



Manual Multi-port Valve for Water Treatment Systems

- TM.F56A
- TM.F56B/C
- TM.F56D
- TM.F56E
- TM.F56EC
- TM.F56F
- TM.F52

User manual



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

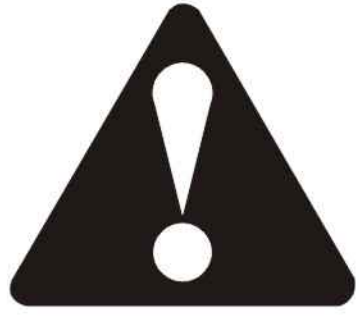
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Preface

Dear user, Thank you for using RUNXIN brand manual multi-port valve for water treatment systems. Please read this manual carefully before using, which will contribute to your machine offering perfect services for you normally for a long time.

RUNXIN brand manual multi-port valve is our patent product (Patent Number : ZL02257746.7, ZL02220153.X) which specially allocate in all kinds of water treatment systems. This valve has high hardness and pottery of degree of high level ceramic moving slice inside its body. As relative and moving slice have different blind holes and put through holes respectively, with change of the relative angle during slice rotate one course of circle definitely with it height laminating, it produces three different fluid pass way so as to realize these necessary functions, namely Service, Backwash and Fast Rinse. As the core control part for water treatment systems, this valve changes traditional water treatment systems tedious operation mode of a lot of valves and many pieces of pipelines, integrating various kinds of functions in one which is easier to install and operate.



- 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 manual valve with water that is unsafe or of unknown quality.
- Test water periodically to verify that system is performing satisfactorily.
- Do not put the valve near the hot resources or high humidity environment. And do not leave it outside.
- Forbidden to use the handle, pipelines, or other connectors as support to carry system.
- Handle or wheel is only used for turning left or right. It is forbidden to lift it up and down.
- Please use this product under the water temperature between 5℃ and 45℃ , water pressure between 0.1MPa and 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.

Product Characteristics

●**More reliable method for opening and closing**

It adopts the seal slice with high degree pottery, scuffresistance,corrosion proof for opening and closing, no leakage.

●**Reasonable fluid design:** Filter-Fast Rinse-Backwash-Fast Rinse-Filter.

●**Small rotation angle for opening and closing. It feels good for operation.**

●**It could be operated with pressure, leak proof.**

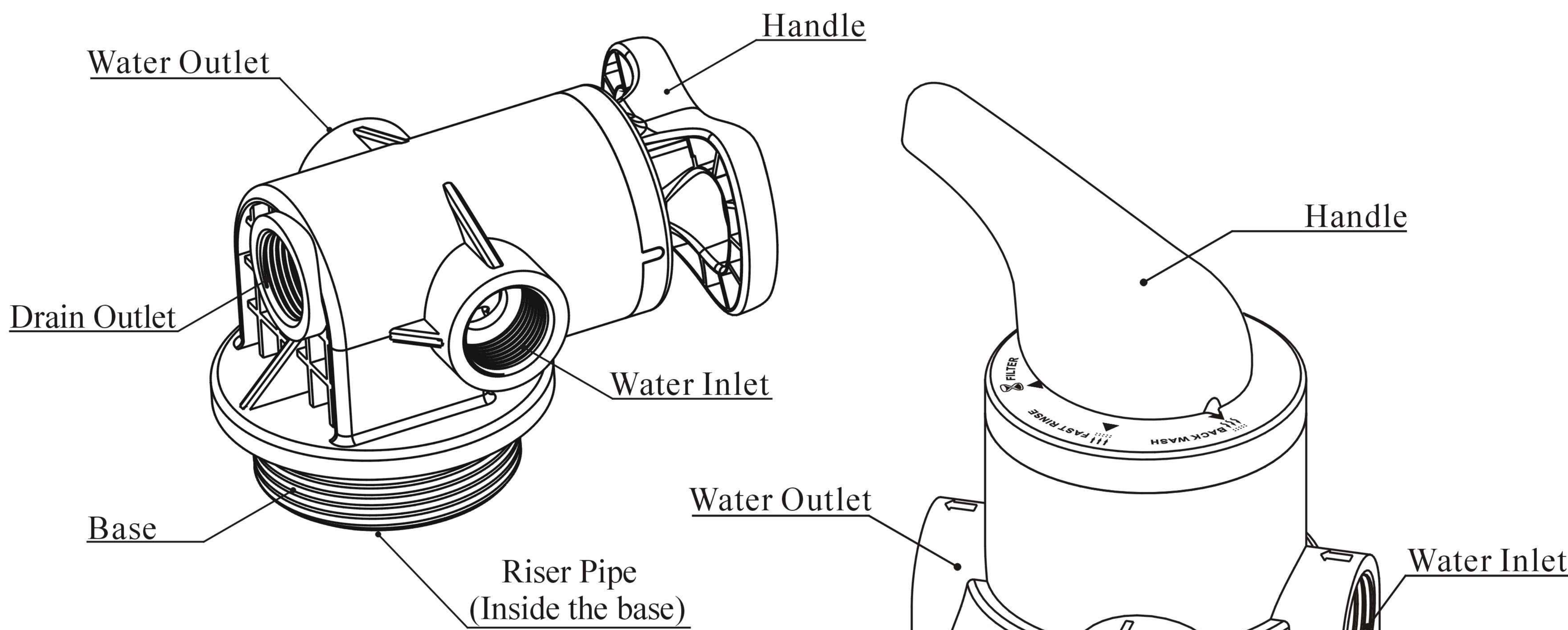
Range of Application

Water treatment system applied to Industrial,Commercial or Residential, such as:

