



Advantage of Multi-valve System

- **Real counter-current regeneration softener**
- **Salt saving up to 50%**
- **Water saving up to 30%**
- **Reduce secondary pollution of water**



- ✔ **Counter-current Regeneration Full Bed Technology**
The real counter-flow regeneration technology saves water up to 50% and saves salt up to 30%.
- ✔ **Flow Control Technology**
Adopt flow rate measuring method to precisely measure total water output, increase the utilization efficiency of resin, save water and salt.
- ✔ **Flexibility to Select Different Processes**
Counter-current softening, co-current softening, sand filtration or activated carbon filtration can be selected flexibly.
- ✔ **Wide Scope of Applications and High Flow Rate**
Meet various flow rate requirements via changing valve sizes.
- ✔ **Professional Control System, Easy Operation**
Specially designed controllers for softening systems are easy to manage.
- ✔ **Easy After-sales Service and Low Cost of Maintenance**
The control is separated from the system, once there is a malfunction of the system, just need to change the relevant part(s) to repair the control system at site. Professional service engineer or return-to-factory repair is not needed.



Specially designed multi-functional controller for softening, filtration and demineralization processes is easy to operate.



Pulse signal type flow sensor with very high measuring accuracy (up to $\pm 4\%$) and very good anti-interference capability.



All plastic double-chamber diaphragm valve with high flow rate and low pressure lose, air or water control, very good corrosion resistant performance could be used in demineralization systems.



Use JKC flow controller to control multiple tanks and ensure continuous water output.

Multi-valve System



Technical Parameters of JKA Control System

| Item | Parameters |
|---------------------------------------|--|
| Controller Power Supply Requirements | 85-250 V/AC, 50/60 Hz, 4W |
| Distributor Power Supply Requirements | 110 V/AC 60Hz, 220 V/AC 50Hz |
| Pressure of Control Source | 2 - 8 bar (30-115psi) |
| IP Rating | IP65 |
| Control Fluid of Distributor | Air / Water |
| Working Temperature | 4 - 60 °C (40 - 140 °F) |
| Dimensions of Controller Enclosure | 290mm×190mm×140mm (11.4"×7.5"×5.5") |



Technical Parameters of JKC Control System

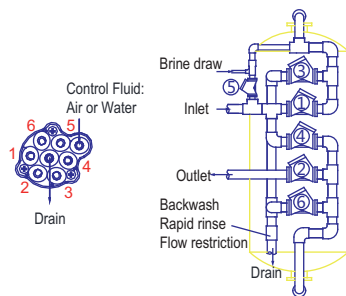
| Item | Parameters |
|--------------------------------------|---------------------------------------|
| Instrument Power Supply Requirements | 100 - 265V/AC, 5W |
| Signal Type | Square wave pulse input |
| Pulse Signal Voltage | 5 - 24 V/DC |
| IP Rating | IP65 |
| Working Temperature | 4 - 60 °C (40 - 140 °F) |
| Dimensions of Controller Enclosure | 234mm×163mm×105mm (9.2"×6.4"×4.1") |

JKTT Flow Sensor Technical Parameters

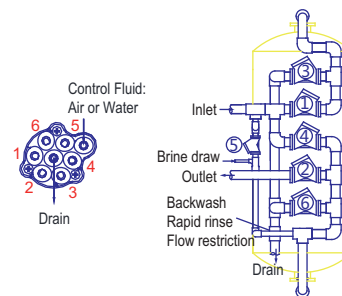
| Item | Parameters |
|--|--|
| Power Supply and Output Current | 5-24V/DC, ≤20mA Long distance transmission capability |
| The Longest Signal Transmission Distance | 300m |
| Impeller Material | PVDF |
| Measurement Scope | 1-5m/s (3.3 - 16.5 ft/s) Design scope 1-3m/s(3.3-10 ft/s) |
| Pipe Size Range for Optimal Measurement | DN40-DN100 (1 1/2" - 4") |
| Measurement Accuracy Grade | ±4% |

Multi-valve Softening System Application Diagrams

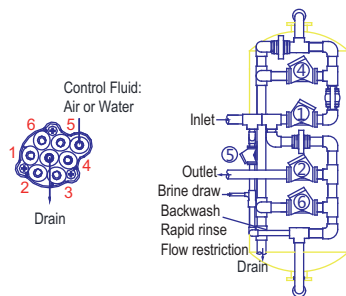
Softener - Co-current Regeneration (Model 502)



