

amcAccuFlow

Cartridges-Modified Polyethersulfone Filters



amcAccuFlow cartridge is a precision filter product that combines the benefit of both a prefilter and final filter in one device to provide reliable and consistent performance. The pleated filter medium is *amcAccupor* membrane, i.e., modified hydrophilic polyethersulfone membrane specifically developed by AMC for various filtration applications.

This cartridge is designed for long service and can be used for final filtration when absolute particle removal is necessary, or prefiltration where highly fine particle removal is desired to protect the final filter.

During the manufacturing process, every *amcAccuFlow* cartridge is flushed with proper solvents under controlled conditions to provide cleanliness, and integrity tested to assure product quality.

amcAccuFlow cartridge is compatible with autoclave and in-line steam sterilization, as well as chemical sanitization methods.

Performance Advantages

Constructed of only two materials, i.e., modified polyethersulfone and polypropylene with no adhesives to ensure lower extractables

All components meet USP Class VI-121°C Plastics Tests for biosafety, and are listed as being acceptable for food contact applications according to the Code of Federal Regulation, Title 21

Provides high throughputs to minimize filter change-outs during batch processing

Enhanced porosity of *amcAccupor* membrane as a filter medium in the cartridge results in low differential pressures and extended filter life

Offers great resistance to severe sanitizing agents such as hot water, concentrated hydrogen peroxides, and active chloride compounds

Available in a variety of configurations allowing for easy installation in commonly used filtration systems

100% integrity tested during manufacturing to assure product reliability and quality

Typical Applications

Parenterals, ophthalmics, oral and topical medicines, serum, tissue culture media, wash and rinse water, diagnostic reagents, buffers, vaccines, bottle and vial washers, make-up water

Specifications

Materials of Construction

Filter Media: Serial layers of pleated *amcAccupor* membrane (modified hydrophilic PES membrane)

Support Materials: Polypropylene

Structure Components: Polypropylene

Sealing Technology: Thermal Bonding

Dimensions

Nominal Length: 10, 20, 30 and 40 inch
(25.4, 50.8, 76.2 and 101.6 cm)

Diameter: 2.7 inches (6.9 cm)

Nominal Pore Sizes

0.1, 0.2, 0.45 μm

Typical Effective Filtration Area

5.8 ft² (0.54 m²) per 10 inch

Maximum Operating Temperature

90°C (194°F) at 30 psi (2.1 bar)

(Supported adapters are recommended for applications at elevated temperatures over 60 C)

Sterilization/Sanitization Methods

Chemical: peracetic acid, chlorinated alkaline products, bleach, sulfur dioxide, and hydrogen peroxide at typical sanitization concentrations and temperatures

Hot Water: 88°C (190°F) at 5 psi (0.34 bar)

Autoclave: 121°C (250°F) for 30 minutes up to 50 cycles

In-line Steam: 121°C (250°F) for 30 minutes at 2 psi (0.14 bar) up to 50 cycles
142°C (288°F) for 60 minutes at 2 psi (0.14 bar) up to 25 cycles

Maximum Differential Forward Pressure

60 psi (4.1 bar) at ambient temperature

Maximum Differential Back Pressure

0.1 μm : 30 psi (2.1 bar) at ambient temperature

0.2 μm : 15 psi (1.0 bar) at ambient temperature

0.45 μm : 15 psi (1.0 bar) at ambient temperature

Maximum Continuous Pressure

Limited by housing

Recommended Integrity Tests

Minimum Bubble Point:

- 0.1 µm: 28 psi (2.0 bar) - ethanol
- 0.2 µm: 45 psi (3.1 bar) - water
- 0.45 µm: 28 psi (2.0 bar) - water

Diffusional Flow in Water:

Provided separately*

Typical Water Flow Rate

- 0.1 µm: 0.4 gpm/psi/10 inch length
(2.2 lpm/0.1 bar/25.4 cm length)
- 0.2 µm: 2.2 gpm/psi/10 inch length
(12.1 lpm/0.1 bar/25.4 cm length)
- 0.45 µm: 4 gpm/psi/10 inch length
(22 lpm/0.1 bar/25.4 cm length)

Oxidizable Substances

Filtrate meets USP XXII requirements for purified water with < 1 L flush after autoclaving

Biosafety

All components meet USP Class VI-121°C Plastics Tests, and are listed as being acceptable for food contact according to the Code of Federal Regulation, Title 21

Endotoxin Level

< 0.25 EU/ml utilizing Limulus Amoebocyte Lysate (LAL) test

Typical non-Volatile Residue

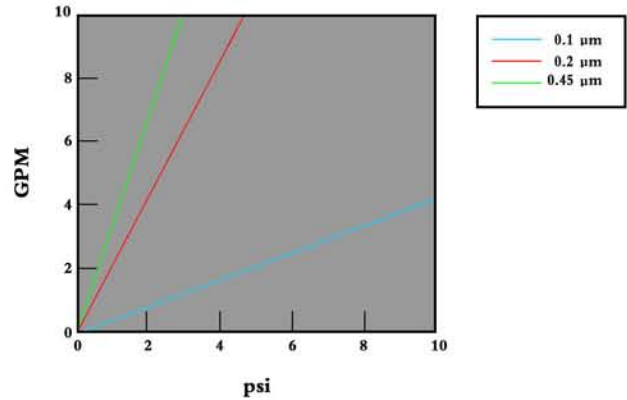
50 ppm per 10 inch

Bacterial Retention

Provided separately*

* For more information, please contact us.

Typical Water Flow Rates (10 inch length)



Cartridges Ordering Information



■ Rated	10	0.1 µm
Pore	20	0.2 µm
Size	45	0.45 µm
◆ Nominal	1	10 inch (25.4 cm)
Length	2	20 inch (50.8 cm)
	3	30 inch (76.2 cm)
	4	40 inch (101.6 cm)
▲ Seal	S	Silicone
Material	V	Viton
	E	Ethylene Propylene

● Cartridge Configuration	D	SOE, Flat
	F	DOE, Gasket/Gasket 10 inch increments
	J	SOE, -222/Flat/SS*
	K	SOE, -222/Fin/SS*
	M	SOE, -222/Flat
	P	SOE, -222/Fin
	Q	SOE, -226/Fin
	R	SOE, -226/Fin/SS*
	V	SOE, -226/Flat
	W	SOE, -226/Flat/SS*

* SS indicates stainless steel supported adapter