



**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

**The Culligan Side Mount (CSM™) Series  
 WATER SOFTENER SYSTEM**

Efficient and Scalable Heavy-Duty Water  
 Treatment System

Use Culligan equipment to help meet the highest standard of water quality at your facility. The Culligan Side Mount heavy-duty softener reduces hard water contaminants\*, even for large flow volume applications, reducing scale buildup that can affect equipment performance. The Culligan-exclusive Smart Controller allows you to efficiently set up and manage your water treatment. Using optional accessories, monitor water usage data, such as the flow rate and volume, and regenerate the system as needed, saving resources and money.

The CSM 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 CSM softener system.

**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

\*Contaminants may not necessarily be in your water.



# SYSTEM SPECIFICATIONS

## Warranty

Culligan's CSM water softeners are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, softener tanks are warranted for a period of 5 years. †

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

## System Specifications

Specification	US	Metric
Inlet Pressure (dynamic)	30–100 psig	210–690 kPa
Power Voltage Frequency Phase	120 Volts 50/60Hz	
Feed Water Temperature	40–120° F	4–49° C
Turbidity Chlorine Iron	5 NTU, max. <sup>2</sup> 1 mg/L, max. <sup>2</sup> 5 mg/L, max. <sup>2</sup>	

<sup>1</sup> 120 Volt/24 Volt CUL/UL listed Transformer Included.  
<sup>2</sup> See media specification for details.



Tested and Certified by WQA to NSF/ANSI 372

## Examples of Softener Applications

- Food and Beverage—Improved taste
- Educational Facilities—Boiler and cooling tower make-up water for scale reduction and improved energy costs
- Restaurants—For dishwashing, cleaning material savings, scale reduction
- RO Softener/DI Pretreatment
- Car washes—Quality results, detergent and water heating savings, scale reduction
- Apartment buildings, assisted living facilities and hotels—Quality water for laundry, dishwashers, boilers
- Grocery/Retail—Quality water for aesthetics and help extend equipment life

## Standard Features

- Single, Multiple Tank Configurations – Hardness removal capacities up to 900,000 grains per tank Continuous flow rates up to 201 gpm 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
- Telemetric Capability
- Regeneration initiation by choice or combination of time clock, meter or Aqua-Sensor® inputs
- Culligan's Multiport Valve – Our guided perimeter-designed diaphragm valves are built with reinforced rubber components to resist damage from particulates in the water and ensure smooth operation free of water hammer. The inside and outside surfaces of the valve are electro-coated to deter

## Optional Features & Accessories

- Corrosion resistant brine system construction for long life
- Skid Mounted – fully pre-piped and wired systems for single point field utility connection of inlet, outlet, drain and power supply
- Patented Progressive Flow – Culligan's Smart Controller can monitor flow demands bringing additional softening tanks on-line or offline as flows increase or decrease
- ASME Code Tanks
- Brine Reclaim – reduces operating costs
- Patented Aqua-Sensor® Control – initiates regeneration only when needed based upon water hardness, automatically adjusts to changes in raw water hardness and water consumption
- Flow Measuring Devices – are available for direct connection to the Culligan Smart Controller for volume based regeneration initiation
- Remote Display
- RS232, RS485, Modbus PLC Output

corrosion. The valve was designed with serviceability in mind; accessibility for installation and maintenance won't be an issue.

- Corrosion resistant tanks – Made of low carbon steel with epoxy interior lining and finish coat painted exterior

## CSM Water Softener System

Model	Resin Qty. (ft <sup>3</sup> /L)	Pipe Size (in/mm)	Flow Rates (gpm/lpm)		Tank Size*** (in/mm)	
			Continuous*	Peak**	Softener	Brine****
150-2	5	2	67	94	20 x 54	24 x 50
	142	50.8	253.6	355.8	508 x 1,372	610 x 1,270
210-2	7	2	76	102	24 x 54	24 x 50
	198	50.8	287.7	386.1	610 x 1,372	610 x 1,270
300-2	10	2	84	112	30 x 60	30 x 50
	283	50.8	317.9	423.9	762 x 1,524	762 x 1,270
300-3	10	3	152	210	30 x 60	30 x 50
	283	76.2	575.3	794.9	762 x 1,524	762 x 1,270
450-2	15	2	79	106	30 x 60	30 x 50
	425	50.8	299	401.2	762 x 1,524	762 x 1,270
450-3	15	3	135	192	30 x 60	30 x 50
	425	76.2	511	726.7	762 x 1,524	762 x 1,270
600-2	20	2	94	125	36 x 60	39 x 48
	566	50.8	355.8	473.1	914 x 1,524	991 x 1,219
600-3	20	3	183	252	36 x 60	39 x 48
	566	76.2	692.7	953.8	914 x 1,524	991 x 1,219
750-2	25	2	97	129	42 x 60	42 x 48
	708	50.8	367.1	488.3	1,067 x 1,524	1,067 x 1,219
750-3	25	3	201	267	42 x 60	42 x 48
	708	76.2	760.8	1010.6	1,067 x 1,524	1,067 x 1,219
900-2	30	2	96	127	42 x 60	42 x 48
	850	50.8	363.4	480.7	1,067 x 1,524	1,067 x 1,219
900-3	30	3	193	259	42 x 60	42 x 48
	850	76.2	730.5	980.3	1,067 x 1,524	1,067 x 1,219

\*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 channeling (flow rates less than 0.5 gallons per minute per cubic foot of resin) may cause hardness leakage into effluent.  
CSM product formerly sold under the Bruner label.



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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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