



HARMSCO® Filtration Products

Liquid Filtration Solutions

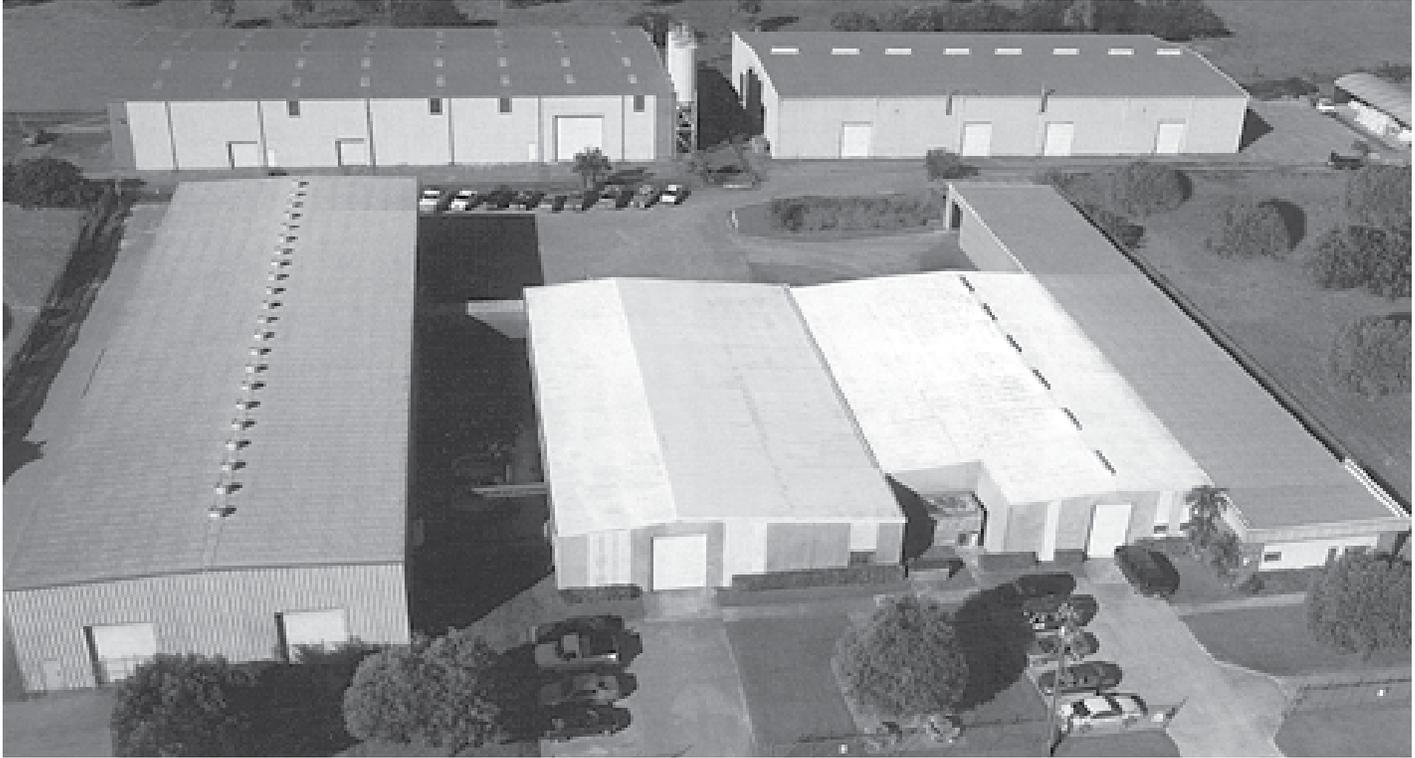


PRODUCT CATALOG

January 1, 2009

Pricing available to customers on our website. Log in at www.harmsco.com.

Harmsco® Filtration Products



An American Family Business Success . . .

Harmsco® was founded in 1958 by John Harms soon after he and his family relocated to Florida from the state of Ohio. At the time the company's primary assets were John's experience in the liquid filtration industry, his unique **Up-Flow Filter Design**, wife Laura's trustworthy assistance and John's resolve to manufacture high quality filtration equipment and market them worldwide.

Harmsco® Up-Flow Cartridge Filters were patented and introduced to the market in 1968. Almost immediately, people in the filtration industry took note of the many advantages Harmsco® Filters provide. As a result, sales began to accelerate.

In 1972 we developed a complete line of filter cartridges to market with Harmsco® filter housings. John Harms wasn't satisfied, however, with conventional filter cartridges that provide marginal performance. John pioneered **Pleated Polyester Filter Cartridges**, which outperform conventional cartridges by lowering filtration costs.

In 1991, Harold (Hank) Harms II was elected President of Harmsco®, Inc. During Hank's tenure as president and owner, there have been significant developments; **Hurricane Filters** were introduced in 1992 and became an overnight success; marketing activities have been accelerated; expansion has been made to plant and facilities; as well as the addition of 90,000 square feet in Lake Wales, FL.

Today, we are a market leader in the water filtering industry. Our products are marketed through an extensive network of distributors located worldwide; and our dedication to research and development is ongoing, so our growth will continue into the 21st century.

Dedicated to Quality and Value

We provide economical solutions to liquid filtration challenges because we are dedicated to offering both **quality** and **value**. We control overhead expenses and produce in volume to lower production costs.

Our designs are efficient.

The **cornerstone** of our corporate philosophy is our dedication to quality.

For these reasons, Harmsco® filter housings and cartridges are your best buy for price and performance.



MADE IN U.S.A.

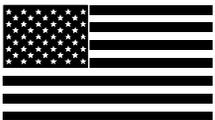




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Private labeling and custom products available.



Band Clamp



Hurricane® Swing Bolt Closures



Harmsco® Filtration Products



**Harmsco® Hurricane®
High Performance Swing Bolt Housings**

See Page 18

Let us quote your Private Label Cartridge and Custom Product needs.

NOTICE

Some of the information contained in this publication has been obtained from outside sources and is considered accurate. Temperature ratings, flow rates and chemical resistance can be affected by a number of unknown factors. For this reason, we do not assume any liability for the accuracy or completeness of the data in this publication. End users should perform their own tests to determine suitability for each application.

CARTRIDGE ACCEPTABILITY CROSS-REFERENCE

New for 2008 - Non-Cellulose Cartridges

See page 22



801 Series

Harmsco® SureSafe™

CALYPSO BLUE™



POLY-PLEAT™



801 Cartridges

See Page 9



Let us quote your **Private Label Cartridge** and **Custom Product** needs.

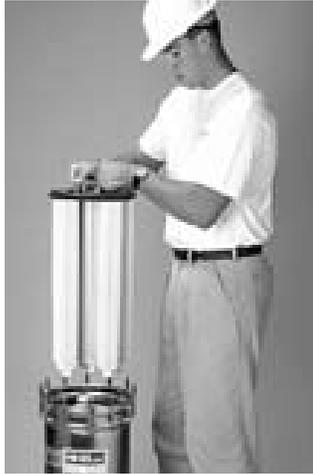
Cartridge Acceptability

Filter Housings

	801-*	801-*/20	801-*/30	801-*/40	921-*	931-*	WB-*	WB-921-*	WB-931-*	CTO/2	PB1	HAC-10-W	HAC-20-W
Harmsco Up-Flow Cluster Filters													
HIF 7	•						•			•	•	•	
HIF 14	•				•		•			•	•	•	
HIF 16	•				•		•			•	•	•	
HIF 21	•					•	•		•	•	•	•	
HIF 24	•					•	•		•	•	•	•	
Harmsco Up-Flow High-Capacity Filters													
HIF 42	•					•	•		•	•	•	•	
HIF 75	•					•	•		•	•	•	•	
HIF 100	•				•		•			•	•	•	
HIF 150FL	•					•	•		•	•	•	•	
HIF 200FL	•				•		•		•	•	•	•	
Harmsco Band Clamp Filters													
BC4-1-T-EP	•						•			•	•	•	
BC4-2-T-EP	•	•			•		•			•	•	•	•
BC4-3-T-EP	•		•			•	•		•	•	•	•	
BC6-1-T-EP	•						•			•	•	•	
BC6-2-T-EP	•	•			•		•			•	•	•	•
BC6-3-T-EP	•		•			•	•		•	•	•	•	
Harmsco Up-Flow Filter HIF 5x170FL													
HIF 5x170FL													
Harmsco Hurricane Filters (ASME "U" Stamp)													
HUR 90 ASME U STAMP													
HUR 170 ASME U STAMP													
HUR 850 ASME U STAMP													
Harmsco Hurricane													
HUR 850 HP													
HUR 40 HP													
HUR 90 HP													
HUR 170 HP													
Harmsco Hurricane ASME Design Swing Bolt Closures													
HUR 1x170FL													
HUR 3x170FL													
HUR 5x170FL													
HUR 8x170FL													
Harmsco WaterBetter Single Cartridge Filter Housings													
WB 40SC-1													
WB 40SC-2													
WB 90SC-2													
WB 170SC-2													
316 Stainless Steel Slimline													
FSSS-1A	•						•			•	•	•	
FSSS-2A	•				•		•	•		•	•	•	
Single Cartridge Plastic Filter Housings and Drinking Water Systems													
HSL-10-0.75-WPR	•						•			•	•	•	
HSL-20-0.75-WPR	•	•			•		•	•		•	•	•	•
HBB-10-1-WPR													
HBB-20-1-WPR													

Let us quote your **Private Label Cartridge** and **Custom Product** needs.

Harmsco® Industrial Up-Flow Filters . . . a design so superior it's patented!



With Harmsco® *cluster filters*, the entire set of filter cartridges is removed at one time for cleaning or replacement.

Cluster Filters



HIF 7



HIF 14



HIF 16



HIF 21



HIF 24

Max. flow rate (U.S. GPM)	Up to 30	Up to 60	Up to 75	Up to 90	Up to 100
Max. flow rate (LPM)	Up to 113	Up to 226	Up to 284	Up to 340	Up to 397
Max. flow rate (M ³ HR)	Up to 7	Up to 14	Up to 16	Up to 21	Up to 24
Number of std. cartridges	7	14	16	21	24
Alternative cartridge	Single only	Doubles	Doubles	Triples	Triples
Pipe size	1-1/2" NPT	1-1/2" NPT	2" NPT	1-1/2" NPT	2" NPT
Drain	1" NPT				
Filter height	19.5" / 49 cm	28" / 71 cm	28" / 71 cm	37" / 94 cm	37" / 94 cm
Floor space requirement	13" x 13"				
Service height clearance	35" / 89 cm	48" / 122 cm	48" / 122 cm	68" / 173 cm	68" / 173 cm
Shipping weight (approx.)	29 lbs. / 13 kg	39 lbs. / 18 kg	39 lbs. / 18 kg	50 lbs. / 23 kg	50 lbs. / 23 kg
Carton dimensions	14" x 14" x 21"	14" x 14" x 38"	14" x 14" x 38"	14" x 14" x 41"	14" x 14" x 41"

Harmsco® High Temperature Filter Housings

Filters come with stainless steel holding rods and standpipes for high temperatures and aggressive chemicals. O-rings are Buna-N; rim gaskets are EPDM; other options, including viton, available.

Note: Model HIF 7-SS-222 accepts seven cartridges with 222 adapters, eliminating the need for holding rods. For cartridges with 222 adapters please see All-Poly cartridges listed on page 13.

Model	Max flow Rate	Pipe Size	Ship Wt.
HIF 7SS	To 30 GPM	1-1/2"	30 lbs.
HIF 7SS-222	To 30 GPM	1-1/2"	35 lbs.
HIF 14SS	To 60 GPM	1-1/2"	40 lbs.
HIF 16SS	To 75 GPM	2"	42 lbs.
HIF 21SS	To 90 GPM	1-1/2"	51 lbs.
HIF 24SS	To 100 GPM	2"	52 lbs.



High-Capacity Filters

High capacity filters have lifting rods to remove a single stack of cartridges at one time.



