

Memtrex* HFE - Halar PTFE

All Fluoropolymer Pleated Cartridge

Features and Benefits



Figure 1 : Memtrex HFE filter

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 deliver 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. GE Water & Process Technologies 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 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

Core and cage	Halar (ECTFE)
Support layer	Halar (ECTFE)
Membrane	ePTFE
End caps	Halar (ECTFE)



Find a contact near you by visiting www.ge.com/water and clicking on "Contact Us".
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Table 2: Dimensions

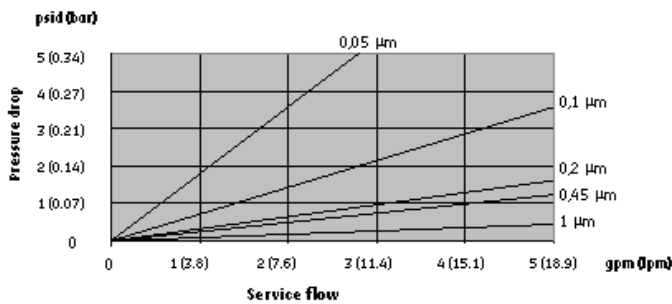
Filter model	Nominal O.D.	Nominal I.D.
MHFE85	2.75" (70mm)	1.25" (31mm)
MHFE91	2.75" (70mm)	1.25" (31mm)
MHFE92	2.75" (70mm)	1.25" (31mm)
MHFE94	2.75" (70mm)	1.25" (31mm)
MHFE01	2.75" (70mm)	1.25" (31mm)

Table 3: Operational Limits

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

¹ Data based on 10" length filter



Integrity Testing

- 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.
- GE 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 GE 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.
- GE 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 GE distributor for more information.

Table 5 provides additional ordering information. 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	1 = 10 in (25 cm)	A = Open End Gasket	A = Open End Gasket	T = Teflon ² Encapsulated Viton ²	E = Electronic grade rinse Pre Wet = Rinsed and packed wet
	91 = 0.1 μm	2 = 20 in (51 cm)	E = 222 O-Ring	E = Closed End Cap		
	92 = 0.2 μm	3 = 30 in (76 cm)	F = 226 O-Ring	H = Fin Adapter		
	94 = 0.45 μm	4 = 40 in (102 cm)				

²Teflon and Viton are a registered trademark of DuPont.

