Product Category Booklet
In-Line Filtration
FUSED100, FUGAC100, FUGAC150

Booklet includes:

- Complete Product Category of In-Line Water Filtration Units
- Tearsheets on Individual Units with Technical Specifications
- Filter Replacements specific to these units
- Compliances
- Filter/Filtration Removal and Capabilities

EWS, INC. and Environmental Water Systems
A Complete Line of Water Filtration Product from Sink to Whole-Home

Applicable Water Filtration Available Based on Water Conditions and Consumer Needs and/or Preferences:

Drinking Water Filtration Systems
Reverse Osmosis
UV Disinfection
CWL Series of Whole Home Filtration Appliances
EWS Series of Whole Home Filtration & Physical Conditioning
Softener Series
pH Balancing
Iron Removal
and more...

■Municipally-Treated ■Well Water Applications ■Residential ■Commercial ■Industrial

ALL FILTRATION PRODUCT MANUFACTURED AND ASSEMBLED IN THE USA

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In-Line, Point of Use Filtration Units

Model No: FUSED100 PRE-SEDIMENT ONLY

In-line, 5-micron, full bed depth, pre-sediment filter reduces suspended matter, dirt, rust, silt and sediment.
Filter Replacement Code: 1.

Model No: FUGAC100 GOOD FILTRATION

Improves taste, clarity and odor by removing chlorine and other volatile organic compounds.
Meets or complies with NSF Standard 42.
Filter Replacement Code: 6.

Model No: FUGAC150 BETTER FILTRATION

Improves taste, clarity and odor by removing chlorine and other volatile organic compounds. The upgraded filter also safeguards against lead and cysts (giardia and cryptosporidium).
Meets or complies with NSF Standard 53.
Filter Replacement Code: 7.

Product Notes:

We offer the above units to provide a full bed depth of filtration, which offers superior performance compared to the limited capacities of typical in-line “refrigerator type” filters. The above units or similar single-stage units are also being used, as gimmicks, by faucet and sink companies as filtration devices. These units can be used in-line for many limited applications. However, it’s the upgraded applications of proper drinking water systems, reverse osmosis systems, and/or whole home filtration appliances that offer the superior performance for drinking, cooking and many other uses.

Filtration Upgrade Options:

Upgrade your applications to the better performing undercounter drinking water systems which provide a dispenser and can be additionally connected to refrigerator (if applicable), ice-makers, instant hot, chillers, and other devices.

Upgrade to a CWL/EWS whole-home filtration appliance and provide the filtration to every location without the routine maintenance of constant filter cartridge replacements.

All completely assembled undercounter units include the following standard features:

White 10" housing with full bed depth filtration cartridges, spanner wrench to open housings for easy filter replacement, self-piercing saddle valve for water line connection with shut-off valve (see service guide for your correct application), all necessary tubing (color coded) to make proper connections, simple to use mounting bracket, and complete service guide with installation and use instructions.

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Technical Information for In-Line Units: FUSED100, FUGAC100, FUGAC150

REPLACEMENT FILTERS FOR EACH UNIT:

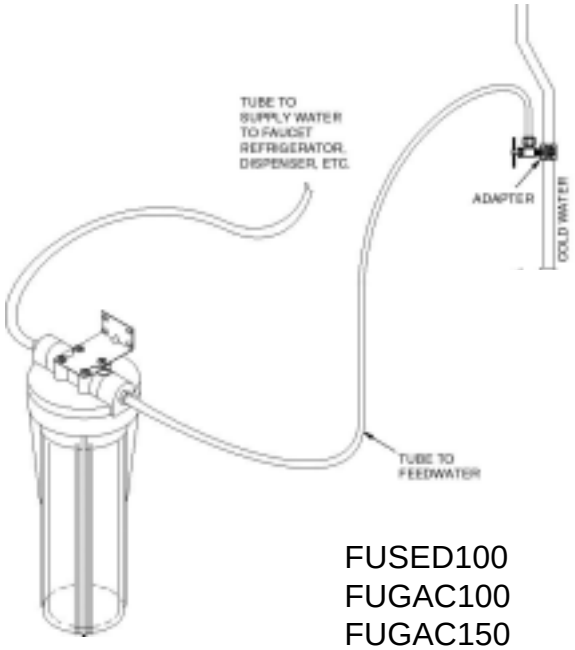
Part No.	Model #	Description	Replacement Time*
93023	FUSED100	5 Micron Sediment Cartridge	Up to a Year
UDF10HP	FUGAC100	10" GAC Cartridge	Up to a Year
PB-1	FUGAC150	Lead and Cyst Removal Cartridge	Up to a Year

