

International Patent Public No.:

WO 2006/007772

US Patent No.: 7549446 India Patent No.: 232582 Russia Patent No.: 2349819

Australia Patent No.: 2005263257 Philippine Patent No.: 1-2006-502553 South Korea Patent No.:10-0914137

Mexico Patent No.: 268581 Taiwan Patent No.: M287896

Multi-functional Flow Control Valve for

Water Treatment Systems

60002 (Old Model No.: F65C) 70002 (Old Model No.: F69C)

User Manual

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

> 0WRX.466.522 REV.A. 2004

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 Specifications of Drain	Line Flow Control	;	
Injector No	<u>.</u>		
Water Source: Ground-water□	; Filtered Ground-water		
Tap Water □;	Other		

 If there is no special requirement when product purchase, we choose (old) injector 6305, 8468005(3#) drain line flow control; or (new) injector 6804, 8468061 drain line flow control for the standard configuration.

Catalogue

Notice	3
1. Product Overview	4
1.1. Main Application & Applicability	4
1.2. Product Characteristics	4
1.3. Service Condition	4
1.4. Product Structure and Technical Parameters	5
1.5. Installation	6
2. Basic Setting & Usage	9
2.1. The Function of PC Board	9
2.2. Basic Setting & Usage	9
3. Application	10
3.1. Softener Flow Chart	10
3.2.System Configuration and Flow Rate Characteristic	12
3.3. Trial Running	15
3.4. Trouble-Shooting	16
3.5. Assembly& Parts	19
4. Warranty Card	

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.
- Sodium used in the water softening process should be considered as part your overall dietary salt intake. Contact doctor if you are on a low sodium diet.
- 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 crystalline coarse salt 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 using injector body as support to carry the system.
- Forbidden to use the brine tube or other connectors as support to carry the system.
- ullet Please use this product under the water temperature between 5 \sim

 $45\,^\circ\!\!\mathrm{C}$,water pressure $0.15\,^\sim\!0.6\text{MPa}.$ 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 in front of the water inlet. While, if the water pressure is under 0.15MPa, a booster pump must be installed before the water inlet.
- PPR pipes, corrugated pipes or UPVC pipe are recommended for pipe installation and aluminum-plastic pipes should be avoided.
- Do not let children touch or play, because careless operating may cause the procedure changed.
- When the attached cables or transformer of this product are broken, they must be changed to the one that is from our factory.

1. Product Overview

1.1. Main Application & Applicability

Used for softening or demineralization water treatment systems Be suitable for

Residential softening system

Ion exchange equipment

Boiler softening water system

RO pretreatment softening system, etc.

1.2. Product Characteristics

Simple structure and reliable sealing

It adopts hermetic head faces with high degree pottery and corrosion resistance for opening and closing. It combines with Service, Backwash, Brine & Slow Rinse, Brine Refill and Fast Rinse.

●No water passes the valve in regeneration in single tank type

Manual function

Realize regeneration immediately by pressing manual button "•" at any time.

One-button start

Control the regeneration time, only need pressing the one-button start button then start regeneration.

Status indicator

Every position has corresponding status indicator.

More simple and more economical

Customize time parameter value, easy to operate and more economical.

1.3 Service Condition

Runxin Valve should be used under the below conditions.

	Items	Requirement
Working	Water pressure	0.15MPa∼0.6MPa

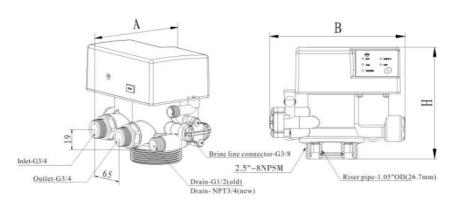
conditions	Water temperature	5℃~45℃				
Modeine	Environment temperature	5℃~45℃				
Working environment	Relative humidity	≤95% (25℃)				
	Electrical facility	AC100~240V/50~60Hz				
	Water turbidity	Down-flow regeneration < 5FTU; Up-flow regeneration < 2FTU				
Inlet water	Water hardness	First Grade Na ⁺ <6.5mmol/L; Second Grade Na ⁺ <10mmol/L				
quality	Free chlorine	<0.1mg/L				
	Iron ²⁺	<0.3mg/L				
	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.

