Fulflo® Abso-Mate™ Cartridges

Absolute, Cost-Effective Filtration From All Polyproylene Cartridges

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

Benefits

- Absolute ratings for consistent and reliable performance (99.98%; ß = 5000)
- Backwashable media, reduces replacement maintenance and cartridge disposal costs
- Abso-Mate catridges 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 mulitilength 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 acurate bubble point integrity testing

Applications

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

Fulflo® 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:
2-11/16 in
Cartridge Inside Diameter:
DOE: 1-1/16 in SOE: 1-5/32 in

Maximum Recommended Operating Conditions:

Temperature: 200°F (93°C)
Change Out ΔP: 35 psi (2.4 bar)
ΔP @ Ambient 70°F (21°C): 90 psi (6 bar)
ΔP @ 200°F (93°C): 20 psi (1.4 bar)
Flow Rate: 10 gpm (38 lpm) per 10 in length

Biological Safety/Product Purity:

Meets USP XXi VI requirements for plastics
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

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

Rating Flow (µm)	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

Length (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

Flow Rate and Pressure Drop Formulas

$$\text{Flow Rate (gpm)} = \frac{\text{Clean DP x Length Factor}}{\text{Viscosity x Flow Factor}}$$

$$\text{Clean DP} = \frac{\text{Flow Rate x Viscosity x Flow Factor}}{\text{Length Factor}}$$

Beta Ratio (ß) =

$$\frac{\text{Upstream Particle Count @ Specified Particle Size and Larger}}{\text{Downstream Particle Count @ Specified Particle Size and Larger}}$$

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

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

Notes:

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

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

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

Ordering Information

PAB [ ] — [ ] [ ] [ ] — [ ] [ ]

Rating (µm)
002 = 0.2
004 = 0.45
010 = 1
020 = 2
050 = 5
100 = 10
200 = 20
400 = 40
700 = 70

Nominal Length

Code	in	mm
9	9-5/8	244
10	9-13/16	249
19	19-5/8	498
20	19-15/16	506
29	29-1/4	743
30	30-1/16	764
39	39	991
40	40	1016

Support Construction
F= Glass-filled Polypropylene (core only)
G = 304 Stainless Steel (core only)
N = Natural Polypropylene (All support components)
X = Coreless Cartridge

Seal Material
A = Polypropylene Foam (DOE gasket only)
E = EPR
N = Buna-N
S = Silicone
T = PFA Encapsulated Viton* (222, 226, O-ring only)
V = Viton*
X = No Seal Material

End Cap Configuration
AR = 020 O-Ring/Recessed cap
DO = Double open end (DOE)
DX = Double open end/extended core
LL = 120 O-Ring/Recessed cap
LR = 120 O-Ring/Recessed cap
OB = Std. Open End/Polypro Spring Closed End
PR = 213 O-Ring/Recessed cap
SC = 226 O-Ring/Flat
SF = 226 O-Ring/Fin
SSC = SS Inserted 226 O-ring/Closed
SSF = SS Inserted 226 Oring/Fin
TC = 222 O-Ring/Flat
TF = 222 O-Ring/Fin
STC = SS Inserted 222 O-ring/Closed
STF = SS Inserted 222 O-ring/Fin
TX = 222 O-ring/Flex Fin
XB = Ext. Core open End/ Polypro Spring Closed End

Special Options
B = Bubble-Point Test
R = DI Water Rinse (5 minutes)
Z6 = Individual Poly Bag only

Specifications are subject to change without notification.
*Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc.

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