

# Kinetico ESSENTIAL SERIES™

## WATER SOFTENERS

# Essential Platinum

### Design Specifications

Flow Rate 15 psid.....	10 gpm
Flow Rate 30 psid.....	15 gpm
Pressure Range* .....	25 – 125 psi
Temperature Range .....	35 – 120° F
Free Chlorine .....	≤ 2.0 mg/L
Compensated Hardness.....	≤ 50 gpg
Iron (ferrous).....	< 0.5 mg/L
Iron (ferric).....	< 0.01 mg/L

### System Components

Media Vessel (qty.) Size .....	(1) 9" x35"
Media Vessel Construction .....	Wrapped Polyethylene
Empty Bed Volume .....	1.0 cubic feet
Media Type .....	Non-Solvent, High Capacity Cation Resin
Media Volume (per tank) .....	0.6 cubic feet
Free Board .....	None
Riser Tube.....	1.05" ABS
Upper Distributor .....	0.012" Slots, Cone Type
Lower Distributor .....	0.012" Slots, Cone Type
Regeneration Control .....	Volumetric
Service Flow.....	Upflow
Regeneration Flow .....	Downflow
Regeneration Type.....	Countercurrent
Hard Water By-pass During Regeneration .....	Automatic
Water Used for Regeneration .....	Inlet Water, Unprocessed
Water Used for Brine Tank Fill.....	Softened
Salt Capacity (pellet) (18x35 brine drum).....	200 lbs
System By-pass .....	Optional

### Connections

Inlet / Outlet Connections .....	Custom Adapter
Drain Connection.....	0.5" Quick Connect Tubing
Brine Line Connection .....	0.375" Quick Connect Tubing
Brine Tank Overflow .....	0.5" Hose Barb
Power, .....	None

### Essential Part Numbers

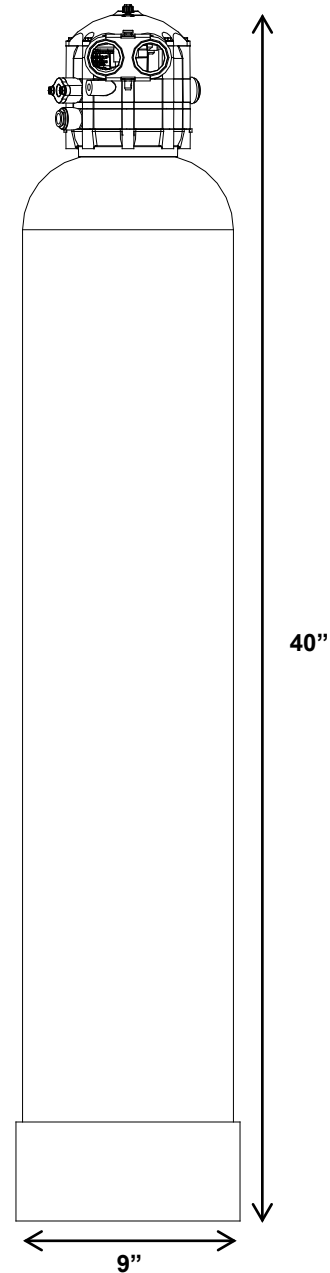
Platinum .....	15210
Platinum, No Brine Drum .....	15195

### Dimensions and Weight

Height.....	40 in.
Width.....	9 in.
Depth .....	9 in.
Shipping Weight .....	60 lbs.
Operating Weight.....	300 lbs.

### Regeneration Sequence

Offline Time During Regen Cycle.....	13.5 minutes
Total Regen Cycle Time .....	15.0 minutes
Total Regen Volume.....	9.5 gallons
Salt Used per Regen .....	1.25 lbs.
Salt Dose.....	2.1 lbs./cubic foot
System Capacity.....	5,000 grains
Backwash Flow Rate .....	2.5 gpm



# Essential Platinum

## **Operating Profile**

The softener shall remove hardness to less than 2 grains per gallon when operated in accordance with the operating instructions. The system shall provide soft water using a simplex (single tank) configuration. System regenerations shall be initiated based on gallons processed. The adjustable meter shall allow regenerations to be set within 5.2 gallon increments.

## **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 4.4 lbs. Control valve shall operate using a minimum pressure of 25 psi. Pressure shall be used to drive all valve functions. Control valve shall incorporate five operational cycles including; service, brine draw, slow rinse, fast rinse and brine refill. Service cycle shall operate in an upflow direction. The brine cycle shall flow downflow, providing countercurrent regeneration. Control valve shall contain a fixed orifice eductor nozzle and a backwash flow control. The control valve will allow the by-pass of untreated water to service during the regeneration cycle. Control valve shall be certified to standard NSF/ANSI 61.

## **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 polypropylene and reinforced with a fiberglass wrapping. Tank shall have a 2.5" threaded top opening. Tank shall be NSF/ANSI 44 approved. Upper and lower distribution system shall be of a cone slot design. Distribution system shall provide even distribution of regeneration water and the collection of processed water.

## **Conditioning Media**

Each softener shall use non-solvent, high capacity cation resin having a minimum exchange capacity of 30,000 grains removed per cubic foot of media when regenerated with a dose of 15 lbs of salt per cubic foot of media. The media shall be solid, of a proper particle size and shall contain no plates, shells, agglomerates or other shapes that 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, rigid polyethylene. The brine tank shall have an internal brine well chamber to house the brine valve assembly. The brine float assembly shall allow for adjustable salt settings and shall provide for a shutoff to the brine refill. The brine tank shall include a safety overflow connection to be plumbed to a suitable drain.