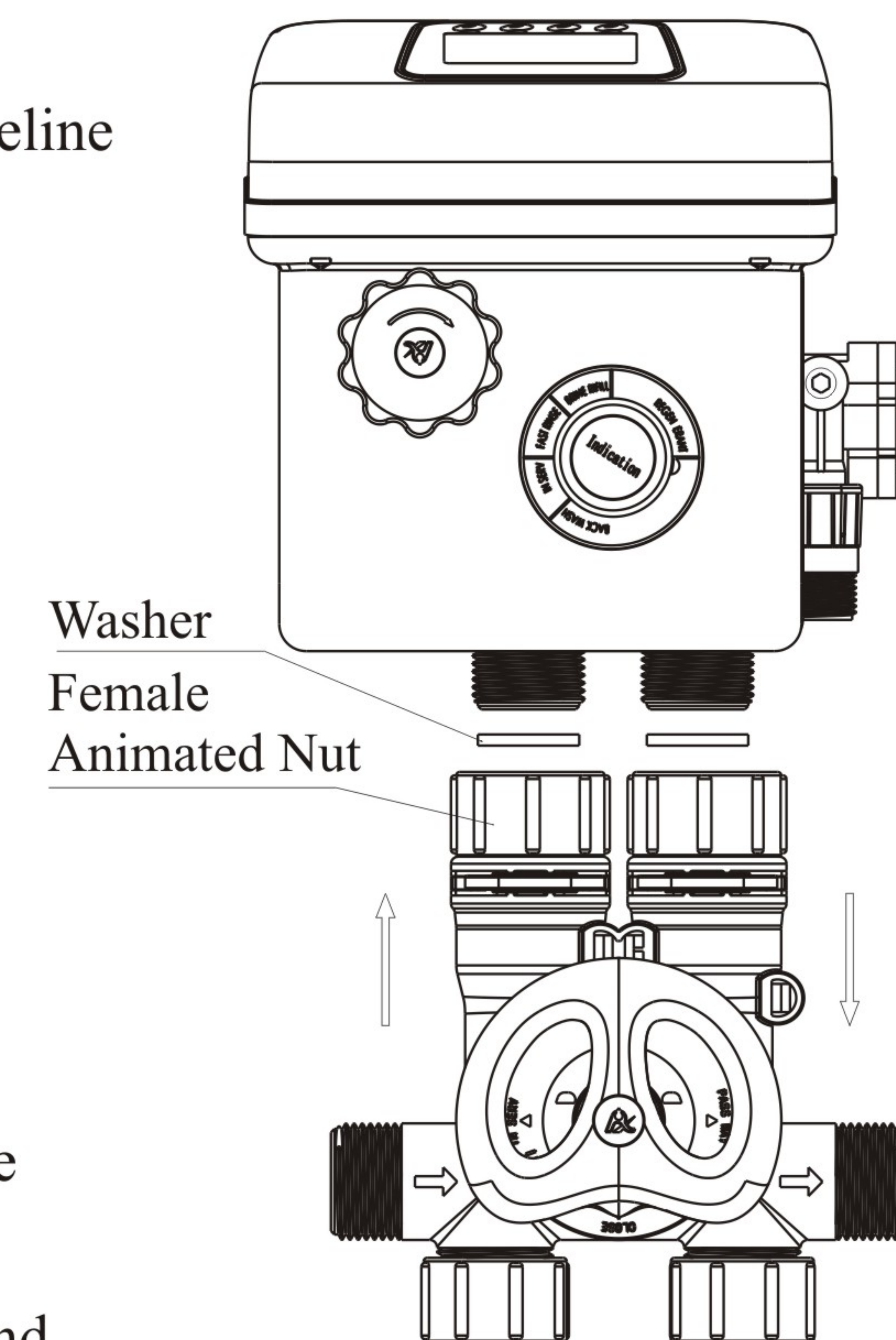


Figure 1-1

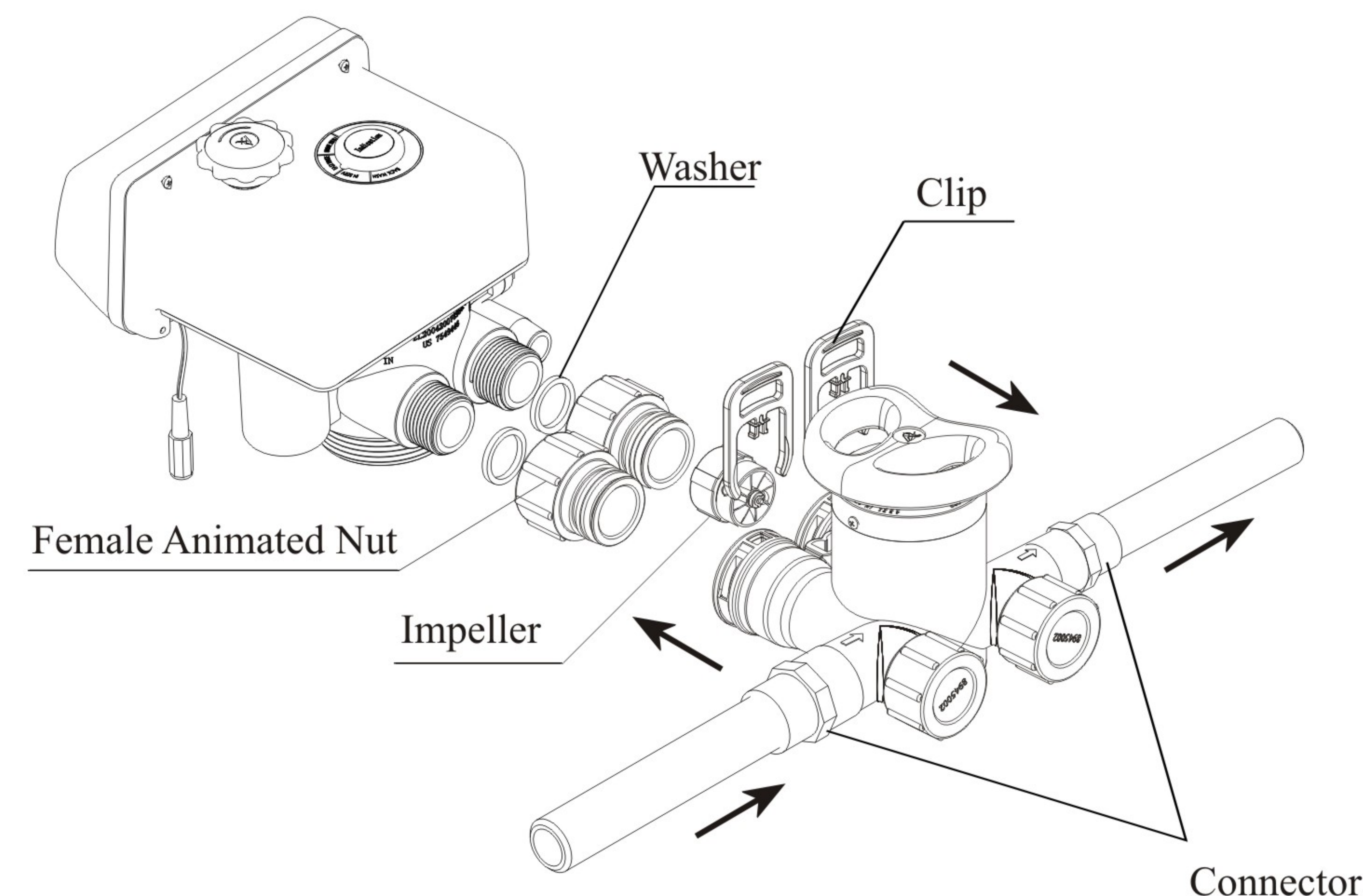


