



## The Culligan® High Efficiency (HE) Series Water Softener System



### EXAMPLES OF MARKETS SERVED:

CLINICS  
EDUCATIONAL FACILITIES  
ENERGY & POWER  
FOOD & BEVERAGE PRODUCTION  
FOOD SERVICE/RESTAURANTS  
GROCERY  
HEALTHCARE/HOSPITALS/BIO-PHARMACEUTICAL  
HOSPITALITY/LODGING  
MANUFACTURING  
MUNICIPAL DRINKING WATER  
OIL & GAS

### Reduce Operating Costs and Improve Efficiency with a Smart Choice

The High Efficiency (HE) softener with patented technology delivers improved efficiency to reduce operating costs. The HE softener reduces hard water contaminants\*, reducing scale build-up that affect equipment performance. With the Culligan Smart Controller, available on the HE, the softener adjusts to influent water conditions and regenerates based on need. Customers can also monitor their water treatment system performance, consumable usage, and maintenance needs, at a single site or across multiple ones 24 hours a day.

The HE softener is part of the Culligan Matrix Solutions™ that combine durable and efficient equipment, systems experience, and technical experts who understand your unique requirements. From planning your system to installing your water treatment equipment, Culligan Matrix Solutions offer options that help deliver the quality of water to meet your needs. Contact Culligan today to learn more about the HE softener system.

\*contaminants are not necessarily in your water.

### Culligan Matrix Solutions Advantages:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Quick Delivery/Easy Installation
- Exclusive Culligan Advanced Electronics
  - Historical Operating Data
  - Alarm Recognitions
  - US Standard and Metric Readings
  - Remote Monitoring Options
  - Telemetry Options



**Pre-Treatment  
Solutions**



**Membrane  
Solutions**



**Deionization  
Solutions**



**Storage  
Solutions**



**Distribution  
Solutions**

## Warranty

Culligan's HE water softeners are backed by a limited 1-year warranty against defects in materials, workmanship, and corrosion. The plastic conditioner tank has a 5-year warranty. See printed warranty for details.†

Some localities have corrosive water. A softener cannot correct this condition, so its printed warranty disclaims liability for corrosion of plumbing lines, fixtures, or water-using equipment. If you suspect corrosion, your independently operated Culligan dealer has equipment to help control the problem.

† See printed warranty for details. Culligan will provide a copy of the warranty upon request.

## Examples of Softener Applications

- RO/DI Pretreatment
- Apartment buildings, assisted living facilities and hotels — Quality water for laundry, dishwashers, boilers
- Office buildings — For heating plant pretreatment, tenant convenience, general housekeeping
- Restaurants — For dishwashing, cleaning material savings, scale reduction
- Car washes — Quality results, detergent and water heating savings, scale reduction
- Grocery/Retail — Quality water for aesthetics and help extend equipment life

- Light industry — For process and make-up water, boiler and cooling system pretreatment, general housekeeping

## Standard Features

- Single or Multiple Tank Configurations — Hardness removal capacities up to 235,000 grains per tank
- Culligan's Smart Controller — More control over your equipment with programming and monitoring capabilities typically found in more expensive PLC controls a variety of add-on options for advanced instrumentation and communication let you easily customize the system to help meet your needs
- Regeneration initiation by choice or combination of time clock, flow meter or Aqua-Sensor
- Telemetric Capability
- Corrosion Resistant Positive Motor-Driven Regeneration Valve — Motor driven piston is reliable under server water conditions, resists dirt, iron and turbidity
- Corrosion Resistant Tanks — Made from fiberglass reinforced polyester
- Under-drain design enhances softening capacity and reduces pressure loss
- Multi-Popet Design — Allows for easy service and increases durability and valve life
- Flow Meter

- Electronic By-Pass - The softener can be by-passed electronically either from the unit or from the remote monitor and automatically goes back into service after a pre-set time.
- Internally blocked Progressive Flow Systems
- Tested and certified by WQA against NSF/ANSI 372, CSA B483.1 and NSF/ANSI Standard 61 for material requirements
- The Control Enclosure complies with UL 50/50E and UL 746C standards for a NEMA 3R Enclosure Rating

## Optional Features & Accessories

- Dubl-Safe™ Brine System for softeners — Positive overflow protection Automatic refill control is backed up by shutoff float valve to reduce chance of overflow
- Patented Aqua-Sensor® Control — Initiates regeneration only when needed based upon water hardness. Automatically adjusts to changes in raw water hardness and water consumption
- Smart Brine Tank Probe - monitors salt usage and communicates how much salt is left.
- Skid Mounted System
- Remote Display
- RS232, RS485, Modbus PLC Output

## System Specifications

Specification	US	Metric
Pipe Size, All Units	1.5"	
Maximum Operating Pressure	20–125 psig	135–860 kPa
Power Voltage Frequency Phase	24 50/60 Hz <sup>1</sup>	
Feed Water Temperature	33–120° F	0–48° C
Power Consumption	22 Watts	
Vacuum	None <sup>2</sup>	
Turbidity	5 NTU, max. <sup>3</sup>	
Chlorine	1 mg/L, max. <sup>3</sup>	
Iron	5 mg/L	

<sup>1</sup> 120 Volt/24 Volt CUL/UL listed Transformer Included.

<sup>2</sup> Tank warranty is void if subject to vacuum.

<sup>3</sup> See media specification for details.

<sup>4</sup> Influent Hardness upflow systems — limit 30 gpg

## HE Water Softener System

Model			Resin Qty. (ft <sup>3</sup> /L)	Flow Rates (gpm/lpm)		Tank Size*** (in./mm)	
Upflow	Downflow	Progressive Flow		Continuous*	Peak**	Softener	Brine****
HE 1.5 UF 060	HE-060	HE 1.5 PF 060	2	25.1	31.5	14 x 47	18 x 38
			56.6	95.0	119.2	356 x 1,194	457 x 965
HE 1.5 UF 090	HE-090	HE 1.5 PF 090	3	26.6	35.2	16 x 53	24 x 40
			85	100.7	133.2	406 x 1,346	610 x 1,016
HE 1.5 UF 120	HE-120	HE 1.5 PF 120	4	23.3	31.8	16 x 65	24 x 40
			113.3	88.2	120.4	406 x 1,651	610 x 1,016
HE 1.5 UF 150	HE-150	HE 1.5 PF 150	5	27.2	35.8	18 X 65	24 X 50
			141.6	103.0	135.5	457 X 1,651	610 X 1270
HE 1.5 UF 210	HE-210	HE 1.5 PF 210	7	28	37.4	21 X 62	24 X 50
			198.2	106.0	141.6	533 X 1,575	610 X 1,270

\*Flow rate at a 15 psi pressure loss.

\*\*Flow rate at a 25 psi pressure loss.

\*\*\*Dimensions are diameter by tank height.

\*\*\*\*Brine systems are optional.

Flow rates shown are per tank.

Low flow channelling (flow rates less than 0.5 gallons per minute per cubic foot of resin) may cause hardness leakage into effluent.

# Finally, an end-to-end solution from a single source.



## Place your commercial and industrial water treatment needs in the hands of a global leader.

For over 75 years, Culligan has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

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