# Capsules- Modified Polyethersulfone Filters



amcAccuCap capsule filters are specifically designed using advanced filtration technology. They incorporate serial layers of amcAccupor membrane (hydrophilic polyethersulfone membrane) to provide high throughputs and particle retention. All product components are fusion-welded to ensure lower extractables.

amcAccuCap filters are available in 3 pore sizes: 0.1 μm, 0.2 μm, and 0.45 μm. Four sizes of amcAccuCap are available: amcAccuCap-S is recommended for filtration of liquids up to 50 liters of most solutions, amcAccuCap-M is recommended for solutions up to 100 liters, amcAccuCap-L is recommended for filtering up to 150 liters of most solutions, and amcAccuCap-J is recommended for filtration up to 300 liters.

amcAccuCap filters contain up to 40% more effective filtration area than other capsule filters on the market. This product offers the efficiency of amcAccuFlow cartridges in a self contained filtration device being ideal for point-of-use applications and small to medium volume batch filtration.

# **Performance Advantages**

Hydrophilic *amc*Accupor polyethersulfone membrane offers outstanding particle retention while maintaining high flow rates

Provides excellent resistance to severe sanitizing agents

A variety of inlet/outlet configurations allow easy installation into existing filtration systems

Use of thermal welding technology during assembling process eliminates the potential for extractables to be released from sealing adhesives

Sterilized with gamma irradiation (upon requested) eliminates potential for contamination by cytotoxic EtO residuals; ready to use

# **Typical Applications**

Parenterals, ophthalmics, oral and topical medicines, serum, tissue culture media, wash and rinse water, diagnostic reagents, buffers, vaccines, bottle and vial washers, dry compressed gases, make-up water

# **Specifications**

#### **Materials of Construction**

Filter Media: Serial layers of amcAccupor hydrophilic polyethersulfone

membrane

Filter Support Material and structural Components: Polypropylene

Housing: Polypropylene

Sealing Method: Thermal bonding

Vent Plug: Polypropylene

# Overall Length (Excluding Inlet/Outlet Adapter)

amcAccuCap-S: 6.4 cm (2.5 in)
amcAccuCap-M: 11.2 cm (4.4 in)
amcAccuCap-L: 16.0 cm (6.3 in)
amcAccuCap-J: 14.2 cm (5.6 in)

#### Diameter

amcAccuCap-S: 7.5 cm (3.0 in)
amcAccuCap-M: 7.5 cm (3.0 in)
amcAccuCap-L: 7.5 cm (3.0 in)
amcAccuCap-J: 9.5 cm (3.7 in)

#### **Nominal Pore Size**

0.1, 0.2, 0.45 μm

## **Typical Effective Filtration Area**

amcAccuCap-S: 570 cm<sup>2</sup> amcAccuCap-M: 1,300 cm<sup>2</sup> amcAccuCap-L: 2,100 cm<sup>2</sup> amcAccuCap-J: 2,400 cm<sup>2</sup>

# **Maximum Operating Temperature**

60°C (140°F) at 30 psi (2.1 bar) in aqueous solution

#### Sterilization/Sanitization Methods

Autoclave: Multiple 30 minute liquid cycles at 121°C for non-gamma resistant

grade.

Irradiation: Sterilized by gamma irradiation. If desired, autoclave once only at

121°C for 20 minutes for gamma resistant grade.

#### **Maximum Differential Pressure**

Continuous: 60 psi (4.1 bar) at ambient temperature Momentary: 100 psi (7.0 bar) at ambient temperature

### Minimum Water Bubble Point

0.1 µm: 28 psi (2.0 bar) in ethanol

0.2 μm: 49 psi (3.4 bar) 0.45 μm: 32 psi (2.3 bar)

#### **Typical Water Flow Rate**

# 0.1µm:

amcAccuCap-S: 0.3 lpm/psi (0.5 lpm/0.1 bar)
amcAccuCap-M: 0.6 lpm/psi (0.9 lpm/0.1 bar)
amcAccuCap-L: 0.8 lpm/psi (1.2 lpm/0.1 bar)
amcAccuCap-J: 1.0 lpm/psi (1.5 lpm/0.1 bar)

