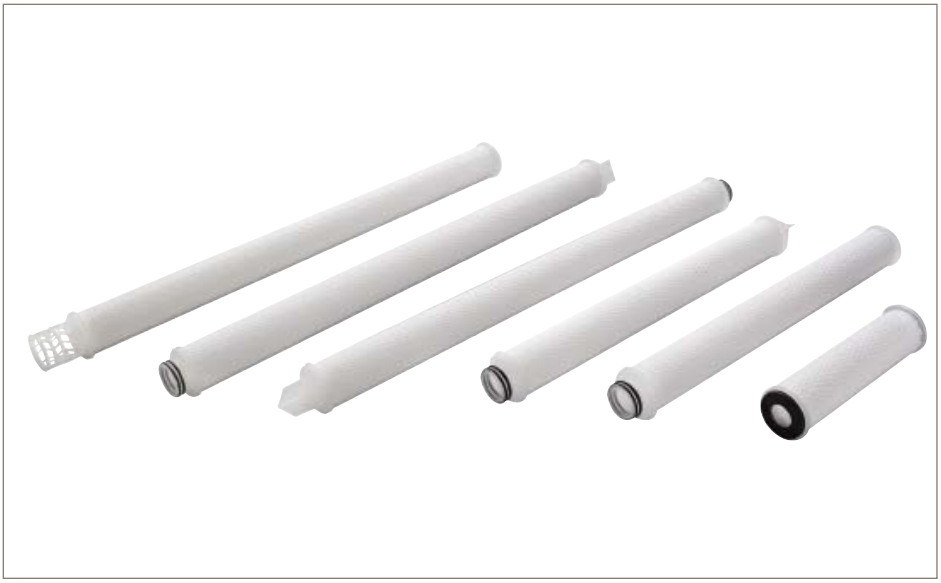
Fulflo® Poly-Mate™ Plus Filter Cartridges

High surface area and high efficiency all-polypropylene pleated cartridges

Fulflo® Poly-Mate™ Plus Cartridges, made of pleated polypropylene microfiber, provide high efficiency and high purity filtration. The high efficiency of the Poly-Mate Plus line makes it an ideal membrane pre-filter or cost-effective alternative to membrane cartridges in a wide range of applications.

Poly-Mate Plus Pleated Cartridges are available in the following pore sizes (nominal rating at 90%): 0.25µm, 0.45µm, 0.8µm, 2.0µm, 3.0µm, 5.0µm, 30.0µm, 50.0µm, 100.0µm.



Contact Information

Parker Hannifin Corporation
Bioscience Division - N.A.
2340 Eastman Avenue
Oxnard, CA 93030

phone +1 805 604 3583
bioscience.na@parker.com

www.parker.com/bioscience

Benefits

- All-polypropylene media and construction meet a broad range of performance requirements
- One-piece integral construction is 100% bonded for maximum cartridge integrity
- High surface area design provides superior flow rates and extended service life
- All materials of construction are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21
- Fixed pore construction provides ultimate particle retention
- Major end seal options are available to fit most standard vessels
- Poly-Mate™ Plus cartridges are non-fiber releasing and ensure consistent quality filtration performance
- ISO 9001 registered company

Applications

- DI Water
- Process Water
- Magnetic Media
- Plating Chemicals
- Membrane Pre-filter

Fulflo® Poly-Mate™ Plus Filter Cartridges

SPECIFICATIONS

Materials of Construction

Filter Media
- Melt blown polypropylene microfiber

Media Support Layers
- Non-woven or mesh polypropylene

Core
- Heavy wall high strength polypropylene

Media Support Cage and Thermally Welded End Caps
- Molded polypropylene

Seal Materials
- Buna-N, EPR, Silicone, Viton®, PFA Encapsulated Viton®

Dimensions:

Cartridge Outside Diameter:
- 2 11/16 in.

Cartridge Inside Diameter:
- DOE: 1 1/16 in.
- SOE: 1 5/32 in.

