PMA™ Polypropylene Filter Series

"Absolute" Rated Pleated Filter Cartridges

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.

Filter Features–Benefits

- Micron ratings from 0.2 to 25 µm– Broad application range
- Meets current USP Class VI biological test for plastics – Acceptable for food & beverage contact
- "Absolute" Efficiency– Rated at 99.98% (Beta 5000)
- Competitive surface area– High flow rates, and long on-line 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

Filter Specifications

Media:	*Polypropylene*
Inner core:	*Polypropylene*
End caps:	*Polypropylene*
Cage:	*Polypropylene*
Gaskets/O-Rings:	*Buna-N, EPDM, Silicone, Viton, Teflon Encapsulated Viton (O-Rings only)*
Polypropylene micron ratings:	*0.2, 0.45, 1.0, 2.5, 5.0, 10, 25, 50, 100µm*
Dimensions and Operating Parameters	
Nominal lengths:	*9.75'' 10'', 20'', 30'', 40'' (24.7, 25.4, 50.8, 76.2, 101.6 cm)*
Outside diameter:	*2.7'' (6.86 cm)*
Inside diameter:	*1.1'' (2.79 cm)*
Maximum operating temperature:	*176 °F (80 °C)*
Maximum differential pressure:	*75 psid @ 70 °F (5.2 bar @ 21°C)* *40 psid @ 176 °F (2.8 bar @ 80°C)* *15 psid @ 190 °F (1.03 bar @ 88°C)*
Recommended change-out pressure for disposal:	*35 psid (2.4 bar)*



Filter Removal Efficiency

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

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

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 3 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

FDA Compliance

All polypropylene material used in manufacturing complies with the regulations of the Food and Drug Administration (FDA) title 21 of the Code of Federal Regulations Sections 174.5, 177.1520, and 177.1630, as applicable for food and beverage contact.

PMA Nomenclature Information

PMA	2.5	-10	P	V
Filter Type PMA Series Filters	**Retention Rating (microns)** **0.2** **0.45** **1** **2.5** **5** **10** **25** **50** **100**	**Nominal Length (inches)** **-9.75** **-10** **-20** **-30** **-40**	**End Configuration** **P** Double Open End **P2** 226/Flat Single Open End **P3** 222/Flat Single Open End **P7** 226/Fin Single Open End **P8** 222/Fin Single Open End	**Gasket or O-Ring** **S** Silicone **B** Buna-N **E** EPDM **V** Viton **T** Teflon encap. Viton (O-Rings only) **T** Teflon gasket

Example: PMA 2.5-10 PV

PMA FLOW RATE