HIF 42



HIF 75



HIF 100



HIF 150FL



HIF 200FL

Max. flow rate (U.S. GPM)	Up to 175	Up to 300	Up to 400	Up to 600	Up to 800
Max. flow rate (LPM)	Up to 662	Up to 1,135	Up to 1,514	Up to 2,271	Up to 3,028
Max. flow rate (M ³ HR)	Up to 42	Up to 75	Up to 100	Up to 150	Up to 200
Number of std. cartridges	42	75	100	150	200
Alternative cartridge	Triples	Triples	Doubles	Triples	Doubles
Pipe size	2" NPT	3" NPT	3" NPT	4" flanged	4" flanged
Drain	1" NPT	1-1/2" NPT	1-1/2" NPT	1-1/2" NPT	1-1/2" NPT
Filter height	40" / 102 cm	42" / 107 cm	52" / 132 cm	48" / 122 cm	58" / 147 cm
Floor space requirement	18" x 18"	20" x 20"	20" x 20"	28" x 28"	28" x 28"
Service height clearance	68" / 173 cm	70" / 178 cm	87" / 221 cm	76" / 193 cm	93" / 236 cm
Shipping weight (approx.)	100 lbs.	129 lbs.	188 lbs.	274 lbs.	321 lbs.
Shipping weight (kg)	45 kg	86 kg	86 kg	124 kg	156 kg
Carton dimensions	23" x 23" x 43"	23" x 23" x 53"	23" x 23" x 57"	28" x 28" x 49"	28" x 28" x 57"

Harmsco recommends operation at 60-70% of maximum flow rate for optimum performance. Pressure rated to 150 psi (10 bar) max. Standard Harmsco® Up-Flow filter housings and filter cartridges rated for temperatures to 140°F (60°C); ratings based on pressure and time under load. All Stainless Filter housings and high temperature cartridges (see pages 9,11) recommended for temperatures to 200°F (93°C). Cartridges not included. For cartridge installation add \$55 service fee. Units also available with BSP threads as special order.

Note: All stainless steel housings are 304; 316 available upon request.

Genuine Harmsco® Filter Cartridges

These top-of-the-line cartridges have extended surface area that can be cleaned & re-used making them much more cost effective.



Certified to ANSI-NSF 61

Excluding High Temp Cartridges

Specifications

Filter media	Polyester-Plus™	pH	3 to 11 (see compatibility charts)**
End caps	Plastisol (pliable PVC)	Flow rate	3-6 GPM (11-22 LPM; One M ³ /hr.) per 9-3/4" length
Temperature*	Up to 140°F (60°C) for standard cartridges Up to 200°F (93°C) for high-temp cartridges	Dimensions	2-3/4" (70 mm) OD; 1-1/16" (27 mm) ID
		Shrink wrap	Available in single length 9-3/4" cartridges Add "W" to product code when ordering

*Temperature limits vary and depend on pressure and time under load. **For housings and cartridges.

9-3/4" (248 mm) (For all Harmsco® multi-cartridge filter housings and most other single cartridge filter housings; approx. 6 sq. ft. surface area.)

Micron	Product Code	Color End Cap	No./Case	Ship/Wt. (lbs)	Ship/Wt. (Kg)	Ctn. Size (in.)
0.35	801-0.35	Brown	24	11	5	12x17x11
1	801-1	Tan	24	11	5	12x17x11
5	801-5	White	24	11	5	12x17x11
10	801-10	Red	24	11	5	12x17x11
20	801-20	Blue	24	11	5	12x17x11
50	801-50	Yellow	24	11	5	12x17x11
100	801-100	Green	24	11	5	12x17x11

Harmsco® 9-3/4" (248 mm) wrapped cartridges (Individually shrink wrapped; approx. 6 sq. ft. surface area.)

0.35	801-0.35W	Brown	24	11	5	12x17x11
1	801-1W	Tan	24	11	5	12x17x11
5	801-5W	White	24	11	5	12x17x11
10	801-10W	Red	24	11	5	12x17x11
20	801-20W	Blue	24	11	5	12x17x11
50	801-50W	Yellow	24	11	5	12x17x11
100	801-100W	Green	24	11	5	12x17x11

Harmsco® 9-3/4" (248 mm) High-Temp cartridges for temperatures to 200°F. (Temperature limits based on pressure and time under load; approx. 6 sq. ft. surface area.)

1	801-1HT	Tan	24	11	5	12x17x11
5	801-5HT	White	24	11	5	12x17x11
20	801-20HT	Blue	24	11	5	12x17x11
50	801-50HT	Yellow	24	11	5	12x17x11

Harmsco® 19-1/2" (495 mm) cartridges (For Harmsco® filter housings requiring "double" length cartridges; approx. 12 sq. ft. surface area.)

0.35	921-0.35	Brown	24	19	9	12x17x21
1	921-1	Tan	24	19	9	12x17x21
5	921-5	White	24	19	9	12x17x21
10	921-10	Red	24	19	9	12x17x21
20	921-20	Blue	24	19	9	12x17x21
50	921-50	Yellow	24	19	9	12x17x21

Harmsco® 29-1/4" (743 mm) cartridges (For Harmsco® filter housings requiring "triple" length cartridges; approx. 18 sq. ft. surface area.)

0.35	931-0.35	Brown	24	28	13	12x17x31
1	931-1	Tan	24	28	13	12x17x31
5	931-5	White	24	28	13	12x17x31
10	931-10	Red	24	28	13	12x17x31
20	931-20	Blue	24	28	13	12x17x31
50	931-50	Yellow	24	28	13	12x17x31

Harmsco® 9-3/4" (248 mm) wrapped cartridges (individually shrink wrapped; approx. 4 sq. ft. surface area.)

1	WB-1W	Tan	24	10	4.5	12x17x11
5	WB-5W	White	24	10	4.5	12x17x11
20	WB-20W	Blue	24	10	4.5	12x17x11
50	WB-50W	Yellow	24	10	4.5	12x17x11

Harmsco® 19-1/2" (495 mm) cartridges (For Harmsco filter housings requiring "double length" cartridges; approx. 8 sq. ft. surface area.)

1	WB-921-1	Tan	24	16	7.2	12x17x21
5	WB-921-5	White	24	16	7.2	12x17x21
20	WB-921-20	Blue	24	16	7.2	12x17x21
50	WB-921-50	Yellow	24	16	7.2	12x17x21

Harmsco® 29-1/4" (743 mm) cartridges (For Harmsco filter housings requiring "triple length" cartridges; approx. 12 sq. ft. surface area.)

1	WB-931-1	Tan	24	22	10	12x17x31
5	WB-931-5	White	24	22	10	12x17x31
20	WB-931-20	Blue	24	22	10	12x17x31
50	WB-931-50	Yellow	24	22	10	12x17x31

Harmsco® 9-3/4" (2-3/4" OD) Standard cartridges.

5	HAC-10-W		24	14	6.3	12x17x11
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Harmsco® 9-3/4" (2-3/4" OD) Activated carbon plus lead removal cartridges.

5	HAC-10-LR-W		24	18	8	12x17x11
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Harmsco® 9-3/4" (2-5/8" OD) Molded, pulverized activated carbon cartridges.

10	WBAC-10-W		30	13	5.9	14x16x11
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Harmsco® 9-3/4" (2-3/4" OD) Solid block activated carbon cartridges.

10	HSBAC-10-W		20	13	5.9	14x16x11
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Harmsco® 9-3/4" (2-3/4" OD) POLY-PLEAT filter cartridges.

1	PP-S-1		24	11	5	12x17x11
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Harmsco® 19-1/2" (2-3/4" OD) POLY-PLEAT filter cartridges.

1	PP-D-1		24	19	9	12x17x21
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Harmsco® 29-1/4" (2-3/4" OD) POLY-PLEAT filter cartridges.

1	PP-T-1		24	28	13	12x17x31
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See Page 21 For Harmsco® Filter Cartridges For Competitive Housings (10", 20", 30", 40")

Harmsco® Band Clamp Filters

Harmsco® Band Clamp Filters utilize patented Up-Flow Filtration while simplifying installation and maintenance.

- ✓ All Housings constructed with 304 Stainless Steel**
- ✓ Available in either Electropolish (EP) or Polycoat (PC) finishes
- ✓ High Temperature Filters Available



**BC4-1-T-EP
BC4-1-T-PC**



**BC4-2-T-EP
BC4-2-T-PC**



**BC4-3-T-EP
BC4-3-T-PC**

Max flow rate (U.S. GPM)	Up to 25	Up to 50	Up to 75
Max flow rate (LPM)	Up to 95	Up to 190	Up to 285
Max. flow (M ³ HR)	Up to 5	Up to 12	Up to 17
Number of standard cartridges	4	8	12
Alternative cartridge	Single Only	Doubles	Triples
Pipe size	2" FPT	2" FPT	2" FPT
Drain	1/2" NPT	1/2" NPT	1/2" NPT
Filter height	19-1/2"	29-1/4"	39"
Floor space requirement	13" x 13"	13" x 13"	13" x 13"
Service height clearance	28"	47"	67"
Shipping weight	27 lbs.	32 lbs.	38 lbs.



**BC6-1-T-EP
BC6-1-T-PC**



**BC6-2-T-EP
BC6-2-T-PC**



**BC6-3-T-EP
BC6-3-T-PC**

Max flow rate (U.S. GPM)	Up to 42	Up to 84	Up to 126
Max flow rate (LPM)	Up to 159	Up to 318	Up to 477
Max. flow (M ³ HR)	Up to 10	Up to 19	Up to 29
Number of standard cartridges	6	12	18
Alternative cartridge	Single Only	Doubles	Triples
Pipe size	2" FPT	2" FPT	2" FPT
Drain	1/2" NPT	1/2" NPT	1/2" NPT
Filter height	26-1/2"	36-1/4"	46"
Floor space requirement	15" x 15"	15" x 15"	15" x 15"
Service height clearance	28"	47"	67"
Shipping weight	32 lbs.	37 lbs.	42 lbs.

***Poly Coat**

****T-316 Call for availability and quote**

Note: All units available in NPT or Victaulic Fittings

Harmsco recommends operation at 60-70% of maximum flow rate for optimum performance. Pressure rated to 150 psi (10 bar) max. Standard Harmsco® Up-Flow filter housings and filter cartridges rated for temperatures to 140°F (60°C); ratings based on pressure and time under load. All Stainless Filter housings and high temperature cartridges (see pages 9,11) recommended for temperatures to 200°F (93°C). Cartridges not included. For cartridge installation add \$55 service fee. Units also available with BSP threads as special order.

Note: All stainless steel housings are 304; 316 available upon request.

Genuine Harmsco® Filter Cartridges

These top-of-the-line cartridges have extended surface area that can be cleaned & re-used making them much more cost effective.



Certified to
ANSI-NSF 61

Excluding High Temp Cartridges

Specifications

Filter media	Polyester-Plus™	pH	3 to 11 (see compatibility charts)**
End caps	Plastisol (pliable PVC)	Flow rate	3-6 GPM (11-22 LPM; One M ³ /hr.) per 9-3/4" length
Temperature*	Up to 140°F (60°C) for standard cartridges Up to 200°F (93°C) for high-temp cartridges	Dimensions	2-3/4" (70 mm) OD; 1-1/16" (27 mm) ID
		Shrink wrap	Available in single length 9-3/4" cartridges Add "W" to product code when ordering

*Temperature limits vary and depend on pressure and time under load. **For housings and cartridges.

9-3/4" (248 mm) (For all Harmsco® multi-cartridge filter housings and most other single cartridge filter housings; approx. 6 sq. ft. surface area.)

Micron	Product Code	Color End Cap	No./Case	Ship/Wt. (lbs)	Ship/Wt. (Kg)	Ctn. Size (in.)
0.35	801-0.35	Brown	24	11	5	12x17x11
1	801-1	Tan	24	11	5	12x17x11
5	801-5	White	24	11	5	12x17x11
10	801-10	Red	24	11	5	12x17x11
20	801-20	Blue	24	11	5	12x17x11
50	801-50	Yellow	24	11	5	12x17x11
100	801-100	Green	24	11	5	12x17x11

Harmsco® 9-3/4" (248 mm) wrapped cartridges (Individually shrink wrapped; approx. 6 sq. ft. surface area.)

