# amcAccuFlow HP

## Cartridges-Modified Polyethersulfone Filters

**amcAccuFlow HP cartridge is a premium sterilizing-grade filter product combining two layers of amcAccupor membrane with thermally bonded polypropylene components to provide a durable filter for aggressive microfiltration applications. Its double layer membrane configuration makes the cartridge ideally suited for final filtration in critical applications, especially those involving fluids at high temperatures.**

**amcAccuFlow HP cartridge is manufactured under tightly controlled procedures for consistent and reliable performance. During manufacturing, each amcAccuFlow HP cartridge is flushed with proprietary solvents, followed by purified water, and integrity tested to ensure product quality.**

**amcAccuFlow HP cartridge is compatible with multiple 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

Manufactured under stringent processes to ensure highest level of quality and consistency

Provides high particle retention to minimize filter change-outs during batch processing

Maximizes recovery of critical solution components with amcAccupor PES membrane's extensive drug compatibility and low protein binding characteristics

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

100% integrity tested in production to ensure optimal quality product

## 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: Two 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 µm

### Typical Effective Filtration Area

5.8 $ft^2$ (0.54 $m^2$) per 10 inch

### Maximum Operating Temperature

90°C (194°F) at 30 psi (2.1 bar)
(Supported adapters are recommended for applications at elevated 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
Autoclave: 121°C (250°F) for 30 minutes up to 50 cycles
In-line Steam: 121°C (250°F) for 60 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

### Maximum Continuous Pressure

Limited by housing

### Recommended Integrity Tests

**Minimum Bubble Point:**
0.1 µm: 28 psi (2.0 bar) - ethanol
0.2 µm: 49 psi (3.4 bar) - water

### Diffusional Flow in Water:

Provided separately*

** For more information, please contact us.*

### Typical Water Flow Rate

0.1 µm: 0.2 gpm/psi/10 inch length (1.1 lpm/0.1 bar/25.4 cm length)
0.2 µm: 1.2 gpm/psi/10 inch length (6.6 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

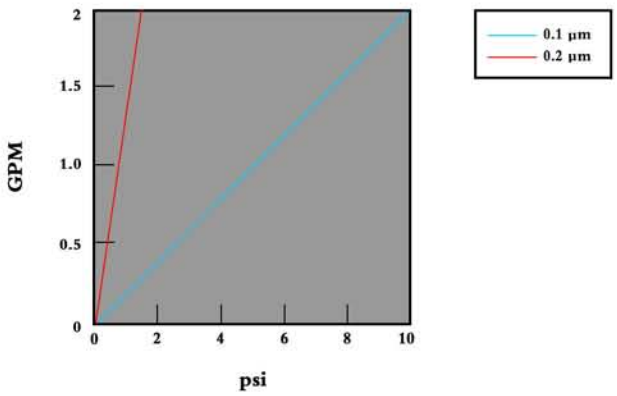
50 ppm per 10 inch

### Bacterial Retention

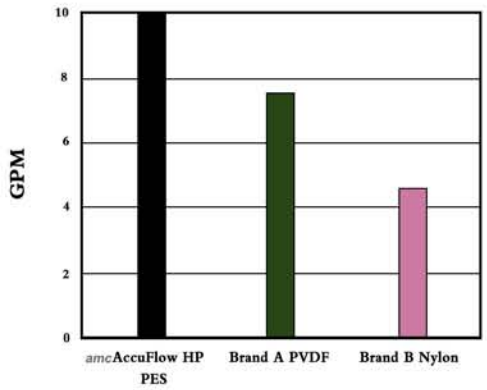
Provided separately*

**For more information, please contact us.*

## Typical Water Flow Rates (10 inch length)




## amcAccuFlow HP Water Flow Rates




Cartridge Type (0.2 µm)

P = 8 psi, 10 inch cartridge at ambient temperature

## Cartridges Ordering Information

| A | F | ■ | ■ | 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*