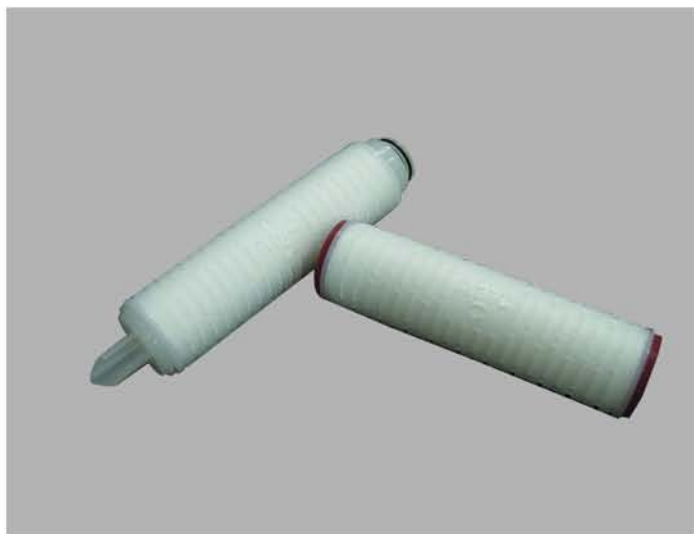


amcFluoroGuard

Cartridges-Hydrophobic PTFE Filters



amcFluoroGuard cartridge filter contains a layer of pleated PTFE membrane filter with a layer of polypropylene depth filters as a prefilter in an all polypropylene construction. It is particularly designed to deliver sterile air/gas filtrate for pharmaceutical venting, clarification and point-of-use air or gas filtration. It is also suitable for chemical filtration. The amcFluoroGuard Filter cartridge is biosafe and suitable for sterile liquid filtration.

The self-contained filter element requires minimal handling and is easily disposed of after use. Thermal bonding of membrane and components minimizes extractables, while allowing the filter to withstand multiple sterilizations without losing integrity.

amcFluoroGuard cartridge is compatible with autoclave and in-line steam sterilization, as well as chemical sanitization methods. Each amcFluoroGuard cartridge is integrity tested to verify compliance with established pore size specifications.

Performance Advantages

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

Withstands shocks and back pressure in rigorous applications

Broad chemical compatibility and temperature resistance

All materials of construction are non-toxic and biosafe, and are listed as being acceptable for food contact applications according to the Code of Federal Regulation, Title 21

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

Typical Applications

Tank bioreactor or fermentor venting, filtration of compressed air, point-of-use air or gas filtration, clarification or prefiltration of organic based formulation, filtration of solvents for extraction, sterile tank vents, filtration of cleaning and sanitizing agents

Specifications

Materials of Construction

Filter Media: Pleated hydrophobic PTFE membrane

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

0.1, 0.2 μm

Typical Effective Filtration Area

5.4 ft^2 (0.50 m^2) per 10 inch

Maximum Operating Temperature

90°C (194°F) at 30 psi (2.1 bar)

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

Sterilization/Sanitization Methods

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

In-line Steam: 140°C (284°F) for 60 minutes at 2 psi (0.14 bar) up to 20 cycles

Maximum Differential Forward Pressure

60 psi (4.1 bar) at ambient temperature

Maximum Differential Back Pressure

15 psi (1 bar) at ambient temperature

Recommended Integrity Tests

Minimum Bubble Point:

0.1 μm : 21 psi (1.5 bar) - ethanol

0.2 μm : 15 psi (1.1 bar) - ethanol

Typical Liquid Flow Rates

0.1 μm : 0.6 gpm/psi/10 inch (3 lpm/0.1 bar/25.4 cm)

0.2 μm : 1.1 gpm/psi/10 inch (6 lpm/0.1 bar/25.4 cm)

Typical Air Flow Rates

0.1 μm : 13 $\text{cfm}/\text{psi}/10$ inch at atmospheric pressure
(31 $\text{Nm}^3/\text{hr}/0.1$ bar/25.4 cm)

0.2 μm : 20 $\text{cfm}/\text{psi}/10$ inch at atmospheric pressure
(48 $\text{Nm}^3/\text{hr}/0.1$ bar/25.4 cm)

Typical Non-Volatile Residue

≤ 0.01 g /10 inch length in IPA

Endotoxin Level

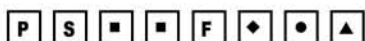
< 0.25 EU/mL utilizing Limulus Amoebocyte Lysate (LAL) test

Biosafety

Membrane materials passes USP Class VI-121°C Plastics Test

*For more information, please contact us.

Cartridge Ordering Information



■ Rated Pore Size	10	0.1 μm
	20	0.2 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