HARMSCO®

HMF-SS

Microfiber SureSeal™ Cartridges

Absolute Rated

Designed specifically for Filter Housings That Utilize 4-1/2" O.D. High Flow Cartridges

CERTIFICATION PENDING: NSF/ANSI STANDARD 61

Drinking Water System Components - Health Effects

Harmsco® uses the patented dual durometer endcaps to provide superior sealing characteristics for Big Blue® and other 4¼" style cartridge filter housings. The overall length of the cartridge alone is ¼" over standard but when installed in the housing, it is designed to compress and operate as normal.



- Soft one-time use seals ensure a positive seal in most Big-Blue* style cartridge filter housings
- Absolute rated one micron filter media removes cystsized 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
- Sizes available to fit 10" and 20" Big-Blue* style 4-1/2" cartridge filter housings.

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

Applications

- Commercial/Residential Drinking Water Filtration
- Water Bottling Filtration
- Reverse Osmosis Pre-filtration
- Desalination Pre-filtration



Harmsco® SureSeal™ Series Cartridges

- Industrial Water Filtration
- Chill Water Loop Filtration
- Marine/Aquatic Filtration
- Food & Beverage Filtration

- Micron rating One micron absolute for cryptosporidium and giardia cysts
- Filter media Microfiber
- Shrink Wrap Standard for all Poly-Pleat[™] cartridges
- Temperature 140°F (60°C) max*
 - * Temperature limits vary and depend on pressure and time under load.
- 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

Independent Lab Validated

To verify the performance of the Harmsco HMF SureSeal™ 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.

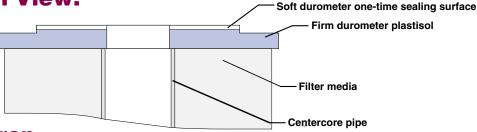


Cartridge Selection/Sizing Guide

4-1/2" O.D. - Big Blue® style housings use 10", and 20" lengths only.

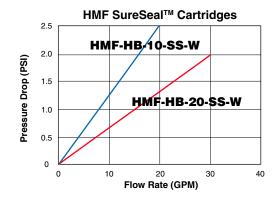
Product Code	Pleated Media Area (sq ft)	Туре	Length (in.)	O.D. (in.)	Recommended Flow Rate (GPM)	No./Carton
SureSeal™ - 1 micron absolute, multi-layered media for 2 log removal						
HMF-HB-10-SS-W	12	Standard	10	4-1/2	10	8
HMF-HB-20-SS-W	24	Standard	20-1/4	4-1/2	20	4

End Cap Section View:



Low Pressure Drop

Initial pressure drop using SureSeal™ 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.

Cartridge

2-1/2

^{*} 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.