# **SECTION 15**

# Replacement Filter Cartridges



WATER QUALITY PRODUCTS Catalog 10

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. Watts reserves the right to change or modify product design, construction, specifications or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

# C-MAX<sup>®</sup> Extruded Carbon Filter Cartridges

Full line of solid block activated carbon cartridges for water treatment.



Standard cartridges

Full-Flow(B-B)

### Full Product Line With Color Coded End Caps To Indicate Cartridge Type



#### **Cartridge Selection Guide**

Cartridge type	Wall	Carbon Type	Micron	Particle Size	Very High Sediment Removal	Very High Chlorine Reduction	Cysts	VOCs	Lead
MAX-ETW	Thick	Bituminous	5	Medium					
MAX-S	Thick	Coconut shell	5	Medium	•				
MAX-CYST	Thick	Bituminous	0.5	Fine			٠		
MAX-VOC	Thick	Coconut shell	0.5	Fine			٠	•	
MAX-T	Thick	Coconut shell	5	Medium					
MAX-PB	Thick	Coconut shell	0.5	Fine			٠		•
MAX-CL	Thick	Bituminous	0.5	Fine		•			



 $C-MAX^{\otimes}$  carbon block cartridges are tested and certified by NSF International under NSF / ANSI Standard 42 for materials only. Performance claims are supported by company test results.

Note: C-MAX cartridges are rated for temperatures to 165°F (74°C).

## C-MAX<sup>®</sup> Extruded Carbon Filter Cartridges

Full line of solid block activated carbon cartridges for water treatment.

# MAX-VOC, Coconut shell carbon block cartridges for reduction of VOC's, cysts and extended Chlorine taste and odor reduction

Part Number	Туре	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXVOC-975	Water washed	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12

# MAX-T, Acid washed coconut shell carbon block cartridges for RO post treatment and improved, sweeter taste

Part Number	Туре	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXT-975	Acid washed	2-7/8"	9-3/4"	5 nominal	5,000 gallons	12

#### MAX-PB, Coconut shell carbon block cartridges for lead and cyst reduction

Part Number	Туре	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXPB-975	Lead + cysts	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12
MAXPB-FF20	Lead + cysts	4-5/8"	20"	0.5 nominal	150,000 gallons	6

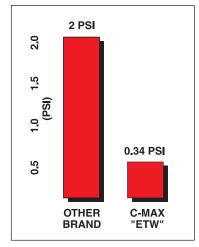
## MAX-CL, Thick wall carbon block for long life and high chlorine reduction. Reduces tastes, odors, fine particles. The best choice when a "super chlorine guzzler" is needed!

Part Number	Туре	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXCL-975	Thick Wall	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12
MAXCL-20	Thick Wall	2-7/8"	20"	0.5 nominal	45,000 gallons	6
MAXCL-FF975	Thick Wall	4-5/8"	9-3/4"	0.5 nominal	70,000 gallons	4
MAXCL-FF20	Thick Wall	4-5/8"	20"	0.5 nominal	150,000 gallons	6

### Premium quality and economically priced C-Max<sup>®</sup> cartridges are in stock for immediate shipment!

## C-MAX<sup>®</sup> Extruded Carbon Filter Cartridges

Full line of solid block activated carbon cartridges for water treatment.



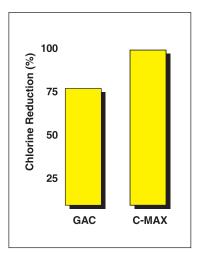
Low Pressure Drop

The chart above compares the pressure drop of MAXETW cartridges to another well known brand. This data demonstrates flow restrictions are dramatically reduced using MAXETW cartridges and not all carbon block cartridges perform the same.



C-MAX®

Your best choice when both price and performance are required!



#### **High Chlorine Reduction**

Chlorine reduction with MAXETW carbon block cartridges is dramatically greater than other cartridge types, including granular activated carbon cartridges. The above data is typical for GAC and C-MAX cartridges during their usable life.

#### MAX-ETW, Economical, thick wall carbon block cartridges for Chlorine taste and odor

Part Number	Туре	OD	Length	Micron Rating	<b>Chlorine Reduction</b>	No. / Case
MAXETW-975	Thick Wall	2-7/8"	9-3/4"	5 nominal	3,000 gallons	12
MAXETW-20	Thick Wall	2-7/8"	20"	5 nominal	6,000 gallons	6
MAXETW-30	Thick Wall	2-7/8"	30"	5 nominal	9,000 gallons	6
MAXETW-FF975	Thick Wall	4-5/8"	9-3/4"	5 nominal	11,000 gallons	4
MAXETW-FF20	Thick Wall	4-5/8"	20"	5 nominal	20,000 gallons	6
MAXETW-SS	Candle	2-7/8"	9-3/4"	5 nominal	3,000 gallons	12

#### MAX-S, Thick wall coconut shell carbon block cartridges for high dirt holding capacity

Part Number	Туре	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXS-975	Thick Wall	2-7/8"	9-3/4"	5 nominal	6,000 gallons	12
MAXS-20	Thick Wall	2-7/8"	20"	5 nominal	12,000 gallons	6
MAXS-FF20	Thick Wall	4-5/8"	20"	5 nominal	40,000 gallons	6

# MAX-CYST, Thick wall carbon block cartridges for fine particles, cyst reduction & extended Chlorine taste & odor reduction

Part Number	Туре	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXCYST-975	Long life + cysts	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12

### Thick wall carbon construction for superior performance. Low cost for economy!

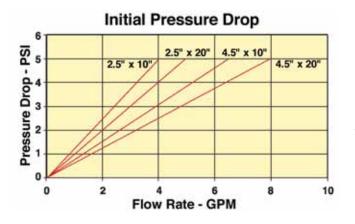


Top-of-the-line coconut shell carbon block filter cartridge for chlorine, taste, odor and sediment reduction.

