

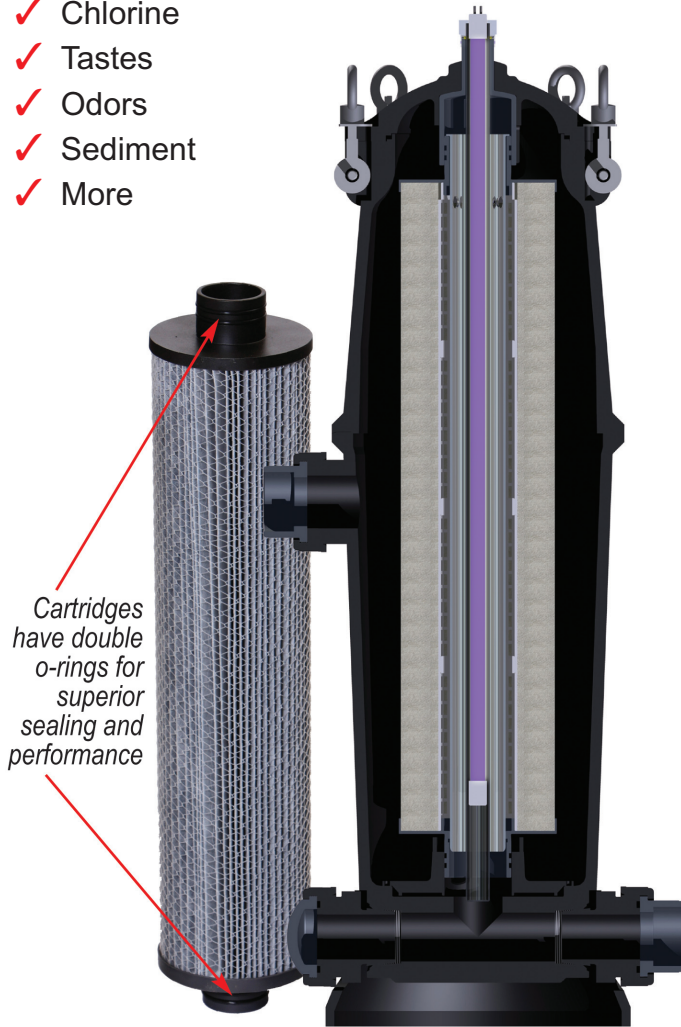
Hydrosafe® - Model HSFS

Whole House Filtration and Water Treatment

Triple-Treat™ Protection

The innovative HydroSafe® filtration system incorporates three technologies in one unit to provide three-step treatment to remove:

- ✓ Bacteria
- ✓ Cysts
- ✓ Chlorine
- ✓ Tastes
- ✓ Odors
- ✓ Sediment
- ✓ More



Cartridges have double o-rings for superior sealing and performance



Part Numbers

Part	Part Number
System	HSFS
Cartridge	HSFSCART-PAC
Lamp	HSFSLAMP
Sleeve	HSFSQUARTZ
Ballast	WUVBALLAST6-12
Coupler, 1"	HSFSCOUPLING-T

Three-In-One Technology

Provides peace of mind and safe, great tasting water, supplied to every tap in the house. Here's how it works:

Step #1

0.2 Micron Filtration

Hydro-Safe filter cartridge is pleated for greater surface area using a micro-fiber, rated at 0.2 micron. This unique filter media is certified under NSF / ANSI Standard 53 for cysts reduction with the capacity to remove sub-micron particles and harmful microorganisms with very little pressure drop or flow restriction.

Step #2

Carbon Treatment

An exceptionally fine activated carbon powder is added to the sub micron filter fiber using an electrostatic bonding process. Activated carbon provides a secondary treatment process to remove chlorine, taste and odors.

Step #3

UV Light Disinfection

During the final process, water flows into a stainless steel reaction chamber where it is exposed to a 254 nanometer UV lamp. Inside this chamber bacteria, viruses and other harmful microorganisms are destroyed to provide disinfection without the use of chemicals.

Specifications (Model HSFS)

Flow rate (max.)	14 GPM
Voltage (lamp)	110 Volts
Cartridge capacity (Gals./ average use)	120,000 Gallons
UV dose rate (mJ/cm2)	40,000 +
Bacteria reduction*	99.9%

*E-Coli used for tests with cartridge in place.