Maximum Recommended Operating Conditions:

Temperature - 200°F (93°C)

Temperature @ 35psid - 160°F (71°C)

Change Out ΔP - 35psi (2.4bar)

ΔP @ Ambient 70°F (21°C) - 70psi (4.8bar)

ΔP @ 200°F (93°C) - 20psi (1.4bar)

Flow Rate -10gpm (38 lpm) per 10 in. length

Product Safety:

- All components FDA listed per CFR, Title 21
- Non-fiber releasing per FDA Part 210.3B (5) and (6)
- Non-photosensitive

Filtration Ratings:

90% at 0.25, 0.45, 0.8, 2, 3, 5, 10, 30, 50 and 100 micrometer pore sizes

Performance Attributes

Flow Rate and Pressure Drop Formulas

$$\text{Flow Rate (gpm)} = \frac{\text{Clean } \Delta P \times \text{Length Factor}}{\text{Viscosity} \times \text{Flow Factor}}$$

$$\text{Clean } \Delta P = \frac{\text{Flow Rate} \times \text{Viscosity} \times \text{Flow Factor}}{\text{Length Factor}}$$

Notes:

1. Clean ΔP is psi differential at start.
2. Viscosity is centistokes. Use Conversion Tables for other units.
3. Flow Factor is psid/gpm at 1cks for 10 in. (or single).
4. Length Factors convert flow or ΔP from 10 in. (single length) to required cartridge length.

Liquid Particle Retention Ratings (µm) @ Removal Efficiency of:

Cart.	ß=1000 99.9%	ß=100 99%	ß=50 98%	ß=20 95%	ß=10 90%
PMP002	2.2	1.6	0.90	0.45	0.30
PMP004	3.1	2.9	1.4	0.75	0.45
PMP008	9.2	8.0	3.2	1.5	0.8
PMP020	11.0	9.5	8.6	3.1	1.7
PMP030	12.0	11.0	6.1	4.6	3.0
PMP050	14.0	12.0	10.6	8.4	5.0
PMP100	21.0	17.0	15.0	12.0	10.0
PMP300	52.0	44.0	35.0	24.0	15.0
PMP500	71.0	68.0	62.0	56.0	50.0
PMP1000	138.0	126.0	117.0	109.0	100.0

Poly-Mate Plus Flow Factors (psid/gpm @ 1 cks)

Rating (µm)	Flow Factor
0.25	0.0900
0.45	0.0530
0.8	0.0290
2	0.0068
3	0.0060
5	0.0048
10	0.0040
30	0.0030
50	0.0025
100	0.0020

Poly-Mate Plus Length Factors

In.	Factor
4	0.4
10	1.0
20	2.0
30	3.0
40	4.0

Ordering Information

PMP [ ] – [ ] [ ] [ ] – [ ] – [ ]

Cartridge Code	
PMP	Poly-Mate Plus

Pore Size	
CODE	MICRON
002	0.25
004	0.45
008	0.8
020	2
030	3
050	5
100	10
300	30
500	50
1000	100

Nominal Length	
CODE	INCHES
4	4
10	9 13/16
20	19 15/16
30	30 1/16
40	40

Support Construction	
CODE	MATERIAL
A	Natural Polypropylene (All support components)

Seal Material	
CODE	MATERIAL
E	EPR
N	Buna-N
S	Silicone
T	PFA/Viton® (SOE)
V	Viton®

End Cap Configuration	
CODE	DESCRIPTION
AR	020 O-ring/Recessed cap
DO	Double open end (DOE)
DX	Double open end/extended core
LL	120/120 (Filterlite LMO & Nuclepore Polymeric Vessels)**
LR	120 O-ring/Recessed (Nuclepore)**
PR	213 O-ring/Recessed cap (Ametek® & Parker LT Polymeric Vessels) **
TC	222 O-ring/Flat
TF	222 O-ring/Fin
SC	226 O-ring/Flat
SF	226 O-ring/Fin

**Available only in 9 5/8" (-9) and 19 5/8" (-10) lengths

Special Options	
CODE	DESCRIPTION
No Symbol	No Option
B	Bubble-point test
R	DI water rinse (5 minutes)
Z6	Individual Poly bag only

Specifications are subject to change without notification.
For User Responsibility Statement, see www.parker.com/safety