



MAR COR[®]
PURIFICATION

A Cantel Medical Company

FiberFlo TF 1680

FiberFlo TF 1680 Cartridges are made using the unique polysulfone hollow fiber membranes available only from Mar Cor Purification. The TF Cartridge is available in a pore size of $0.1\mu\text{m}$ and $0.05\mu\text{m}$, $0.2\mu\text{m}$ & $0.45\mu\text{m}$ pore sizes are available for pre-assessment.

Applications

The Microfiltration membranes are ideal for many applications in biotechnology that include:

- Latex microparticle washing & coating
- Cell concentration
- Cell Debris removal
- Cell harvest
- Cell perfusion
- Multi-particle washing

Hollow Fiber Membrane Structure

Ideal for separation and purification applications, the polysulfone fibers have a graded pore size structure with a "skin" on the inside of the fibers. Fluids, even with varying viscosities, flow easily through the center of the fibers (inside the lumens) with the skin resistant to fouling by materials in the fluids.

FiberFlo[®] TF 1680



Dependable Membrane Performance

The Hollow Fiber membrane is produced in a registered FDA medical device facility under an extensive quality program compliant with ISO 13485:2003 standard. Each membrane lot is tested to rigorous standards resulting in very consistent performance not only within each lot but also from lot to lot.

Product Configuration

FiberFlo TF 1680 cartridges are available for use in pilot and small production scale environments; stainless steel housing required. The TF 1680 cartridges have much higher membrane surface area than small scale laboratory capsules, also available from Mar Cor Purification, making them ideal for scale up from laboratory batch volumes to pilot and small production batch volumes.

Specifications	
Membrane Material:	Polysulfone Hollow Fiber
Cartridge Cage Material:	Polysulfone
Fiber Sealing Technology:	Urethane Potting
Membrane Surface Area:	16.8 ft ² (1.6 m ²)
Fiber Flow Path Length:	9.5" (24 cm)

Cleanliness and Biosafety	
Biosafety	All components meet or exceed USP Class VI-121C plastic tests
Oxidizable Substances:	Permeate and Retentate meet USP XXIX requirements
Endotoxins:	Less than 0.25 EU/ml

Operating Characteristics

Maximum Recommended Trans-Membrane Pressure at 25°C: 30 p.s.i.

Maximum Continuous Operating Temperature, 200 Hours Total Exposure: 80°C

Clean Water Flux

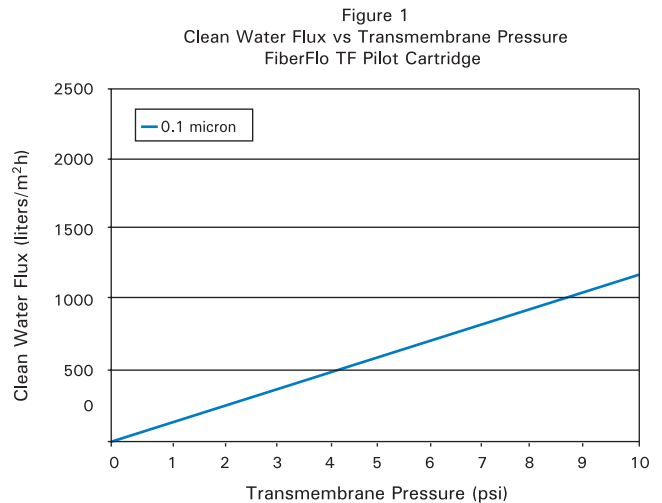
Figure 1 shows the normalized water flux rate for the 0.1µm pore size filter through a range of transmembrane pressures. This is a guide for system design. Flux rates for solutions will vary depending on solution particulate load and viscosity.

Integrity Test

Air Diffusion (Inside Lumen to Outside Lumen): 80cc/minute @ 30psi

Traceability

Each cartridge has a unique serial number etched into the case. Each is packaged in two sealed plastic pouches. Each shipping carton also contains a Certificate of Compliance and the Directions for Use.



Product Ordering Information

FiberFlo TF 1680 Nomenclature Matrix

TF - C - M - 1000 - 028 - 24

Device Type

C - Cartridge

Pore Size Range

M - Microfiltration (Microns)

Pore Size Rating

1000 - 0.1µm

Membrane ID

028 - 0.28mm

Nominal Flow Path Length

24 - 24cm

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