- · Competitively priced!
- Outperform GAC cartridges four ways:
  1. Superior chlorine reduction
  - 2. Lower pressure drop.
  - 3. Will not channel
  - 3. Will not channe
  - 4. Lower cost
- Media wrap between center tube and carbon block to reduce carbon fines.
- 100% Coconut shell Carbon.
- Up to 99% chlorine reduction\*.
- FDA grade components & materials.

#### **Recommended Rlow Rate**

Part Number	OD	Length	GPM
WCBCS975	2.5"	9-3/4"	1
WCBCS20	2.5"	20"	2
WCBCFF975	4.5"	9-3/4"	4
WCBCFF20	4.5"	20"	8



Maximum operating pressure: 125 PSIG Operating temperature: 50° F to 125° F 10° C to 52° C

\*Performance tested @ flow with 2ppm chlorine.

\* Tested and verified by independent laboratory testing.

WCBCFF20 have been tested and certified under NSF/ANSI standard 42 for materials only. For more information related to this certification please contact Watts Water Quality Products, 11611 S.W. 147 Ct., Dunnellon, FL 34432



Part Number	Туре	OD	Length	MICRON Rating*	Chlorine Reduction*	No. / Case
WCBCS975	Thick Wall	2.5"	9-3/4"	5 nominal	>4,000 Gal @ 1 gpm	20
WCBCS20	Thick Wall	2.5"	20"	5 nominal	>8,000 Gal @ 2 gpm	12
WCBCFF975	Thick Wall	4.5"	9-3/4"	5 nominal	>10,000 Gal @ 2 gpm	12
WCBCFF20	Thick Wall	4.5"	20"	5 nominal	>20,000 Gal @ 4 gpm	6

## **GAC Filter Cartridges**

Full line, including standard GAC and GAC with KDF.



### **GAC Cartridge Specifications**

Media	Water washed coconut shell activated carbon
Cartridge body	NSF listed polypropylene
Minimum / maximum working pressure	20 psi / 125 psi
Minimum / maximum temperature	40° F / 100° F (4° C / 38°C)
Maximum flow rate	1 GPM, std. 9-3/4" 3 GPM, 4.5"x9-3/4" 5 GPM 4.5"x20"

#### Watts® GAC Cartridge (granular coconut carbon)

Part Number	Туре	O.D.	Length	Capacity (gals.)	No. / case
WGAC-975	Coconut shell	2-3/4"	9-3/4"	2,500	20
WGAC-20	Coconut shell	2-3/4"	20"	5,000	15

#### Water Washed Coconut Shell Granular Activated carbon Cartridges (GAC)

Part Number	Туре	O.D.	Length	Capacity (gals.)	No. / case
GAC10N	GAC	2-3/4"	9-3/4"	2,500	24
GAC20NRW	GAC	2-3/4"	20"	5,000	24
GAC-BB10	GAC	4-1/2"	9-3/4"	7,500	8
GAC-BB20	GAC	4-1/2"	20"	15,000	4
GAC-10S	GAC - Silver	2-3/4"	9-3/4"	2,500	24

#### GAC + KDF 55 For Longer Life And Enhanced Performance For Municipal Water

Part Number	Туре	O.D.	Length	Capacity (gals.)	No. / case
GAC10N/KDF	GAC + KDF55	2-3/4"	9-3/4"	4,000	24
GAC-BB20K/1800	GAC + KDF55	4-1/2"	20"	20,000	4

#### GAC + KDF85 For Longer Life And Enhanced Performance For Well Water

Part Number	Туре	O.D.	Length	Capacity (gals.)	No. / case
FPKDF85-975	GAC + KDF 85	2-3/4"	9-3/4"	4,000	24
FPKDF85-BB-20	GAC + KDF 85	4-1/2"	20"	20,000	4

## Intelifil Activated Carbon Filter Cartridges

Inline-filters, GAC and Carbon Block



Intelifil Inline Filters

**Carbon Block** 

#### **In-line - Carbon**

Part Number	Size	Description	Capacity (Gals.)	Fittings	No. / Case
T200400	2" x 6"	Coconut shell GAC	1,500	1/4" FPT	25
T200410	2" x 10"	Coconut shell GAC (NSF)	3,000	1/4" FPT	25
T200411	2" x 10"	Coconut shell GAC (NSF)	3,000	1/4" FQC	25

#### **In-line - Sediment**

Part Number	Size	Description	Capacity (Gals.)	Fittings	No. / Case
T200412	2" x 10	Melt Blown (NSF)	5	1/4" FPT	25

#### **Scale Control**

Part Number	Size	Description	Capacity (Gals.)	Fittings	No. / Case
T200414	2" x 10"	2 Oz. Polyphosphate / GAC	1,500	1/4" FPT	25
T200420	2" x 10"	2 Oz. Polyphosphate/GAC/0.5 KDF #55	3,000	1/4" FPT	25

#### GAC

Part Number	Length	Diameter	Туре	Capacity (Gals.)	No. / Case
IF-UDF010/3	9-3/4"	2-1/2"	CC	2,000	25
FI-UDF010	9-3/4"	2-1/2"	CC	2,000	25
FI-UDF020	20"	2-1/2"	CC	4,000	15
IF-GAC010BB/3	9-3/4"	4-1/2"	CC	10,000	8
IF-GAC020BB/3	20"	4-1/2"	CC	20,000	4

#### **Carbon Block**

Part Number	Length	Diameter	Туре	Capacity (Gals.)	No. / Case
IF-CB-010	9-3/4"	2-1/2"	Standard	3,000	20
IF-CB-020	20"	2-1/2"	Standard	6,000	15
IF-CB-010BB	9-3/4"	4-1/2"	Big-Blue	10,000	8
IF-CB-020BB	20"	4-1/2"	Big-Blue	20,000	4

## **Specialty Media Cartridges**



Each cartridge is individually wrapped and labeled.

