



# The Culligan Hi-Flo<sup>®</sup> 50 Series Industrial Water Filter System



## EXAMPLES OF 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

## Durable High-Volume Water Filtration for Industrial Applications

The Culligan Hi-Flo 50 Filter reduces contaminants\* and solids that affect equipment efficiency and water quality. Configure the system based on your requirements, adding tanks and instrumentation as your usage increases. Use the Culligan-exclusive Smart Controller to easily manage and control your filtering options. Save time and effort with an automatic timer or sensors that reliably monitor your water usage and quality without constant supervision.

The Hi-Flo 50 industrial water filter 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. Your investment in treated water pays off when you work with the best equipment and people. Contact Culligan today to discuss your water treatment options.

\*contaminants may not necessarily be in your water

## 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



**Pre-Treatment  
Solutions**



**Membrane  
Solutions**



**Deionization  
Solutions**



**Storage  
Solutions**



**Distribution  
Solutions**

## Warranty

Culligan's Hi-Flo 50 water filters are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, filter tanks are warranted for a period of 5 years.†

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

## System Specifications

Specification	US	Metric
Inlet Pressure (dynamic)	30-100 psig	210-690 kPa
Power Voltage Frequency Phase	120 VAC/24 VAC <sup>1</sup> 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

- Pretreatment — For water softeners, reverse osmosis and deionization systems
- Boilers — Turbidity reduction, reduce sludge blowdown
- Drinking Water — Turbidity reduction, chlorine reduction, improves taste and clarity
- Food And Beverage — Improved taste
- Industrial Processes — Reduces particulate matter
- Vehicle Wash — Turbidity reduction
- Office buildings — For heating plant pretreatment, tenant convenience, general housekeeping

## 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, meter or pressure differential switch
- Carbon Filters — For reduction of organics (flow rates up to 98 gpm), or chlorine (flow rates up to 196 gpm)
- Depth Filters — Flow rates up to 295 gpm
- Side-Mounted Valve Harness — Guided perimeter designed diaphragm valves are smooth operating and free of water hammer, all valve parts are easily accessible in the design for ease of service
- Corrosion resistant tanks — Made of low carbon steel with epoxy interior lining and finish coat painted exterior

## Optional Features & Accessories

- 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 tanks on-line or offline as flows increase or decrease
- ASME Code Tanks
- Flow Measuring Devices — Available for volume based regeneration initiation
- Differential Pressure Switch
- Gauge Packages — Pressure gauges provided for mounting at the inlet and outlet connection
- Remote Display
- RS232, RS485, Modbus PLC Output

## Hi-Flo 50 Water Filter System

Model	Depth Filters					
	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 gpm @ psi drop lpm @ kPa drop	Peak gpm @ psi drop lpm @ kPa drop				
HD-483	126 @ 5	189 @ 10	188	3	4280	48 x 60
	476.9 @ 34.5	715.4 @ 69	711.6	76.2	1941	1,219 x 1,524
HD-544	159 @ 5	239 @ 8	210	4	5500	54 x 60
	601.8 @ 34.5	904.6 @ 55.2	794.9	101.6	2495	1,372 x 1,524
HD-604	196 @ 4	295 @ 10	270	4	6930	60 x 60
	741.9 @ 27.6	1116.6 @ 69	1022	101.6	3143	1,524 x 1,524

<sup>1</sup> Service flow rates are based on:

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 and greater than 300 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 < 300 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.

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.

Model	Carbon Filters					
	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> gpm @ psi drop lpm @ kPa drop	Dechlorination <sup>2</sup> gpm @ psi drop lpm @ kPa drop				
HR-4825	63 @ 4	126 @ 15	136	2.5	32	48 x 60
	238.5 @ 27.6	476.9 @ 103.4	514.8	63.5	0.906	1,219 x 1,524
HR-543	80 @ 6	159 @ 18	160	3	40	54 x 60
	302.8 @ 41.4	601.8 @ 124.1	605.6	76.2	1.133	1,372 x 1,524
HR-603	98 @ 1	196 @ 12	210	3	48	60 x 60
	370.9 @ 6.9	741.9 @ 13.8	794.9	76.2	1.359	1,524 x 1,524

<sup>1</sup> Service flow rates for taste, odor & organic removal are based on 5 gpm/ft<sup>2</sup> (12 m<sup>3</sup>/hr/m<sup>2</sup>).

<sup>2</sup> Service flow rates for dechlorination are based on 10 gpm/ft<sup>2</sup> (24 m<sup>3</sup>/hr/m<sup>2</sup>).

<sup>3</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.

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 micron effluent water quality, whereas all other filter types are capable of 40 micron effluent water quality.

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



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

For over 70 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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