

Fulflo® MegaBond™ Nominal Filter Cartridges

High-purity filtration with low-cost melt blown depth filter cartridges

Fulflo® MegaBond™ Nominal (MBN) cartridges are the most economical high purity filter cartridges available. Featuring a graded density matrix of uniform polypropylene fibers, the MBN 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.

Available in nominal ratings of .5, 1, 5, 10, 25, 50 and 75 micron.



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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) designed to conform to ANSI/NSF42 & NSF61 standards
- 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. Pre-filtration
- Membrane Pre-filtration
- Organic Solvents
- Oil field Fluids
- Bleach
- Potable Water
- Chemical Processing Fluids



ENGINEERING YOUR SUCCESS.

Fulflo® MegaBond™ Nominal 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

@ 40psid (2.7bar): 80°F (27°C)

@ 20psid (1.4bar): 140°F (60°C)

Flow Rate

5gpm (18.9 lpm) per 10 in length

Recommended Maximum

Change Out ΔP: 30psi (2.1bar)

Operating Differential Pressure @ Ambient

Temperature: 40psi (2.7bar)

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%)

.5µm, 1µm, 5µm, 10µm, 25µm, and 50µm

MBN Flow Factors

Rating (µm)	Aqueous Service psi/gpm per 10 in cartridge
MBN05	0.15
MBN1	0.13
MBN5	0.11
MBN10	0.10
MBN25	0.09
MBN50	0.05
MBN75	0.03

MBN 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 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:

- 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

Cartridge Code		Micrometer Rating (µm)	Nominal Length			End Cap Configuration		Seal Material	
MBN	MegaBond Nominal		Code	Inches	mm	Code	Description	Code	Material
		.5							
		1	9-4	9¾	248	None	DOE (w/o gaskets)	None	No Seal Material (Std. DOE)
		5	10	10	254	AR	020/Flat (Gelman)	A	Poly Foam Gaskets w/ Collars (DO only)
		10	19-4	19½	495	DO	DOE	E	EPR
		25	20	20	508	LL	120 O-ring both ends**	N	Buna-N
		50	29-4	29¼	743	LR	120 O-ring/Recessed**	S	Silicone
			30	30	762	OB	Std. open end/Polypropylene spring closed end	T	PFA Encapsulated Viton® (222, 226 O-ring only)
			39-4	39	991	PR	213 O-ring/Recessed**	V	Viton®
			40	40	1016	SC	226 O-ring/Flat	W	Poly Foam Gaskets w/o Collars (DO only)
			50	50	1270	SF	226 O-ring/Fin		
			75	75	1905	TB	222 open end/Polypropylene spring closed end		
						TC	222 O-ring/Flat		
						TF	222 O-ring/Fin		
						TX	222 O-ring/Flex Fin		
						XA	DOE w/Extended Core		
						XB	Ext. core open end/Polypropylene spring closed end		

**Available only in 9-¾" (9-4) and 19-½" (19-4) lengths.

Specifications are subject to change without notification.
For User Responsibility Statement, see www.parker.com/safety

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