IMPORTANT: It is essential to install a one micron pre-filter prior to the unit to extend the life of the 0.2 micron cartridge.

Independent Lab Validated

Hydro-Safe systems have been tested by Bio-Vir labs to validate performance.

Test results confirm bacteria is reduced by 99.9%.

E-coli bacteria used for tests.



Hydrosafe® - Model HSFS 5M

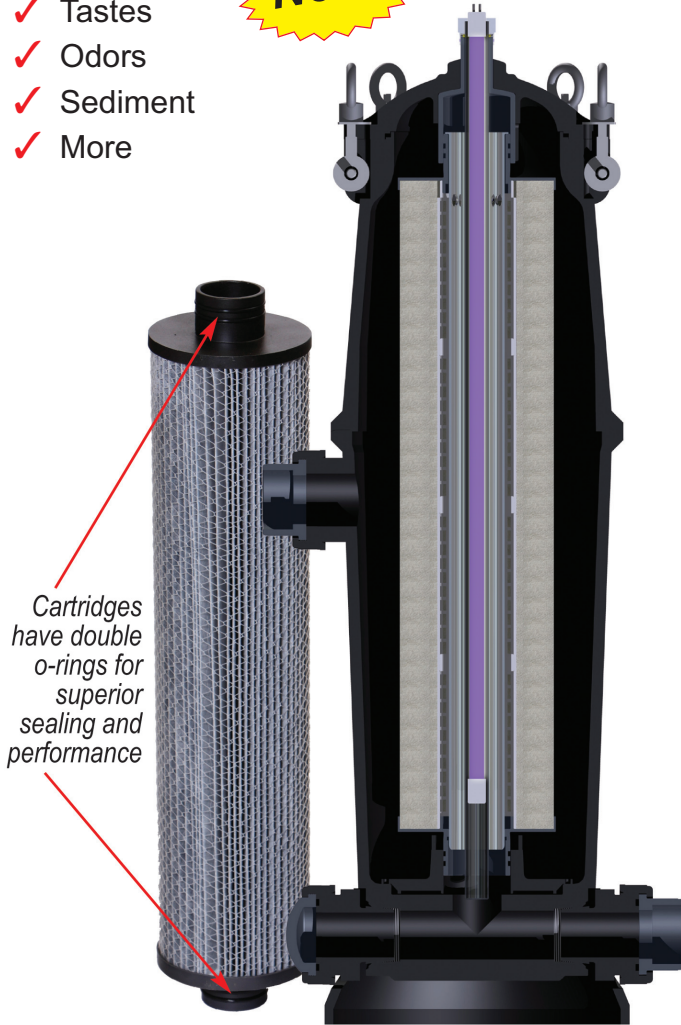
Whole House Filtration and Water Treatment

Triple-Treat™ Protection

The innovative HydroSafe® filtration system incorporates three technologies in one unit to provide three-step treatment to remove:

- ✓ Bacteria
- ✓ Chlorine
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- ✓ More

New!



Cartridges have double o-rings for superior sealing and performance

Hydrosafe®

Part Numbers

Part	Part Number
System	HSFS-5M
Cartridge	HSFSCART-ACP
Lamp	HSFSLAMP
Sleeve	HSFSQUARTZ
Ballast	WUVBALLAST6-12
Coupler, 1"	HSFSCOUPLING-T

Three-In-One Technology

Provides peace of mind and safe, great tasting water, supplied to every tap in the house. Here's how it works:

Step #1

5 Micron Filtration

The Hydro-Safe filter cartridge is pleated for greater surface area and long life, using a 5 micron filter media. This highly effective filter cartridge removes particulate, sand, silt, rust particles and other solid matter.

Step #2

Carbon Treatment

The pleated filter media includes activated carbon which provides a secondary treatment process to remove chlorine, taste and odors.

Step #3

UV Light Disinfection

During the final process, water flows into a stainless steel reaction chamber where it is exposed to a 254 nanometer UV lamp. Inside this chamber bacteria, viruses and other harmful microorganisms are destroyed to provide disinfection without the use of chemicals.

Specifications (Model HSFS)

Flow rate (max.)	14 GPM
Voltage (lamp)	110 Volts
Cartridge capacity (Gals./ average use)	140,000 Gallons
UV dose rate (mJ/cm2)	40,000 +
Bacteria reduction*	99.9%

*E-Coli used for tests with cartridge in place.

