润新®
RUNXIN

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Multi-functional Flow Control Valve for Water Treatment Systems

61240（Old Model No.：F78AS）
51230（Old Model No.：F78BS）

Instruction Manual

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

0WRX.466.513

MODEL：61240-F78AS/51230-F78BS

Before the valve put into use, please fill in the below content so as to help us to refer in the future.

Softener System Configuration

Tank Size：Dia. _____mm，Height_____mm；
Resin Volume _____L；Brine Tank Capacity_____L；
Hardness of Raw Water_____mmol/L；
Pressure of Inlet Water_____MPa；
Control Valve Model_____ ；Number_____ ；
The Specification of Drain Line Flow Control_____；
Injector No._____.
Water Source: Ground-water☐ Filtered Ground-water☐ Tap Water☐ Other _____.

Parameter Set

Backwash time_____ min；Brine & slow rinse time_____ min；
Brine refill time_____ min；Fast rinse time_____ min.

If there is no special requirement when softener product purchase, we choose 3# drain line flow control and 3# injector for the standard configuration

Catalogue

Notice

●To ensure normal operation of the valve, please consult with professional installation or repairing personnel before use it.

●If there are any of pipeline engineering and electric works, there must be finished by professional at the time of installation.

●Do not use the control valve with the water that is unsafe or unknown quality.

●Depending on the changing of working environment and water requirement, each parameter of softener should be adjusted accordingly.

●When the water treatment capacity is too low, please check the resin. If the reason is shortage of resin, please add; if the resin is turn to reddish brown or broken, please replace.

●Test water periodically to verify that system is performing satisfactorily.

●Ensure that there is solid salt all the time in the brine tank in the course of using, when this valve is used for softening. The brine tank should be added the clean water softening

salts only, at least 99.5% pure, forbidding use the small salt.

●Do not put the valve near the hot resource, high humidity, corrosive, intense magnetic field or intense librations environment. And do not leave it outside.

●Forbidden to carry the injector body. Avoid to use injector body as support to carry the system.

●Forbidden to use the brine tube or other connectors as support to carry the system.

●Please use this product under the water temperature between 5～50℃, water pressure 0.2～0.6MPa. 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. While, if the water pressure under 0.2 MPa, a booster pump must be installed before the water inlet.

●It is suggested to install PPR pipe, corrugated pipe or UPVC pipe, instead of TTLSG pipe. The pipeline should be straight.

●Do not let children touch or play, because carelessness operating may cause the procedure changed.

●Please add disc filter in the inlet of the valve.

1.Product Overview

1.1.Main Application & Applicability

Used for softening or demineralization water treatment systems

F78AS（Down-flow）suit for the ion exchange equipment which hardness of the water ≤6.5mmol/L

Boiler softening water system

RO pretreatment softening system

F78BS(Filter) suit for swimming pool filter equipment

Filtration equipment

RO pretreatment active carbon and sand filtration system

1.2.Product Characteristics

➢**Simple structure and reliable sealing**

The distribution valve adopts hermetic head faces with high degree pottery and corrosion resistance for opening and closing. The main valve uses the structure of four tee pistons. The distribution valve is combined with main valve.

➢**No water pass the valve in regeneration or washing in single tank type**

➢**Brine refill is controlled by electric ball valve.**

Brine refill is controlled by electric ball valve, refilled when in service, shorten the regeneration time.

➢**Variety kinds of installation methods.**

The valve installs in side of tank, easy to operate.

Inlet, outlet, and drain adopt UPVC pipe by sticking, it comes with animated connector.

Inlet can connect pressure meter. Sampling valve on outlet.

➢**Suitable for filtration system**

Maximal drain size is the same as water outlet. In case of block brine line connector (To be model F78BS), it could be used in filtration system.

1.3.Service Condition

This valve should be used under the below condition

Item		Requirement
Working conditions	Work pressure	0.2MPa ~ 0.6MPa
	Water temperature	5℃ ~ 50℃
Working envir-onment	Environment Temperature	5℃ ~ 50℃
	Relative humidity The pipeline should be straight	≤95%（25℃）
Inlet water quality	Water turbidity	F78AS＜2FTU，F78BS＜10FTU
	Water hardness	First Grade Na^+＜6.5mmol/L； Second Grade Na^+＜10mmol/L
	Free chlorine	＜0.1mg/L
	$Iron2^+$	＜0.3mg/L
	（CODMn）CODMn	＜2mg/L（O_2）

In the above table, First Grade Na^+ represents First Grade Na^+ Exchanger. Second Grade Na^+ represents Second Grade Na^+ Exchanger.

● When the water turbidity exceeds the conditions, a filter should be installed on the inlet of control valve.

● When the water hardness exceeds the conditions, the outlet water hardness will hardly reach the requirement of boiler feed water（0.03 mmol/L）. It is suggested to adopt second grade softener.

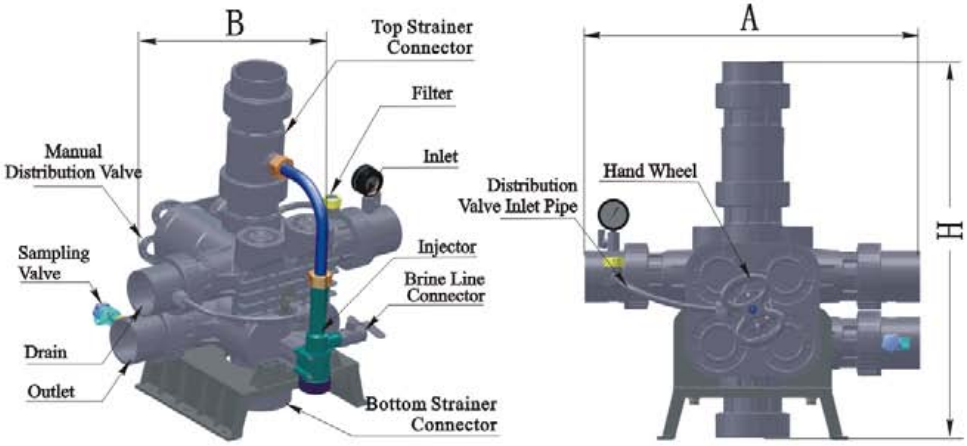
● When use water pump.make sure the flow rate of the pump no less than 40m^3/h, or the control valve can' t work normally.

