

MICROFILTER PRODUCTS GUIDE

For Customer Satisfaction

We provide a wide range of product portfolio to offer the best solution for each individual market needs. Under high-tech full automation and through inline inspection, stable supply with competitive cost is granted to our valued customers.

R&D

We have over 30 R&D engineers in our lab, together with specialized engineers designated for overseas business. With over 20 years of experience in the drinking water industry, this enables us to design and develop creative products on reflection to diverse market requirements and changes.

Quality System

Our core value for quality assurance is to deliver flawless product and to maximize customer satisfaction ; proved by global certificate authorities-NSF, SII, WRAS, Watermark, and etc. Our water quality analysis lab has various professional methods and test machines to prevent the defective filtration problems. TQM system consecutively monitors defects in the line and detects the defective elements.

Competitive Price

We are vertically integrated to manufacture plastic parts, components, and filtration materials in- house. And our R&D and QA perform continuous studies on cost reduction.

Optimized Solution

We support our valued customers worldwide by providing promotion programs to gain our brand recognition and market share for mutual business success.

Production capacity (annual)

20 million units equipped with large capacity to meet delivery time required by customers worldwide.





MICROFILTER PRODUCTS GUIDE

Commercial

FLUUX SYSTEM / FX-Series / IEN-Series / VH IEN-Series

Residential

Undersink SYSTEM / Inline Filtration

Elements

Carbon / UF / Sediment / UV / PEX

[Packing Information](#)

[Contact us](#)

Commercial

FLUUX SYSTEM

FX-Series

IEN-Series

VH IEN-Series

Optimize The Water You Serve

Diverse options for all HORECA or OCS market.
Make your choice with Microfilter's High-Flow water solution.

FLUUX SYSTEM

High-Flow Water Purifying Solution For Commercial-Grade Filtration

Microfilter's high flow filters and systems bring you many advantages and options. Various FLUUX filters can be applied flexibly depending on usage and water quality.





Features



Direct type High-Flow water purifier

Various Configurations

- Serial, Parallel, Serial-Parallel (3stage)
- compatible with 10", 15", 17", 21" filters

Compatibility

- Compatible with major manufacturers' product

Custom filtration solution

- Filtration method/solution customizable depending on end-user's needs

HFR-5 Pre-filtration System

- Provide clean ice, remove rust and impurities.
- Protect the main equipment, prevent clogging of the equipment pipe
- Depth filtration of melt-blown sediment system
- Minimize maintenance costs with an eco-friendly replaceable sediment system.
- 'HFR-5' product can be reused replacing only the inner sediment cartridge.
- 'HFR-5' reduces plastic waste by applying reusable filter housing.

SYSTEM Specification

System Variation



Size	Inlet/Outlet : 3/8"	Filter : 10", 15", 17", 21"
Temperature	39-100°F (4-38°C)	
Flow rate	1 GPM ~ 6 GPM (Flow rate may vary with the water quality to be applied and the System variation stage.)	
Working Pressure	30 ~ 100 PSI	

NSF Certification

Carbon Block Filter 1stage system



System tested and certified by NSF International against NSF/ANSI Standard 42, 53 for the reduction of the Chlorine, Taste and Odor and Nominal Particulate Class 1, Turbidity and Cyst

NSF Trade Name
HF-17-CS2, HF-17-PS2, HF-17-ECS2, HF-17-EPS2



System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of the Chlorine, Taste and Odor and Nominal Particulate Class 1

NSF Trade Name
HF-17-CS1, HF-17-PS1, HF-17-ES1 / DH-S1



System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of the Chlorine, Taste and Odor and Nominal Particulate Class 3

NSF Trade Name
HF-15-CS3, HF-15-PS3, HF-15-ECS3, HF-15-EPS3 /
HF-17-CS3, HF-17-PS3, HF-17-ECS3, HF-17-EPS3

Carbon Block Filter 2 & 3 stage system (parallel)



System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of the Chlorine, Taste and Odor and Nominal Particulate Class 1

NSF Trade Name
2stage : DH-S2, HF-17-PS1(TW), HF-17-CS1(TW)
3stage : DH-S3, HF-17-PS3, HF-17-CS3(TR)



System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of the Chlorine, Taste and Odor and Nominal Particulate Class 3

NSF Trade Name
2stage : DH5-S2, HF-17-PS3(TW), HF-17-CS1(TW)
3stage : DH5-S3, HF-17-PS3, HF-17-CS3(TR)





FILTER Specification

HF-C



FLUUX High Flow Carbon Block

Filter Size	10	15	17	21
Flow rate (GPM)	1.0	1.3 / 1.6	1.7 / 2.0	2.2 / 2.6
Capacity (gallons)	10,000	16,800	21,000	27,000
Micron rating (µm)	0.5 / 5			
Benefit	Common claim : Chlorine, Taste & Odor 0.5µm - Particulate Class 1, Turbidity, Cyst 5µm - Particulate Class 3			

HF-P



FLUUX High Flow Scale Inhibitor

Filter Size	10	15	17	21
Flow rate (GPM)	1.0	1.3 / 1.6	1.7 / 2.0	2.2 / 2.6
Capacity (gallons)	10,000	16,800	21,000	27,000
Micron rating (µm)	0.5 / 5			
Benefit	Common claim : Chlorine, Taste & Odor, Scale Inhibitor 0.5µm - Particulate Class 1, Turbidity 5µm - Particulate Class 3			

HF-S



FLUUX High Flow Sediment

Filter Size	10	15	17	21
Flow rate (GPM)	0.9	1.6	2.0	2.6
Capacity (gallons)	6 months			
Micron rating (µm)	Nominal 5			
Benefit	Particulate			

HFR-5



FLUUX HFR Replacement Cartridge Sediment System

Filter Size	13
Flow rate (GPM)	2.0
Capacity (gallons)	6 months
Micron rating (µm)	Nominal 5
Benefit	Particulate

FX-Series

Commercial-Grade All-In-One Filtration

A hybrid filter for specific purposes such as lead, chloramine removal and ultrafiltration, scale inhibitor options.



FLUUX
FXC10
High Capacity, reduction of Chlorine, Taste & Odor, Cyst, Chloramine

Operating Conditions :
- Flow Rate : 0.5 GPM (1.9 LPM)
- Pressure : 10-125 psi (0.7-8.5 kg/cm²)
- Temperature : 35-100 °F (2-38 °C)
- Filtration : 0.5 micron
- Capacity : 2,000 gallons (7.57 m³)
- Function : Chemical/Mechanical reduction
- Inlet / Outlet size : 3/8 inch
- Flushing time : 5 minutes or until water runs clear

Installation Instructions :
1. Rotate the old cartridge counter clockwise 1/4 turn and pull out.
2. Insert the new cartridge into the filter and rotate clockwise 1/4 turn.
3. Place the cartridge to the vertical position.
4. Turn on the water and check for leaks. If leaks occur, repeat step 1, 2, 3, 4. If leaks persist, discontinue use and call your supporting dealer.
5. Flush filter for 5 minutes before use or until water runs clear.

Notice :
1. Do not use with water that is microbiologically unsafe or of unknown adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when the flow rate becomes too slow and contact your local distributor for replacement.

FLUUX
FXC17
High Capacity, reduction of Chlorine, Taste & Odor, Cyst, Chloramine

Operating Conditions :
- Flow Rate : 0.5 GPM (1.9 LPM)
- Pressure : 10-125 psi (0.7-8.5 kg/cm²)
- Temperature : 35-100 °F (2-38 °C)
- Filtration : 0.5 micron
- Capacity : 2,000 gallons (7.57 m³)
- Function : Chemical/Mechanical reduction
- Inlet / Outlet size : 3/8 inch
- Flushing time : 5 minutes or until water runs clear

Installation Instructions :
1. Rotate the old cartridge counter clockwise 1/4 turn and pull out.
2. Insert the new cartridge into the filter and rotate clockwise 1/4 turn.
3. Place the cartridge to the vertical position.
4. Turn on the water and check for leaks. If leaks occur, repeat step 1, 2, 3, 4. If leaks persist, discontinue use and call your supporting dealer.
5. Flush filter for 5 minutes before use or until water runs clear.

