# GE Water & Process Technologies

# Flotrex\* HR Pleated Filters with Halar (ECTFE) Microfiber



#### Figure 1: Flotrex HR Pleated Filters

# **Description and Use**

Flotrex-HR (FHR) filters (Figure 1) are made entirely from Halar (ECTFE) (Halar is a trademark of Ausimont.), an industrial-grade fluoropolymer with excellent solvent resistance. FHR filters can withstand the harshest process conditions due to this virtually indestructible material. Providing broad chemical compatibility, you can count on our filters to produce consistent, uniform process streams in your most demanding filtration applications.

FHR filters 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 typically outperform polypropylene fiber filters.

The FHR filter is just one example of our strong commitment to fluid treatment. Our complete port-

folio 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**

FHR all-Halar, melt-blown fiber filters offer outstanding performance in extremely harsh chemical environments. These FHR filters also provide costeffective, absolute filtration at high flow rates. Available in a range of 3, 10 and 25  $\mu$ m, FHR filters are manufactured and packaged in a cleanroom environment for assured cleanliness. FHR filters are designed for both pre- and final filtration. Typical applications include:

- Filtration of aggressive chemicals including Toluene and Xylene
- Filtration of Ozonated Water
- Beverage

### **General Properties**

Flotrex-HR filters are available the following absolute pore size micron ratings: 3, 10 and 25  $\mu$ m. Tables 1, 2, 3 and 4 show further details on materials of construction, dimensions, operational limits and flow performance.

#### Table 1: Materials of Construction

Description	Material of Construction
Media	Halar Microfiber
Support Layers	Halar
Core and Cage	Halar
Endcaps and Adapters	Halar



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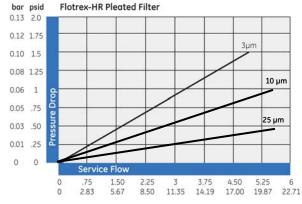
#### **Table 2: Dimensions**

Nominal O.D.	Nominal I.D.	Effective Filtration Area
2.75" (70 mm)	1.25" (31 mm)	8.0 ft <sup>2</sup> (0.74 m <sup>2</sup> )

#### Table 3: Operational Limits

Description	Operational Limits
Maximum Forward Differential Pressure	60 psi (4.1 bar) at 70°F (21°C)
Maximum Reverse Differential Pressure	30 psi (2.1 bar) at 70°F (21°C)
Maximum Operating Temperature	180°F (82°C) at 10 psid (0.69 bar) in water

#### Table 4: Flow Performance in Clean Water<sup>1</sup>



<sup>1</sup> Data based on 10" length filter

# **Additional Information**

- Flotrex-HR filters may be sanitized with compatible chemical agents such as ozonated water. The filters must not be autoclaved or steam sterilized.
- Flotrex-HR filters meet the test criteria for USP24 class VI-121°C plastics and pass the MEM Elution Cytotoxicity Test.
- Aqueous extracts from Flotrex-HR filters contains less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues. FHR filters are ozone tolerant for 9,000 ppm/hr with no extractables.
- Table 5 provides more information on ordering Flotrex HR filters.

#### **Table 5: Ordering Information**

Туре	Absolute Micron Rating	Nominal Cartridge Length	End #1 Adapter	End #2 Adapter	Elastomer Material
FHR	03 = 3.0 μm	1 = 10 in (25 cm)	A = Open End Gasket	A = Open End Gasket	V = Viton <sup>2</sup>
	$10 = 10 \ \mu m^4$	2 = 20 in (51 cm)	E = 222 O-Ring	G = Closed End Cap	$T = Teflon^2$
	25 = 25 µm	3 = 30 in (76 cm)	F = 226 O-Ring	H = Fin Adapter	Encapsulated Viton
		4 = 40 in (102 cm)			

<sup>2</sup> Viton and Teflon are registered trademarks of DuPont.