1.4. Product Structure and Technical Parameters

Product dimension



Model	A (mm) max	B (mm) max	H (mm) max	Flow Rate m³/h @0.15MPa	Regeneration Mode
F65C/60002	127.5	187.8	154.7	2.0	Down-flow
F69C/70002	127.5	187.8	154.7	2.0	Up-flow

Remark:

1. OD—Outer Diameter

2. Transformer Output: DC12V/1.5A

3. The appearance is just for reference. It is subject to the real product.

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, and Brine Line Connector.

B. Device location

- (1) The filter or softener should be located close to drain.
- ② Ensure the unit is installed in enough space for operating and maintenance.
- (3) Brine tank needs to be close to softener.
- ④ The unit should be kept away from the heater, and not be exposed outdoor. Sunshine or rain will cause the system damage.
- § Please avoid installing the system in one acid/alkaline, magnetic or strong vibration circumstance, because above factors will cause the system disorder.
- ⑥ Do not install the filter or softener, drain pipeline in circumstance which temperature may drop below 5°C or above 50°C.
- ① Install the system in the place where with minimum loss in case of water leakage.

C. Pipeline installation

- (1) Install control valve
- a. As the Figure 1-1 shows, select the riser pipe with 26.7mm OD, glue the riser pipe to the bottom strainer and put it into the mineral tank, cut off the exceeding pipe out of tank top opening and make external rounding.

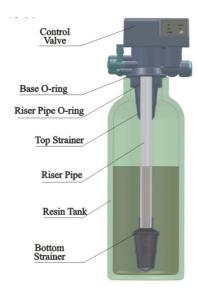


Figure 1-1

- b. Fill the resin to the tank, and the height is in accordance with the design code.
- c. Install the top strainer to the valve.
- d. Insert the riser pipe into control valve through top strainer and screw tight control valve.

Note:

- •The length of riser pipe should be neither higher 2mm nor lower 5mm tank top opening height, and its top end should be rounded to avoid damage of O-ring inside the valve.
- Avoid floccules substance together with resin to fill in the mineral tank.
- •Avoid O-ring inside control valve falling out while rotating it on the tank.
- 2 Pipeline connection
- a. As Figure 1-2 shows, install a pressure gauge in water inlet.
- b. Install valve A, valve B, valve C and valve D in inlet pipeline, outlet pipeline, the middle of the inlet and outlet pipeline. Valve D is a sampling valve(or adopt as F70B by-pass valve).

- c. Install a check valve in outlet.
- d. Inlet pipeline should be in parallel with outlet pipeline. Support inlet and outlet pipeline with fixed holder.

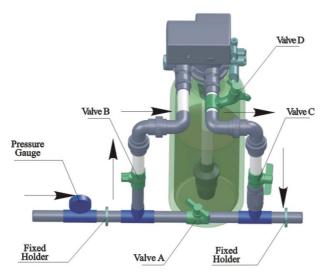


Figure 1-2

Note:

- •If the water outlet or water tank is installed higher than control valve or parallel interlock system with multi-outlets, a liquid level controller must be installed in brine tank or a check valve must be installed at the outlet. Otherwise, the water in water outlet or water tank will flow backwards into brine tank when backwash.
- •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.
- (3) Install drain pipeline
- a. As Figure1-3 shows: slide the drain hose connector into drain connector.

- b. Insert drain line flow control into drain connector.
- c. Screw drain connector into drain outlet, and lock it.
- d. Locate the drain hose as Figure 1-3.

Note:

- •Control valve should be higher than drain outlet, and be better not far from the drain hose.
- •Be sure not to connect drain with sewer, and leave a certain space between them to prevent wastewater absorbed to the water treatment equipment, such as showed in the Figure 1-3.

