FiberFlo® Hollow Fiber Cartridge Filters

Proven Technology for Bacteria, Endotoxin and Particle Control

- Much higher flow rates at lower pressure drops
- Extended life--cleanable, sanitizable
- Removes pyrogens*
- ✓ Autoclavable and steam sterilizable
- Quick rinse-up in ultrapure water
- In-situ integrity testable

- Hydrophilic membranes--repeatedly rewettable without wetting agents
- Biocompatible for life science and medical applications



FiberFlo HF Cartridge Filters

- Fine filtration
- High flow with low pressure drops
- ✓ Longer filter life

Bacteria, Particle and Pyrogen Removal*

The unique membrane structure of FiberFlo HF cartridge filters provides consistent and verifiable pyrogen removal that surpasses traditional, absolute-rated membrane filters. High level endotoxin, bacteria, and spore removal make these filters ideal for a variety of water purification or process fluid applications.

Longer Lasting

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

Easy to Maintain

FiberFlo HF cartridge filters can be steam sterilized in-line or autoclaved off-line.

Customized

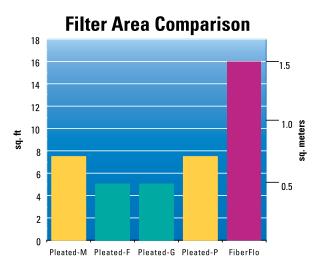
FiberFlo cartridge filters are available in four lengths, four micron ratings, and a variety of endcap styles to fit a variety of standard filter housings.

Quality Assured

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

*Only the pore sizes of the FiberFlo 50 and FiberFlo 100 are validated to remove pyrogens.





Proven Technology for Bacteria,

FiberFlo Cartridge Selection

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 endotoxin¹ 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 0.1µm 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 endotoxin¹ 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.

¹Minimum LAL test sensitivity of 0.06 EU/ml.

- Suggested Applications -



Medical and Laboratory

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



Pharmaceutical Manufacturing

- Serum & other blood fractions
- USP purified water
- Ophthalmics
- Buffers
 - Growth media
 - Fermentation feed stocks
 - Diagnostic reagents

Industrial

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



Food and Beverage

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

Endotoxin and Particle Control

FiberFlo	50	100	200	450		
Pore Size µm	0.05 absolute ¹	0.1 absolute ¹	0.2 absolute ^{1,2}	0.45 absolute ¹		
Maximum Flow Rate per 10" segment	2.5 GPM	3.0 GPM	3.0 GPM	5.0 GPM		
Membrane	Polyphen® Polysulfone					
Maximum Differential Pressure	30 PSI (2 Bar)					
Surface Area	16 ft ² (1.5 m ²)					
Diameter	2.9" (6.4 cm)					
Nominal Length	10", 20", 30", 40" (25 cm, 51 cm, 76 cm, 102 cm)					
Case and End Caps	Polypropylene					
End Seals	Polyurethane					
Extractables	Passes U.S.P. tests for oxidizable substances and total solids for purified water.					

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

1. As determined by latex bead challenge. Procedure available upon request.

2. As determined by HIMA challenge and latex bead challenge.

Ordering Information:

1. Select type:	FiberFlo 50	FiberFlo 100	FiberFlo 200	FiberFlo 450
2. Select length:	10 inch	20 inch	30 inch	40 inch

3. Select style:

Style 3: SOE flat, closed end, external 222 O-ring. Replaces Pall Code 3, Millipore Code 0.

Style 4: SOE fin end, external 222 O-ring. Replaces Pall Code 8, Millipore Code 5.

Style 5: SOE fin end, external 226 O-ring. Replaces Pall Code 7, Millipore Code 7.

Style 7: SOE mini fin end, internal 119 O-ring. Installs in standard 10 inch Ametek Housing*

Style 8: SOE flat, internal 119 O-ring. Installs in standard 20 inch Ametek Housing*

*Simple filter bowl modifications are required for this cartridge.

Internal 119 O-Ring

SOE Flat, Closed End

> SOE Fin End

External 222 O-Ring



Contact your Mar Cor Purification representative for more information.

 Mar Cor Purification
 Mar Cor Purification

 4450 Township Line Road
 14550 28th Avenue North

 Skippack, PA 19474-1429
 Plymouth, MN

 U.S.A.
 55447-4822 U.S.A.

 Tel:
 (484) 991-0220

 Toll Free:
 (800) 346-0365

 Fax:
 (484) 991-0230

Mar Cor Purification 3250 Harvester Road - Unit 6 Burlington, ON L7N 3W9 Canada Tel: (905) 639-7025 Toll Free: (800) 268-5035 Fax: (905) 639-0425

Minntech B.V. Sourethweg 11 6422 PC Heerlen The Netherlands Tel: (+31) 45 5471 471 Fax: (+31) 45 5429 695

Minntech Asia/Pacific Pte. Ltd. 438 Alexandra Road #03-01 Alexandra Point Singapore 119958 Tel: (+65) 6227 9698 Fax: (+65) 6225 6848