Part Number	Status	OD	Length	Туре	Resin	Capacity	No./Case
FPMBDIR-975	S	2-1/2"	9-3/4"	Mixed bed	Purolite® DI Resin	300 gals. at 1.0 gpm	24
FPMBDIR-20	S	2-1/2"	20"	Mixed bed	Purolite® DI Resin	700 gals at 1.0 gpm	12
FPMBDIR-BB-975	S	4-1/2"	9-3/4"	Mixed bed	Purolite DI Resin	900 gals at 2.0 gpm	8
FPCATR-975	S	2-1/2"	9-3/4"	Cation	Dow®	800 gals at 1.0 gpm	24
FPCATR-BB-975	S	4-1/2"	9-3/4"	Cation	Dow®	2700 gals at 2.0 gpm	12
FPNSR-975	S	2-1/2"	9-3/4"	Nitrate	Tulsion®	4000 gals at 0.5 gpm	24
FPCSR-975	S	2-1/2"	9-3/4"	Calcite	Calcite + GAC	2500 gals at 1.0 gpm	24
FPGACP-975	S	2-1/2"	9-3/4"	Phosphate	Phosphate + GAC	2000 gals at 1.0 gpm	24
FPKDF85-975	S	2-1/2"	9-3/4"	KDF85 + GAC	KDF85 + CC GAC	2500 gals at 1.0 gpm	12
FPKDF85-BB-20	S	4-1/2"	20"	KDF85 + GAC	KDF85 + CC GAC	5000 gals at 2 gpm	4
FPAR-975	S	2-1/2"	9-3/4"	Arsenic	Arsenic reduction	1000 gals at 0.75 gpm	24

### **Cartridges With Specialized Media**

## **In-Line Filters**

In-line filters for reverse osmosis systems, ice makers and other water treatment needs.



#### **In-line Filters**

For pre & post RO and ice maker filtration.

- AICRO<sup>®</sup> (our best selling in-line filter)
- AICRO-JGK\* (With J. Guest fittings.)
- \* Coconut shell activated carbon. Rated for flow rates to 0.75. GPM and 1,500 gallons capacity



#### Coconut Shell GAC

Part Number	O.D.	Length	Media	Туре	Fitting Size	Fitting Type	No./Case
AICRO	2"	10"	GAC	Coconut shell	1/4"	FNPT	25
AICRO-JGK	2"	10"	GAC	Coconut shell	1/4"	Quick ct	25
K2533SS	2"	10"	GAC	Coconut shell	1/4"	JG Elbow	25
CL6ROT33	2"	6"	GAC	Acid wash coconut shell	1/4"	FNPT	25
CL10ROT33	2"	10"	GAC	Acid wash coconut shell	1/4"	FNPT	25
K2333JJ	2"	6"	GAC	Acid wash coconut shell	1/4"	J. Guest	25
K2533JJ	2"	10"	GAC	Acid wash coconut shell	1/4"	J. Guest	25
GS10ROB	2"	10"	GAC	Coconut shell	1/4"	FNPT	25

#### **GAC With Phosphate For Scale Reduction**

Part Number	O.D.	Length	Media	Туре	Fitting Size	Fitting Type	No./Case
SCL10	2"	10"	GAC	Phosphate	1/4"	FNPT	25

#### In-line Filters With GAC And Calcite To Raise TDS

Part Number	O.D.	Length	Media	Туре	Fitting Size	Fitting Type	No./Case
GS10CAL/ROB	2"	10"	GAC	With Calcite	1/4"	FNPT	25

#### **In-line Filters For Sediment**

Part Number	0.D.	Length	Media	Туре	Fitting Size	Fitting Type	No./Case
AIPRO	2"	10"	PP SPUN	5	1/4"	FNPT	25
CL10PF5	2"	10"	PP SPUN	5	1/4"	FNPT	25
K2505JJ	2"	10"	PP SPUN	5	1/4"	J. Guest	25
K5605JJ	2"	12"	PP SPUN	5	1/4"	J. Guest	25

Warning: Do not use filters listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the filter.

## Flowmatic<sup>®</sup> Empty Refillable Canisters

Plastic refillable canisters for activated carbon and other filter media for water treatment.

#### **Refillable Canisters For Granular Media**

Plastic refillable canisters for activated carbon and other granular filter media. Low cost and reusable! Made using FDA grade polypropylene. Available in white and clear.





#### **Refillable Canisters For Granular Filter Media**

Part Number	Length	OD	Color	Volume (ml)	Volume (cu. in.)	No. Per Case
RC-C-975	9-3/4"	2-1/2"	Clear	803	49	24
RC-W-975	9-3/4"	2-1/2"	White	803	49	24
RC-C-20	20"	2-1/2"	Clear	1,786	109	24
RC-W-20	20"	2-1/2"	White	1,786	109	24
RC-C-BB-975	9-3/4"	4-1/2"	Clear	2,130	130	8
RC-W-BB-975	9-3/4"	4-1/2"	White	2,130	130	8
RC-C-BB-20	20"	4-1/2"	Clear	4,572	279	4
RC-W-BB-20	20"	4-1/2"	White	4,572	279	4



#### **Doulton® Brand Ceramic Filters**

Cleanable Doulton self-sterilizing elements can be used over and over to reduce filtration costs. Capable of removing 99.99% of suspended solids and 100% of Cryptosporidium, Giardia Lamblia cysts and bacteria. Designed to comply with the most stringent potable water standards.

- Cleanable
- Self-sterilizing
- · Can be used over and over, reducing cost
- Capable of removing 99.99% of suspended solids and 100% of Cryptosporidium, Giardia Cysts, and bacteria.

Part Number	Size	Model	No. Per Case
DS-1000	1/4" BSP thread	Sterasyl	25
DUC-1000	1/4" BSP thread	Ultra Carbon	25
DS-OBE	Double open ends	Sterasyl	25
DSC-OBE	Double open ends	Super Carbon	25
DUC-OBE	Double open ends	Ultra Carbon	25

## Flow-Max<sup>®</sup> Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.

Flow-Max filter cartridges outperform wound, spun, melt blown, resin bonded and other "depth" type filter elements because our cartridges are pleated to provide increased surface area and longer life.