FILTER SPECIFICATIONS:

Pre-Filter: 93023 (Model # FUSED100)
Construction: 100 % Pure Polypropylene Fibers
Temperature Range: 40-145° F (4.4 -62.8°C)
Maximum Flow Rate: 5 gpm (19 lpm)
Dimensions: 2 - 3/8 in. x 4-7/8 in. (61mm x 124 mm)
Micron Rating: 5 µm Nominal
Initial Pressure Change: 2.00 psid @1.0 GPM
Fits all Standard 10 in. Housings
Meets FDA Requirements for food and beverage contact.

Filter: UDF10HP (Model # FUGAC100)
Vibration Packed Granular Activated Carbon
Carbon Wt.: 0.75 lbs. Iodine Rating No. 1100
Temperature Range: 40° to 125ºF (4.4° to 52° C)
Maximum Flow Rate: 1.0 gpm (3.875 lpm)
Dimensions: 2- 7/8 in. x 9 3/4 in. (73 X 248 mm)
Micron Rating: 5 µm Nominal
Initial Pressure Change: 2.00 psid @1.0 GPM
Chlorine Reduction: 2,500 Gal. @ 1.0 GPM
Fits all Standard 10 in. Housings
Cartridge is Tested and Certified by International ANSI/NSF Standard 42 - Conforms to requirements

Filter: PB-1 (Model # FUGAC150)
Construction: Extruded Activated Carbon Block
Carbon Wt.: 0.85 lbs. Iodine Rating No. 1100
Temperature Range: 40° to 125ºF (4.4° to 52° C)
Maximum Flow Rate: 1.0 gpm(3.875 lpm)
Dimensions: 2.50 x 9 3/4 in. (62 X 248 mm)
Micron Rating: 1 - 2 µm
Initial Pressure Change: 4.0 psid @0.75 GPM
Chlorine Reduction: 6,000 Gal. @ 0.75 GPM
Lead Reduction: 2,500 Gal. @ 0.75 GPM to obtain minimum 90% removal of influent (150 ppb) in accordance with NSF International Protocol.
Cyst Reduction: 99.984% reduction of 3 - 4µm
Fits all Standard 10 in. Housings
Manufactured using FDA-approved materials.
Cartridge meets or complies with NSF Standard 53.



FUSED100
FUGAC100
FUGAC150

Tubing Size: 1/4 in. O.D
System Weight: 4 lbs. /2 Kgs.
System Size: 6 in. W x 6 in. L x 12 in. H / 15 cm x 15 cm x 36 cm
Min/Max Water Temperature: 40º / 80 ºF - 4.4 / 62.8C
Max Water Pressure: 75 PSI / 5.86 Bar
Housing Inlet / Outlet Size: 1/4 in. O.D. tube female
Quick Connect x 1/4 in. MNPT
Flow Rate : <1.0 GPM / 3.78 LPM - Designed system flow rate to insure proper filtration tolerances.

SHIPPING INFORMATION
Carton Size.:6 in. W x 6 in. L x 13 in. H
Carton Wt.: 5 lbs. / 2.5 kgs.

For other performance requirements or applications, other models are available.
*Based on local water conditions and usage.

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Filter Replacements for In-Line Series

Filter Code No: 1
Model No: 93023 **Replace: up to a year***
Pre-Sediment Filter (5-micron)

5-Micron Prefilter (93023) is a pure, high quality polypropylene depth filter, with no fillers or binders, with exceptional dirt holding capability. The removal of any dirt, silt, rust or suspended matter protects the remaining cartridges and extends the performance of other filters. This Prefilter is standard in all our undercounter drinking water systems and reverse osmosis units.
Meets or complies with all FDA requirements for food and beverage contact.
In Use With: FUSED100

Filter Code No: 6
Model No: UDF10HP ***(Good)*** **Replace: up to a year***
Granular Activated Carbon (GAC) Postfilter++

This vibration packed cartridge uses the highest quality (Iodine No. 1100) granular activated carbon for effective reduction of taste, clarity and odor problems such as Chlorine and VOC's. Cartridges are designed to allow water to pass through entire carbon bed to allow maximum adsorption. This Postfilter is standard in our; FUGAC100, FUGAC200, FUGAC300 and all Reverse Osmosis Units.
Meets or complies with NSF Standard 42. See Removal Reference Chart.
In Use With: FUGAC100

