Fulflo® EcoBond™ Filter Cartridges

■ Polypropylene

Melt Blown Depth Series

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.

Applications

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

Features and Benefits

- Fixed pore structure provides efficiency integrity and optimum particle retention.
- 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.
- 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.

Process Filtration Division

Bulletin C-1320 Eff. 11/99, Rev. 11/00

Parker Filtration

Specifications

Nominal Filtration Ratings:

- 1µm, 5µm, 10µm, 25µm, and 50µm.

Materials of Construction:

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

Recommended Operating Conditions:

- Maximum Temperature: @ 40 psid (2.7 bar): 80°F (27°C) @ 20 psid (0.8 bar): 140°F (60°C)
- Maximum Recommended Flow Rate: 5 gpm per 10 in length
- Change Out ΔP: 30 psi (2.1 bar)
- Maximum 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 and 40 in continuous nominal lengths

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

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

Flow Rate and Pressure Drop Formulas:

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

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

Notes:

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

Ordering Information

EBC — *Cartridge Code*: EcoBond Cartridge

10 — *Micrometer Rating (µm)*: 1, 5, 10, 25, 50

M — *Filter Medium*: M = FDA Polypropylene

10 — *Nominal Length*

Code	in	mm
9-4	9-3/4	248
10	10	254
19-4	19-1/2	496
20	20	508
29-4	29-1/4	743
30	30	762
39-4	39	992
40	40	1016

TC — *End Cap Options*:
None = DOE
AR = 020 O-Ring/Recessed
LL = 120 O-Ring (Both Ends)
LR = 120 O-Ring/Recessed
PR = 213 O-Ring/Recessed
SC = 226 O-Ring/Closed
SF = 226 O-Ring/Fin
TC = 222 O-Ring/Closed
TF = 222 O-ring/Fin
XA = DOE w/Ext Core

N — *Seal Options*:
None = No Gasket (DOE Only)
N = Buna
E = EPR
S = Silicone
V = Viton*
T = PFA Encapsulated Viton*

* A trademark of E. I. du Pont de Nemours & Co.

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