

## **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 Bleach
- Oilfield Fluids
- Food & Beverages
- Membrane Prefiltration
- Chemical Processing Fluids
- Potable Water

# Fulflo® EcoBond™ **Filter Cartridges**

■ Polypropylene

## **Bonded Depth Series**



### 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-laver 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.

**Process Filtration Division** 



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# **Bonded 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

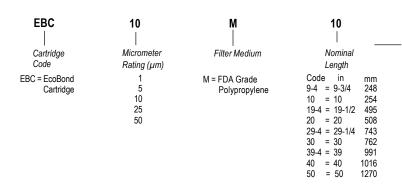
#### **Maximum Recommended Operating Conditions:**

- Temperature:
  - @ 40 psid (2.7 bar): 80°F ( 27°C) @ 20 psid (0.8 bar): 140°F (60°C)
- Flow Rate:
  - 10 gpm (38 lpm) per 10 in length
- Change Out ∆P: 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

# Ordering Information



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

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#### EBC Flow Factors

Rating <i>(μm)</i>	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
50.00	5.0

#### Flow Rate and Pressure Drop Formulae:

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

Clean  $\Delta P$  = Flow Rate x Viscosity x Flow Factor

Length Factor

#### Notes:

TC

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

 End Cap	 Configuration	Seal Material
AR = DO = LL = LR = OB = SC = TC = TX = XA =	DOE w/o gaskets 020 O-Ring (Recessed) DOE with gaskets 120 O-Ring (Both Ends)** 120 O-Ring/Recessed** Std. Open End/Polypro Spring Closed End 213 O-Ring/Recessed** 226 O-Ring/Flat Cap 222 O-Ring/Fin 222 O-Ring/Flat Cap 222 O-Ring/Flat Cap 222 O-Ring/Flex Fin DOE w/Core Extender Ext. Core Open End/Polypro Spring Closed End	A = Poly Foam Gasket (DO only) E = EPR N = Buna N S = Silicone (O-Ring only) T = PFA Encapsulated Viton* (222, 226 only) V = Viton*
	opg 0.0000 =110	

### **Process Filtration Division**

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