1.4.Product Structure and Technical Parameters

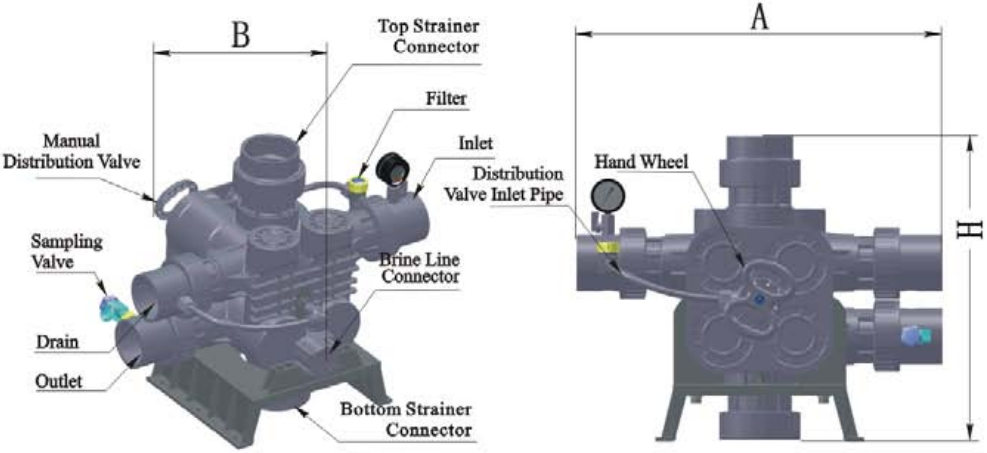
A. The appearance is just for reference. It is subjected to the real product.

MODEL：61240-F78AS/51230-F78BS

F78AS



F78BS



Model	A（mm）max	B（mm）max	H（mm）max
F78AS（61240）	561	488	634
F78BS（51230）	561	453	468

B. Technical parameter

MODEL：61240-F78AS/51230-F78BS

Model	Connect Size				Flow Rate m^3/h @0.3MPa	Remark
	In/Outlet	Drain	Brine Line Connector	Top and Bottom Strainer		
F78AS	DN65	DN65	G3/4	DN80	40	Down-flow regeneration
F78BS	DN65	DN65	/	DN80	30	Filter

Notice: DN65-Outer diameter is Φ 75 UPVC pipeline.
DN65-Outer diameter is Φ 90 UPVC pipeline.

1.5.Installation

A. Installation notice

Before installation, read all those instructions completely. Then obtain all materials and tools needed for installation.

The installation of product, pipes and circuits, should be accomplished by professional to ensure the product can operate normally.

Perform installation according to the relative pipeline regulations and the specification of Water Inlet, Water Outlet, Drain Outlet, Brine Line Connector.

B. Device location

①The filter or softener should be located close to drain.
②Ensure the unit is installed in enough space for operating and maintenance.
③Brine tank need to be close to softener.
④The unit should be kept away the heater, and not be exposed outdoor. Sunshine or rain will cause the system damage.
⑤Do not install the filter or softener, drain pipeline in circumstance which temperature may drop below 5℃, or above 50℃.
⑥One place is recommended to install the system which cause the minimum loss in case of water leaking.

C. Pipeline installation

①Support installation

Take out the whole fittings and screws, install them according to the figure 1-1. When install support, each number of support should be in correspondence.

Figure 1-1

②Install control valve

a. As the Figure 1-2 shows, insert the riser pipe to the bottom strainer and put it into the bottom of the tank.

b. Fill the mineral to the tank, and the height is accordance with the design code.Install the top strainer.

c. Connect the control valve and support with screw

d. Choose the suitable position to install the valve. Using DN80(Outer diameter is ϕ90) UPVC pipe to connect top and bottom strainer connector with tank' s top and bottom strainer.

Figure 1-2

Notice:

●Avoid floccules substance together with resin to fill in the mineral tank.

●Piping installation should be straight, and shall not make control valves or the fittings by torsion.

③Install inlet/outlet pipe

a. As figure 1-2, install a disc filter on the inlet of the filter.

b. Install valve A, valve B and valve C on the inlet, outlet and the middle of the pipeline of inlet and outlet.

c. Glue the inlet of the system with the inlet of the valve with DN65 UPVC pipeline (The outer diameter is ϕ 75); Glue the flow meter with outlet of the valve with DN65 UPVC pipeline (The outer diameter is ϕ 75); Glue the outlet of the system with flow meter with DN65 UPVC pipeline (The outer diameter is ϕ 75).

Note:

- If making a soldered copper installation, do all sweat soldering before connecting pipes to the valve. Torch heat will damage plastic parts.
- When turning threaded pipe fittings onto plastic fitting, use care not to cross thread or broken valve.
- Inlet pipeline should be in parallel with outlet pipeline. Support inlet and outlet pipeline with fixed holder.

④Install drain pipeline. (If no special request, the injector is 7803)

a. According to P15, for F78AS, if the diameter of the tank is 1400mm or 1500mm, please do as step e; if the diameter of the tank is less than 1400mm or longer than 1500mm, please do as following:

b. According to P15, match the drain line flow control based on the number and size of the hole.

c. Use the white manual handle as figure 1-3 shows to open the drain connector, take out the drain line flow control, change it to the suit one. (Please refer the hole of P16)

Figure 1-3

d. Tight the drain connector with the drain of the valve.

e. Use DN65 (Outer diameter is ϕ 75) UPVC pipeline stick to the drain, drain pipeline should directly to the sewer, the sewer and the drain pipeline should installed as figure 1-4.