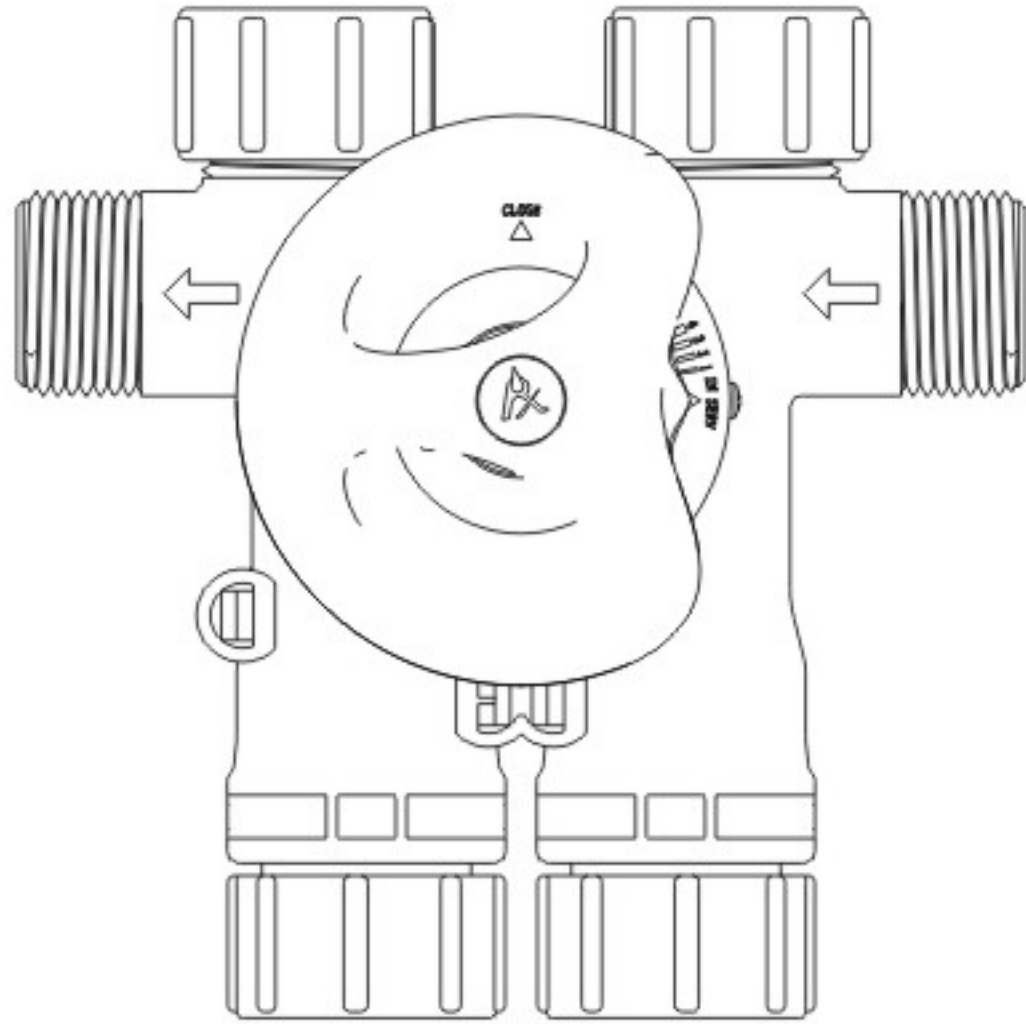
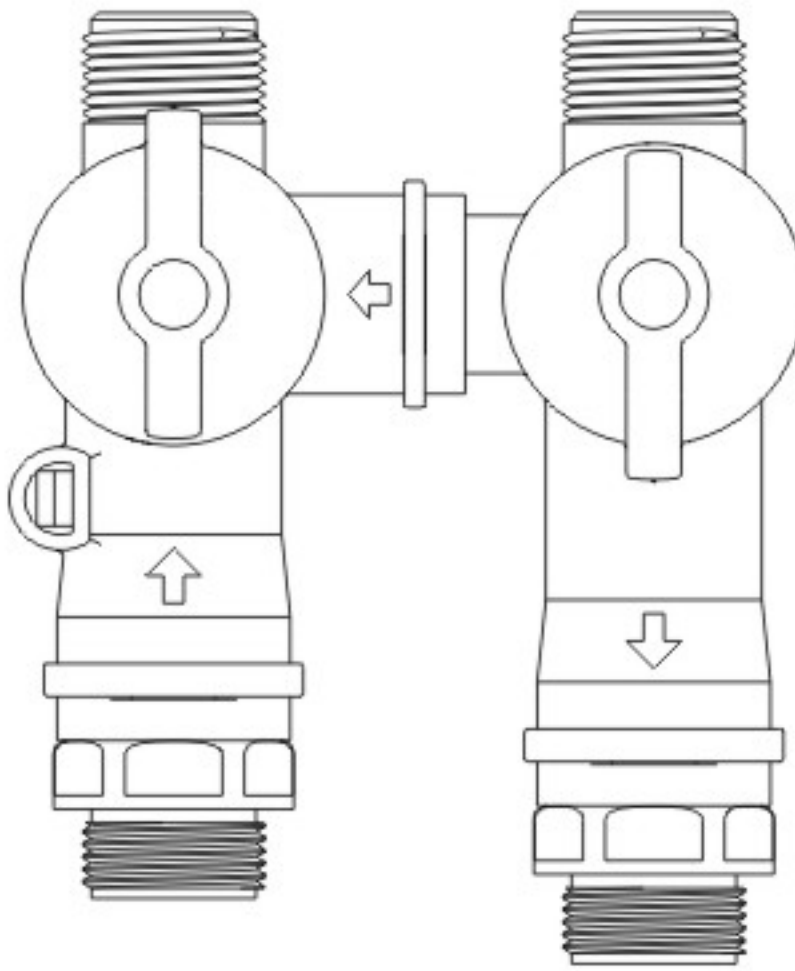
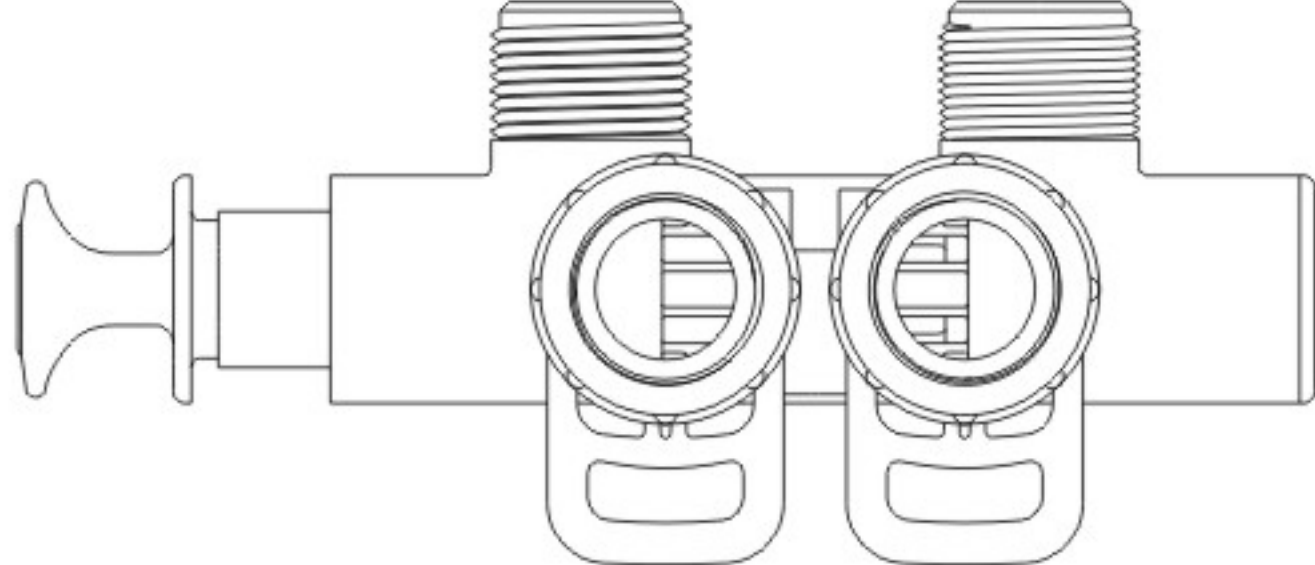