0.35	801-0.35W	Brown	24	11	5	12x17x11
1	801-1W	Tan	24	11	5	12x17x11
5	801-5W	White	24	11	5	12x17x11
10	801-10W	Red	24	11	5	12x17x11
20	801-20W	Blue	24	11	5	12x17x11
50	801-50W	Yellow	24	11	5	12x17x11
100	801-100W	Green	24	11	5	12x17x11

Harmsco® 9-3/4" (248 mm) High-Temp cartridges for temperatures to 200°F. (Temperature limits based on pressure and time under load; approx. 6 sq. ft. surface area.)

1	801-1HT	Tan	24	11	5	12x17x11
5	801-5HT	White	24	11	5	12x17x11
20	801-20HT	Blue	24	11	5	12x17x11
50	801-50HT	Yellow	24	11	5	12x17x11

Harmsco® 19-1/2" (495 mm) cartridges (For Harmsco® filter housings requiring "double" length cartridges; approx. 12 sq. ft. surface area.)

0.35	921-0.35	Brown	24	19	9	12x17x21
1	921-1	Tan	24	19	9	12x17x21
5	921-5	White	24	19	9	12x17x21
10	921-10	Red	24	19	9	12x17x21
20	921-20	Blue	24	19	9	12x17x21
50	921-50	Yellow	24	19	9	12x17x21

Harmsco® 29-1/4" (743 mm) cartridges (For Harmsco® filter housings requiring "triple" length cartridges; approx. 18 sq. ft. surface area.)

0.35	931-0.35	Brown	24	28	13	12x17x31
1	931-1	Tan	24	28	13	12x17x31
5	931-5	White	24	28	13	12x17x31
10	931-10	Red	24	28	13	12x17x31
20	931-20	Blue	24	28	13	12x17x31
50	931-50	Yellow	24	28	13	12x17x31

Harmsco® 9-3/4" (248 mm) wrapped cartridges (individually shrink wrapped; approx. 4 sq. ft. surface area.)

1	WB-1W	Tan	24	10	4.5	12x17x11
5	WB-5W	White	24	10	4.5	12x17x11
20	WB-20W	Blue	24	10	4.5	12x17x11
50	WB-50W	Yellow	24	10	4.5	12x17x11

Harmsco® 19-1/2" (495 mm) cartridges (For Harmsco filter housings requiring "double length" cartridges; approx. 8 sq. ft. surface area.)

1	WB-921-1	Tan	24	16	7.2	12x17x21
5	WB-921-5	White	24	16	7.2	12x17x21
20	WB-921-20	Blue	24	16	7.2	12x17x21
50	WB-921-50	Yellow	24	16	7.2	12x17x21

Harmsco® 29-1/4" (743 mm) cartridges (For Harmsco filter housings requiring "triple length" cartridges; approx. 12 sq. ft. surface area.)

1	WB-931-1	Tan	24	22	10	12x17x31
5	WB-931-5	White	24	22	10	12x17x31
20	WB-931-20	Blue	24	22	10	12x17x31
50	WB-931-50	Yellow	24	22	10	12x17x31

Harmsco® 9-3/4" (2-3/4" OD) Standard cartridges.

5	HAC-10-W		24	14	6.3	12x17x11
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Harmsco® 9-3/4" (2-3/4" OD) Activated carbon plus lead removal cartridges.

5	HAC-10-LR-W		24	18	8	12x17x11
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Harmsco® 9-3/4" (2-5/8" OD) Molded, pulverized activated carbon cartridges.

10	WBAC-10-W		30	13	5.9	14x16x11
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Harmsco® 9-3/4" (2-3/4" OD) Solid block activated carbon cartridges.

10	HSBAC-10-W		20	13	5.9	14x16x11
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Harmsco® 9-3/4" (2-3/4" OD) POLY-PLEAT filter cartridges.

1	PP-S-1		24	11	5	12x17x11
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Harmsco® 19-1/2" (2-3/4" OD) POLY-PLEAT filter cartridges.

1	PP-D-1		24	19	9	12x17x21
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Harmsco® 29-1/4" (2-3/4" OD) POLY-PLEAT filter cartridges.

1	PP-T-1		24	28	13	12x17x31
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See Page 21 For Harmsco® Filter Cartridges For Competitive Housings (10", 20", 30", 40")

Harmsco® WaterBetter® Cartridges

Our Economy Brand for Residential and Light Commercial Applications

Filter media	Polyester-Plus™	Surface area	Approximately 4 sq. ft. (0.37 M ²)	pH	3-11 (see compatibility charts)*
End caps	Plastisol (pliable PVC)	Temperature limit	Up to 140°F (60°C) depending on pressure and time under load	Dimensions	2-3/4" (70 mm) OD; 1-1/16" (27 mm) ID
					* For housings and cartridges.

Micron	Product Code	Color End Caps	No./Case	Ship/Wt. (lbs.)	Ship/Wt. (kg)	Ctn. Size (in.)
9-3/4" (248 mm) Wrapped cartridges (Individually shrink wrapped.)						
1	WB-1W	Tan	24	10	4.5	12x17x11
5	WB-5W	White	24	10	4.5	12x17x11
20	WB-20W	Blue	24	10	4.5	12x17x11
50	WB-50W	Yellow	24	10	4.5	12x17x11

19-1/2" (495 mm) Cartridges (For Harmsco filter housings requiring "double length" cartridges.)

1	WB-921-1	Tan	24	16	7.3	12x17x21
5	WB-921-5	White	24	16	7.3	12x17x21
20	WB-921-20	Blue	24	16	7.3	12x17x21
50	WB-921-50	Yellow	24	16	7.3	12x17x21

29-1/4" (743 mm) Cartridges (For Harmsco filter housings requiring "triple length" cartridges.)

1	WB-931-1	Tan	24	22	10	12x17x31
5	WB-931-5	White	24	22	10	12x17x31
20	WB-931-20	Blue	24	22	10	12x17x31
50	WB-931-50	Yellow	24	22	10	12x17x31



Certified to ANSI-NSF 61

MATRIKX® Extruded Activated Carbon Block Filters To Fit Harmsco® Filter Housings

HAC-KX-CTO/2

MATRIKX + CTO[®]/2 filters are the most widely used carbon block devices in the world and provide previously unattainable performance at the lowest price point.

MATRIKX + CTO[®]/2 filters simultaneously remove free chlorine and organic chemicals that contribute to taste and odor while providing the particulate filtration and dirt-holding capacity of an efficient 5 µm nominal sediment filter.

These filters are optimized for applications where they perform the role of both a sediment and an activated carbon filter.

HAC-KX-PB1

MATRIKX + Pb1 is a powerful, multifunctional filter cartridge for residential and commercial water purification systems.

Heavy Metals Reduction

MATRIKX + Pb1 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, meeting the performance requirements of NSF/ANSI Standard 53 protocol for over 2,500 gallons when operating at a flow of 0.75 GPM.



Model	No. per case	Carton size (in.)	Ship weight (lbs.)
HAC-KX-CTO/2	20	15 x 12 x 11	21
HAC-KX-PB1	20	15 x 12 x 11	25



All-Poly Cartridges

For Fine Retention Ratings, Ultrapure Water and Chemical Compatibility

High efficiency cartridges for wide range of filtration requirements. All polypropylene construction for chemical compatibility; non-leaching. Pleated for increased surface area, low pressure drop and long life. Ideal for food, beverage, deionized water, fine chemicals, wastewater, plating chemicals, pharmaceutical, R/O pre-filtration and more!

Specifications:

Media (microfibers)	Polypropylene
Media (membrane)	Polyethersulfone
Center tubes, end caps, cage/netting	Polypropylene
Micron ratings	Nominal and absolute
O-rings (for 222 end caps)	Silicone
Flow Rate (per 9-3/4" length cartridge)	3-6 GPM in water



All-Poly cartridges fit in slimline plastic housings, Harmsco® high capacity filters, and Harmsco® Up-Flow cluster filters. Knife edge gasket NOT required using All-Poly cartridges between top plate and cartridge using Harmsco® cluster filters.

Product Code	Micron	Rating	End Cap	Length	No./Case	Wt. (lbs.)	Ctn. Size (in.)
High Efficiency Cartridges (98% efficient.)							
0.2 micron, DOE with rigid cage; temperature rated to 200°F (93°C)							
PP-10-0.2-DOE	0.2	Nominal	DOE	9-3/4"	12	7	14 x 11 x 14
PP-20-0.2-DOE	0.2	Nominal	DOE	19-1/2"	12	13	14 x 11 x 25
PP-30-0.2-DOE	0.2	Nominal	DOE	29-1/4"	12	20	14 x 11 x 35
PP-40-0.2-DOE	0.2	Nominal	DOE	40"	6	25	14 x 11 x 45
PP-20E-0.2-DOE	0.2	Nominal	DOE	20" exact	12	13	14 x 11 x 25
0.2 micron, with 222 o-ring end caps and rigid cage; temperature rated to 200°F (93°C)							
PP-10-0.2-222	0.2	Nominal	222	9-3/4"	12	7	14 x 11 x 14
PP-20-0.2-222	0.2	Nominal	222	19-1/2"	12	13	14 x 11 x 25
PP-30-0.2-222	0.2	Nominal	222	29-1/4"	12	20	14 x 11 x 35
PP-40-0.2-222	0.2	Nominal	222	40"	6	25	14 x 11 x 45
1 micron, DOE with netting cage; temperature rated to 125°F (52°C) @ 35 psid							
PP-10-1-DOE	1	Nominal	DOE	9-3/4"	12	7	14 x 11 x 14
PP-20-1-DOE	1	Nominal	DOE	19-1/2"	12	13	14 x 11 x 25
PP-30-1-DOE	1	Nominal	DOE	29-1/4"	6	20	9 x 6 x 34
PP-40-1-DOE	1	Nominal	DOE	40"	6	25	9 x 6 x 45
1 micron, with 222 o-ring end caps and netting cage; temperature rated to 125°F (52°C) @ 35 psid							
PP-10-1-222	1	Nominal	222	9-3/4"	12	7	14 x 11 x 14
PP-20-1-222	1	Nominal	222	19-1/2"	12	13	14 x 11 x 25
PP-30-1-222	1	Nominal	222	29-1/4"	6	6	9 x 6 x 34
PP-40-1-222	1	Nominal	222	40"	6	6	9 x 6 x 45
5 micron, DOE with netting cage; temperature rated to 125°F (52°C) @ 35 psid							
PP-10-5-DOE	5	Nominal	DOE	9-3/4"	12	7	14 x 11 x 14
PP-20-5-DOE	5	Nominal	DOE	19-1/2"	12	13	14 x 11 x 25
PP-30-5-DOE	5	Nominal	DOE	29-1/4"	12	19	14 x 11 x 35
PP-40-5-DOE	5	Nominal	DOE	40"	6	25	14 x 11 x 45
25 micron, DOE with netting cage; temperature rated to 125°F (52°C) @ 35 psid							
PP-10-25-DOE	25	Nominal	DOE	9-3/4"	12	7	14 x 11 x 14
PP-20-25-DOE	25	Nominal	DOE	19-1/2"	12	13	14 x 11 x 25
PP-30-25-DOE	25	Nominal	DOE	29-1/4"	12	19	14 x 11 x 35
PP-40-25-DOE	25	Nominal	DOE	40"	6	25	14 x 11 x 45
Absolute Rated Cartridges (Temperature rated to 200°F (93°C); >99.9% efficient.)							
0.2 micron, DOE with rigid cage							
PP-A-10-0.2-DOE	0.2	Absolute	DOE	9-3/4"	12	7	14 x 11 x 14
PP-A-20-0.2-DOE	0.2	Absolute	DOE	19-1/2"	12	13	14 x 11 x 25
PP-A-20E-0.2DOE	0.2	Absolute	DOE	20" Exact	12	13	14 x 11 x 25
PP-A-30-0.2-DOE	0.2	Absolute	DOE	29-1/4"	12	20	14 x 11 x 35
0.2 micron, with 222 o-ring end caps and rigid cage							
PP-A-10-0.2-222	0.2	Absolute	222	9-3/4"	12	7	14 x 11 x 14
PP-A-20-0.2-222	0.2	Absolute	222	19-1/2"	12	13	14 x 11 x 25
PP-A-30-0.2-222	0.2	Absolute	222	29-1/4"	12	20	14 x 11 x 35



Harmsco® POLY-PLEAT™ Absolute 1 Micron Filter Cartridges

One micron absolute rated cartridges for Cryptosporidium & Giardia Cysts removal.