Lower pressure drop is another significant advantage, using Flow-Max pleated cartridges, which allows for increased flow rates and the use of smaller filter housings to reduce capital equipment costs.

Further savings are provided because our 100% synthetic filter media is cleanable, five micron and up, to lower cartridge replacement costs.



Flow-Max filter cartridges outperform other pleated elements because our highperformance filter media is systematically produced using 100% synthetic fibers, with no binders or additives to leave a residue, foam or contaminate.

Our filter media is dramatically thicker than other products. For this reason, Flow-Max cartridges provide "depth" filtration for greater sediment removal, along with more surface area with our pleated design.

A multi-ply laminate is used with our sub and one micron absolute grades for longer life and greater solids removal. (See right.)



## **Features**

Filter media is pleated for greater surface area.

Synthetic filter media is cellulose-free.

"Thicker" filter media has a greater capacity to capture and retain particles, compared to thin, more rigid media types, which have less void space for particle retention.

One micron absolute and 0.35 media use a multi-ply laminate for superior performance.

Long lengths have netting to hold pleats in place.

All cartridge types and lengths are wrapped.

Full product line (types, lengths & micron ratings).

## **Benefits**

Low pressure drop; long life; reduced filtration costs, compared to wound and spun cartridges.

No additives or binders, which may cause foaming.

Increased dirt holding capacity; longer life; fewer cartridge replacements needed; and reduced filtration costs, compared to other pleated cartridge suppliers.

Increased particle removal efficiency; longer life; and reduced cost per gallon filtered.

Superior performance and appearance.

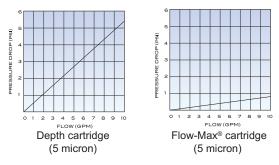
Provides security at no additional cost.

Greater selection from your single source supplier!

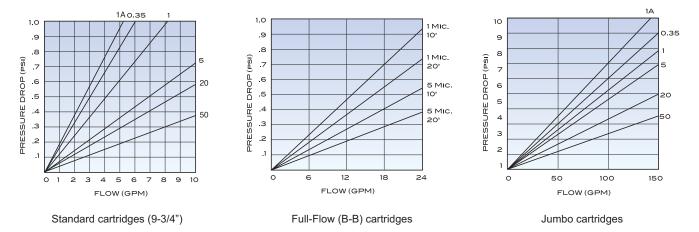
#### Flow-Max<sup>®</sup> cartridges cost less to use ... regardless what they cost to buy!

#### Lower pressure drop for higher flow rates

Flow-Max<sup>®</sup> cartridges are pleated, so initial pressure drop is significantly less compared to depth cartridges, such a wound, spun, melt blown and resin bonded. As a result, higher flow rates are possible, reducing filter housing size requirements to lower capital equipment costs.



Use the pressure drop charts shown below to help determine the ideal flow rate for your particular application:



Note: Pressure drop data shown above include filter housing and cartridge.

#### **Flow rates**

Maximum flow rate guidelines for Flow-Max cartridges are shown below:

Maximum Flow Rates Per Cartridge (GPM)								
Micron Rating	Stan	dard Ca	rtridge	10" Full-Flow	20" Full-Flow	Jur	nbo Cartr	idge
	9-3/4"	20"	29-1/4"			40	90	170
1 Absolute	3	6	9	8	12	20	40	80
0.35 Micron	4	8	12	9	13	25	50	100
1 Micron	4	8	12	10	15	30	60	120
5 Micron	7	14	21	15	25	50	100	150
20 Micron	8	16	24	15	25	50	100	150
50 Micron	10	20	30	15	25	50	100	150

Note: Filter housing selection should also be considered when flow rate per cartridge is determined.



#### Washable & reusable

Flow-Max<sup>®</sup> cartridges are washable and reusable, five micron and up to reduce filtration costs. For best results, direct spray into pleats to dislodge sediment. Or, let dry and brush off filter cake from surface of the media.

> All Flow-Max® cartridges are individually shrink wrapped for purity



Greater surface area for longer life and reduced filtration costs.



#### Standard 2-3/4" OD x 9-3/4" Length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1A-975	Synthetic	1 Absolute	24
FM-0.35-975	Synthetic	0.35	24
FM-1-975	Synthetic	1	24
FM-5-975	Synthetic	5	24
FM-20-975	Synthetic	20	24
FM-50-975	Synthetic	50	24
FM-100-975	Synthetic	100	24

#### Standard 2-3/4" OD x 19-1/2" Length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1-195	Synthetic	1	24
FM-5-195	Synthetic	5	24
FM-20-195	Synthetic	20	24

#### Standard 2-3/4" OD x 20" Length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1A-20	Synthetic	1 Absolute	24
FM-0.35-20	Synthetic	0.35	24
FM-1-20	Synthetic	1	24
FM-5-20	Synthetic	5	24
FM-20-20	Synthetic	20	24
FM-50-20	Synthetic	50	24

#### Standard 2-3/4" OD x 29-1/4" Length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1A-2925	Synthetic	1 Absolute	24
FM-0.35-2925	Synthetic	0.35	24
FM-1-2925	Synthetic	1	24
FM-5-2925	Synthetic	5	24
FM-20-2925	Synthetic	20	24
FM-50-2925	Synthetic	50	24

#### Standard 2-3/4" OD x 40" Length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1-40	Synthetic	1	24
FM-5-40	Synthetic	5	24
FM-20-40	Synthetic	20	24
FM-50-40	Synthetic	50	24

#### **Specifications**

Filter media	Synthetic (100% cellulose-free)
End caps	Plastisol (PVC)
Center tubes	Polypropylene
Temperature range	40°F - 140°F (4.4°C - 60°C)
Maximum Pressure	40 PSID
Recommended change out	20 - 30 PSID
Flow rate per 10" cartridge	3-10 GPM, depending on micron rating

## Flow-Max<sup>®</sup> Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.





Highly efficient, five ply filter media

Our one micron absolute and 0.35 micron filter cartridges use a five ply filter media for greater efficiency and longer life. They are ideal for surface water filtration to reduce Cryptosporidium and Giardia cysts.

