

Product Information Booklet Two-Stage Drinking Water Filtration System FUGAC250

Booklet includes:

- Complete Product Category of Drinking Water Filtration Systems
 - Tearsheet on Individual System with Technical Specifications
 - Filter Replacements specific to this unit
- Compliances
 - Filter/Filtration Removal 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



Two Stage Drinking Water Systems Undercounter Filtration and UV Units

Model No: FUGAC200 GOOD

Improves taste, clarity and odor by removing chlorine and other volatile organic compounds. The 5-micron pre-sediment filter serves to remove suspended matter, dirt, rust and sediment and improves performance of other filters.

Meets or complies with NSF Standard 42. Filter Replacement Codes: 1, 6.



Model No: FUGAC250 BETTER

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). The 5-micron pre-sediment filter serves to remove suspended matter, dirt, rust and sediment and improves performance of other filters.

Meets or complies with NSF Standard 53. Filter Replacement Codes: 1, 7.



Model No: UU250

BEST

This unit improves, removes and safeguards like above model FUGAC250. The additional UV module protects against bacterial, viral, E-coli and other microorganisms and is tested 99.9% effective. The 5-micron pre-sediment filter serves to remove suspended matter, dirt, rust and sediment and improves performance of other filters.

Meets or complies with NSF Standards 53 and 55. Filter Replacement Codes: 1, 7, 16.



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, chrome, lead-free faucet with white trim for dispensing water (other faucet options available), 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, UV lamp and setup (UV unit only) and complete service guide with installation and use instructions.



Two Stage Upgraded Undercounter Drinking Water Filtration Unit Model: FUGAC250

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). The 5-micron pre-sediment filter serves to remove suspended matter, dirt, rust and sediment and improves performance of other filters. Meets or complies with NSF Standard 53.

- * Faucet with Chrome, Lead-Free Dispenser (other faucet options available)
- * Powder Coated, Corrosive Resistant Bracket Mounts Easily
- * Quick Connect Fittings for Easy Installation
- * 10" Heavy Duty Housings Contain our Full Sized, Full Bed Depth Cartridges for Optimum Performance and Longer Life
- Replacing Filters is Easy; Use the Included Spanner Wrench to Spin Housing Off, Replace Filter, Spin Housing Back On.



FUGAC250

Benefits:

- * Safeguards Against Lead and Cysts (Cryptosporidium and Giardia)
- * Improves Taste, Clarity and Odors
- * Removes Chlorine and VOC's
- * Reduces Dirt, Silt, Sediment and Rust
- * Replaces Costly Bottled Water
- * Better Tasting, Quality, Filtered Water for Coffee, Tea, Juices and Ice

Applications:

- * Installs Easily at Any Sink, Wet Bar or Any Point of Use Location
- * Can be Cross-Connected (if applicable) to Refrigerators, Ice Makers and Other Devices (see our options for heaters and chillers)
- * For All Your Drinking and Cooking Needs
- * Safe for Pets and Plants

Upgrade Options:

- For bacterial, viral, e-coli and/or microorganism safeguard (UU250)
- Reverse osmosis (with or without UV options), if applicable based on water issues
- * CWL/EWS Series for Whole Home Filtration

<u>All completely assembled undercounter units include the following standard features:</u>

White 10" housing with full bed depth filtration cartridges, spanner wrench to open housings for easy filter replacement, chrome, lead-free faucet with white trim for dispensing water (other faucet options available), 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, UV lamp and setup (UV unit only) and complete service guide with installation and use instructions.



Technical Information: FUGAC250 REPLACEMENT FILTERS

Part No. 93023 PB-1

Description 5 Micron Sediment Cartridge Lead and Cyst Removal Cartridge

Replacement Time* Up to a Year



TURE TO SUPPLY WATER

FILTER SPECIFICATIONS:

Pre-Filter: 93023

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: PB-1

www.ewswater.com

Construction: Extruded Activated Carbon Block Carbon Wt.: 0.85 lbs. Iodine Rating No. 1100 Temperature Range: 40° to 125°F (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.

Tubing Size: 1/4 in. O.D System Weight: 14 lbs. /7 Kgs. System Size: 14 in. W x 6 in. L x 12 in. H / 36 cm x 15 cm x 21 cm Min/Max Water Temperature: 40° / 80 °F - 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.

