

Memtrex* HFE - Halar PTFE

FACT SHEET

All Fluoropolymer Pleated Cartridge



Figure 1: Memtrex HFE filter

Features and Benefits

Memtrex HFE are made entirely from fluoropolymer materials including Halar (ECTFE). (Halar is a trademark of Ausimont.), and PTFE. Halar is an industrial-grade fluoropolymer with excellent solvent resistance. MHFE benefits of the edge lamination technology assuring a lower pressure drop and increasing flow rate. MHFE filters can withstand the harshest process conditions due to its construction using these highly resistant materials. Providing broad chemical compatibility, you can count on our filters to produce consistent, uniform process streams in your most demanding filtration applications. MHFE delivers high flow rates and high purity results with absolute rated efficiencies (99.9% filtration efficiency at rated pore size based on ASTM F795 and F661 test methods) and retention

characteristics that outperform other filters.

The MHFE filter is just one example of our strong commitment to fluid treatment. Our complete portfolio includes filters for every stage of processing, and we offer custom solutions for your unique applications. Veolia is your complete source for filters, crossflow membranes, housings, and other filtration equipment.

Typical Applications

MHFE all fluoropolymer filters offer outstanding performance in extremely harsh chemical environments. MHFE filters are manufactured and packaged in a cleanroom environment for assured cleanliness. Typical applications include:

- Chemicals
- Microelectronics
- Pharmaceuticals

General Properties

Memtrex HFE filters are available with the following absolute pore size micron ratings: 0.05, 0.1, 0.2, 0.45, and 1 µm. Tables 1, 2, 3, and 4 show further details on materials of construction, dimensions, operational limits, and flow performance in water.

Table 1: Materials of Construction

Description	Material of Construction
Core and Cage	Halar (ECTFE)
Support Layer	Halar (ECTFE)
Membrane	ePTFE
End caps	Halar (ECTFE)

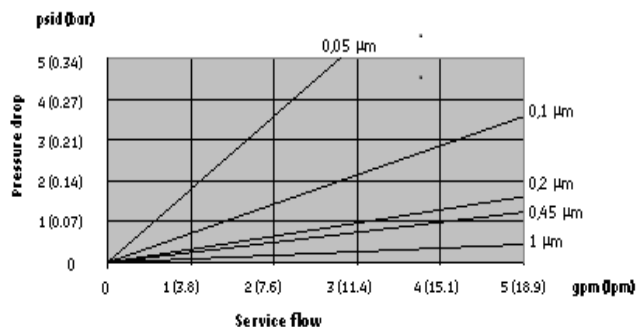
Table 2: Dimensions

Filter Model	Nominal O.D.	Nominal I.D.
MHFE85	2.75" (70mm)	1.25" (31mm)
MHFE91	2.75" (70mm)	1.25" (31mm)
MHFE92	2.75" (70mm)	1.25" (31mm)
MHFE94	2.75" (70mm)	1.25" (31mm)
MHFE01	2.75" (70mm)	1.25" (31mm)

Table 3: Operational Limits

Description	Operational Limits
Maximum forward differential pressure	60 psi (4.14 bar) at 70°F (21.1°C)
Maximum reverse differential pressure	30 psi (2.07 bar) at 70°F (21.1°C)
Maximum operating temperature	205°F (96.1°C) at 25 psid (1.7 bar)

Table 4: Flow Performance in CleanWater¹



¹Data based on 10" length filter

Table 5: Ordering Information

Type	Absolute Micron Rating	Nominal Cartridge Length	End #1 Adapter	End #2 Adapter	Elastomer Material	Product Grade
MHFE	85 = 0.05 µm 91 = 0.1 µm 92 = 0.2 µm 94 = 0.45 µm	1 = 10 in (25 cm) 2 = 20 in (51 cm) 3 = 30 in (76 cm) 4 = 40 in (102 cm)	A = Open End Gasket E = 222 O-Ring F = 226 O-Ring	A = Open End Gasket G = Closed End Cap H = Fin Adapter	T = Teflon ² Encapsulated Viton ²	E = Electronic grade rinse Pre Wet = Rinsed and packed wet

²Teflon and Viton (registered trademarks of The Chemours Company)

Integrity Testing

Micron Rating	Test Pressure
0.05 µm	≤ 5 cc / min at 40 psig (2.76 bar)
0.1 µm	≤ 5 cc / min at 40 psig (2.76 bar)
0.2 µm	≤ 5 cc / min at 30 psig (2.07 bar)
0.45 µm	≤ 5 cc / min at 20 psig (1.38 bar)
1 µm	≤ 5 cc / min at 15 psig (1.38 bar)

Additional Information

- Memtrex HFE filters may be sanitized with compatible chemical agents. The filters must not be autoclaved or steam sterilized.
- Veolia certifies that the material contained in its Memtrex HFE pleated filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact Veolia technical services. Memtrex HFE filters meet the test criteria for USP class VI-121°C Plastics.
- Aqueous extracts from Memtrex HFE filters contain less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues.
- Veolia filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your Veolia distributor for more information.



Veolia Water Technologies
Please contact us via:
www.veoliawatertechnologies.com