

Kinetico 2100s

System Components

Media Vessel (qty) Size	(2) 254 x 1,372 mm
Media Vessel Construction	Wrapped Polyethylene
Empty Bed Volume	62 liters
Media Type	Non Solvent Cation Resin
Media Volume	42 liters
Bed Depth	991 mm
Free Board	381 mm
Riser Tube	25 mm ABS
Distributor Upper	0.36 mm Slots, ABS Basket
Lower	0.36 mm Slots, ABS Basket
Under bedding	None
Regeneration Control	Non-electric Use Meter
Regeneration Type	Countercurrent
Meter Type	1.1 – 94.6 lpm Polypropylene Turbine

Inlet Water Quality

Pressure Range	1.0 – 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.)	1,830 mg/l

Operating Specs

Flow Range (1-2 Δ bar)	45 – 82 lpm
Flow Configuration	Alternating
Dimensions (width x depth x height)	533 x 254 x 1,524 mm
Weight (Operating / Shipping)	159 / 79 kg

Connections

Inlet / Outlet Connections	Custom Adapter and E-Clip
Drain Connection	0.5" Tube
Brine Line Connection	0.375" Tube
Power	None

System Part Numbers

Kinetico 2100s, 18 x 35 brine drum	11031
Kinetico 2100s, no brine drum	11050
Kinetico 2100s, no brine drum, no resin	11052

Brine Tank Options

Tank Description	K-Spray	18 x 35
Brine Tank Part Number	9763A	7938
Tank Height	89 cm	89 cm
Tank Footprint	46 cm DIA	46 cm DIA
Material	HDPE	HDPE
Salt Capacity	114 kg	114 kg

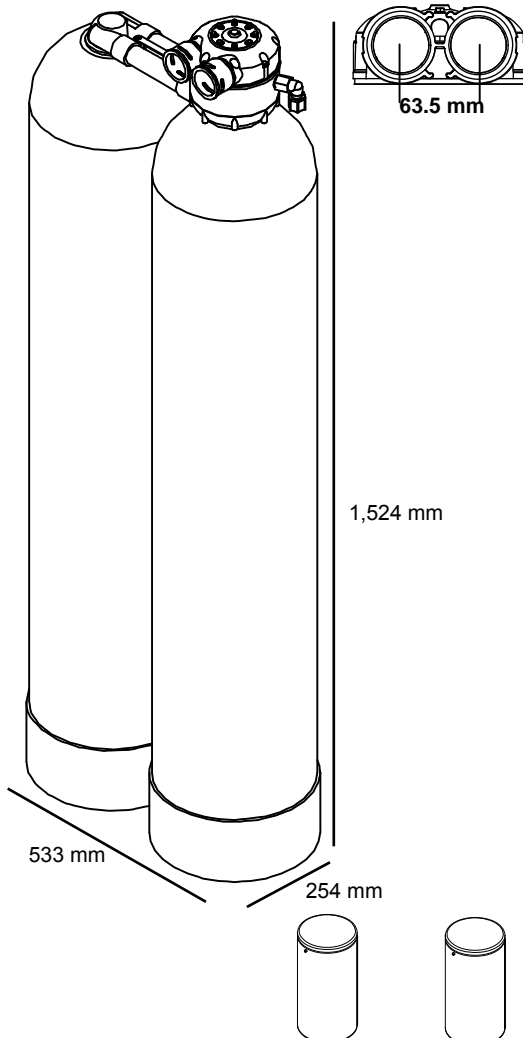
Regeneration Specifications

Regeneration Volume	386 liters
Regeneration Time	90 minutes
Backwash Flow Control	11.3 lpm
Brine Refill Flow Control	2.7 lpm

Setting	Capacity	Efficiency	Dosing	Meter Disc
**2.5 kg	1,634 grams	655 grams/kg	0.06 kg/l	
3.4 kg	1,996 grams	587 grams/kg	0.08 kg/l	
**4.5 kg	2,659 grams	586 grams/kg	0.11 kg/l	
6.8 kg	2,758 grams	405 grams/kg	0.16 kg/l	

Liters/Regeneration:

** Settings certified by NSF and or WQA



Disc Selection

(Compensated Hardness*)

1	2	3	4	5	6	7	8
188	359	513	650	--	--	--	--
239	445	650	821	--	--	--	--
291	530	787	992	1,146	1,300	1,454	1,607
325	633	889	1,129	1,300	1,505	1,76	1,830
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)

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 operate with one tank 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 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 1 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 an up-flow direction. The brine cycle shall flow down-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 engineered plastic with a 2.5 in. threaded top opening. Each tank shall be NSF approved. Upper distribution system shall be of a slot design. Lower distribution system shall be of a flat plate design. Distributors will provide even flow of regeneration water and the collection of processed water.

Conditioning Media

Each softener shall include non-solvent cation resin having a minimum exchange capacity of 68.6 grams of CaCO₃ 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.