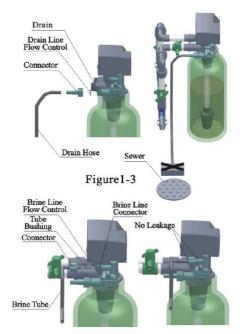


Figure 1-4

(4) Connect brine tube

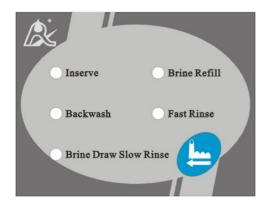
- a. As Figure 1-4 shows, slide 3/8" brine tube hose connector over end of brine tube.
- b. Insert tube bushing into the end of brine tube.
- c. Insert the red brine line flow control into valve brine line connector (attention: cone side of control should face into valve)

- d. Tighten brine draw hose connector onto brine line connector.
- e. Connect the other end of brine tube with the brine tank. (The liquid level controller and air-blocker should be installed in the brine tank.)

Remark: The brine tube and drain pipeline should not be bended or plugged.

2. Basic Setting & Usage

2.1. The Function of PC Board



- •When the system is in Service status, only press button, then the system will start to regenerate, otherwise, the system will not regenerate.
- •After start the regeneration, the system will process the complete regeneration circle automatically according to the set parameter (see the table below), then back to Service status.
- •During the regeneration circle, if you would like to finish the current status in advance, press button to process to next status.

2.2 Basic setting

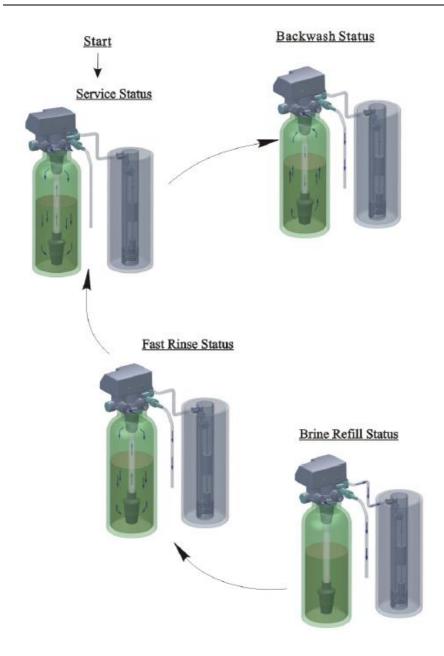
Controller setting (Default configuration)

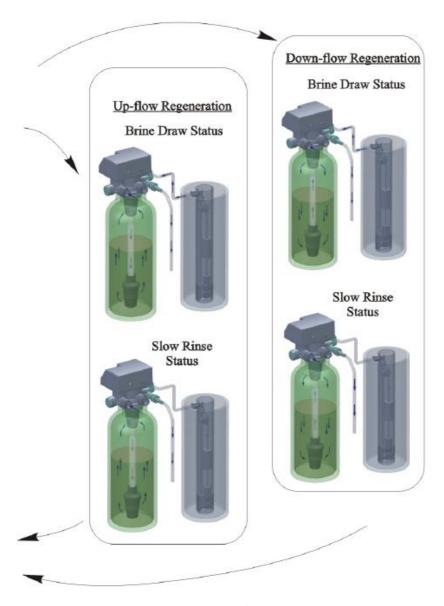
Backwash	Brine & Slow Rinse	Brine Refill	Fast Rinse
1 min.	35 min.	2 min.	2 min.

