

Poly-Ray Pleated Filter Cartridge with PP Microfiber media

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.

✓ Applications of product

- 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.



✓ 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%; Bata ratio = 1000) 100% PP for compatibility with a wide range of process fluids.
- End configurations to fill all standard housings.
- Certificated by USP XXIII and FDA CFR Title 21.
- In compliance with EUDirective 200/72/EC for plastic in food contact.

✓ Operating Conditions

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





✓ Product specifications

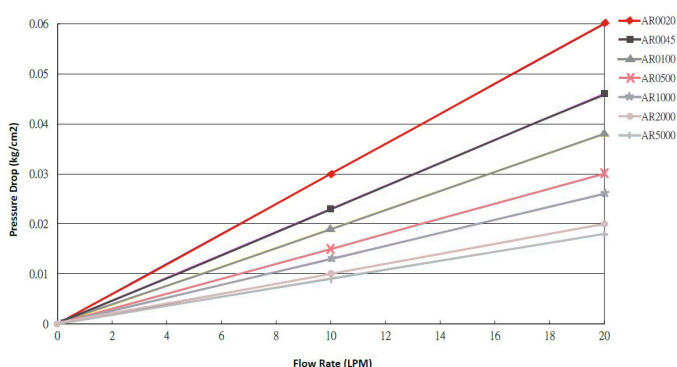
- Micron ratings: Absolute rating 0.2, 0.45, 1.5, 10, 20, 50 micron.
- Material of construction: 100% melt-blown micro-denier PP fiber.
- Support: PP fiber.
- Core & End Cap: High Strength PP (Stainless Steel insert end cap available).
- O-ring Material: EPDM, Buan N, Silicone, Viton, PFA, encapsu- lated Viton.
- Retention Efficiency: >99.9% under muti-pass test.
- Filtration Area:
 - Poly Ray AR > 0.4 m² / 10"
 - Poly Ray E-AR >0.49 m² / 10"
- Length: 10", 20", 30, 40"
- Inner Diameter: 28 mm
- Outer Diameter:
 - AR= 69mm;
 - E-AR= 80mm;
 - N-AR= 64mm.

✓ Efficiency of Filtration

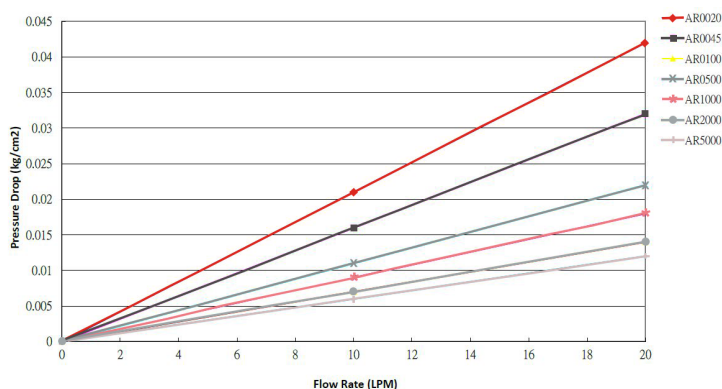
| spec. | Retention Efficiency (%) | | | | | | | |
|--------|--------------------------|------------|------------|------------|------------|-----------|-----------|-----------|
| | 0.2 micron | 0.3 micron | 0.5 micron | 1.0 micron | 5.0 micron | 10 micron | 20 micron | 50 micron |
| AR0020 | >99.9 | >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

AR Initial Pressure Drop



E-AR Initial Pressure Drop



✓ Ordering Information

| | AR | 005 | E | 0 | 1 | B |
|--|----------|--|--|---|---|--|
| Outer Diameter Blank: Standard: 69 mm E: 80 mm N: 64 mm | Poly-Ray | Micro Ratings: 0020 : 0.2 micron 0045 : 0.45 micron 0100 : 1 micron 0500 : 5 micron 1000 : 10 micron 2000 : 20 micron 5000 : 50 micron | O-Ring Material: E = EPDM N = BUNA N S = Silicone V = Viton T = PFA Encapsulated Viton | End cap number: F = Double Open End (DOE) 0 = 222 /Flat (SOE) 5 = 222 /Fin (SOE) 6 = 226 /Flat (SOE) 7 = 226 /Fin (SOE) A = 213 / 213 B = 213 /Flat C = 213 /Fin | Length A = shorter than 10" 1 = 10" 2 = 20" 3 = 30" 4 = 40" | A = Non-Preflush B = Preflush with DI Water |