



China Patent No.: ZL02220153.X,
ZL200820037030.X

Electronic Tee Valve for Water Treatment Systems

42020 (Old Model: F80)

Instruction Manual



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

0WRX.466.521

Catalogue

| | |
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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 put the valve near the hot resource, high humidity, corrosive, intense magnetic field or intense vibrations environment. And do not leave it outside.
- Please use this product under the water temperature between 5~50℃, water pressure $\leq 0.6\text{MPa}$. 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 before the water inlet.
- When the attached cables of this product and transformer are changed, they must be changed to the one that is from our factory.

1.Product Overview

1.1.Main Application & Applicability

Mainly used in application that needs remote control.

Be suitable for

Softening system

Ion exchange equipment

Backwash system for ultrafiltration membrane,etc.

1.2.Product Characteristics

➤Simple structure and reliable sealing

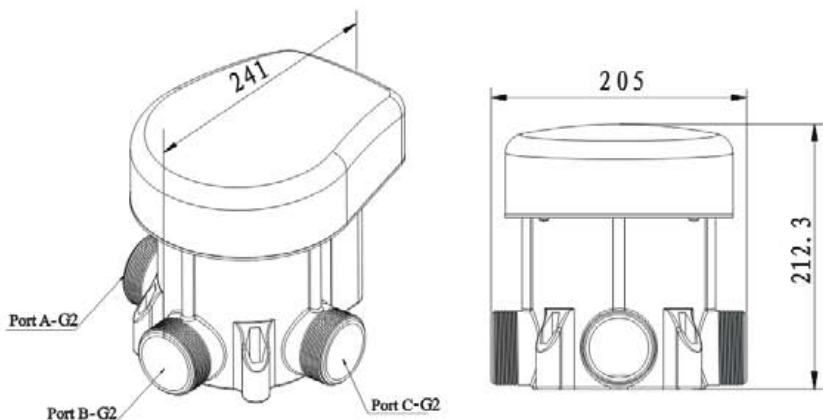
It adopts hermetic head faces with high degree pottery and corrosion resistance for opening and closing.

➤Connect Conveniently

Connecting two of the four wires to the anode and cathode of the transformer respectively to realize the function that is needed.

1.3.Product Structure and Technical Parameters

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



Technical parameters: Nominal pressure: 0.6MPa;
Max flow rate(@0.3MPa) is 20m³/h
Transformer output: DC24V、1.5A

2.Usage

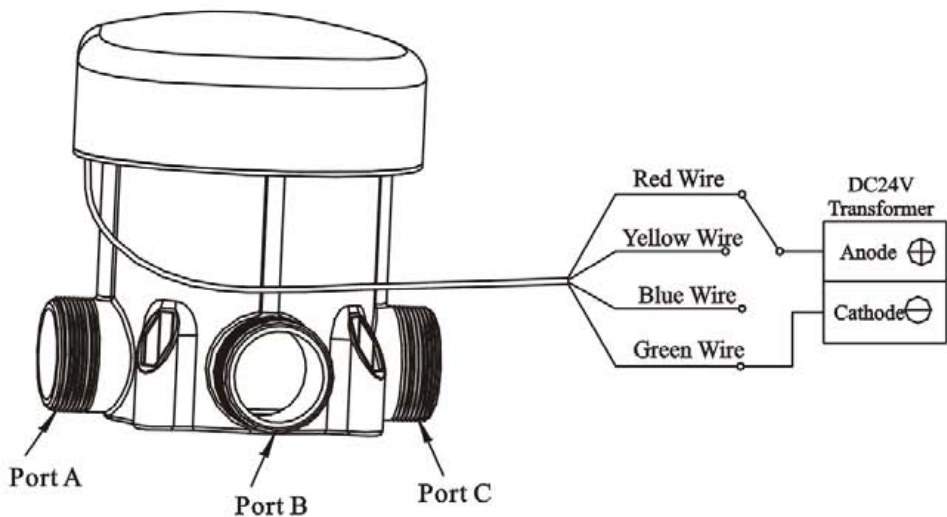
2.1. Function Introduction

There are three ports in this control valve. B is water inlet, A and C are outlets.

