

Microfiber Cartridges

Absolute Rated

Designed for Filter Housings That Utilize 2-1/2", 2-3/4", and 7-3/4" O.D. High Flow Cartridges.

CERTIFIED: NSF/ANSI STANDARD 61

Drinking Water System Components - Health Effects

- **Substantially removes:**
 - Cryptosporidium
 - Giardia cysts
 - Harmful organisms
 - Sediment
 - Silt
 - Turbidity



Features

- ▶ Absolute rated one micron filter media removes cyst-sized particles for safe, cyst-free drinking water
- ▶ Pleated microfiber filter media provides more surface area for longer filter life and increased particle removal
- ▶ FDA listed materials for use in potable water and liquid food applications
- ▶ End caps, center tubes and media are thermally bonded as one integral component for added strength and to provide superior end sealing
- ▶ Full product line available for standard, and Hurricane® filter housings



Harmsco® Microfiber Series Cartridges

Applications

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

Specifications

- ▶ **Micron rating** - One micron absolute for cryptosporidium and giardia cysts
- ▶ **Filter media** - Microfiber
- ▶ **Shrink Wrap** - Standard for all Microfiber cartridges
- ▶ **Temperature** - 140°F (60°C) max*
- ▶ **Center tubes** - Rigid PVC with perforations or molded polypropylene
- ▶ **Flow Rates** - Up to 0.8 gpm per ft² of media
- ▶ **End Caps** - Pliable PVC, sealing surface built in

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

Independent Lab Validated

To verify the performance of the Harmsco HMF Microfiber cartridge and NSF filter housing, IBR, a highly respected independent testing facility, was selected to conduct a single-pass challenge test at 3 points. This defines the maximum challenge particulate based on detection limit and acceptable cryptosporidium surrogate...2 microns in this test. The "terminal" pressure drop was determined by Harmsco to be 30 psi. For more information on the test results, please contact Harmsco.

* Pace Analytical is State Certified (CA, IA, MA, WI). Results are accepted by Water Quality Association (WQA), Underwriters Laboratory (UL) and Canadian Standards Association (CSA) for product label or seal programs.

Results of Challenge Test

Using 2-micron surrogate beads.

Sample Point	Log Removal
Initial Efficiency	3.6
50% Terminal Pressure Drop: 15 psi	3.8
100% Terminal Pressure Drop: 30 psi	3.7



Certified to NSF/ANSI Standard 61

Cartridge Selection/Sizing Guide

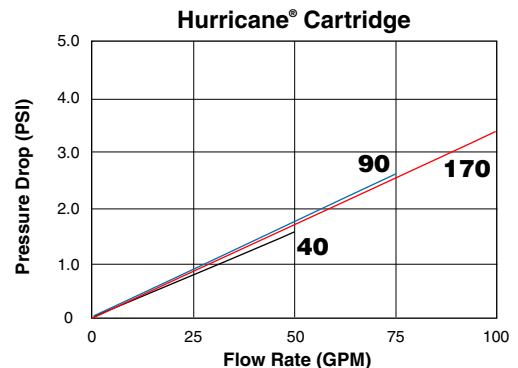
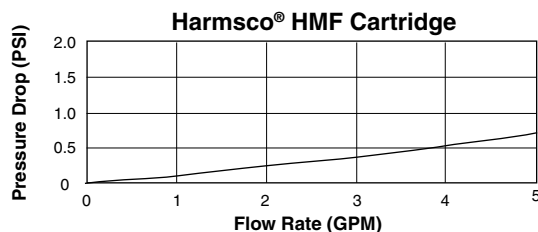
2-1/2", 2-3/4" and 7-3/4" O.D. - Harmsco® HIF filter housings use 9-3/4", 19-1/2" and 29-1/4" lengths only

Cartridge O.D.

Product Code	Pleated Media Area (sq ft)	Type	Length (in.)	O.D. (in.)	Recommended Flow Rate (GPM) for 2 log removal	No./Carton
Microfiber - 1 micron absolute, multi-layered media						
HMF-701-W	4.8	Standard	9-3/4	2-1/2	4	28
HMF-701/20-W	10	Standard	20	2-1/2	8	28
HMF-701/30-W	15	Standard	30	2-1/2	12	28
HMF-701/40-W	20	Standard	40	2-1/2	16	28
HMF-801-W	6.4	Standard	9-3/4	2-3/4	5.25	24
HMF-921-W	12.8	Standard	19-1/2	2-3/4	10.25	24
HMF-931-W	19.25	Standard	29-1/4	2-3/4	15.5	24
HMF-941-W	25.65	Standard	39	2-3/4	20.5	24
HMF-170-W	125	Hurricane®	30-3/4	7-3/4	100	1
HMF-90-W	81.5	Hurricane®	19-1/2	7-3/4	65	1
HMF-40-W	38	Hurricane®	9-5/8	7-3/4	30	1

Low Pressure Drop

Initial pressure drop using HMF cartridges is exceptionally low due to our pleated design and increased surface area. Pressure drop data is shown here, calculated for new cartridges in clear 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.