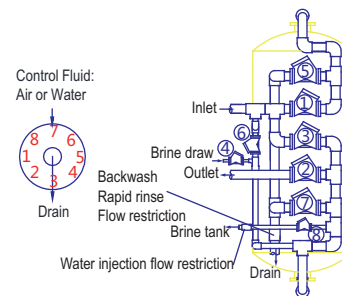
Softener - Counter-current Regeneration (Model 505)



Full Bed Softener - Counter-current Regeneration (Model 511)



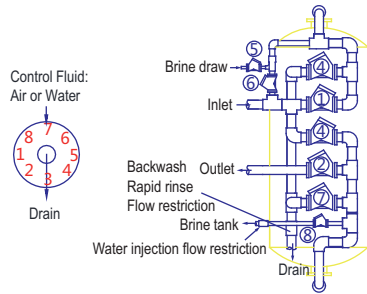
Softener - Counter-current Regeneration with Brine Refill (Model 520)



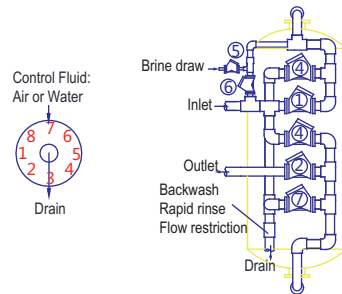
Multi-valve System



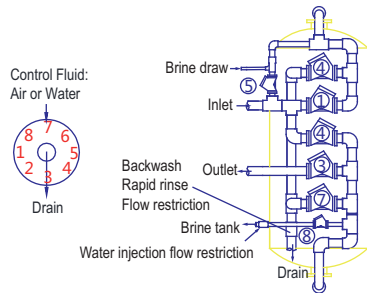
Softener - Co-current Regeneration with Brine Refill (Model 524)



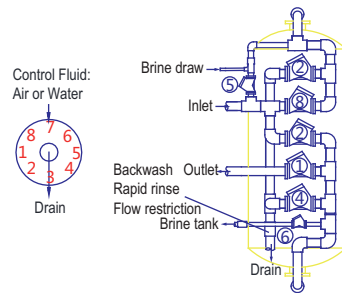
Softener - Co-current Regeneration (Model 525)



Softener - Co-current Regeneration with Brine Refill (Model 526)

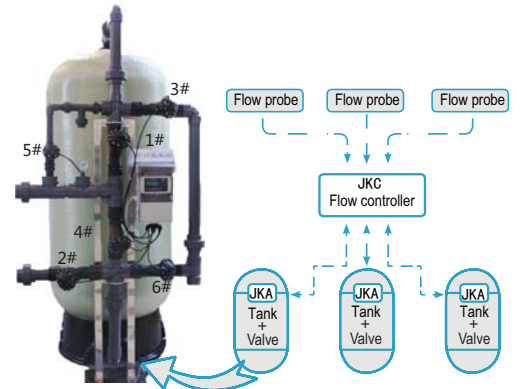


Softener - Co-current Regeneration with Brine Reclaim (Model 529)



Recommended Multi-valve Softening System Operation Modes

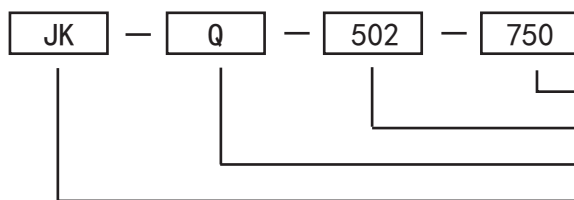
| Control Method | System Mode | Tank Quantity | Time Control | Flow Control | Day of Week | Remote Control | Signal Output |
|---|-------------|---------------|--------------|--------------|-------------|----------------|---------------|
| Single Tank Softener (JKA) | Q | 1 | √ | √ | √ | √ | √ |
| Two Tank Alternating Softener (JKC+Two JKA) | D2 | 2 | - | √ | - | √ | √ |
| Two in Service One in Regeneration or Standby (JKC+Three JKA) | D3 | 3 | - | √ | - | √ | √ |
| Two Tank Sequential Softener (JKC+Two JKA) | E2 | 2 | - | √ | - | √ | √ |
| Three Tank Sequential Softener (JKC+Three JKA) | E3 | 3 | - | √ | - | √ | √ |



Tank for Softening & Recommended Flow Rate

| Diameter of Tank [mm (inch)] | 750 (30) | 900 (36) | 1200 (48) | 1500 (60) | 1800 (72) |
|----------------------------------|--------------|---------------|----------------|-----------------|----------------|
| Recommended Flow Rate[m³/h(gpm)] | 8-12 (35-53) | 12-20 (53-88) | 20-30 (88-132) | 30-50 (132-220) | 50-75(220-330) |

