Water Softeners

AVENEW

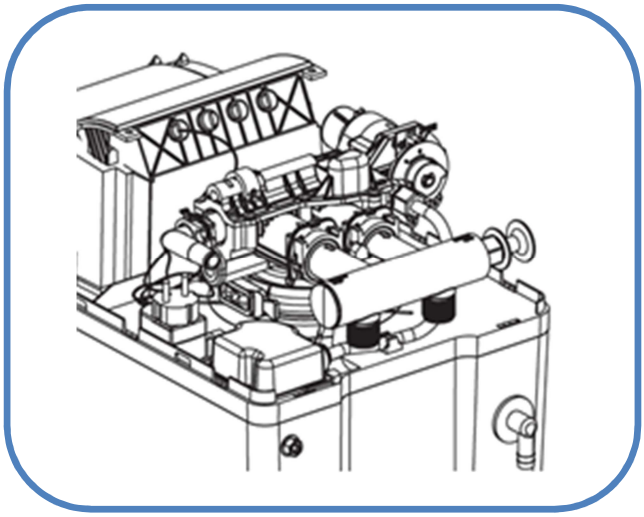
CE

M012-12 – Rev. 00 - 09/2017

Technical Sheet

The **AVENEW** water softener is designed to fit the smallest of spaces and be easily installed in any room of the house.
It consists of a single body, which includes the resin container and the salt container.
Made from top quality materials it features a clean but also refined design.

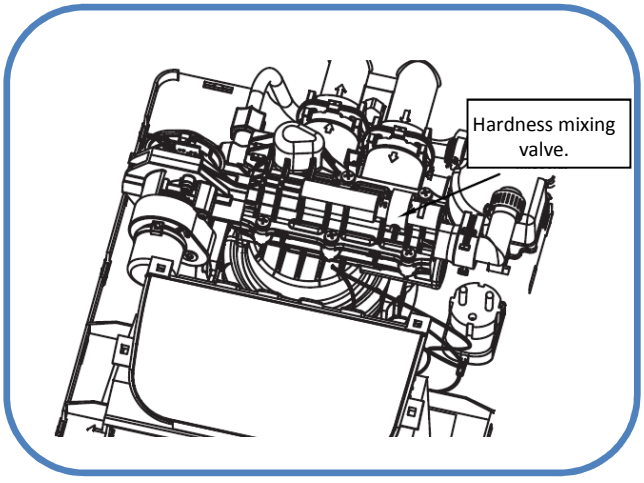
Specific for removing hardness (calcium and magnesium), by means of selected Cullex strong cation exchange resins in sodium cycle and suitable for contact with water for food use, normally regenerated with sea salt.
The time-operated salt container filling device has a brine valve with safety float and overflow fitting, for connecting to the drain, to prevent any possible spilling of water from the salt container.



The command system with motorized piston consists of a valve in anti-corrosion material, controlled by a high tech electronic control unit, that allows volumetric regeneration according to actual water consumption.
The display has intuitive icons that indicate: salt level, regeneration data, and other information about the water softener's operation.

Through the countercurrent regeneration process, it saves considerably on water, salt and power consumption.

The control valve has a bypass for excluding the water softening system from the water mains.
With the bypass it is possible to use hard water when required, without wasting the availability of softened water, thereby saving on salt consumption.



The control valve has a hardness mixing valve. With this valve it is possible to adjust the desired residual hardness for the service.

All models are equipped with a system for automatic disinfection of the resins at each regeneration.