Notice :
1. Do not use with water that is microbiologically unsafe or of unknown adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when the flow rate becomes too slow and contact your local distributor for replacement.

FLUUX
FKL15
High Capacity, reduction of Chlorine, Taste & Odor, Cyst, Lead

Operating Conditions :
- Flow Rate : 0.5 GPM (1.9 LPM)
- Pressure : 10-125 psi (0.7-8.5 kg/cm²)
- Temperature : 35-100 °F (2-38 °C)
- Filtration : 0.5 micron
- Capacity : 2,000 gallons (7.57 m³)
- Function : Chemical/Mechanical reduction
- Inlet / Outlet size : 3/8 inch
- Flushing time : 5 minutes or until water runs clear

Installation Instructions :
1. Rotate the old cartridge counter clockwise 1/4 turn and pull out.
2. Insert the new cartridge into the filter and rotate clockwise 1/4 turn.
3. Place the cartridge to the vertical position.
4. Turn on the water and check for leaks. If leaks occur, repeat step 1, 2, 3, 4. If leaks persist, discontinue use and call your supporting dealer.
5. Flush filter for 5 minutes before use or until water runs clear.

Notice :
1. Do not use with water that is microbiologically unsafe or of unknown adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when the flow rate becomes too slow and contact your local distributor for replacement.

FLUUX
FX10
High Capacity, reduction of Chlorine, Taste & Odor, Cyst, Bacteria

Operating Conditions :
- Flow Rate : 0.5 GPM (1.9 LPM)
- Pressure : 10-125 psi (0.7-8.5 kg/cm²)
- Temperature : 35-100 °F (2-38 °C)
- Filtration : 0.5 micron
- Capacity : 2,000 gallons (7.57 m³)
- Function : Chemical/Mechanical reduction
- Inlet / Outlet size : 3/8 inch
- Flushing time : 5 minutes or until water runs clear

Installation Instructions :
1. Rotate the old cartridge counter clockwise 1/4 turn and pull out.
2. Insert the new cartridge into the filter and rotate clockwise 1/4 turn.
3. Place the cartridge to the vertical position.
4. Turn on the water and check for leaks. If leaks occur, repeat step 1, 2, 3, 4. If leaks persist, discontinue use and call your supporting dealer.
5. Flush filter for 5 minutes before use or until water runs clear.

Notice :
1. Do not use with water that is microbiologically unsafe or of unknown adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when the flow rate becomes too slow and contact your local distributor for replacement.



Hybrid cartridge suitable for tight HORECA kitchen space

: 4 step "All-In-One" [SD + CB + UF (FX basic) + Polyphosphate (option)]

Reinforced anti-microbial protection

: Inhibits any potential bacterial growth

Variety of suitable options

: Above 10"/15"/17"/21" with variety of derivatives

Longer life-span compared to current market products

: Approx. 10 % increased capacity depending on raw water quality

Eliminates ultrasmall bacteria (over 100+ E-coli)

: Efficient removal by 0.1micron UF filter (FX Basic)

Compatible filter key structure

: Compatible fitting with the most of existing head

Chlorine Reduction Ratio

: Competitor (15,000 gallon) vs. 7% above (in case of 15")

Robust & Aesthetic appreciated Design

: Thicker cartridge (t: 5.6mm vs avg. 4.5mm), FDA certified materials

: "Easy-Grip" (Ø : 75mm vs avg. 78mm)

: Simple, elegant design/structure

Flow Stage

: Each step can be applied differently on demand

: Various additive available (polyphosphate, etc.)



Felt



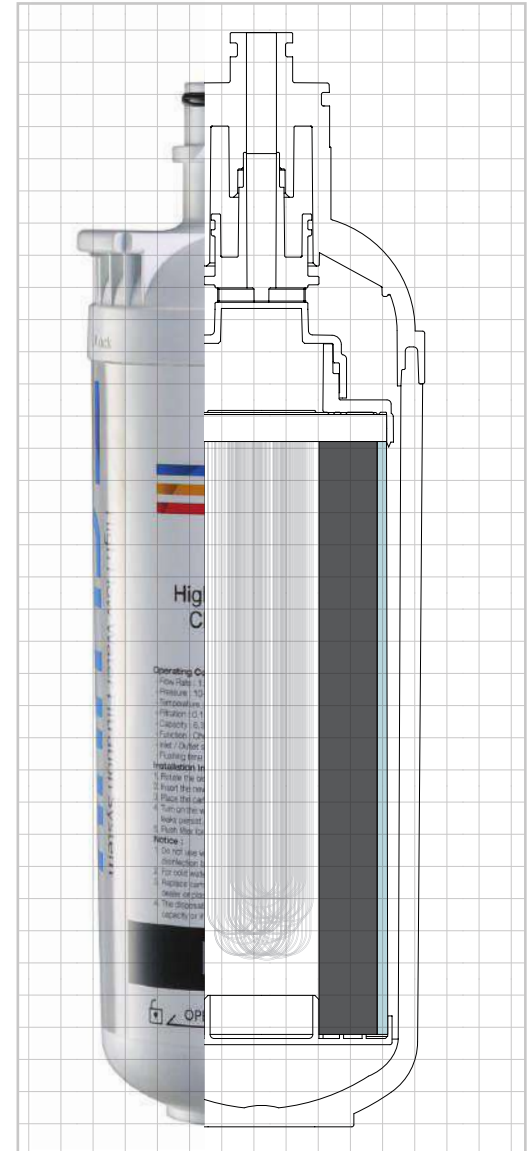
Carbon Block



UF Membrane
0.1µm
(FX-basic)



Polyphosphate
(Optional)



FX (10", 15", 17", 21")

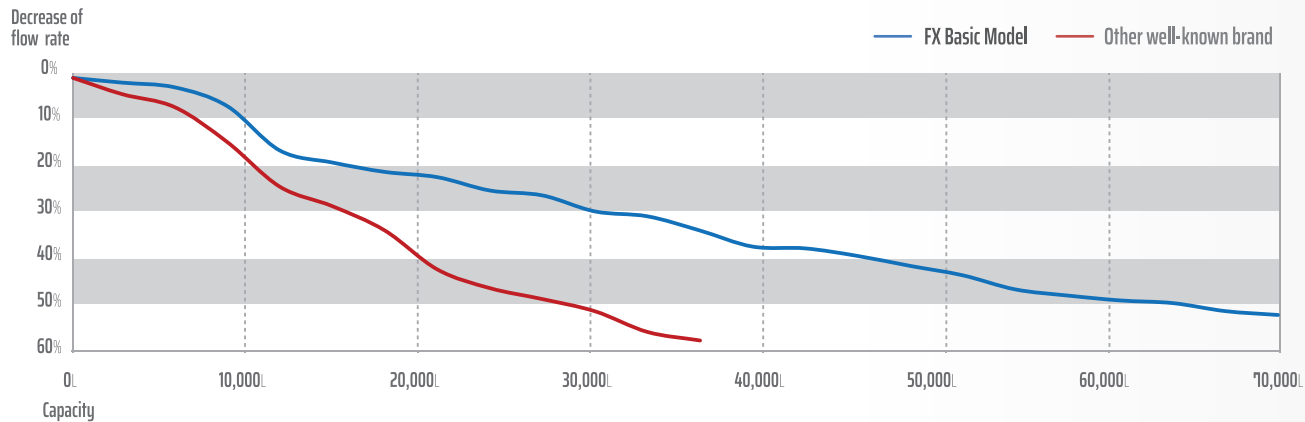
Reduction of Chlorine
Taste & Odor, Cyst, Bacteria

Bacteria in drinking water are one of the most harmful contaminants that one can encounter. It causes numerous infectious diseases such as dysentery, cholera, hepatitis and typhoid etc. Bacteria can be transferred to edible water in various ways such as from human and animal waste. Bacteria enter water through diverse precipitation canals such as snow melt and rainfalls. The EPA requires all public water suppliers to regularly test for coliform bacteria and deliver water that meets their standard.

Microfilter's FX-Basic filter cartridges contain Ultra-Filtration which eliminates bacteria thus providing clean edible water for end-users.