POLY-PLEAT™ cartridges meet or exceed the three-log (99.9%) removal requirement for cyst reduction and are certified effective by independent testing. Available for Harmsco®, Big-Blue* and Hurricane® filter housings. Cartridges not reusable.



Certified to ANS-NSF 61

Specifications

Micron ratings: One micron absolute for cryptosporidium and giardia cysts.
 Filter media: Meltblown polypropylene inner layer with outer layers of polypropylene scrim material for support.
 Center tubes: Rigid PVC with perforations, or molded polypropylene.
 End caps: Pliable PVC with sealing surface built-in.
 Temperature: 140°F/60°C temperature limit (varies depending on pressure and time under load).
 Flow rates: Up to .5 gpm/ft² media.
 Netting: Polypropylene netting standard for 2-3/4" O.D.; 10" & 20" cartridges use polyethylene netting.
 Shrink wrap: Standard for all POLY-PLEAT™ cartridges.

	Product Code	Micron Rating	Media (sq. ft.)	Type	Length (in.)	O.D. (in.)	No./Case	Carton Size (in.)
Standard (2-3/4" O.D.)	PP-S-1	1 absolute	3.7	Standard	9-3/4	2-3/4	24	12 x 17 x 11
	PP-D-1	1 absolute	7.5	Standard	19-1/2	2-3/4	24	12 x 17 x 21
	PP-T-1	1 absolute	11	Standard	29-1/4	2-3/4	24	12 x 17 x 31
Calypso Blue™ (10" & 20")	PP-20E-1	1 absolute	7.5	Standard	20	2-3/4	24	12 x 17 x 21
	PP-BB-10-1	1 absolute	8	Big Blue*	9-3/4	4-1/2	8	10 x 10 x 21
	PP-BB-20-1	1 absolute	16.5	Big Blue*	20	4-1/2	4	10 x 10 x 21
Hurricane® (40, 90, 170)	PP-HC/40-1	1 absolute	27	Hurricane	9-5/8	7-3/4	1	9 x 9 x 11
	PP-HC/90-1	1 absolute	58	Hurricane	19-1/2	7-3/4	1	9 x 9 x 21
	PP-HC/170-1	1 absolute	100	Hurricane	30-3/4	7-3/4	1	9 x 9 x 32

*Big-Blue is a registered trademark of Plymouth Products, Inc.

Harmsco® Activated Carbon Cartridges

For chlorine, taste, odor and lead removal.
 When your customers demand the very best quality for their process, select Harmsco® activated carbon cartridges with high carbon content for superior performance and long life. All cartridges individually wrapped. Five micron nominal.

Code	Length	No./Case	Ship Wt.	Carton Size
Standard cartridges (2-3/4" OD)				
HAC-10-W	9-3/4"	24	14 lbs.	12"x17"x11"
HAC-20-W*	20"	24	30 lbs.	12"x17"x21"
*For competitive housings. Will not fit Harmsco housings.				
Calypso Blue™ cartridges (4-1/2" OD)				
HAC-BB-10-W	9-3/4"	8	14 lbs.	10"x10"x21"
HAC-BB-20-W	20"	4	12 lbs.	10"x10"x21"
Activated carbon plus lead removal cartridges (2-3/4" OD)				
HAC-10-LR-W	9-3/4"	24	18 lbs.	12"x17"x11"



COMPONENT

HAC-10-W, HAC-20-W, HAC-10-LR-W and WBAC-10-W Filter Cartridges are Tested and Certified by NSF International Under ANSI / NSF Standard 42 Materials.



Product Code	Type / Description	Dimensions (in.)	Flow Rate (gpm)	Capacity (gals.)	No./Case	Carton Size (in.)	Ship. Weight (lbs./kg.)
WBAC-10-W	Molded, pulverized activated carbon; economically priced.	9-3/4 x 2-5/8 x 1-1/16	1.5	1,500	30	14 x 16 x 11	13 / 5.9
HSBAC-10-W	Solid block activated carbon for long life and reduced filtration costs.	9-3/4 x 2-3/4 x 1-1/16	1.0	9,000	20	14 x 16 x 11	13 / 5.9

Temperature limits (10 micron nominal): WBAC-10-W: 140°F (60°C); HSBAC-10-W: 125°F (52°C)

Harmsco® Up-flow Filter HIF 5x170FL

Filter features a convenient five jumbo-cartridge cluster design using 170 size Hurricane® cartridges. 850 sq. ft. of filter media surface area. Rated for pressures to 125 PSI and temperatures to 140°F (60°C). Cartridges available in nine micron ratings and activated carbon.

Max. flow rate (U.S. GPM)	Up to 600	Filter height	47" / 120 cm
Max. flow rate (LPM)	Up to 2270	Floor space requirement	28" x 28"
Max. flow (M³HR)	Up to 150	Service height clearance	85" / 216 cm
Pipe size	4" flanged	Shipping weight (approx.)	230 lbs. / 105 kg
Drain	1 1/2" NPT		



Harmsco® Hurricane® Filters With ASME “U” Stamp Certification

Filters meet ASME design requirements for high pressure applications and when insurance compliance is required. Rugged, heavy-duty construction for long equipment life and durability.

Quantity Discounts Available. Call for quote and delivery schedule.

Specifications:

Material: 304 stainless steel
 Closure: Hinged lids with swing-bolts
 (Spring assist on Model HUR 850ASME)
 Pressure: Rated to 200 psi (13.3 bar) @ 100°F
 Temperature: Cartridges rated to 140°F (60°C)

Filter Model	Cartridge	Max. Flow Rate	Inlet/Outlet	Height	Ship Wt.
HUR 90 ASME	Model 90 (1)	Up to 100 GPM	2"	36"	225 lbs.
HUR 170 ASME	Model 170 (1)	Up to 150 GPM	2"	48"	250 lbs.
HUR 850 ASME	Model 170 (5)	Up to 600 GPM	4" *	66"	900 lbs.

*Flanged



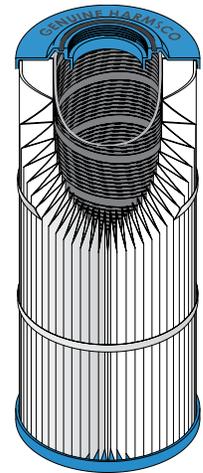
Models HUR 170 ASME, HUR 850 ASME and HUR 90 ASME

Harmsco® Hurricane® and WaterBetter® High Temperature Replacement Cartridges

For Housings listed on pages 17, 18, 19

Cleanable and reusable in most applications.
 Rated for Temperatures to 200°F (93°C)
 and Pressures of 50 PSID.

Product Code	Micron	No./case	Ship Wt. (lbs.)	Carton Size (in.)
HC/40-20HT	20	1	4	9 x 9 x 11
HC/40-50HT	50	1	4	9 x 9 x 11
HC/90-5CPHT	5	1	7	9 x 9 x 21
HC/90-10HT	10	1	7	9 x 9 x 21
HC/90-20HT	20	1	7	9 x 9 x 21
HC/90-50HT	50	1	7	9 x 9 x 21
HC/170-5HT	5	1	10	9 x 9 x 32
HC/170-5CPHT	5	1	10	9 x 9 x 32
HC/170-10HT	10	1	10	9 x 9 x 32
HC/170-20HT	20	1	10	9 x 9 x 32
HC/170-50HT	50	1	10	9 x 9 x 32



High Temperature Replacement Cartridge

316 Stainless Steel Single Cartridge Filter Housings

FDA Compliant



A series of rugged, heavy-duty stainless steel filter cartridge housings suitable for high-flow, high-capacity, and/or high temperature applications. Accept 10" and 20" length nominally sized cartridges.

Sumps have a spring-loaded seal plate to accept cartridges of varying length. This design also allows easier assembly of sump into head by raising the cartridge an inch for easy mating with centering post.

All models feature stainless steel sump and head. Includes 1/4" NPT drain.

Operating pressure range:
 300 psi (20.7 bar) maximum
Operating temperature:
 40-300° F (4-149° C)

Dimensions (approx.):
 4-1/8" OD x 15-5/8" length (10" models)
 4-1/8" OD x 25-3/8" length (20" models)

Product Code	Type	Pipe	Case	Wt. (lbs.)	Carton Size (in.)
FSSS-1A	10"	3/4"	6	9	4-1/2x4-1/2x14
FSSS-2A	20"	3/4"	6	11	4-1/2x4-1/2x24

Harmsco® Extended Area Bag Housings

Harmsco® Bag Housings utilize patented technology combined with superior bag filtration.

- ✓ **All Housings are 304 Stainless Steel**

For T-316, call for availability and quote

- ✓ **All Internal Parts are Stainless Steel**

- ✓ **All Units Come Electro-polished and Passivated**

- ✓ **Housing Seal is Buna-N**

Viton optional for higher temperatures

- ✓ **Drill-in-place Legs**

- ✓ **Harmsco® Supplies Only Extended Area Replacement Bags***

Baskets available:

- Extended Area (Longer Life)
- Standard #2 (Optional)

Bag Housing #2

Basket
Extended Area



Max flow rate (U.S. GPM)	Up to 90
Max flow rate (LPM)	Up to 340
Max. flow (M ³ HR)	Up to 20
Bag size	*G1PS Extended
Pipe size	1-1/2" or 2" FPT
Filter height	32-1/2"

Harmsco® Bag #1

Up to 90
Up to 340
Up to 20
*G1PS Extended
1-1/2" or 2" FPT
32-1/2"

Harmsco® Bag #2

Up to 200
Up to 760
Up to 45
*G2PS Extended
1-1/2" or 2" FPT
42-3/4"

Note: Flow rates will vary depending on pipe size and load

Harmsco recommends operation at 60-70% of maximum flow rate for optimum performance. Pressure rated to 150 psi (10 bar) max. Standard Harmsco® housings rated for temperatures to 200°F (93°C); ratings based on pressure and time under load; ratings are for housing only - bag, o-ring and seal temperature specifications should also be considered. Actual flow rates are based on fluid, viscosity, bag type and other factors.

HOUSINGS

Model	Description	Model	Description
BCB-1-1.5-EXT	1-1/2" Inlet/Outlet - Extended Area	BCB-2-1.5-EXT	1-1/2" Inlet/Outlet - Extended Area
BCB-1-1.5-STD	1-1/2" Inlet/Outlet - Standard	BCB-2-1.5-STD	1-1/2" Inlet/Outlet - Standard
BCB-1-2-EXT	2" Inlet/Outlet - Extended Area	BCB-2-2-EXT	2" Inlet/Outlet - Extended Area
BCB-1-2-STD	2" Inlet/Outlet - Standard	BCB-2-2-STD	2" Inlet/Outlet - Standard

#1 EXTENDED BAGS			#2 EXTENDED BAGS		
Product Code	Micron	No./Case	Product Code	Micron	No./Case
PO-1-G1PS-EA	1	25	PE-1-G2PS-EA	1	25
PE-1-G1PS-EA			PO-1-G2PS-EA		
PO-5-G1PS-EA	5	25	PE-5-G2PS-EA	5	25
PE-5-G1PS-EA			PO-5-G2PS-EA		
PO-10-G1PS-EA	10	25	PE-10-G2PS-EA	10	25
PE-10-G1PS-EA			PO-10-G2PS-EA		
PO-15-G1PS-EA	15	25	PE-15-G2PS-EA	15	25
PE-15-G1PS-EA			PO-15-G2PS-EA		
PO-25-G1PS-EA	25	25	PE-25-G2PS-EA	25	25
PE-25-G1PS-EA			PO-25-G2PS-EA		
PO-50-G1PS-EA	50	25	PE-50-G2PS-EA	50	25
PE-50-G1PS-EA			PO-50-G2PS-EA		
PO-100-G1PS-EA	100	25	PE-100-G2PS-EA	100	25
PE-100-G1PS-EA			PO-100-G2PS-EA		
PO-200-G1PS-EA	200	25	PE-200-G2PS-EA	200	25
PE-200-G1PS-EA			PO-200-G2PS-EA		

Cartridges Listed Below

Harmsco® Hurricane® Filters with Single Hurricane® Cartridge

Combination cyclone separator and cartridge filter in a single compact design. Cartridge and filter sold separately.