Note: The time parameter can be inquired and adjusted by USB adjuster. (USB adjuster is five digit display board, please buy separately if necessary)

3. Application

3.1 Softener Flow Chart





3.2 System Configuration and Flow Rate characteristic

A. Product Configuration

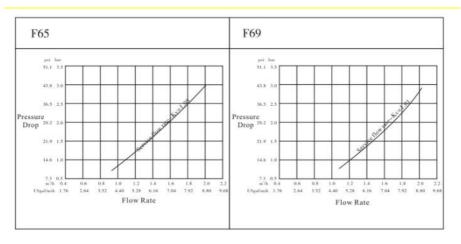
Product configuration with tank, resin volume, brine tank and injector

Tank Size (mm)	Resin Volume (L)	Flow Rate	Brine Tank Size (mm)	The Minimum Salt Consumption for Regeneration	Injector Model
				(Kg)	
φ180×1130	16	0.5	φ200×500	2.40	6302/6801
φ205×1300	25	0.7	φ390×810	4.00	6303/6802
φ255×1390	40	1.2	φ390×810	6.00	6305/6804
φ300×1650	60	1.8	φ450×940	9.00	6306/6806

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

B. Flow Rate characteristic

1). Pressure-flow rate curve



2). Injector parameter table Old injector:(6300 series)

Inlet		Draw Rate(L/M)											
Pressure		Draw Rate (L/M)											
MPa	6301 Coffee	6302 Pink	6303 Yellow	6304 Blue	6305 White	6306 Black	6307 Purple	6308 Red	6309 Green	6310 Orange			
0.15	0.81	1.12	1.58	2.21	2.45	3.30	3.44	4.08	5.19	5.69			
0.20	0.95	1.41	1.87	2.53	2.89	3.88	4.21	4.83	5.36	6.80			
0.25	0.99	1.61	2.08	2.79	3.30	4.30	4.66	5.39	6.86	7.65			
0.30	1.30	1.81	2.18	3.05	3.66	4.74	5.15	5.95	7.50	8.60			
0.35	1.45	1.96	2.39	3.27	3.94	5.02	5.55	6.51	8.30	9.57			
0.40	1.56	2.12	2.55	3.50	4.25	5.41	5.88	6.77	8.74	9.90			

New Injector: (6800 series)

Inlet Pressure		Draw Rate (L/M)											
MPa	6820 Grey	6821 Cyan	6801 Coffee	6802 Pink	6803 Yellow	6804 Blue	6805 White	6806 Black	6807 Purpl e	6808 Red	6809 Green	6810 Orange	
0.15	0.61	0.88	1.30	1.45	2.00	2.68	2.72	3.72	4.52	4.85	5.75	6.00	
0.20	0.70	1.03	1.52	1.73	2.37	3.16	3.27	4.27	5.03	5.70	6.40	6.26	
0.25	0.79	1.14	1.77	1.90	2.70	3.46	3.78	4.80	5.65	6.22	7.19	7.13	
0.30	0.87	1.27	1.93	2.26	3.00	3.80	4.30	5.23	6.20	6.80	7.97	8.53	
0.35	0.95	1.35	2.08	2.20	3.23	4.05	4.50	5.57	6.67	7.27	8.50	8.80	
0.40	1.00	1.43	2.23	2.27	3.46	4.38	4.88	5.95	6.95	7.63	8.80	9.30	

3). Configuration for Standard Injector and Drain Line Flow Control

Old Injector: (6300 series)

Tank Dia.	ia. Injector Injector Model Color		Draw Rate	Slow Rinse	Brine Refill	DLFC	Backwash / Fast Rinse Rate
mm			L/m	L/m	L/m		L/m
150	6301	Coffee	1.30	0.91	3.0	1#	4.7
175	6302	Pink	1.81	1.32	3.7	1#	4.7
200	6303	Yellow	2.18	1.73	3.8	2#	8.0
225	6304	Blue	3.05	2.14	3.3	2#	8.0
250	6305	White	3.66	2.81	4.3	3#	14.4
300	6306	Black	4.74	3.32	4.2	3#	14.4

New injector: (6800 series)