Clogging (capacity)

- Felt type early clogging prevention performance sums to nearly twice efficient compared to sediment type
- Turbidity reduction (PT1, cyst pass) ratio: current market products (84.25%), Microfilter products (99.63%)





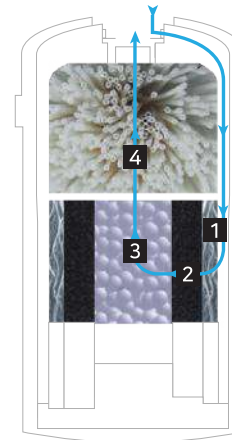
Features & Specification

Turbidity reduction

Current market products = 84.25% **vs** FX-Basic = 99.63%

FX-Basic contain Ultra-Filtration

UF-membrane eliminates over 100+ bacteria and E-Coli



Filtration process

- 1 Felt
- ↓
- 2 Carbon Block (Basic)
- ↓
- 3 Polyphosphate (Option 15, 17, 21)
- ↓
- 4 UF-Membrane

Filter Size	10	15	17	21
Flow rate (GPM)	1.5	2.5	2.5	2.5
Capacity (gallons)	6,300	16,000	19,000	26,000
Micron rating (µm)	0.1			
Benefit	Chlorine, Taste & Odor, Scale Inhibitor (optional) Particulate Class1, Turbidity, Cyst			



System tested and certified by NSF International against NSF/ANSI Standard 42, 53 for reduction Claims specified on the Performance Data sheet

NSF Trade Name : FX-10 / FX-15 / FX-17 / FX-21

FXL (10", 15", 17", 21")

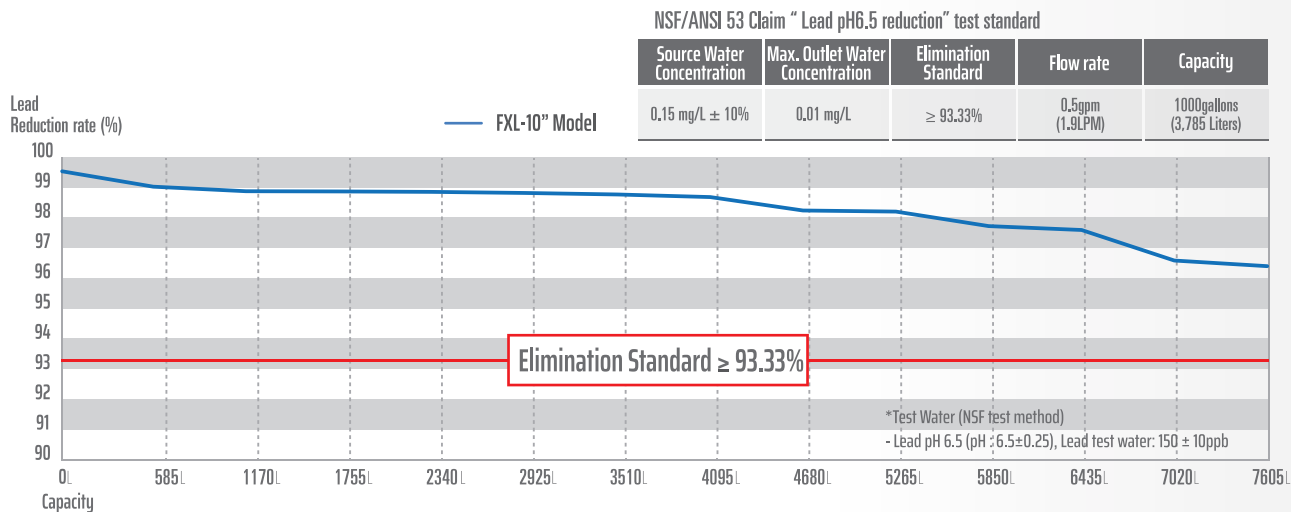
Reduction of Chlorine
Taste & Odor, Cyst, Lead

Lead is a heavy metal that is a major environmental/health hazard which is rarely found in source water. Lead can enter drinking water through pipe corruptions. Exposure to lead can cause a variety of health effects, mainly for children and newborns by damaging kidneys, nervous/reproductive system. Water is the main exposure point in old buildings with lead pipes and old fixtures. In contrast to removing old pipes with costly expensive, our FXL cartridges provide efficient removal without having to go through inconvenient construction. Once dissolved, lead cannot be detected without chemical testing since they are odorless, tasteless and invisible to the eye.

With this mind, Microfilter's FXL cartridges come in handy and suitable for lead contaminated regions around the world.

Lead Reduction (FXL-10")

- Must satisfy a 200% in capacity rate when without PID (Performance Indication Device)
- Average elimination rate of 98.3% at a capacity of 3,785L or at 200% capacity of 7,570L
- Test results indicate satisfactory condition on the elimination standard ($\geq 93.33\%$)

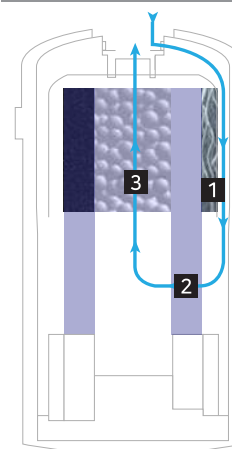




Features & Specification

MicroFilter's Lead-type Carbon Block

Average elimination rate of 98.3% at a capacity of 3,785L or at 200% capacity of 7,570L



Filtration process

- 1 Felt
- ↓
- 2 Carbon Block (Lead-type Carbon)
- ↓
- 3 Polyphosphate (Option 10", 15", 17", 21")

Filter Size	10	15	17	21
Flow rate (GPM)	0.5	0.5	0.5	0.5
Capacity (gallons)	1,000	2,000	2,600	3,800
Micron rating (µm)	0.5			
Benefit	Chlorine, Taste & Odor, Scale Inhibitor (optional) Particulate Class1, Turbidity, Cyst			

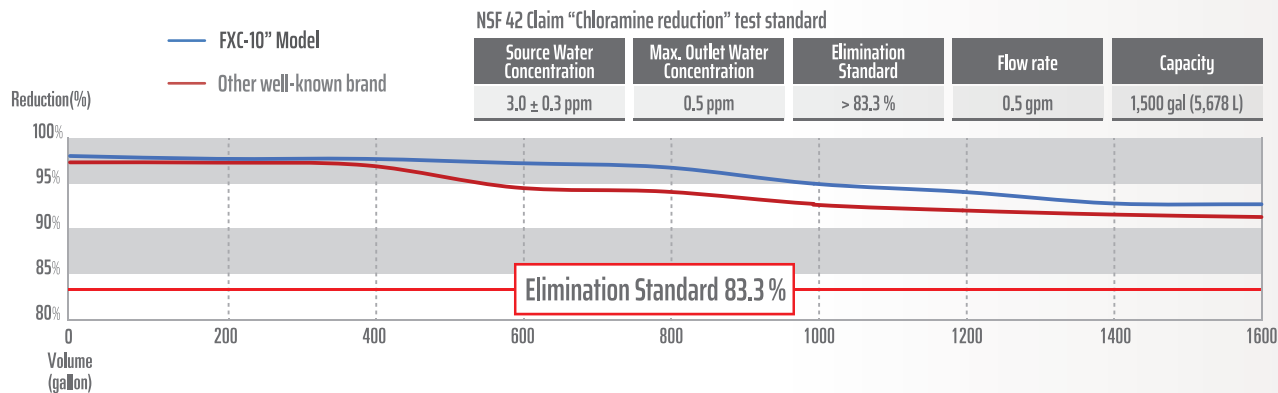
FXC (10", 15", 17", 21")

Reduction of Chlorine
Taste & Odor, Cyst, Chloramine

Throughout the United States, cities have used disinfectants such as chlorine and chloramines (NH_2Cl) for several decades. Thus, water borne illnesses like typhoid and cholera have nearly been eliminated. But, chlorine can lead to disinfection by-products (DBPs) which are very harmful to human-beings. To reduce these DBPs, water suppliers added ammonia to the chlorine which then created chloramine, an alternative disinfectant. The EPA estimates that 1 out of 5 Americans drink chloramine contaminated water. As the US EPA places stronger regulations on DBPs, more water suppliers will ultimately turn to the usage of chloramine removing filter cartridges.

