

# Flotrex\* HR

## FACT SHEET

### 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 portfolio includes filters for every stage of processing, and we offer custom solutions for your unique applications.

Veolia Water 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 cost-effective, absolute filtration at high flow rates. Available in a range of 3, 10 and 25  $\mu\text{m}$ , 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  $\mu\text{m}$ . Tables 1, 2, 3 and 4 show further details on materials of construction, dimensions, operational limits and flow performance.

**Table 1: Materials of construction**

|                             |                  |
|-----------------------------|------------------|
| <b>Media</b>                | Halar Microfiber |
| <b>Support Layers</b>       | Halar            |
| <b>Core and Cage</b>        | Halar            |
| <b>Endcaps and Adapters</b> | Halar            |

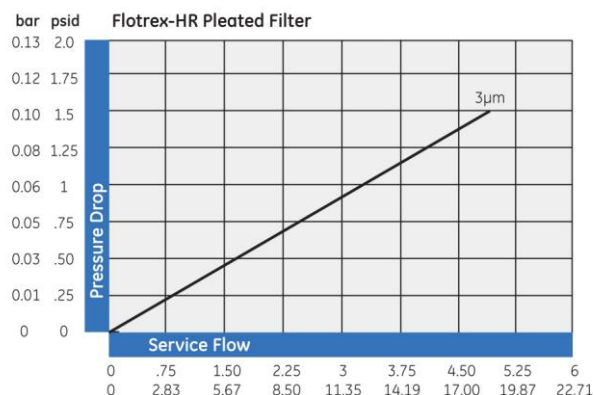
**Table 2: Dimensions**

| 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**

|                                       |   |
|---------------------------------------|---|
| 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

**Table 5: Ordering Information**

| Type | Absolute micron rating                  | Nominal cartridge length  | End #1 adapter  | End #2 adapter   | Elastomer material  |
|------|---|---|---|--|---|
| FHR  | 03 = 3.0 µm<br>10 = 10 µm<br>25 = 25 µm | 1 = 10 in (25 cm)<br>2 = 20 in (51 cm)<br>3 = 30 in (76 cm)<br>4 = 40 in (102 cm) | A = Open End Gasket<br>E = 222 O-Ring<br>F = 226 O-Ring | A = Open End Gasket<br>G = Closed End Cap<br>H = Fin Adapter | V = Viton <sup>2</sup><br>T = Teflon <sup>2</sup><br>Encapsulated Viton |

<sup>2</sup> Viton and Teflon (trademarks of The Chemours Company)

## 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.

