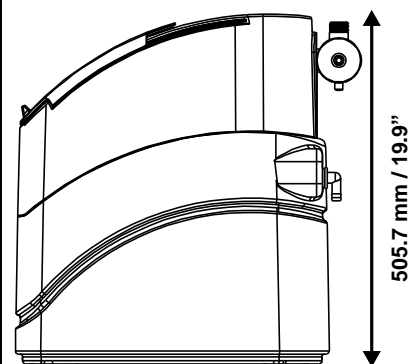
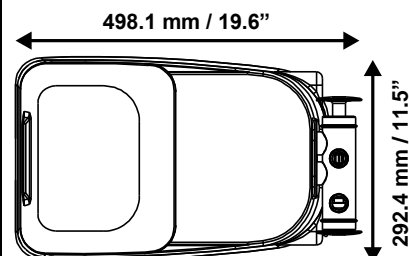
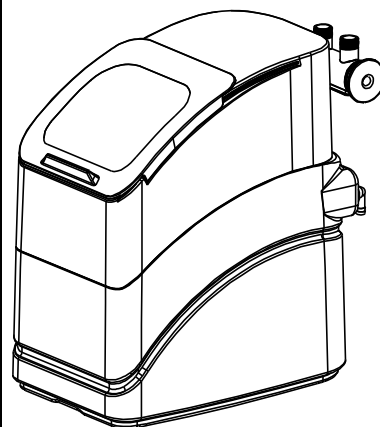


Kineticico ESSENTIAL SERIES®

Essential 8

| Design Specifications | | |
|--|---------------------------------|-------------------------|
| Service Flow Rate | 30 Lpm | 8 gpm |
| Flow Rate @ 15 psid | 36 Lpm | 9.5 gpm |
| Pressure Range | 1.7 – 8.6 bar | 25 – 125 psi |
| Temperature Range | 2 – 50 °C | 35 - 120° F |
| Free Chlorine | ≤ 1.0 mg/L | ≤ 1.0 mg/L |
| Compensated Hardness | ≤ 600 mg/L | ≤ 35 gpg |
| Iron (ferrous) | < 0.5 mg/L | < 0.5 mg/L |
| Iron (ferric) | < 0.01 mg/L | < 0.01 mg/L |
| System Components | | |
| Media Vessel (Qty. 1) | 203 mm x 330 mm | 8" x 13" |
| Media Vessel Construction | Fiberglass Wrapped Polyethylene | |
| Empty Bed Volume | 7.4 liters | 0.26 cubic feet |
| Media Type | Fine Mesh Resin | |
| Media Volume (per tank) | 7.4 liters | 0.26 cubic feet |
| Total Bed Depth | 254 mm | 10" |
| Free Board | None | |
| Riser Tube | 27 mm ABS | 1.05" ABS |
| Upper Distributor | 0.18 mm Slots, Cone Type | 0.007" Slots, Cone Type |
| Lower Distributor | 0.18 mm Slots, Cone Type | 0.007" Slots, Cone Type |
| Regeneration Control | Volumetric | |
| Service Flow | Upflow | |
| Regeneration Flow | Downflow | |
| Regeneration Type | Countercurrent | |
| Hard Water By-pass During Regeneration | Automatic | |
| Salt Capacity (Pellet) | 23.6 kg | 52 lbs. |
| System By-pass | Included | |
| Connections | | |
| Inlet / Outlet Connections | Custom Adapter and Bracket | |
| Drain Connection | 0.5" Quick Connect Tubing | |
| Brine Line Connection | 0.375" Quick Connect Tubing | |
| Brine Tank Overflow | 0.625" Tubing Barb | |
| Power | None | |
| System Part Number | | |
| Essential 8 | 15937 | |
| Dimensions and Weight | | |
| Height | 505.7 mm | 19.9 in. |
| Width | 292.4 mm | 11.5 in. |
| Depth | 498.1 mm | 19.6 in. |
| Shipping Weight | 14.5 kg | 32 lbs. |
| Operating Weight | 45.4 kg | 100 lbs. |
| Regeneration Specifications at 35 psi | | |
| Offline Time during Regeneration Cycle | 13.5 minutes | |
| Total Regeneration Cycle Time | 15 minutes | |
| Total Regeneration Volume | 25 liters | 6.6 gallons |
| Salt Used per Regeneration | 0.36 kg | 0.8 lbs. |
| Salt Dose | 49.3 grams NaCl/liter resin | 3.1 lbs./cu. ft. |
| System Capacity | 176 grams | 2,678 grains |
| Backwash Flow Rate | 3.78 Lpm | 1.0 gpm |



| | Setting | A | B | C | D | E | F | ---- | G | ---- | H | - | ---- | - | I | - | ---- | - | |
|------------------------|----------------------|-----|-----|-----|-----|-----|-----|------|-----|------|-----|-----|------|-----|-----|-----|------|-----|--|
| Essential 8 | Comp. Hardness (ppm) | 112 | 124 | 138 | 157 | 180 | 213 | 235 | 262 | 293 | 336 | 352 | 390 | 441 | 470 | 502 | 561 | 600 | CAUTION! DO NOT SET IN BLACK AREA! |
| | Comp. Hardness (°TH) | 11 | 12 | 14 | 16 | 18 | 21 | 23 | 26 | 29 | 34 | 35 | 39 | 44 | 47 | 50 | 56 | 60 | |
| | Comp. Hardness (°dH) | 6 | 7 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 19 | 20 | 22 | 25 | 26 | 28 | 31 | 34 | |
| | Comp. Hardness (gpg) | 6 | 7 | 8 | 9 | 10 | 12 | 13 | 15 | 17 | 19 | 20 | 22 | 25 | 27 | 29 | 32 | 35 | |

Operating Profile

The softener shall remove hardness to less than 17.1 mg/L (1 gpg) 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 37.9 liter (10 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 2.0 kg (4.4 lbs). Control valve shall operate using a minimum pressure of 1.7 bar (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.

Media Tanks

The tanks shall be designed for a maximum working pressure of 8.6 bar (125 psi) and hydrostatically tested at 20.7 bar (300 psi). Tanks shall be made of polyethylene and reinforced with a fiberglass wrapping. Tank shall have a 63.5 mm (2.5 in) 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, cation resin having a minimum exchange capacity of 971,000 g/L (30,000 grains/ft³) of CaCO₃ when regenerated with 240 g/L (15 lbs/ft³) of salt. 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 polypropylene with an acrylic lid. The brine tank shall have an internal brine well chamber to house the brine valve assembly. The brine float assembly has one fixed salt setting 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.