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#### **BACTERIA, PARTICLE AND PYROGEN REMOVAL**

The unique membrane structure of FiberFlo® HF capsule filters provides consistent and verifiable pyrogen removal, which is superior to traditional, absolute rated membrane filters. High level endotoxin, bacteria, and spore removal make these point of use filters ideal for a variety of water and process purification applications.

#### **SANITIZABLE**

The FiberFlo HF capsule filters with the Polyphen® Polysulfone membrane (FiberFlo 50, 100, 200 & 450) can be autoclaved up to five individual 20 minute cycles at 121°C (250°F) and 15 psig (1 bar). To prevent excessive pressures, do not steam sterilize filters in-line. See Technical Data for more information

#### **CONFIGURATIONS TO FIT YOUR NEEDS**

FiberFlo capsule filters are available in two sizes, five micron ratings, and a variety of endcap styles. Both inline and crossflow configurations are available

#### **HIGH FLOW RATES**

FiberFlo HF capsule filters deliver fine filtration at high flow rates with low pressure drops, performance superior to traditional, pleated membrane capsule filters.

#### **QUALITY ASSURED**

Each FiberFlo capsule filter is manufactured to meet medical device quality standards with adherence to QSR manufacturing guidelines. These filters exceed the requirements of USP Class VI Plastics Testing and meet USP XXIII standards for purified water extractables. FiberFlo HF capsule filters are integrity testable by diffusional or forward flow methods.

#### **LONGER LASTING**

FiberFlo capsules have up to six times the surface area of comparable pleated capsule filters. This larger membrane surface area provides greater capacity and longer life than pleated filters, resulting in lower filter replacement costs.

## FIBERFLO® HF CAPSULE FILTER FEATURES

- Higher flow rates at lower pressure drops
- Extended life—cleanable, sanitizable
- Removes pyrogens\*
- Polyphen® polysulfone filters can be autoclaved
- Quick rinse-up in ultrapure water
- In-situ integrity testable
- Hydrophilic membranes and hydrophobic membranes
- Biocompatible for medical applications



# PROVEN TECHNOLOGY FOR BACTERIA, ENDOTOXIN AND SPORE REMOVAL

#### **FIBERFLO MEMBRANE SELECTION**

#### **FIBERFLO 30**

FiberFlo HF 30 offers very fine filtration for gas and venting applications. This polypropylene hollow fiber filter has an absolute pore removal rating of 0.03 µm. The hydrophobic hollow fiber membrane repels water, but can be wetted by an aqueous solution with high surface tension if prewetted with alcohol.

#### **FIBERFLO 50**

FiberFlo HF 50 offers the highest degree of control of particulates and microorganisms through its absolute pore removal rating of 0.05 µm and the retentive characteristics of its Polyphen® polysulfone membrane. It is recommended for the most demanding bacteria, particle and pyrogen removal applications. FiberFlo HF 50 will remove 100 percent of endotoxin when challenged with a feed concentration of 5.0 EU/ml."

#### **FIBERFLO 100**

FiberFlo HF 100 offers the best balance of flow, pressure, retentive capacity, pyrogen removal and cost. Its absolute pore removal rating of 0.1 µm and overall pore structure gives high water flow rates and excellent control of particulates, microorganisms and pyrogens. FiberFlo HF 100 will remove 100 percent of endotoxin when challenged with a feed concentration of 1.0 EU/ml.\*\*

#### **FIBERFLO 200**

FiberFlo HF 200 offers maximum flow rates without loss of bacteria retention. Absolute removal of Brevundimonas diminuta is a characteristic of this filter. The ability of FiberFlo HF 200 to remove bacteria and particulates gives it performance characteristics unmatched by traditional 0.2 micron pleated membrane filters.

#### FIBERFLO 450

FiberFlo HF 450 is designed for prefiltration and fluid clarification applications. The HF 450 assures maximum protection of downstream sterilizing filters. It provides superior particle control, dirt holding capacity, and flow rates. The ability of the FiberFlo HF 450 to remove particulates is unmatched by traditional 0.45µm absolute pleated membrane filters.