- Household Purify, Soften System.
- RO Pre-treatment System.
- Boiler Softening Water System.
- Swimming Pool Filter Equipment.
- Ion Exchange Equipment.

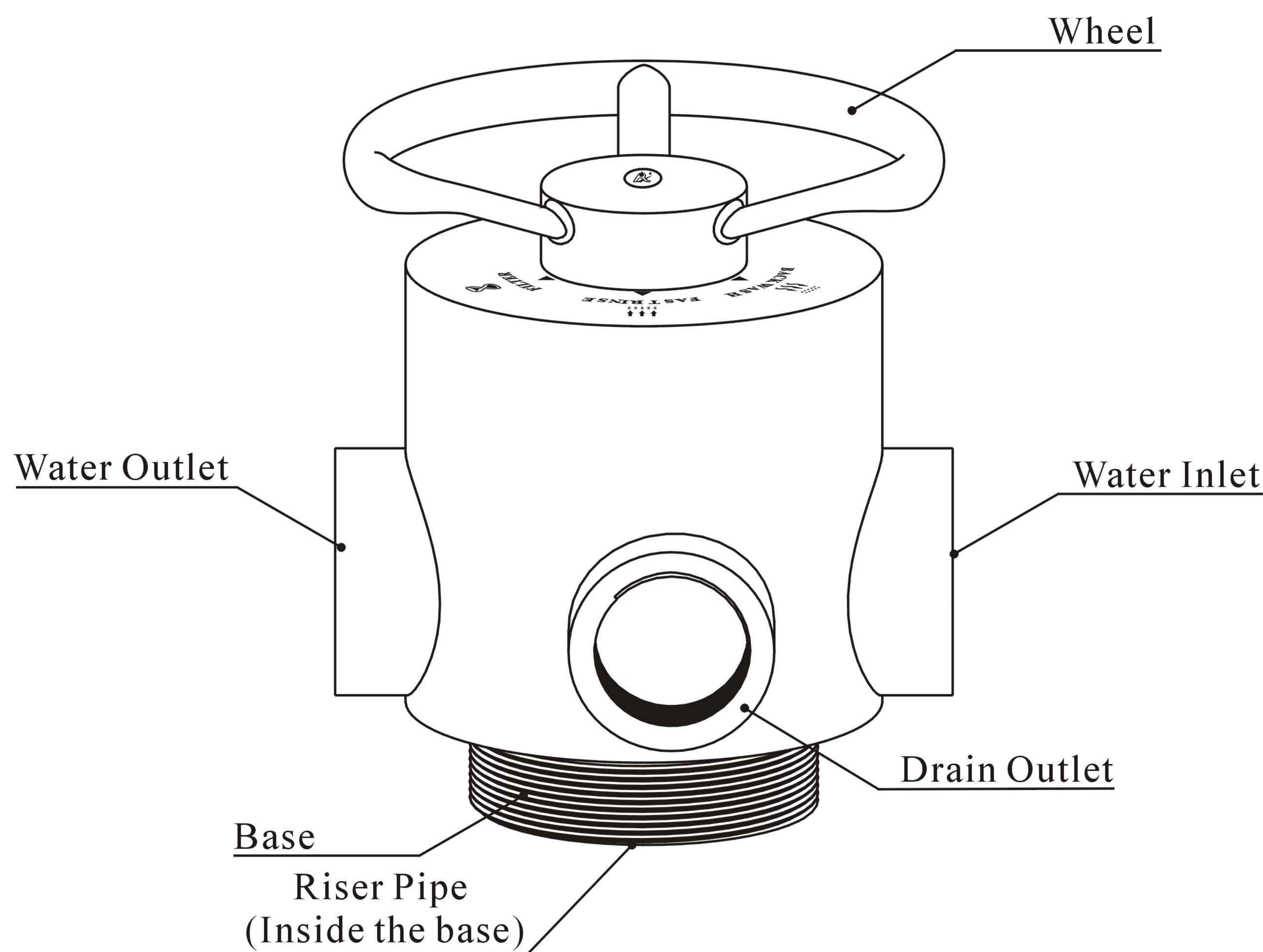
Product Appearance and Accessories

Product Appearance (only for reference, subject to real product)