Ordering Guide

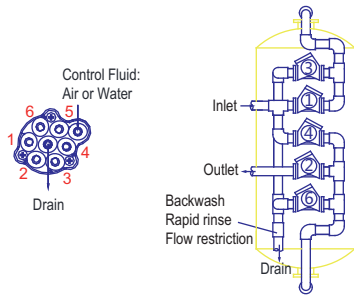


- Diameter of Tank
- System Model
- System Mode
- Product Code of Kangjie Multi-valve System

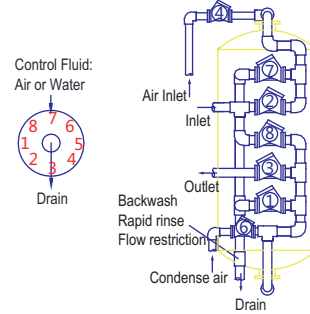
Multi-valve System

Multi-valve Filtration System Application Diagrams

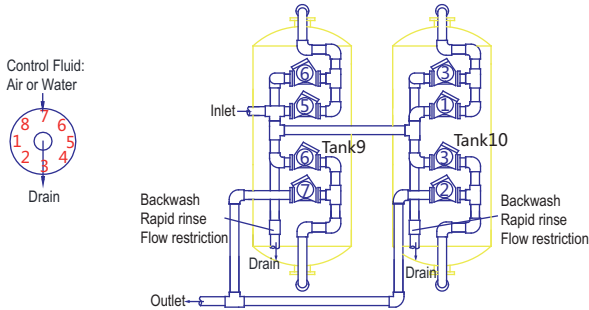
Filter - Backwash & Rinse (Model 501)



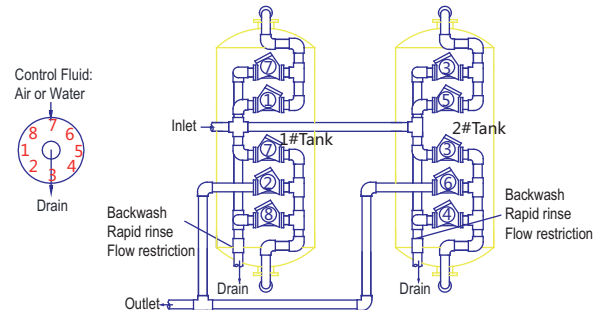
Filter with Air Scour (Model 528)



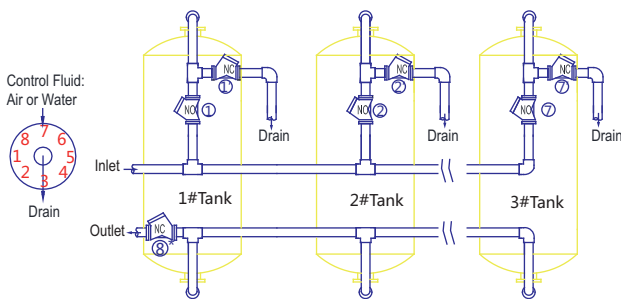
Two Tank Alternating Filter - Backwash Only (Model 523)



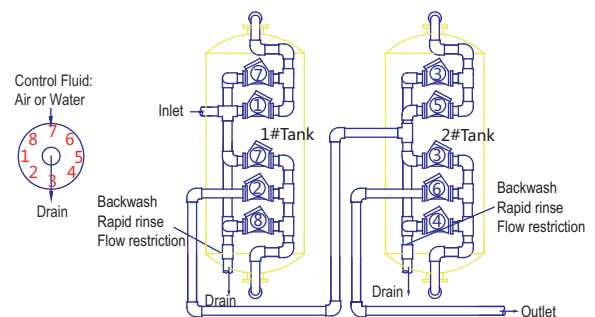
Two Tank Sequential Filter - Backwash & Rinse (Model 527)



Multiple Tank Sequential Filter - Backwash Only (Model 506/507/508/530/531)



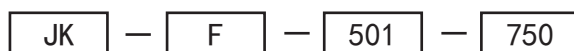
Two Tank in Series Filter - Backwash & Rinse (Model 535)



Tank for Filtration & Recommended Flow Rate

| Diameter of Tank[mm (inch)] | 750 (30) | 900 (36) | 1200 (48) | 1500 (60) | 1800 (72) |
|---|-------------|--------------|---------------|---------------|----------------|
| Recommended Flow Rate[m ³ /h(gpm)] | 5-7 (22-31) | 7-10 (31-44) | 10-15 (44-66) | 15-20 (66-88) | 20-30 (88-132) |

Ordering Guide



- JK — Diameter of Tank
- F — System Model
- 501 — Filtration Mode
- 750 — Product Code of Kangjie Multi-valve System

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