<sup>\*</sup> FiberFlo 50 and FiberFlo 100 only.

<sup>\*\*</sup>Test sensitivity of 0.06 EU/ml.

## SUGGESTED APPLICATIONS

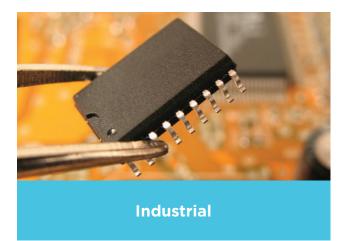


- Medical device rinsing
- Hemodialysis water systems
- Medical equipment rinse water



**Pharmaceutical** 

- Manufacturing
- Serum and blood fractions
- USP purified water
- Ophthalmics
- Growth media
- Fermentation feed stocks



- Semiconductor
- Deionized water
- Industrial process water
- Dilute inorganic chemical solutions



**Food and Beverage** 

- Distilled spirits
- Bottled water
- Seltzer
- Vinegar
- Food products
- Makeup and rinse waters

## TECHNICAL DATA

FiberFlo® Hollow Fiber Specifications					
FiberFlo	30	50	100	200	450
Pore Size mm	0.03 absolute <sup>1</sup>	0.05 absolute <sup>1</sup>	0.1 absolute <sup>1</sup>	0.2 absolute <sup>1,2</sup>	0.45 absolute <sup>1</sup>
Membrane	Hydrophobic Polypropylene	Hydrophilic Polyphen* Polysulfone			
Sanitization	Not Autoclavable	May be autoclaved up to five 20 minute cycles at 121°C (250°F) and 15 psig (1 bar) and/or Chemical sanitization with approved peracetic acid based products.			
Maximum Differential Pressure		30 PSI (2 Bar)			
Surface Area	M = 2.0 ft², L = 6.0 ft²				
Diameter	M = 1", L = 2"				
Nominal Length	M, L = 6.5"				
Case and End Caps	Polycarbonate				
End Seals	Polyurethane				
Extractables	Passes U.S.P. testing for less than 500 ppb when fed U.S.P. purified water.				

Fiber meets all USP-XXIII Class VI criteria, as well as, test standards for tissue cytoxicity.

## ORDERING INFORMATION

End-fitting options:						
Code	Inlet Description	Outlet Description	Filter Type			
А	1/4 inch NPT	1/4 inch NPT	Inline			
В	3/8 inch NPT	3/8 inch NPT	Inline			
D	3/8 inch hose barb	3/8 inch hose barb	Inline			
Н	Sanitary	Sanitary	Inline			
K	1/4 inch NPT	Luer	Cross Flow			
L	3/8 inch hose barb	Luer	Cross Flow			

#### How to determine ordering codes:

Catalog Number M-C-100-K is a 2.0 square foot capsule filter with cross flow design, a 0.10 micron rating, a quarter inch NPT inlet and a Luer outlet.



Capsule Size (Membrane Surface Area)  $L = 6.0 \text{ ft}^2$ 

 $M = 2.0 \text{ ft}^2$ 



Inline/Cross Flow C = Cross Flow I = Inline

100

Micron Rating  $030 = 0.03 \, \mu m^*$  $050 = 0.05 \, \mu \text{m}$  $100 = 0.10 \, \mu m$  $200 = 0.20 \, \mu m$  $450 = 0.45 \, \mu m$ 



**End-Fitting Option** K Ena-Filli (see chart)



<sup>\*\*</sup> Hose barb endcaps are only available on medium size capsule filters.



#### Visit mcpur.com for more information or call 1-800-633-3080

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Hose Barb\*

**MNPT** 

<sup>&</sup>lt;sup>1</sup> As determined by latex bead challenge. Procedure available upon request.

<sup>&</sup>lt;sup>2</sup> As determined by HIMA challenge and latex bead challenge.