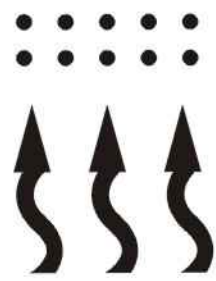
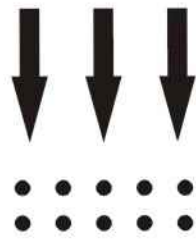
TM.F56EC

TM.F56A



TM.F56D

Figures on Decoration Cover and its English Description

ENGLISH	FIGURE	DESCRIPTION
FILTER		In Filtration state
BACKWASH		In Backwash state
FAST RINSE		In Fast Rinse state

Product Accessories

Model	Description	Quantity	Description	Quantity
TM.F56A	2-1/2 " Base Seal Ring ($\phi 73 \times \phi 5.3$)	1PC	1 " Washer ($\phi 30 \times \phi 24 \times 3.3$)	3PCS
TM.F56B/C				
TM.F56D	4 " Base Seal Ring ($\phi 104.6 \times \phi 5.7$)	1PC		
TM.F56E	2-1/2 " Base Seal Ring ($\phi 73 \times \phi 5.3$)	1PC	3/4 " Washer or 1/2 " Washer ($\phi 24 \times \phi 18 \times 3$) or ($\phi 18.5 \times \phi 12 \times 2.5$)	3PCS
TM.F56EC	2-1/2 " Base Seal Ring ($\phi 73 \times \phi 5.3$)	1PC	3/4 " Washer or 1/2 " Washer ($\phi 24 \times \phi 18 \times 3$) or ($\phi 18.5 \times \phi 12 \times 2.5$)	3PCS
TM.F56F	2-1/2 " Base Seal Ring ($\phi 73 \times \phi 5.3$)	1PC	1 " Washer ($\phi 30 \times \phi 24 \times 3.3$)	3PCS
TM.F52	Base Seal Ring ($\phi 78.5 \times \phi 73 \times 3.4$)	1PC		

Product Specifications

Control Mode: Manual Working Condition: Suited Pressure — — — 0.1~0.6MPa
Suited Water Temperature — — — — 5~45℃

(Table One) Manual Multi-port Valve

Model	Connection Size				Maximum Water Capacity m³/h
	Inlet/Outlet	Drain Outlet	Base	Riser Pipe	
TM.F56A	1" F	1" F	2-1/2" -8NPSM	1.05" OD (26.7mm)	4.5
TM.F56B	3/4" or 1/2" F	3/4" or 1/2" F	Matching with 10" housing	1.05" OD (26.7mm)	0.5-1
TM.F56C	3/4" or 1/2" F	3/4" or 1/2" F	Matching with 20" housing	1.05" OD (26.7mm)	0.5-1
TM.F56D	2" F	1-1/2" F	4" -8UN	1.5" D-GB (50mm)	10
TM.F56E	3/4" or 1/2" F	3/4" or 1/2" F	2-1/2" -8NPSM	1.05" OD (26.7mm)	2
TM.F56EC	3/4" or 1/2" F	3/4" or 1/2" F	2-1/2" -8NPSM	1.05" OD (26.7mm)	2
TM.F56F	1" F	1" F	2-1/2" -8NPSM	1" D-GB (32mm)	6
TM.F52	1/2" F	1/2" F	M82×3	Inserting Mode (16.5mm)	0.5-1

Note:

- ①M— Male Thread F— Female Thread OD— Outer Diameter
- ② 2-1/2" and 4" side-mounted connectors available when you want to operate on the side. The TOP and BOTTOM size of 2-1/2" one is 1" , the size of 4" one is 2" .
- ③TM.F56B is matching with 10" housing. The tank whorl sizes have two kinds which are 95 rectangle whorl and 98 hackle whorl.
- ④TM.F56C is matching with 20" housing. The tank whorl sizes have three kinds which are 118 rectangle whorl, 115 hackle whorl and 110 rectangle whorl.
- ⑤The water treatment capacity is related with flow speed, inlet water pressure, filtering materials etc. The parameters showed on the above table is only for reference.

