

Polyethersulfone Filter Capsules offer unique polyethersulfone membranes that exhibit both high throughputs and precise retention characteristics for superior performance in most applications. Additionally, the filters are resistant to a broad range of chemicals and pH extremes. The DI water rinsed filters are the filtration solution to a wide variety of applications in the beverage, pharmaceutical, and electronics industries.

FEATURES AND BENEFITS

- Hydrophilic PES Membrane
- Fully Disposable Capsule
- Small Compact Design
- Low Filter Extractables

APPLICATIONS

- Acids
- Bases
- Solvents
- Fine Chemicals
- Plating Solutions
- Process Water
- Beverages
- Ink Jets
- Electronics
- Pharmaceuticals
- Biologics
- Dyes
- Lacquers
- Parts Cleaning

PRODUCT DESCRIPTION

Sterlitech Polyethersulfone (PES) filter capsules have been specially designed for simple, quick, and efficient filtration of fluids and gases used in laboratory, pilot, and small scale applications. The PES membrane is housed in an all-polypropylene capsule construction providing excellent chemical compatibility. No adhesives, binders, or surfactants are used in the manufacturing process and all capsules are rinsed with high purity water to reduce extractables and downtime.

The hydrophilic PES membrane does not require pre-wetting with IPA and flushing with DI water, thereby eliminating a potential source of contamination and hazardous waste. In addition, the PES membrane reduces the potential for bubble formation by not de-wetting in out-gassing fluids unlike hydrophobic filters such as polypropylene. All filter capsules are 100% integrity tested to ensure filter performance each and every time out of the package. Sterlitech PES filter capsules are well suited for applications where superior flow and particle removal efficiency at 0.1, 0.2, 0.45, and 0.65 micron is required.



MATERIALS OF CONSTRUCTION	
Membrane	Hydrophilic Polyethersulfone
Membrane Supports	Polypropylene Microfiber
Cage, Core, End Caps	Polypropylene
Fitting Connections	MNPT, FNTP, Compression, Flare, Sanitary Flange, Hose Barb
DIMENSIONS (NOMINAL)	
Lengths Available	3.5–5.0" (9–13 cm) 7.6–9.1" (19–23 cm) 11.5–13.0" (29–33 cm)
Diameter	3.5 in (9 cm)
Effective Filtration Area	0.8 ft ² (748 cm ²) 3.0 ft ² (2806 cm ²) 5.9 ft ² (5500 cm ²)
OPERATING CONDITIONS	
Max Operational Pressure	80 psi (5.5 bar) @ 70°F (21°C) in Liquid 55 psi (3.8 bar) @ 70°F (21°C) in Gas
Max Reverse Differential Pressure	60 psi (4.1 bar) @ 70°F (21°C)
Max Operating Temperature	110°F (43°C) at ≤30 psi (2.1 bar) Operating Pressure

Regulatory Compliance:

Manufactured from materials that conform to the requirements of 21CFR Part 177 of the U.S. Code of Federal Regulations.

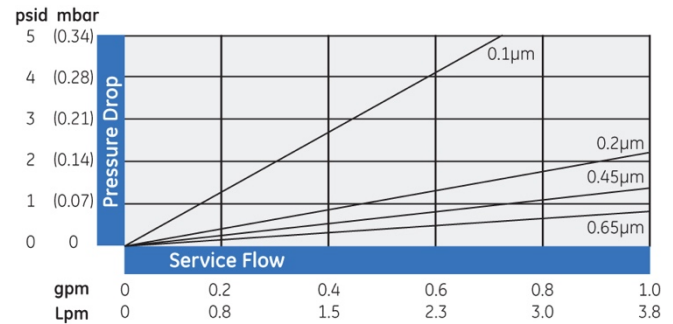


Figure 1. Small capsule flow rate performance in clean water.

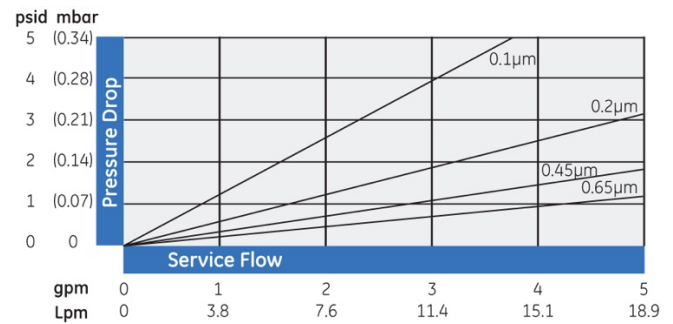


Figure 2. Medium capsule flow rate performance in clean water.

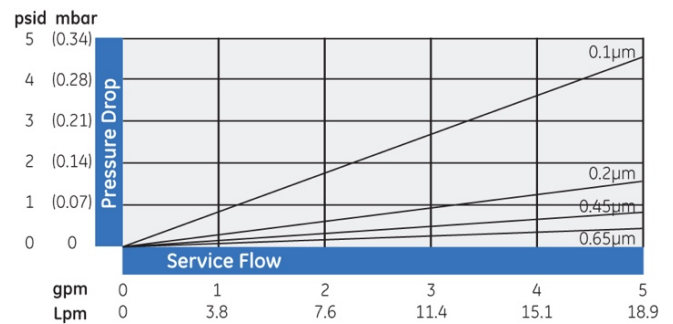


Figure 3. Large capsule flow rate performance in clean water.