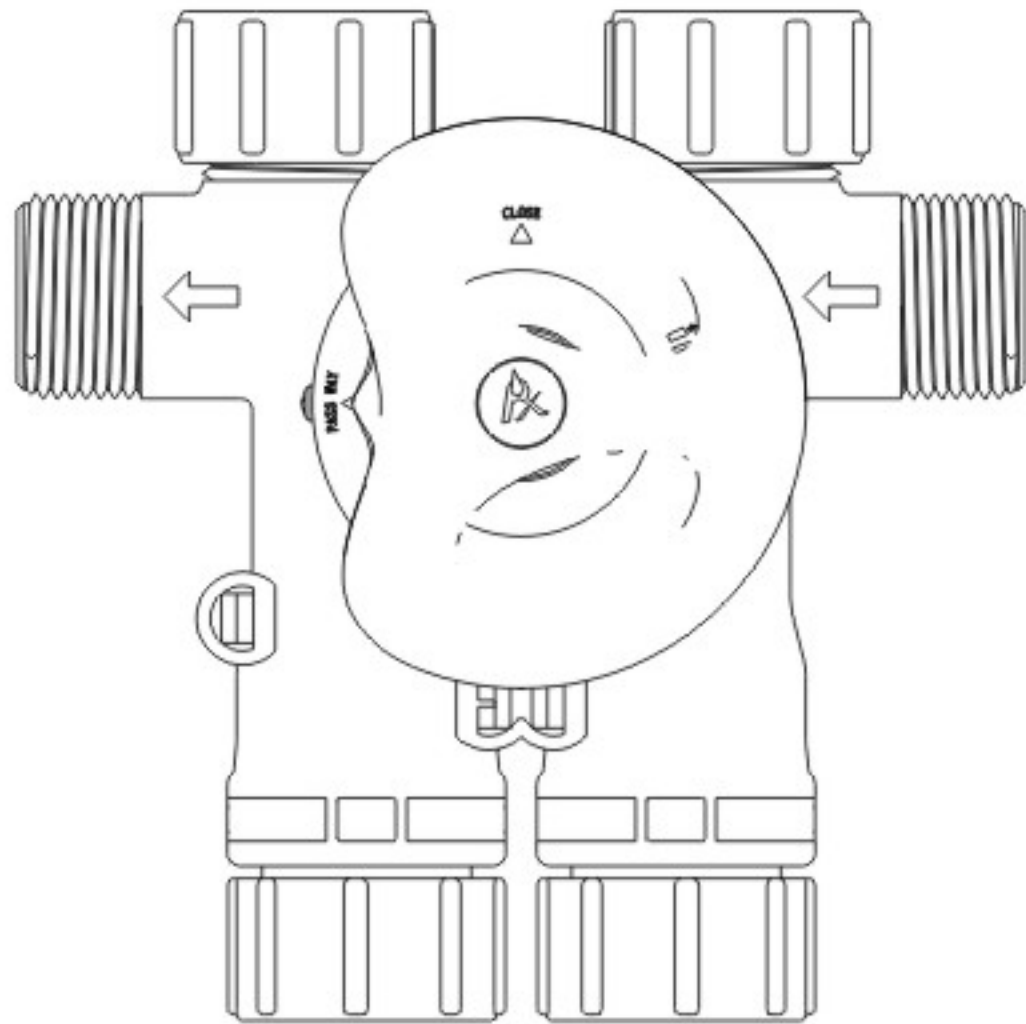
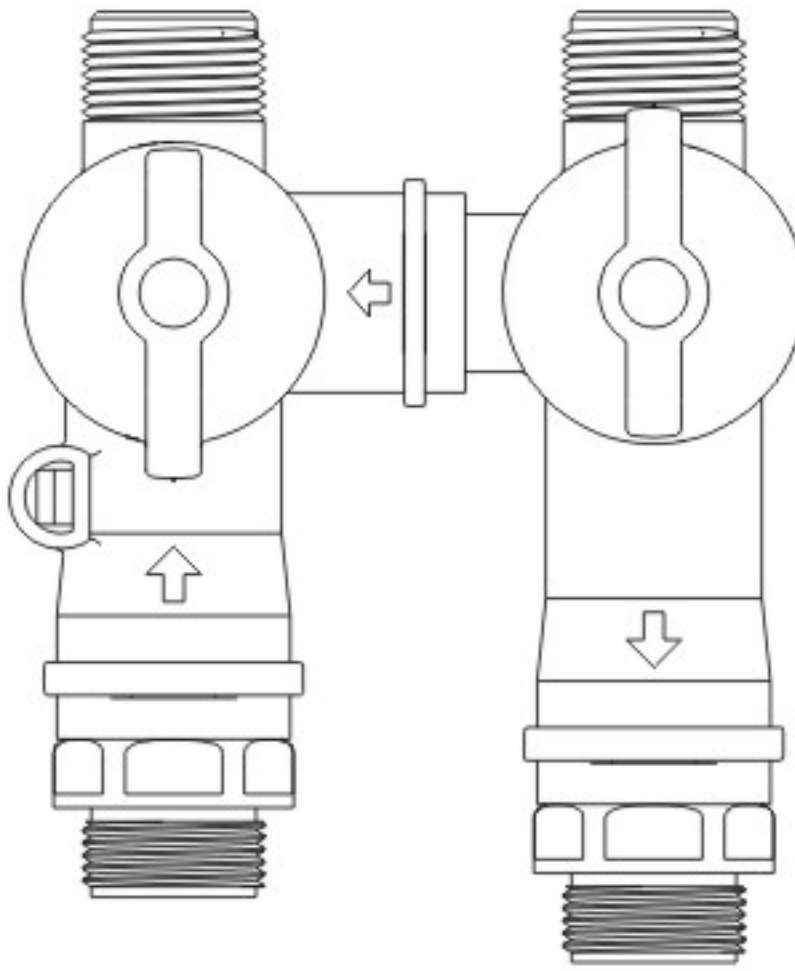
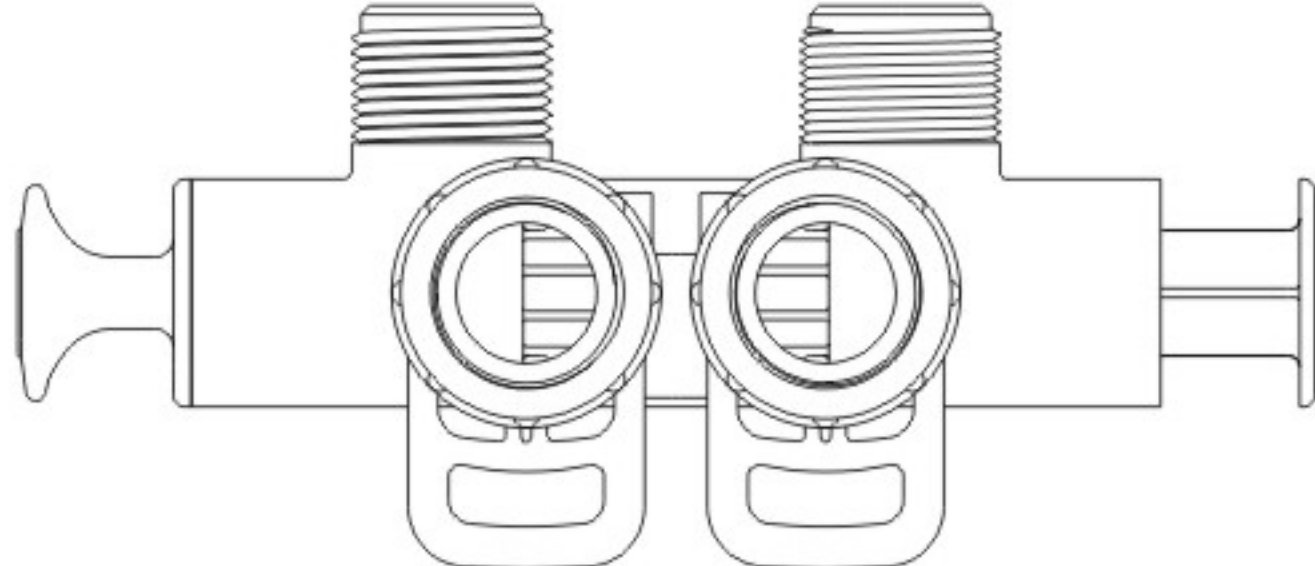