Figure 1-4

f. For F78BS filter, there is no drain line flow control, please do as step e

Note:

●Leave a certain space between the drain pipe and the sewer, avoid waste-water be absorbing to the water treatment equipment.

●The drain pipeline shouldn't be too long, and the drain should no more higher than the valve. For softener, drain pipeline should no longer than 5m; For filter, it should no longer than 2m. If the drain pipeline is longer or higher than the requirement, please dissemble the connector between distribution valve and drain and let the drain of distribution valve connect with the air. Use G 1/2 female screw to block the G1/2 male of drain. Please refer the figure 1-5.

Figure 1-5

⑤Connect brine tube

a. As figure 1-6 shows, use DN20 UPVC pipe and other pipe to connect the brine valve and the brine line connector of the valve.

Note:

●The brine pipeline should as shorter as possible, and smooth. There are less four elbows in the pipeline, or it will make the brine sucking unsmooth.

●It must install brine valve in the brine tank.

Figure 1-6

Special instruction

This series of valve need the inlet pressure ≥0.2MPa, or the piston can't reach the right position which may result in internal mixing water. For RO pretreatment system and second grade Na^+ exchanger, as the pressure drop, the pressure of second and the third one can't reach at 0.2MPa. There are following solutions:

A. As figure 1-7 shows, install a voltage regulator air pump which has a function of oil removal in the system (The pressure is 0.6Mpa, and the pressure should be bigger than the inlet's), dissemble the connector between the contribution valve and the inlet pipeline, and make the pipeline connect with the air pump, then block the G1/2 female connector on inlet pipeline.

Figure 1-7

B. If the system can't offer a voltage regulator air pump, please refer the figure 1-8, dissemble the connector between the second and the third distribution valve and the inlet pipeline. Use a tee valve to connect the pipelines and make them in parallel with the first control valve's inlet pipeline. Finally block the G1/2 female inlet connector.

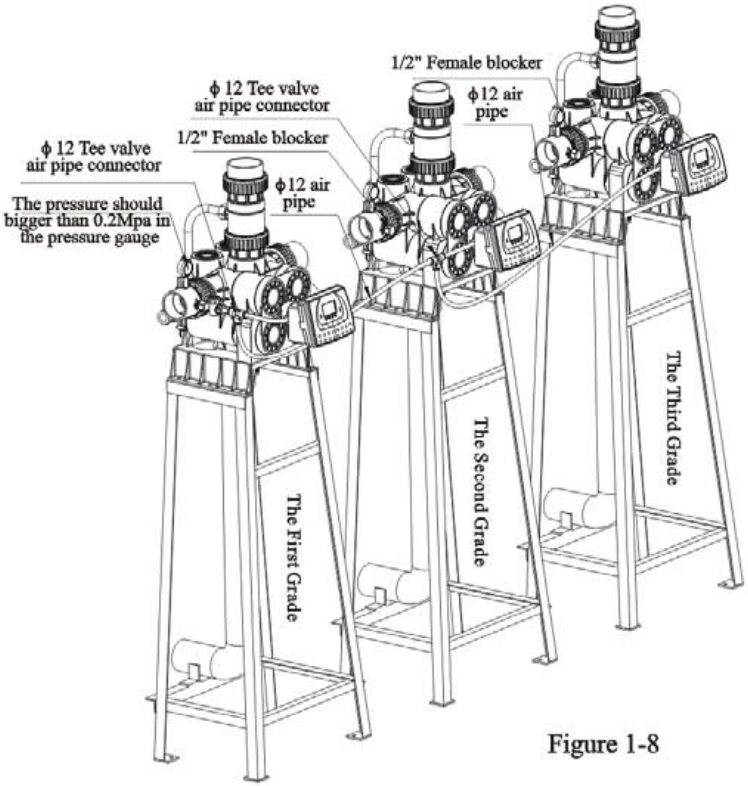


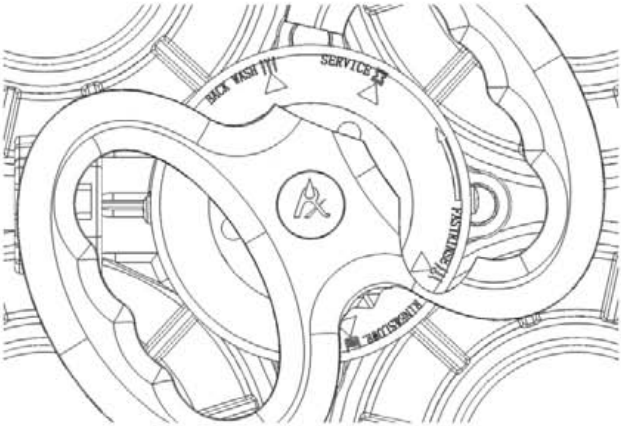
Figure 1-8

C. More than two sets of valve use as one in service one standby or several in service one standby, for using water pump system, the pump head should be more than 30m, the flow rate should be more than（30*set）m^3/h. Don't choose low flow rate with high pump head to make sure there is 0.2MPa during working. Then, the system can work normally. If the flow rate can't meet the requirement, please solve the problem according to the instruction A.