Installation and Connection

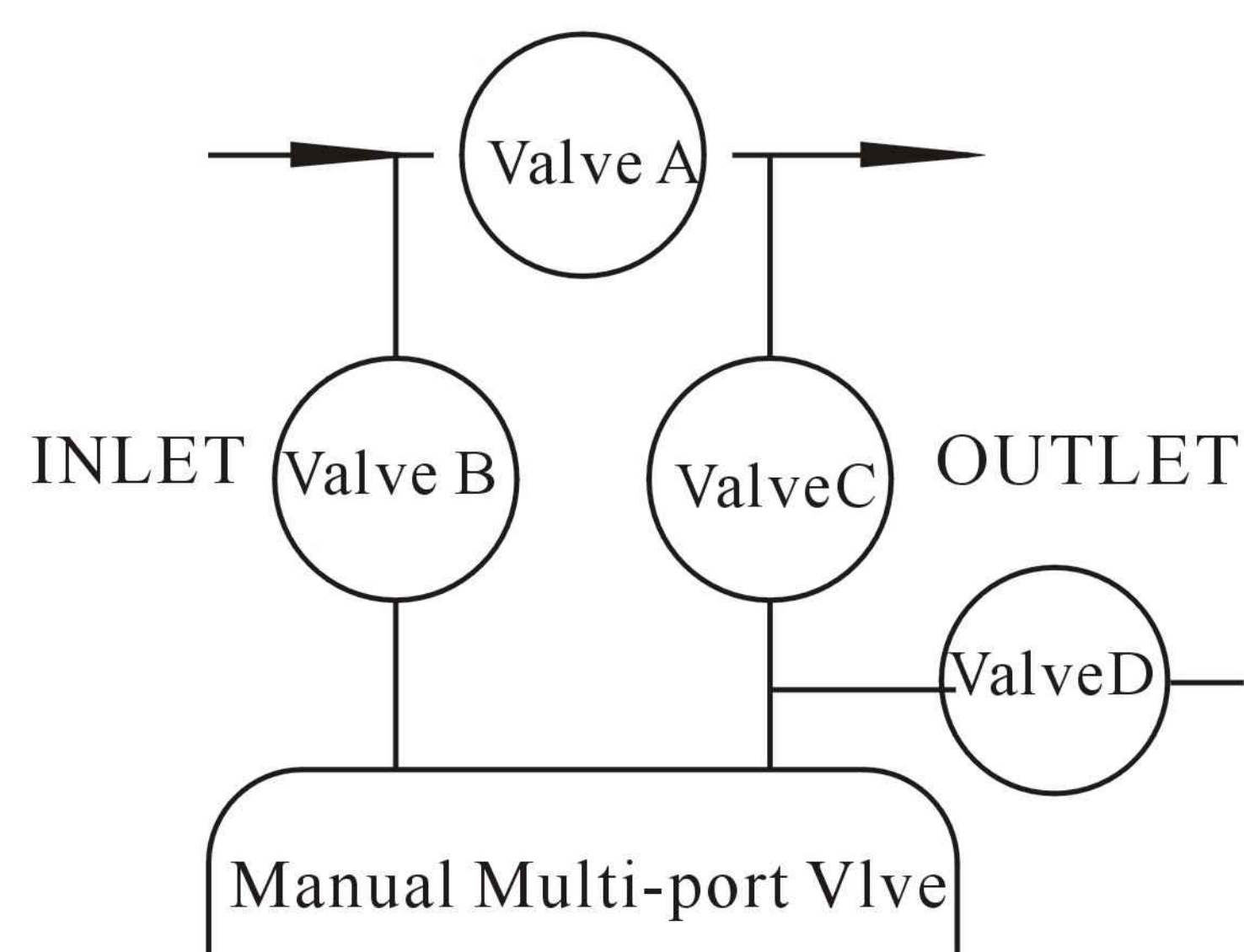
Before installation, read all those instructions completely. Then obtain all the materials and tools needed for installation.

Perform installation according to regulated water inlet, water outlet, drain outlet and relative plumbing codes.

1、Installation requirements:

- 1) The shorter the distance between filter and drain point, the better;
- 2) Leave a certain space for operating and maintaining devices conveniently.

- 3) Do not install the vavle near hot resources or in direct sunlight, rain and other factors that may result in damage to the product. And don't leave it outside.
- 4) Do not install the valve, pipeline ect under circumstances where the temperature may drop below 5℃ or above 45℃.
- 5)Install the valve in a place where water damage is least likely to occurif a leak develops.
- 2、 Installation of pipeline.



(Picture One)

In order to maintain conveniently, device is advised installation like drawing as follows:

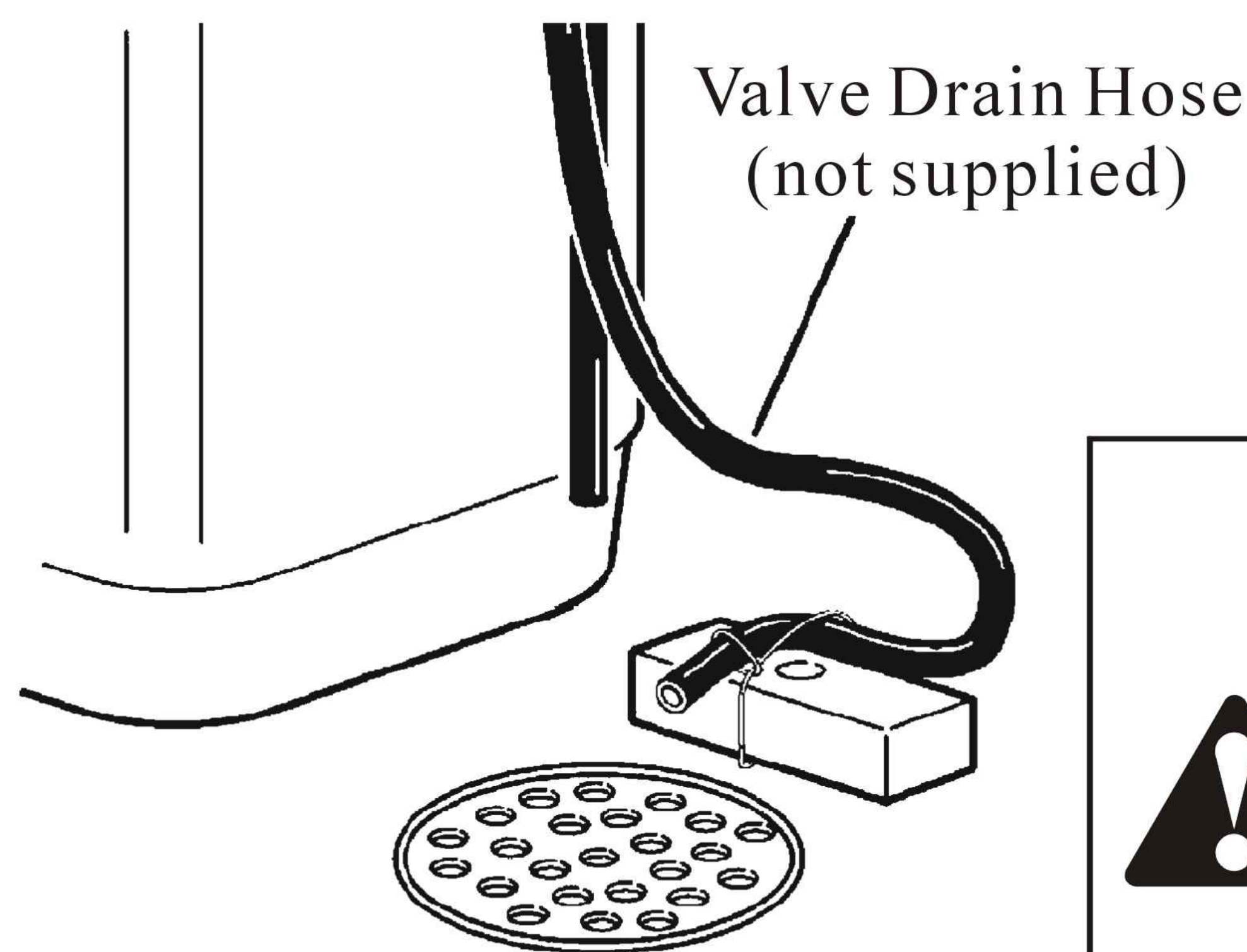
Instrucion: There are three ball valves being connected to the manual multi-port valve and the inlet and outlet pipe.Valve B is connected to the inlet pipe.Valve C is connected to the outlet pipe.

When changing filter materials or maintaining tank, open valve A, close valve B and C. When using, open valve B and C, close valve A.ValveD is for taking water used to test.

	● If making a soldered copper installation, do all sweat soldering before connecting pipes to the valve. Torch heat will damage plastic parts. ● When turing threaded pipe fittings onto plastic fittings, usd care not to cross-thread or cause damage to the valve. ● Support inlet and outlet plumbing in some manner (use pipe hangers) to keep the weight off of the valve fittings.
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3、 Installation of drain hose.

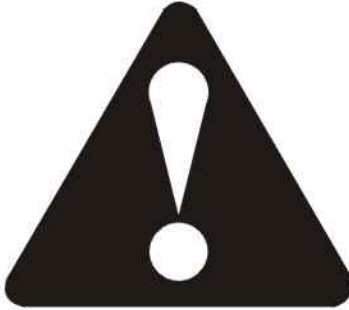
If use following hose as drain pipe, please fix it as the picture two shows.



(Picture Two)
Correct Method for Drain

The valve should be higher than the drain point.And the distance of the drain point shouldn't be too far.

