

# Kinetico Aquakinetic HF

## Design Specifications

|  |                                |
|--|--------------------------------|
| Flow Rate 1 Δ bar .....                    | 19.3 Lpm                       |
| Pressure Range .....                       | 1.0 – 8.6 bar Dynamic Pressure |
| Temperature Range .....                    | 2 – 49°C                       |
| pH Range .....                             | .5 – 10 SU                     |
| Free Chlorine Cl <sub>2</sub> (Max.) ..... | 2.0 mg/L                       |
| Hardness as CaCO <sub>3</sub> (Max.) ..... | 513 mg/L                       |
| Meter Disc .....                           | 5                              |
| Module .....                               | #10067B                        |

## System Components

|                                 |  |
|---------------------------------|--|
| Media Vessel (Qty.) Size .....  | (2) 152 x 330 mm                         |
| Media Vessel Construction ..... | Fiberglass Wrapped Polypropylene         |
| Empty Bed Volume .....          | 4,5 liters                               |
| Media Type .....                | High Capacity Fine Mesh Cation Resin     |
| Media Volume .....              | 4.5 liters                               |
| Bed Depth .....                 | Packed                                   |
| Free Board .....                | None                                     |
| Riser Tube .....                | 25 mm ABS                                |
| Upper Distributor .....         | 0.23 mm Slots, Engineered Plastic Basket |
| Lower Distributor .....         | Stainless Steel Flat Plate               |
| Under bedding .....             | None                                     |
| Regeneration Control .....      | Non-electric Use Meter                   |
| Flow Configuration .....        | Alternating                              |
| Regeneration Type .....         | Countercurrent                           |
| Salt Capacity(Blocks).....      | 8 kg                                     |
| Meter Type .....                | 2 – 57 Lpm Polypropylene Turbine         |
| Nozzle Type .....               | Standard Nozzle #14693                   |

## Connections

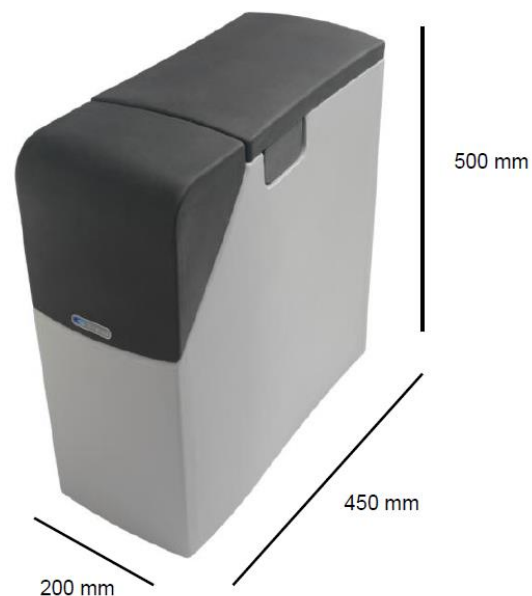
|                                  |                            |
|----------------------------------|----------------------------|
| Inlet / Outlet Connections ..... | Custom Adapter and Bracket |
| Drain Connection .....           | 0.375" Tube                |
| Brine Line Connection .....      | 0.375" Tube (internal)     |
| Overflow Connection .....        | 0.625" Tube                |
| Power .....                      | None                       |

## Part Numbers

|                                 |       |
|---------------------------------|-------|
| Aquakinetic HF No Castors ..... | 14887 |
|---------------------------------|-------|

## Dimensions and Weight

|                       |        |
|-----------------------|--------|
| Height .....          | 500 mm |
| Width .....           | 200 mm |
| Depth .....           | 450 mm |
| Shipping Weight ..... | 21 kg  |
| Operating Weight..... | 39 kg  |



## Regeneration Specifications @ 2bar

|                                |                |
|--------------------------------|----------------|
| Regeneration Volume .....      | 24 liters      |
| Regeneration Time .....        | 11 minutes     |
| Backwash Flow Control .....    | 2,7 Lpm #1419  |
| Brine Refill Flow Control..... | 1,2 Lpm #10529 |

Disc Selection  
(Compensated Hardness\*)

| Setting | Dosing   | Meter Disc | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|---------|----------|------------|----|-----|-----|-----|-----|-----|-----|-----|
| 0,45 kg | 0,1 kg/l | ppm        | 64 | 127 | 189 | 249 | 323 | 388 | 448 | 507 |
|         |          | °dH        | 4  | 7   | 11  | 15  | 19  | 23  | 26  | 30  |
|         |          | °fH        | 6  | 13  | 19  | 25  | 32  | 39  | 45  | 51  |
|         |          | gpg        | 3  | 7   | 11  | 14  | 18  | 22  | 26  | 29  |

|                      |      |      |     |     |     |     |     |     |
|----------------------|------|------|-----|-----|-----|-----|-----|-----|
| Liters/Regeneration  | 2207 | 1103 | 736 | 552 | 441 | 368 | 315 | 276 |
| Gallons/Regeneration | 583  | 292  | 194 | 146 | 117 | 97  | 83  | 73  |

Compensated Hardness in gpg=Hardness+ (3 x Fe in mg/L)

# Kinetico Aquakinetic HF

## 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 upflow and regeneration flow shall be downflow.

## 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 upflow direction. The brine cycle shall flow downflow, 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 by-pass 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 41 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 high capacity, fine mesh cation resin having a minimum exchange capacity of 68.6 grams/liter when regenerated with 0.24 kg/liter. 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 shutoff to the brine refill. The brine tank shall include a safety overflow connection to be plumbed to a suitable drain.