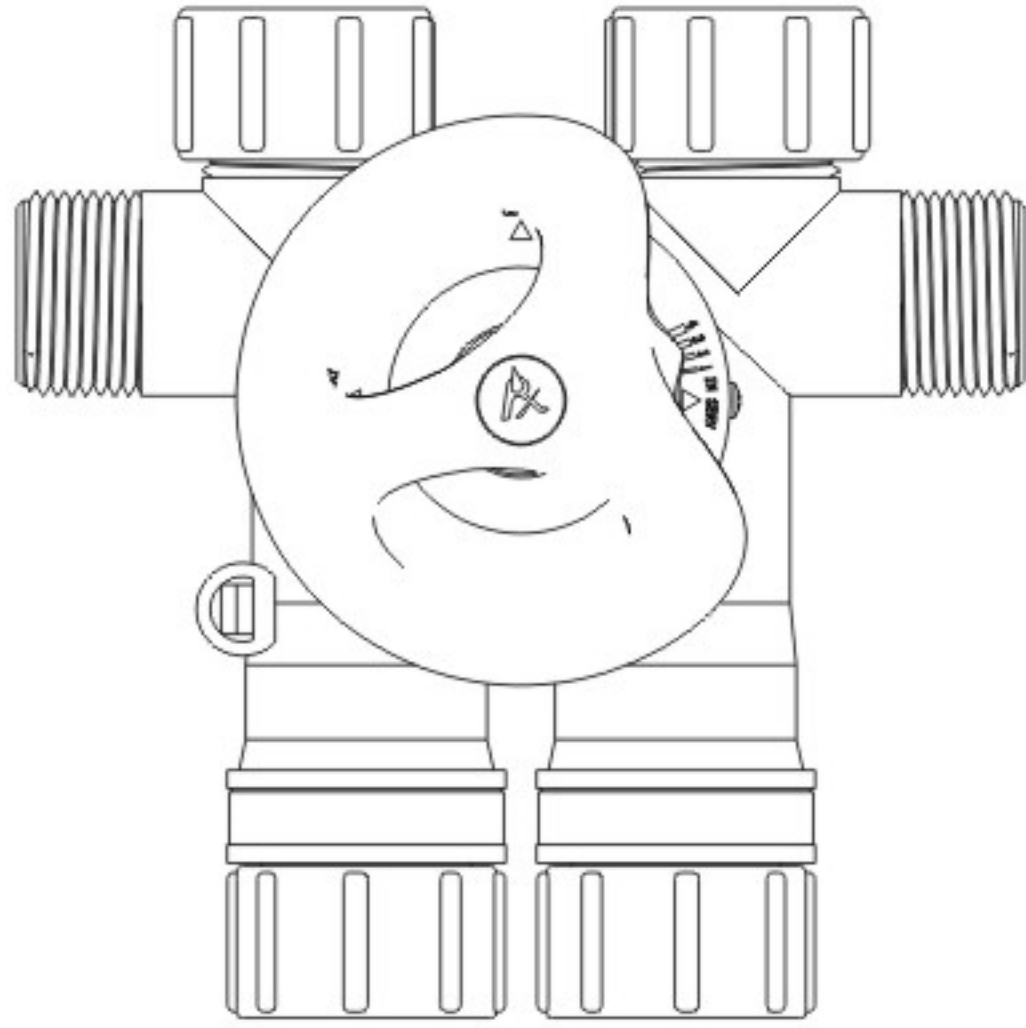
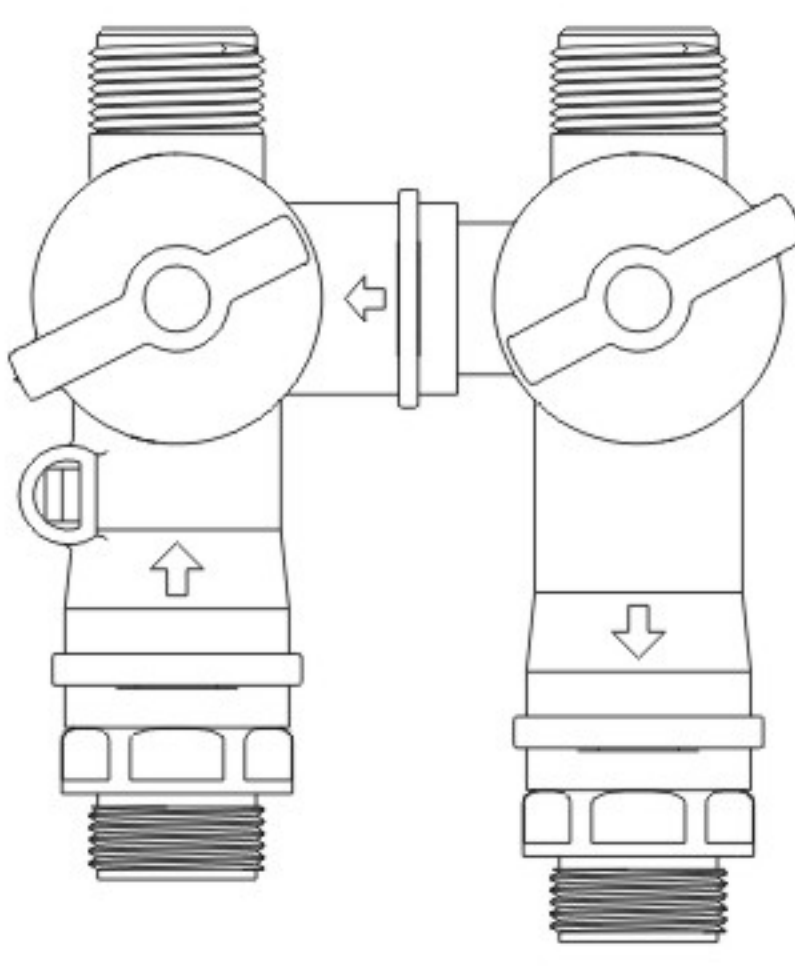
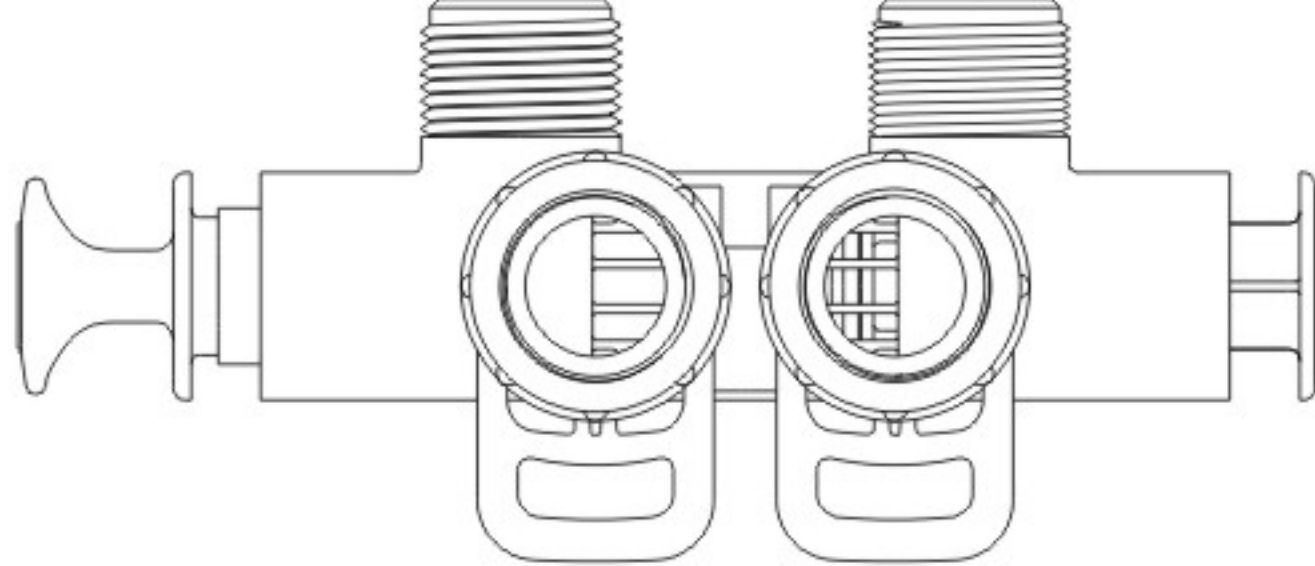