Independent Lab Validated

Hydro-Safe systems have been tested by Bio-Vir labs to validate performance. Test results confirm bacteria is reduced by 99.9%.

E-coli bacteria used for tests.



Watts UV Disinfection Systems



**Value Priced.
Order Today!**

Applications

- Well water
- Homes
- Water systems
- Aquaculture
- Food service
- Water coolers
- RO systems



Features & Benefits

- Disinfection without chemicals.
- Effective disinfection for chlorine resistant bacteria, virus cysts.
- Lamps rated for 12 month continuous service life.
- Highly polished 304 stainless steel reactor chamber.
- Audible and visual alarm indicating lamp failure.
- Easy lamp replacement service.
- Available in 110 v and 230v.
- 30mj/cm² dose at specified flow rate at the end of lamp life.
- Quartz sleeve and lamps.

Independent Lab Validated

Watts UV systems have been tested by BioVir Laboratories, using *E.coli* bacteria. Test results indicate Watts UV systems are capable of providing the 40 mJ/cm² dose requirement for *E.coli* bacteria disinfection at maximum flow rates for all four models. Based on these tests, the log reduction of *E.coli* bacteria was between 2.07 to 3.03, which is 99.1 to 99.9 percent reduction of *E.coli* bacteria.

Specifications

Chamber materials	304SS
Max. water temperature	104°F (40°C)
Min. water temperature	36°F (2°C)
Max pressure	125 psi
UV dose (end of life)	30 mj/cm ²
Lamp life	9,000 hrs
Lamps per chamber	Single

Water Quality Guidelines

Total Iron	less than 0.3 mg/l
Hydrogen sulfide	less than 0.05 mg/l
Turbidity	less than 10 mg/l
Manganese	less than 0.05 mg/l
Hardness	less than 7 grains
UV transmittance	greater than 90%

Note: Minimum water quality guidelines are recommended to ensure proper operation and continuous disinfection.

Models

Product Code	Flow Rate (GPM)	Pipe Size	Dimensions (L X W X H)	Electrical	Shipping (Lbs.)
WUV2-110	2	1/2" MNPT	18" x 6" x 5-3/8"	110-130 v / 50-60 Hz	6
WUV2-230	2	1/2" MNPT	18" x 6" x 5-3/8"	200-250 v / 50-60 Hz	6
WUV6-110	6	3/4" MNPT	25-1/2" x 6" x 5-3/8"	110-130 v / 50-60 Hz	7
WUV6-230	6	3/4" MNPT	25-1/2" x 6" x 5-3/8"	200-250 v / 50-60 Hz	7
WUV8-110	8	3/4" MNPT	32" x 8-1/4" x 3-3/4"	110-130 v / 50-60 Hz	9
WUV8-230	8	3/4" MNPT	32" x 8-1/4" x 3-3/4"	200-250 v / 50-60 Hz	9
WUV12-110	12	1" MNPT	41-1/2" x 8-1/4" x 3-3/4"	110-130 v / 50-60 Hz	17
WUV12-230	12	1" MNPT	41-1/2" x 8-1/4" x 3-3/4"	200-250 v / 50-60 Hz	17

Watts® Jumbo Cartridge Filter Housings (PP Series)

Ideal for whole house water treatment and commercial filtration.

Rugged Construction

Filter housings are made of rugged, glass-reinforced polypropylene with brass reinforced gauge port so they won't chip, rust or dent.

Low Cost

Watts Jumbo filters are an economical alternative to costly stainless steel filtration equipment.

Applications

Jumbo Cartridge Filters are ideal for a wide range of applications, including:

- Whole house filtration
- Commercial filtration
- Industrial filtration
- Pre-filtration for reverse osmosis equipment
- Community water systems
- Sea water applications due to their non-corrosive construction*
- Replacement for bag filters with more filter area
- A convenient alternative to multiple cartridge filters
- Water for livestock and poultry

*For applications where non-metallic construction is required, order lid without brass reinforced gauge port separately (part# BB-DID-NP).

Model BBH-150 housings are NSF certified to Standard 61.