	Be sure not connect drain with sewer definitely, and leave a certain space between them avoiding wastewater be absorbing to the water treatment equipment, such as showed in picture two. If wastewater is used for other purpose, please use another container for loading. And also keep a certain space between drain and container.
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	● Failure to install the manual multi-port valve correctly voids the warranty. ● Installation of any pipelines and electric equipments should be performed by relative professional. ● The minimum inlet pressure is 0.1MPa, maximum inlet pressure is 0.6MPa. If the inlet pressure exceeds 0.6MPa, a pressure reducing valve must be installed before the inlet pipeline. ● When installation, do not use drain hose or other connectors as support. ● Handle all components of this valve with care. Do not drop, drag, or turn components upside down. And please use the accessories we supplied. ● Forbidden overexerted when installation and connection pipelines to avoid thread broken. And no bearing of all stresses on all ports of the valve. ● It is suggested to use PPR pipe, Wave-thread pipe or UPVC pipe, and avoid using Aluminum Plastic pipe. ● The connection of all pipelines should be sealed enough, no leakage. Otherwise, flow capacity under some status may not reach expected effect.
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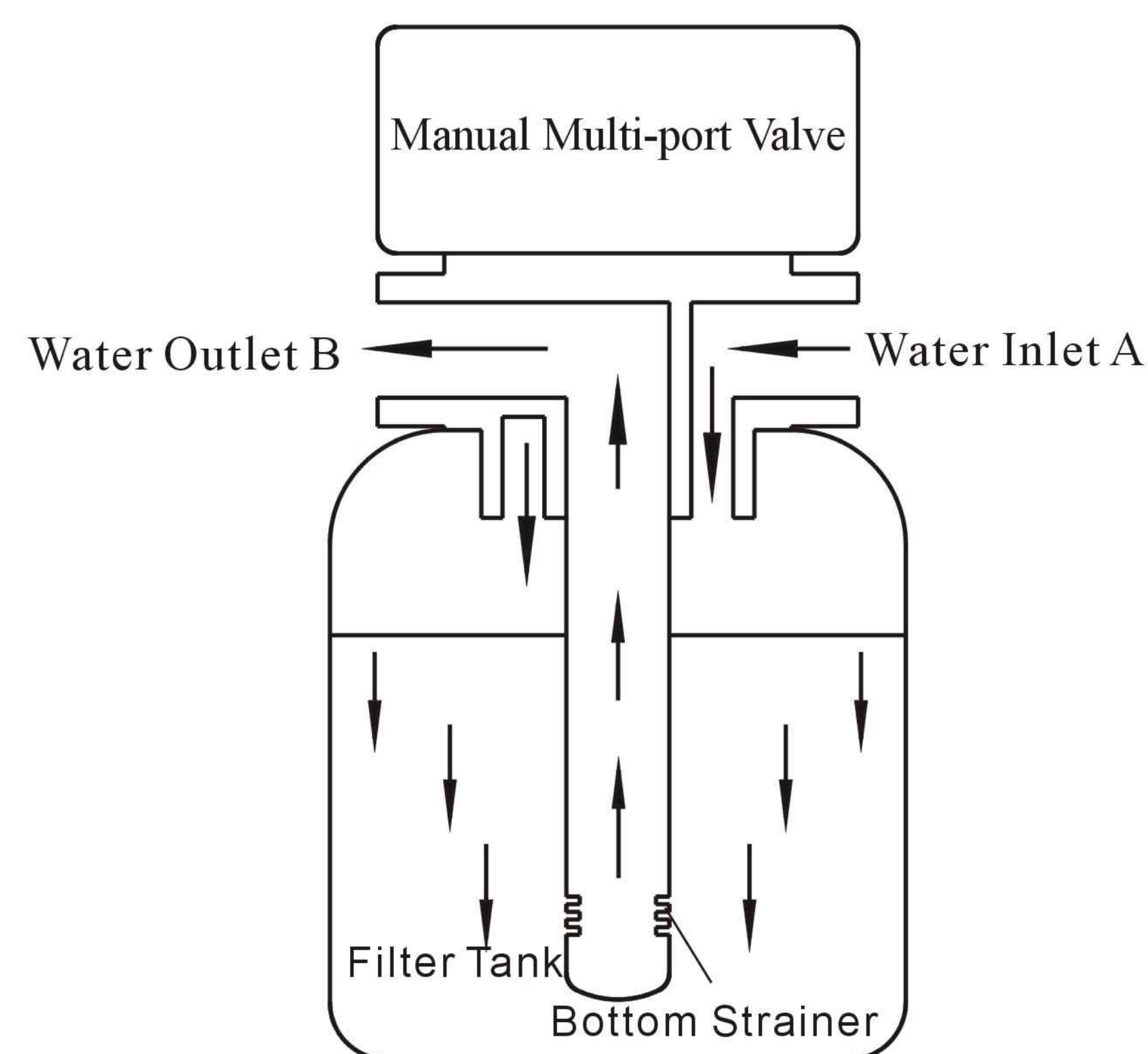
Trial Running

1. Installation the multi-port valve on tank and other pipes, close the by-pass valve A (as picture one show, following same as).
2. Opening inlet valve B to 1/4 position slowly, making water flow into the tank. When water stop flowing, open the outlet valve C. Until all the air are out of the pipe, then close the outlet valve. And check whether it is leakage. In case it is, please solve it immediately.
3. Open the inlet valve B completely.
4. Rotate the valve handle to the 'Backwash' position. Let drain water flow out for 3 ~4 minutes.
5. Rotate the valve handle to the 'Fast Rinse' position, Fast Rinse for a certain time.
6. Take out some water for analysis. If the water quality is eligible, then rotate the handle to the 'Service' position to be used.

