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ValueBond Depth Filter Cartridge

A Parker Filtration Product - Asia Pacific



Product Lines

The ValueBond Nominal cartridge is one of the most economical high purity filters available in Parker. Constructed with a graded density matrix design using fine Polypropylene fibers, it provides low initial pressure drop for enhanced flow and the two-layers structure gives superior service life.

Features & Benefits

- Two-layers structure cartridge, enhanced dirt holding capacity.
- Polypropylene construct provides broad chemical compatibility for a variety of applications.
- Thermally bonded without the use of any binders and adhesives.
- Materials of construction listed in FDA 21 CFR.
- Meets the latest EC Directives for Food Contact.

Operation Conditions

- Maximum operating forward pressure:
 - 80°C: 1.15 bar
 - 60°C: 2.05 bar
 - 20°C: 4.10 bar
- *Recommended change out differential pressure: 2.4 bar
- Maximum operating temperature: 80°C
- * subject to operating temperature.

Applications of Product

- Photographic Chemicals
- DI Water
- Plating Solutions
- R.O. Pre-filtration
- Membrane Pre-filtration
- Oil field Fluids
- Bleach
- Potable Water
- Chemical Processing Fluids

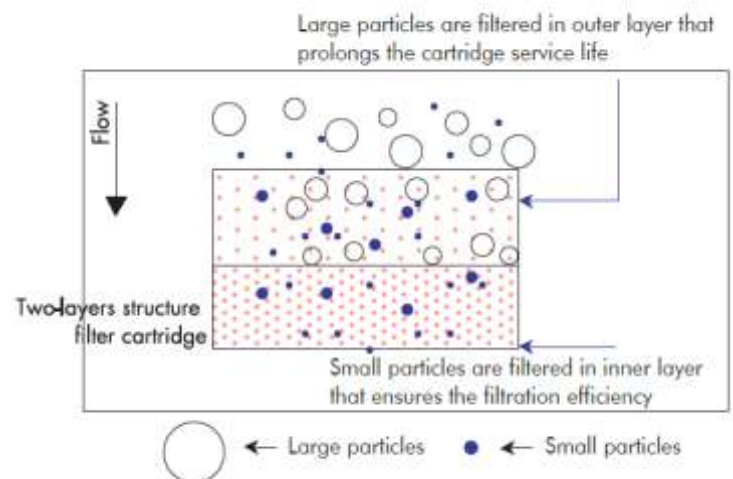
Product Specifications

Micron ratings: Available in nominal ratings of 0.5, 1, 3, 5, 10, 25, 50, 75 and 100 micron

Material of construction: 100% melt-blown PP

Nominal Length: 10 20 30 40 50 60
(254mm, 508mm, 762mm, 1016mm, 1270mm, 1524mm)

Inner / Outer Diameter: 28mm / 63mm



The Efficiency of ValueBond Filter Cartridge

Initial Pressure Drop

Rating (µm)	Aqueous Service PSI/GPM per 10 Cartridge
0.5	0.14
1	0.11
3	0.10
5	0.08
10	0.05
25	0.04
50	0.03
75	0.02
100	0.02

Dirt Holding Capacity

Rating (µm)	Capacity (g/ 10)
0.5	25
1	40
3	50
5	63
10	105
25	120
50	150
75	175
100	200

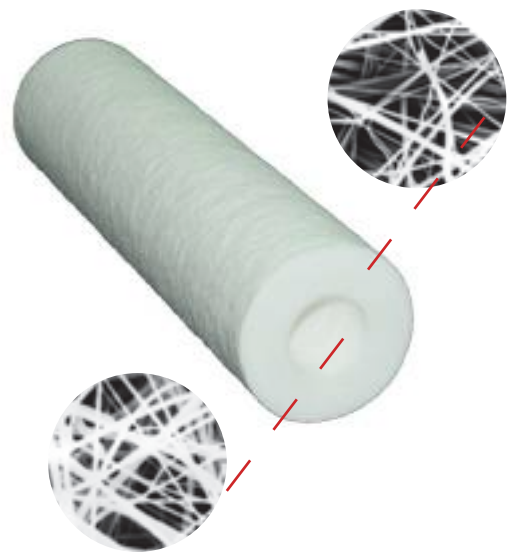
Flow Rate and Pressure Drop Formulas

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

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

Notes:

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



Ordering Information

Cartridge Code		Micrometer Rating (µm)		Nominal Length		End Cap Configuration		Seal Material	
VB	ValueBond Nominal	Code	Description	Code	Inches	Code	Description	Code	Material
		05	0.5	9-4	9 ^{3/4}	N	DOE	None	No seal material
		1	1	10	10	DO	DOE (with gasket)	E	EPDM
		3	3	19-4	19 ^{1/2}	SF	226 O-ring / Fin	N	Buna N
		5	5	20	20	SC	226 O-ring / Flat	S	Silicone
		10	10	29	29 ^{1/4}	TF	222 O-ring / Fin	V	Viton
		25	25	30	30	TC	222 O-ring / Flat	T	PFA Encapsulated
		50	50	39	39			A	PE (Applicable for DO only)*
		75	75	40	40				
		100	100	50	50				
				60	60				

* PE maximum temperature 60°C