#### Full-Flow (B-B) 4-1/2" OD x 9-3/4" Length

Product Code	Length	Media Type	Micron Rating	Number Per Case
FM-BB-10-1A	9-3/4"	Synthetic	1 Absolute	8
FM-BB-10-0.35	9-3/4"	Synthetic	0.35	8
FM-BB-10-1	9-3/4"	Synthetic	1	8
FM-BB-10-5	9-3/4"	Synthetic	5	8
FM-BB-10-20	9-3/4"	Synthetic	20	8
FM-BB-10-50	9-3/4"	Synthetic	50	8

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

### Full-Flow (B-B) 4-1/2" OD x 20" Length

Product Code	Length	Media Type	Micron Rating	Number Per Case
FM-BB-20-1A	20"	Synthetic	1 Absolute	4
FM-BB-20-0.35	20"	Synthetic	0.35	4
FM-BB-20-1	20"	Synthetic	1	4
FM-BB-20-5	20"	Synthetic	5	4
FM-BB-20-20	20"	Synthetic	20	4
FM-BB-20-50	20"	Synthetic	50	4

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

#### Specifications (synthetic media for sediment)

Maximum temperature	140°F (60°C)	Center tubes	PVC
Minimum temperature	40°F (4.4°C)	End caps	Molded Urethane
Maximum pressure	40 PSID	Maximum flow rate, model 40	50 GPM (12m <sup>3</sup> HR)
Recommended change out	25-30 PSID	Maximum flow rate, model 90	100 GPM (24m <sup>3</sup> HR)
Filter media	PE & PP	Maximum flow rate, model 170	150 GPM (36m <sup>3</sup> HR)

# Flow-Max<sup>®</sup> Jumbo Filter Cartridges

With cellulose-free synthetic and mesh media in a wide range of micron ratings.



Standard Synthetic Media



Flow-Max jumbo filter cartridge



PP Mesh Media

#### Model 40

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
4.0	1 Absolute	FMHC-40-1A	N. A.	1
4()	0.35	FMHC-40-0.35EZ	N. A.	1
	1	FMHC-40-1EZ	N. A.	1
	5	FMHC-40-5EZ	N. A	1
	20	FMHC-40-20EZ	N. A.	1
	50	FMHC-40-50	N. A.	1
	100	FMHC-40-100EZ	N. A.	1
	150	N. A.	FMHC-40-150M	1

### Model 90

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
00	1 Absolute	FMHC-90-1A	N. A.	1
90	0.35	FMHC-90-0.35	N. A.	1
•••	1	FMHC-90-1EZ	N. A.	1
	5	FMHC-90-5EZ	N. A	1
	20	FMHC-90-20EZ	N. A.	1
	50	FMHC-90-50EZ	N. A.	1
	100	FMHC-90-100EZ	N. A.	1
	150	N. A.	FMHC-90-150M	1

#### Model 170

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
470	1 Absolute	FMHC-170-1A	N. A.	1
170	0.35	FMHC-170-0.35EZ	N. A.	1
	1	FMHC-170-1EZ	N. A.	1
	5	FMHC-170-5EZ	N. A.	1
	20	FMHC-170-20EZ	N. A.	1
	50	FMHC-170-50EZ	N. A.	1
	100	FMHC-170-100EZ	N. A.	1
	150	N. A.	FMHC-170-150M	1

## Flow-Max<sup>®</sup> Phenolic Cellulose Cartridges

Ideal for high temperature industrial water and oil filtration.



#### **Specifications**

Maximum temperature	250°F (121°C)
Minimum temperature	-20°F (-29°C)
Maximum pressure	70 PSID (482 k PA)
Recommended change out	25 PSID (172 k PA)
End caps, cores, outer body	Electro plated tin
Media	Phenolic impregnated cellulose

### Standard 2-1/2" OD x 9-3/4" Length With Electro Tin Plated Outer Body

Part Number	OD	Length	Micron	No. / case
FMPIC-5-975	2-1/2"	9-3/4"	5	30
FMPIC-20-975	2-1/2"	9-3/4"	20	30
FMPIC-50-975	2-1/2"	9-3/4"	50	30

#### Jumbo Model 40 (7-3/4" x 9-5/8")

Part Number	OD	Length	Micron	No. / case
FMPIC-40-5-HT	7-3/4"	9-5/8"	5	1
FMPIC-40-20-HT	7-3/4"	9-5/8"	20	1
FMPIC-40-50-HT	7-3/4"	9-5/8"	50	1

#### Jumbo Model 90 (7-3/4" x 19-1/2")

Part Number	OD	Length	Micron	No. / case
FMPIC-90-5-HT	7-3/4"	19-1/2"	5	1
FMPIC-90-20-HT	7-3/4"	19-1/2"	20	1
FMPIC-90-50-HT	7-3/4"	19-1/2"	50	1

#### Jumbo Model 170 (7-3/4" x 30-3/4")

Part Number	OD	Length	Micron	No. / case
FMPIC-170-5-HT	7-3/4"	30-3/4"	5	1
FMPIC-170-20-HT	7-3/4"	30-3/4"	20	1
FMPIC-170-50-HT	7-3/4"	30-3/4"	50	1

Note: Phenolic impregnated cellulose cartridges are not to be used for potable water. Jumbo cartridges fit in Flow-Max jumbo housings only.

## Flow-Max<sup>®</sup> HP Series Filter Cartridges

### **High Efficiency Pleated Filter Cartridges**

Flow-Max HP series filter cartridges are cost effective, disposable, filter elements for a wide range of applications. Flow-Max HP cartridges are constructed of highly efficient pleated polypropylene filter media with extended filter area to provide high flow rates, low pressure drop and increased dirt holding capacity.