Topk		njector Injector	Draw	Slow		Brine		Backwash /
Tank Dia.	Injector			Rinse	BLFC Code	Refill	DLFC Code	Fast Rinse
	Model	Color	Rate	Rate		Rate	DLFC Code	Rate
111111	nm	L/m	L/m		L/m		L/m	
150	6821	Cyan	1.27	0.75	8468057	0.98	8468064	3.33
175	6801	Coffee	1.93	1.18	8468057	0.98	8468043	4.31
200	6802	Pink	2.26	1.24	8468056	1.21	8468042	7.15
225	6803	Yellow	3.0	1.7	8468056	1.21	8468060	7.64
250	6804	Blue	3.8	2.4	8468052	1.66	8468061	10.82
300	6806	Black	5.23	3.3	8468053	2.73	8468077	18.1

4). Configuration for BLFC (This data is only applicable to the new injector)

Part Number	8468076	8468075	8468057	8468056	8468052	8468053	8468054	8468055
Color	Red	Purple	Black	White	Coffee	Pink	Yellow	Blue

Flow	L/m	0.38	0.68	0.98	1.21	1.66	2.73	4.92	5.86
Rate	gal/min	0.1	0.18	0.26	0.32	0.44	0.72	1.30	1.55

5). Configuration for DLFC (This data is only applicable to the new injector)

Part Nu	ımber	84680 64	84680 43	84680 42	84680 60	84680 61	84680 45	8468077	84680 44	84680 62	84680 63	Without
Color		Green	Pink	Coffee	White	Black	Blue	Orange	Yellow	Purple	Red	1
Flow	L/m	3.33	4.31	7.15	7.64	10.82	15.96	18.1	18.5	24.97	30.64	32.00
Rate	gal/	0.88	1.14	1.89	2.02	2.86	4.22	4.78	4.89	6.6	8.1	8.45
	min											

Note: Above data for the product configuration and relevant characteristics are only for reference. When put into practice, it is subject to different requirements of raw water hardness and applications.

3.3 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. Turn off the inlet and outlet of the valve B and valve C, turn on the by-pass valve A, and clean the internal pipeline then turn off the valve A, (as shown in Figure 1-2).
- B. Add calculated water to the brine tank and adjust the height of liquid level switch. Then add solid salt to the tank and dissolve the salt as much as possible.
- C. Connect the power supply. Press the button **(9)** turn to Backwash status, open valve B to 1/4 slowly to let water into brine tank. You can

hear the sound of air-out from the drain pipeline, then fully open the valve B after air is exhausted, wash the resin tank until the outlet water is clean. It will take $8\sim10$ minutes to finish the whole process.

- E. Press button , and turn the status from Brine & Slow Rinse to Brine refill position. It takes about 5~6 minutes to refill the salt water to appropriate height, then add the crystalline coarse salt.
- F. Press button , and turn the status from Brine refill to Fast rinse. After 10~15min., take our 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 next step.
- G. Press to stop fast rinse, then making the control valve return to Service and start to running.
- When the control valve enters into the regeneration, all programs can be finished automatically according to the setting time; if you want one of the steps to be terminated early, you can press.
- If the water inflow is too fast, the media in tank will be damaged. When the water inflow is slow, 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, and ensure there are no resin leakage.
- The time for Backwash, Brine& Slow Rinse, Brine Refill and Fast Rinse position status can be set and executed according to the calculation in the formula or suggestions from the control valve suppliers.

3.4 Trouble-Shooting

A. Control Valve Fault

Problem	Cause	Solution
Softener fails to regenerate.	A. Electrical service to unit has been interrupted. B. Controller is defective. C. Motor fails to work.	A. Assure permanent electrical service(check fuse, plug, pull chain or switch). B. Check or replace controller. C. Check or replace motor.
2. Softener supply hard water.	A. Bypass valve opens or leaks. B. No salt in brine tank. C. Injector is plugged. D. Insufficient water flows into brine tank. E. O-ring on riser pipe leaks. F. Internal valve leaks. G. Time for Regeneration cycles is too long. 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. Shorten regeneration time. H. Add resin to mineral tank and check whether resin leaks.
3. Softener fails to draw brine.	A. Inlet water pressure is too low. B. Brine line is plugged. C. Brine line is leaking. D. Injector is plugged or broken. E. Internal valve leaks. F. Drain line is plugged. G. Size of injector and DLFC does not match with tank	A. Increase inlet water pressure. B. Clean brine line. C. Replace brine line. D. Clean or replace new injector. E. Replace valve body. F. Clean drain line flow control. G. Select correct injector size and DLFC according to the P14 requirements.
4. Unit uses too much salt	A. Improper salt setting.B. Excessive water in brine tank.	A. Check salt usage and salt setting. B. See problem No.5

