Graver Technologies

FILTRATION | SEPARATION | PURIFICATION

PMA™ Series Filter Cartridges

"Absolute" Rated Pleated Filter Cartridges

Product Specifications

Media: Polypropylene

Inner core, end caps, cage: Polypropylene

Gaskets/O-Rings: Buna-N, EPDM, Silicone, Teflon Encapsulated Viton (O-Rings only), Teflon (gaskets), Viton

Micron ratings: 0.2, 0.45, 1, 2.5, 5, 10, 25, 50, 100 µm

Dimensions

Nominal lengths: 5", 9.75", 10", 19.5", 20", 29.25", 30", 39", 40" *(12.7, 24.8, 25.4, 49.5, 50.8, 74.3, 76.2, 99.1, 101.6 cm)*

Outside diameter: 2.7" (6.86 cm)

Inside diameter: 1.0" (2.54 cm)

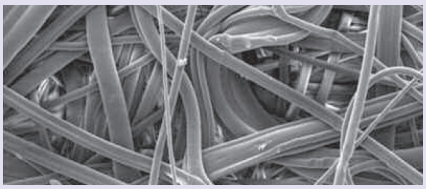
Operating Parameters

Maximum operating temperature: 176°F (80°C)

Maximum differential pressure: 75 psid @ 70°F (5.2 bar @ 21°C)
30 psid @ 176°F (2.0 bar @ 80°C)

Maximum reverse pressure: 40 psid @ 70°F (2.8 bar @ 21°C)

Recommended change-out pressure: 35 psid (2.4 bar)



This all polypropylene filter retains particles with absolute efficiency. Available in a broad range of pore sizes, it is suitable for a wide range of applications. The pleated construction provides a high surface area to offer outstanding overall filtration economy.

FEATURES & BENEFITS

- Micron ratings from 0.2 to 100 µm — Broad application range
- "Absolute" efficiency — Rated at 99.98% (Beta 5000)
- Competitive surface area — High flow rates, and long online service — minimize maintenance cost
- Fixed pore structure — Eliminates dirt unloading at maximum differential pressure
- Polypropylene construction — Inert to many process fluids
- Various gasket/O-ring materials — Compatible with a variety of fluids
- Manufactured in continuous lengths up to 40 inches

CERTIFICATIONS

- USP Class VI: Meets USP Class VI Biological Test for Plastics
- FDA Listed Materials: All materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, and 177.1520, as applicable for food and beverage contact.
- European Directive for Direct Food Contact: European Regulation No. 1935/2004 and European Regulation 10/2011: Tested for migration behavior and is suitable for contact with all kinds of foodstuffs with minimal rinse-up. Data available upon request.

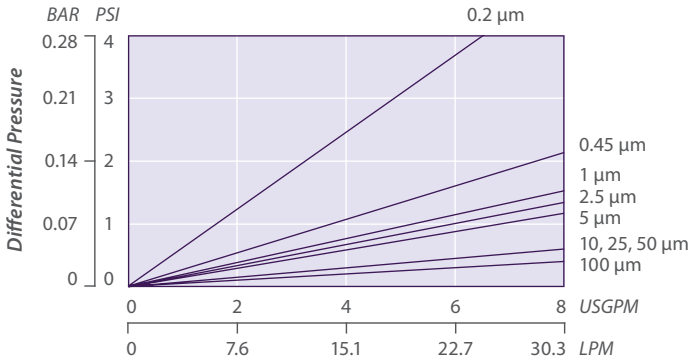
PMA NOMENCLATURE INFORMATION

Filter Type	Retention Rating (microns)		Nominal Length (inches)		End Configuration		Gasket or O-Ring		Options	
PMA Series	0.2	10	–5	–29.25[1]	P	Double Open End	B	Buna-N	–I	End Cap Insert
	0.45	25	–9.75[1]	–30	P2	226/Flat Single Open End	E	EPDM	–R	Factory Pre-Rinse
	1	50	–10	–39[1]	P3	222/Flat Single Open End	S	Silicone		
	2.5	100	–19.5[1]	–40	P7	226/Fin Single Open End	T	Teflon encap. Viton (O-Rings only)[2]		
	5		–20		P8	222/Fin Single Open End				
					AM	Single Open End, Internal O-Ring				
					NPC	Double Open End, Internal O-Ring	T	Teflon Gasket		
							V	Viton		
Example: PMA 2.5–10PV–R										
PMA	2.5		–10		P		V		–R	

[1]Available only for DOE (P) configuration [2]Not available in AM style

PMA FLOW RATE

Typical Flow Rate Clean Water at Ambient Temperature (per 10" cartridge)



For liquids other than water, multiply pressure drop by the fluid viscosity in centipoise

REMOVAL EFFICIENCY

Beta Ratio Efficiency	Beta 5000 99.98%	Beta 100 99%	Beta 50 98%
0.2 µm	0.20	0.10	0.05
0.45 µm	0.45	0.30	0.20
1 µm	1.0	0.60	0.30
2.5 µm	2.5	2.0	1.5
5 µm	5.0	4.0	3.0
10 µm	10.0	8.0	7.0
25 µm	25.0	19.0	15.0
50 µm	45.0	35.0	28.0
100 µm	–	100.0	85.0

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters.

Testing was conducted using the single-pass test method, water at 2.5 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

FOR MORE INFORMATION **GTX-261 10-21**

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