Filter Code No: 7
Model No: PB-1 ***(Better)*** **Replace: up to a year***
Carbon Block 1-Micron Postfilter++

The PB-1 is designed for effective reduction of taste, clarity and odor problems such as Chlorine and VOC's. In addition, the filter reduces Lead and Cysts such as Giardia and Cryptosporidium. Cartridges are designed to allow water to pass through entire carbon bed to allow maximum adsorption. This Upgraded Postfilter is standard in our; FC150, UC150. FUGAC150, FUGAC250, UU250, FUGAC350 and UU350.
Meets or complies with NSF Standard 53.
See Removal Reference Chart and the Upgraded PB-1 Capabilities.
In Use With: FUGAC150

++Compare to loosely filled cartridges using carbon of lower Iodine No's. (industry standards are 600-650, imported filters may meet minimum compliances at 450). Be cautious of impregnated papers, KDF media and/or combined materials and filter purposes. Be aware of smaller filter diameters and limited time, usage and replacement requirements.

FDA, EPA and NSF Compliances

Please be advised that all the materials and components utilized in producing all POU (Point of Use) drinking water filtration and reverse osmosis systems, and all POE (Point of Entry) filtration, conditioning and softening equipment, by EWS, Inc., comply with, but are not limited to, one or more of the following regulating standards:

NSF STANDARD 14	FDA 21 CFR 177.1520	FDA 21CFR 177.1640
FDA 21 CFR 177.1350	FDA 21 CFR 175.105	CAS # 7440-44-0
ANSI 304	CDA C360000	NSF STANDARD 60
NSF STANDARD 61	NSF STANDARD 58	ANSI 302
ANSI 316	FDA 21 CFR 177.2600	FDA 21 CFR 175.300
FDA 21 CFR 177.2550	NSF STANDARD 52	NSF STANDARD 42
NSF STANDARD 18	FDA 21 CFR 177.2550	FDA 21 CFR 177.1655
FDA 21 CFR 177.1630	FDA 21 CFR 177.2800	FDA 21 CFR 175.300
FDA 21 CFR 177.2260	FDA 21 CFR 181.32	FDA 21 CFR 177.2660
FDA 21 CFR 177.1950	FDA 21 CFR 177.2910	FDA 21 CFR 177.2250
FDA 21 CFR 177.1680	NSF STANDARD 53	NSF STANDARD 55

- **Most of these standards relate to the Code of Federal Regulations of the United States of America, Title 21, Charter 1, Subchapter B set forth by the U.S. Food and Drug Administration.**
- **The NSF (National Sanitation Foundation) standards correlate to materials and potable water.**

Furthermore, and without, exception every component included in all POU and POE systems by EWS, Inc. are compliant for food and beverage contact and/or meet or comply with the most current, appropriate, and applicable standards without exception.

Factory Preparation Summary:
All systems are factory prepared and thoroughly checked to assure proper function and if applicable, quality tests of product water produced to assure that minimum standards of rejection have been met, and/or tests of specific components to assure correct function and flow rate measurements to assure efficiency specifications are met.

Product Performance Summary: Detailed in Section 5, pg. 5-34

♦ For all product capabilities, compliances and/or warranties to remain valid, all systems are dependent upon proper application, specification, and installation of any specific unit and/or combination of units.

♦ Please know your local or individual water condition(s), and plumbing application(s). Please review system(s) capabilities, applications, setup, installation, startup, maintenance, and related warranties.

♦ Detailed information is published in EWS Product Manuals and specific Product Service Guides (included with each specific unit) and made available upon request throughout US distribution and/or EWS corporate offices. All current information is available online @ www.ewswater.com or www.ewswater.com/techandspec.html

EWS, Inc. / Environmental Water Systems

UDF10HP GAC Filter Cartridge

Filter cartridge UDF10HP meets or complies with NSF Standard 42 for reduction of Chlorine and other Volatile Organic Compounds. The UDF10HP utilizes a vibration packed, high performance granular activated carbon (Iodine No. 1100) which provides exceptional filtration capacity and effectively reduces chlorine, voc's, bad taste and odor in drinking water.