5. Excessive water in brine tank.	A. Overlong refilling time. B. Too much water left after brine draw. C. Foreign material in brine valve. D. Power outage when brining and system without liquid level controller. E. Brine refill is out of control.	A. Reset correct brine refilling time. B. Check the injector and make sure no stuff in the brine pipe. C. Clean brine valve and brine line. D. Stop water supplying and restart or install liquid level controller in salt tank. E. Repair or replace liquid level controller.
6.The salt water flows into outlet pipeline	A. Brine valve is not closed completely B. Time of fast rinse is set too short	A Repair brine valve or clean it B. Increase the fast rinse time.

Control Valve Fault (Continued.)

	A. Iron in the water supply	A. Clean the water supply pipe. B. Clean valve and add resin cleaning chemical, increase frequency of regeneration.			
7. Pressure lost or rust in pipeline.	pipe. B. Iron mass in the softener. C. Fouled resin bed. D. Too much iron in the raw water.	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.			
8. Loss of mineral	A. Air in water system. B. Strainer is broken.	A. Assure that well system has proper air eliminator control.			
through drain line.	C. Improperly sized drain line control.	B. Replace new bottom strainer.C. Check for proper drain rate.			

9. Control valve cycles continuously.	A. Locating signal wring breakdown.B. Controller is faulty.C. Foreign material stuck the driving gear.	A. Check and connect locating signal wiring. B. Replace controller. C. Take out foreign material.
10. Drain flows continuously.	A. Internal valve leaks. B. Power off when valve is in backwash or fast rinse status.	A. Check and repair valve body or replace it.B. Adjust valve to service position or turn off bypass valve and restart when electricity supply.
11. Interrupted or irregular brine.	A. Water pressure is too low or not stable. B. Injector is plugged or faulty. C. Air in resin tank. D. Floccules in resin tank during up-flow regeneration.	A. Increase water pressure. B. Clean or replace injector. C. Check and find the reason. D. Clean the floccules in resin tank.
12. Water flows out from drain or brine pipe after regeneration.	A. Foreign material in valve which makes valve unable to be closed completely. B. Hard water mixed in valve body. C. Water pressure is too high which causes valve not getting the right position. D. Under the Backwash position, the outlet line and brine line are connected.	A. Clean foreign material in valve body. B. Change valve core or sealing ring. C. Reduce water pressure or use pressure relief function. D. Install a check valve, solenoid valve in front of the outlet or install a liquid level controller in the brine tank.
13. Water capacity decreases	A. Doesn't regenerate properly. B. Fouled resin bed. C. Salt consumption is not proper. D. Raw water quality deterioration.	A. Regenerate according to the correct operation requirement. B. Increase backwash flow rate and time, clean or change resin. C. Set proper salt. D. Regenerate unit by manual temporarily, then

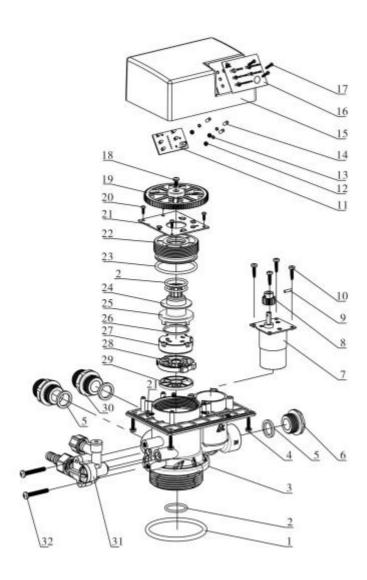
	reset regeneration cycle.