Chloramine (monochloramine) in the food service industry must be aware that the use of chloramines can decrease the quality of products such as coffee, beverages, and soups. Water containing chloramine tends to have a "bitter" or "stale" taste. In addition, it damages intricate equipment applied in HORECA. Chloramine containing tap water should not be used in hospitals or dialysis centers as contact into the blood stream can cause serious health problems. The EPA has warned that the exposure to chloramines can lead to the development of gastrointestinal and skin problems. Chloramine can also create perilous DBP (NDMA). NDMA is a compound that is identified as a probable carcinogen by the EPA. NDMA causes headaches, nausea, and vomiting. This is where Microfilter's FXC cartridges kick in for the removal of chloramine and provide a safe drinking water environment for all purposes.

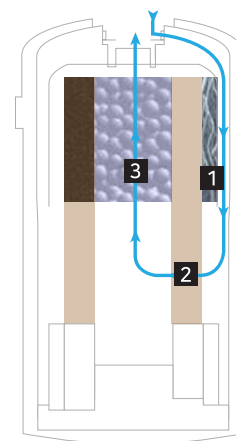
Chloramine Elimination (FXC-10")





Features & Specification

MicroFilter's Chloramine-type Carbon Block
0.07 GPM higher flow rate compared to market products



Filtration process

- 1 Felt
- ↓
- 2 Carbon Block
(Chloramine-type Carbon)
- ↓
- 3 Polyphosphate
(Option 10", 15", 17", 21")

Filter Size	10	15	17	21
Flow rate (GPM)	0.5	0.7	0.8	1.0
Capacity (gallons)	1,500	4,000	5,800	8,000
Micron rating (µm)	0.5			
Benefit	Chloramine, Chlorine, Taste & Odor, Scale Inhibitor (optional) Particulate Class1, Turbidity, Cyst			

Operating Conditions :

Flow Rate : 1.0GPM (3.8LPM)
Pressure : 10-125psi (0.7-8.6kg/cm²)
Temperature : 35-100 °F (2-38 °C)
Filtration : 0.5 micron
Capacity : 8,000 gallons (30,280L)
Function : Chemical/Mechanical reduction
Inlet / Outlet size : 3/8 inch
Flushing time : 5 minutes or until water runs clear

Installation Instructions :

1. Rotate the old cartridge clockwise 1/4 turn to pull it out.
2. Insert the new cartridge into the filter head and rotate clockwise 1/4 turn.
3. Place the cartridge to the vertical position.
4. Turn on the water and check for leaks. If leaks occur, repeat steps 1,2,3,4. If leaks persist, replace the cartridge and call your supplier dealer.
5. Flush filter for 5 minutes before use or until water runs clear.

Notice :

1. Do not use with water that is microbiologically unstable or of unknown adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when the flow rate becomes too slow and on that day the filter is placed where you purchase.
4. The disposable filter cartridge must be replaced every 6 months, or the rated capacity or if a reduction in flow occurs.

Operating Conditions :

Flow Rate : 1.0GPM (3.8LPM)
Pressure : 10-125psi (0.7-8.6kg/cm²)
Temperature : 35-100 °F (2-38 °C)
Filtration : 0.5 micron
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Operating Conditions :

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Filtration : 0.5 micron
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Installation Instructions :

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Notice :

1. Do not use with water that is microbiologically unstable or of unknown adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when the flow rate becomes too slow and on that day the filter is placed where you purchase.
4. The disposable filter cartridge must be replaced every 6 months, or the rated capacity or if a reduction in flow occurs.

IEN-Series

Commercial-Grade Ion-Exchange Filtration

Protect expensive espresso machines, help yourself with low upkeep
and yet provide the best coffee taste.



FLUUX
High Flow Water Filtration System
MODEL NO. IEN 6000
Reduction of scale, chlorine taste & odor

Operating Conditions:
Flow Rate: 10-20 GPM (3-7 LPM)
Pressure: 30-100 PSI (2-7 Bar)
Temperature: 30-100°F (0-38°C)
Capacity: 1,000 gallons (3,785 L)
Filtration: 5-10 Microns
Function: Reduction of scale, chlorine taste & odor

Installation Instructions:
1. Rotate the old cartridge counter clockwise 1/4 turn and pull out.
2. Insert the new cartridge into the flow head and rotate clockwise 1/4 turn.
3. Place the cartridge in the vertical position.
4. Turn on the water and check for leaks. If leaks occur, tighten the cap.
5. Flush the filter for 5 minutes before use to remove any air and sediment.
6. Do not use with water that is contaminated with oil, grease, or other substances.
7. Do not use with water that is contaminated with iron or copper.
8. Do not use with water that is contaminated with lead or other heavy metals.
9. Do not use with water that is contaminated with bacteria or viruses.
10. Do not use with water that is contaminated with other harmful substances.

Notice:
1. Do not use with water that is contaminated with oil, grease, or other substances.
2. Do not use with water that is contaminated with iron or copper.
3. Do not use with water that is contaminated with lead or other heavy metals.
4. Do not use with water that is contaminated with bacteria or viruses.
5. Do not use with water that is contaminated with other harmful substances.

Scale Reduction Filter
MicroFilter

FLUUX
High Flow Water Filtration System
MODEL NO. IEN 1500
Reduction of scale, chlorine taste & odor

Operating Conditions:
Flow Rate: 10-20 GPM (3-7 LPM)
Pressure: 30-100 PSI (2-7 Bar)
Temperature: 30-100°F (0-38°C)
Capacity: 1,000 gallons (3,785 L)
Filtration: 5-10 Microns
Function: Reduction of scale, chlorine taste & odor

Installation Instructions:
1. Rotate the old cartridge counter clockwise 1/4 turn and pull out.
2. Insert the new cartridge into the flow head and rotate clockwise 1/4 turn.
3. Place the cartridge in the vertical position.
4. Turn on the water and check for leaks. If leaks occur, tighten the cap.
5. Flush the filter for 5 minutes before use to remove any air and sediment.
6. Do not use with water that is contaminated with oil, grease, or other substances.
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9. Do not use with water that is contaminated with bacteria or viruses.
10. Do not use with water that is contaminated with other harmful substances.

Notice:
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3. Do not use with water that is contaminated with lead or other heavy metals.
4. Do not use with water that is contaminated with bacteria or viruses.
5. Do not use with water that is contaminated with other harmful substances.

Scale Reduction (Non-Exchange)



Features

Create soft water through ion-exchange resin

- Espresso machines boil water at high temperature/pressure thus generates scale. (lime scale)
- Through Microfilter's IEN-Series, a work of ion exchange prevents scale that damages equipment applied for HORECA.

One filter for a full-duty

- Granular Activated Carbon + Ion-Exchange Resin

Daily perfection : 30% BY-PASS

- 70% elimination to provide the utmost water quality you deserve

Hardness elimination : 51%, avg

Ion exchange efficiency : 77%

- Approx. 6% better hardness elimination rate, 11% better ion exchange efficiency

Stable pH of 6.7 ~ 7.9 (market products' pH : 5.7 ~ 6.4)

*Test condition

Model : IEN-3000, Hardness : 180 ± 10ppm, pH : 7.5~7.9, Pressure : 4.2 kgf/cm²

*Test conducted on basis to in-house standards

FILTER Specification

Model	IEN 1500	IEN 3000	IEN 6000	IEN 9000
Filter Length (inch)	13"	16"	15"	22"
Filter Diameter (mm)	Ø 120mm		Ø 160mm	
Flow rate (GPM)	0.26 GPM			0.44 GPM
Capacity (gallon)	405	794	1,586	2,377
Life cycle (month)	6 month			
Benefit	Chlorine, Taste & Odor / Scale reduction			

VH IEN-Series

Variable Head System Ion Exchange Filtration

Adjustable "8 stage by-pass" VH-IEN Series provide a filter solution for coffee professionals with a system that fulfills every preference regarding hardness and concentration.





Features

Coffee, espresso machine → Necessary to maintain the coffee taste and quality

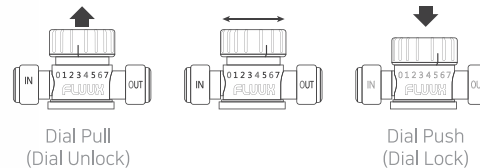
- Scale adsorption and accumulation in coffee extraction nozzles and heating tanks reduce the extraction pressure, changing the taste of coffee.

