



Deluxe Twin Configuration

## VANTAGE® PTC TWIN SOFTENERS

Vantage® PTC twin softeners for commercial applications offer a flexible, reliable and feature rich solution to reduce the level of hardness in the feed water by filtering the water through a cation resin bed. Softeners are necessary to remove hardness or calcium that can clog or minimize the effectiveness of other sensitive downstream devices, such as RO membranes or boilers.

Systems are available in a twin configuration using a specialized valve where only one tank is in operation and the other is in standby.

The Vantage PTC twin softener vessel diameters start at 10" (25cm) and end at 24" (61cm). Each softener contains high capacity cation resin for this ion exchange process.

The Vantage PTC twin softener comes in two models: Economy and Deluxe.

- Economy - Controlled by a digital controller and composite valve
- Deluxe - Controlled by a digital controller and a lead free brass valve

The Economy and Deluxe twin softener models will only operate in the following flow:

- Simplex Operation - single vessel operation.  
Each twin softener will operate in a 1+1 or standby configuration.
- When one tank has exhausted the resin bed it will regenerate with softened water which will provide higher quality regeneration. A system lockout is available.

### VANTAGE PTC SYSTEM FEATURES

- Regeneration with softened water
- 24vac systems with UL® and cUL® Listed transformers
- Feature-rich digital controller for networked systems
- Tanks and valves are NSF/WQA\* approved
- Corrosion resistant fiberglass vessels

### VANTAGE PTC SYSTEM BENEFITS

- Provides a higher quality regeneration while minimizing calcium leakage
- Complies with regulatory and safety requirements
- Offers maximum operational flow and configuration flexibility to the customer
- Requires stringent testing for leaching contaminants, providing a safe system
- Prevents rust and increases longevity of the vessel

\* NSF = National Science Foundation  
WQA = Water Quality Association

## NOMINAL DESIGN PARAMETERS

Configurations	Twin Alternating
Inlet Pressure	30 psig minimum
Inlet Temperature	65° F
Sizing	3 gpm/ft <sup>3</sup>
Bed Depth	30 to 38 inches of Evoqua Water Technologies. C-211 strong acid cation resin.
Freeboard	26 to 37% of tank volume
Capacities	30 Kgrains/ft <sup>3</sup>
Free Chlorine	0.5 ppm
Regeneration	15 lb. NaCl/ft <sup>3</sup>



Economy Twin Configuration

## SPECIFICATIONS \*

Recommended flow  
for RO Applications  
(hardness dependant)

Model Number	Tank Dia. (Inches)	Media Volume (cuft)	Minimum Flow (min)*	Nominal Flow @ 3 GPM/ Cuft	Nominal Flow @ 6 GPM/ Cuft	Service Flow @ 15 psi	Maximum Temporary Service Flow @ 25 psi	Capacity (Kgrains) **	Economy Valve Size	Deluxe Valve Size
PTCSW_00-10X54	10	1.5	1.1	4.5	9.0	16.0	22.0	45	1"	1"
PTCSW_00-12X52	12	2	1.6	6.0	12.0	16.0	22.0	60	1"	1"
PTCSW_00-14X65	14	3	2.1	9.0	18.0	18.0	24.0	90	1.5"	1" / 1.5"
PTCSW_00-16X65	16	4	2.8	12.0	24.0	18.0	24.0	120	1.5"	1" / 1.5"
PTCSW_00-18X65	18	5	3.5	15.0	30.0	35.0	46.0	150	N/A	1.5"
PTCSW_00-21X62	21	7	4.8	19.5	39.0	35.0	46.0	195	N/A	1.5"
PTCSW_00-24X72	24	10	6.3	27.0	46.0	35.0	46.0	270	N/A	1.5"

To calculate metrics: 1 inch equals 2.54 centimeter, 1 gallon per minute equals 3.79 liters per minute.

\_ defines the trim package selected (E-Economy, D-Deluxe)

\* Flow rates can vary based on Valve Size and Trim Package selected

\*\* Based on 30 Kgrains/cuft of resin regenerated @ 15 lbs NaCl / cuft and service flow at 3 gpm / cuft

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