

### 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 <sub>2</sub> , 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

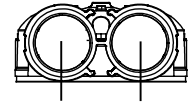
Setting	Capacity	Efficiency	Dosing	Meter Disc	Gallons/Regen
5.5 lbs.	24,612 gpg	4,474 grains/lb	3.6 lbs/ft³		
10.0 lbs.	37,270 gpg	3,727 grains/lb	6.6 lbs/ft³		
					<b>Flow @ 15 psi loss During Regen. (gpm)</b>

### Disc Selection

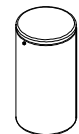
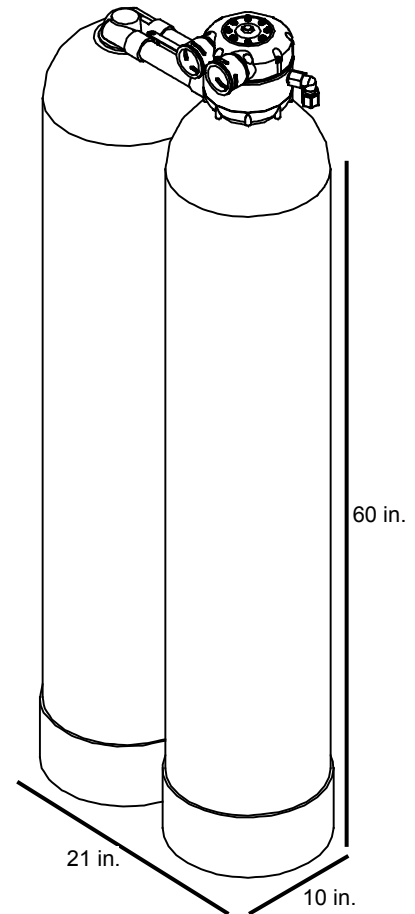
(Compensated Hardness\*)

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/ft<sup>3</sup> when regenerated with 15.0 lbs/ft<sup>3</sup>. 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.