Groundwater use area → Need to remove the hardness

- Groundwater requires removing the temporary hardness of about 150 to 300 ppm.
Setting 8 stage blending values of bypass adjustment according to water hardness and concentration

* appropriate hardness and concentration of Coffee extract → 17-85 ppm

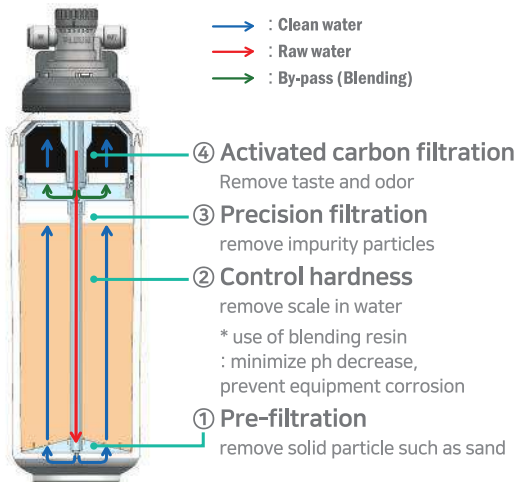
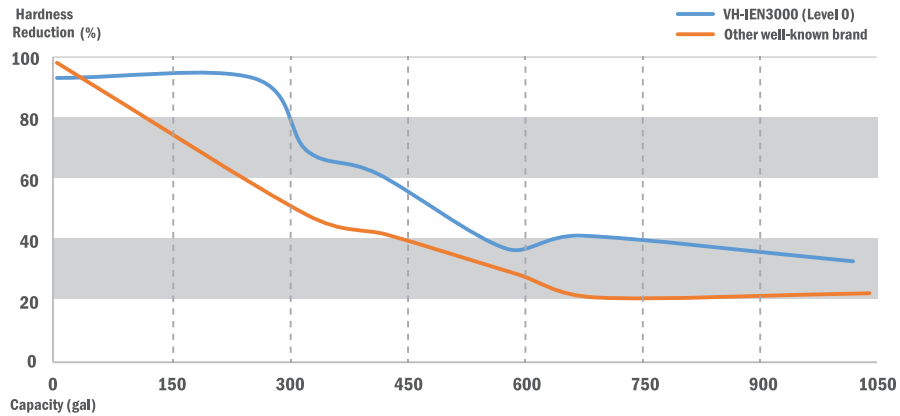
Easy handling of the head dial



Application	By-pass							
	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Coffee, espresso machine			•	•	•	•	•	•
Vending machine			•	•	•	•	•	•
Steamer, dishwasher	•	•						
Oven, Hot-water	•	•						

❖ Raw Water Conditions

pH	Tem.	TDS	Hardness - solution
7,5±0,5	20±3°C	200 to 500 mg/L	180±10 mg/L Total (Titrimetric, EDTA)





Additional product (must be purchased separately)

1. Hardness test kit (2 tests kit)



2. Filter holder



FILTER Specification

Model	VH IEN 1500	VH IEN 3000	VH IEN 6000	VH IEN 9000
Filter Length (inch)	14"	16"	16"	22"
Filter Diameter (mm)	Ø 120mm		Ø 160mm	
Flow rate (GPM)	0.26 GPM			0.44 GPM
Capacity(gal.) (By-pass Leve7)	529	1,207	2,608	3,647
Life cycle (month)	6 month			
Benefit	The filter capacity may vary with the water quality to be applied and the head stage.			

Residential



Under Sink System

M9 SYSTEM / U1 SYSTEM

In-line Filter

K3 Series



M9 SYSTEM



U1 SYSTEM

Undersink System

Great option for
clutter-free kitchen



M9 Stand type 4stage(S-C-R-C) RO 50GPD

M9 SYSTEM

Home Care Water Filtration System

Whether to hang or to let stand, the M9 Undersink System provides various filter cartridge options to best suit your needs

Features

Custom filtration solution

- Filtration method/solution customizable depending on end users' needs

Safe & Unlimited

- NSF58 / CA Certified system (M9 RO 4 stage system)
- Unlimited supply of quality drinking water

Easy DIY system

- No tools needed, "Pull & Turn" Quick-Change type

Outstanding flow rate compared to current market products (20% higher)

* Tested by in-house laboratory for performance specifications in accordance with NSF test standards



System tested and certified by NSF International against NSF/ANSI Standard 58 for the reduction of the claims specified on the Performance Data Sheet.

NSF System Trade Name
M9 4HA RO 50GPD / M9 4HA RO 75GPD / M9 4SS RO 50GPD / M9 4SS RO 75GPD

Substance	Influent Challenge Concentration	Max Allowable Concentration	Average Product Water Concentration	Average Reduction
Arsenic	0.3 mg/L $\pm$ 10%	0.01 mg/L	0.001 mg/L	99,7 %
Barium	10 mg/L $\pm$ 10%	2 mg/L	0,13 mg/L	98,7 %
Cadmium	0.03 mg/L $\pm$ 10%	0.005 mg/L	0.0001 mg/L	99,7 %
Chromium (Hexavalent)	0.3 mg/L $\pm$ 10%	0.1 mg/L	0.006 mg/L	98 %
Chromium (Trivalent)	0.3 mg/L $\pm$ 10%	0.1 mg/L	0.003 mg/L	99 %
Copper	3.0 mg/L $\pm$ 10%	1.3 mg/L	0.039 mg/L	98,7 %
Fluoride	8.0 mg/L $\pm$ 10%	1.5 mg/L	0.328 mg/L	95,9 %
Lead	0.15 mg/L $\pm$ 10%	0.01 mg/L	0.004 mg/L	97,3 %
Radium 226/228	25 pCi/L	5 pCi/L	5 pCi/L	80 %
Selenium	0.1 mg/L $\pm$ 10%	0.05 mg/L	0.001 mg/L	99 %
Turbidity	11 $\pm$ 1 NTU	0.5 NTU	0.022 NTU	99,8%

SYSTEM Specification

Model				
Stand type	Hanger type			
4 Stage	4 Stage	3 Stage	2 Stage	1 Stage
				
* 4 stage stand type system can contain pressure pump				
Size	Filter size : 8" / 11" / 13"		inlet/outlet : 1/4"	
Temperature	39~100°F (4~38°C)			
Flow rate	RO SYSTEM : 50~150 GPD / UF SYSTEM : 0.5 GPM			
Pressure	RO SYSTEM : 30~125psi(stand type), 50~125psi(hanger type) / UF SYSTEM : 30~60 psi			
Option	 Pressure Pump (Electricity required 24W) * Additional pump installation may be required with low pressure	 Storage Tank (RO System)		Extra Stage

FILTER Specification

SD

Element Type	Sediment
Flow Rate	0,5 GPM
Life Cycle	- / 6months
Micron Rating	3 / 5 / 10 / 25 µm
Benefit	Particulate / Dirt & Sand

MC

Element Type	Melt-blown Carbon
Flow Rate	0,5 GPM
Life Cycle	1,000~2,000gal / 6months
Micron Rating	5 / 10 µm
Benefit	Particulate / Dirt & Sand / Chlorine, Taste & Odor

UF (Option. Virus UF)

Element Type	Ultra filtration membrane
Flow Rate	0,5 GPM
Life Cycle	- / 12months (18months)
Micron Rating	0,1 µm (0.01 µm)
Benefit	Particulate / Dirt & Sand / Cyst / Bacteria / E-coli / (+ virus)

RO

Element Type	Reverse osmosis membrane
Flow Rate	50 / 75 / 100 / 150 GPD
Life Cycle	- / 24months
Micron Rating	0,0001 µm
Benefit	Turbidity / TDS / IONIC Substance Reduction / Heavy Metal Reduction (Arsenic, Barium, Cadmium, Copper, Fluoride, Lead, Radium, Selenium, etc.)