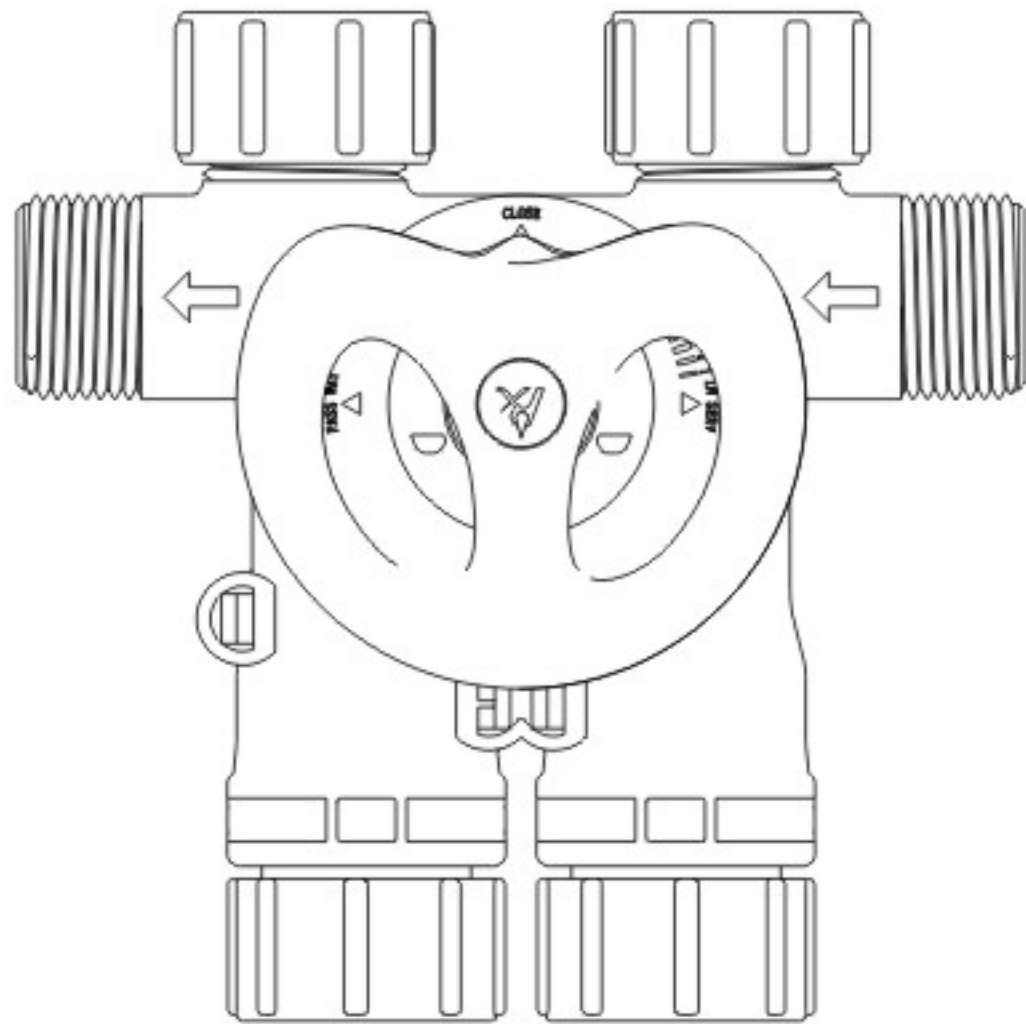
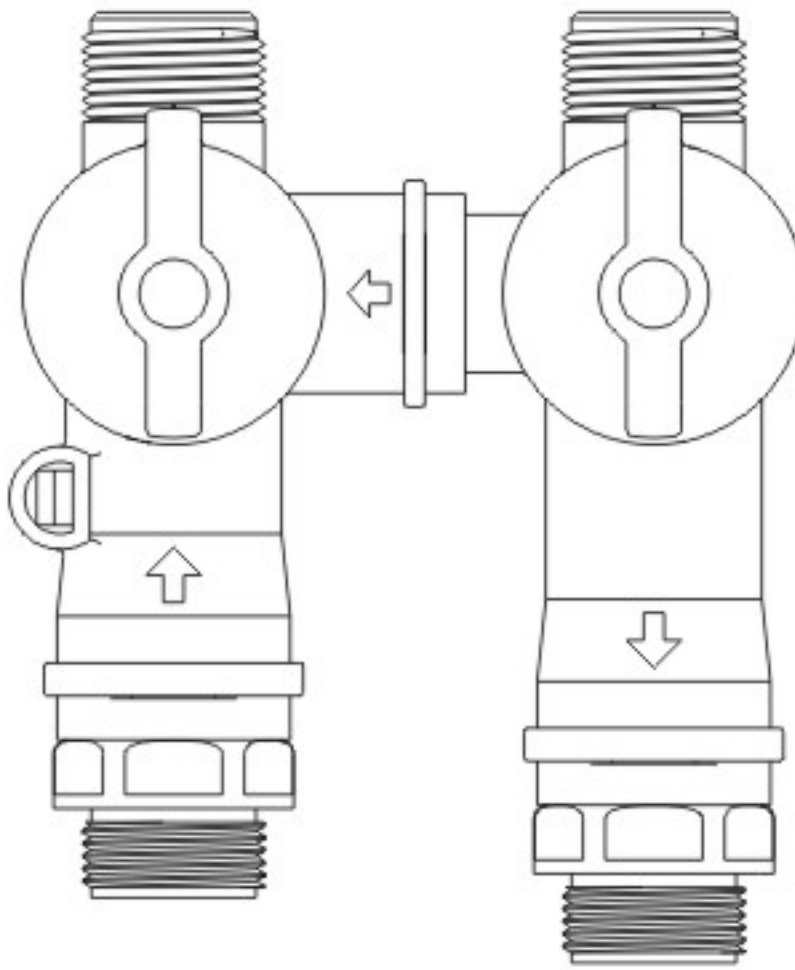
Figure 1-2