	● If the inlet water flow too quickly, materials in tank will be damaged. The sound from drain pipe could be heard when water flow into tank slowly. ● The operating time in backwash and fast rinse status could according to suggestions of set equipments suppliers.
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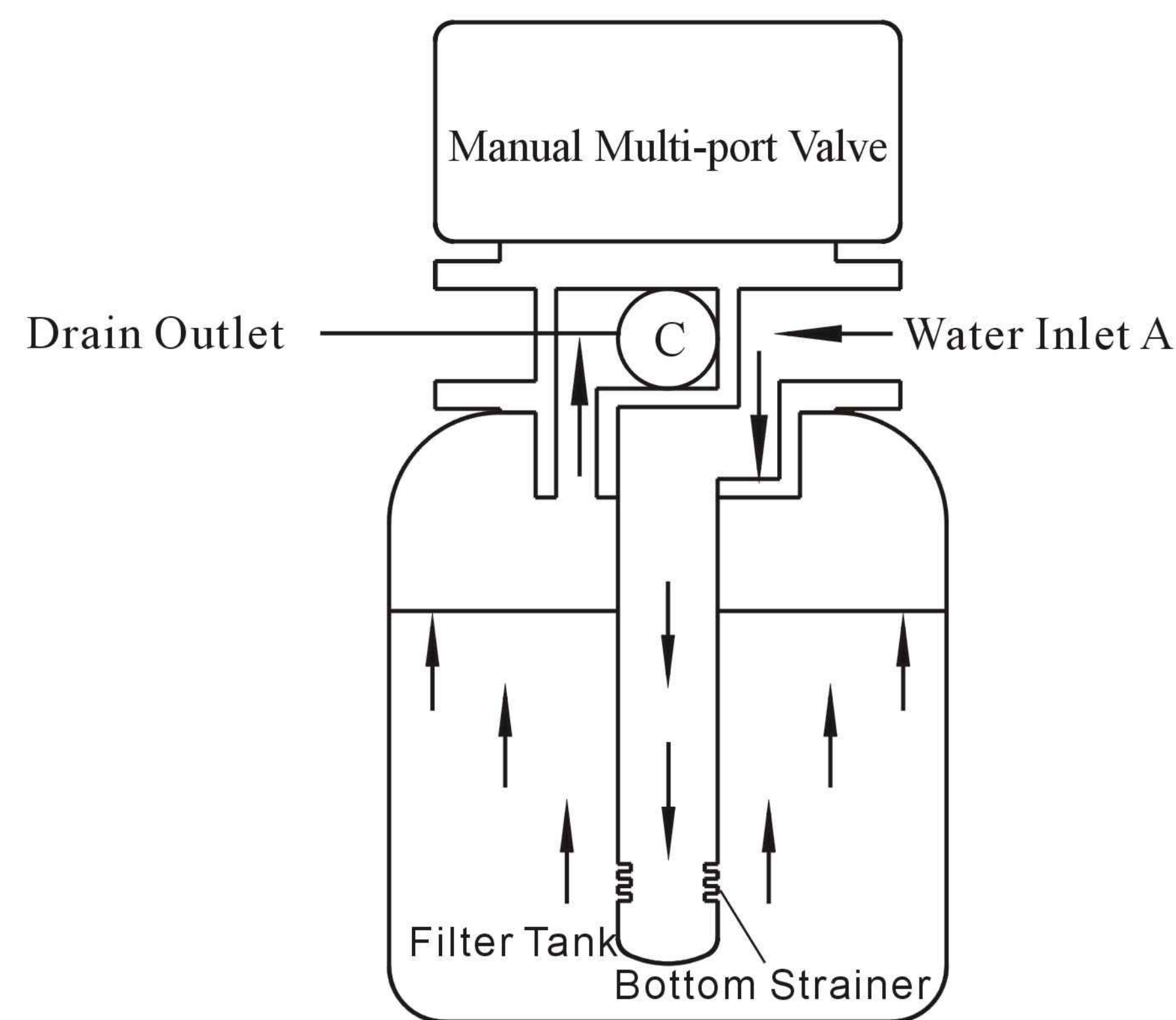
Working Principle and Flow Chart