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



FUGAC250



Filter Replacements for FUGAC250

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: All Drinking Water Filtration Systems

Filter Code No: 7Model No: PB-1(Better, Best with UV)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: FUGAC250, UU250, FUGAC350, UU350

++Compare to loosely filled cartridges using carbon of lower lodine 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.

■For upgraded filtration capabilities, see the Best (UU250), or, if applicable, our Three-Stage Drinking Water Filtration Systems or selection of Reverse Osmosis Systems.

■For filtration to the whole home see our CWL or EWS Series of whole home filtration appliances.

*Replacement is based on local water conditions and usage. Replace as needed and/or not beyond recommended time limit







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 apositio unit) and made available upon request throughout US distribution and/or

(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



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 manmade 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 next page with information on 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 lodide	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	lodine	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 Permangan	-	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- GOO 2- FAIR - limited application 1- POOR - not a recommended application 0- Not an

3- GOOD - very acceptable result 0- Not an application for GAC





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

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 μ m particulate, >99.96% reduction of 1-2 μ m 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. 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



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.

<u>Caution:</u> 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 addition 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.



Chiller KMA-200-C

EWS presents the option of chilled water with any of our undercounter water filtration systems or our selection of whole home water filtration appliances

EWS Model Number: KMA-200-C

The Perfect Residential In-Line Water Chiller.

Delivers over two gallons of cold water per day.

Advanced and Proven Thermoelectric Technology, used throughout Europe. No old and inefficient compressors.

Compatible with all EWS residential drinking water and reverse osmosis systems, and all CWL/EWS whole home appliances.

- Compact size & easy undercounter installation.
- Quiet, efficient & reliable.
- Operates under normal household pressure.



Cold Water at Your Fingertips!



Dimensions: 8" diameter x 18.5" height Weight: 12 lbs. Maximum Water Pressure: 60 psi Electrical: Separate UL listed 120 vac or CE marked 240 vac Power Converter. Chiller operates on 12 vdc and 4 amps. Compliance: All waterways are constructed of NSF and/or FDA compliant materials.

Why Chilled Water?

Eliminates the need for dispensing water in the refrigerator/freezer, which can be costly and takes up valuable freezer shelf and door space.

Puts the chilled water at the sink for easy usage. Fill any size cup or bottle with cold filtered water.

Avoids the spills of dispensed refrigerator water. No more mess at the drain and on the floor.

A perfect compliment for those consumers purchasing separate stand alone ice-makers.

To buy an instant hot or chiller ?

EWS can provide you both and with all your water filtration options. Microwaves provide hot water very quickly for most usages without storing stale water.***

Chilled water is wonderful for drinking, used more frequently, and may be a more preferred option.

*** EWS has heaters available, however the pricing of other companies and big box retailers have stifled any opportunity to create a better unit. They just dress them up. Heaters are prone to failure and a consumer nightmare when they leak. Heaters are unnecessary anyway - instant coffee anyone?



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





Dispenser Finish Options

All Drinking Water Systems and Reverse Osmosis Systems include: Standard long-reach dispensers Chrome with white tip and handle trim (air gap adaptor included - RO unit only)

To Order with Any Unit as an Upgraded Dispenser

Select Finish Option	Upgrade and Order Complete with any EWS Point of Use (sink) Filtration System ADD the Finish Code to the EWS Model # (ie: UU250 - SN)
PVD Satin Nickel	xxxx - SN
PVD Polished Nickel	xxxx - PN
PVD Polished Brass	xxxx - PB
PVD Oil Rubbed Bronze	xxxx - ORB

All PVD Finish Options come with black trim



Important:

Water filtration is not an add-on, gimmick or accessory. It is a primary consideration for you and your family. Once you have selected a sink filtration system, then select the dispenser you would like to see the water coming from.



EWS, Inc. / Environmental Water Systems

The complete EWS, Inc./Environmental Water System product line from sink to whole-home, available through:

Available on the Internet through Authorized Retail Web Distributors 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.



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

Telephone:

702-256-8182 M-F, 8:30am - 4:30pm Pacific Standard Time

Fax:	702-256-3744
E-Mail:	customerservice@ewswater.com
Web Site:	www.ewswater.com

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

ALL FILTRATION PRODUCT MANUFACTURED AND ASSEMBLED IN THE USA