

Fulflo® Abso-Mate™ Pleated Depth Filter Cartridges

All polypropylene, absolute-rated, cost-effective filtration

Parker's Fulflo® Abso-Mate™ Cartridges provide the ultimate in economical filtration for even the most critical process fluids. The proprietary melt blown media is rigidly controlled for reliable results time after time. Abso-Mate cartridges are produced without adhesives that can potentially contaminate fluids.

Abso-Mate Pleated Cartridges are available in 0.2µm, 0.45µm, 1µm, 2µm, 5µm, 10µm, 20µm, 40µm, and 70µm absolute rated pore sizes.



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Benefits

- Absolute ratings for consistent and reliable performance (99.98%; $\beta = 5000$)
- Back-washable media, reduces replacement maintenance and cartridge disposal costs
- Abso-Mate cartridges are non-fiber releasing and contain minimal extractables
- All materials of construction are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21
- One-piece construction eliminates bypass concerns on multi-length cartridges
- All-polypropylene construction offers wide chemical compatibility with most chemicals, acids, bases and solvents
- Fused construction and continuous lengths eliminate the need for adhesives and allow accurate bubble point integrity testing
- ISO 9001 registered company

Applications

- Membrane Prefilter
- Chemicals
- Catalyst Recovery
- Precious Metal Recovery
- Waste Water



ENGINEERING YOUR SUCCESS.

Abso-Mate® Cartridges

SPECIFICATIONS

Materials of Construction

Type of Construction

- Integrally sealed, all-polypropylene pleated media supported by all-polypropylene construction

Filter Media

- Melt blown polypropylene microfiber

Media Support Layers

- Non-woven or mesh polypropylene

Media Support 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 1/16 in.

Cartridge Inside Diameter

- DOE: 1 1/16 in.
- SOE: 1 5/32 in.

Maximum Recommended Operating Conditions

Temperature: 200°F (93°C)

Change Out ΔP: 35psi (2.4bar)

ΔP @ Ambient 70°F (21°C): 90psi (6bar)

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-photo sensitive

Filtration Ratings

99.98% efficiency at 0.2, 0.45, 1, 2, 5, 10, 20, 40, & 70 μm pore sizes

Beta Ratio (β) =

Upstream Particle Count @ Specified Particle Size and Larger

Downstream Particle Count @ Specified Particle Size and Larger

$$\text{Percent Removal Efficiency} = \left(\frac{\beta - 1}{\beta} \right) 100$$

Performance determined per ASTM F-795-88. Single-Pass Test using AC test dust in water at a flow rate of 3.5gpm per 10 in. (13.2 lpm per 254 mm) cartridge.

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:

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

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

Cart.	β=5000 Absolute	β=1000 99.9%	β=100 99%	β=50 98%	β=20 95%
PAB002	0.2	<0.2	<0.2	<0.2	<0.1
PAB004	0.45	0.4	0.2	<0.2	<0.1
PAB010	1	0.8	0.4	<0.2	<0.1
PAB020	2	1.9	0.8	<0.2	<0.1
PAB050	5	3.8	1.4	0.4	0.15
PAB100	10	7	2	0.5	0.25
PAB200	20	13	4	1.8	0.35
PAB400	40	22	7	3.2	0.8
PAB700	70	52	22	15	5.5

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

Rating (μm)	Flow Factor
0.20	3.100
0.45	1.000
1	0.750
2	0.300
5	0.072
10	0.031
20	0.021
40	0.012
70	0.008

Abso-Mate Length Factors

In.	Factor
9	1.0
10	1.0
19	2.0
20	2.0
29	3.0
30	3.0
39	4.0
40	4.0

Ordering Information



Filter Rating		Nominal Length			Support Construction		Seal Material		End Cap Configuration			Special Options				
Code	Micron	Code	Inches	mm	Code	Material	Code	Material	Code	Description	Code	Description	Code	Description		
002	0.2	9	9 5/8	244	F	Glass-filled Polypropylene (core only)	P	Polyethylene Foam (DOE gasket only)	AR	020 O-ring/Recessed cap	SSC	SS inserted 226 O-ring/Closed	B	Bubble-point test		
004	0.45	10	9 13/16	249	G	304 Stainless Steel (core only)	E	EPR	DO	Double open end (DOE)	SSF	SS inserted 226 O-ring/Fin	R	DI water rinse (5 min.)		
010	1	19	19 3/8	498			N	Buna-N	DX	Double open end/extended core	TC	222 O-ring/Flat	Z6	Individual Poly bag only		
020	2	20	19 15/16	506	A	Natural Polypropylene (All support components)	S	Silicone	LL ²	120/120 (Filterlite LMO & Nuclepore Polymeric Vessels)	TF	222 O-ring/Fin				
050	5	29	29 1/4	743			T ¹	PFA-Encapsulated Viton® (222, 226 & O-ring only)*	LR ²	120 O-ring/Recessed (Nuclepore)	STC	SS inserted 222 O-ring/Closed				
100	10	30	30 1/16	764			V	Viton®	OB	Std. open end/Polypropylene spring closed end	STF	SS inserted 222 O-ring/Fin				
200	20	39	39	991			X	No seal material	PR ²	213 O-ring/Recessed cap (Ametek® & Parker LT Polymeric Vessels)	TX	222 O-ring/Flex Fin				
400	40	40	40	1016					SC	226 O-ring/Flat			XB	Ext. core open end/Polypropylene spring closed end		
700	70								SF	226 O-ring/Fin						

¹PFA/Viton is O-ring only, T is expanded PTFE gaskets

²Available only in 9 5/8" (-9) and 19 3/8" (-10) lengths

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

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