



#### 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 HEAVY-DUTY WATER FILTER SYSTEM

High-Volume Filtration for Commercial and Industrial Water Systems

When you want to produce high quality water in a demanding and variable environment, trust Culligan® filters. The Culligan Side Mount (CSM) heavy-duty filter reduces contaminants\* and solids that affect water quality and equipment efficiency. The Culligan®-exclusive Smart Controller makes it easy for you to set up and manage your water treatment. Using optional accessories such as an automatic timer or sensors, monitor the system and filter as needed without constant supervision, saving resources and money.

The CSM heavy-duty commercial filter is part of the Culligan® Commercial and Industrial 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® Commercial and Industrial 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® COMMERCIAL & INDUSTRIAL 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.



**PRE-TREATMENT SOLUTIONS.**

# SYSTEM SPECIFICATIONS

## CSM Water Filter System

CSM Depth Filters Family Group*						
Model	Service Flow Rates <sup>1</sup>		Backwash Flow <sup>2</sup> (gpm/lpm)	Pipe Size (in/mm)	Media Qty. (lbs/kg)	Filter Tank Size (in/mm)
	Normal	Peak				
	gpm @ psi drop lpm @ kPa drop	gpm @ psi drop lpm @ kPa drop				
CSM-202D	22 @ 6	33 @ 12	30	2	571	20 x 54
	83.3 @ 41.4	124.9 @ 13.8	113.6	50.8	259	508 x 1,372
CSM-242D	32 @ 5	48 @ 9	45	2	830	24 x 54
	121.1 @ 34.5	181.7 @ 62	170.3	50.8	376	610 x 1,372
CSM-302D	50 @ 9	74 @ 17	75	2	1244	30 x 60
	189.3 @ 62	280.1 @ 117	283.9	50.8	564	762 x 1,524
CSM-362D	71 @ 11	107 @ 23	105	2	1765	36 x 60
	268.7 @ 6.9	405 @ 159	397.4	50.8	801	914 x 1,524
CSM-422D	97 @ 15	145 @ 28	150	2	2488	42 x 60
	367.1 @ 103.4	548.8 @ 193	567.8	50.8	1129	1,067 x 1,524
CSM-423D	97 @ 6	145 @ 11	150	3	2488	42 x 60
	367.1 @ 41.4	548.8 @ 76	567.8	76.2	1129	1,067 x 1,524

CSM Carbon Filters Family Group*						
Model	Service Flow Rates		Backwash Flow <sup>3</sup> (gpm/lpm)	Pipe Size (in/mm)	Media Qty. (ft <sup>3</sup> /m <sup>3</sup> )	Filter Tank Size (in/mm)
	Taste Odor & Organic Removal <sup>1</sup>	Dechlorination <sup>2</sup>				
	gpm @ psi drop lpm @ kPa drop	gpm @ psi drop lpm @ kPa drop				
CSM-242R	16 @ 3	31 @ 6	30	2	8	24 x 54
	60.6 @ 20.7	117.3 @ 41.4	113.6	50.8	0.227	610 x 1,372
CSM-302R	25 @ 4	49 @ 7	45	2	12	30 x 60
	94.6 @ 27.6	185.5 @ 48.3	170.3	50.8	0.34	762 x 1,524
CSM-362R	35 @ 3	71 @ 11	70	2	18	36 x 60
	132.5 @ 20.7	268.7 @ 6.9	265	50.8	0.51	914 x 1,524
CSM-422R	48 @ 4	96 @ 13	95	2	24	42 x 60
	181.7 @ 27.6	363.4 @ 20.7	359.6	50.8	0.68	1,067 x 1,524

CSM Greensand / Cullisorb Filter Family Group*						
Model	Service Flow Rates <sup>1</sup>		Backwash Flow <sup>2</sup> (gpm/lpm)	Cullisorb Media Qty. <sup>3</sup> (ft <sup>3</sup> /ltr)	Pipe Size** (in/mm)	Tank Size *** (in / mm)
	Manganese and Iron (oxidized or soluble) removal					
	gpm @ psi drop lpm @ kPa drop					
CSM-202G	22 @ 6		33	4.5	2"	20 x 54
	83.3 @ 41.4		124.9	127	50.8	508 x 1,372
CSM-242G	32 @ 5		48	6.5	2"	24 x 54
	121.1 @ 34.5		181.7	184	50.8	610 x 1,372
CSM-302G	50 @ 9		74	10	2"	30 x 60
	189.3 @ 62		280.1	283	50.8	762 x 1,524
CSM-362G	71 @ 11		107	14	2"	36 x 60
	268.7 @ 6.9		405	396	50.8	914 x 1,524
CSM-422G	97 @ 15		145	19	2"	42 x 60
	367.1 @ 103.4		548.8	538	50.8	1,067 x 1,524
CSM-423G	97 @ 6		145	19	3"	42 x 60
	367.1 @ 41.4		548.8	538	76.2	1,067 x 1,524

