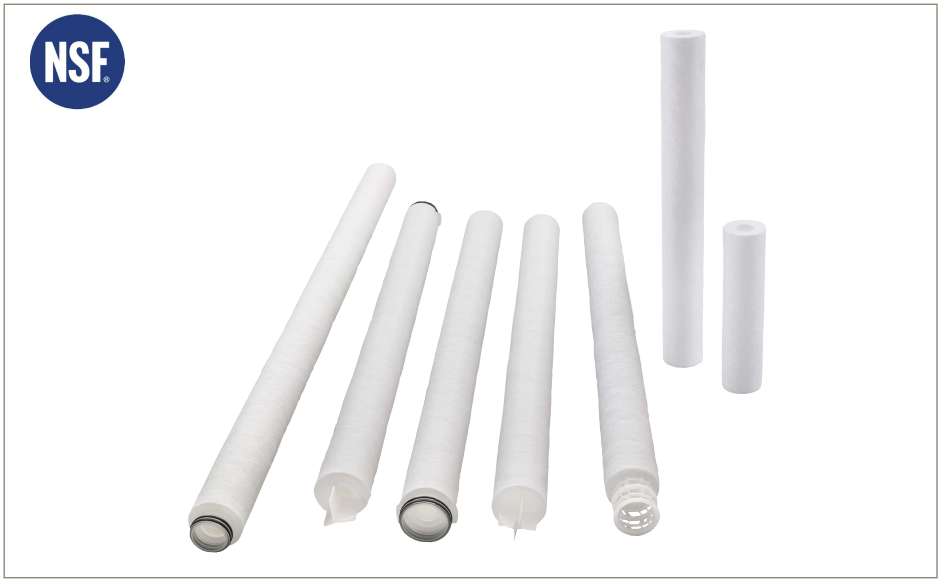
MegaBond™ Nominal Filter Cartridges

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

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/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.

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, 50µm, and 75µm

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

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 in. (or single).
4. Length Factors convert flow or ΔP from 10 in. (single length) to required cartridge length.

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

Ordering Information

MBN [ ] **M** [ ] — [ ] — [ ]

Cartridge Code	
MBN	MegaBond Nominal

Micron Rating (µm)
.5
1
5
10
25
50
75

Nominal Length		
Code	Inches	mm
9-4	9¾	248
10	10	254
19-4	19½	495
20	20	508
29-4	29¼	743
30	30	762
39-4	39	991
40	40	1016
50	50	1270

End Cap Configuration	
Code	Description
None	DOE (w/o gaskets)
AR	020/Flat (Gelman)
DO	DOE
LL	120 O-ring both ends**
LR	120 O-ring/Recessed**
OB	Std. open end/Polypropylene spring closed end
PR	213 O-ring/Recessed**
SC	226 O-ring/Flat
SF	226 O-ring/Fin
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/Poly-propylene spring closed end

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

Seal Material	
Code	Material
None	No Seal Material (Std. DOE)
A	Poly Foam Gaskets w/ Collars (DO only)
E	EPR
N	Buna-N
S	Silicone
T	PFA Encapsulated Viton® (222, 226 O-ring only)
V	Viton®
W	Poly Foam Gaskets w/o Collars (DO only)

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