amcFluoroGuard HP

Cartridges-Hydrophobic PTFE Filters

amcFluoroGuard HP cartridge filter incorporates a layer of pleated PTFE membrane in an all polypropylene construction. It is particularly designed for high-volume delivery of sterile air/gas filtrate for pharmaceutical venting, clarification and point-of-use air or gas filtration. It is also suitable for chemical filtration.

amcFluoroGuard HP cartridge is certified biosafe and is non-phylogenic. It meets the HIMA standards for bacterial retention and sterile filtration.

amcFluoroGuard HP cartridge is 100% integrity tested during manufacturing via bubble point to assure product performance.

Optimized for critical venting applications, amcFluoroGuard HP cartridge is tested for extensive hours of exposure to steam at 40 psi. The construction also provides one of the highest air flow rates in the industry, minimizing the differential pressure build-up in critical tanks and vessels.

Performance Advantages

Made exclusively of two hydrophobic materials, i.e., polytetrafluoroethylene and polypropylene with no adhesives to provide lower extractables

Broad chemical compatibility and temperature resistance

Engineered to withstand shocks, back pressure, and rigors of chemical processing operations

High flow rates and reduced pressure drops make for improved filtration efficiency

Extensive process controls for reliable and consistent lot-to-lot service

Each filter is integrity tested to guarantee performance

All materials of construction are non-toxic and biosafe

Typical Applications

Process air/gas filtration, tank bioreactor or fermentor venting, filtration of organic chemicals, acids, etchants, solvents, sterile tank vent, dry compressed gases

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 Size
0.1, 0.2 µm

Typical Effective Filtration Area
8.6 ft^2 (0.8 m^2) per 10 inch

Maximum Operating Temperature
90℃ (194℉) at 30 psi (2.1 bar)
(Supported adapters are recommended for applications at elevated temperature over 60℃)

Sterilization/Sanitization Methods
Autoclave: 121℃ (250℉) for 30 minutes up to 30 cycles
In-line Steam: 140℃ (284℉) 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: 0.9 gpm/psi/10 inch
(4.8 lpm/0.1 bar/25.4cm)
0.2 µm: 1.5 gpm/psi/10 inch
(8 lpm/0.1 bar/25.4cm)

Typical Air Flow Rates

0.1 µm: 20 cfm/psi/10 inch at atmospheric pressure
（48 Nm^3/hr/0.1 bar/25.4 cm）
0.2 µm: 30 cfm/psi/10 inch at atmospheric pressure
（72 Nm^3/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℃Plastics Test

** For more information, please contact us.*

Cartridge Ordering Information

P	S	■	■	H	◆	●	▲

■ **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*