## Warranty

Culligan's CSM water filters are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, tanks carry a limited 5-year warranty.†

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



Tested and Certified by WQA to NSF/ANSI 372  
CSM Greensand/Cullisorb Filters are not tested or certified by WQA

## System Specifications

Specification	US	Metric
Inlet Pressure (dynamic)	30–100 psig	207–690 kPa
Power Voltage Frequency Phase	120 Volts 50/60Hz	
Feed Water Temperature	40–120° F	4–49° C

<sup>1</sup> 120 Volt/ 24 Volt CuL/UL listed transformer included.

## Examples of Filter Applications

- Food and Beverage—Improved taste and increased cost savings
- Drinking Water—Reduces turbidity and chlorine; improves taste and clarity
- Boilers—Turbidity reduction, reduce sludge blowdown
- Light Industry Processes—Reduces particulate matter
- Pretreatment—For softeners, RO's and DI systems
- Vehicle Wash—Turbidity reduction
- Grocery / Retail—Quality water for aesthetics and help extend equipment life

## Standard Features

- Single or Multiple Tank Configurations
- 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, flow meter or differential pressure switch
- Carbon Filters—For reduction of organics (flow rates up to 48 gpm per tank), or chlorine (flow rates up to 96 gpm per tank)
- Depth Filters—Flow rates up to 145 gpm per tank
- 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 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

## Optional Features & Accessories

- Patented Progressive Flow—Culligan's Smart Controller can monitor flow demands, bringing additional tanks on-line or off-line as flows increase or decrease
- Differential Pressure Switch
- ASME Code Tanks
- Gauge Packages—Pressure gauges provided for mounting at the inlet and outlet connection
- Separate source regeneration kits
- Skid Mounted—Fully pre-piped and wired systems for single point field utility

\* Each Family Group includes the following control valve options: Single downflow, Multi-tank downflow

\*\* Depending on choice of 1.5" or 2" flow adapter

<sup>1</sup> Service flow rates are based on 2" flow adapter and may be slightly lower when using the 1.5" flow adapter:

- Normal (10 gpm/ft<sup>2</sup> - 24 m<sup>3</sup>/hr/m<sup>2</sup>) - Best quality effluent at specified flow. Lowest pressure loss. Recommended for suspended solids loads up to 20 ppm.

- Peak (15 gpm/ft<sup>2</sup> - 37 m<sup>3</sup>/hr/m<sup>2</sup>) - Very good quality effluent at specified flow. Increased pressure loss. Recommended for suspended solids loads up to 10 ppm.

<sup>2</sup> Backwash flow rates are based on 12-14 gpm/ft<sup>2</sup> (29-34 m<sup>3</sup>/hr/m<sup>2</sup>) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature.

<sup>3</sup> Service flow rates are based on 2" flow adapter and may be slightly lower when using the 1.5" flow adapter:

- Taste, odor & organic removal are based on 5 gpm/ft<sup>2</sup> (12 m<sup>3</sup>/hr/m<sup>2</sup>)

- Dechlorination are based on 10 gpm/ft<sup>2</sup> (24 m<sup>3</sup>/hr/m<sup>2</sup>)

<sup>4</sup> Backwash flow rates are based on 10 gpm/ft<sup>2</sup> (24 m<sup>3</sup>/hr/m<sup>2</sup>) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature or the type of carbon used.

<sup>5</sup> Systems designed with Greensand/Cullisorb B bed depth of 24" (610mm)

**NOTE:** Operational, maintenance and replacement requirements are essential for this product to perform as advertised. Specifications shown are for single models. Also available in multiple tank configurations. All pressure drop figures are based on new filter media and a water temperature of 60°F. Depth filters are capable of 10 microns effluent water quality, whereas all other filter types are capable of 40 micron effluent water quality.

For over 80 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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