2. Basic Setting & Usage

2.1. Hand wheel usage

The valve needs hand wheel to operate indicator, which to realize backwash, brine & slow rinse or fast rinse functions, As Figure shows:

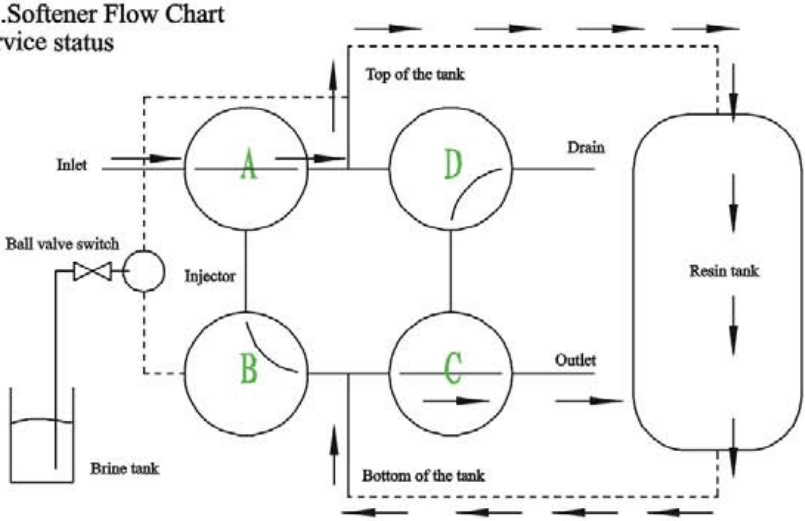


2.2.Figure on Decoration Cover and its English Description

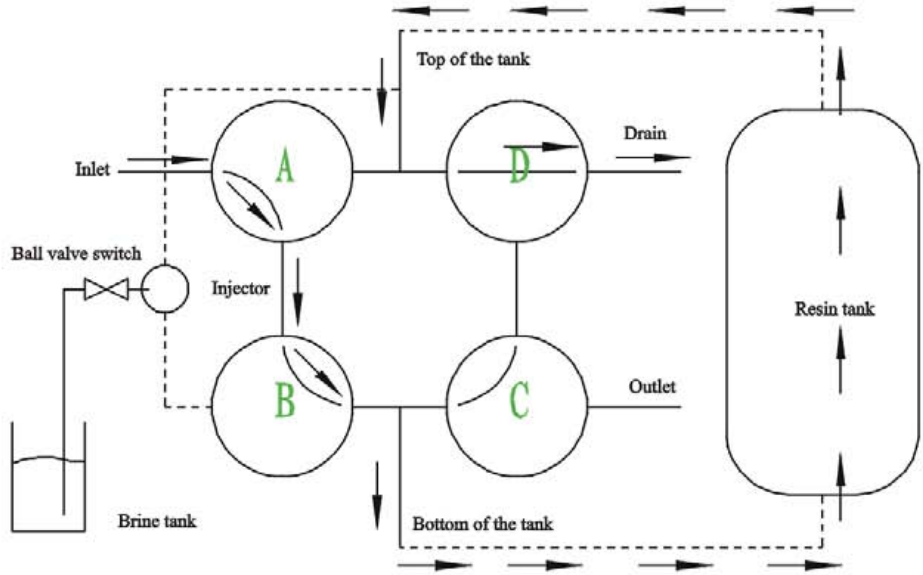
English	Figure	Description
SERVICE		Service status
BACKWASH		Backwash status
BRINE&SLOW R.		Brine & slow rinse status
BRINE REFILL		Brine refill status
FAST RINSE		Fast rinse status