#### **Features**

- 100% polypropylene
- Ratings from 0.2 to 50 micron
- FDA listed polypropylene components
- Removal efficiencies to 99.98%
- High surface area
- Long service life & reduced maintenance costs
- · Fixed pore construction for reliability

### Applications

- High purity water
- Traps for DI resin
- Electronics
- Pre filtration for RO
- Magnetic tape coatings
- Aqueous solutions
- Plating solutions

### **Specifications**

Components	Data
Filter media	Polypropylene
End caps	Polypropylene
Center tubes	Polypropylene
Cage	Polypropylene
Gaskets & o-rings	EPDM, standard. (Buna-N,
	Viton and Silicone are optional.)
Micron ratings	0.2, 0.45, 1, 2, 5, 10, 25 & 50
Operating temperature	175° F (80° C) maximum
Collapse pressure	130 psid (8.9 bar) maximum
Change out	35 psid (2.4 bar) maximum
FDA	All materials comply with FDA
	174.5, 177.1520 & 177.1630
	for contact with foods &

beverages

#### Dimensions

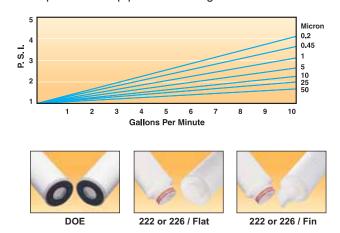
Nominal lengths Outside diameter Inside diameter 4-7/8", 9-3/4", 10", 20", 30" & 40" 2.5" (6.35 cm) 1.0" (2.54 cm)



### **Filter Removal Efficiency**

Beta ratio Efficiency	10000 99.99%	5000 99.98%	100 99%	50 98%	10 90%
0.2 micron	0.35	0.2	0.1		
0.45	0.6	0.45	0.3	0.2	
1 micron	1.2	1.0	0.6	0.3	0.25
2 micron	2.5	2.0	1.5	1.0	0.8
5 micron	8.0	5.0	4.0	3.0	2.0
10 micron	13.0	10.0	8.0	7.0	5.0
25 micron	32.0	25.0	19.0	15.0	13.0
- 50 micron	66.0	50.0	44.0	32.0	26.0

Relative performance data was developed using laboratory tests, which may be used for guidelines in cartridge selection. The single-pass test method was used with particle counters and 3 GPM flow per 10" cartridge. Results vary, and actual field tests may be necessary to determine final cartridge selection. Initial pressure drop per 10" cartridge



Replacement Filter Cartridges

Bottled waterEdible oilsWaste water

Waste water

Chemicals

Inks

Cosmetics

Food & beverage

# Flow-Max<sup>®</sup> HP Series Filter Cartridges

Product code	Micron	Length	End Cap	No./case	Ship weight
FPP-0.2-975-DOE	0.2	9-3/4"	DOE	24	12 lbs.
FPP-0.2-20-DOE	0.2	20"	DOE	12	11 lbs.
FPP-0.2-30-DOE	0.2	30"	DOE	12	17 lbs.
FPP-0.2-40-DOE	0.2	40"	DOE	12	21 lbs.
FPP-0.2-10-222	0.2	10"	222 / flat	24	12 lbs.
FPP-0.2-20-222	0.2	20"	222 / flat	12	12 lbs.
					17 lbs.
FPP-0.2-30-222	0.2	30"	222 / flat	12	
FPP-0.2-40-222	0.2	40"	222 / flat	12	21 lbs.
FPP-0.2-10-222F	0.2	10"	222 / fin	24	12 lbs.
FPP-0.2-20-222F	0.2	20"	222 / fin	12	11 lbs.
FPP-0.2-30-222F	0.2	30"	222 / fin	12	17 lbs.
FPP-0.2-40-222F	0.2	40"	222 / fin	12	21 lbs.
FPP-0.45-975-DOE	0.45	9-3/4"	DOE	24	12 lbs.
FPP-0.45-20-DOE	0.45	20"	DOE	12	11 lbs.
FPP-0.45-30-DOE	0.45	30"	DOE	12	17 lbs.
FPP-0.45-40-DOE	0.45	40"	DOE	12	21 lbs.
FPP-1-975-DOE	1	9-3/4"	DOE	24	12 lbs.
FPP-1-20-DOE	1	20"	DOE	12	11 lbs.
FPP-1-30-DOE	1	30"	DOE	12	17 lbs.
FPP-1-40-DOE	1	40"	DOE	12	21 lbs.
FPP-1-10-222	1	10"	222 / flat	24	12 lbs.
FPP-1-20-222	1	20"	222 / flat	12	11 lbs.
FPP-1-30-222	1	30"	222 / flat	12	17 lbs.
FPP-1-40-222	1	40"	222 / flat	12	21 lbs.
	5	0.2/4"	DOE	24	10 lba
FPP-5-975-DOE FPP-5-20-DOE	5	9-3/4" 20"	DOE	24 12	12 lbs. 11 lbs.
FPP-5-30-DOE	5	30"	DOE	12	17 lbs.
FPP-5-40-DOE	5	40"	DOE	12	21 lbs.
FPP-5-10-222	5	10"	222 / flat	24	12 lbs.
FPP-5-20-222	5	20"	222 / flat	12	11 lbs.
FPP-5-30-222	5	30"	222 / flat	12	17 lbs.
FPP-5-40-222	5	40"	222 / flat	12	21 lbs.

Note: 2, 10, 25, and 50 micron ratings are also available by special order. (Substitute micron rating at appropriate place in product code.) Standard gaskets and o-rings are EPDM. Buna-N, Viton and Silicone are also available. (For special gaskets or o-rings, add "B" for Buna-N, "V" for Viton or "S" for Silicone at end of product code.) For 226 cartridges, substitute "226" for "222".

## Watts<sup>®</sup> Pleated Cartridges

Greater surface area, longer life, reduced filtration costs!



Watts pleated cartridges outperform wound, spun, melt blown, resin bonded and other "depth" style filter elements because our pleated cartridges provide increased surface area, lower pressure drop and longer service life. Our 100% synthetic media is washable and cleanable, five micron and up, to reduce filtration costs.

### Features

Filter media is pleated...