B. Controller Fault

Problem	Cause	solution
	A. The connecting cables are	A. Replace the connecting
1. The indicator	damaged.	cables.
	B. Display board is damaged.	B. Replace display board.
lights off	C. Control board is damaged.	C. Replace control board.
	D. Electricity is interrupted.	D. Check electricity.

3.5. Assembly & Parts

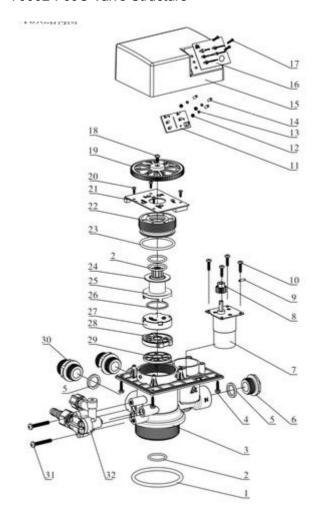
60002-F65C Valve Structure



60002-F65C Spare parts and part No.

Item No.	Description	Part No.	Qua ntity	Item No	Description	Part No	Quanti ty
1	O-ring 73x5.3	8378143	1	17	Screw, Cross M2.5x16	8902023	1
2	O-ring 25.8x2.65	8378078	3	18	Screw, Cross ST3.9x16	8909013	1
3	Valve Body (ABS+GF10)	5022018	- 1	10	Coor	E04400E	
3	Valve Body (PPO+GF20)	5022019		19	Gear	5241005	1
4	Screw, Cross ST3.9X16	8909016	4	20	Screw, Cross ST3.9X9.5	8909008	7
5	Seal Ring ф24хф18х3	8371019	3	21	Locating Board	6382037	1
6	Plug	8323005	1	22	Fitting Nut	8092007	1
7	Motor	6158006	1	23	O-Ring 50.39x3.53	8378107	1
8	Small Gear, Motor	8241010	1	24	Anti-friction Washer	8216010	1
9	Pin	8993003	1	25	Shaft	8258009	1
10	Screw, Cross ST3.9x16	8902044	4	26	Moving Seal Ring	8370053	1
11	Display Board	6381014	1	27	Moving Disk	8459013	1
12	Hexagonal Nut	8940019	3	28	Fixed Disk	8469012	1
13	Spring Washers	8953002	3	29	Seal Ring	8370003	1
14	Tube	8457006	3	30	Joint	8458011	1
15	Front Cover	8300009	1	31	Old Injector	5468005	
				31	New Injector	5468111	1
16	Sticker	8865009	1	32	Screw, Cross M5x35	8902017	2

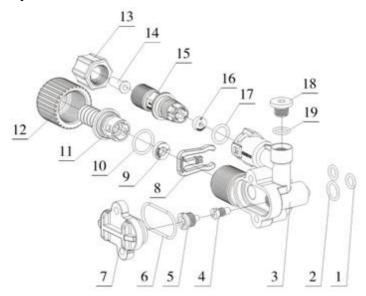
70002-F69C Valve Structure



70002-F69C Spare parts and part No.