#### $0.2 \mu m$ :

amcAccuCap-S: 0.9 lpm/psi (1.3 lpm/0.1 bar)
amcAccuCap-M: 1.7 lpm/psi (2.5 lpm/0.1 bar)
amcAccuCap-L: 2.4 lpm/psi (3.5 lpm/0.1 bar)
amcAccuCap-J: 2.7 lpm/psi (4.0 lpm/0.1 bar)

## $0.45 \, \mu m$ :

amcAccuCap-S: 1.6 lpm/psi (2.4 lpm/0.1 bar)
amcAccuCap-M: 3.0 lpm/psi (4.5 lpm/0.1 bar)
amcAccuCap-L: 4.4 lpm/psi (6.6 lpm/0.1 bar)
amcAccuCap-J: 5.0 lpm/psi (7.5 lpm/0.1 bar)

### **Oxidizable Substances**

Filtrate meets USP XXII requirements for purified water with <500 mL flush after autoclaving

# **Biosafety**

All components meet USP Class VI-121°C Plastic Tests

#### **Endotoxin Level**

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

# amcAccuCap

# **Typical Non-Volatile Residue**

amcAccuCap-S: <2 mg/device
amcAccuCap-M: <4 mg/device
amcAccuCap-L: <8 mg/device
amcAccuCap-J: <10 mg/device</pre>

## **Inlet/Outlet Connections**

1/4-1/2 inch stepped hose barb (S)

1/2 hose barb (H)

1/2 inch NPTM (T)

1-1/2 inch sanitary flange (F)

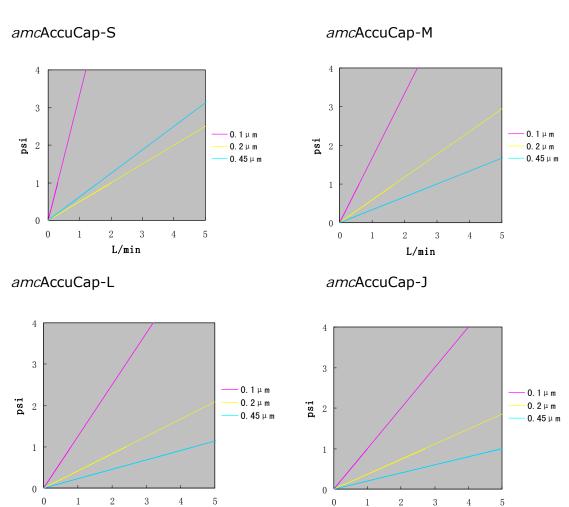
\* For "J" type, only 3/4 inch NPTM available

#### **Bacterial Retention**

For more information, please contact us

L/min

# Typical Water Flow Rates (10 inch length):



L/min

# Ordering Information

# ACC ■ ■ ● ▼ ▲ ◆

■ Rated	Pore Size	10 20 45	0.1 μm 0.2 μm 0.45 μm
● Lengt	h	S M L J	2.5 inch (6.4 cm) 4.4 inch (11.2 cm) 6.3 inch (16.0 cm) 5.6 inch (14.2 cm)
<b>▼</b> Grade	:	0 1	Non-Sterile Sterile
▲ Inlet 0	Connector	S H T F Q N*	1/4-1/2 inch Stepped Hose Barb 1/2 inch Hose Barb 1/2 inch NPTM 1-1/2 inch Sanitary Flange Quick Connect Hose Nipple 3/4 inch NPTM (only for "J" type)
◆ Outle	et Connector*	S H T N* F N*	1/4-1/2 inch Stepped Hose Barb 1/2 inch Hose Barb 1/2 inch NPTM 3/4 inch NPTM 1-1/2 inch Sanitary Flange 3/4 inch NPTM (only for "J" type)

<sup>\*</sup> For "J" type, only 3/4 inch NPTM available