

System Components

Media Vessel (qty) Size	(2) 10 x 54 in.
Media Vessel Construction	Polyglass
Empty Bed Volume	2.2 ft³
Resin Type	Cation Resin
Resin Volume (per tank)	1.5 ft³
Bed Depth	40 in.
Free Board	14 in.
Riser Tube	0.75 in., ABS
Distributors: Upper	0.014 in. Slots, ABS Basket
Lower	0.014 in. Slots, ABS Basket
Under Bedding	None
Regeneration Control	Non-Electric Use Meter
Regeneration Type	Countercurrent
Meter Type	0.75 - 40.00 gpm Polypropylene Turbine

Inlet Water Quality

Pressure	25 - 125 psi
Temperature	35 - 120°F
pH	5 - 10 SU
Cl ₂ , Max.	2.0 mg/l
Hardness	50 gpg

Operating Specifications

Flow Rate (15–30 psi)	21.1 - 31.6 gpm
Flow Rate (service)	21.1 gpm
Flow Configuration	Overdrive
Dimensions (width x depth x height)	21 x 10 x 60 in.

Regeneration Specifications

Regeneration Volume	102 gallons
Regeneration Time	90 minutes
Backwash Flow Control	3.00 gpm
Brine Refill Flow Control	0.70 gpm

System Part Numbers

Number of Parallel Systems	1
CP 210s with OverDrive, 18 x 35 brine drum	11128
CP 210s with OverDrive, no brine drum	11129

System Connections

Inlet / Outlet Connections	1.25 in. Custom Adapter And E-Clip
PN 10739	1.25" THD Plastic Adapter
PN 10748	0.75" Sweat Copper Adapter
PN 11047	1" PVC Glue Adapter
PN 11049	1" Sweat Brass Adapter
PN 11048	1.25 - 1.5" Sweat Brass Adapter
Drain Connection	0.5 in. Tube
Brine Line Connection	0.375 in. Tube
Power	None



System Options

Brine Tank Description	18 x 35
Brine Tank Part Number	7938
Tank Height	35 in.
Tank Footprint	18 in.
Material of Construction	HDPE
Salt Capacity	250.0 lbs.

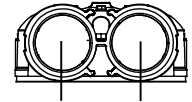
Regeneration

Setting	Capacity	Efficiency	Dosing	Meter Disc	Gallons/Regen
5.5 lbs.	24,612 gpg	4,474 grains/lb	3.6 lbs/ft³		
10.0 lbs.	37,270 gpg	3,727 grains/lb	6.6 lbs/ft³		
					Flow @ 15 psi loss During Regen. (gpm)

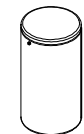
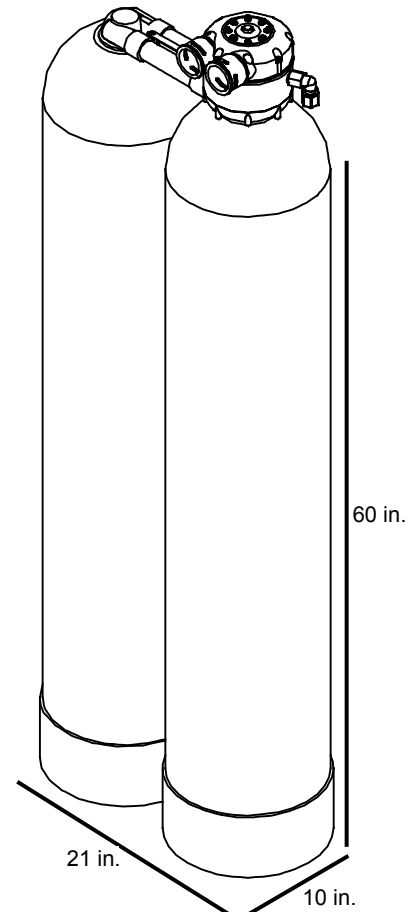
Disc Selection

Disc Selection (Compensated Hardness*)							
1	2	3	4	5	6	7	8
5	10	15	19	23	26	29	32
8	15	22	29	34	40	45	49
3,830	1,915	1,276	957	766	638	547	478
10.0	10.0	10.0	10.0	10.0	8.0	7.0	6.0

*Compensated Hardness in gpg = (Hardness + 3 X Fe mg/l)



2.5 in.



Operating Profile

Softener shall remove hardness to less than 1 gpg when operated in accordance with the operating instructions. System shall provide continuous soft water through the use of a duplex (two tanks) configuration. 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 down-flow and regeneration flow shall be up-flow.

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 weight more than four pounds. Control valve shall provide service and regeneration control for two media tanks. Inlet and outlet ports shall accept a 1.25" 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 25 psi. 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. Regeneration cycle shall operate opposite than 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 bypass of hard water to service during the regeneration cycle.

Media Tanks

The tanks shall be designed for a maximum working pressure of 125 psi and hydrostatically tested at 300 psi. Tanks shall be made of polyglass with a 2.5 in. threaded top opening. Each tank shall be NSF approved. Upper and lower distribution system shall be of a slot design. They will provide even distribution of regeneration water and the collection of processed water.

Conditioning Media

Each softener shall include cation resin having a minimum exchange capacity of 30,000 grains/ft³ when regenerated with 15.0 lbs/ft³. The media shall be solid, of a proper particle size (not more that 4% through a 40 mesh U.S. standard screen, wet screening) 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, rotationally molded rigid polyethylene. 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 shut-off to the brine refill. The brine tank shall include a safety overflow connection to be plumbed to a suitable drain.