2. Usage

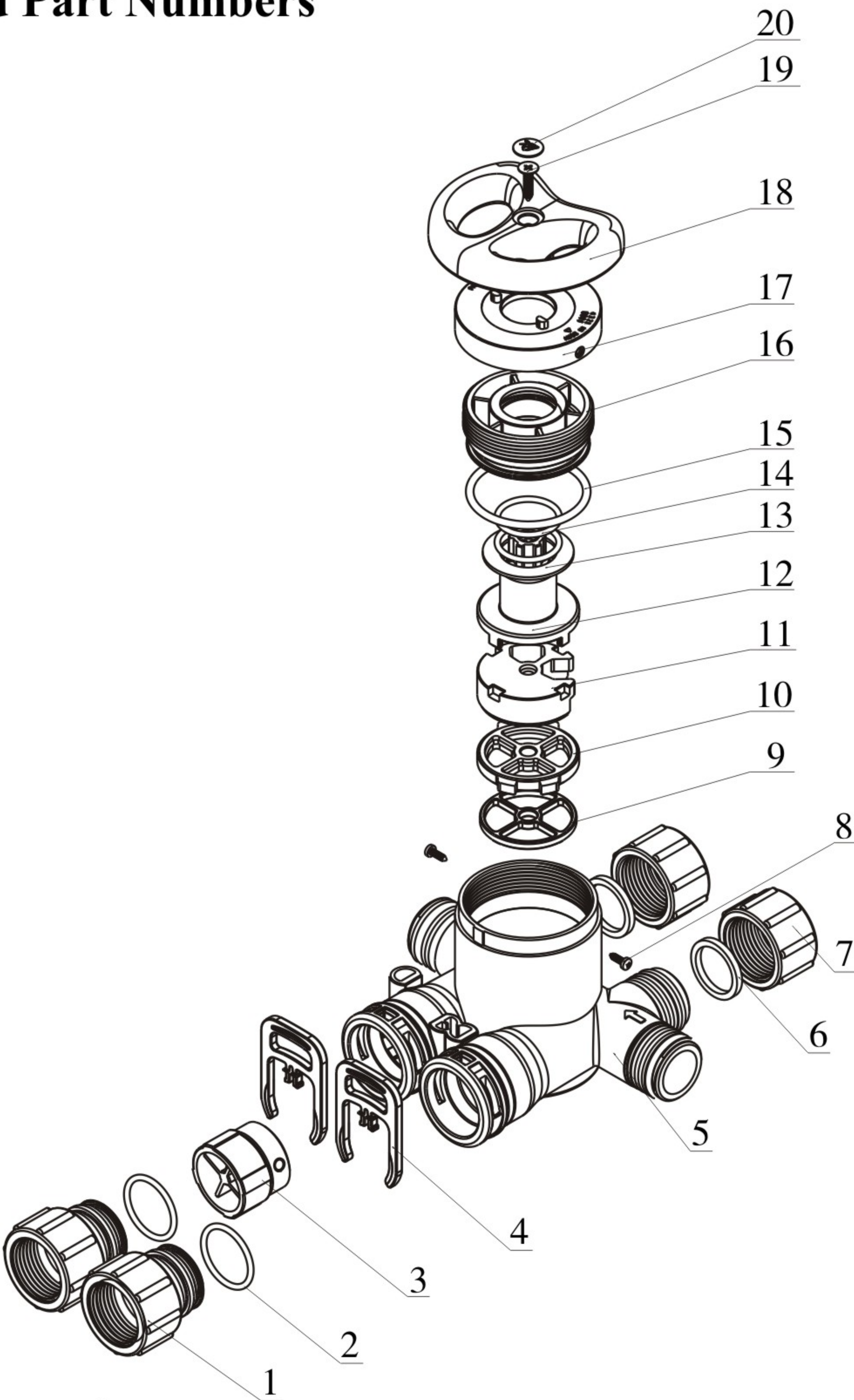
2.1.Usage

When the bypass valve handle is at the following position, it could achieve the required functions.