Model: BBH-150

Proprietary Cartridges

The replacement cartridge filter is totally proprietary, so you may enjoy the replacement cartridge business over the life of the equipment

Conserves Water!

Watts Jumbo Cartridge Filter Systems are 100% efficient because no backwashing is required. Valuable water is conserved with no waste.

Double O-Rings

For superior sealing.

E-Z Change-Out

Cartridge replacement is easy as 1-2-3:

1. Remove swing bolts.
2. Remove lid.
3. Rotate cartridge 1/4 turn and pull-up.

Filter inlet.

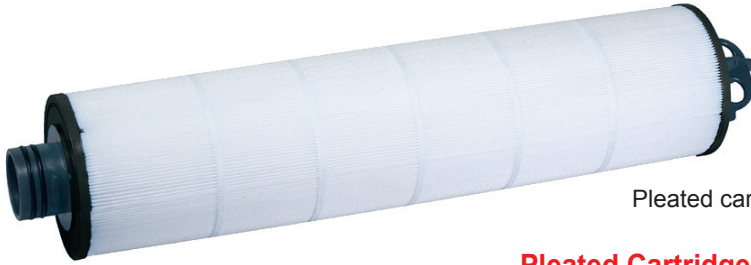
Three Cartridge Types!

- Pleated, for flow rates up to 150 GPM using 100% cellulose free media (cleanable 5 micron up).
- Low cost Melt Blown for depth filtration.
- Activated carbon to remove chlorine, tastes, odors and sediment. Ideal for whole house treatment to 15 GPM offering 140,000 gallon capacity.

Filter outlet.

Jumbo Cartridge Filters

Replacement cartridges for PP Series Housings only.



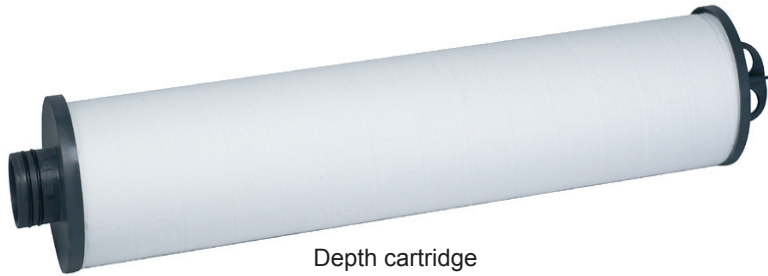
Pleated cartridge

Pleated Cartridges

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

Part Number	Media Type	Micron Rating	Per case
BBC-150-P1A	PP	1 Absolute	1
BBC-150-P1	PP	1	1
BBC-150-P5	PP	5	1
BBC-150-P20	PE	20	1
BBC-150-P50	PE	50	1
BBC-150-PM150	Mesh	150	1

Note: 5, 20, 50 and 150 micron cartridges are cleanable and reusable to reduce costs.

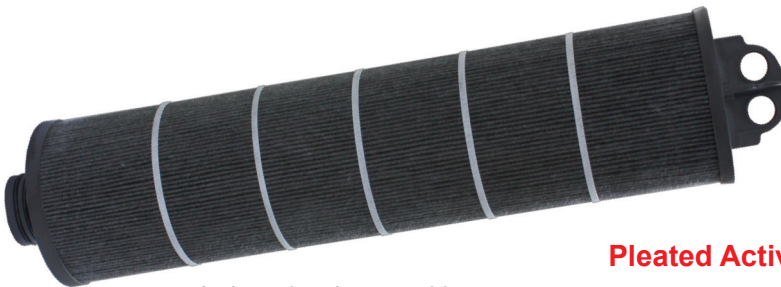


Depth cartridge

Depth Cartridges

Melt blown Polypropylene cartridges are recommended when depth filtration is necessary for the reduction of soft particulate.

Part Number	Media Type	Micron Rating	Per case
BBC-150-D1	PP	1	1
BBC-150-D5	PP	5	1
BBC-150-D20	PP	20	1
BBC-150-D50	PP	50	1



Activated carbon cartridge

Pleated Activated Carbon Cartridges

Ideal for whole house filtration to reduce chlorine, taste, odors and sediment.

Part Number	Max. Flow	Capacity	Chlorine Reduction
BBC-150-ACP	15 GPM	140,000 Gals.	90%

Note: We build filtration systems, or they may be installed on site. For more information please inquire!