3.Applications

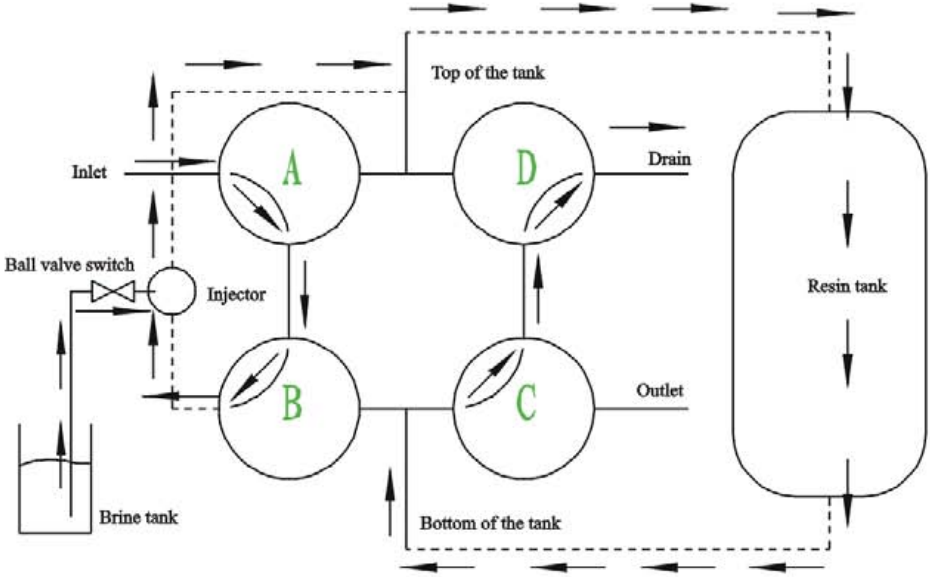
3.1.Softener Flow Chart
Service status



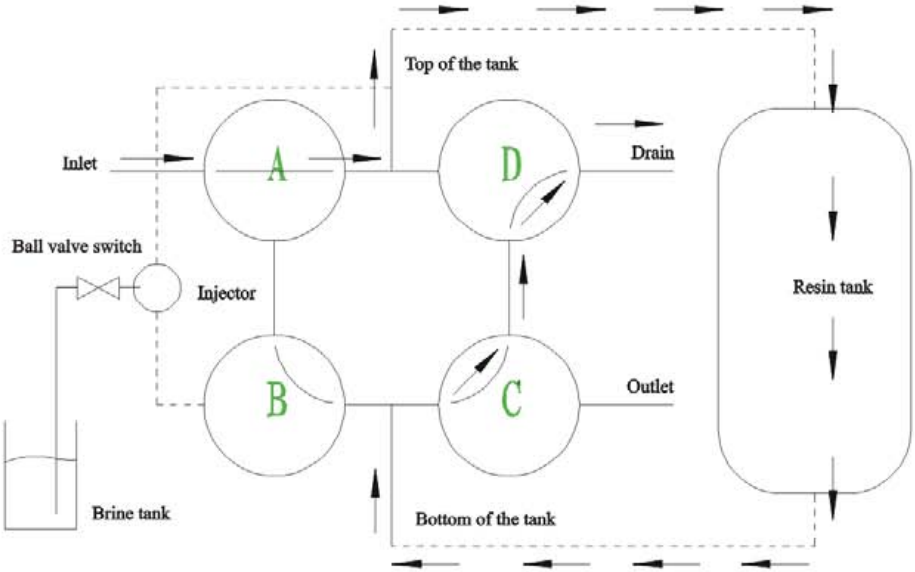
Backwash status



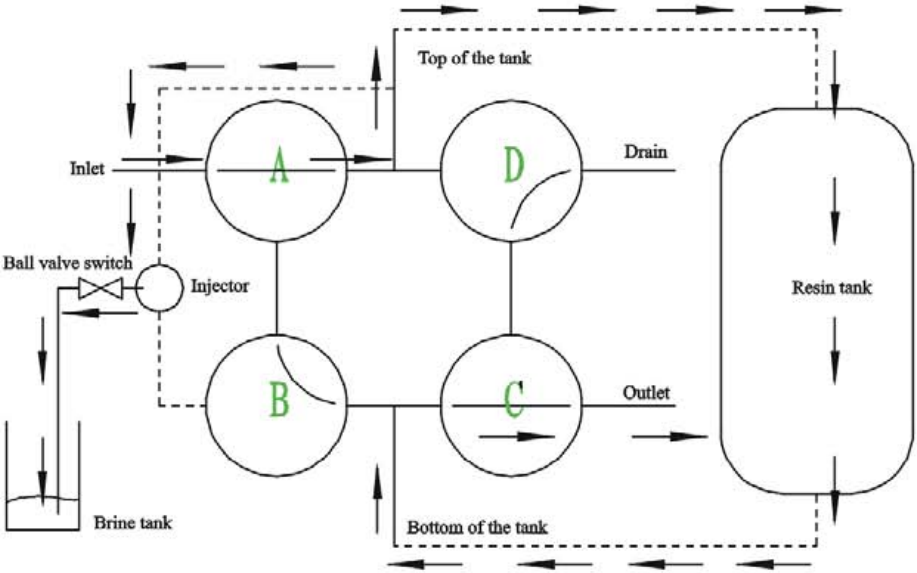
Brine & slow rinse status



Fast rinse status



Brine refill state



Brine refill and service are in same status, when brine refilling, brine sucking valve open, after finish the brine refilling, the valve is closed.

For F78BS filter, only have service status, backwash status and fast rinse status.

3.2.System Configuration and Flow Rate Curve

A. Product Configuration

① Product F78AS configuration with tank, resin volume, brine tank and injector

Tank Size (mm)	Resin Volume (L)	Flow Rate (t/h)	Brine Tank Size (mm)	The Mini Salt Consumption for Regeneration (Kg)	Injector Model
ϕ1000 × 2400	1100	20.0	ϕ1100 × 1500	165.00	7801
ϕ1200 × 2400	1500	28.0	ϕ1100 × 1500	225.00	7802
ϕ1500 × 2400	2500	44.0	ϕ1240 × 1600	375.00	7803
ϕ1600 × 2400	2800	50.0	ϕ1360 × 1690	420.00	7804

Note: The flow rate calculation is based on linear velocity 25m/h; the minimum salt consumption for regeneration calculation is based on salt consumption 150g /L (Resin).

②Product F78BS configuration with tank, filter material.

Tank Size	Volume of Filter Material	Carbon Filter		Sand Filter	
		Filtering Flow Rate	Backwash Flow Rate	Filtering Flow Rate	Backwash Flow Rate
mm	L	m^3/h	m^3/h	m^3/h	m^3/h
ϕ900 × 2400	900	7.6	22.9	15.9	34.3
ϕ1000 × 2400	1100	9.5	28.2	19.6	42.4
ϕ1200 × 2400	1500	13.5	40.7	28.2	61

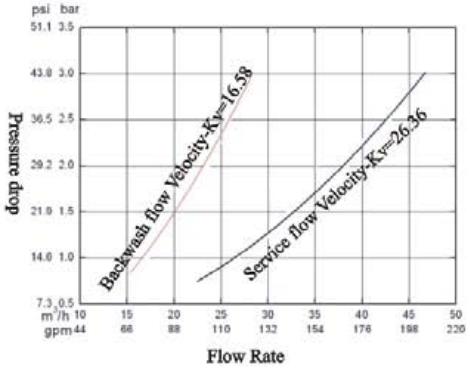
Attention: the filtering flow rate of carbon filter is calculated based on the 12m/h operation rate; the backwash flow rate is calculated based on the 10L/(m^2*s) backwash intensity; the filtering flow rate of sand filter is calculated based on the 25m/h operation rate; the backwash flow rate is calculated based on the 15L/(m^2*s) backwash intensity.

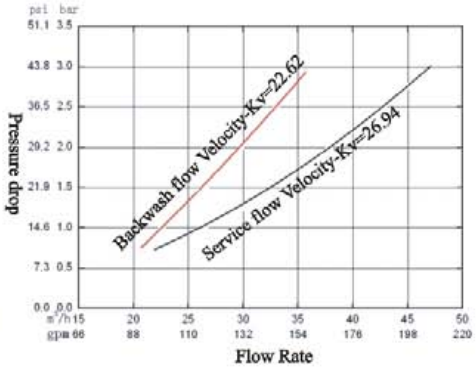
MODEL：61240-F78AS/51230-F78BS

B. Flow Rate characteristic

1）Pressure-flow rate curve

F78AS	F78BS





2）Configuration for standard injector and drain line flow control

Tank Dia. mm	Injector Model	Injector Color	Draw Rate	Slow Rinse Rate	Brine Refill Rate	Hole Qty on Drain Outlet	Hole Size on Drain Outlet	Backwash / Fast Rinse Rate
			L/h	L/h	L/h			t/h
1000	7801	Coffee	3960	2550	2150	0	/	12.40
1200	7802	Pink	5280	3430	2150	2	ф7	17.02
1400	7803	Yellow	6810	4800	3400	4	ф8	22.34
1600	7804	Blue	7940	5910	3400	5	ф10	26.83

Note：① The above data in table is tested under pressure of 0.3MPa.