Function	F70A	F70B	F70C/F70D
Service			
Bypass			
Part bypass			
Close			

2.2.Components and Part Numbers

F70A parts



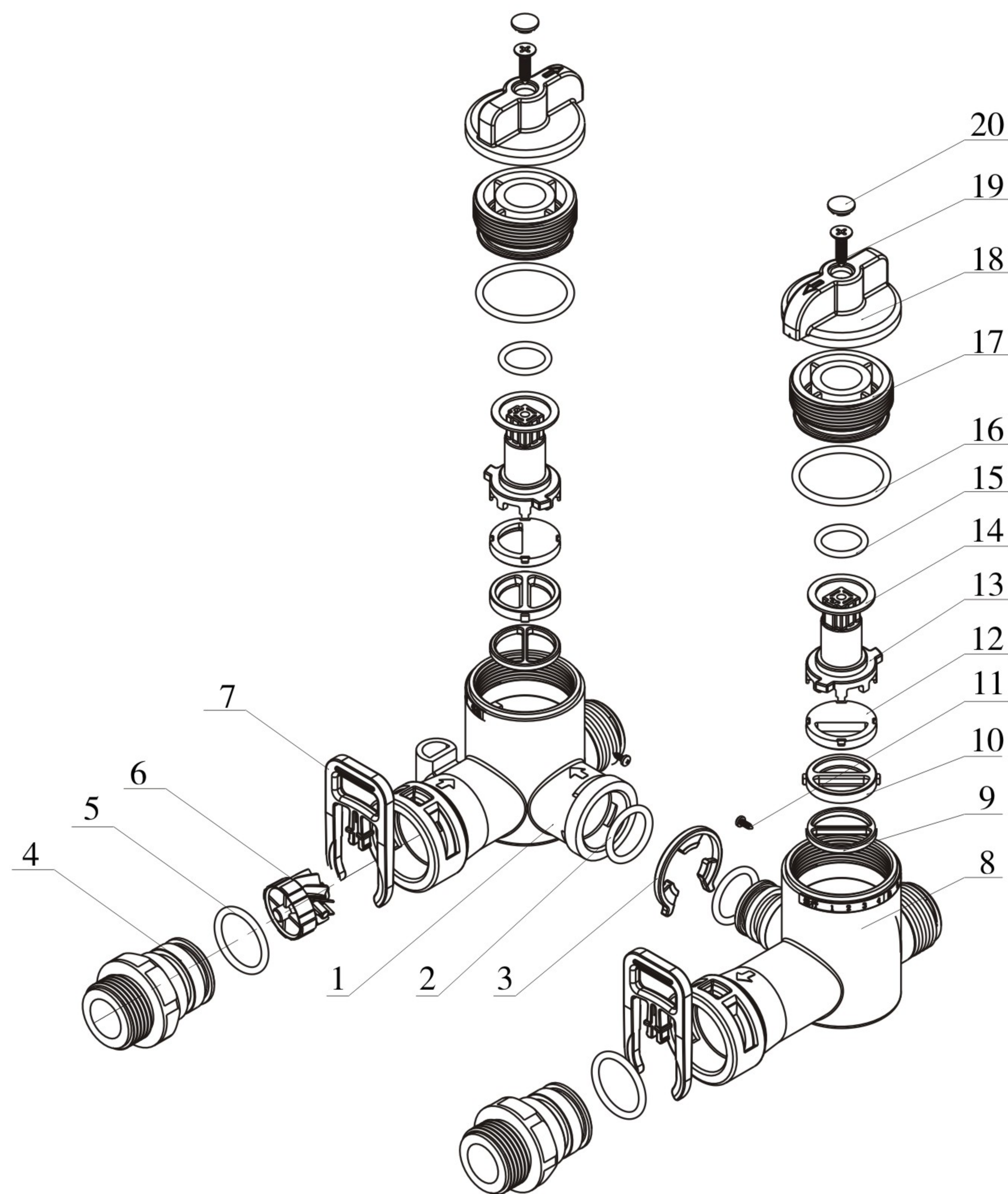
F70A/41104 Components

Item No.	Description	Part No.	Quantity
1	Animated Nut	8945001	2
2	O-ring	8378081	2
3	Impeller	5295001	1
4	Clip	8270004	2
5	Valve body	8022041	1
6	Washer	8371001	2
7	Blind nut	8945002	2
8	Screw, Cross	8909008	2
9	Seal Ring	8370036	1
10	Fixed Disk	8469016	1

Item No.	Description	Part No.	Quantity
11	Moving Disk	8459017	1
12	Shaft	8258009	1
13	Anti-friction Washer	8216010	1
14	O-ring	8378078	2
15	O-ring	8378107	1
16	Fitting Nut	8092007	1
17	Decorative Cover	8444016	1
18	Handle	8253011	1
19	Screw, Cross	8909015	1
20	Label	8860001	1



F70B Parts

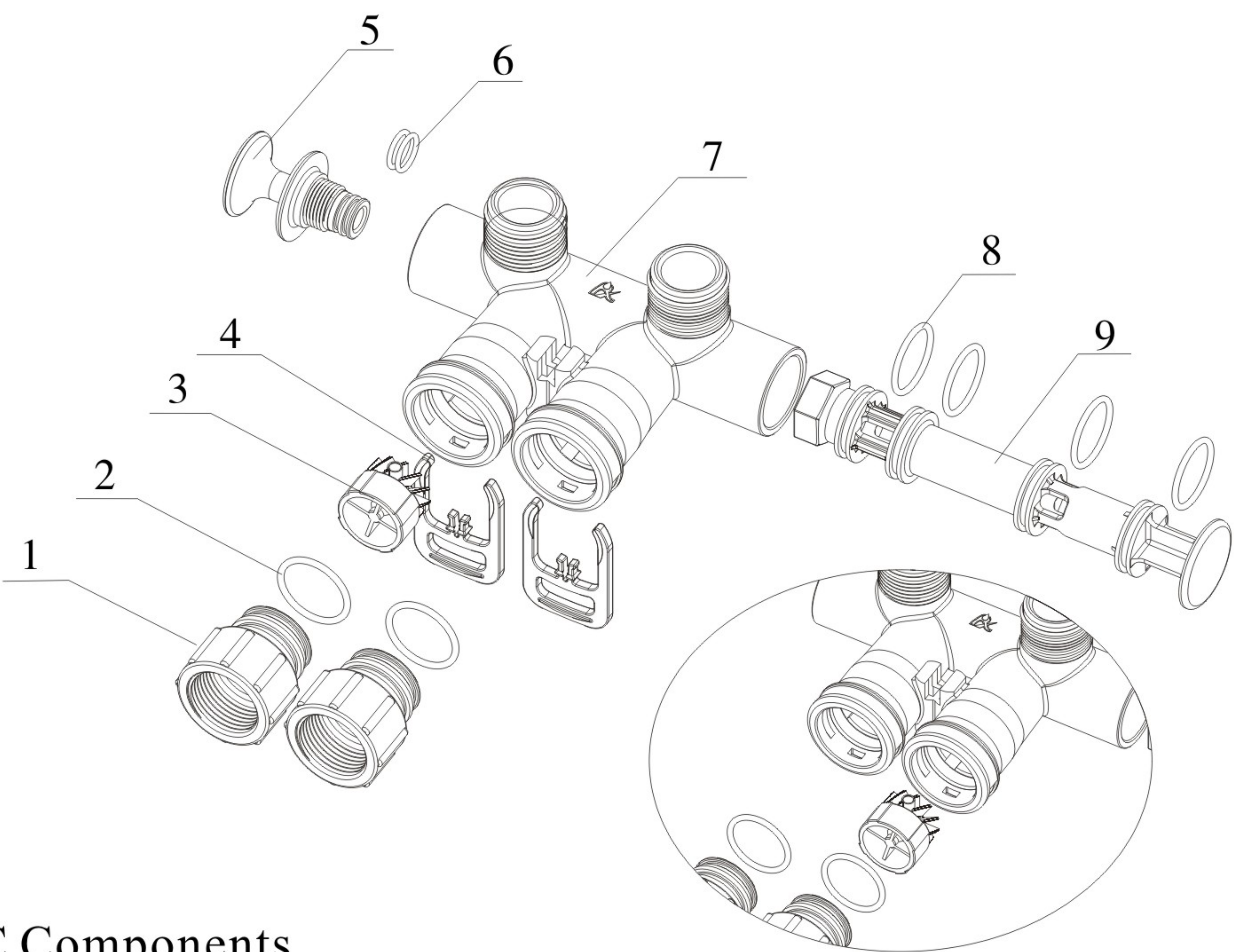


F70B Components

Item No.	Description	Part No.	Quantity
1	Valve Body	8022043	1
2	O-ring	8378073	2
3	Clip	8270003	1
4	Connector	8458060	2
5	O-ring	8378064	2
6	Impeller	5295002	1
7	Clip	8270008	2
8	Valve Body	8022042	1
9	Seal Ring	8370037	2
10	Fixed Disk	8469017	2

