



The Culligan® High Efficiency (HE) Series WATER FILTER SYSTEM

High-Quality Filtered Water At Your Fingertips.

The High Efficiency (HE) filter with patented technology delivers improved efficiency by reducing contaminants* that affect equipment performance and durability. With the Culligan® Smart Controller, available on the HE, customers can set-up a single or multiple tank system that adjusts to flow demand. Customers can also monitor their water treatment system performance, consumable usage, and maintenance needs, at a single site or across multiple ones 24 hours a day.

The HE 1.5 filter is part of the Culligan® Commercial & 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® offer options that help deliver the quality of water to meet your needs. Contact Culligan® today to learn more about the HE filter system.

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

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.



SYSTEM SPECIFICATIONS

Culligan® High Efficiency (HE) Water Filter System

HE Depth Filters Family Group*							
Model		Service Flow Rates ¹		Backwash Flow ² (gpm/lpm)	Pipe Size (in/mm)	Media Qty. (lbs/kg)	Filter Tank Size (in/mm)
		Normal	Peak				
Single Units	Progressive Flow	gpm @ psi drop lpm @ kPa drop	gpm @ psi drop lpm @ kPa drop				
HE DF-12	HE 1.5 PF DF-12	8 @ 3	12 @ 5	10	1.5	180	12 x 52
		30.3 @ 20.7	45.4 @ 34.5	37.9	38.1	82	305 x 1,321
HE DF-14	HE 1.5 PF DF-14	11 @ 3	16 @ 6	15	1.5	208	14 x 47
		41.6 @ 20.7	60.6 @ 41.4	56.8	38.1	94	356 x 1,194
HE DF-16	HE 1.5 PF DF-16	14 @ 4	21 @ 6	20	1.5	280	16 x 53
		53.0 @ 27.6	79.5 @ 41.4	75.7	38.1	127	406 x 1,346
HE DF-21	HE 1.5 PF DF-21	24 @ 8	36 @ 13	30	1.5	615	21 x 62
		90.8 @ 55.2	136.3 @ 89.6	113.6	38.1	279	533 x 1,575

HE Carbon Filters Family Group*							
Model		Service Flow Rates		Backwash Flow ² (gpm/lpm)	Pipe Size (in/mm)	Media Qty. (ft ³ /m ³)	Filter Tank Size (in/mm)
		Taste Odor & Organic Removal ¹	Dechlorination ²				
Single Unit	Progressive Flow	gpm @ psi drop lpm @ kPa drop	gpm @ psi drop lpm @ kPa drop				
HE CF-12	HE 1.5 PF CF-12	4 @ 1	8 @ 1	8	1.5	2	12 x 52
		15.1 @ 6.9	30.3 @ 6.9	30.3	38.1	0.057	305 x 1,321
HE CF-14	HE 1.5 PF CF-14	5 @ 1	11 @ 2	10	1.5	3	14 x 47
		18.9 @ 6.9	41.6 @ 13.8	37.9	38.1	0.085	356 x 1,194
HE CF-16	HE 1.5 PF CF-16	7 @ 1	14 @ 2	15	1.5	3	16 x 53
		26.5 @ 6.9	53.0 @ 13.8	56.8	38.1	0.085	406 x 1,346
HE CF-21	HE 1.5 PF CF-21	12 @ 2	24 @ 8	25	1.5	6	21 x 62
		45.4 @ 13.8	90.8 @ 55.2	94.6	38.1	0.170	533 x 1,575

HE Greensand / Cullisorb Filter Family Group*							
Model		Service Flow Rates ¹		Backwash Flow ² (gpm/lpm)	Cullisorb Media Qty. ³ (ft ³ /ltr)	Pipe Size** (in/mm)	Tank Size*** (in / mm)
		Manganese and Iron (oxidized or soluble) removal					
Single Unit	Progressive Flow	gpm @ psi drop lpm @ kPa drop					
HE-GF-12	HE 1.5 PF GF-12	8 @ 3		10	1.5	1.5"	12 x 52
		30.3 @ 21		38	42	38.1	305 x 1,321
HE-GF-14	HE 1.5 PF GF-14	11 @ 3		15	2	1.5"	14 x 47
		42 @ 21		57	57	38.1	356 x 1,194
HE-GF-16	HE 1.5 PF GF-16	14 @ 4		20	3	1.5"	16 x 53
		53 @ 28		76	85	38.1	406 x 1,346
HE-GF-21	HE 1.5 PF GF-21	24 @ 8		30	5	1.5"	21 x 62
		91 @ 55		114	142	38.1	533 x 1,575

* Each Family Group includes the following control valve options: Single downflow, Multi-tank downflow
 ** Depending on choice of 1.5" or 2" flow adapter
 1 Service flow rates are based on 2" flow adapter and may be slightly lower when using the 1.5" flow adapter:
 - Normal (10 gpm/ft³ - 24 m³/hr/m³) - Best quality effluent at specified flow. Lowest pressure loss. Recommended for suspended solids loads up to 20 ppm.
 - Peak (15 gpm/ft³ - 37 m³/hr/m³) - Very good quality effluent at specified flow. Increased pressure loss. Recommended for suspended solids loads up to 10 ppm.
 2 Backwash flow rates are based on 12-14 gpm/ft³ (29-34 m³/hr/m³) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature.
 3 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/ft³ (12 m³/hr/m³)
 - Dechlorination are based on 10 gpm/ft³ (24 m³/hr/m³)
 4 Backwash flow rates are based on 10 gpm/ft³ (24 m³/hr/m³) using 50°F (10°C) water. A different backwash rate may be required depending upon water temperature or the type of carbon used.
 5 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.



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Warranty

Culligan's HE filters are backed by a limited 1-year warranty against defects in materials, workmanship, and corrosion. The plastic conditioner tank has a 5-year warranty. See printed warranty for details.†

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

System Specifications

Specification	US	Metric
Pipe Size, All Units	1.5"	
Maximum Operating Pressure	20-125 psig	135-860 kPa
Power Voltage Frequency	24 50/60 Hz ¹	
Feed Water Temperature	33-120° F	0-48° C
Power Consumption	22 Watts	
Vacuum	None ²	

1 120 Volt/24 Volt CUL/UL listed Transformer Included.
 2 Tank warranty is void if subject to vacuum.

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
- Grocery / Retail – Quality water for aesthetics and help extend equipment life
- Pretreatment – For softeners, RO's and DI systems
- Vehicle Wash – Turbidity reduction

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
- Corrosion Resistant Positive Motor-Driven Regeneration Valve – Motor driven piston resists dirt, iron and turbidity
- Corrosion Resistant Tanks – Made from fiberglass reinforced polyester
- Under-drain design reduces pressure loss
- Flow meter
- Electronic By-Pass – The filter can be by-passed electronically either from the unit or from the remote monitor and automatically goes back into service after a pre-set time.
- Multi-Poppet Design – Allows for easy service and increases durability and valve life
- Internally blocked Progressive Flow Systems
- HE Carbon and Depth Filters are tested and certified by WQA against NSF/ANSI 372, CSA B483.1 and NSF/ANSI 61 for material requirements. Greensand filters do not have this certification
- The Control Enclosure complies with UL 50/50E and UL 746C standards for a NEMA 3R Enclosure Rating

Optional Features & Accessories

- Patented Progressive Flow – Culligan's Smart Controller can monitor flow demands bringing additional tanks on-line or offline as flows increase or decrease
- Pressure Differential Switch
- Bypass valve
- Remote Display
- RS232, RS485, Modbus PLC Output
- Skid Mounted Systems

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.