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SAFETY WARNINGS

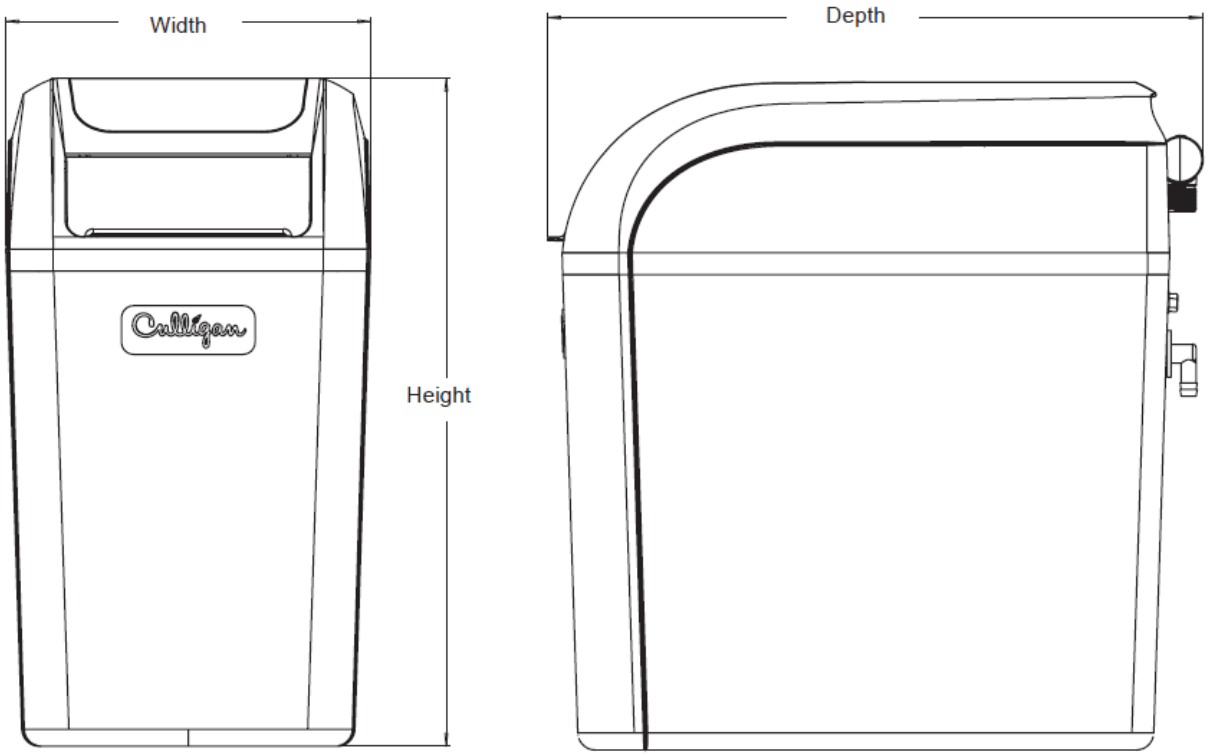
- **Equipment for the treatment of potable water, conforming with the requirements of Min. Decree 25/2012.**
- Refer to the technical manual supplied with the system for all information and instructions.
- **The water softener must be installed by qualified personnel, in compliance with Min. Decree 37/08, the best state of the art and in conformity with the instructions given in the technical manual.**
- **ATTENTION: This equipment requires regular maintenance to ensure the required potability of the treated drinking water and to maintain the improvements as declared by the manufacturer.**
- Any handling, installation, maintenance and repair work on the systems must be carried out by qualified personnel in compliance with Min. Decree 37/08, the best state of the art and in conformity with the instructions given in the technical manual.
- The place where the systems, auxiliary material and consumables are located must comply with the storage, use and safety requirements of the current regulations.
- The water produced by each unit must only be used for its specifically intended purpose. Culligan declines any liability for the consequences of improper use of the water produced by its equipment.
- Any operation fault in the systems must be promptly reported to the Culligan Service Center. Culligan declines any liability for the consequences of prolonged use of a faulty system.
- When necessary, the choice, dosing and handling of chemicals must be done by professionally qualified personnel, complying with the instructions given by Culligan and in the Safety Data sheets.
- Waste or consumable materials from the water treatment systems must be disposed of in accordance with the current regulations.
- This equipment can be used by children aged 8 years and over, and by people with reduced physical, sensory and mental capabilities or without experience and expertise, only if they are supervised or provided with instructions on its correct and safe use and are aware of the potential hazards. Children must not play with this equipment, adult supervision is needed to make sure this does not happen. Basic cleaning and maintenance cannot be carried out by a child without the supervision of an adult.
- Do not place the device on top of other electrical appliances.
- Position the device away from heat sources.
- In case of an anomaly (water leaks, etc.), disconnect the power supply and close the water inlet shutoff valve.
- Culligan also declines any liability in the following specific cases:
  - improper use of the device;
  - use contrary to the specific national regulations (power and water supplies, installation and maintenance);
  - installation without following the instructions supplied in this manual;
  - power and water supply faults (electrical discharges – voltage rushes – water supply overpressure – low water pressure);
  - unsuitable ambient operating temperature;
  - inadequate maintenance;
  - unauthorized work or modifications;
  - use of non-original replacement parts or not specific for the model;
  - total or partial non-compliance with the instructions;
- For **anything** not specified, the operator must rely on common sense when using the device.