The water passage could be $B \rightarrow A$, $B \rightarrow C$, or close (Which means three ports are not connected).

2.2. Wiring Introduction

The green wire is connected to the cathode of transformer. When the red wire connected to the anode, the valve can realize water passage $B \rightarrow A$. When the yellow wire connected to the anode, the valve is closed (Which means the three ports are not connected). When the blue wire connected to the anode, the valve can realize water passage $B \rightarrow C$.

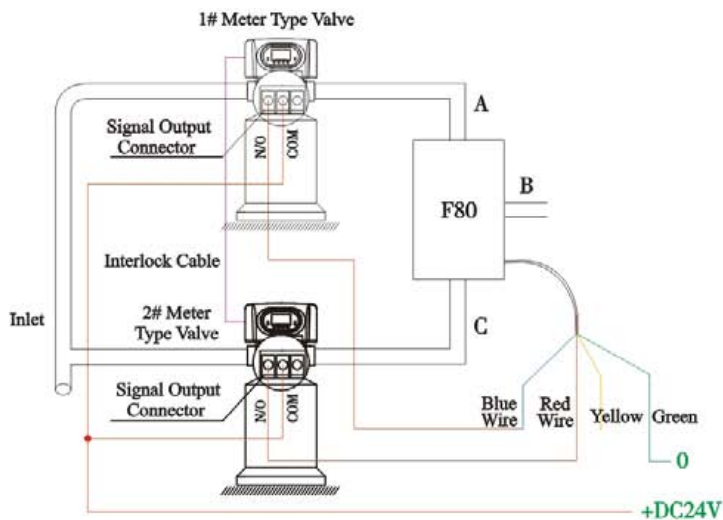


2.3.Applications

A. One in Service One Standby Used in Softening System

F80 can be assembled with two sets of meter type of softeners like F74A3 or F77A3 to form a softening system with one in service one standby. The wiring is as following:

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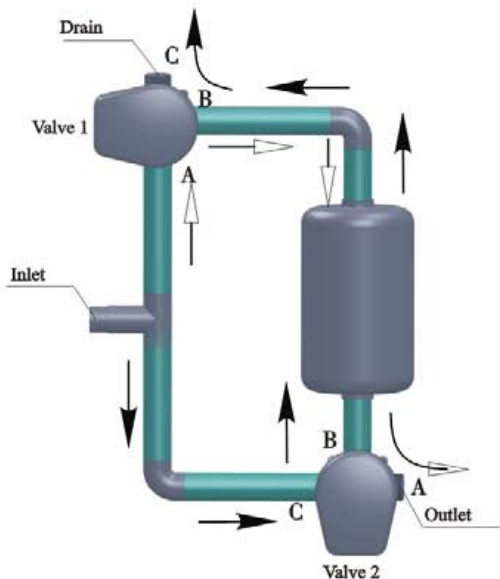


B.Assemble Two Sets of F80 to Form a Backwash System for Filter Material or Ultrafiltration Membrane

By using control device, two sets of F80 can realize backwash function to filter material or ultrafiltration membrane. The process of its operation and backwash can be showed as the picture.

Service: Both Valve 1 and Valve 2 are connected as A→ B. The direction of the water passage is showed as the hollow arrows in the picture. And it flows out from the Port A of Valve 2.