GAC

Element Type	Granular Activated Carbon
Flow Rate	0,5 GPM
Life Cycle	1,000~2,000gal / 6months
Micron Rating	- µm
Benefit	Chlorine, Taste & Odor

GP

Element Type	GAC + Polyphosphate
Flow Rate	0,5 GPM
Life Cycle	1,000~2,000gal / 6months
Micron Rating	- µm
Benefit	Chlorine, Taste & Odor / Scale inhibitor

Mineral

Element Type	GAC + Mineral
Flow Rate	0,5 GPM
Life Cycle	2,000 gal / 12months
Micron Rating	- µm
Benefit	Chlorine, Taste & Odor / pH booster

CB

Element Type	Carbon Block
Flow Rate	0,5 GPM
Life Cycle	1,500 ~ 2,500 gal / 6months
Micron Rating	1 / 5 µm
Benefit	Particulate / Chlorine, Taste & Odor

CP

Element Type	Carbon Block + Polyphosphate
Flow Rate	0,5 GPM
Life Cycle	1,500 ~ 2,500 gal / 6months
Micron Rating	1 / 5 µm
Benefit	Particulate / Dirt & Sand / Chlorine, Taste & Odor / Scale inhibitor

Filtration method/solution
customizable depending on
end users' needs

U1 SYSTEM

Entry Level Water Filtration System

The U1 Undersink System comes in 8/11/13" replacement filters, making it much easier to install.

Features

Compact type head system

Custom filtration solution

- Filtration method/solution customizable depending on end users' needs

Easy DIY system

- No tools needed, "Pull & Turn" Quick-Change type

Same purification performance as M9 SYSTEM



U1 4stage(S-C-R-GAC) RO 50GPD

SYSTEM Specification

Model	 4 Stage System  3 Stage System (UF only)
Size	Filter size : 8" / 11" / 13" inlet/outlet : 1/4"
Temperature	39-100°F (4-38°C)
Flow rate	RO SYSTEM : 50~150 GPD / UF SYSTEM : 0.5 GPM
Pressure	RO SYSTEM : 50~125 psi / UF SYSTEM : 30~60 psi
Option	 Storage Tank (RO System)

FILTER Specification

Model	Element Type	Capacity / Life Cycle	Micron rating	Flow rate	Benefit
SD	Sediment	~ gal / 6 months	3 / 5 / 10 / 25 µm	0.5 GPM	Particulate / Dirt & Sand
CB	Carbon Block	1,500 ~ 2,500 gal / 6 months	1 / 5 µm	0.5 GPM	Particulate / Chlorine, Taste & Odor
MC	Melt-blown Carbon	1,000 ~ 2,000 gal / 6 months	5 / 10 µm	0.5 GPM	Particulate / Dirt & Sand / Chlorine, Taste & Odor
UF	Ultra Filtration membrane	~ gal / 12 months	0.1 µm	0.5 GPM	Particulate / Dirt & Sand / Cyst / Bacteria / E-coli
VF	Virus Ultra Filtration membrane	~ gal/18 months	0.01µm	0.5 GPM	Particulate / Dirt&Sand / Cyst / Bacteria / E-coli / Virus
GAC	Granular Activated Carbon	1,000 ~ 2,000 gal / 6 months	~ µm	0.5 GPM	Chlorine, Taste & Odor
GP	GAC + Polyphosphate	1,000 ~ 2,000 gal / 6 months	~ µm	0.5 GPM	Chlorine, Taste & Odor / Scale inhibitor
CP	Carbon Block + Polyphosphate	1,500 ~ 2,500 gal / 6 months	1 / 5 µm	0.5 GPM	Particulate / Dirt & Sand / Chlorine, Taste & Odor / Scale inhibitor
Mineral	GAC + Mineral	2,000 gal / 6 months	~ µm	0.5 GPM	Chlorine, Taste & Odor / pH booster
RO	Reverse Osmosis membrane	~ gal / 24 months	0.0001 µm	50 / 75 / 100 / 150 GPD	Turbidity / TDS / IONIC Substance Reduction / Heavy Metal Reduction (Arsenic, Barium, Cadmium, Copper, Fluoride, Lead, Radium, Selenium, etc.)



Inline Filtration

Refrigerator Water Filtration

Comes in various filtration materials depending on your local water quality. The K3 serves as an inexpensive method to replace any refrigerator filter.

K3-Series

Features



- Non-hazardous filter cartridge (PP)
- Any international certification acquirable
- Various media selection & diverse usage
- Most number of claims filtered worldwide
- In-house pressure test
(4X indicated Max.pressure)
- Higher chlorine reduction performance 99.5% compare to competitor's 84.5%
- Supplier to leading home appliance companies for more than 20 years
- In-house carbon block development & production
(NSF/FDA certified components)

FILTER Specification

Media	Model	Micron rating	Capacity	Flow rate	Benefit	NSF
Granular Activated Carbon	K3-GC	- µm	1,500 gal	0.5 GPM	Chlorine, Taste & Odor	42
	K3-GP	- µm	1,500 gal	0.5 GPM	Chlorine, Taste & Odor / Scale	42
Carbon Block	K3-CB1	1 µm	1,000 gal	0.5 GPM	Particulate / Chlorine, Taste & Odor	-
	K3-CP1	1 µm	1,000 gal	0.5 GPM	Particulate / Chlorine, Taste & Odor / Scale	-
	K3-CB5	5 µm	1,000 gal	0.5 GPM	Chlorine, Taste & Odor	42



System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of the Chlorine and Taste and Odor

NSF Trade Name
K2010, K2010GP, DA2010CB

Elements

MICROFILTER'S Technology



***Carbon Block
Ultra Filtration
Sediment
UV-Sterilizer
PEX-Tube***

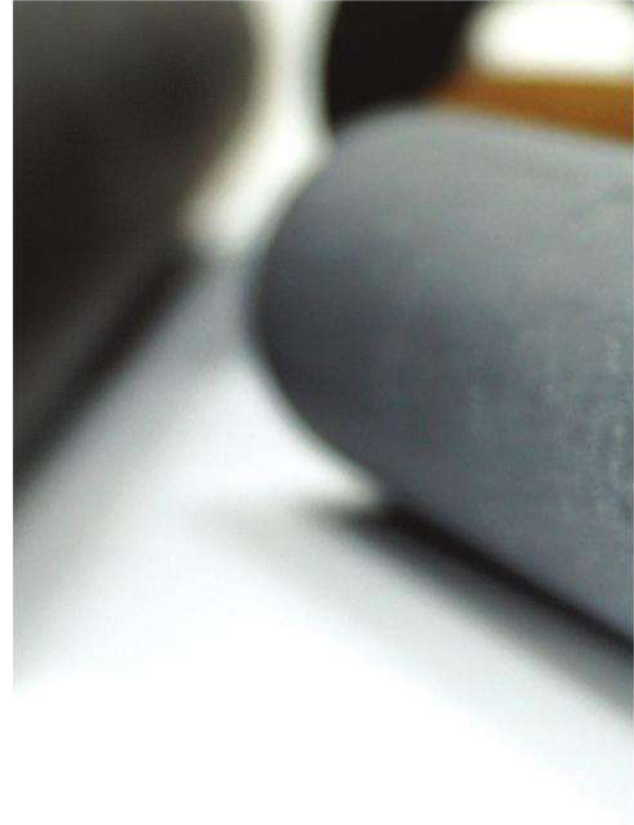
Fundamental Filtration

**Personalizing your own Carbon Block
was the easiest thing to do**

With over 20 years of know-how

- lengths from 50-500mm
- inlet 9-50mm, outlet 30-63mm,
- pore size 0.5-10um,
- binder type,

name a specification with your needs, we just might have it.





