# amcFluoroFlow

### Cartridges-Hydrophobic PTFE Filters



amcFluoroFlow cartridge is an advanced all-fluoropolymer cartridge designed for critical chemical filtration applications. amcFluoroFlow cartridge delivers ultimate protection from films, gels, and hard contamination by provide capacity removal of contaminants from electronics processing chemistries.

amcFluoroFlow cartridge is made from just two components, unsupported polytetrafluoroethylene membrane and perfluoroalkoxy structural materials. These materials are clean and offer the highest resistance to the strong photoresist stripping chemicals at elevated temperatures.

Each amcFluoroFlow cartridge is high purity, acid washed, 18 Mega-ohm DI water flushed, assuring quick and reliable startup. Optional water-wet cartridge requires no IPA procedures, eliminating the time, cost, inconvenience and hazardous waste disposal associated with conventional IPA prewetting.

#### **Performance Advantages**

All fluoropolymer construction resists most stringent chemical conditions at elevated temperature

Offers superior retention of gels/particles due to the use of precisely controlled pore structure of polytetrafluoroethylene membrane

Acid washing and DI water flushing procedures on cartridge provides low extractables

The membrane and the structural components of cartridge are fusion-welded, eliminating unnecessary materials of construction and removing what historically has been a source of continual organic contamination

100% integrity tested

### **Typical Applications**

Organic stripper in non-ashing polymer stripping process

Fine chemical manufacture and distribution: acids, etchants, solvents, photoresists

Point-of-use chemical filtration

# **Specifications**

#### **Materials of Construction**

Filter Media: Pleated single layer of unsupported hydrophobic polytetrafluoroethylene

Support Material: PFA Structure Components: PFA Sealing Technology: Thermal bonding

#### Dimensions

Nominal Length:

amcFluoroFlow 69: 10, 20, 30 and 40 inch

(25.4, 50.8, 76.2 and 101.6 cm)

amcFluoroFlow 83: 10 inch (26.0 cm)

Diameter:

amcFluoroFlow 69: 69 mm

amcFluoroFlow 83: 83 mm

Nominal Pore Size: 0.05, 0.1, 0.2, 0.45, 1, 5 µm

Typical Effective Filtration Area

amcFluoroFlow 69: 1.1 m<sup>2</sup>/10 inch amcFluoroFlow 83: 1.7 m<sup>2</sup>/10 inch

Maximum Operating Temperature 150°C at 7 psi (0.5 bar)

Maximum Differential Pressure

75 psi (5.1 bar) at ambient temperature

Resistivity Recovery within 18 Mega-ohm : ≤120 L/10 inch length (at 1 L/min flow rate)

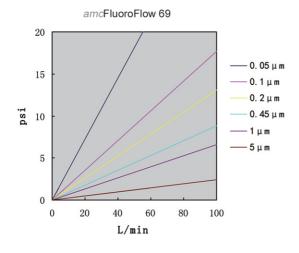
#### Cleanliness

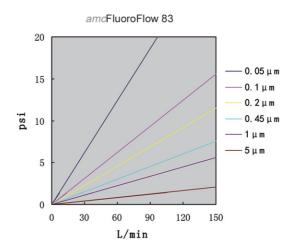
<5 particles/100 mL (>0.5  $\mu$ m particle after 30 minutes 18 m $\Omega$  water flush at 5 L/min flow rate after alcohol wetting)



amc FluoroFlow 2

# Typical Water Flow Rates (10 inch length) \*





## **Cartridges Ordering Information**

 amcFluoroFlow 69:
 F
 F
 6
 ■
 F
 F
 •
 •
 ▲
 P
 W
 (Prewetting)

 amcFluoroFlow 83:
 F
 F
 8
 ■
 F
 F
 •
 •
 ▲
 P
 W
 (Prewetting)

■ Rated Pore Size	50 10 20 45	0.05 μm 0.1 μm 0.2 μm 0.45 μm
Size	01 05	1 μm 5 μm
◆ Nominal Length	1 2 3 4	10 inch (25.4 cm) 20 inch (50.8 cm) 30 inch (76.2 cm) 40 inch (101.6 cm)

	D	SOE, Flat
<ul> <li>Cartridge</li> </ul>	F	DOE, Gasket/Gasket 10 inch increments
Configuration	M	SOE, -222/Flat
	V	SOE, -226/Flat
	S	Silicone
▲ Seal	S V	Silicone Viton
▲ Seal Material		
	V	Viton

<sup>\*</sup>After alcohol rinse followed by water flush