

Advantage™ PS Filter Cartridges

■ Polyethersulfone Membrane

General Grade Membrane Series

High Flow Rate Capability With Polyethersulfone Membrane Filter Cartridges

The General Grade polyethersulfone membrane cartridges are specifically designed to provide superior flow rates at an economical cost. The unique construction features a high-surface area design that allows for excellent flow rates and high particle removal efficiency. Hydrophilic polyethersulfone membrane cartridges require no prewetting and are ready to use. All materials of construction are the same as used in the electronics grade Mega Pure series polyethersulfone cartridges from Parker. This assures a cost effective device while maintaining excellent performance in UPW pad applications and other recirculation applications.

The General Grade is also ideal for final filtration of water and aqueous solutions in plating, chemical process, photographic, food and beverage and bulk pharmaceutical applications.

The General Grade Polyethersulfone Membrane Series is available in 0.03µm, 0.1µm, 0.2µm, 0.45µm and 0.65µm pore sizes.

Applications

UHP Chemical

- Specialty Chemicals
- Bulk Photoresists and Solvents

UHP Water

- Central PAD
- Polishing Stations

Food & Beverage

- Bottled Water
- Wine
- Beer
- Process Water
- Vinegar
- Edible Oils
- Aseptic Packaged Liquids

Miscellaneous

- Pre, Post and Point-of-Use DI Water Filtration
- Pharmaceutical Intermediates
- Plating Solutions
- Bulk Chemicals



Features and Benefits

Superior Polyethersulfone Membrane Yields Maximum Filtration Results

- High surface area design provides excellent flow rates and extended filter life while maintaining high particle removal efficiency.
- Spunbonded polypropylene support materials eliminate sites for potential shedding and increased particle counts.
- Provides broad chemical compatibility.
- Excellent resistance to most sanitizing agents.

Parker's TQM System Assures Consistent Performance and Reliable Filtration

- Thermally welded, eliminating adhesive extractables.
- Biosafe in accordance with USP Class VI-121° Plastic Tests.
- Specifically designed to ensure cleanliness.
- All materials of construction are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21.

Process Filtration Division

WARNING! FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.
This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyse all aspects of your application and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection for the products and systems and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Parker
Filtration

General Grade Membrane Series

Specifications

Materials of Construction:

- Membrane: hydrophilic polyethersulfone.
- Membrane Support/Drainage: polypropylene.
- Structural Components: polypropylene.
- O-Ring Material: various.
- Sealing Method: thermal welding.

Dimensions:

- Diameter: 2.7 in (68mm).
- Lengths: 10-40 in (250-1020mm).

Surface Area:

- Minimum 6.5ft² (0.6 m²).

Recommended Operating Conditions:

- Maximum Temperature: 176°F (80°C) @ 30 ΔP (2.1 bar).
- Maximum Differential Pressure: Forward: 70 psi (4.8 bar) @ 77°F (25°C). 30 psi (2.1 bar) @ 176°F (80°C). Reverse: 50 psi (3.4 bar) @ 77°F (25°C).

Sterilisation/Sanitisation Methods:

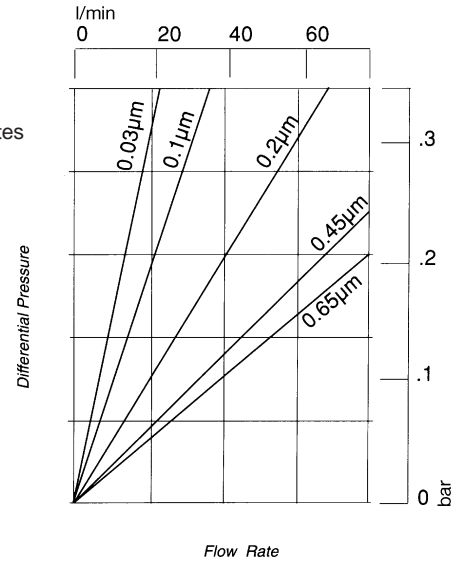
- Isopropyl Alcohol.
- Sodium Hydroxide.
- Hydrogen Peroxide.
- Hot Water: 190°F (88°C) @ 5 psid (0.3 bar).
- Autoclave: 250°F (121°C) for 30 minutes @ 15 psid (1.0 bar).
- In Situ Steam: 284°F (140°C) for 60 minutes @ 15 psid (1.0 bar).
- Chlorine.
- Sodium Hypochlorite.
- Sanitizing Agents (see Materials Selection Guide, Bulletin C-770).

Installation Rinse-In:

- Cartridges typically rinse to back ground resistivity in less than five minutes at 8 l/min – 254mm equivalent.

Polyethersulfone Cartridges:

Flow rate vs. ΔP for a 1 cps liquid @ 73°F (23°C)**



Endotoxins :

- <0.25 eu/ml

Flow Factors:

| Pore Size (µm) | l/min/ bar | bar/ l/min |
|----------------|------------|------------|
| 0.03 | 66 | 0.015 |
| 0.1 | 99 | 0.010 |
| 0.2 | 192 | 0.005 |
| 0.45 | 301 | 0.003 |
| 0.65 | 356 | 0.003 |

Ordering Information

| PS | F | B | 10 | E | TC | G |
|---|--|---------------|---|---|---|-------------|
| Cartridge Code | Pore Size (µm) | Diameter (mm) | Length (mm) | O-Ring Material | End Cap Configuration | Grade |
| PS = Polypropylene/ Polyethersulfone | T = 0.03 S = 0.1 F = 0.2 R = 0.45 H = 0.65 | B = 68.6 | 10 = 254 20 = 508 30 = 762 40 = 1016 | B = Buna N C = CR 503 D = CR 570 E = EPR L = KR 8201 S = Silicone T = PFA/Viton* V = Viton* X = No O-Ring | SC = 2-226 /Flat SF = 2-226 /Fin TC = 2-222/Flat TF = 2-222/Fin HH = DOE (Gaskets) AC = 020/Flat (Gelman) PC = 213/Flat (Ametek and Parker LT Polymeric Housings; Gelman H Style) | G = General |

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** Consult Process Filtration Division for gas flow data.

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