

Advantage™ PF Filter Cartridges

■ PTFE Membrane

Mega-Pure Membrane Series

Twice the Flow and Recirculation Rate With Next Generation PTFE Membrane Filter Cartridges

Mega-Pure PTFE membrane filter cartridges provide unsurpassed flow rate capability. Parker's PTFE membrane cartridge outperforms all competitive cartridges of the same rating at a ratio of 2 to 1 or greater, thus reducing the number of cartridges and housings required. PTFE membrane filter cartridges are a low-cost alternative to all-Teflon cartridges. The Mega-Pure PTFE Membrane Series of filter cartridges meets or exceeds requirements for the filtration of UHP liquids used in the fabrication of state-of-the-art microelectronic devices.

The Mega-Pure PTFE Membrane Series is available in 0.05µm, 0.1µm, 0.2µm, 0.45µm and 1µm pore sizes.

Applications

- | | | |
|----------------|-------------------------|----------------------------------|
| ■ Acids | ■ Developers | ■ Process Gases & Compressed Air |
| ■ Solvents | ■ Strippers | ■ Polymer Filtration |
| ■ Photoresists | ■ Recirculation Systems | |
| ■ Tank Vents | ■ Wet-Etch | |
| ■ Etchants | ■ Rinse Baths | |
| ■ Alkalines | | |



Features and Benefits

Superior PTFE Membrane Yields Maximum Filtration Results

- High flow rates and reduced pressure drops for improved filtration efficiency.
- Rinsed to 18 megohm-cm resistivity with UHP water.
- Large, high-purity filtration area for maximum yields.
- Non-fiber releasing.
- Narrow pore size distribution ensures the ultimate in retention and flow rate.
- Available prewetted for immediate use in process.

Parker's TQM System Assures Consistent Performance and Reliable Filtration

- Strict quality control measures include rigorous testing for rinse up, shedding, flow rate and extractable levels.
- Integrity-tested and testable *in situ*.
- Thermally welded, eliminating adhesive extractables.
- Biosafe in accordance with USP Class VI-121° Plastics 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 analyze 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

Mega-Pure Membrane Series

Specifications

Materials of Construction:

- Membrane: hydrophobic PTFE.
- 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 7.5ft² (0.7 m²).

Integrity Test:

- Bubble Point (100% IPA).
0.05µm ≥ 50 psig (3.4 bar).
- 0.1µm ≥ 24 psig (1.7 bar).
- 0.2µm ≥ 16 psig (1.1 bar).
- 0.45µm ≥ 6 psig (0.4 bar).
- 1µm ≥ 3 psig (0.2 bar).

Recommended Operating Conditions:

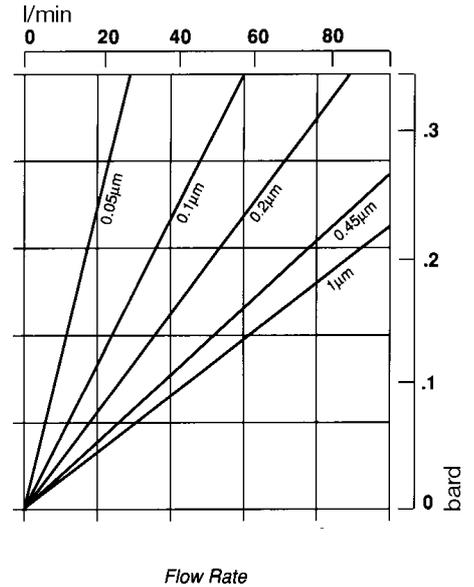
- Maximum Temperature:
176°F (80°C) @ 30 ΔP (2.1 bar).
- Maximum Differential Pressure:
Forward:
70 psi (4.8 bar) @ 77°F (25°C).
30 psi (2.1 bar) @ 176°F (80°C).
Reverse:
50 psi (3.4 bar) @ 77°F (25°C).

Sterilization/Sanitisation Methods:

- Hydrogen Peroxide.
- Sodium Hydroxide.
- IPA (70%).
- 180°F (82°C) Water.

PTFE Cartridges:

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



Flow Factors:

Pore Size (µm)	l/min/bar	bar/l/min
0.05	82	0.012
0.1	164	0.006
0.2	247	0.004
0.45	356	0.003
1	411	0.002

Ordering Information

PF	F	B	10	E	TC	E	W
Cartridge Code	Pore Size (µm)	Diameter (mm)	Length (mm)	O-Ring Material	End Cap Configuration	Grade	Special Preparation
PF = Polypropylene/PTFE	D = 0.05 S = 0.1 F = 0.2 R = 0.45 Q = 1	B = 68	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) LC = 120/Flat (Nuclepore; Gelman G Style) LL = 120/120 (Filterite LMO and Nuclepore Polymeric Housings; Gelman N Style) PC = 213/Flat (Ametek and Parker LT Polymeric Housings; Gelman H Style)	E = Mega Pure	W = Prewetted With Ozonated UHP Water

* Consult Process Filtration Division for gas flow data.

Process Filtration Division

Parker Filtration
Filter Division Europe
Shaw Cross Business Park
Dewsbury, West Yorkshire
WF12 7RD, England
Phone: +44 (0) 1924 487000
Fax: +44 (0) 1924 487001
Website: www.parker.com