②Since the different in the quality of raw inlet water, capacity of resin, size of the tank and the pressure of inlet, the above data are only for reference.

③If the real goods are different in specification, configuration or appearance, please subject to the real goods.

④The hole is made depending on the size of matched tank in practical application. The hole’s numbers and size are made based on the above table.

⑤The products don’t have any special request, the injector is 7803.

3.3. Parameter settlement

①Service time T1

Water treatment capacity：

$Q=V_R \times K \div Y_D$ (m^3)

- Y_D — Hardness of inlet water (mmol/L)
- K — Exchange factor (mmol/L) 400 ~ 1000.
  Down-flow regeneration, take 400 ~ 750.
  Up-flow regeneration, take 450 ~ 1000.
  If the inlet water hardness is higher, the factor is smaller.
- V_R — Resin volume(m^3)

By hour: $T1=Q \div Q_h$ (Hour)

- Q_h — Water treatment capacity per hour (m^3/h)
- Q — Water treatment capacity (m^3)

By day： $T1=Q \div Q_d$ (Day)

- Q_d — Water treatment capacity per day (m^3/d)
- Q — Water treatment capacity (m^3)

②Backwash time T2

It is subject to the turbidity of inlet water. Generally, It is suggested to be set 10～15 minutes. The higher the turbidity is, the longer backwash time can be set. However, if the turbidity is more than 5FTU, it should be better to install a filter in front of the exchanger.

③Brine& slow rinse time T3

$T3=(40 \sim 50) \times H_R$ (min)

Generally, $T3=45H_R$ (min)

In this formula, H_R——the height of resin in exchange tank (m.)

④Brine refill timeT4

Down-flow regeneration： $T4=0.45 \times V_R \div$ Brine refill speed (min.)

Up-flow regeneration： $T4=0.34 \times V_R \div$ Brine refill speed (min.)

In this formula, V_R—— Resin volume (m^3)

The Brine refill speed is related to inlet water pressure. It is suggested to lengthen 1~2 minutes of calculated brine refilling time to make sure there is enough water in tank. (The condition is that the there is a level controller installed in the brine tank)

⑤Fast rinse time T5

$T5=12 \times H_R$ (min)

Generally, the water for fast rinse is 3 ~ 6 times of resin volume. It is suggested to be set 10 ~ 16 minutes, but subject to the outlet water reaching the requirement.

The calculation of parameters for each step is only for reference, the actual proper time will be determined after adjusting by water exchanger supplier.

3.4.Trial running

After installing the multi-functional flow control valve on the resin tank with the connected pipes, as well as setting up the relevant parameter, please conduct the trail running as follows:

A. Close the inlet valve B & C, and open the by-pass valve A. After cleaning the foreign materials in the pipe, close the bypass valve A. (As Figure 1-3)

B. Fill the brine tank with the planned amount of water and adjust the air check valve. Then add solid salt to the tank and dissolve the salt as much as possible.

C. Rotate the handle wheel to "Backwash" status, slowly open the inlet valve B to 1/4 position, making the water flow into the resin tank; you can hear the sound of air-out from the drain pipeline. After all air is out of pipeline, then open inlet valve B completely and clean the foreign materials in the resin tank until the outlet water is clean. It will take 8 ~ 10 minutes to finish the whole process.

D. Rotate the handle wheel to "Brine & Slow Rinse" status, and open the manual ball valve in the brine line connector, enter in the process of Brine& Slow Rinse. The air check valve close when control valve finished sucking brine, then slow rinse start to work. It is about 60 ~ 65minutes for whole process.

E. Rotate the handle wheel to "Fast Rinse" status, start to fast rinse. After 10 ~ 15minutes, take out some outlet water for testing: if the water hardness reach the requirement, and the chloridion in the water is almost the same compared with the inlet water, then go to the service status. In Fast Rinse status, manual ball valve on brine line connector is opened, brine tank is being refilled with water to the required level. It takes about 5 ~ 6minutes, then add solid salt to the brine tank.

F. Rotate handle wheel to "Service" start to running.

Note:

- If water inflow too fast, the media in tank will be damaged. When water inflow slowly, there is a sound of air emptying from drain pipeline.
- After changing resin, please empty air in the resin according to the above step C.
- In the process of trial running, please check the water situation in all position, ensuring there is no resin leakage.

●The time for Backwash, Brine & Slow Rinse, Brine Refill and Fast Rinse status can be set and executed according to the calculation in the formula or suggestions from the control valve suppliers.

3.5.Base Usage

After being accomplished installation, parameter setting and trial running, the valve could be put into use. In order to ensure the quality of outlet water can reach the requirement, the user should complete the below works:

①Ensure that there is solid salt all the time in the brine tank in the course of using when this valve is used for softening.

②Test the outlet water and raw water hardness at regular time. When the outlet water hardness is unqualified, please switch hand wheel and the valve will temporary regenerate from step C to F again.

③When the feed water hardness change a lot, reference parameter settlement to adjust the cycle Water capacity.

