microlene

WS

# Microlene Kinetico Premier Compact XP Water Softener

Model Number: KN17599 (Softener only)
KPREMIERXP (Softener Kit - incl. Bypass & Pre-filter)


## Applications

Ideal for removing hardness 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 Premier Compact XP Water Softeners

Microlene's Kinetico Premier Compact XP 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.

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# Microlene Kinetico Softener

## 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 1.8 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. 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.

## 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.

| SPECIFICATIONS | | |
|---|---|---|
| **DESIGN SPECIFICATIONS** | | |
| Part Number | KN17599 (Softener only), KPREMIERXP (Kit c/w Bypass and Pre-filter) | |
| Model Name | Premier Compact INT XP | |
| Flow Configuration | Alternating | |
| Flow Rate @ 1 Δ bar | 22.7 lpm | 6.0 gpm |
| Flow Rate @ 2 Δ bar | 38.2 lpm | 10.1 gpm |
| Pressure Range | 1.8 - 6 bar Dynamic Pressure | 26 - 87 psi Dynamic Pressure |
| Temperature Range | 2 - 49˚C | 36 - 120˚F |
| Free Chlorine$Cl_2$ (Max.) | 0.0 ppm | |
| Hardness as $CaCO_3$ (Max. in ppm) | 523 ppm | |
| pH Range | 5 - 10 SU | |
| Iron (ferrous) | 0 for Packed Bed | |
| Iron (ferric) | 0 for Packed Bed | |
| **SYSTEM COMPONENTS** | | |
| Media Vessel (Qty. 2) Size | 152 x 330 mm | 6.0 x 13.0 inch |
| Media Vessel Construction | Engineered Plastic | |
| Empty Bed Volume | None | |
| Media Type | Non-Solvent Fine Mesh Cation Resin | |
| Media Volume (per tank) | 4.5 liters | 0.16 cubic foot |
| Total Bed Depth | Packed | |
| Free Board | None | |
| Riser Tube (Qty. 2) | 1.0" Diameter ABS | |
| Distributor Upper (Qty. 2) | 0.23 mm Slots, Engineered Plastic Basket | 0.009 inch Slots, Engineered Plastic Basket |
| Distributor Lower (Qty. 2) | 0.19 mm Slots, Stainless Steel Flat Plate | 0.007 inch Slots, Stainless Steel Flat Plate |
| Regeneration Control | Non-electric Use Meter | |
| **CONNECTIONS** | | |
| Port Sizes on Level One (Qty. 2) | 33.6 mm I.D. | 1.32 inch I.D. |
| Inlet / Outlet Connections | Part Number 10081B - Adapter, ¾ IN-OUT ¾ - 14 BSP Thread and Bracket | |
| Drain Connection | 0.5" O.D. Tube | |
| Brine Line Connection | 0.375" O.D. Tube | |
| Brine Tank Overflow | 0.62" O.D. Tube | |
| Power | None | |

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# Microlene Kinetico Softener

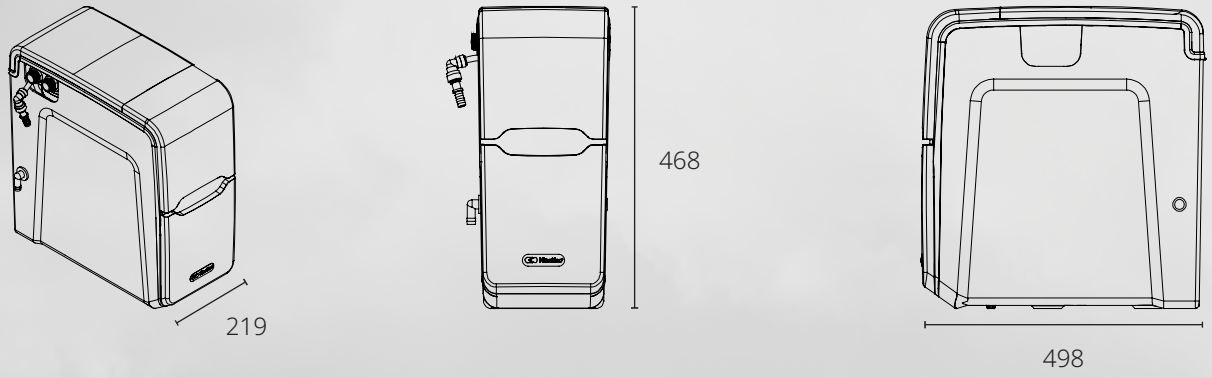
| DIMENSIONS AND WEIGHT | | |
|---|---|---|
| Dimensions (width x depth x height) | 498 x 219 x 468 mm | 19.6 x 8.6 x 18.4 inch |
| Shipping Weight | 17.0 kg | 37.5 lb |
| Operating Weight | 21.7 kg | 47.8 lb |
| **KEY VALVE COMPONENTS & CHARACTERISTICS** | | |
| Premier Compact INT XP Module Assembly | 17594 | |
| Meter Nozzle | Part Number 13689 - Nozzle, Meter - Half Louver - ACS | |
| Meter Gearing | 2-2-3-4 | |
| Meter Turbine | PP9-9258 | |
| Regeneration Gearing | 2-2-2-2 | |
| Backwash Flow Control | Part Number 1419 - Flow Control, B/W 0.7 GPM | |
| Regeneration Turbine | Part Number 8781F - Turbine Regen 10 Jet | |
| Brine Refill Flow Control | Part Number 10529 - Flow Control 0.3 GPM SIL | |
| **REGENERATION SPECIFICATIONS AT 3.8 BAR (55 PSI)** | | |
| Total Regeneration Cycle Time | 11 minutes | |
| Salt Used per Regeneration | 0.45 kg | 1 lb |
| Backwash Flow Rate | 2.6 lpm | 0.7 gpm |
| Regeneration Flow | Countercurrent | |
| Salt Capacity (Block, qty. 2) | 8.0 kg | 17.6 lb |
| Water Used for Regeneration | 20.5 liters | 5.4 gal |

**XP Salt Settings**

| 0.45 KG (1 LB) | | CAPACITY @ 3.8 BAR (55 PSI) | | | | | | | | | | | 145,967 PPM (2255 GRAINS) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **XP Setting** | | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | ***** | **J** | ***** | **K** | ***** | **L** | ***** | **M** | ***** |
| Max Hardness | gpg | 6 | 7 | 7 | 8 | 8 | 9 | 10 | 11 | 13 | 13 | 14 | 16 | 17 | 19 | 21 | 23 | 26 | 31 |
| | ppm | 108 | 115 | 123 | 132 | 143 | 156 | 171 | 191 | 215 | 230 | 247 | 266 | 290 | 318 | 352 | 394 | 449 | 523 |
| | °fH | 11 | 11 | 12 | 13 | 14 | 16 | 17 | 19 | 21 | 23 | 25 | 27 | 29 | 32 | 35 | 39 | 45 | 52 |
| | °dH | 6 | 6 | 7 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 18 | 20 | 22 | 25 | 29 |
| Liters / Gallons Between Regeneration | | "1420 (375)" | "1328 (351)" | "1235 (326)" | "1143 (302)" | "1051 (278)" | "958 (253)" | "866 (229)" | "773 (204)" | "681 (180)" | "635 (168)" | "589 (156)" | "543 (143)" | "496 (131)" | "450 (119)" | "404 (107)" | "358 (95)" | "312 (82)" | "266 (70)" |

Brine valve is preset to 0.45 kg (1 lb), no adjustment is necessary.

**Dimensions (mm)**

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