INSTALLATION

The water softener must be installed by qualified personnel, in accordance with the best state of the art and the instructions given in the technical manual.

OVERALL DIMENSIONS

Model	Height	Width	Depth
9 L	549 mm (22 in)	301 mm (12 in)	540 mm (21 in)
20 L	1080 mm (43 in)		



MAINTENANCE

In order to keep the softener in good working order, it is necessary to check the unit at least once a year. In special conditions (i.e.: raw water with lot of turbidity and chlorine, or very hard raw water) a more frequent check is necessary. If the unit has been idle for a long period, contact the Culligan Service Center for a general check before using it again.

In case of prolonged non-use of the system, it is necessary to call the Culligan Service Center, which will carry out a general check of the water softener before it is put back into service.

CLEANING THE WATER SOFTENER

Use non-abrasive detergents and hot water only to clean the exterior of water softener components. Never use products containing acids.

SALT

Use only Culligan quality salt. Do not use cooking, fine or rock salt, or any other type. Water softeners using sodium chloride for regeneration add sodium to the water. Persons on low-salt diets should consider the added sodium as part of their overall sodium intake. Even when using Culligan quality salt, the container must be occasionally cleaned to remove impurities that may build up on the bottom and thus impair softener efficiency. Cleaning can be performed by your local Culligan dealer, or by following the instructions given in the paragraph "Cleaning the salt container" below.

ATTENTION: *Water softeners that use sodium chloride for regeneration add sodium to the water. Persons on a low-salt diet must take this into account in the calculation of their daily sodium intake; in these cases potassium chloride (KCl) can be used for regeneration.*

WARRANTY

With regard to any possible defectiveness of this system, only the warranty provided under the relevant terms of conditions of sale of Culligan shall apply. Please remember that the warranty will be void if the system and/or its parts are tampered with or in case of damage caused by power supply overvoltages. The warranty will be void in case of conditions or operation not envisaged for normal use of the system.

TECHNICAL SPECIFICATIONS

Technical specifications	Cyclic capacity for regeneration				Cullex Resin	Cullsan Mineral	Rated Service Flow @ Pressure drop		Fitting In/Out M	Salt Storage Capacity
	Minimum		Maximum							
	$m^3x°f$	Salt Kg	$m^3x°f$	Salt Kg	Liters	kg	Lt/min.	bar	Ø	kg
AVENEW 9 Lt	23	0.5	50	2.5	9	3.6	29	1	¾"	25
AVENEW 20 Lt	91	1.5	135	5	20	5.4	27	1	¾"	75

Capacity setting (Influent = 34.2°f)*

Operating parameters: 0.66 m^3/h at 3.5 bar

Salt dosage kg	Capacity 9 Liters		Capacity 20 Liters	
	$m^3x°f$	Liters	$m^3x°f$	Liters
0.5	23	665		
1	32	928		
1.5	41	1191	91	2644
2	45	1323	101	2961
2.5	50	1455	112	3278
3			123	3594
3.5			134	3911
4			134	3919
4.5			134	3928
5			135	3936

Notes:

- *Transformer: 230 V AC/50 Hz – Output electric power: 12 V DC, 1.5 m*
- *Operating temperature: minimum 4.4 °C – maximum 49 °C.*
- *Operating pressure* Min. – Max.: 1.4 – 8 bar.*

* In order to optimize operation of the device during regeneration, an operating pressure of 4.5 Bar is suggested. With higher pressure values > 5 bar, install a pressure reducer.

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