In use with: FUGAC100

GRANULAR ACTIVATED CARBON (GAC) Reference List

Below is a simple reference chart to give some perspective as to GAC's capabilities with various substances. Some items are heavy metals and inorganics, while others are VOC's (volatile organic compounds), some of which are man-made pollutants. Still other items, such as hardness, are not even considered contaminants. In general, GAC is very economical and a great compliment to municipally-treated water without the disadvantages of more aggressive filtration. GAC is used in all filtration due to its removal capacities. Know your water to select the correct product for you, your family and your home.

- See the Upgraded PB-1 for greater GAC capabilities (FUGAC150, FUGAC250, FUGAC350)
- UV disinfection for greater safeguards (UU250, UU350, optional with Reverse Osmosis)
- See CWL or EWS whole home appliances for GAC filtration to the entire home.

Acetaldehyde	4	Emulsions	2	Lead	3	Precipitated Sulfur	2
Acetic Acid	3	Ethyl Acetate	5	Lime	0	Propioic Acid	4
Acetone	4	Ethyl Acrylate	5	Mercaptans	4	Propionaldehyde	3
Alcohols	4	Ethyl Alcohol	4	Metal Salts	1	Propyl Acetate	4
Alkalinity	1	Ethyl Amine	4	Methyl Acetate	4	Propyl Alcohol	4
Amines	3	Ethyl Chloride	4	Methyl Alcohol	4	Propyl Chloride	4
Ammonia	1	Ethyl Ether	4	Methyl Bromide	5	Radon	4
Amyl Acetate	5	Fertilizers	1	Methyl Chloride	4	Rubber Hose Taste	5
Amyl Alcohol	5	Fluorides	2	Methyl Ethyl Ketone	5	Seawater	1
Antifreeze	4	Formaldehyde	2	Naphtha	5	Sediment	2
Arsenic	1	Gasoline	5	Nitrates	0	Soap	3
Benzene	5	Glycols	5	Nitric Acid	3	Sodium Hypochlorite	5
Bleach	5	Hardness	0	Nitrobenzene	5	Soluble Iron	2
Boron	1	Heavy Metals	3	Nitrotoluene	5	Solvents	4
Bytly Alcohol	5	Herbicides	5	Odors (General)	5	Sulfuric Acid	1
Butly Acetate	5	Hydrogen Bromide	2	Oil - Dissolved	5	Sulphonated Oils	4
Calcium Hypochlorite	5	Hydrogen Chloride	1	Oil - Suspended	2	Suspended Matter	2
Carbon Dioxide	0	Hydrogen Fluoride	1	Organic Acids	4	Tannins	4
Chloral	5	Hydrogen Iodide	2	Organic Esters	5	Tar Emulsion	4
Chloramine	4	Hydrogen Peroxide	5	Organic Salts	4	Tartaric Acid	4
Chloroform	5	Hydrogen Selenide	3	Oxalic Acid	5	Taste (DI Water)	4
Chlorine	5	Hydrogen Sulfide	3	Oxygen	5	Taste (From Organics)	4
Clorobenzene	5	Hydroclorous Acid	5	Ozone	4	THM's	5
Chlorophenol	5	Inorganic Acids	1	PCB's	5	Toluene	5
Chlorophyll	4	Inorganic Chemicals1	1	Pesticides	5	Toluidine	5
Citric Acid	4	Insecticides	5	Phenol	5	Trichlorethylene	5
Cresol	5	Iodine	5	Phosphates	0	Turpentine	5
Defoliants	5	Isopropyl Acetate	5	Plastic Taste	5	Urine	2
Detergents	3	Isopropyl Alcohol	5	Plating Wastes	3	Vinegar	3
Diesel Fuel	5	Ketones	5	Potassium Permanganate	4	Xanthophyll	4
Dyes	5	Lactic Acid	4	Precipitated Iron	2	Xylene	5

KEY TO THE ABOVE LIST:

5- EXCELLENT - A proven application 4- VERY GOOD - A proven application 3- GOOD - very acceptable result

2- FAIR - limited application 1- POOR - not a recommended application 0- Not an application for GAC

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PB-1 Upgraded GAC Filter Cartridge

Extruded Activated Carbon Block Filter

The PB-1 cartridge meets or complies with NSF Standard 53 for the removal of Lead and Cysts (Giardia, Cryptosporidium) in addition to removal of Chlorine and other Volatile Organic Compounds.

