# Culligan



#### **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® Top Mount Series WATER FILTER SYSTEM

Superior Flow. Superior Savings. Superior Water for Commercial and Industrial Needs.

The Culligan® Top Mount (CTM) Series filter models use the latest control valve technology to offer superior flow rates and long-lasting performance for commercial and industrial applications. The top-mounted control minimizes the system's footprint and is constructed of a corrosion-resistant, heavy duty plastic tested in extreme operating conditions to service all types of problem water (high chloramines, heavy iron, etc.). The CTM valve and system also carry certification for testing and passing the highest drinking water standards. The CTM includes integrated vacuum breakers and pressure relief valves to protect the system in addition to possessing an integrated flow meter for highly accurate reporting. Each CTM operates with a Culligan® Smart Controller which provides users access to the Culligan® technology platform of intercommunicating systems, remote monitoring and water and energy saving accessories.

The CTM Filter Series forms part of the Culligan® Commercial and Industrial product portfolio that has been offering durable, high-quality equipment to the world for over 80 years. For those customers who need a more customized solution Culligan's application engineering and project management team will provide professional, technical expertise through the initial project scope to the expedited delivery and start-up process. Our expansive dealership network will provide aftermarket support and technical expertise and trusted service to users in every market. Contact Culligan® today to learn more about the CTM and other water treatment products.

#### **CULLIGAN® ADVANTAGES:**

- Global Product Platform with Flexible Modular Configurations
- Simple Integration into Existing Systems
- Quick Delivery & Installation
- Exclusive Culligan Features
- Universal Electronic Controller
- Progressive Flow and Other Operational Cost-Saving Technology
- Remote Monitoring Capabilities with Multiple Alarm Recognitions
- Cloud Storage for Historical Data
- U.S. Standard and Metric Readings with Multiple Interface Languages for Programming Interface











# SYSTEM SPECIFICATIONS

#### Culligan® Top Mount (CTM) Water Filter System

CTM Depth Filter Family Group*						
<b>M</b> ode <b>l</b>	Service Flow Rates <sup>1</sup>					
	Normal	Peak	Backwash Flow² (gpm/lpm)	Media Qty. (lbs/kg)	Pipe Size** (in/mm)	Tank Size*** (in / mm)
	gpm @ psi drop <b>l</b> pm @ kPa drop	gpm @ psi drop lpm @ kPa drop				
CTM- DF21	24@5	36 @ 10	30	615	1.5" & 2"	21 x 62
	90.8 @ 34.5	136.3 @ 69	114	280	38 & 51	533 x 1575
CTM- DF24	32 @ 5	48@9	48	870	1.5" & 2"	24 x 72
	121 @ 34.5	182 @ 62	182	395	38 & 51	610 x 1829
CTM- DF30	50 @ 7	74 @ 11	70	1230	1.5" & 2"	30 x 72
	190 @ 48.3	280 @ 76	265	558	38 & 51	762 x 1829
CTM- DF36	71 @ 10	107 @ 19	90	1895	1.5" & 2"	36 x 72
	269 @ 69	405 @ 131	341	859	38 & 51	914 x 1829

CTM Carbon Filter Family Group*						
Model	Service Flow Rates <sup>1</sup>					
	Taste & Odor Removal	Dech <b>l</b> orination	Backwash Flow <sup>2</sup>	Media Qty. (ft³/ <b>l</b> tr)	Pipe Size** (in/mm)	Tank Size  *** (in / mm)
	gpm @ psi drop lpm @ kPa drop	gpm @ psi drop lpm @ kPa drop	(gpm/lpm)			
CTM- CF21	12 @ 1.5	24 @ 4	20	6	1.5" & 2"	21 x 62
	45 @ 10.3	91 @ 28	76	170	38 & 51	533 x 1575
CTM- CF24	16 @ 2	31 @ 4	30	8	1.5" & 2"	24 x 72
	61 @ 13.8	117 @ 28	114	227	38 & 51	610 x 1829
CTM- CF30	25@3	49@6	48	12	1.5" & 2"	30 x 72
	95 @ 20.7	186 @ 41	182	340	38 & 51	762 x 1829
CTM- CF36	35@3	71 @ 9	70	18	1.5" & 2"	36 x 72
	132 @ 20.7	269 @ 62	265	510	38 & 51	914 x 1829

