

Abso-Mate™ Pleated Depth Filter Cartridges

All polypropylene, absolute-rated, cost-effective filtration

Parker's 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.



Contact Information

Parker-Hannifin Corporation
Bioscience & Water Filtration Division
2340 Eastman Avenue
Oxnard, California, USA 93030

toll free +1 877 784 2234
phone +1 805 604 3400
fax +1 805 604 3401
bioscience.na@parker.com

www.parker.com/bioscience

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 1cks 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

PAB -

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 1/16	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 1/16	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				

*PFA/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

© 2017 Parker-Hannifin Corporation
Bioscience & Water Filtration Division
All Rights Reserved

Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc.
Ametek is a registered trademark of Ametek, Inc.

