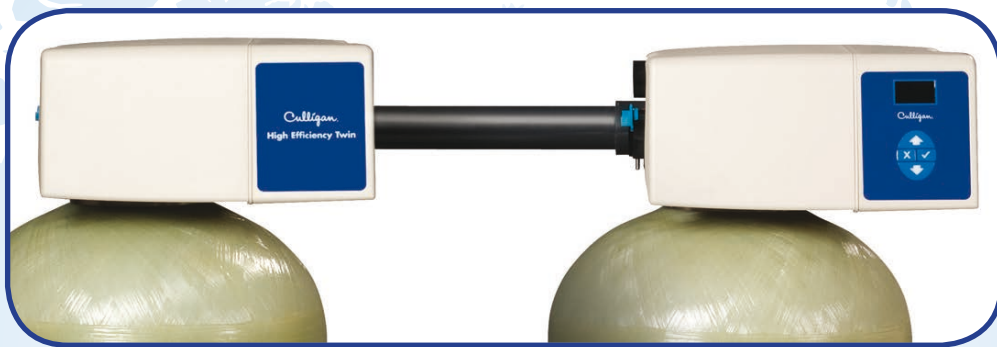




The world's most intelligent and truly efficient water softener

Culligan® HE Twin Softener Series



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



better water. pure and simple.

Culligan® MATRIX

SOLUTIONS™

Culligan® HE Twin Softener Series

The patented technologies found in the Culligan® HE softener series optimise salt, water and electricity consumption by up to 46% over traditional softeners*

Two Different Twin Configurations are Available.



**Duplex
Alternating
System**

The Culligan® HE Duplex Alternating Twin provides uninterrupted conditioned water 24 hours a day.

Two independent mineral tanks provide a continuous supply of soft water; when one tank is exhausted, the second tank takes over while the first regenerates.

The duplex alternating system benefits from upflow** proportional regeneration, which allows up to 24% higher capacity at the same salt dosage when compared to down flow systems.



**Duplex
Progressive
Flow**

With Culligan's patented Progressive Flow feature, you can size softeners based on average water usage, which helps reduce costs.

The feature is best suited for applications requiring intermittent/periodic high flow rates.

The Culligan® Smart Controller monitors water demand and brings the additional tank(s) online or offline as the flow demand changes. In this formation up to 6 Culligan HE softeners can be connected in series.

Exclusive Culligan Advanced Electronics allowing for features such as:

- Remote display and control
- Smart brine tank probe
- Telemetry options
- Historical operating data
- Alarm status

SOFTENER APPLICATIONS

- Hot and Cold water services
- Steam Boiler make up
- Cooling & humidifier system make up
- Process water
- Reverse Osmosis pre-treatment

MARKETS SERVED

- Industrial & Commercial
- Leisure
- Laundries
- Food & Beverage
- Car Washes
- Manufacturing
- Apartment Buildings and Hotels
- Restaurants

Just 1mm of scale can decrease efficiency within heating equipment by 10%!

Provides costs savings while being environmentally friendly

* 46% less versus a time clock regeneration softener.

** Upflow proportional regeneration currently only available on the Duplex Alternating System. Duplex Progressive flow units are downflow regeneration only.



**PRE-TREATMENT
SOLUTIONS**



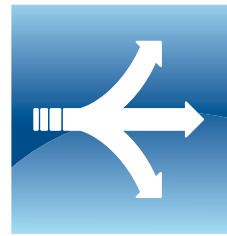
**MEMBRANE
SOLUTIONS**



**DEIONIZATION
SOLUTIONS**



**STORAGE
SOLUTIONS**



**DISTRIBUTION
SOLUTIONS**

STANDARD FEATURES

- Culligan's Smart Controller – More control over your equipment with programming and monitoring capabilities typically found in more expensive PLC controls. The unit is compatible with modern Building Management Systems, providing all essential data and alarms. The controller comes with a 5-year battery back-up with low-battery alarm preventing the loss of settings, and keeps the system functioning in the event of a power outage.
- Automatic bypass valve provides the convenience of bypassing the water softener from the softener itself or the remote display.
- Culligan's Dial-a-Softness® control lets you choose the hardness level by automatically blending mains and soft water.
- Exclusive Culligan® Soft-Minder® meter monitors daily water use and provides advanced system diagnostics.
- Culligan exclusive, corrosion resistant valve using motorised pistons that provide more reliability than traditional rotary valve systems.
- Multi-piston design of valve – allows for easy service and increases durability and valve life.
- 1" units come with high-impact Quadra-hull® resin tanks with a 4-layer reinforced design. Suitable for medical applications. 1.5" units come with corrosion resistant resin tanks made from fiberglass reinforced polyester.
- Long-lasting brine tank with corrosion-proof components and Dubl-Safe brine refill control ensures proper operation.
- All HE softeners use FDA approved Cullex® resin media assuring stability and long life.