Cellulose-FREE, 100% synthetic media

Wide range of lengths and micron ratings

Washable and reusable, 5 micron and up

Individually wrapped for purity

Economical price

Color-coded end caps (2-3/4" OD)

**Benefits** 

More surface area for greater dirt holding capacity; lower initial pressure drop; higher flow rates; longer life; reduced filtration costs.

Superior performance with no additives or binders to break down which may cause foaming and filter degradation.

Full product line to satisfy your application.

Additional security at no additional charge.

Reduce filter replacement costs.

Easily identify standard OD replacements.

Reduced filter costs for higher profits.

Pleated cartridges have eight times the surface area as depth cartridges!

This is why Watts<sup>®</sup> pleated cartridges cost less to use, regardless of what they cost to buy!

## Watts® Pleated Cartridges

Not all pleated cartridges perform the same!

### "Ours"



VS.

## "Theirs"



## The difference is the media!

VS.

Watts, cellulose-free, 100% synthetic filter media allows the pleats to retain their form, maintaining a large amount of surface area. This allows the cartridge to handle higher solids loading and flow rates with a lower pressure drop that increases the filter efficiency and life, while reducing filter change out costs and frequency. The cellulose blended pleats collapsed on one another, blinding off large amounts of the cartridges surface area. Premature blinding of the surface area reduces the flow capacity and efficiency while it raises the differential pressure, and contributes to a limited filter life and frequent filter change outs.

#### **Flow Rates**

Maximum flow rate guidelines for watts cartridges are shown below:

Micron rating	Stan	dard Cartridges (2-3/4	" OD)	Full-Flow	и (В-В)
(Nominal)	9-3/4"	20"	29-1/4"	9-3/4"	20"
1 Micron	4	8	12	10	15
5 Micron	7	14	21	15	25
20 Micron	8	16	24	15	25
50 Micron	10	20	30	15	25

#### Watts Pleated Specifications

Maximum temperature	140°F (60°C)
Minimum Temperature	40°F (4.4°C)
Maximum pressure	40 psid
Recommended change out	25 psid
Filter media (1 & 5 micron)	Polypropylene
Filter media (20 & 50 micron)	Polyester
Material - center tube	Polypropylene
Material - end caps	Molded Polyurethane
ID	1-1/6"

### Washable And Reusable

Watts pleated cartridges are washable and reusable, five micron and up to reduce filtration costs. For best results, direct spray into the pleats to dislodge the sediment.

## Watts® Pleated Cartridges



Standard cartridges (2-3/4" OD)

### Standard 2-3/4" OD X 9-3/4" Length

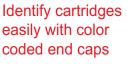


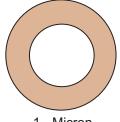
Full-Flow (B-B)Cartridges (4-1/2" OD)

Product code	Media type	Micron	Color	Case / qty
WPC1-975	Synthetic	1	Tan	25
WPC5-975	Synthetic	5	White	25
WPC20-975	Synthetic	20	Blue	25
WPC50-975	Synthetic	50	Yellow	25

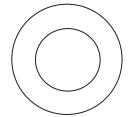
Standard 2-3/4" OD X 20" Length

Product code	Media type	Micron	Color	Case / qty
WPC1-20	Synthetic	1	Tan	25
WPC5-20	Synthetic	5	White	25
WPC20-20	Synthetic	20	Blue	25
WPC50-20	Synthetic	50	Yellow	25





1 - Micron



#### 5 - Micron





## Standard 2-3/4" OD X 29-1/4" Length

Product code	Media type	Micron	Color	Case / qty
WPC1-2925	Synthetic	1	Tan	25
WPC5-2925	Synthetic	5	White	25
WPC20-2925	Synthetic	20	Blue	25
WPC50-2925	Synthetic	50	Yellow	25

#### Standard 2-3/4" OD X 40" Length

Product code	Media type	Micron	Color	Case / qty
WPC1-40	Synthetic	1	Tan	25
WPC5-40	Synthetic	5	White	25
WPC20-40	Synthetic	20	Blue	25
WPC50-40	Synthetic	50	Yellow	25

### Full-Flow (B-B) 4-1/2" OD X 9-3/4" Length

Product code	Media type	Micron	Color	Case / qty
WPC1FF975	Synthetic	1	Embossed	18
WPC5FF975	Synthetic	5	Embossed	18
WPC20FF975	Synthetic	20	Embossed	18
WPC50FF975	Synthetic	50	Embossed	18

### Full-Flow (B-B) 4-1/2" OD X 20" Length

Product code	Media type	Micron	Color	Case / qty
WPC1FF20	Synthetic	1	Embossed	9
WPC5FF20	Synthetic	5	Embossed	9
WPC20FF20	Synthetic	20	Embossed	9
WPC50FF20	Synthetic	50	Embossed	9



**MELT BLOWN FILTER CARTRIDGES** 



#### **Features & Benefits**

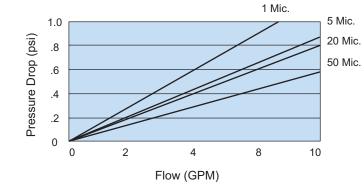
- Low cost
- Excellent chemical resistance
- Food grade for food and beverages
- No media migration
- High dirt holding capacity
- Wide range of lengths
- Five micron ratings

### **Applications**

- Potable water
- Beverages
- Pre-filtration for RO
- Fine chemicals
- Electronics
- Metal finishing
- Plating solutions
- And more!