Functions

Basic Functions

Chlorine / Particulate / Taste and Odor > **NSF/ANSI 42**

Optional Functions

Chloramine / Lead / Mercury / VOC (Volatile Organic Compounds)

Turbidity / Cyst / Asbestos > **NSF/ANSI 53**

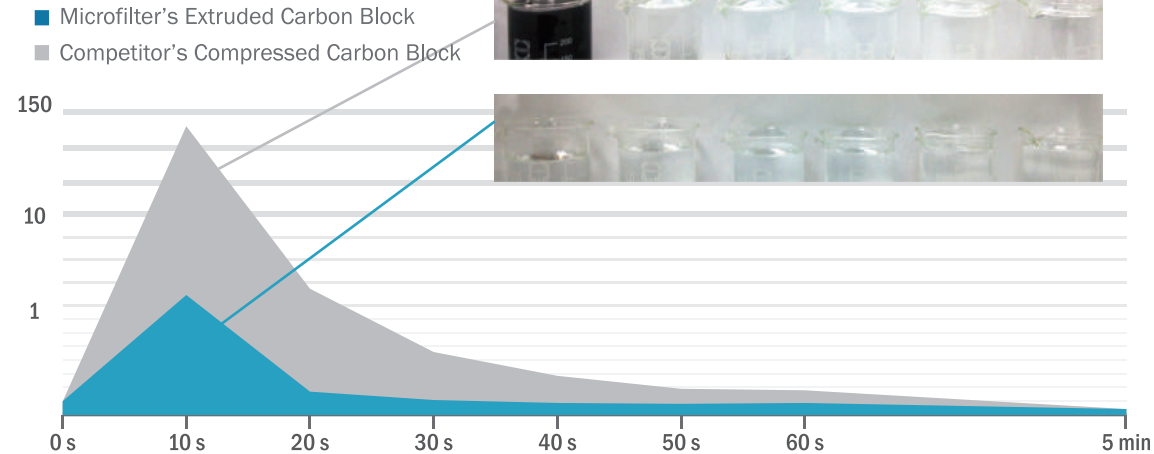
Emerging Compounds / Incidental Contaminants > **NSF/ANSI 401**

PFOA (PerFluoro Octanoic Acid) / PFOS (PerFluoro Octanoic Sulfonate) > **NSF P473**

Microcystin > **NSF P477**

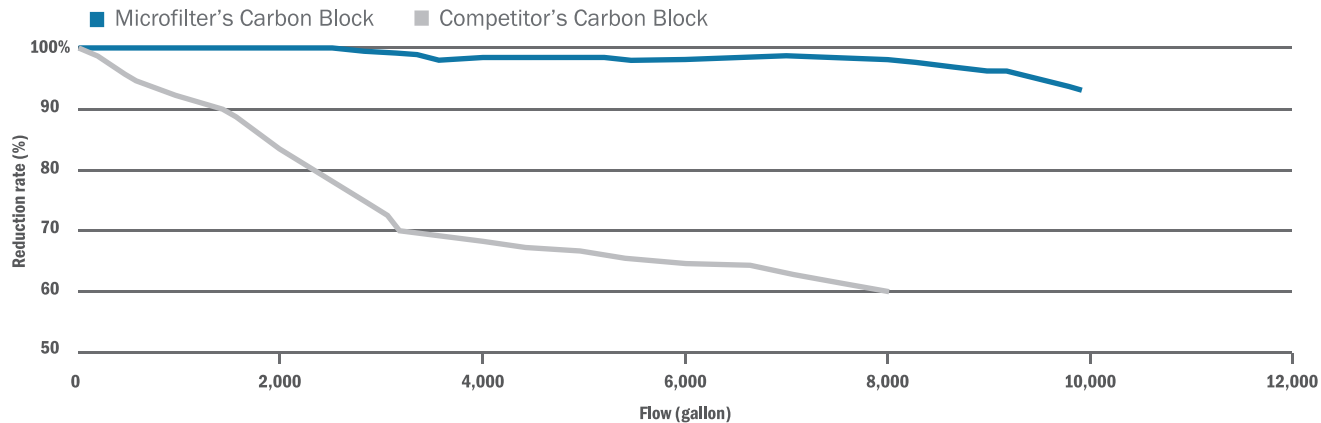
Performance

Initial Flushing Turbidity

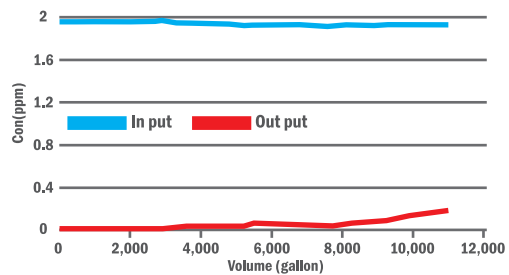


Chlorine Removal (comparison) _Flow rate : 1.0 GPM

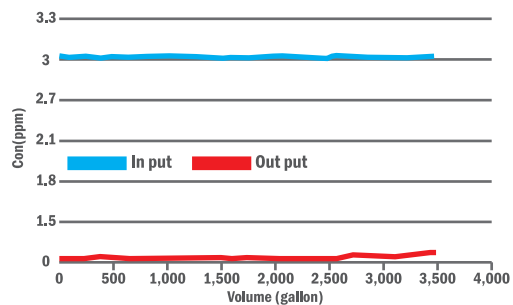
- Concentration of Influent water : 2.0 ± 0.2 ppm
- Test Filter : 2.5"X10" Carbon Block filter, 5um



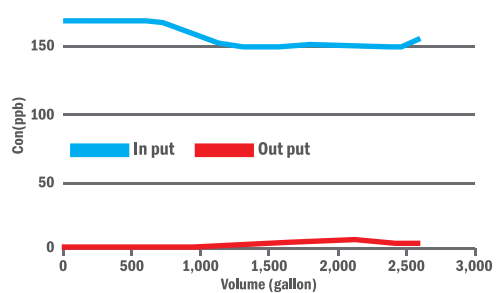
Chlorine Removal Flow rate : 1.0 GPM
Test Filter : 2.5"X10" Carbon Block filter



Chloramine Removal Flow rate : 0.5 GPM
Test Filter : 2.5"X10" Carbon Block filter



pH 6.5 Lead Removal Flow rate : 0.75 GPM
Test Filter : 2.5"X10" Carbon Block filter



UF Hollow Fiber Membrane What's Pathogenic Bacteria?

Microfilter's UF Hollow Fiber Membrane comes with optional function for all water purification systems mainly filtering of Pathogenic bacteria and minute impurities.

Certificate



Virus, Bacteria removal



Material

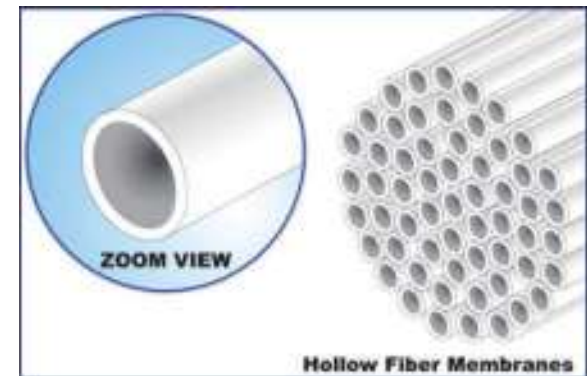
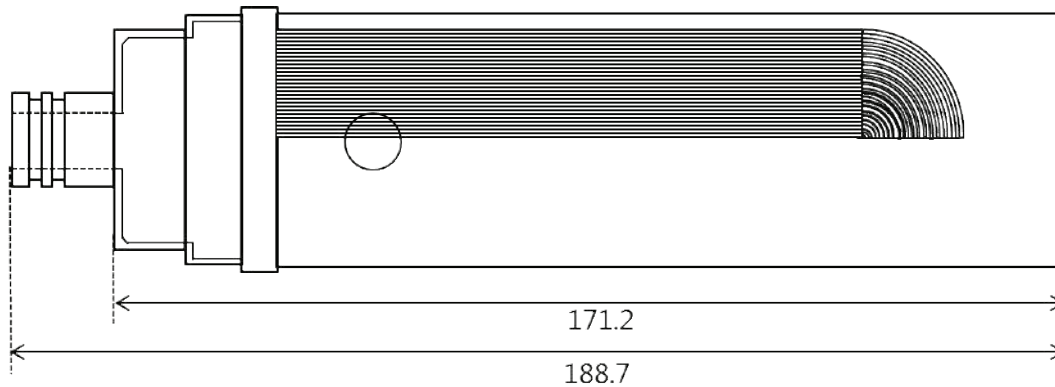
Functions

Main Function: Filtering Pathogenic Virus, bacteria and minute impurities

A range of application: Industrial water purifier and domestic water purifier

Application field: Water purifier, Drinking fountain, Ionizer, Bidet, etc.

