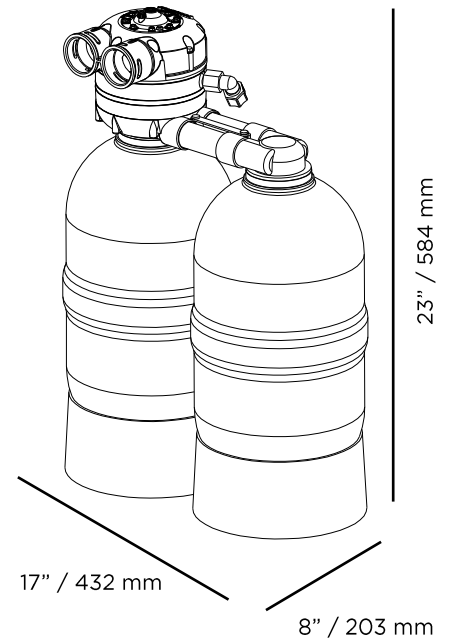
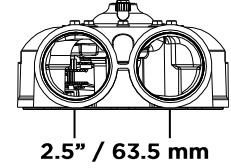


**Kinetico**  
**PREMIER**  
**SERIES<sup>®</sup> XP**  
 WATER SOFTENERS

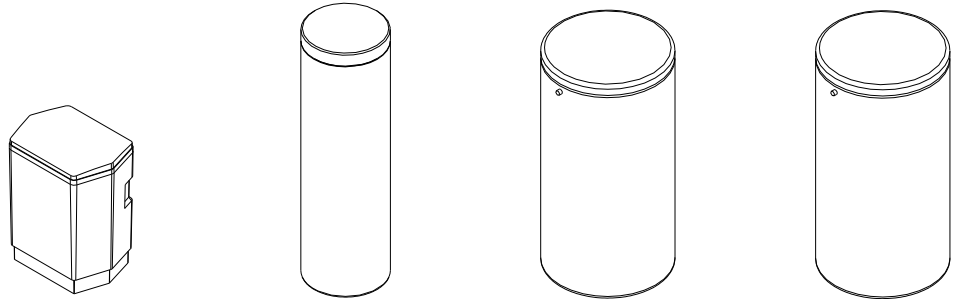
**Model S650 OD XP**

Design Specifications		
Flow Range (15/30 psig / 1-2 Δ bar)	11.0 - 15.0 gpm	41.6 - 56.7 Lpm
Flow Configuration	Overdrive	
Pressure Range	25 - 125 psi Dynamic Pressure	2.0 - 8.6 bar Dynamic Pressure
Temperature Range	34 - 120 ° F	2 - 50 ° C
pH Range	5 - 10 SU	
Free Chlorine Cl <sub>2</sub> (Max.)	0.0 mg/L	
Hardness as CaCO <sub>3</sub> (Max.)	50 gpg	855 mg/L
System Components		
Media Vessel (Qty. 2)	8" x 17"	203 mm x 432 mm
Media Vessel Construction	Fiberglass Wrapped Engineered Plastic	
Empty Bed Volume	0.40 cubic feet	11 liters
Media Type	Fine Mesh Cation Resin	
Media Volume	0.40 cubic feet	11 liters
Total Bed Depth	Packed	
Free Board	None	
Riser Tube	1" ABS	25 mm ABS
Upper Distributor	0.009" Slots, Engineered Plastic Basket	0.23 mm Slots, Engineered Plastic Basket
Lower Distributor	0.009" Slots, Stainless Steel Flat Plate	0.23 mm Slots, Stainless Steel Flat Plate
Under Bedding	None	
Regeneration Control	Non-electric Use Meter	
Regeneration Type	Countercurrent	
Metering Flow Range	0.30 - 25.0 gpm	1.1 - 94.6 Lpm
Connections		
Inlet / Outlet Connection	Custom E-clip Adapter	
Drain Connection	0.5" Tube	
Brine Line Connection	0.375" Tube	
Power	None	
System Part Numbers		
Premier S650 OD XP, no brine drum	16537	
Premier S650 OD XP, 16 x 20 brine drum	16924	
Dimensions and Weight		
Height	23 in.	584 mm
Width	17 in.	432 mm
Depth	8 in.	203 mm
Shipping Weight	90 lbs.	41 kg
Operating Weight	120 lbs.	54 kg
Regeneration Specifications		
Regeneration Volume	7 gallons	26.5 liters
Regeneration Time	11 minutes	
Backwash Flow Control	1.40 gpm	5.3 Lpm
Brine Refill Flow Control	0.40 gpm	1.5 Lpm