Specifications

Watts Jumbo Cartridge Filter Specifications (PP Series)

Jumbo Cartridge Filter Housing (PP Series)

Specifications	Data
Body	Glass reinforced PP
Gauge port	1/4" FNPT brass reinforced
Swing bolts	304 stainless steel
Oring (lid)	EPDM
Pipe fittings	2" slip PVC female
Overall height	42.7"
Width (vessel OD)	15.4"
Maximum temperature	125 deg. F (52 deg C) @ 80 PSI
Maximum working pressure	125 PSI (8.75 bar)

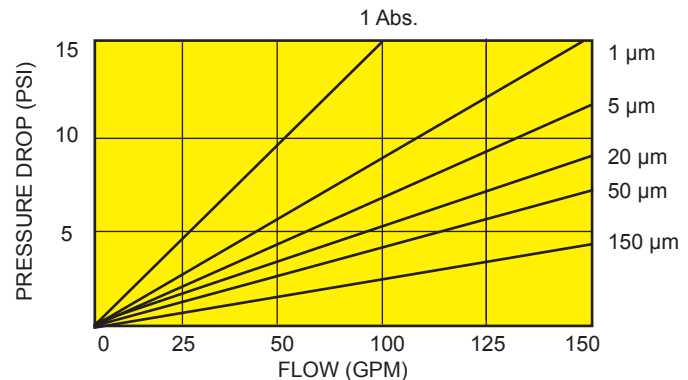
Jumbo Cartridge Filters (PP Series)

Specifications	Data
Maximum flow rate (Pleated)	150 GPM* (34 M ³ /hr.)
Max. flow rate (1 Micron Absolute)	50 GPM (11.3 M ³ /hr.)
Max. flow rate (Depth)	100 GPM (22.7 M ³ /hr.)
Max. flow rate (Activated Carbon)	15 GPM (3.4 M ³ /hr.)
Cartridge end caps	Glass reinforced PP
O-rings (cartridge)	EPDM

* Highly dependent on micron rating, solids content and other factors. Please see pressure drop chart below.

Low Pressure Drop

Jumbo Cartridge Filter Systems are designed to minimize pressure drop, by using 2" pipe fittings and large diameter center tubes. (See chart at right for pressure drop data using pleated cartridges.)



Watts Jumbo Cartridge Filter Specifications (PP Series)

	Pleated	Depth	Activated Carbon (Pleated)
Media	PP or PE	PP	Activated carbon
End caps	PP + FG	PP + FG	PP + FG
Center tubes	PP	PP	PP
Maximum flow rate (GPM)	150	100	15
Maximum temperature	125°F (52°C)	125°F (52°C)	125°F (52°C)
Maximum Δ P (psi)	30	40	30
Chemical resistance	Excellent	Excellent	Not a factor (for water only)
Length (media)	26-1/4"	26-1/4"	26-1/4"
O-rings (dual)	EPDM	EPDM	EPDM
Shipping weight (lbs.)	5	5	5
Carton dimensions	7" x 7" x 31"	7" x 7" x 31"	7" x 7" x 31"
Micron ratings	1A, 1 & 5* 20 & 50** 150***	1, 5, 20, 50	5

*Polypropylene fabric

**Polyester fabric

***Polypropylene mesh screen

Note: Flow rates are based on each specific application, micron rating, solids content and a number of other factors. End user should consider these factors when selecting the filter housing (or number of filter housings) needed for their particular requirement.

Spare Parts

Part Numbers	Description
BB-LID	Lid with 1/4" brass reinforced gauge port
BB-LID-NP	Lid without brass gauge port
PG15L25	Pressure gauge
BB-PR-ASSY	Pressure relief assembly
BB-DRAINPLUG	Drain plug, 1/2" without o-ring
BB-DPOR	Drain plug o-ring
BB-EYEBOLT	Eye bolt
BB-WASHER	Washer for eye bolt

Part Numbers	Description
BB-WINGNUT	Wingnut
BB-ADAPTER	2" PVC slip plumbing adapter
BB-COUPLER	Pipe fitting coupler
BB-COUPLER-OR	O-ring for coupler
BB-ENDCAP	Plug for second outlet
BB-NUT	Nut for plumbing adapter
BB-ORING-E	O-ring for lid (EPDM)