

Designed for HIF, BC and FSSS Filter Housings

Highly efficient and economical filter cartridges made of pleated Polyester-Plus™ filter media.

- Lower overall operating cost
- Longer filter runs for fewer change outs
- Lower initial pressure drops
- Reduced maintenance down time and cost
- Increased contaminant removal
- High flow capability



Certified to NSF/ANSI Standard 61

Features

- ▶ Pleated design for more surface area
- ▶ FDA approved materials - NSF 61 certified
- ▶ Engineered media for superior performance
- ▶ Cleanable and reusable in most applications and micron sizes
- ▶ Thermally bonded end caps to ensure better sealing
- ▶ Color coded end caps for easy micron identification
- ▶ Full product line - largest selection of micron ratings



Applications

- ▶ Reverse Osmosis Pre-filtration
- ▶ Municipal Drinking Water Filtration
- ▶ Commercial/Residential Drinking Water Filtration
- ▶ Desalination Pre-filtration
- ▶ Industrial Water Filtration
- ▶ Cooling Tower Filtration
- ▶ Chill Water Loop Filtration
- ▶ Food & Beverage Filtration
- ▶ Marine/Aquatic Filtration

WaterBetter® Polyester Series Cartridges

Specifications

- ▶ **Filter media:** Polyester-Plus™
- ▶ **Temperature:** 140°F (standard cartridges)
- ▶ **Dimensions:** 2-3/4" O.D.; 1-1/16" I.D.
- ▶ **Center cores:** Molded ABS or rigid PVC
- ▶ **pH:** 3 to 11
- ▶ **Flow rate:** 3-5 GPM
- ▶ **End caps:** Plastisol (pliablePVC)
- ▶ **Surface area:** 4 sq.ft. per 9-3/4" length (approx.)



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Cartridge Selection/Sizing Guide

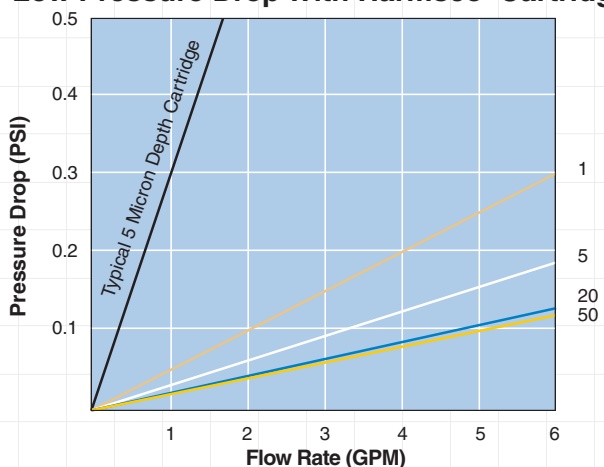
2-3/4" O.D. Harmsco® HIF filter housings use 9-3/4", 19-1/2" and 29-1/4" length cartridges only.

Cartridge Length

Product Code	Nominal Micron Rating	Media (sq ft)	Recommended Flow Rate* (GPM)	Length (in)	O.D. (in)	No./Case
Polyester-Plus™ - engineered for high efficiency, low pressure drops						
WB-1W*	1	4	4	9-3/4	2-3/4	24
WB-5W*	5	4	4	9-3/4	2-3/4	24
WB-20W*	20	4	4	9-3/4	2-3/4	24
WB-50W*	50	4	4	9-3/4	2-3/4	24
WB-921-1	1	8	8	19-1/2	2-3/4	24
WB-921-5	5	8	8	19-1/2	2-3/4	24
WB-921-20	20	8	8	19-1/2	2-3/4	24
WB-921-50	50	8	8	19-1/2	2-3/4	24
WB-20-1W*	1	8	8	20	2-3/4	24
WB-20-5W*	5	8	8	20	2-3/4	24
WB-20-20W*	20	8	8	20	2-3/4	24
WB-20-50W*	50	8	8	20	2-3/4	24
WB-931-1	1	12	12	29-1/4	2-3/4	24
WB-931-5	5	12	12	29-1/4	2-3/4	24
WB-931-20	20	12	12	29-1/4	2-3/4	24
WB-931-50	50	12	12	29-1/4	2-3/4	24

* "W" indicates wrapped.

Low Pressure Drop With Harmsco® Cartridges



Four micron ratings and color coded end caps for easy identification.



Graph colors (left) correspond with color codes (above) used to identify nominal micron rating of cartridge.

Pressure drops are exceptionally low with WaterBetter® Series cartridges due to high surface area and Polyester-Plus™ engineered media. The data shown (left) is per new 9-3/4" cartridge in clean water.

Note: This publication is to be used as a guide. The data within has been obtained from many sources and is considered to be accurate. Harmsco does not assume liability for the accuracy and/or completeness of this data. Changes to the data can be made without notification. Temperature, Pressure, Flow Rates, Differential Pressures, Chemical Combinations and other unknown factors can affect performance in unknown ways. **Limited Warranty:** Harmsco warrants their products to be free of material and workmanship defects. Determination of suitability of Harmsco products for uses and applications contemplated by Buyer shall be the sole responsibility of Buyer. The end user/installer/buyer shall be liable for the product's performance and suitability regarding their specific intended applications. End users should perform their own tests to determine suitability for each application.

Up-Flow Filtration

A design so superior it's patented.

- This product is designed with a patented Up-flow technology which prevents the accumulation of air inside the filter housing keeping the filter operating at 100%.



