

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, 25µm 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

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Parker
Filtration

Melt Blown Depth Series

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:

- 27mm ID x 62mm OD (max)
- 10, 20, 30 and 40 in continuous nominal lengths

EBC Length Factors

Length (mm)	Length Factor
248	1.0
254	1.0
495	2.0
508	2.0
743	3.0
762	3.0
990	4.0
1016	4.0

EBC Flow Factors

Rating (µm)	Aqueous Service m bar /min per 254mm Cartridge
EBC1	1.80
EBC5	1.44
EBC10	1.26
EBC25	1.08
EBC50	0.90

Flow Rate and Pressure Drop Formulas:

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

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

Notes:

- Clean ΔP** is m bar differential at start.
- Viscosity** is centistokes.
Use Conversion Tables for other units.
- Flow Factor** is m bard – l/min at 1 cks for 254mm (or single).
- Length Factors** convert flow or ΔP from 254mm (single length) to required cartridge length.

Ordering Information

EBC Cartridge Code	10 Micrometer Rating (µm)	M Filter Medium	10 Nominal Length	TC End Cap Options	N Seal Options																											
EcoBond Cartridge	1 5 10 25 50	M = FDA Polypropylene	<table border="0"> <tr><td><u>Code</u></td><td><u>in</u></td><td><u>mm</u></td></tr> <tr><td>9-4</td><td>9-3/4</td><td>248</td></tr> <tr><td>10</td><td>10</td><td>254</td></tr> <tr><td>19-4</td><td>19-1/2</td><td>496</td></tr> <tr><td>20</td><td>20</td><td>508</td></tr> <tr><td>29-4</td><td>29-1/4</td><td>743</td></tr> <tr><td>30</td><td>30</td><td>762</td></tr> <tr><td>39-4</td><td>39</td><td>992</td></tr> <tr><td>40</td><td>40</td><td>1016</td></tr> </table>	<u>Code</u>	<u>in</u>	<u>mm</u>	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	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	None = No Gasket (DOE Only) N = Buna E = EPR S = Silicone V = Viton* T = Teflon Encapsulated Viton*
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Parker Filtration
 Filter Division Europe
 Shaw Cross Business Park
 Dewsbury, West Yorkshire
 WF12 7RD, England
 Phone: +44 (0) 1924 487000
 Fax: +44 (0) 1924 487001
 Website: www.parker.com