Hurricane® filters are ideal for high solids and when a single "jumbo" cartridge is desired. Rated for temperatures to 140°F (60°C)* and pressures to 150 psi. Temperature ratings vary and depend on time under load. *Temperatures to 200°F (93°C) can be attained with optional SS Standpipe and Harmsco® high temperature cartridge installed (see Page 15).



Certified to
ANSI-NSF 61



**HUR 40 HP
HUR 40 HPSS***

Up to 50
Up to 189
Up to 12
2"
1"
21"/54 cm
15" x 15"
31"/79 cm
40 lbs. / 18 kg
14"x16"x21"



**HUR 90 HP
HUR 90 HPSS***

Up to 100
Up to 378
Up to 24
2"
1"
31"/79 cm
15 x 15"
51"/130 cm
51 lbs. / 23 kg
14"x16"x38"



**HUR 170 HP
HUR 170 HPSS***

Up to 150
Up to 568
Up to 36
2"
1"
41"/105 cm
15" x 15"
72"/183 cm
64 lbs. / 29 kg
14"x16"x42"

Max flow rate (U.S. GPM)
Max rate (LPM)
Max rate (M³HR)
Pipe size (NPT)
Drain (NPT)
Filter height
Floor space requirement
Service height requirements
Shipping weight
Carton dimensions

*Stainless steel standpipe for high temperature available.

Note: Harmsco recommends operation at 60-70% of maximum flow rate for optimum performance. All stainless steel housings are 304; 316 available upon request.

Harmsco® Hurricane® and WaterBetter® Replacement Cartridges

Made of pleated polyester filter media for long life and high dirt holding capacity; rated for temperatures to 140°F (60°C) packaged one per carton; cleanable and reusable in most applications. Shipping weights: Model 40 cartridges 4 lbs.; Model 90 cartridges 7 lbs.; Model 170 cartridges 10 lbs. Carton dimensions: HC-40 is 9"x9"x11"; HC-90 is 9"x9"x21"; HC-170 is 9"x9"x32".

Hurricane® cartridges rated for pressures to 50 psid.



Certified to
ANSI-NSF 61

Cartridges for Model HUR 40 HP

Product Code	Micron
HC/40-0.35	0.35
HC/40-1	1
HC/40-5	5
HC/40-10	10
HC/40-20	20
HC/40-50	50
HC/40-100	100
HC/40-150	150
HC/40-EZ-CLEAN*	N.R.

Cartridges for Model HUR 90 HP

Product Code	Micron
HC/90-0.35	0.35
HC/90-1	1
HC/90-5	5
HC/90-10	10
HC/90-20	20
HC/90-50	50
HC/90-100	100
HC/90-150	150
HC/90-EZ-CLEAN*	N.R.

Cartridges for Model HUR 170 HP

Product Code	Micron
HC/170-0.35	0.35
HC/170-1	1
HC/170-5	5
HC/170-10	10
HC/170-20	20
HC/170-50	50
HC/170-100	100
HC/170-150	150
HC/170-EZ-CLEAN*	N.R.
HC/170-PM**	N.R.

*100% Synthetic media to prefilter organic matter and particulate. **Poly Mesh. Note: High temperature cartridges available; see Page 15.

Activated Carbon Cartridges for Hurricane® and WaterBetter® Filter Housings

With outer wrap of pleated five micron polyester media to extend filter life.

Activated carbon cartridges for Hurricane® filter housings for taste, odor and chlorine removal. High carbon content for extended throughput. Outer wrap of pleated five micron Polyester-Plus™ filter media to protect the carbon by removing sediment and extend filter life. Not recommended in drinking water applications where water is not micro-biologically safe.

Product code	Carbon content (lbs.)**	Capacity (gals.)**	Chlorine reduction*
HC/40-AC-5	3 (min.)	33,000	90%-95% at 5 GPM
HC/90-AC-5	6.25 (min.)	66,000	90%-95% at 10 GPM
HC/170-AC-5	10 (min.)	100,000	90%-95% at 15 GPM

*Results may vary and are based on flow and other factors. **Approx.

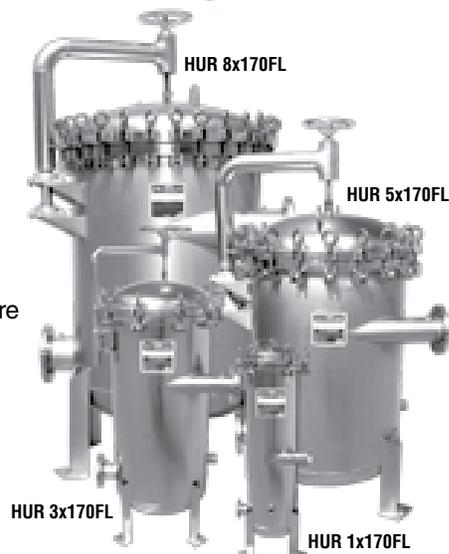


Hurricane® A/C cartridge

For The Above Housings

Harmsco® Hurricane® Swing Bolt Closures Built To ASME Design Standards

High performance Hurricane® cartridge filter housings deliver high flow, high performance filtration, with swing bolt closure.



Features

- ▶ Patented Upflow design
- ▶ Tangential entry
- ▶ Low carbon stainless steel housing
- ▶ “Swing bolt” closure system
- ▶ Four sizes for greater media surface area (170, 510, 850 and 1,360 sq. ft.)
- ▶ Extensive choice of micron ratings and media, including carbon block
- ▶ Combination cyclone separator and cartridge filter in single compact design

Specifications

- ▶ Built to ASME design standards
- ▶ Electro-polished finish
- ▶ O-ring housing seal, swing-bolt closure
- ▶ Standpipes - stainless steel
- ▶ Inlet/Outlet - flanged connections
- ▶ Pressure - Up to 150 psi maximum
- ▶ Temperature - Up to 140°F**

Model	Suggested Flow Rate* (GPM)	Max Flow Rate* (GPM)	Max Flow Rate* (LPM)	Max Flow Rate* (M ³ /HR)	Media (Sq.Ft.)	Pipe Size (I/O) (NPT)	Drain Size (NPT)	Filter Height	Floor Space/ Footprint	Service Height	Shipping Wt. lbs.
HUR 1x170FL	105	150	568	34	170	2" flange	3/4"	47 1/2"	1.8 ft ²	77"	150
HUR 3x170FL	315	450	1,703	102	510	3" flange	1 1/2"	64"	3.7 ft ²	98 1/2"	420
HUR 5x170FL	525	750	2,839	170	850	4" flange	1 1/2"	75"	7.6 ft ²	98 1/2"	1,100
HUR 8x170FL	840	1200	4,542	272	1,360	6" flange	1 1/2"	80"	13 ft ²	98 1/2"	1,600

*Lower flow rates and pressures result in longer cartridge life. Designing to 70-80% of maximum flow will increase overall performance.

**With high temperature cartridge as seen on Page 15.

Cartridges For Hurricane® Swing Bolt Closure Units

Made of pleated polyester filter media for long life and high dirt holding capacity; rated for temperatures to 140°F (60°C)* packaged one per carton; cleanable and reusable in most applications. Shipping weights: Model 40 cartridges 4 lbs.; Model 90 cartridges 7 lbs.; Model 170 cartridges 10 lbs. Carton dimensions: HC-40 is 9"x9"x11"; HC-90 is 9"x9"x21"; HC-170 is 9"x9"x32". Hurricane® cartridges rated for pressures to 50 psid.



Cartridges for Hurricane Swing Bolt Closure Units

Product Code	Micron	Product Code	Micron
HC/170-0.35	0.35	HC/170-100	100
HC/170-1	1	HC/170-150	150
HC/170-5	5	HC/170-EZ-CLEAN**	N.R.
HC/170-10	10	HC/170-PM "POLY MESH"	N.R.
HC/170-20	20	HC/170-AC-5	5
HC/170-50	50	PP-HC-170-1 "POLY PLEAT"	1 Absolute

*High temperature cartridges available; see Page 15.

**100% Synthetic media to prefilter organic matter and particulate.

Activated Carbon Cartridges for Hurricane® and WaterBetter® Filter Housings

With outer wrap of pleated five micron polyester media to extend filter life.

Activated carbon cartridges for Hurricane® filter housings for taste, odor and chlorine removal. High carbon content for extended throughput. Outer wrap of pleated five micron Polyester-Plus™ filter media to protect the carbon by removing sediment and extend filter life. Not recommended in drinking water applications where water is not micro-biologically safe.

Product code	Carbon Content (lbs.)**	Capacity (gals.)**	Chlorine Reduction*
HC/170-AC-5	10 (min.)	100,000	90%-95% at 15 GPM

*Results may vary and are based on flow and other factors. **Approx.



Hurricane® A/C cartridge

For The Above Housings

Harmsco® WaterBetter® Single Cartridge Filter Housings

Simple, economical single cartridge filter housing delivering high flow, high performance filtration.

- Electro-polished 304 stainless steel
- Rim Gaskets - EPDM (Buna-N or Viton optional)
- Standpipes - CPVC (316 stainless steel optional)
- Pressure - 150 psi maximum
- Temperature - Up to 200°F/93°C with optional stainless steel standpipe and Harmsco® high temperature cartridges installed (see Page 15)*
- Inlet/Outlet - 2" NPT or 1" NPT (SC-1 models)



The following WaterBetter® Filters require Harmsco® Hurricane® Cartridges:

Model	Flow Rate* (GPM)	Flow Rate** (LPM)	Flow Rate (M3/HR)	Media (sq. ft.)	Pipe Size (I/O) (NPT)	Drain Size (NPT)	Filter Height	Floor Space Footprint	Service Height	Shipping Weight
WB 40SC-2	Up to 50	Up to 189	Up to 12	40	2" ***	1"	21"/54cm	15"x15"	31"/79cm	24 lbs./11kg
*WB 40SC-2-SS	Up to 50	Up to 189	Up to 12	40	2" ***	1"	21"/54cm	15"x15"	31"/79cm	24 lbs./11kg
WB 90SC-2	Up to 100	Up to 378	Up to 24	90	2" ***	1"	31"/79cm	15"x15"	51"/130cm	31 lbs./14kg
*WB 90SC-2-SS	Up to 100	Up to 378	Up to 24	90	2" ***	1"	31"/79cm	15"x15"	51"/130cm	31 lbs./14kg
WB 170SC-2	Up to 150	Up to 568	Up to 36	170	2" ***	1"	41"/105cm	15"x15"	72"/183cm	37 lbs./17kg
*WB 170SC-2-SS	Up to 150	Up to 568	Up to 36	170	2" ***	1"	41"/105cm	15"x15"	72"/183cm	37 lbs./17kg

**Lower flow rates and pressures result in longer cartridge life. Designing to 70-80% of maximum flow will increase overall performance.

***Also available in a 1" I/O for whole house filtration.

Note: All stainless steel housings are 304; 316 available upon request.

Harmsco® Hurricane® and WaterBetter® Replacement Cartridges



Made of pleated polyester filter media for long life and high dirt holding capacity; rated for temperatures to 140°F (60°C)* packaged one per carton; cleanable and reusable in most applications. Shipping weights: Model 40 cartridges 4 lbs.; Model 90 cartridges 7 lbs.; Model 170 cartridges 10 lbs. Carton dimensions: HC-40 is 9"x9"x11"; HC-90 is 9"x9"x21"; HC-170 is 9"x9"x32". Hurricane® cartridges rated for pressures to 50 psid.

