



Microlene Kinetico Water Softener

Model Numbers: ECP216S, ECP216SOD

Applications

Ideal for reducing calcium, magnesium, manganese and iron from water sources to supply soft water to :-

- make cleaning easier
- make clothes and hair softer
- reduce scale in pipes and appliances

With Technology by Kinetico
 Kinetico

Benefits of Microlene's Kinetico Water Softeners

Microlene's Kinetico water softeners are a hard working non-electric design offering continuous supply of soft water using a twin tank system.

NON ELECTRIC

Only Microlene Kinetico uses the kinetic energy of moving water to power its system instead of electricity – thanks to the patented turbine. So you'll never have to worry about costly repairs or higher electricity bills.

24/7

Our twin tank design allows our system to backwash without ever going offline, for round the clock operation. You'll never be interrupted or inconvenienced by regeneration.

METERED REGENERATION

Based on your water hardness, the system measures water use to accurately determine when it's time to regenerate with clock like precision, resulting in up to 20% less waste water and up to 40% savings in salt. Your softener automatically adjusts to your water use patterns.

SOFT WATER RINSE

Uses only soft conditioned water to clean the media, which extends the life of the system.

COUNTER CURRENT REGENERATION

Unlike most other systems, ours regenerates in counter-current mode, a more even and efficient use of resin beads, resulting in less waste water, less salt use and a longer lasting system.

OPERATING PROFILE

The softener can remove hardness to less than 9 mg/l when operated in accordance with the operating instructions. The system comprises two tanks. This duplex configuration operates with one tank on-line during service.

During regeneration cycles, one tank provides water to service and to the regenerating tank. An internal water meter initiates system regeneration. The water meter measures the processed volume and can be adjusted based on water hardness to be treated. Service flow is down-flow and regeneration flow is up-flow.

Technical data on following page >

SPECIFICATIONS

INLET WATER QUALITY

Pressure Range	1.7-8.6 Bar
Temperature Range	2 - 49°C
pH Range	5 - 10 SU
Free Chlorine Cl ₂ (Max.)	2.0mg/l
Hardness as CaCO ₃ (Max.)	838mg/l

OPERATING SPECIFICATIONS

Flow Configuration	Alternating & Overdrive™
Flow Range - Alternating	87 - 125 lpm
Flow Range - Overdrive™	132 - 178 lpm
Differential Pressure	1.0 - 2.1 Bar
Dimensions (w x d x h)	838 x 406 x 1,803mm
Operating Weight	495kg
Shipping Weight	204kg

SYSTEM COMPONENTS

Media Vessel Quantity	2
Vessel Size	406 x 1,651mm
Media Vessel Construction	Wrapped Polyethylene
Empty Bed Volume	185 litres
Media Type	Non Solvent Cation Resin
Media Volume	113.2 litres
Bed Depth	1,194mm
Free Board	457mm
Riser Tube	25mm ABS
Distributor Upper	0.36mm Slots, ABS Basket
Distributor Lower	0.36mm Slots, ABS Basket
Under bedding	7 Litres (34 kg) ¼ x 1/8 Gravel
Regeneration Control	Non-electric Use Meter
Regeneration Type	Counter Current
Meter Type	4-189 lpm Polypropylene Turbine

CONNECTIONS

Inlet / Outlet Connections	32mm Custom Adapter and E-clip
Drain Connection	16mm Tube
Brine Line Connection	9.5mm Tube
Power	None

BRINE TANK OPTIONS

Tank Description (inches)	24 x 40
Brine Tank Part Number	10586
Tank Height	1,016mm
Tank Footprint	610mm
Material	HDPE
Salt Capacity	225kg

REGENERATION SPECIFICATIONS

Regeneration Volume	606 litres
Regeneration Time	90 minutes
Backwash Flow Control	26.5 lpm
Brine Refill Flow Control	2.7 lpm

REGENERATION CONTROL VALVE

The regeneration control valve is mounted on top of the media tank, and manufactured from non-corrosive materials. A control valve provides service and regeneration control for two media tanks. Inlet and outlet ports accept a quick connect, double o-ring sealed adapter. Interconnection between tanks is made through the regeneration valve with a quick connect adapter. The control valve operates using a minimum inlet pressure of 1 Bar. Pressure is used to drive all valve functions. No electric hook-up is required. The control valve incorporates four operational cycles: service, brine draw, slow rinse, and a combined fast rinse and brine refill. The brine cycle is up-flow, opposite the service flow, providing a counter current regeneration (opposite for MACH2020cHF). The control valve contains 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 are designed for a maximum working pressure of 8.6 Bar and hydrostatically tested at 20.7 Bar. Tanks are made of engineered plastic with a 63.5mm threaded top opening. The tanks are NSF approved. The upper distribution system is a slot design. The lower distribution system is a flat plate design. Distributors will provide even flow of regeneration water and the collection of processed water.

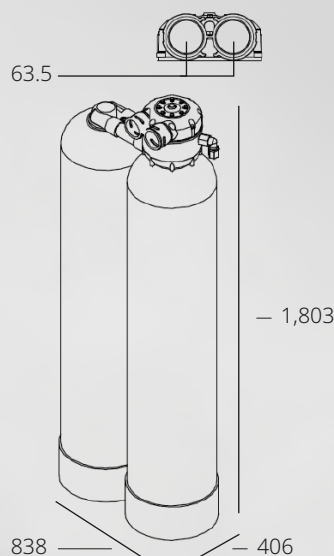
CONDITIONING MEDIA

Each softener includes non solvent cation resin having a minimum exchange capacity of 18 g/l when regenerated with 240.3g/l.

BRINE SYSTEM

The combination salt storage and brine production tank is manufactured of corrosion-resistant plastic. The brine tank has a chamber to house the brine valve assembly. The brine float assembly allows for adjustable salt settings and provides for a shut-off to the brine refill. The brine tank includes a safety overflow connection to be plumbed to a suitable drain.

Dimensions (mm)



DISC SELECTION (Compensated hardness**) - Disc 4 Fitted

Model	Regeneration setting	Hardness capacity	Efficiency	Dosing		1	2	3	4	5	6	7	8
Alternating Operation					Meter Disc								
CP216s	10.9kg	5,696g	528g/kg	96g/l		86	171	257	342	428	513	599	684
CP216s	18.1kg	7,249g	400g/kg	160g/l		120	222	342	445	547	650	735	838
					Flow during regeneration (L/min @ 1 Bar)	87	87	87	87	87	80	65	53
Overdrive Operation					Meter Disc								
CP216s OD	10.9kg	5,696g	528g/kg	96g/l		86	154	222	274	325	376	428	513
CP216s OD	18.1kg	7,249g	400g/kg	160g/l		103	205	274	359	428	513	599	684
					Peak flow during regeneration (L/min)	132	132	132	132	101	80	65	53
					Litres processed before regeneration	57,500	28,750	19,167	14,375	11,500	9,584	8,213	7,188

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



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