Item No.	Description	Part No.	Quantity
11	Screw, Cross	8909001	2
12	Moving Disk	8459018	2
13	Shaft	8258010	2
14	Anti-friction Washer	8216009	2
15	O-ring	8378048	2
16	O-ring	8378084	2
17	Fitting Nut	8092008	2
18	Handle	8253012	2
19	Screw, Cross	8909014	2
20	Decorative Button	8323007	2

F70C Parts



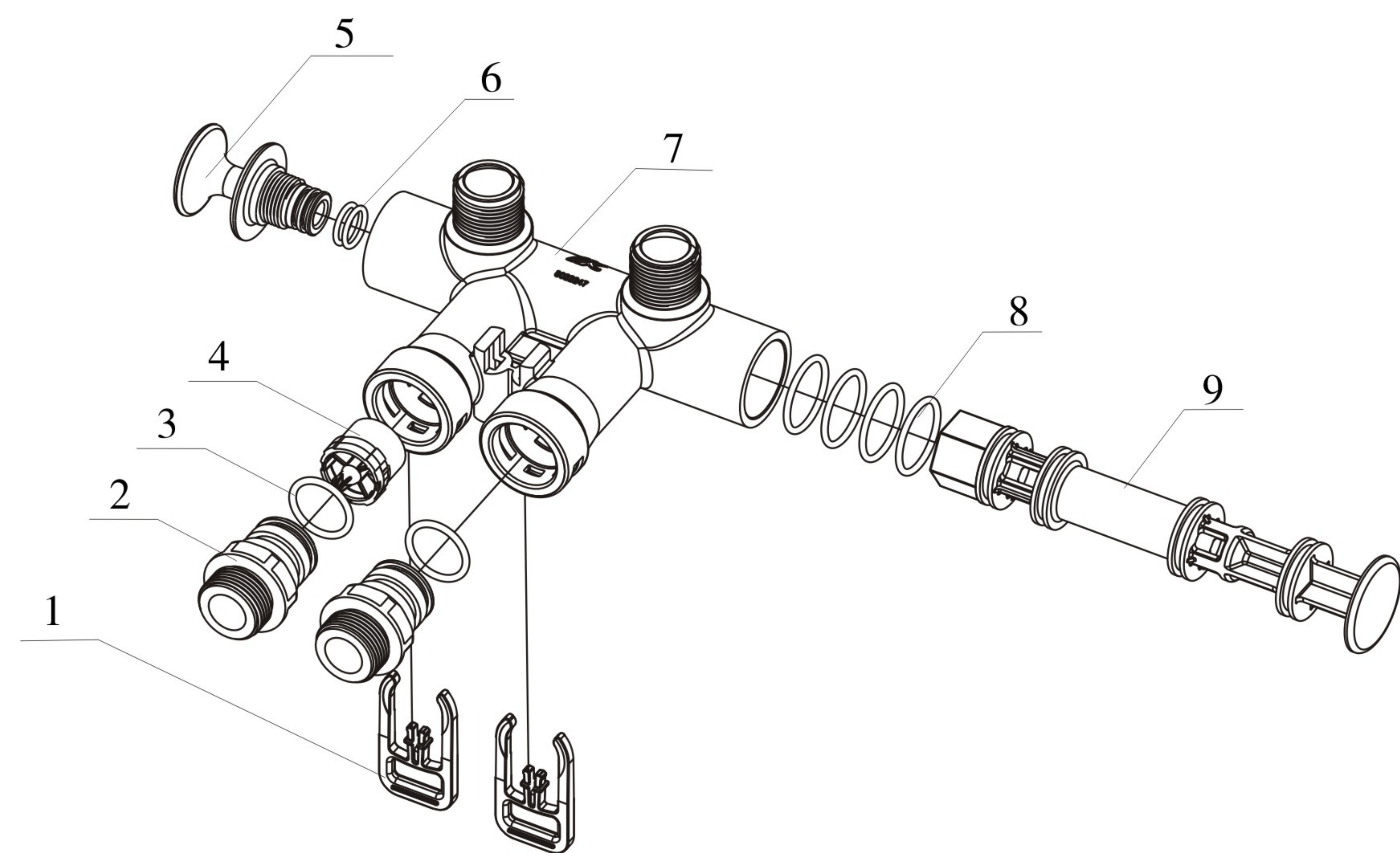
F70C Components

Item No.	Description	Part Number	Quantity
		41204/F70C	
1	Animated Nut	8945001	2
2	O-ring	8378081	2
3	Impeller*	5295001	1
4	Clip	8270004	2
5	Handle	8253013	1
6	O-ring	8378037	2
7	Valve Body	8022143	1
8	O-ring	8378220	4
9	Piston	8450001	1

※The impeller install on the outlet of control valve (the port which is marked “OUT”). For example, when match with F82 valve, the impeller installation place is the same as the picture shows. However, when it matches with the F63 and F68 valve, the impeller should be installed into another port. At the same time, the probe wire should be installed in the same port as impeller, or else it will be fail to transmit the signal.



F70D,F70H,F70HL parts



F70D, F70H, F70HL Components


Item No.	Description	Part Number			Quantity
		41202/F70D	41302/F70H	41302L/F70HL	
1	Clip	8270008	8270008	8270008	2
2	Animated Nut	/	8458014	8458014	2
3	O-ring	/	8378064	8378064	2
4	Impeller	/	/	5295012	
5	Handle	8253013	8253013	8253013	1
6	O-ring	8378037	8378037	8378037	2
7	Valve Body	8022145	8022247	8022247	1
8	O-ring	8378220	8378220	8378220	4
9	Piston	8450001	8450001	8450001	1

3. Warranty Card

Dear client:

This warranty card is the guarantee proof of RUNXIN brand bypass valve. It is kept by client self. You could get the after-sales services from the supplier which is appointed by RUNXIN manufacturer. Please keep it properly. It couldn't be retrieved if lost. It couldn't be repaired free of charge under the below conditions:

- 1. Guarantee period expired.(One year);
- 2. Damage resulting from using, maintenance, and keeping that are not in accordance with the instruction.
- 3. Damage resulting from repairing not by the appointed maintenance personnel.
- 4. Content in guarantee proof is unconfirmed with the label on the real good or be altered.
- 5. Damage resulting from force majeure.

Product Name	 Bypass Valve for Water Treatment Systems				
Model		Code of Valve Body			
Purchase Company Name	Tel/Cel.				
Problem					
Solution					
Date of Repairing		Date of Accomplishment		Maintenance Man Signature	

When product needs warranty service, please contact with your direct supplier first, after got permission, then fill in the below content and send this card together with the product to the appointed suppliers or Runxin company.

End-user Company Name	Tel/Cel.				
Purchase Company Name	Tel/Cel.				
Model		Code of Valve Body			
Problem Description					