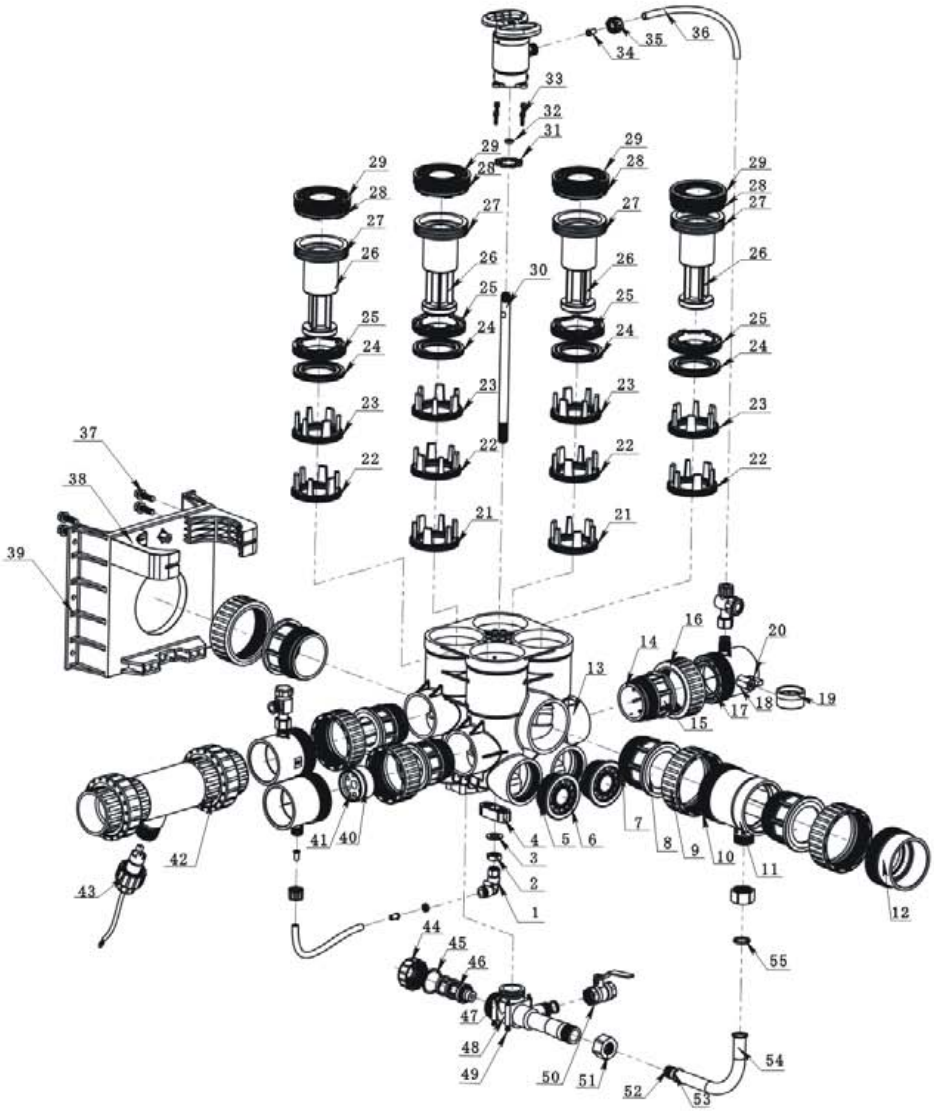
3.6. Trouble-Shooting

Problem	Cause	Correction
1. Softener supply hard water.	A. Bypass valve is open or leaking. B. No salt in brine tank. C. Injector plugged. D. Insufficient water flowing into brine tank. E. Leak at O-ring on riser pipe. F. Internal valve leak. G. Raw water quality deterioration. H. Shortage of resin.	A. Close or repair bypass valve. B. Add salt to brine tank and maintain salt level above water level. C. Change or clean injector. D. Check brine tank refill time. E. Make sure riser pipe is not cracked. Check o-ring and tube pilot. F. Change valve body. G. Increase regeneration frequence. H. Add resin to mineral tank and check whether resin leaks.
2. Softener fails to brine.	A. Line pressure is less than 0.2MPa. B. Brine line is plugged. C. Brine line is leaking. D. Injector is plugged. E. Internal control leak. F. Drain line is plugged. G. Sizes of injector and DLFC not match with tank. H. Brine ball valve closed.	A. Increase line pressure. B. Clean brine line. C. Replace brine line. D. Clean or replace new parts. E. Replace valve body. F. Clean drain line flow control. G. Select correct injector size and DLFC according to the P20 requirements. H. Open the brine ball valve.

3. Pressure lost or iron in conditioned water.	A. Iron in the water supply pipe. B. Iron mass in the softener. C. Fouled resin bed. D. Too much iron in the raw water.	A. Clean the water supply pipe. B. Clean valve and add resin cleaning chemical, increase frequency of regeneration. C. Check backwash, brine draw and brine tank refill. Increase frequency of regeneration and backwash time. D. Iron removal equipment is required to install before softening.
4. Loss of mineral through drain line.	A. Air in water system. B. Strainer broken. C. Backwash flow rate is too big.	A. Assure that well system has proper air eliminator control. B. Replace new bottom strainer. C. Check and adjust backwash flow rate.
5.Drain flows continuously.	A. Internal valve leak. B. Inlet pressure less than 0.2MPa.	A. Check and repair valve body or replace it. B. Increase the inlet pressure.
6. Salt water in soften water.	A. Foreign material in injector pr injector fails to work. B. Brine valve cannot be shut-off. C. Time of fast rinse is too short.	A. Clean and repair injector. B. Repair brine valve and clean it. C. Extend fast rinse time.
7.Interupted or irregular brine.	A. Water pressure too low or not stable. B. Injector is plugged or faulty. C. Air in resin tank	A. Increase water pressure. B. Clean or replace injector. C. Check and find the reason.
8. Water flow out from drain or brine pipe after regene-ration.	A. Foreign material in valve which makes valve can't be closed completely. B. Hard water mixed in valve body. C. Water pressure is too high which result in valve doesn't get the right position. D. Ball valve doesn't close completely.	A. Clean foreign material in valve body. B. Change valve core or sealing ring. C. Reduce water pressure or use pressure release function. D. Repair or replace ball valve.
9. Water treatment capacity decreases.	A.Regenerate not properly. B. Fouled resin bed. C. Raw water quality deterioration.	A. Regenerate according to the correct operation requirement B. Increase backwash flow rate an time,chean or change resin. C. Increase regeneration time.