In use with: FUGAC150

- Lead Reduction: 2,500 gallons @ 0.75 GPM
- Cyst Reduction: Giardia, Cryptosporidium
  - >99.96% reduction of 1 - 2 µm particulates
  - >99.984% reduction of 3 - 4 µm particles
- Class 1 Turbidity Reduction
- Outstanding Chlorine, Taste and Odor Reduction
- Chlorine Reduction >90 % @ 6,000 gallons @ 0.75 GPM

Filter Dimensions: 2.50" O.D. x 1.25" I.D. x 10" L
Carbon Weight: 0.85 lbs.

Construction:
Precision Continuous Extrusion,
Graded Density Pre-Filtration Design

Lead and Heavy Metal Reduction
Reduction of Soluble and Insoluble (Particulate) Lead
The PB-1 extruded activated carbon filters reduce soluble lead using an ion-exchange filter medium with high specificity for soluble lead. Particulate filtration is used to intercept insoluble lead-containing particles.Standard 2.50" O.D. x 9.75" L filters will reduce lead, a minimum of 90% (or 150 ppb) over 2,500 gallons @ 0.75 gpm meeting NSF test protocol for Standard 53.

Chemical Adsorption
PB-1 filters offer high levels of chemical reduction in potable drinking water, including the removal of chlorine and other compounds that contribute to taste and odor.

Particulate, Cyst and Turbidity Reduction
PB-1 filters provide >99.984% reduction of 3-4 µm particulate, >99.96% reduction of 1-2 µm particulates, and are high performance sediment filters with extended life. Graded-density prefiltration combined with high dirt capacity extruded activated carbon provide several times greater life than molded filters.

PB-1 filters consist of activated carbon particles fused into a uniform block with enhanced adsorptive capacity and efficiency. These filters flow in a radial, outside-to-inside direction, providing increased dirt capacity and low pressure drop. Unlike more basic GAC filters, these cartridges will not channel or by-pass, due to extreme uniformity of the extruded activated carbon core. Service life of the PB-1 is greatly extended by two layers of prefiltration media consisting of 15 µm polypropylene spun-bonded outer pre-filtration layer and a 5 µm polypropylene melt-blown inner layer.

Caution: Filters or media representing percentages of removal *"up to"* do not provide the minimum removal rate or the quantitative amount that can actually be removed. In addition, any removal may be over a limited amount of water and may meet only the minimum of the standard for that filter. Better marketing does not provide better consumer protection.

In addtion to the detailed and technical information provided about this filter cartridge, please review the GAC Reference, the basic characteristics of carbon filtration regarding the removal of chlorine and other disinfectants, as well as, volatile organic containments (VOC's).

- See the UV module for additional capabilities and safeguards.

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Point of Use (sink) Pressure Limiting Valve
Highly Recommended

- This device is of vital importance to reduce pressure or prevent pressure surges above 60psi.
- All heaters and chillers have warranty issues with water supply pressure exceeding 60psi.
- All Point of Use (sink) Product function best above 40psi but should be limited to 60psi for optimum performance and product longevity.

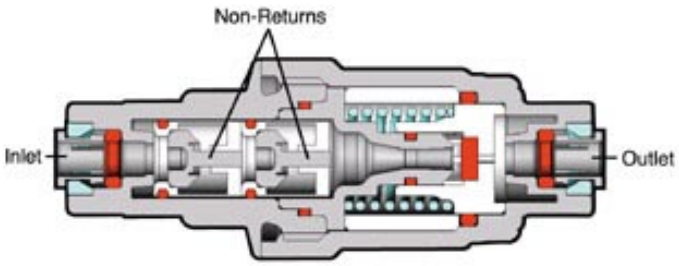
Item #: FMP-60

High pressure system to protect drink dispensers, water filters, ice makers, coffee machines, chillers (cold water systems), hot tanks (hot water systems) and other devices

Easy to install at supply side to any device
Simple connection with supplied quick connect fittings to 1/4" tubing

• Integral Dual Check Valves • Resists Water Hammer
• Stops backflow • Supplied with fixing clip

This device is highly recommended with the use of all Chillers, Heaters, In-Lines, and all other point of use filtration systems



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www.waterontheweb.com
and
Business-to-Business E-Commerce Distributors.

Available through Authorized Building Wholesale Supply Locations, Kitchen & Bath Showrooms and Appliance Dealers, and their Building and Plumbing Contractors throughout the United States.

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For all product information, service guides, technical specifications, well water applications, go to: www.ewswater.com/techandspec.html

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