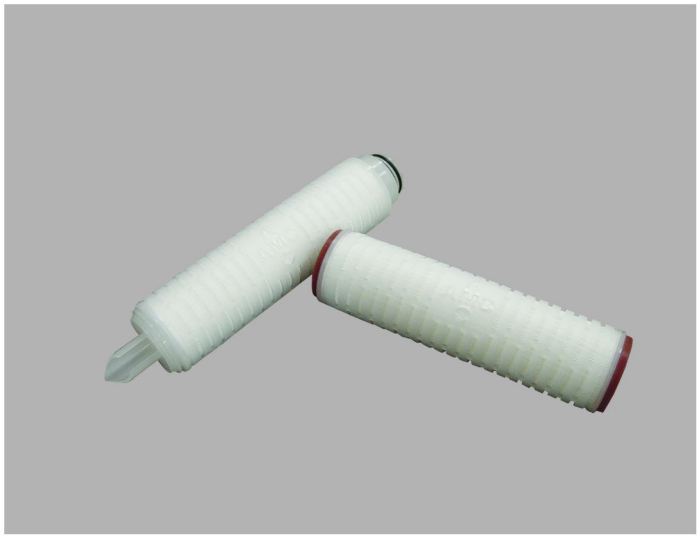
amcAccuFlow B

Cartridges-Modified Polyethersulfone Filters



amcAccuFlow B cartridge contains a nominally rated polypropylene pleated depth filter with a secondary polyethersulfone membrane filter. It combines fine retention with high contaminant-holding capacity for microfiltration of beverages and beverage ingredients.

amcAccuFlow B cartridge can be sanitized with all normally used sanitizing agents. The inert materials of construction protects the beverage product from adverse taste. It is available in 0.2 µm, 0.45 µm, and 0.65 µm pore sizes, and up to 40 inch cartridge lengths (101.6 cm).

In wine filtration, used as either a final filter or as a prefilter, the 0.65 µm amcAccuFlow B removes all yeast and significantly reduces the level of other organisms such as Lactobacillus plantarum. The microorganism retention of the 0.45 µm amcAccuFlow B exhibits a typical LRV of approximately 7 when challenged with Serratia marcescens at 20 psi. The performance demonstrates the filter will remove all yeast and significantly reduce other spoilage organisms as required by the food and beverage industries.

Each cartridge is integrity tested to ensure security in filtration effectiveness. During the manufacturing process, purified water is flushed through the filter to provide optimum cleanliness.

amcAccuFlow B cartridge is manufactured using materials which are listed as being acceptable for food contact according to the Code of Federal Regulation, Title 21, or materials which are commonly found in food contact applications.

Performance Advantages

Provides significant yeast and bacterial removal to meet the needs of the beverage industry

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℃ plastics tests for biosafety, and are listed as being acceptable for food contact applications according to the Code of Federal Regulations, Title 21

Offers high flow rates and throughput for efficient use and extended filter life

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

Sterilizable or sanitizable with in-line steam, hot water, or chemical sanitizing agents

Typical Applications

Wines and wine coolers, beer and distilled spirits, mineral water and bottled water, soft drinks, flavored seltzer, vinegar

Specifications

Materials of Construction

Filter Media: A layer of polypropylene depth filter combined with a layer of amcAccupor membrane, (i.e., modified polyethersulfone hydrophilic membrane) in a pleated configuration
Support Material: 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

0.2, 0.45, 0.65 µm

Typical Effective Filtration Area

6.4 ft^2 (0.6 m^2) per 10 inch

Maximum Operating Temperature

80℃ (176℉) at 30 psi (2.1 bar)
(Supported adapters are recommended for applications at elevated temperature over 60℃)

Sterilization/Sanitization Methods

Chemical: peracetic acid, chlorinated alkaline products, bleach, sulfur dioxide, and hydrogen peroxide at typical sanitization concentrations and temperatures
Hot Water: 88℃ (190℉) at 5 psi (0.34 bar)
Autoclave: 121℃ (250℉) for 30 minutes up to 30 cycles
In-line Steam: 121℃ (250℉) for 30 minutes at 2 psi (0.14 bar) up to 30 cycles
142℃ (288℉) for 60 minutes at 2 psi (0.14bar) up to 20 cycles

Maximum Differential Forward Pressure

60 psi (4.1 bar) at ambient temperature

Maximum Differential Back Pressure

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

Maximum Continuous Pressure

Limited by housing

Recommended Integrity Tests

Minimum Bubble Point:
0.2 µm: 35 psi (2.5 bar) in water
0.45 µm: 24 psi (1.7 bar) in water
0.65 µm: 18 psi (1.2 bar) in water

Diffusional Flow in Water:
0.2 µm: ≤20 cc/min at 30 psi
0.45 µm: ≤20 cc/min at 20 psi
0.65 µm: ≤20 cc/min at 15 psi

Typical Water Flow Rate
0.2 µm: 2.4 gpm/psi/10 inch length (13.3 lpm/0.1 bar/25.4 cm length)
0.45 µm: 4.4 gpm/psi/10 inch length (24.2 lpm/0.1 bar/25.4 cm length)
0.65 µm: 5.4 gpm/psi/10 inch length (30.0 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 and CFR Title 21
All components meet USP Class VI-121℃ Plastics Tests, and are listed as being acceptable for food contact according to the Code of Federal Regulation, Title 21

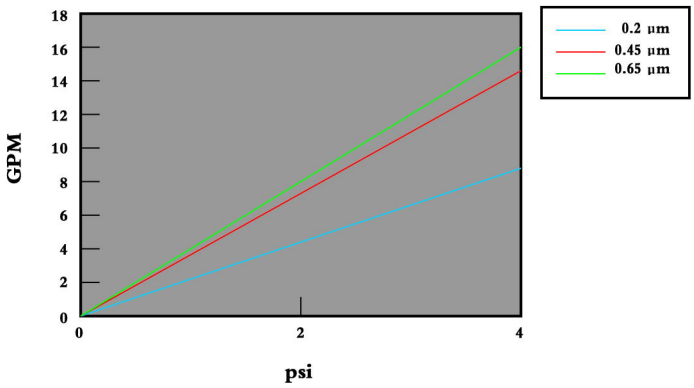
Endotoxin Level
< 0.25 EU/mL utilizing Limulus Amoebocyte Lysate (LAL) test

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)



Cartridge Ordering Information

A	F	■	■	P	◆	●	▲

■ Rated Pore Size	20	0.2 µm
	45	0.45 µm
	65	0.65 µm
◆ Nominal Length	1	10 inch (25.4 cm)
	2	20 inch (50.8 cm)
	3	30 inch (76.2 cm)
	4	40 inch (101.6 cm)
▲ Seal Material	S	Silicone
	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*