# Flotrex\* AP

## Pleated Filters with Polypropylene Microfiber Media



Figure 1: Flotrex AP Filters

## **Description and Use**

Constructed with gradient density thermally-bonded polypropylene microfiber media, absolute-rated Flotrex AP (FAP) filters (Figure 1) combine exceptional solids-holding capacities with precise micron retention ratings. The FAP filters are constructed of FDA acceptable high-purity polypropylene.

FAP filters are absolute-rated for air, gas and liquid filtration with low pressure drop across the wide range of 0.65 to 40 microns. Sheets of melt-blown media are layered to provide absolute particle retention, high solids loading and long service life.

## **Typical Applications**

Typical Flotrex AP filtration applications include:

 Prefiltration and Final Chemical Filtration – broad chemical compatibility

- Prefiltration of Pharmaceuticals and Biological Fluids – dependable protection for final filters
- High Throughput for Beer Filtration

#### **General Properties**

Flotrex AP filters are available the following absolute pore size micron ratings: 0.65, 1, 2, 3, 5, 10, 20 and 40  $\mu$ m. Tables 1, 2, 3, 4 and 5 show further details on materials of construction, dimensions, operational limits and flow performance in air and water.

**Table 1: Materials of Construction** 

Filtration Media	Polypropylene Microfiber	
Support Layers	Polypropylene Microfiber	
Core and Cage	Polypropylene	
Endcaps and Adapters	Polypropylene	

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

Filter Model	Nominal O.D	Nominal I.D.	Effective Filtration Area
FAP96	2.75" (70mm)	1.25" (31mm)	4.4 ft <sup>2</sup> (0.41 m <sup>2</sup> )
FAP01	2.75" (70mm)	1.25" (31mm)	4.4 ft <sup>2</sup> (0.41 m <sup>2</sup> )
FAP03	2.75" (70mm)	1.25" (31mm)	4.4 ft <sup>2</sup> (0.41 m <sup>2</sup> )
FAP02	2.75" (70mm)	1.25" (31mm)	5.5 ft <sup>2</sup> (0.51 m <sup>2</sup> )
FAP05	2.75" (70mm)	1.25* (31mm)	5.5 ft <sup>2</sup> (0.51 m <sup>2</sup> )
FAP10	2.75* (70mm)	1.25* (31mm)	5.5 ft <sup>2</sup> (0.51 m <sup>2</sup> )
FAP20	2.75" (70mm)	1.25" (31mm)	7.3 ft <sup>2</sup> (0.68 m <sup>2</sup> )
FAP40	2.75" (70mm)	1.25" (31mm)	7.3 ft <sup>2</sup> (0.68 m <sup>2</sup> )

**Table 3: Operational Limits** 

Maximum Forward Differential Pressure	60 psi (4.14 bar) @ 70°F (211°C)
Maximum Reverse Differential Pressure	30 psi (2.07 bar) @ 70°F (211°C)
Maximum Operating Temperature	180°F (82°C) at 10 psid (0.7 bar) in water



Table 4: Flow Performance in Clean Air1

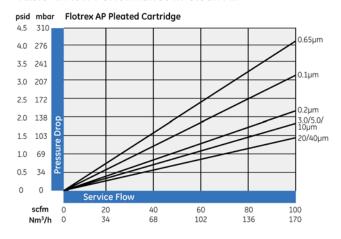
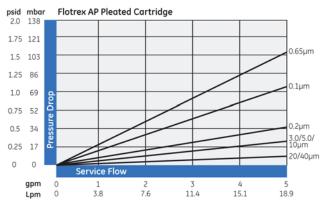


Table 5: Flow Performance in Clean Water<sup>1</sup>



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

#### **Additional Information**

 Flotrex AP filters may be autoclaved or in situ steam sterilized (up to 257°F [125°C], 30-minute cycles) for a maximum accumulated exposure of 10 hours. Alternately, the filters may be sanitized with compatible chemical agents.

- GE certifies that the material contained in its Flotrex AP pleated filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact GE technical services. Flotrex AP filters meet the test criteria for USP class VI-121°C Plastics.
- Aqueous extracts from Flotrex AP filters contain less that 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 6 provides additional ordering information.



**Table 6: Ordering Information** 

Type	Absolute	Nominal	End #1	End #2	Elastomer
	Micron Rating	Cartridge Length	Adapter	Adapter	Material
FAP E <b>xample</b> :	96 = 0.65 μm 01 = 1.0 μm 02 = 2.0 μm 03 = 3.0 μm 05 = 5.0 μm 10 = 10.0 μm 20 = 20.0 μm 40 = 40.0 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 B = 120 O-Ring C = 213 O-Ring E = 222 O-Ring F = 226 O-Ring J = 020 O-Ring Q = 222 O-Ring Stainless Steel Support Ring <sup>2</sup> Z = 226 O-Ring Stainless Steel Support Ring <sup>2</sup>	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring G = Closed End Cap H = Fin Adapter	B = Buna-N E = EPDM S = Silicone T = Teflon <sup>3</sup> Encapsulated Viton <sup>3</sup> (Only in 222 and 226 Sizes) V = Viton

<sup>&</sup>lt;sup>2</sup>Q or Z Adapters normally require G or H adapters.

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<sup>&</sup>lt;sup>3</sup>Teflon and Viton are registered trademarks of DuPont.