

Polypropylene Membrane Filter - Absolute Filtration

The Poly-Ray pleated filter is made of polypropylene fiber media. Poly-Ray pleated filter combines exceptional solids holding capacities with precise micron ratings than depth filters. The multi-layers sheets of melt-blown media provide absolute particle retention. The Poly-Ray pleated cartridge filter has high solid loading and long service life, which is also designed for membrane's pre-filtration.

Features & Benefits

- Low pressure drop, high capacity of dust and long service life.
- End caps and connectors sealed by thermal bond, free of binder
- Manufacture in clean room, high clean cartridge.
- Pre-flush with 18 Megohm-cm DI water, TOC content is lower than 40 PPb
- Poly-Ray filter is multi-layers structure, absolute efficiency filter (Absolute rating 99.9%; Beta ratio = 1000) 100% PP for compatibility with a wide range of process fluids.
- End configurations to fit all standard housings
- Certificated by USP XXIII and FDA CFR Title 21
- In compliance with the latest EC Directive for food contact.

Operation conditions

- Maximum operating forward pressure:
 - 90 C: 1.4 kg/cm²
 - 60 C: 2.8 kg/cm²
 - 20 C: 4.9 kg/cm²
- Recommended replacement pressure drop: 2.5kg/cm²
- Maximum operating temperature: 90 C
- Sterilization: 121 C, 30min 10 times

Applications of products

- Pre-filtration of membrane cartridge
- Filtration of cleaning process
- Pre-filtration of DI water filtration
- Filtration of cooling water system (PCW)
- Filtration of beer or beverage manufacture
- Filtration of medium & low viscosity chemical fluids.

Product specifications

Micron ratings: Absolute rating 0.2, 0.45, 1, 5, 10 ,20 ,50 micron

Material of construction: 100% melt-blown micro-denier PP fiber

Support: PP fiber

Core & End Cap: High Strength PP (Stainless Steel insert end cap available)

O-ring Material: EPDM, Buan N, Silicone, Viton, PFA encapsulated Viton

Filtration Area: Poly Ray AR >0.4 m²/ 10"
Poly Ray E-AR >0.49 m²/ 10"

Length: 10", 20", 30", 40"

Inner Diameter: 28mm

Outer Diameter: AR = 69mm; E-AR = 80mm; N-AR = 64mm

Retention Efficiency: >99.9% under muti-pass test



Poly-Ray Efficiency

Efficiency of Filtration

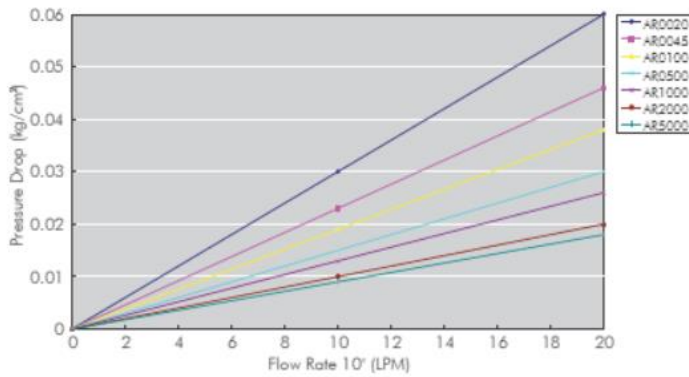
spec.	Retention Efficiency (%)							
	0.2 micron	0.3 micron	0.5 micron	1.0 micron	5.0 micron	10 micron	20 micron	50 micron
AR0020	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9
AR0045	62.3	71.9	>99.9	>99.9	>99.9	>99.9	>99.9	>99.9
AR0100	30.2	67.1	73.9	>99.9	>99.9	>99.9	>99.9	>99.9
AR0500	—	—	46.8	87.3	>99.9	>99.9	>99.9	>99.9
AR1000	—	—	—	53.9	81.5	>99.9	>99.9	>99.9
AR2000	—	—	—	—	59.3	86.9	>99.9	>99.9
AR5000	—	—	—	—	—	79.8	>89.9	>99.9

*Multi-pass Test

Suggested equivalent products

- Mykrolis Polygard-CN
- Pall HDC II Filter
- Pall Ultipleat Profile
- CUNO Betafine D
- CUNO Polypro
- Pall Poly-Fine II

AR Initial Pressure Drop



E-AR Initial Pressure Drop