CTM Greensand / Cullsorb Filter Family Group*						
	Service Flow Rates <sup>1</sup>		Cullsorb Media Qty. <sup>5</sup> (ft³/ltr)	Pipe Size** (in/mm)	Tank Size *** (in / mm)	
Model	Manganese and Iron (oxidized or soluble) removal	Backwash F <b>l</b> ow² (gpm/				
	gpm @ psi drop lpm @ kPa drop	<b>l</b> pm)				
CTM- GF21	12 @ 5	30	5	1.5" & 2"	21 x 62	
	45 @ 10.3	114	142	38 & 51	533 x 1575	
CTM- GF24	16 @ 2	48	6.5	1.5" & 2"	24 x 72	
	61 @ 13.8	182	184	38 & 51	610 x 1829	
CTM- GF30	25 @ 3	70	10	1.5" & 2"	30 x 72	
	95 @ 20.7	265	283	38 & 51	762 x 1829	
CTM- GF36	35 @ 3	90	14	1.5" & 2"	36 x 72	
	132 @ 20.7	341	396	38 & 51	914 x 1829	

- Each Family Group includes the following control valve options: Single downflow, Multi-tank downflow Depending on choice of 1.5" or 2" flow adapter Service flow rates are based on 2" flow adapter and may be slightly lower when using the 1.5" flow adapter:
- Normal (10 gpm/ft² 24 m³/hr/m²) Best quality effluent at specified flow. Lowest pressure loss. Recommended for suspended solids loads up
- Peak (15 gpm/ft² 37 m³/hr/m²) Very good quality effluent at specified flow. Increased pressure loss. Recommended for suspended solids
- Backwash flow rates are based on 12–14 gpm/ft² (29–34 m³/hr/m²) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature.

  Service flow rates are based on 2" flow adapter and may be slightly lower when using the 1.5" flow adapter:

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

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

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

  Backwash flow rates are based on 10 gpm/ft<sup>2</sup> (24 m<sup>2</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
- Systems designed with Greensand/Cullsorb 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.



## Warranty

Culligan's CTM Water Filters are backed by a limited 2-year warranty against defects in material, workmanship and corrosion. In addition, softener tanks are warranted for a period of 5 vears.†

† 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)	35–125 psig	240–860 kPa	
Power Voltage Frequency	120 Volts <sup>1</sup> 50/60Hz		
Feed Water Temperature	40–120° F	4-49° C	
Vacuum	None <sup>2</sup>	None <sup>2</sup>	
Turbidity Chlorine Iron	5 NTU, max. <sup>3</sup> 1 mg/L, max. <sup>3</sup> 5 mg/L, max. <sup>3</sup>		

- 120 Volt/24 Volt CUL/UL listed Transformer Included.
- FRP tank warranty is void if subject to vacuum See media specification for details.

# **Examples of Filter 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, and 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
- Light industry For process and make-up water, boiler and cooling system pretreatment, general housekeeping
- Office buildings For heating plant pretreatment, tenant convenience, general housekeeping

# **Standard Features**

- Single or multiple tank configurations available
- Corrosion resistant control valve body certified to NSF safe drinking water standards
- Integrated flow meter, vacuum breaker and pressure relief valve
- Backwash initiation based on either time clock, flow meter or differential pressure inputs
- Telemetric data capabilites with remote monitoring
- No special tools required for servicing
- · Robust piston-valve technology uses retained, radial seals in the body for improved longevity and reliability. Ideal for challenging water conditions
- Control complies with CUL, CE, UL 50/50E and UL 746C standards for NEMA 3R enclosure rating

#### **Optional Features & Accessories**

- 1.5" or 2" Flow adapters are available to provide every CTM unit the flexibility to use different inlet pipe sizes with minimal impact to flow rates
- Patented Progressive Flow Culligan's Smart Controller can monitor flow demands bringing additional filter tanks on-line or offline as flows increase or decrease
- Differential pressure switch and pressure gauge packages available for mounting at inlet and outlet connection
- Remote Display
- RS232, RS485, Modbus PLC Output

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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Culligan® reserves the right to change the specifications referred to in this literature at any time, without prior notice.