Filtration Position



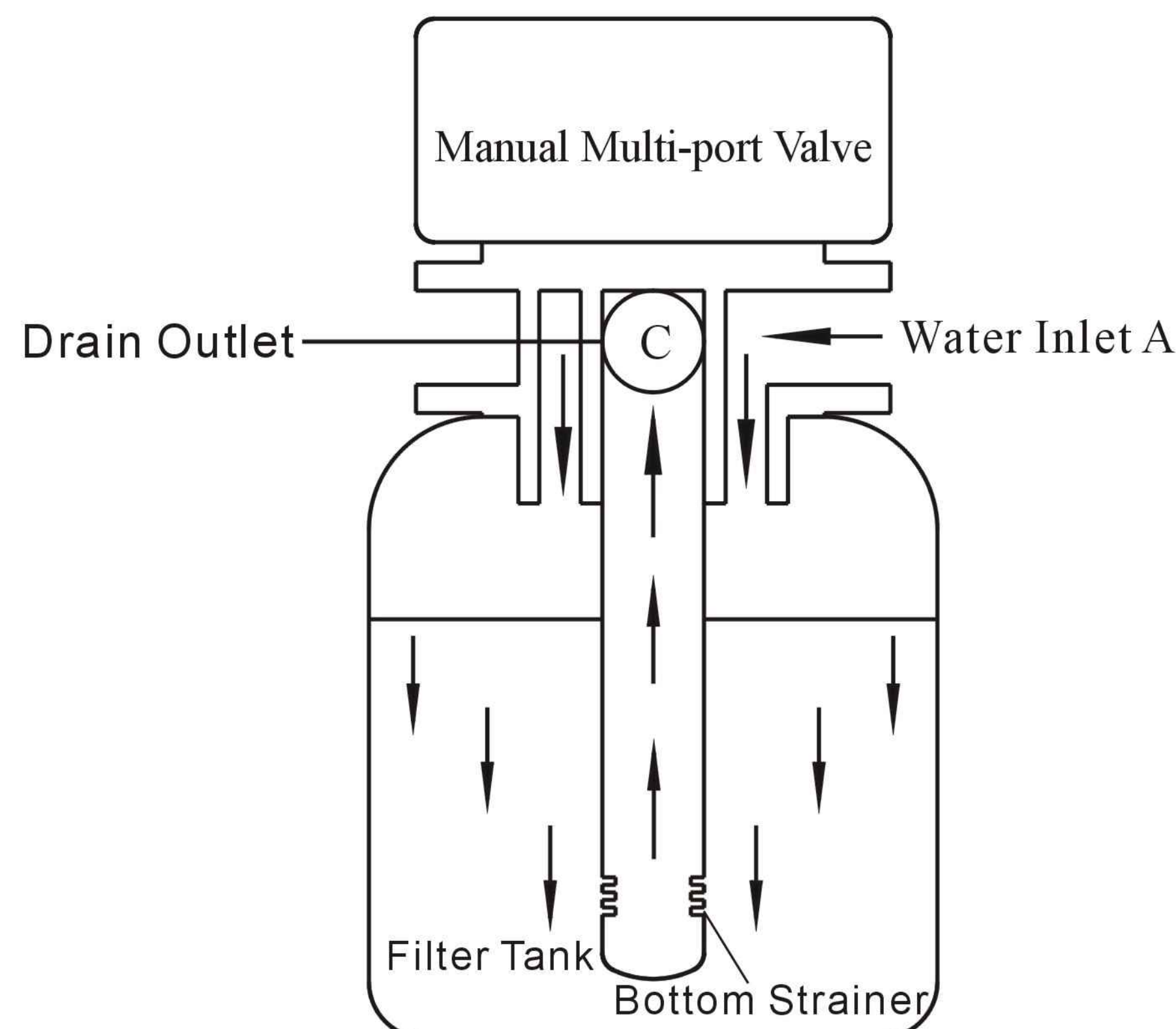
Raw water enter into manual valve from inlet A, through valve body from the top of valve core, and going into tank from top (or riser pipe outside of tank, the same as below). Then, adownthrough filter materials to be filtered water,then through bottom strainer to return to riser pipe, upward to valve body, pass through valve core, and finallyflow out from outlet B.

Backwash Position



Raw water enter into manual valve from inlet A, through valve body from the top of valve core, then from the bottom of tank (or riser pipe inside, the same as below), bottom strainer into tank, upward through filter materials, and valve body, valve core, finally flow out from drain C.

Fast Rinse Position



Raw water enter into manual valve fromA, through valve body from the top of valve core, and enter into tank from the top. Then, adown through the filter materials, return to riser pipe from bottom strainer, upward to valve body, through valve core, finally flow out from drain C.

Guarantee Card

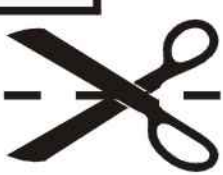
Dear Client:

This card is the guarantee credence of RUNXIN brand Manual Multi-port Valve.It is kept by the client himself. You could get the after-sale 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:

- (i) Guarantee repair period expired.
- (ii) Damage resulting from using, maintenance, and keeping that are not according to the instruction.
- (iii) Damage resulting from repairing not by the appointed maintenance man.
- (iv) No purchase credence and effectual invoice.
- (v) Content in guarantee credence is unconfirmed with the label on the real good or be altered.
- (vi) Damage resulting from force majeure.

Product Name	Manual Multi-port Valve for Water Treatment Systems		
Brand			
Model	TM.F	Code Of Valve Body	
Guarantee Term	One year Notice: Charge the fee over expiration date		
Purchase Company Name		Tel Fax	
Problem		Date of Repairing	
Solution			
Date of Accomplishment		Signature by Maintenance Man	





WENZHOU RUNXIN MANUFACTURING MACHINE CO.,LTD

ADD: No.1,Longfang Ind.Zone, Nanjiao, Wenzhou, Zhejiang, ChinaP.C:325029

Tel: 86-577-88635628 88630038

Fax: 86-577-88633258

[Http://www.run-xin.com](http://www.run-xin.com)

E-mail:runxin86@yahoo.com.cn