Cartridges for Model HUR 40 HP		Cartridges for Model HUR 90 HP		Cartridges for Model HUR 170 HP	
Product Code	Micron	Product Code	Micron	Product Code	Micron
HC/40-0.35	0.35	HC/90-0.35	0.35	HC/170-0.35	0.35
HC/40-1	1	HC/90-1	1	HC/170-1	1
HC/40-5	5	HC/90-5	5	HC/170-5	5
HC/40-10	10	HC/90-10	10	HC/170-10	10
HC/40-20	20	HC/90-20	20	HC/170-20	20
HC/40-50	50	HC/90-50	50	HC/170-50	50
HC/40-100	100	HC/90-100	100	HC/170-100	100
HC/40-150	150	HC/90-150	150	HC/170-150	150
HC/40-EZ-CLEAN*	N.R.	HC/90-EZ-CLEAN*	N.R.	HC/170-EZ-CLEAN**	N.R.
				HC/170-PM***	N.R.

*High temperature cartridges available; see Page 15.

**100% Synthetic media to prefilter organic matter and particulate.

***Poly Mesh.

Activated Carbon Cartridges for Hurricane® and WaterBetter® Filter Housings

With outer wrap of pleated five micron polyester media to extend filter life.

Activated carbon cartridges for Hurricane® filter housings for taste, odor and chlorine removal. High carbon content for extended throughput. Outer wrap of pleated five micron Polyester-Plus™ filter media to protect the carbon by removing sediment and extend filter life. Not recommended in drinking water applications where water is not micro-biologically safe.



Hurricane® A/C cartridge

Product code	Carbon content (lbs.)**	Capacity (gals.)**	Chlorine reduction*
HC/40-AC-5	3 (min.)	33,000	90%-95% at 5 GPM
HC/90-AC-5	6.25 (min.)	66,000	90%-95% at 10 GPM
HC/170-AC-5	10 (min.)	100,000	90%-95% at 15 GPM

*Results may vary and are based on flow and other factors. **Approx.

For The Above Housings

Harmsco® SureSafe™ Cartridges

Featuring Silver Zeolite Technology



NEW

- ✓ Cleanable and Reusable
- ✓ Features Two Nominal Micron Ratings*
 - 20 Micron
 - 50 Micron

Premium quality cartridges are made of pleated polyester with Silver Zeolite media for long life and high dirt-holding capacity.

Cartridges can be cleaned and reused in most applications and micron ratings. Individually shrink wrapped.

Code	Micron	No./Case	Ship Wt. (lbs.)	Carton Size
10" Calypso Blue™ SureSafe™ Cartridges (4-1/2" OD x 9-3/4" L)				
HB-10-20W-AM	20	8	8	10" x 10" x 21"
HB-10-50W-AM	50	8	8	10" x 10" x 21"
20" Calypso Blue™ SureSafe™ Cartridges (4-1/2" OD x 20" L)				
HB-20-20W-AM	20	4	6	10" x 10" x 21"
HB-20-50W-AM	50	4	6	10" x 10" x 21"
Harmsco® Hurricane® and WaterBetter® SureSafe™ Cartridges				
HC/40-20-AM	20	1	4	9" x 9" x 11"
HC/40-50-AM	50	1	4	9" x 9" x 11"
HC/90-20-AM	20	1	7	9" x 9" x 21"
HC/90-50-AM	50	1	7	9" x 9" x 21"
HC/170-20-AM	20	1	10	9" x 9" x 32"
HC/170-50-AM	50	1	10	9" x 9" x 32"
Harmsco® Filter SureSafe™ Cartridges (2-3/4" OD x 9-3/4"L)				
801-20-AM	20	24	11	12" x 17" x 11"
801-50-AM	50	24	11	12" x 17" x 11"

Harmsco® SureSafe™ Cartridges utilize Silver Zeolite technology. Combining inert organic materials with silver into our filter media enables our cartridges to help reduce odor-causing bacteria and inhibit growth of destructive mold and mildew on the filter cartridge.

Harmsco® SureSafe™ Media is interwoven with the latest in Silver Zeolite technology. Unlike competitive "treated media" products, Harmsco® SureSafe™ cartridges will continue to provide safety and protection for your customers while out-lasting the competition.

**Other micron ratings available - please contact your sales representative.*

For more information on Silver Zeolite technology, visit www.harmsco.com

Harmsco® Calypso Blue™ Cartridges To Fit 4-1/2" Diameter Filter Housings



Premium quality cartridges made of pleated polyester filter media for long life and high dirt holding capacity. Cartridges can be cleaned and reused in most applications and micron ratings. Available for both 10" and 20" Big-Blue® housings. Individually shrink wrapped.



Certified to
ANSI-NSF 61

Code	Micron	No./Case	Ship Wt. (lbs.)
10" Calypso Blue™ Cartridges (4-1/2" OD x 9-3/4" L)			
HB-10-0.35W	0.35	8	8
HB-10-1W	1	8	8
HB-10-5W	5	8	8
HB-10-20W	20	8	8
HB-10-50W	50	8	8
HAC-BB-10-W	10	8	14
HB-10-EZ-CLEAN	50	8	7
20" Calypso Blue™ Cartridges (4-1/2" OD x 20" L)			
HB-20-0.35W	0.35	4	6
HB-20-1W	1	4	6
HB-20-5W	5	4	6
HB-20-20W	20	4	6
HB-20-50W	50	4	6
HAC-BB-20-W	10	8	14
HB-20-EZ-CLEAN	50	8	7

Carton dimensions: 10"x10"x21" (for both 10" and 20")

Single Filter Cartridge Housings and Drinking Water Systems



For reference only; design may vary.

Single filter cartridge housings

A wide selection of high quality, single filter cartridge housings are available for low flow rates and when multi-cartridge filter housings are not required. Made of polypropylene for durability, strength and chemical compatibility. Rated for temperatures to 100°F (38°C) and pressures to 125 psi (8.5 bar). Slimline and Big-Blue housings available.

Drinking water systems

Counter top and under counter model for two housings are available. Rated for temperatures to 100°F (38°C) and pressures to 125 psi (8.5 bar). Individually boxed; installation instructions included.

Product Code	Type	Pipe	Pr. Relief	No./Case	Ship Wt. (lbs.)	Carton Size (in.)
Polypropylene filter housings for one 9-3/4" cartridge (2-3/4" OD).						
HSL-10-0.25-W	Slimline*	1/4"	No	12	25	19x15x13
HSL-10-0.375-W	Slimline	3/8"	No	12	25	19x15x13
HSL-10-0.75-WPR	Slimline	3/4"	Yes	12	25	19x15x13
HSL-10-0.75-WCP	Slimline	3/4"	Yes	12	32	19x15x13
HSL-10-0.75-222*	Slimline	3/4"	No	12	38	36x12x15
* Filter housing for 10" cartridge with 222 end caps. Made with all natural pure polypropylene.						
Polypropylene filter housings for one 20" cartridge (2-3/4" OD).						
HSL-20-0.75-WPR	Slimline	3/4"	Yes	6	35	18x13x25
Polypropylene filter housings for 4-1/2" OD filter cartridges.						
HBB-10-1-WPR	10" Big-Blue*	1"	Yes	4	22	15x15x15
HBB-20-1-WPR	20" Big-Blue	1"	Yes	4	35	16x16x26
HBB-20-1.5-WPR	20" Big-Blue	1-1/2"	Yes	4	35	16x16x26
Counter Top Filter (Complete with slimline housing, stainless steel faucet, tubing and instructions.)						
HCT-100	Slimline	1/4"	No	1	2	6x6x15
Under Counter Model (Two Slimline housings w/bracket, installed in series, instructions included.)						
HUC-200	Slimline	1/4"	No	1	7	13x7x15
Brackets			Wrenches to remove sumps from heads			
Part Number	Description		Part Number	Description		
HSL-10-S-BRKT	Bracket, single		HSL-WRENCH-10/20-P	Wrench 10/20" Pentek Slim		
HSL-10-D-BRKT	Bracket, dual		HSL-WRENCH-10/20-VL	Wrench 10/20" Valuline Slim		
HSL-10-T-BRKT	Bracket, triple		HBB-WRENCH	Wrench for Big-Blue ¹		
HSL-20-S-BRKT	Bracket, 20" slimline		HBB-WRENCH-10	Wrench 10" BB Housing ²		
HBB-BRKT	Bracket, 10" & 20" B-B		HBB-WRENCH-20	Wrench 20" BB Housing ²		
* Slimline and Big Blue are registered trademarks of Ametek Corp.			¹ Double O-Ring; ² Single O-Ring			

Harmsco® Filter Cartridges For Competitive Filter Housings

Micron	Product Code	Cap Color	No./Case	Ship Wt. (lbs.)	Ship Wt. (kg.)	Carton Size (in.)
Harmsco® 10" (254 mm) cartridges. (For competitive filter housings requiring 10" cartridges.)						
0.35	801-0.35/10	Brown	24	11	5	12x17x11
1	801-1/10	Tan	24	11	5	12x17x11
5	801-5/10	White	24	11	5	12x17x11
20	801-20/10	Blue	24	11	5	12x17x11
50	801-50/10	Yellow	24	11	5	12x17x11
Harmsco® 20" (508 mm) cartridges. (For competitive housings requiring 20" length cartridges.)						
0.35	801-0.35/20	Brown	24	19	9	12x17x21
1	801-1/20	Tan	24	19	9	12x17x21
5	801-5/20	White	24	19	9	12x17x21
20	801-20/20	Blue	24	19	9	12x17x21
50	801-50/20	Yellow	24	19	9	12x17x21
Harmsco® 30" (762 mm) cartridges. (For competitive housings requiring 30" length cartridges.)						
0.35	801-0.35/30	Brown	24	28	13	12x17x31
1	801-1/30	Tan	24	28	13	12x17x31
5	801-5/30	White	24	28	13	12x17x31
20	801-20/30	Blue	24	28	13	12x17x31
50	801-50/30	Yellow	24	28	13	12x17x31
Harmsco® 40" (1016 mm) cartridges. (For competitive housings requiring 40" length cartridges.)						
0.35	801-0.35/40	Brown	24	37	17	12x17x41
1	801-1/40	Tan	24	37	17	12x17x41
5	801-5/40	White	24	37	17	12x17x41
20	801-20/40	Blue	24	37	17	12x17x41
50	801-50/40	Yellow	24	37	17	12x17x41
Harmsco® Spring End Caps (All Poly). Call for details.						
Call for details	801-Spring		200	8	5	12x17x11
Harmsco® Special Application Cartridges						
5	8618-5	White	1	3	2	7x7x19
10	8618-10	Red	1	3	2	7x7x19
20	8618-20	Blue	1	3	2	7x7x19

New! Cellulose-free Cartridges

Harmsco® now offers **cellulose-free filter cartridges** constructed with newly developed **synthetic composite media**. The media's patented gradient density and low resistance provide for extended filter life while maintaining high efficiency. They contain no binders or cellulose and have been developed specifically for **drinking and bottled water applications**. They are currently offered in **1, 5 and 20 micron** nominal ratings in our **801, Calypso Blue™ and Hurricane®** cartridges.