Item No.		Part No	Qua ntity	Item No.	Description	Part No	Qua ntity
1	O-ring 73x5.3	8378143	1	17	Screw, Cross M2.5x16	8902023	1
2	O-ring 25.8x2.65	8378078	3	18	Screw, Cross ST3.9x13	8909013	1
,	Valve Body (ABS+GF10)	5022024		10	Coor		
3	Valve Body (PPO+GF20)	5022025	1	19	Gear	5241005	1
4	Screw, Cross ST3.9x16	8909016	4	20	Screw, Cross ST2.9x9.5	8909008	7
5	Seal Ring ф24хф18х3	8371019	3	21	Location Board	6382038	1
6	Plug	8323005	1	22	Fitting Nut	8092007	1
7	Motor	6158006	1	23	O-Ring 50.39x3.53	8378107	1
8	Small Gear, Motor	8241010	1	24	Anti-friction Washer	8216010	1
9	Pin	8993003	1	25	Shaft	8258009	1
10	Screw, Cross ST3.9x16	8902044	4	26	Moving Seal Ring	8370053	1
11	Display Board	6381014	1	27	Moving Disk	8459016	1
12	Hexagonal Nut	8940019	3	28	Fixed Disk	8469015	1
13	Spring Washers	8953002	3	29	Seal Ring	8370034	1
14	Tube	8457006	3	30	Joint	8458011	1
15	Front Cover	8300009	1	31	Screw, Cross M5X35	8902017	2
16	Sticker	8865009	1	32	Old Injector New Injector	5468005 5468111	1

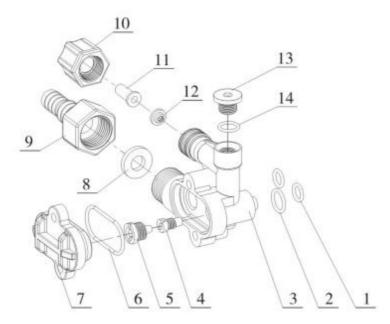
New Injector Structure



New Injector Spare Parts and Part No.

Item No.	Description	Part No.	Qua ntity	Item No.	Description	Part No.	Quantity
1	O-ring 7.5x1.8	8378016	2	11	Connector	8458064	1
2	O-ring 10.82x1.78	8378012	1	12	Animated Nut	8945025	1
3	Injector Body	8008010	1	13	Nut Nex. Hd	8940001	1
4	Throat, Injector	Optional	1	14	Tube	8457004	1
5	Nozzle, Injector	Optional	1	15	Connector	8458068	1
6	O-ring 30x1.8	8378025	1	16	BLFC	Optional	1
7	Cover, Injector	8315001	1	17	O-ring 11×2	8378169	1
8	Clip	8270010	1	18	Plug	8323002	1
9	DLFC	Optional	1	19	Seal Ring	8370003	1
10	O-ring 15×1.8	8378179	1				

Old Injector Structure



Old Injector Spare Parts and Part No.

Item No.	Description	Part No	Qua ntity	Item No.	Description	Part No	Quantity
1	O-ring 7.5x1.8	8378016	2	8	Drain Line Flow Control	Optional	1
2	O-ring 10.82x1.78	8378012	1	9	Joint	8458017	1
3	Injector Body	8008001	1	10	Hexagonal Nut	8940001	1
4	Throat, Injector	8467005	1	14	Tube	8457004	1
5	Nozzle, Injector	8454005	1	12	Brine Line Flow Control	Optional	1
6	O-ring 30x1.8	8378025	1	13	Plug	8323002	1
7	Cover, Injector	8315001	1	14	Seal Ring	8370003	1

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	Multi-functional Flow Control Valve					
Name	for Water Treatment Systems					
Model		Code of Valve				
		Body				
Purchase						
Company		Tel/Cel.				
Name						
Problem						
Solution						
Date of	Date of	Maintenance				
Repairing	Accomplishment	Man Signature				

When product needs warranty service, please fill in the below content and send this card together with the product to the appointed suppliers or Runxin company.

End-user						
Company				Tel/Cel.		
Name						
Purchase						
Company				Tel/Cel.		
Name						
Model			Code of Valve Body			
Tonk Cizo 49		Resin Ta	sin Tank Size Rav		/ Water Hardness	
Tank Size φ	×	L		mmol/L		
		L		min	noi/L	
Water Source:	Ground-water□	Water	Treatment			
Water Source:	Ground-water□	Water Capacity		Backwash Tir		
	Ground-water□		m3	Backwash Tir	me min	
Tap Water	Ground-water□ min	Capacity	m3		me min	

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