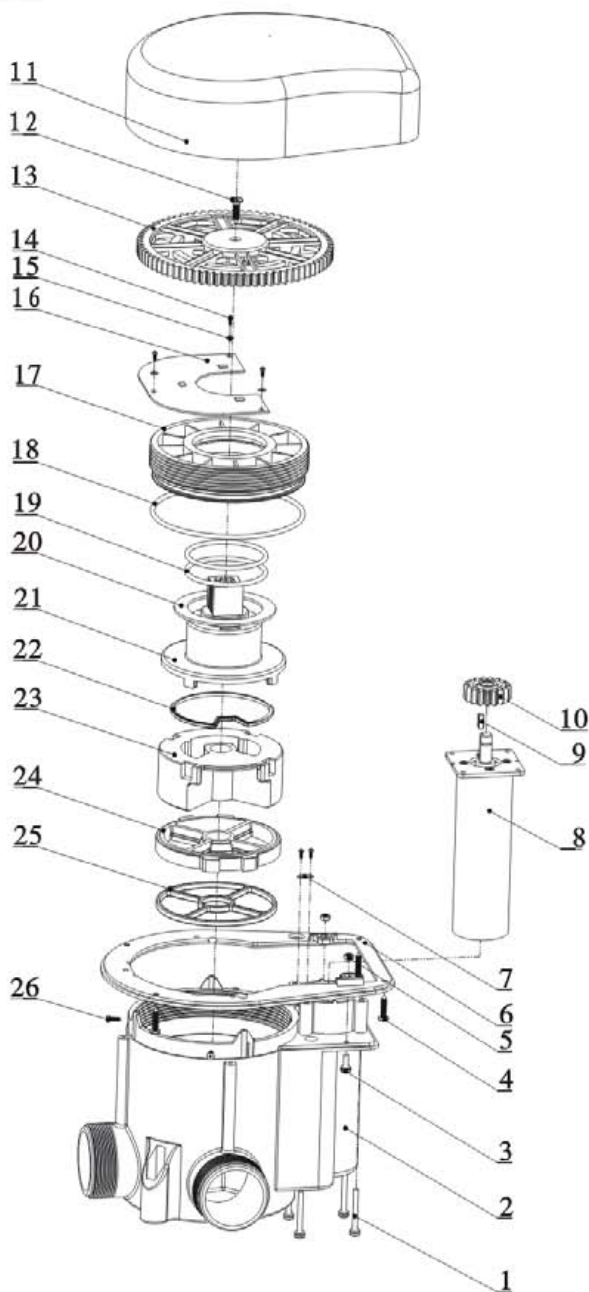
Backwash: Both Valve 1 and Valve 2 are connected as C→ B. The direction of the water passage is showed as the black arrows in the picture. And it flows out from the Port C of Valve 1.



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2.4. Spare Part and Part No.

F80 Structure Chart



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F80 (42020) Component

| Item No. | Description | Part Number | Quantity |
|----------|------------------------------------|-------------|----------|
| 1 | Screw Assemble, Cross Hd M4 × 36.5 | 8902012 | 4 |
| 2 | Valve Body | 8022012 | 1 |
| 3 | Screw Assemble, Cross Hd M4 × 12 | 8902005 | 2 |
| 4 | Screw, Cross ST3.9 × 16 | 8909016 | 4 |
| 5 | Nut, Hex.Hd | 8940002 | 2 |
| 6 | Connection Plate | 8152005 | 1 |
| 7 | Cable Clamp | 8126001 | 1 |
| 8 | Deceleration Motor | 6158036 | 1 |
| 9 | Key | 8971001 | 1 |
| 10 | Small Gear, Motor | 8241008 | 1 |
| 11 | Dust Cover | 8005004 | 1 |
| 12 | Screw, Cross ST4.8 × 19 | 8909018 | 1 |
| 13 | Big Gear, Driven | 5241004 | 1 |

| Item No. | Description | Part Number | Quantity |
|----------|------------------------|-------------|----------|
| 14 | Screw, Cross ST2.2X6.5 | 8909004 | 5 |
| 15 | Washer | 8952001 | 3 |
| 16 | Control Board | 6382042 | 1 |
| 17 | Fitting Nut | 8092005 | 1 |
| 18 | O-ring 117.6X3.55 | 8378133 | 1 |
| 19 | O-ring 59.92X3.53 | 8378110 | 2 |
| 20 | Anti-friction Washer | 8216006 | 1 |
| 21 | Shaft | 8258005 | 1 |
| 22 | Moving Seal Ring | 8370018 | 1 |
| 23 | Moving Disk | 8459008 | 1 |
| 24 | Fixed Disk | 8469022 | 1 |
| 25 | Seal Ring | 8370044 | 1 |
| 26 | Screw, Cross ST2.9X9.5 | 8909008 | 3 |


3. 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 |  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 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 | | | | |



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