3.7. Spare Part and Part No

F78AS Structure（Main body part）



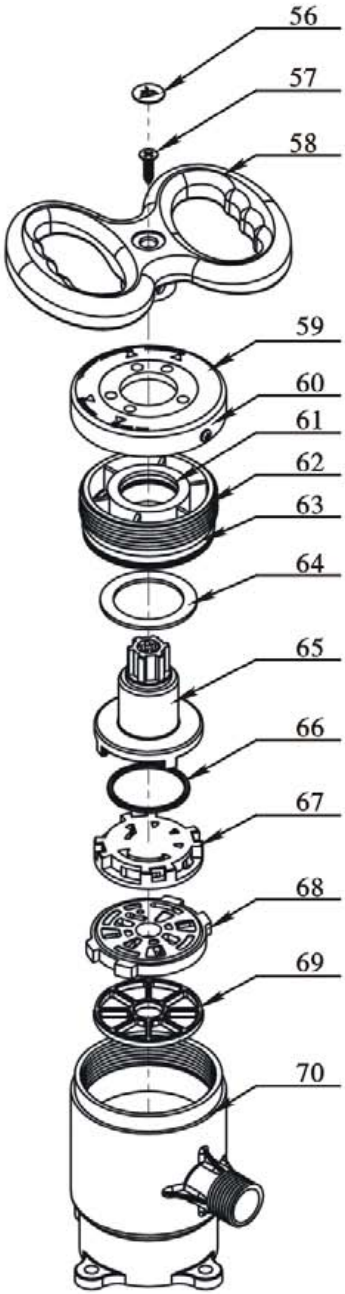
MODEL：61240-F78AS/51230-F78BS

F78AS Valve Body Components and Part Number

Item Number	Description	Part Number	Quantity	Item Number	Description	Part Number	Quantity
1	Air Pipeline Connector	5455001	1	29	Plug	8323010	4
2	Seal Washer	8940016	1	30	Pipeline	8457008	1
3	Hexagonal Nut	8371011	1	31	Seal Washer	8371009	8
4	Washer	8156003	1	32	Seal Washer	8371011	1
5	O-ring	8378127	2	33	Hexagonal Bolt	8920006	4
6	Plug	8323011	2	34	Pipe	8457025	2
7	O-ring	8378129	3	35	Hexagonal Nut	8940016	2
8	Connector	8458022	3	36	Air Pipeline	8465001	1
9	Animated Nut	8947008	3	37	Hexagonal Bolt	8920001	4
10	O-ring	8378138	3	38	Washer	5156001	2
11	Connector	8458023	1	39	Toggle	8109009	1
12	Connector	8458024	2	40	O-ring	8378125	1
13	Valve Body	5022027	1	41	Flow Control	8468013	1
14	O-ring	8338127	3	42	Tee Joint	5457009	1
15	Connector	8458020	3	43	Impeller structure	5295004	1
16	Animated Nut	8947007	3	44	Impeller Set	5315013	1
17	O-ring	8378137	3	45	Seal Washer	8371006	1
18	Connector	8458021	3	46	Nozzle	8454024	1
19	Pressure Gauge Protect Valve	2976013	1	47	O-ring	8378101	2
20	Pressure Gauge	6342001	1	48	Injector Body	8008006	1
21	Chamber Set	5330001	1	49	Hexagonal Bolt	8920005	4
22	Chamber Set	5330002	4	50	3/4" Manual Ball Valve	2976008	1
23	Chamber Set	5330003	4	51	O-ring	8940006	1
24	Chamber Set	5330004	4	52	O-ring	8378064	2
25	Fitting Nut	8092010	4	53	Hexagonal Nut	8378073	1
26	Piston	8450002	4	54	Elbow Pipeline	8457019	1
27	O-ring	8378139	8	55	Seal Washer	8371010	1
28	O-ring	8378139	8				

MODEL：61240-F78AS/51230-F78BS

F78AS Structure (Distribution valve part)



MODEL: 61240-F78AS/51230-F78BS

F78AS Distribution Valve Components and Part Number

Item Number	Description	Part Number	Quantity
56	Label	8860001	1
57	Screw, Cross	8909014	1
58	Handle Wheel	8253033	1
59	Decorative Cover	8444018	1
60	Screw, Cross	8909008	1
61	O-ring	8378078	1
62	Fitting Nut	8092007	1
63	O-ring	8378107	1
64	Anti-friction Washer	8216010	1
65	Shaft	8258009	1
66	Moving Seal Ring	8370053	1
67	Moving Disk	8459025	1
68	Fixed Disk	8469023	1
69	Seal Ring	8370031	1
70	Distribution Valve Body	8022060	1

Note:

1. The distribution valve for F78AS and F78BS are the same.
2. The difference of control valve between F78BS and F78AS is: F78BS don't have item 40~46, 48, 50~55, but have No. 8323012 plug.

4.Warranty Card

Dear client:

This warranty card is the guarantee proof of RUNXIN brand multi-functional flow control 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	润新 RUNXIN Multi-functional Flow Control 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 need warranty service, please fill in the below content and sent 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

Tank Size ϕ ×	Resin Tank Size L	Raw Water Hardness mmol/L
Water Source: Ground-water☐ Tap Water☐	Water Treatment Capacity m^3	Backwash Time min
Brine & Slow Rinse Time min	Brine Refill Time min	Fast Rinse Time min

Problem Description	

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