Code	Micron	Color	Media (ft. ²)	No./Case	Ship Wt. (lbs.)	Carton Size (in.)
10" 801 Cartridges (2-3/4" OD x 9-3/4" L) Individually Wrapped						
801-1W-HF	1	Tan	4.25	24	11	12 x 17 x 11
801-5W-HF	5	White	4.25	24	11	12 x 17 x 11
801-20W-HF	20	Blue	4.25	24	11	12 x 17 x 11
10" Calypso Blue™ Cartridges (4-1/2" OD x 9-3/4" L) Individually Wrapped						
HB-10-1W-HF	1	Blue	9	8	8	10 x 10 x 21
HB-10-5W-HF	5	Blue	9	8	8	10 x 10 x 21
HB-10-20W-HF	20	Blue	9	8	8	10 x 10 x 21
20" Calypso Blue™ Cartridges (4-1/2" OD x 19-1/2" L) Individually Wrapped						
HB-20-1W-HF	1	Blue	18.5	4	6	10 x 10 x 21
HB-20-5W-HF	5	Blue	18.5	4	6	10 x 10 x 21
HB-20-20W-HF	20	Blue	18.5	4	6	10 x 10 x 21
Hurricane® 40 Cartridges (7-3/4" OD x 9-5/8" L) Individually Wrapped						
HC/40-1W-HF	1	Blue	28.5	1	4	9 x 9 x 11
HC/40-5W-HF	5	Blue	28.5	1	4	9 x 9 x 11
HC/40-20W-HF	20	Blue	28.5	1	4	9 x 9 x 11
Hurricane® 90 Cartridges (7-3/4" OD x 19-1/2" L) Individually Wrapped						
HC/90-1W-HF	1	Blue	60	1	7	9 x 9 x 21
HC/90-5W-HF	5	Blue	60	1	7	9 x 9 x 21
HC/90-20W-HF	20	Blue	60	1	7	9 x 9 x 21
Hurricane® 170 Cartridges (7-3/4" OD x 30-3/4" L) Individually Wrapped						
HC/170-1W-HF	1	Blue	115	1	10	9 x 9 x 32
HC/170-5W-HF	5	Blue	115	1	10	9 x 9 x 32
HC/170-20W-HF	20	Blue	115	1	10	9 x 9 x 32



Filtration Systems by Harmsco® Using Hurricane Filters

Skid mounted filtration systems are available to reduce labor and installation costs. All systems include steel skids assembled with shut-off valves, check valves and pressure gauges. Controls for pumps are included when pump systems are ordered. Please see our Systems Brochure for full details.

OPTIONS:

- NEMA enclosure for pump systems in outdoor installations
- Filter service beacon
- Automatic purge valve for high solids application
- Crating for export

Shut-off and check valves installed to allow each individual filter to be isolated for servicing on all parallel systems. Filter Service Beacons and Automatic Purge Valves (if ordered) are tied in with all filters in parallel installations and with first filter only in series installations. Nema 12 enclosure with 10V control standard for indoor installation. 110 vac/15 amp plug for beacon included if pump is not ordered.

STANDARD MODELS

Model No. With Pump	Pump Size	Rated Flow (approx.)		Model No. Without Pump	Number of HUR170-HP Filters	Inlet/Outlet
		GPM	LPM			
Parallel Installation Filters						
PFS-1-P	5 HP	100	378	PFS-1	1	2" NPT
PFS-2-P	7.5 HP	200	757	PFS-2	2	3" FLG
PFS-3-P	15 HP	300	1,135	PFS-3	3	4" FLG
PFS-4-P	20 HP	400	1,514	PFS-4	4	4" FLG

Harmsco® Spare Parts

Harmsco® Filtration Products
www.harmsco.com

Description	Part Number	Size / Use	Material	Filter Model
O-Rings				
O-Ring	551-B	2-1/8" for standpipe	Buna-N	HIF 7, 14, 21
O-Ring	551-E	2-1/8" for standpipe	EPDM	HIF 7, 14, 21
O-Ring	551-V	2-1/8" for standpipe	Viton	HIF 7, 14, 21
O-Ring	930-B	2-3/4" for standpipe	Buna-N	HIF 16, 24
O-Ring	930-E	2-3/4" for standpipe	EPDM	HIF 16, 24
O-Ring	930-V	2-3/4" for standpipe	Viton	HIF 16, 24
O-Ring	552-B	1-5/16" for holding rods	Buna-N	HIF 7, 14, 16, 21, 24 models
O-Ring	552-E	1-5/16" for holding rods	EPDM	HIF 7, 14, 16, 21, 24 models
O-Ring	552-V	1-5/16" for holding rods	Viton	HIF 7, 14, 16, 21, 24 models
O-Ring	1625-B	8" ID x 7/16" THK	Buna-N	BC4
O-Ring	1625-V	8" ID x 7/16" THK	Viton	BC4
O-Ring	1626-B	10" ID x 7/16" THK	Buna-N	BC6
O-Ring	1626-V	10" ID x 7/16" THK	Viton	BC6
O-Ring	361-E	.275 CS x 11.75	EPDM	HUR 1x170FL
O-Ring	363-E	.375 CS x 20.38	EPDM	HUR 3x170FL
O-Ring	365-E	.375 CS x 30.38	EPDM	HUR 5x170FL
O-Ring	368-E	.375 CS x 36.38	EPDM	HUR 8x170FL
Rim Gaskets				
Rim Gasket	550-E	Cluster, Hurricane	EPDM	HIF 7, 14, 16, 21, 24, HUR 40, 90, 170, WB40SC, 90SC, 170SC
Rim Gasket	550-B	Cluster, Hurricane	Buna-N	HIF 7, 14, 16, 21, 24, HUR 40, 90, 170, WB40SC, 90SC, 170SC
Rim Gasket	550-V	Cluster, Hurricane	Viton	HIF 7, 14, 16, 21, 24, HUR 40, 90, 170, WB40SC, 90SC, 170SC
Top Seals				
Top Seal	635-E	16" top seal	EPDM	HIF 28 and HIF 42
Top Seal	635-B	16" top seal	Buna-N	HIF 28 and HIF 42
Top Seal	671-E	18" top seal	EPDM	HIF 75 and HIF 100
Top Seal	671-B	18" top seal	Buna-N	HIF 75 and HIF 100
Top Seal	653-E	24" top seal	EPDM	HIF 150FL and HIF 200FL
Top Seal	653-B	24" top seal	Buna-N	HIF 150FL and HIF 200FL
Top Seal	654-E	24" top seal	EPDM	HIF 5x170FL
Bottom Seals				
Bottom Seal	639-N	Nat. gum rubber seal	NGR	HIF 28 through HIF 200FL
Bottom Seal	639-E	EPDM bottom seal	EPDM	HIF 28 through HIF 200FL
Bottom Seal	639-B	Buna-N bottom seal	Buna-N	HIF 28 through HIF 200FL
Bottom Seal	640-N	Nat. gum rubber seal	NGR	HIF 5x170FL
Bottom Seal	640-E	EPDM bottom seal	EPDM	HIF 5x170FL
Top Plates				
Top Plate	519SS-222	Top plate - cluster	Stainless	HIF 7-SS-222
Top Plate	519SS	Top plate - cluster	Stainless	HIF 7, 14 and HIF 21
Top Plate	901SS	Top plate - cluster	Stainless	HIF 16 and HIF 24
Top Plate	309SS	Top plate - Hurricane	Stainless	HUR 40 HP, 90 HP, 170 HP, WB40SC-1, WB90SC-1, WB170SC-1
Top Plate	633SS	Top plate	Stainless	HIF 42, HIF 28
Top Plate	670SS	Top plate	Stainless	HIF 75, 100
Top Plate	650SS	Top plate	Stainless	HIF 5x170FL
Top Plate	651SS	Top plate	Stainless	HIF 150FL, 200FL
Top Plate	903SS	Top plate	Stainless	WB40SC-2, WB90SC-2, WB170SC-2
Top Plate	1645	8" Top plate assy	Stainless/Plastic	BC4
Top Plate	1665	10" Top plate assy	Stainless/Plastic	BC6
Bottom Discs				
Bottom Disc	628SS	16" Bottom disc	Stainless	HIF 28, 42
Bottom Disc	631SS	24" Bottom disc	Stainless	HIF 150FL, HIF 200FL
Bottom Disc	664SS	18" Bottom disc	Stainless	HIF 75, HIF 100
Bottom Disc	659SS	24" Bottom disc	Stainless	HIF 5x170FL
Sub Base Assemblies				
Sub Base Assy	637SS	16" Sub base assy	Stainless	HIF 28, 42
Sub Base Assy	638SS	24" Sub base assy	Stainless	HIF 150FL, HIF 200FL
Sub Base Assy	677SS	18" Sub base assy	Stainless	HIF 75, HIF 100
Sub Base Assy	642SS	24" Sub base assy	Stainless	HIF 5x170FL
Lids				
Lid	530-A	Lid for 12 studs	Stainless	HIF 7, 14, 16, 21 and 24
Lid	611-A	Lid for 16 studs	Stainless	HIF 42, HIF 28, HIF 56
Lid	669-A	Lid for 20 studs	Stainless	HIF 75 and HIF 100
Lid	613-A	Lid for 40 studs	Stainless	HIF 150FL, HIF 200FL and HIF 5x170FL
Lid	530-AC	Lid, 12 studs w/vent	Stainless	HUR 40 HP, HUR 90 HP, HUR 170 HP, WB40SC, WB90SC, WB170SC
Lid	1600-C	8" Inverted dome w/vent	Stainless	BCB Housings
Lid	1601-C	8" Medium dome w/vent	Stainless	BC4 Housings
Lid	1602-C	10" Medium dome w/vent	Stainless	BC6 Housings
Lid vent	Vent up-charge	For air release	1/4" FPT	Up-charge for any 11" diameter lid
Lid vent	Vent up-charge	For air release	1/4" FPT	Up-charge for 16" dia. lids and larger
Tanks				
Tank	HIF 7TANK	Tank, standpipe, o-ring	Stain/CPVC	HIF 7
Tank	HIF 14TANK	Tank, standpipe, o-ring	Stain/CPVC	HIF 14
Tank	HIF 16TANK	Tank, standpipe, o-ring	Stain/CPVC	HIF-16

