

CP 216s OD

System Components

Media Vessel (qty) Size	(2) 406 x 1,651 mm
Media Vessel Construction	Wrapped Polyethylene
Empty Bed Volume	185 liters
Media	113 liters Non Solvent Cation Resin
Bed Depth / Free Board	1,194 / 457 mm
Riser Tube	25 mm ABS
Distributor Upper	0.36 mm Slots, ABS Basket
Lower	0.36 mm Slots, ABS Basket
Under bedding	7 liters (11 kg), ¼ x ½ Gravel
Regeneration Control	Non-electric Use Meter
Regeneration Type	Countercurrent
Meter Type	4.2 – 189 lpm Polypropylene Turbine (Kinetico Open Louver Flow Nozzle)

Inlet Water Quality

Pressure Range	2.0 – 8.6 bar Dynamic Pressure
Temperature Range	2 – 50° C
pH Range	5 – 10 SU
Free Chlorine Cl ₂ (Max.)	2.0 mg/l
Hardness as CaCO ₃ (Max.)	838 mg/l

Operating Specs

Flow Range – Overdrive (1-2 Δ bar)	125 – 178 lpm
Flow Range – Alternating (1-2 Δ bar)	87 – 125 lpm
Dimensions (width x depth x height)	838 x 406 x 1,803 mm
Weight (Operating / Shipping)	495 / 204 kg

Connections

Inlet / Outlet Connections	Custom Adapter and E-Clip (1 ½" Brass Sweat Fittings Included)
Drain Connection	0.625" Tube
Brine Line Connection	0.375" Tube
Power	None

System Part Numbers

CP 216s OD, 24 X 40 brine tank, media separate	11182
CP 216s OD, no brine tank, media separate	11168
CP 216s OD, empty, no brine tank	11186

Brine Tank Options

Tank Description	610 x 1,016 mm
Brine Tank Part Number	10586
Material	HDPE
Salt Capacity	228 kg

Regeneration Specifications

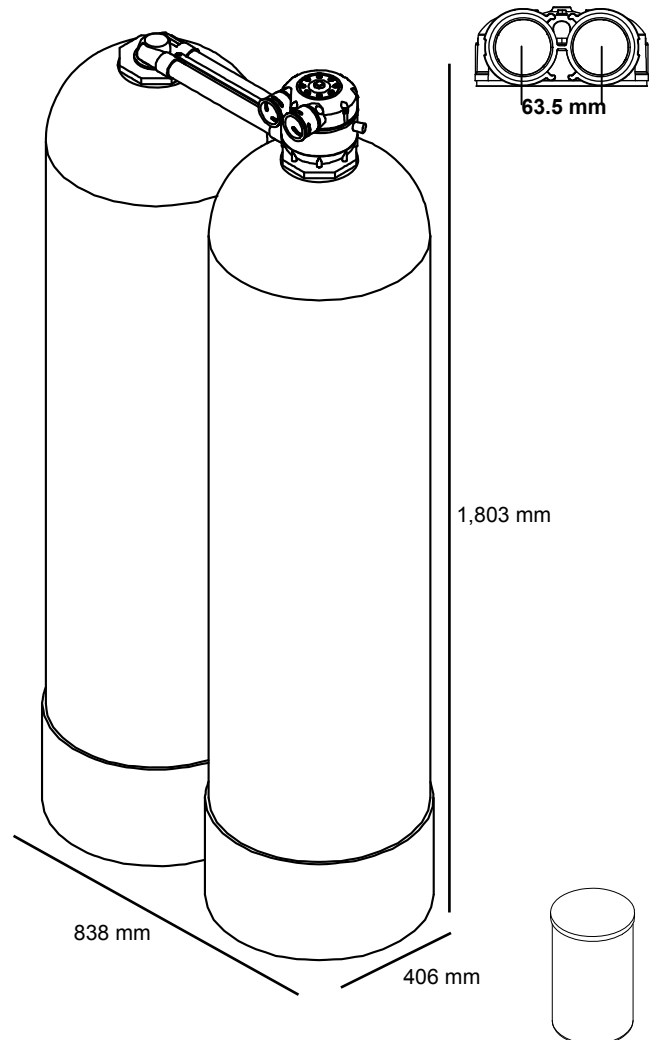
Regeneration Volume / Time	606 liters / 90 minutes
Backwash Flow Control	26.5 gpm
Brine Refill Flow Control	0.27 gpm

Overdrive Operation

Setting	Capacity	Efficiency	Dosing	Meter Disc
10.9 kg	5,696 grams	528 grams/kg	0.10 kg/l	
18.1 kg	7,249 grams	400 grams/kg	0.16 kg/l	
Peak flow (lpm) during regeneration:				

Alternating Operation

Setting	Capacity	Efficiency	Dosing	Meter Disc
10.9 kg	5,696 grams	528 grams/kg	0.10 kg/l	
18.1 kg	7,249 grams	400 grams/kg	0.16 kg/l	
Flow (lpm) during regeneration (@1 Δ bar):				
M³/Regeneration:				



Disc Selection

(Compensated Hardness*)

1	2	3	4	5	6	7	8
86	154	222	274	325	376	428	513
103	205	274	359	428	513	599	684
132	132	132	132	101	80	65	53
1	2	3	4	5	6	7	8
86	171	257	342	428	513	599	684
120	222	342	445	547	650	735	838
87	87	87	87	87	80	65	53
57.5	28.8	19.2	14.4	11.5	9.6	8.2	7.2

*Compensated hardness in mg/l = Hardness + (51 x Fe in mg/l)

Operating Profile

Softener shall remove hardness to less than 8 mg/l when operated in accordance with the operating instructions. The system shall include two tanks. This duplex configuration shall be flexible to operate in alternating or parallel mode depending on installed program disc. In alternating mode, one tank will be on-line during service. In parallel mode, both tanks will be on-line during service. With either mode, during regeneration cycles, one tank shall provide water to service and to the regenerating tank. An external hydraulic signal shall initiate system regeneration. 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 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 2 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 a down-flow direction. The brine cycle shall flow up-flow, 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 bypass of hard water to service during the regeneration cycle.

Media Tanks

The tanks shall be designed for a maximum working pressure of 8.6 bar and hydrostatically tested at 20.7 bar. Tanks shall be made of polyethylene and reinforced with a fiberglass wrapping. Each tank shall include a 2.5 in. threaded top opening. Each tank shall be NSF approved. Upper and lower distribution system shall be of a slot design. Distributors will provide even flow of regeneration water and the collection of processed water.

Conditioning Media

Each softener shall include a non-solvent, high capacity cation resin having a minimum exchange capacity of 68.6 grams per liter of resin when regenerated with 0.24 kg of salt, per liter of resin. 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 shut-off to the brine refill. The brine tank shall include a safety overflow connection to be plumbed to a suitable drain.