microlene





Microlene Kinetico Water Softener

Model Number: E2175S (Softener only)

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



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	2.0-8.6 Bar						
Temperature Range	2 - 50°C						
pH Range	5 – 10 SU						
Free Chlorine Cl2 (Max.)	2.0mg/l						
Hardness as CaCO3 (Max.)	2.993mg/l						
OPERATING SPECIFICATIONS							
Flow Range	61 - 83 lpm						
Differential Pressure	1.0 – 2.0 Bar						
Flow Configuration	Alternating						
Dimensions (w x d x h)	686 x 330 x 1,524mm						
Operating Weight	204kg						
Shipping Weight	136kg						
SYSTEM COMPONENTS							
Media Vessel Quantity	2						
Vessel Size	330 x 1,372mm						
Media Vessel Construction	Fibreglass Wrapped Polyethylene						
Empty Bed Volume	104 litres						
Media Type	Non Solvent Cation Resin						
Media Volume	64 litres						
Bed Depth	940mm						
Free Board	432mm						
Riser Tube	25mm ABS						
Distributor Upper	0.36mm Slots, ABS Basket						
Distributor Lower	0.36mm Slots, ABS Basket						
Under bedding	11kg Gravel						
Regeneration Control	Non-electric Use Meter						
Regeneration Type	Counter Current						
Meter Type	1.1-94.6 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	61cm diameter						
Material	HDPE						
Salt Capacity	227kg						
REGENERATION SPECIFICATION	s						
Regeneration Volume	538 litres						
Regeneration Time	90 minutes						
Backwash Flow Control	18.9 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

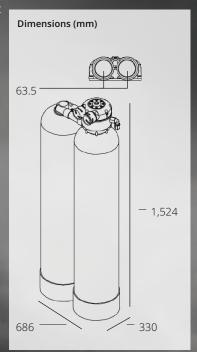
The tanks are designed for a maximum working pressure of 8.6 Bar and hydrostatically tested at 20.7 Bar. Tanks are made of engineered plastic with a 63.5mm threaded top opening. The tanks are NSF approved. The upper distribution system is a slot design. The lower distribution system is a flat plate design. 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.



DISC SELECTION (Compensated hardness**) – Disc 4 Fitted													
Model	Regeneration setting	Hardness capacity	Efficiency	Dosing	Meter Disc	1	2	3	4	5	6	7	8
2175s	6.8kg*	4,216g	620g/kg	110g/l		462	855	1,197	1,505	1,761	2,001	2,206	2,394
2175s	13.6kg*	5,297g	390g/kg	210g/l		581	1,060	1,488	1,881	2,206	2,497	2,770	2,993
*Costified by NCI	Fand (ar MOA	Litres processed before regeneration			6,492	3,246	2,164	1,623	1,298	1,082	927	811	

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



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