Salt Setting		Capacity		Efficiency		Dosing	
0.8 lbs.†	0.36 kg†	4,338 grains	281 grams	5,423 gr./lb.	775 grams/kg	2.0 lbs./ft <sup>3</sup>	0.03 kg/l
1.0 lbs.*	0.45 kg*	5,100 grains	330 grams	5,100 gr./lb.	729 grams/kg	2.5 lbs./ft <sup>3</sup>	0.04 kg/l
1.25 lbs.	0.57 kg	5,816 grains	377 grams	4,653 gr./lb.	665 grams/kg	3.1 lbs./ft <sup>3</sup>	0.05 kg/l

\*Not a certified setting by WQA  
 † 0.8 salt setting is only available with the 12" x 40" and 12" x 16" x 20" brine drums.



**Brine Tank Options**

Tank Description	12" x 16" x 20"		12" x 40"		K Spray		18" x 35"	
Brine Tank Part Number	7202		1479B		9763A		7938A	
Tank Height	20"	51 cm	40"	102 cm	35"	89 cm	35"	89 cm
Tank Footprint	12" x 16"	30 x 41 cm	12" DIA	30 cm DIA	18" DIA	46 cm DIA	18" DIA	46 cm DIA
Material	HDPE		HDPE		HDPE		HDPE	
Salt Capacity	50 lbs	23 kg	100 lbs	45 kg	200 lbs	91 kg	250 lbs	114 kg

**Operating Profile**

Softener shall remove hardness to less than 1/2 gpg (8 mg/L) when operated in accordance with the operating instructions. The system shall include two tanks. This duplex configuration shall operate with both tanks on-line during service. During regeneration cycles, one tank shall provide water to service and to the regenerating tank. A water meter shall initiate system regeneration. The water meter shall measure the processed volume and be adjustable. Service flow shall be upflow and regeneration flow shall be downflow.

**Regeneration Control Valve**

The regeneration control valve shall be top mounted (top of media tank) and manufactured from non-corrosive materials. Control valve shall not weigh more than four pounds. Control valve shall provide service and regeneration control for two media tanks. Inlet and outlet ports shall accept a quick connect, double O-ring sealed adapter. Interconnection between tanks shall be made through the regeneration valve with a quick connect adapter. Control valve shall operate using a minimum inlet pressure of 15 psi (1 bar). Pressure shall be used to drive all valve functions. No electric hook-up shall be required. Control valve shall incorporate four operational cycles including; service, brine draw, slow rinse, and a combined fast rinse and brine refill. Service cycle shall operate in an upflow direction. The brine cycle shall flow downflow, opposite the service flow, providing a countercurrent regeneration. Control valve shall contain a fixed orifice eductor nozzle and self-adjusting backwash flow control. The control valve will prevent the by-pass of hard water to service during the regeneration cycle.

**Media Tanks**

The tanks shall be designed for a maximum working pressure of 125 psi (8.6 bar) and hydrostatically tested at 300 psi (20.7 bar). Tanks shall be made of fiberglass wrapped engineered plastic with a 2.5 in. threaded top opening. Each tank shall be NSF approved. Upper distribution system shall be of a slot design. Lower distribution system shall be of a flat plate design. Distributors will provide even flow of regeneration water and the collection of processed water.

**Conditioning Media**

Each softener shall include fine mesh cation resin having a minimum exchange capacity of 40,000 grains/ft<sup>3</sup> (91.5 g/L) of CaCO<sub>3</sub> when regenerated with 15.0 lbs/ft<sup>3</sup> (0.24 kg/L) of salt. The media shall be solid, of a proper particle size and shall contain no plates, shells, agglomerates or other shapes, which might interfere with the normal function of the water softener.

**Brine System**

A combination salt storage and brine production tank shall be manufactured of corrosion resistant, plastic. The brine tank shall have a chamber to house the brine valve assembly. The brine float assembly shall allow for adjustable salt settings and shall provide for a shutoff to the brine refill. The brine tank shall include a safety overflow connection to be plumbed to a suitable drain.