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Features

- ▶ NSF/ANSI Standard 61 listed
- ▶ 304 stainless steel construction, standard
- ▶ Electropolished finish, standard
- ▶ 150 psi (10.3 bar) pressure rating
- ▶ Flow Rates up to 800 gpm
- ▶ All filter housings hydrostatically tested
- ▶ Easy cartridge installation, removal and service
- ▶ Individual studs for safe, secure lid closure
- ▶ Extensive choice of cartridge micron ratings and media

Options:

316 stainless steel
Chemical resistant epoxy coating
Flanged options on HIF 24, HIF 42,
HIF 75 and HIF 100



HIF 7

HIF 24

HIF 200FL

Not shown:
HIF 14, HIF 16, HIF 21, HIF 42, HIF 75, HIF 100 and HIF 150FL

Applications

- ▶ Residential and Commercial Drinking Water
- ▶ Cooling Tower Filtration
- ▶ Process Water
- ▶ Reverse Osmosis Pre-filtration
- ▶ Ground Water Remediation
- ▶ Utility Water
- ▶ Industrial Waste Water Treatment
- ▶ Surface Water Treatment Rule (SWTR) LT2

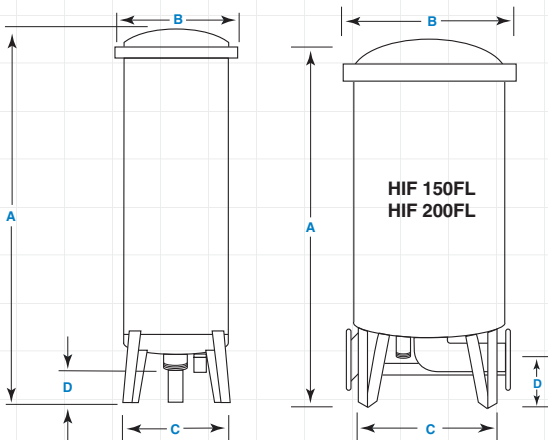


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Cartridge Cluster Filters

All cartridges in our 7, 14, 16, 21 and 24 models are arranged in a single "cartridge cluster," so all cartridges are removed at one time for easy cartridge cleaning or replacement.



Dimensions

Filter Model	A Height	B Diameter	C Leg Width	D Height	Service Ht.	Inlet/Outlet	Drain
HIF 7	19-1/2"	13"	13"	3-1/2"	35"	1-1/2" NPT	1" NPT
HIF 14	28"	13"	13"	3-1/2"	48"	1-1/2" NPT	1" NPT
HIF 16	28"	13"	13"	4"	48"	2" NPT	1" NPT
HIF 21	37"	13"	13"	3-1/2"	68"	1-1/2" NPT	1" NPT
HIF 24	37"	13"	13"	4"	68"	2" NPT	1" NPT
HIF 42	40"	18"	18"	5-3/8"	68"	2" NPT	1" NPT
HIF 75	42"	20"	20"	6-3/8"	70"	3" NPT	1-1/2" NPT
HIF 100	52"	20"	20"	5-7/8"	87"	3" NPT	1-1/2" NPT
HIF 150FL	48"	28"	28"	5-3/16"	76"	4" flange	1-1/2" NPT
HIF 200FL	58"	28"	28"	5-3/16"	93"	4" flange	1-1/2" NPT

Flanged options on HIF 24, HIF 42, HIF 75 and HIF 100

Ordering Information

Filter Model	HIF 7	HIF 14	HIF 16	HIF 21	HIF 24	HIF 42	HIF 75	HIF 100	HIF 150FL	HIF 200FL
Flow Rate* (GPM)	Up to 30	Up to 60	Up to 75	Up to 90	Up to 100	Up to 175	Up to 300	Up to 400	Up to 600	Up to 800
Flow Rate* (LPM)	Up to 113	Up to 226	Up to 284	Up to 340	Up to 397	Up to 662	Up to 1,135	Up to 1,514	Up to 2,271	Up to 3,028
Flow Rate* (M³/HR)	Up to 7	Up to 14	Up to 17	Up to 20	Up to 23	Up to 40	Up to 68	Up to 91	Up to 136	Up to 181
Cartridges	7 - 9-3/4" "Singles"	7 - 19-1/2" "Doubles"	8 - 19-1/2" "Doubles"	7 - 29-1/4" "Triples"	8 - 29-1/4" "Triples"	14 - 29-1/4" "Triples"	25 - 29-1/4" "Triples"	50 - 19-1/2" "Doubles"	50 - 29-1/4" "Triples"	100 - 19-1/2" "Doubles"

*Flow rates shown above are for guidelines only. Actual flow rates are based on cartridge type, micron rating, viscosity, solids content and a number of other factors. For complete flow and pressure drop information please refer to your cartridge manufacturer guidelines.

Specifications

- ▶ **Filter Vessel/Metal Components** - 304 stainless steel, electropolished for increased resistance to corrosion
- ▶ **Holding/Lifting Rods, Standpipes and Pipe Caps** - CPVC, standard models; 304 stainless steel for All-Stainless models
- ▶ **Rim Gaskets** - EPDM, standard; Buna-N, Viton available
- ▶ **O-rings** - Buna-N, standard; EPDM, Viton available
- ▶ **Bottom Seals** - natural gum rubber, standard; EPDM, Viton available
- ▶ **Pressure** - rated for pressures to 150 PSI (10.3 bar) max
- ▶ **Temperature** - rated to 140°F (60°C) with CPVC rods, pipe caps, standpipes and standard Harmsco cartridges; to 200°F (93°C) for all stainless models with stainless steel rods, pipe caps and standpipes, and Harmsco High-Temp cartridges
- ▶ **Flow** - up to 800 gpm; typical flow rates are 4-6 gpm per single length (9-3/4")
- ▶ **Wing Nuts** - brass; optional brass hex nuts and stainless steel flat washers

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