### **Specifications**

Material	Melt blown polypropylene
Maximum temperature	140° F / 60° C
Maximum pressure	40 PSID
Recommended change out	30 PSID
Maximum flow rate	2-8 GPM based on micron
Cartridge packaging	Shrink wrapped for purity



Replacement Filter Cartridges

NSF

ANSI / NSF

STANDARD 42

COMPONENT

CERTIFIED

## Flow-Pro<sup>®</sup> Melt Blown Cartridges

### Standard Diameter (2-1/2") 5"



Part Number	Length	OD	Micron	No. / case
FPMB1-5	5"	2-1/2"	1	48
FPMB5-5	5"	2-1/2"	5	48
FPMB20-5	5"	2-1/2"	20	48
FPMB50-5	5"	2-1/2"	50	48
9-7/8"				
FPMB1-978	9-7/8"	2-1/2"	1	48
FPMB5-978	9-7/8"	2-1/2"	25	48
FPMB5-978-NL	9-7/8" (no label)	2-1/2"	5	48
FPMB10-978	9-7/8"	2-1/2"	10	48
FPMB20-978	9-7/8"	2-1/2"	20	48
FPMB50-978	9-7/8"	2-1/2"	50	48
20"				
FPMB1-20	20"	2-1/2"	1	24
FPMB5-20	20"	2-1/2"	5	24
FPMB20-20	20"	2-1/2"	20	24
FPMB50-20	20"	2-1/2"	50	24
29-1/4"				
	00 4/4	0.4/01	F	24
FPMB5-2925	29-1/4"	2-1/2"	5	24
FPMB5-2925 30"	29-1/4	Z-1/2"	5	24
	30"	2-1/2"	5	24
30"				
<b>30''</b> FPMB1-30	30"	2-1/2"	1	24

FPMB1-40	40"	2-1/2"	1	24
FPMB5-40	40"	2-1/2"	5	24
FPMB20-40	40"	2-1/2"	20	24
FPMB50-40	40"	2-1/2"	50	24

### Full-Flow (B-B) 9-3/4" x 4-1/2" O.D. Cartridges

Part Number	Length	OD	Micron	No. / case
FPMB-BB1-10	9-3/4"	4-1/2"	1	24
FPMB-BB5-10	9-3/4"	4-1/2"	5	24
FPMB-BB20-10	9-3/4"	4-1/2"	20	24
FPMB-BB50-10	9-3/4"	4-1/2"	50	24

### Full-Flow (B-B) 20"x 4-1/2" O.D. Cartridges

Part Number	Length	OD	Micron	No. / case
FPMB-BB1-20	20"	4-1/2"	1	12
FPMB-BB5-20	20"	4-1/2"	5	12
FPMB-BB20-20	20"	4-1/2"	20	12
FPMB-BB50-20	20"	4-1/2"	50	12

### **Grooved Cartridges For Increased Surface Area**

Part Number	Length	OD	Micron	No. / case
FPMBG-1-975	9-3/4"	2-1/2"	1	48
FPMBG-5-975	9-3/4"	2-1/2"	5	48
FPMBG-20-975	9-3/4"	2-1/2"	20	48
FPMBG-1-20	20"	2-1/2"	1	24
FPMBG-5-20	20"	2-1/2"	5	24

## Wound Filter Cartridges

### Exceptional value when depth filtration is required.



#### **Features & Benefits**

- Low cost
- Polypropylene media for chemical resistance
- Food grade ingredients for potable water
- No leachables to contaminate downstream
- Wide range of lengths and micron ratings
- Cartridges with stainless steel center tubes for temperature applications

Product Number	Length	OD	Micron	No. / case
SF1-978	9-7/8"	2-1/2"	1	30
SF5-978	9-7/8"	2-1/2"	5	30
SF20-978	9-7/8"	2-1/2"	20	30
SF50-978	9-7/8"	2-1/2"	50	30
SF1-20	20"	2-1/2"	1	15
SF5-20	20"	2-1/2"	5	15
SF20-20	20"	2-1/2"	20	15
SF50-20	20"	2-1/2"	50	15
SF1-30	30"	2-1/2"	1	15
SF5-30	30"	2-1/2"	5	15
SF20-30	30"	2-1/2"	20	15
SF1-40	40"	2-1/2"	1	10
SF5-40	40"	2-1/2"	5	10
SF20-40	40"	2-1/2"	20	10

#### Full-Flow (BB) 4-1/2" OD Cartridges

Product Number	Length	OD	Micron	No. / case
SF1-10-425	9-3/4"	4-1/2"	1	8
SF5-10-425	9-3/4"	4-1/2"	5	8
SF20-10-425	9-3/4"	4-1/2"	20	8
SF50-10-425	9-3/4"	4-1/2"	50	8
SF1-20-425	20"	4-1/2"	1	4
SF5-20-425	20"	4-1/2"	5	4
SF20-20-425	20"	4-1/2"	20	4
SF50-20-425	20"	4-1/2"	50	4

#### Wound Cartridges With 304 Stainless Steel Center Tubes For Temperatures To 200°F (93°C)

Product Number	Length	OD	Micron	No. / case
MS10FS5	9-7/8"	2-1/2"	5	30
MS10FS20	9-7/8"	2-1/2"	20	30
MS10FS50	9-7/8"	2-1/2"	50	30
MS20FS5	20"	2-1/2"	5	15
MS20FS20	20"	2-1/2"	20	15
MS30FS5	30"	2-1/2"	5	15
MS30FS20	30"	2-1/2"	20	15
MS40FS5	40"	2-1/2"	5	10
MS40FS20	40"	2-1/2"	20	10

## **Shower Filters**



## Great "add on sale"

The Flowmatic<sup>®</sup> shower filter is a great "add on sale", used to reduce chlorine from shower water. The media is 100% KDF 55, to provide superior performance.

### **Dial-A-Date**

Flowmatic shower filters come with a unique "save-the-date" ring, which is used to remind your customers when to change cartridges, buy moving the dial to the current month, plus six months.

## **Features & Benefits**

- Virtually eliminates chlorine from shower water.
- No chemical damage to hair!
- No dry skin!
- Uses KDF 55 media for superior performance.
- Available in an attractive retail box or plain cartons.
- Plastic components will not rust or corrode.
- Dial-A-Date ring reminds customers when to change cartridges.

#### **Ordering Information**

Part Number	Description	Number Per Carton
FMSHWR-KDF55	Shower filter in retail box.	1
FMSHWR-KDF55-PLAIN	Shower filter in white plain box.	1