Specification



	General UF	Virus UF	Natural Pressure load UF
Membrane Length (mm)	115 ± 5.0	115 ± 5.0	63 ± 5.0
Membrane O.D (mm)	0.57 ± 0.01	0.57 ± 0.01	0.50 ± 0.01
Number of Membrane	1700	2000	1400
Membrane surface area (m ²)	0.35 ± 0.01	0.42 ± 0.01	0.12 ± 0.01
Pore Size (μm)	0.1	<0.01	0.1



Sediment

- Industrial Filter Cartridge offer superior contaminant holding capacity compare to conventional pleated cartridges due to their multiple layered construction.
- Thermal bonded construction ensure cartridge integrity under severe process conditions.
- All materials used in cartridges are FDA listed for food contact use.
- High efficiency / High dirt holding capacity / Low pressure drop
- Stringent quality control standards guarantee an uniform microporous membrane for effective, consistent filtration performance

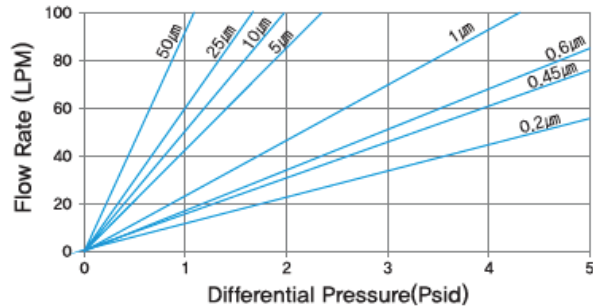


Industrial Filtration
Water Simply isn't Enough to Just Drink



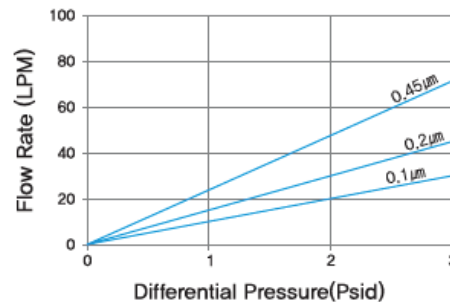
Application

- Food & beverage, Cosmetice, Wine, Mineral water, Pharmaceuticals
- Organic solvents, plating solutions, Process
- Semiconductor CMP Filter
- Chemicals, Petrochemicals, Oil .etc



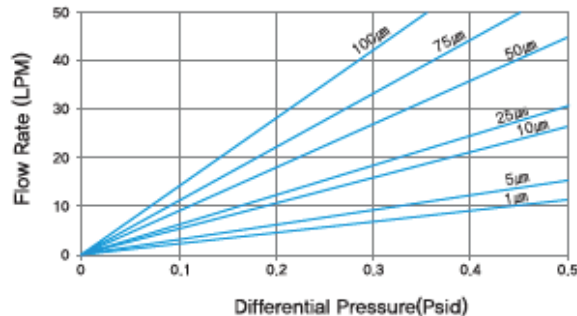
Testing standard : ASTM F 317-72, ISO 16889

PP Pleated Filter



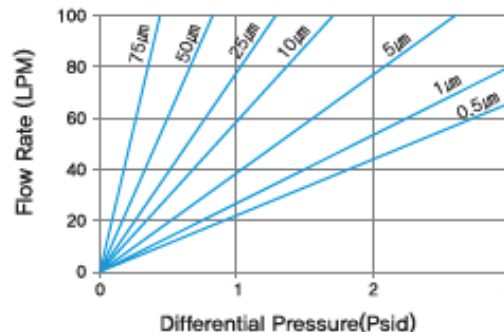
Testing standard : ASTM F 317-72, ISO 16889

PES Membrane Pleated Filter



Testing standard : ASTM F 317-72, ISO 16889

Melt-blown Depth Filter



Testing standard : ASTM F 317-72, ISO 16889

Bi-Component Depth Filter



UV-Sterilizer

Disinfection of Virus & Bacteria Reduction

(CE & RoHS certified)

Effective disinfection for chlorine resistant bacteria, virus, cyst, protozoa and microorganisms by 99.9%, the lamps are easy to replace for all residential end-users.



Specification

Model	 	
	UV-4W	UV-6W
Size	50mm X 210mm	50mm X 280mm
Weight	360 g	500 g
Flow rate	0.5 GPM	1 GPM
Pressure	20 ~ 80psi	
Temperature	39-100°F (4-38°C)	
Life cycle	8,000 hour	
Material	PP / SUS / SILICON	
Lamp Wattage	4 W	6 W
Input Voltage	AC 110/220 V, 50~60 Hz	

- Water Purification from 0.5 to 6 GPM
- Effective disinfection for chlorine resistant bacteria, virus, cysts
- Reduces all bacteria, viruses, protozoa and microorganisms by 99.99%
- Potable & high purity water point of use applications
- Electronic ballast provides constant output current over the entire operating range
- Easy lamp replacement
- Available in 110V and 220V units
- CE, RoHS certified

PEX-Tube

Cross-Linked Polyethelene Tube

Make your own customized PEX tube design in all angles and make a more favorable cost by eliminating unnecessary fittings in your water filtration system



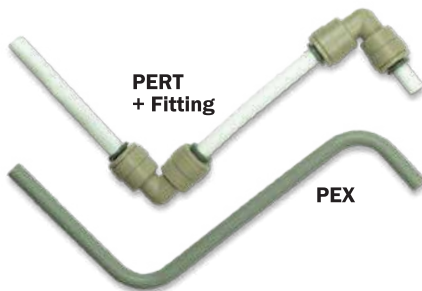
This MF PEX Flexible Pipe 460, MF PEX Flexible Pipe 650 is tested and certified by NSF International against NSF/ANSI Standard 61, 372 for materials and structural integrity requirements.

NSF Trade Name
MF PEX Flexible Pipe460, MF PEX Flexible Pipe650

Elements
MICROFILTER'S Technology

Functions

- Reduce the cost of fitting
- Chemical, UV resistance
- No pinhole problem



Simple Design



PERT



PEX

Chlorine effect

Size (diameter)		
1/4"	3/8"	1/2"
5/16"	5/8"	
+ under 2"		
Tube Formation		
Tube End Tips		
Color		
+		

Packing information

FLUUX

Model	Box	pallet	20ft	40ft
1stage head	12	1632	16320	32640
2stage head	3	240	2400	4800
3stage head	1	80	800	1600
10 inch filter	10	800	8000	16000
15 inch filter	6	480	4800	9600
17 inch filter	6	480	4800	9600
21 inch filter	9	216	2160	4320

FX-Series

Model	Box	pallet	20ft	40ft
1stage head	12	1632	16320	32640
10 inch filter	9	486	4860	9720
15 inch filter	9	432	4320	8640
17 inch filter	9	324	3240	6480
21 inch filter	9	216	2160	4320

IEN-Series

Model	Box	pallet	20ft	40ft
IEN-1500	4	320	3200	6400
IEN-3000	4	256	2560	5120
IEN-6000	4	144	1440	2880
IEN-9000	4	108	1080	2160

M9

Model	Box	pallet	20ft	40ft
4 stage stand RO Full set	1	24	240	480
4 stage stand UF Full set	3	72	720	1440
4 stage hanger RO Full set	1	24	240	480
4 stage hanger UF Full set	3	72	720	1440
3 stage hanger Full set	3	135	1350	2700
2 stage hanger Full set	4	160	1600	3200
8 inch filter	20	1260	12600	25200
11 inch filter	25	1350	13500	27000
13 inch filter	25	1125	11250	22500

U1

Model	Box	pallet	20ft	40ft
4stage RO full set	1	24	240	480
4stage full set	3	72	720	1440
3stage full set	3	72	720	1440
8 inch filter	20	1260	12600	25200
11 inch filter	25	1350	13500	27000
13 inch filter	25	1125	11250	22500

CU5

Model	Box	pallet	20ft	40ft
CU5 -RO fullset	1	18	180	360
CU5 -CRO fullset	1	18	180	360

Counter-top

Model	Box	pallet	20ft	40ft
AWP	1	32	320	640
Filter	1	1350	13500	27000
RO-tank	1	100	1000	2000

In-line filter

Model	Box	pallet	20ft	40ft
K3	25	1350	13500	27000

UV-Sterilizer

Model	Box	pallet	20ft	40ft
UV-4W	20	1260	12600	25200
UV-6W	20	1260	12600	25200
Ballast	20	1800	18000	36000
Replacement Lamp	42	2646	26460	52920