OPTIONAL FEATURES & ACCESSORIES

- Smart Brine Tank Probe - monitors salt usage and communicates how much salt is left, also providing alarms should errors such as salt bridging occur.
- Culligan's remote display makes it possible to control and monitor the softener remotely up to 60-m away (where building conditions allow).
- Telemetry options – a modem can be fitted to alert Culligan if salt is needed or the softener needs service.
- RS232, RS485, Modbus PLC Output.
- Resin disinfection during regeneration to ensure high quality water is continuously provided to service.



CULLIGAN® HE WATER SOFTENERS SYSTEM

Softener model	Overall Dimensions w x d x h cm	Exchange Capacity m³ x °F @ Salt Dosage per Recharge per Tank	Salt Storage Capacity	Working Weight	Shipping Weight	Connection type & size inlet/outlet/ drain	Regeneration water peak flow to drain	Regeneration water volume to drain *
HE 60 TWIN 1"	152x61x153	226 @ 3,6 Kg 330 @ 7,3 Kg 401 @ 8,2 Kg	295 Kg	630 Kg	215 Kg	BSP 1"/1"/0.5"	1.2 m³/h	254 L o 0.25 m³
HE 90 TWIN 1"	162x61x185	343 @ 5,4 Kg 492 @ 10,9 Kg 589 @ 16,0 Kg	295 Kg	765 Kg	290 Kg	BSP 1"/1"/0.5"	1.2 m³/h	587 L o 0.59 m³
HE 60 TWIN 1.5"	147x61x153	214 @ 3,6 Kg 265 @ 5,4 Kg 395 @ 13,6 Kg	295 Kg	690 Kg	206 Kg	BSP 1.5"/1.5"/0.5"	1.2 m³/h	390 L o 0.39 m³
HE 90 TWIN 1.5"	173x61x153	343 @ 5,4 Kg 440 @ 8,2 Kg 621 @ 20,4 Kg	295 Kg	710 Kg	250 Kg	BSP 1.5"/1.5"/0.5"	1.2 m³/h	540 L o 0.54 m³
HE 120 TWIN 1.5"	173x61x188	505 @ 7,3 Kg 641 @ 10,9 Kg 887 @ 27,2 Kg	409 Kg	960 Kg	315 Kg	BSP 1.5"/1.5"/0.5"	1.2 m³/h	500 L o 0.50 m³
HE 150 TWIN 1.5"	203x77x155	602 @ 9,1 Kg 764 @ 13,6 Kg 977 @ 34,0 Kg	636 Kg	1560 Kg	450 Kg	BSP 1.5"/1.5"/0.5"	1.6 m³/h	575 L o 0.58 m³
HE 210 TWIN 1.5"	203x77x178	744 @ 12,7 Kg 1081 @ 19,1 Kg 1521 @ 47,6 Kg	636 Kg	1600 Kg	555 Kg	BSP 1.5"/1.5"/0.5"	2.6 m³/h	819 L o 0.82 m³

SYSTEM SPECIFICATIONS

System Specification	For the HE 1" models	For the HE 1.5" models
Service Flowrate @ pressure drop	2,3 m³/h @ 0,8 bar	6,4 m³/h @ 1 bar
Service Flowrate @ pressure drop	2,8 m³/h @ 1 bar	8,4 m³/h @ 1,7 bar
Operating pressure min/max	1.4 - 8.6 bar	1.7 - 8.3 bar
Operating water temperature range	0 - 49 °C	4.4 - 38 °C
Operating ambient temperature range	0 - 55 °C	0 - 55 °C
Supply Voltage	230/24V - 50/60 Hz	230/24V - 50/60 Hz
Power consumption	8.4 - 21.61 Watt	8.4 - 21.61 Watt
Minimum mainten- ance access to safely fill the brine tank	1 m	1 m
For proportional brining use	20 g salt/ m³ x °F	20 g salt/ m³ x °F

* Based on a backwash time of 10 minutes. The average time for complete regeneration is considered to be 70 minutes.

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



Place your industrial and commercial 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.

QUALITY SYSTEM CERTIFIED ACCORDING TO UNI EN ISO 9001:2008 NORM

CULLIGAN

40057 Cadriano di Granarolo dell' Emilia (BO) ITALY • Via Gandolfi, 6 • Tel. +39 051.60.17.111 • Fax +39 051.76.56.02 • culligan@culligan.it • www.culligan.it

Culligan reserves the right to change any technical or design specifications for the models shown in this brochure.

Culligan

better water. pure and simple.