

Fulflo® EcoBond™ Filter Cartridges

High Purity Filtration With Low Cost Melt Blown Depth Cartridges

Parker's Fulflo® EcoBond™ Cartridges are the most economical high purity filter cartridges available. Featuring a graded density matrix of uniform polypropylene fibers, the EcoBond™ provides consistent filtration for a wide variety of fluids. No fiber finish or surfactants are present to generate extractables leading to foaming or other undesirable effects on the filtrate.

Fulflo EcoBond™ Cartridges are available in nominal ratings of 1µm, 5µm, 10µm, 25 µm and 50µm.



Benefits

- Thermally bonded melt blown fiber matrix provides dimensionally stable construction
- Continuous fiber matrix prevents media migration and ensures consistent quality filtration performance
- Finish-free construction provides optimum fluid purity and eliminates foaming condition
- Superior inter-layer bonding eliminates contaminant unloading and channeling
- FDA grade polypropylene (DOE only) certified to ANSI/NSF61 standard for contact with drinking water components

- Narrow range fiber size optimizes consistency of filtration performance
- Polypropylene construction provides broad chemical compatibility for a variety of applications
- All materials of construction are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21
- Single component construction simplifies compatibility options and provides easy disposal

Applications

- Photographic Chemicals
- DI Water
- Plating Solutions
- R.O. Prefiltration
- Membrane Prefiltration
- Organic Solvents
- Oilfield Fluids
- Bleach
- Potable Water
- Chemical Processing Fluids

Fulflo® EcoBond™ Filter Cartridges

Specifications

Materials of Construction:

Filter Medium
100% melt blown polypropylene
End Caps/Adapters (optional)
polyolefin copolymer
Seal Options
Various; refer to Ordering
Information

Maximum Recommended Operating Conditions:

Temperature:
@ 40 psid (2.7 bar): 80°F (27°C)
@ 20 psid (1.4 bar): 140°F (60°C)
Flow Rate:
5 gpm (18.9 lpm) per 10 in length

Recommended Maximum:

Change Out ΔP: 30 psi (2.1 bar)
Operating Differential
Pressure @ Ambient Temperature:
40 psi (2.7 bar)

Dimensions:

1-1/16 in ID x 2-7/16 in OD (max)
10, 20, 30, 40 and 50 in continuous
nominal lengths

Nominal Filtration Ratings (90%) :

1µm, 5µm, 10µm, 25µm, and 50µm

EBC Flow Factors

Rating (µm)	Aqueous Service PSI/GPM per 10 in Cartridge
EBC1	0.10
EBC5	0.08
EBC10	0.07
EBC25	0.06
EBC50	0.05

EBC Length Factors

Length (in)	Length Factor
9.75	1.0
10.00	1.0
19.50	2.0
20.00	2.0
29.25	3.0
30.00	3.0
39.00	4.0
40.00	4.0

Flow Rate and Pressure Drop Formulas

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

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

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

Ordering Information

EBC					
Cartridge Code	Micrometer Rating (µm)	Filter Medium	Nominal Length (in)	End Cap Configuration	Seal Material
EBC = EcoBond Cartridge	1 5 10 25 50	M = FDA Grade Polypropylene	Code in mm 9-4 = 9-3/4 248 10 = 10 254 19-4 = 19-1/2 495 20 = 20 508 29-4 = 29-1/4 743 30 = 30 762 39-4 = 39 991 40 = 40 1016 50 = 50 1270	None = DOE (w/o gaskets) AR = 020/Flat (Gelman) DO = Double open end (DOE) LL = 120 O-Ring both ends** LR = 120 O-Ring/Recessed** OB = Std. Open End/Polypro spring closed end PR = 213 O-Ring/Recessed** SC = 226 O-Ring/Flat SF = 226 O-Ring/Fin TC = 222 O-Ring/Flat TF = 222 O-Ring/Fin TX = 222 O-Ring/Flex Fin XA = DOW w/Extended Core XB = Ext. Core Open End Polypro spring closed end	None = No Seal Material (Std. DOE) P = Poly Foam Gaskets w/Collars (DO only) E = EPR N = Buna-N S = Silicone (O-Ring only) T = PFA Encapsulated Viton* (222, 226 O-Ring Only) V = Viton* W = Poly Foam Gaskets without Collars (DO only)

**Available only in 9-3/4" (9-4) and 19-1/2" (19-4) lengths.