Description	Part Number	Size / Use	Material	Filter Model
Tanks (cont'd)				
Tank	HIF 21TANK	Tank, standpipe, o-ring	Stain/CPVC	HIF 21
Tank	HIF 24TANK	Tank, standpipe, 0-ring	Stain/CPVC	HIF 24
Tank	HIF 24TANK	Tank, standpipe, 0-ring	Stain/CPVC	HIF 24
Tank	HIF 42TANK	Tank, standpipe	Stain/CPVC	HIF 42
Tank	HIF 75TANK	Tank, standpipe	Stain/CPVC	HIF 75
Tank	HIF 100TANK	Tank, standpipe	Stain/CPVC	HIF 100
Tank	HIF 150FLTANK	Tank, standpipe	Stain/CPVC	HIF 150FL
Tank	HIF 200FLTANK	Tank, standpipe	Stain/CPVC	HIF 200FL
Tank	HUR 40 HPTANK	Tanks & standpipe	Stain/CPVC	HUR 40 HP (inner and outer tanks)
Tank	HUR 90 HPTANK	Tanks & standpipe	Stain/CPVC	HUR 90 HP (inner and outer tanks)
Tank	HUR 170 HPTANK	Tanks & standpipe	Stain/CPVC	HUR 170 HP (inner and outer tanks)
Standpipes				
Standpipe	560-C	Standpipe, 1-1/2"	CPVC	HIF 7
Standpipe	531-C	Standpipe, 1-1/2"	CPVC	HIF 14
Standpipe	965-C	Standpipe, 2"	CPVC	HIF 16
Standpipe	532-C	Standpipe, 1-1/2"	CPVC	HIF 21
Standpipe	1445-C	Standpipe, 2"	CPVC	HIF 24
Standpipe	630-C	Standpipe, 2"	CPVC	HIF 42
Standpipe	672-C	Standpipe, 3"	CPVC	HIF 75
Standpipe	673-C	Standpipe, 3"	CPVC	HIF 100
Standpipe	646-C	Standpipe, 4"	CPVC	HIF 150FL
Standpipe	647-C	Standpipe, 4"	CPVC	HIF 200FL
Standpipe	316-C	Standpipe, 2"	CPVC	HUR 40 HP
Standpipe	317-C	Standpipe, 2"	CPVC	HUR 90 HP
Standpipe	315-C	Standpipe, 2"	CPVC	HUR 170 HP
Standpipe	562-C	Standpipe, 2"	CPVC	WB40SC-2
Standpipe	563-C	Standpipe, 2"	CPVC	WB90SC-2
Standpipe	564-C	Standpipe, 2"	CPVC	WB170SC-2
Standpipe	562-C-1	Standpipe, 1"	CPVC	WB40SC-1
Standpipe	563-C-1	Standpipe, 1"	CPVC	WB 90SC-1
Standpipe	564-C-1	Standpipe, 1"	CPVC	WB 170SC-1
Standpipe	645-C	Standpipe, 4"	CPVC	HIF 5x170FL
Standpipe	560-SS	Standpipe, 1-1/2"	Stainless	HIF 7SS, HIF 7SS-222
Standpipe	531-SS	Standpipe, 1-1/2"	Stainless	HIF 14SS
Standpipe	965-SS	Standpipe, 2"	Stainless	HIF 16SS
Standpipe	532-SS	Standpipe, 1-1/2"	Stainless	HIF 21SS
Standpipe	1445-SS	Standpipe, 2"	Stainless	HIF 24SS
Standpipe	316-SS	Standpipe	Stainless	HUR 40 HP
Standpipe	317-SS	Standpipe	Stainless	HUR 90 HP
Standpipe	315-SS	Standpipe	Stainless	HUR 170 HP
Standpipe	562-SS	Standpipe	Stainless	WB40SC-2-SS
Standpipe	563-SS	Standpipe	Stainless	WB90SC-2-SS
Standpipe	564-SS	Standpipe	Stainless	WB170SC-2-SS
Nuts, Washers, Retainers				
Nut	202-B	1/2" wing nut	Brass	For all filters
Nut	202-BT	1/2" wing nut-Tall	Brass	HIF 150FL, HIF 200FL and HIF 5x170FL
Nut	202-H	1/2" hex nuts	Brass	All units use nuts specified
Washer	203	1/2" washer	Stainless	All units if hex nuts are used
Retainer nut insert	312	To secure cartridges	PVC	HUR 40 HP, HUR 90 HP, HUR 170 HP, WB 40, WB 90, WB 170
Retainer nut	905-P	To secure cartridges	PVC	HUR 40 HP, HUR 90 HP, HUR 170 HP, WB 40, WB 90, WB 170
Retainer nut	905-HT	To secure cartridges	ABS	HUR 40 HPSS, HUR 90 HPSS, HUR 170 HPSS
Retainer Ring	904	To secure cartridges	PVC	HIF 5x170FL
Retainer Npl	908	To secure cartridges	CPVC	HIF 5x170FL
Inner can isolator	329	To support inner can	CPVC	HUR 40 HP, HUR 90 HP, HUR 170 HP, WB 40, WB 90, WB 170
Screw	330	To install isolator	Stainless	HUR 40 HP, HUR 90 HP, HUR 170 HP, WB 40, WB 90, WB 170
Bushing	1654-P	Bushing for top plate assy	Polypropylene	BC4, BC6
Bushing	1654-SS	Bushing for top plate assy	Stainless	BC4, BC6
Snap Ring	1633	Retainer for top plate assy	Stainless	BC4, BC6
Holding Rods				
Holding rod	555-C	To install cartridges	CPVC	HIF 7
Holding rod	512-C	To install cartridges	CPVC	HIF 14, HIF 16
Holding rod	534-C	To install cartridges	CPVC	HIF 21, HIF 24
Holding rod	555-SS	To install cartridges	Stainless	HIF 7SS
Holding rod	512-SS	To install cartridges	Stainless	HIF 14SS, HIF 16SS
Holding rod	534-SS	To install cartridges	Stainless	HIF 21SS, HIF 24SS
Lifters & Rods				
Lifter	621-C	To install cartridges	CPVC	HIF 28
Lifter	622-C	To install cartridges	CPVC	HIF 42, HIF 75 and HIF 150FL
Lifter	623-C	To install cartridges	CPVC	HIF 56, HIF 100 and HIF 200FL
Lifter	621-SS	To install cartridges	Stainless	HIF 28
Lifter	622-SS	To install cartridges	Stainless	HIF 42, HIF 75 and HIF 150FL
Lifter	623-SS	To install cartridges	Stainless	HIF 56, HIF 100 and HIF 200FL
Lifter	1648	To install cartridges (single)	Stainless	BC4-1, BC6-1
Lifter	1649	To install cartridges (double)	Stainless	BC4-2, BC6-2

Harmsco® Spare Parts. Visit www.harmsco.com for photos and to place your order.

Description	Part Number	Size / Use	Material	Filter Model
Lifters & Rods (cont'd)				
Lifter	1650	To install cartridges (triple)	Stainless	BC4-3, BC6-3
Centering rod	625-P	Centering rod	PVC	HIF 28 through HIF 200FL
Pipe caps				
Pipe cap	513-C	To secure cartridges	CPVC	HIF 7, 14, 16, 21
Pipe cap	513-SS	To secure cartridges	Stainless	HIF 7, 14, 16, 21
Miscellaneous				
Basket	1738-E-316	Size 1 basket for extended housings	Stainless	BCB-1-1.5-EXT, BCB-1-2-EXT
Basket	1738-S-316	Size 1 basket for standard housings	Stainless	BCB-1-1.5-STD, BCB-1-2-STD
Basket	1737-E-316	Size 2 basket for extended housings	Stainless	BCB-2-1.5-EXT, BCB-2-2-EXT
Basket	1737-S-316	Size 2 basket for standard housings	Stainless	BCB-2-1.5-STD, BCB-2-2-STD
1/4" Cartridge spacer	801-GSKT	To add length	EPDM	When needed
Cartridge coupler	801-CPLG	Joins two cartridges	Plastic	All cartridges with 1-1/16" ID
Clamp Band	1615	8" w/4" T-bolt	Stainless	BCB, BC4
Clamp Band	1616	10" w/4" T-bolt	Stainless	BC6
Flange (each)	327	For 2" inlet, outlet	Stainless	HUR 40 HP, HUR 90 HP, HUR 170 HP
Knife edge gasket	509	To seal cartridges	PVC	HIF 7, 14, 16, 21, 24 if required (KE units only)
Knob	1635-P	Knob for top plate	Phenolic	BC4, BC6
Knob	1635-SS	Knob for top plate	Stainless	BC4, BC6
Leg extension (3)	525-A	To extend legs	Aluminum	HIF 56 through HIF 200FL (set of three)
Plug	362-L	Plug, long handle	Stainless	HUR 3x170FL, HUR 5x170FL, HUR 8x170FL
Plug	362-S	Plug, short handle	Stainless	HUR 1x170FL
T-Bolt	1615TB	T-bolt for clampband	Stainless	BCB, BC4, BC6
T-Handle	1615TH	T-handle assy for clampband	Stainless	BCB, BC4, BC6

Standby Clusters for Quick and Easy Access to Cartridge Cluster (For HIF 7 through HIF 24 filters.)

Part Number

- HIF 7CO (specify choice of cartridge*. All poly, polypleat and carbon; call for additional cost.)
- HIF 14CO (specify choice of cartridge*. All poly, polypleat and carbon; call for additional cost.)
- HIF 16CO (specify choice of cartridge*. All poly, polypleat and carbon; call for additional cost.)
- HIF 21CO (specify choice of cartridge*. All poly, polypleat and carbon; call for additional cost.)
- HIF 24CO (specify choice of cartridge*. All poly, polypleat and carbon; call for additional cost.)

* Not included in price.

Fusion Bonded Epoxy Coating for Chemical Resistance

Available for all HIF, Hurricane® and WaterBetter® filters on pages 8, 14, 17 and 19. Please call for price.

Note: Fusion bonded epoxy coating material is NSF Std. 61 certified. Allow additional 2-3 weeks lead time for special coating.

Let us quote your **Private Label Cartridge** and **Custom Product** needs.
PLEASE CALL FOR YOUR SPECIFICATION REQUEST FORM.

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- MINIMUM ORDERS:** \$50.00 minimum order applies.
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- RETURNS:** Returns may be accepted with prior RGA approval. A 25% restocking fee may also apply. Contact a Harmsco® sales representative for details.
- FREIGHT:** All shipments are FOB, West Palm Beach, Florida, USA. Goods damaged or lost in transit must be noted with carrier at time of delivery. Harmsco® will assist with claims, but will not be responsible for loss during transit. All shipping weights listed are approximate and may vary.
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CANCELLATION FEE:** A cancellation fee equivalent to costs incurred will be charged on special order/request products for which manufacturing processes have begun.
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- WARRANTY:** Harmsco® Industrial Filters come with a one year limited warranty. See Owners Manual for full details.
- SERVICE:** Please contact an Authorized Harmsco® Distributor, Dealer or Harmsco®, Inc.

NOTICE

Some of the information contained in this publication has been obtained from outside sources and is considered accurate. Temperature ratings, flow rates and chemical resistance can be affected by a number of unknown factors. For this reason, we do not assume any liability for the accuracy or completeness of the data in this publication. End users should perform their own tests to determine suitability for each application.



Harmsco^{AE} Liquid Filtration Solutions

HARMSCO^{AE} PATENTED UPFLOW FILTRATION PROCESS

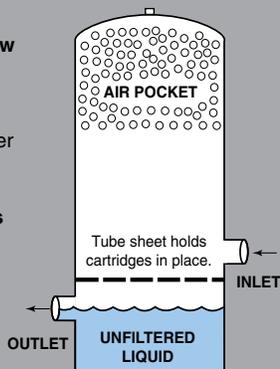
Conventional Cartridge Filter Design

Potential for air entrapment

With outlets located below inlets, air travels upward so vents are needed to expel air that can accumulate within the filter vessel during operation.

Potential for by-pass

With outlets located below inlets, by-pass can occur as unfiltered liquid drains downward to the sump while the cartridges are removed. This may result in by-pass when the filter is put back into service.



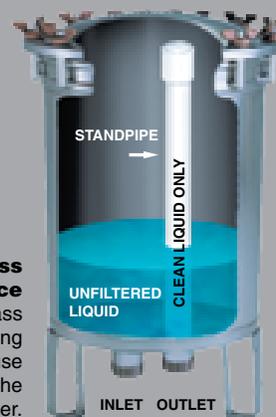
Harmsco^{AE} Up-flow Cartridge Filter

No air entrapment

Air is self purged from Harmsco Up-Flow filters because outlets (top of standpipes) are at the high point of the filters.

No by-pass during service

No liquid can by-pass Harmsco filters during servicing because standpipes are the "clean side" of the filter.



A HISTORY IN PROGRESS

Inventor John Harms and his wife Laura founded Harmsco^{AE}, Inc. in 1958. Their mission was to design and manufacture high quality filtration equipment and market their product line worldwide.

Almost 50 years later, Harmsco^{AE} brand filtration products are recognized around the globe and respected by the leading experts in the filtration industry.

With over 180,000 square feet of manufacturing space in West Palm Beach and Lake Wales, Florida, Harmsco^{AE} is prepared to meet the increasing global demands for liquid filtration.

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HARMSCO^{AE} TODAY...

Harmsco^{AE} is a leader in providing solutions to liquid filtration challenges.

Whether it is industrial, swimming pool or custom product applications, Harmsco^{AE} is focused on delivering innovative and cost-effective approaches to filtration.

The foundation of Harmsco^{AE} begins with its commitment to excellence and focus on providing quality, value and service.

When it comes to price and performance, your best solution for liquid filtration challenges is Harmsco^{AE} Filtration Products.

HARMSCO^{AE} HIGHLIGHTS

- ◆ **March 1973**
 - i Upflow Cartridge Filter Application (Pat. no. 3,720,322)
- ◆ **February 1980**
 - i Electrically grounded filter plate (Pat. no. 4,187,179)
- ◆ **June 1984**
 - i Combination Filter/Heat Exchanger (Pat. no. 4,455,227)
- ◆ **December 1985**
 - i End connected filter cartridges (Pat. no. 4,559,138)
 - i Single Cartridge Filter (Pat. no. 4,561,979)
- ◆ **December 1992**
 - i Filter System utilizing rotational flow and method for making slanted pleats (Pat. no. 5,174,896)
- ◆ **March 1993**
 - i Filtering System utilizing rotational flow and dual chamber (Pat. no. 5,196,119)
- ◆ **May 1994**
 - i Pleated Filtering Sleeve for rotational flow filtering systems (Pat. no. 5,316,677)
- ◆ **April 2001**
 - i Additional 80,000 sq. ft. production facility opens in Lake Wales, Florida
 - i Introduction of the SureSafe™ filter cartridge.
- ◆ **March 2004**
 - i Introduction of Band Clamp Filters and Bag Filter Housings
- ◆ **January 2006**
 - i Introduction of Swing Bolt High Performance Hurricane Cartridge Filter Housings, ASME design