# Poly-Ray 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.

#### ▶ Features & Benefits

- Low pressure drop, high capacity of dust and long service life.
- End caps and connectors sealed by thermal bond, free of binder
- Manufature in clean room, high clean catridge.
- Pre-flush with 18 Megohm-cm DI water.
- 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, 100 micron

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

Support: PP fiber

Core & End Cap: High Strength PP(OD:69mm, 64mm); HDPE(OD:80mm)

(Stainless Steel insert end cap is available for PP cage)

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

Filtration Area: Poly Ray AR > 0.4 m<sup>2</sup> / 10"

Extra Poly Ray E-AR >0.49 m<sup>2</sup>/10"

Length: 10", 20", 30", 40" Inner Diameter: 28mm

Outer Diameter: AR = 69mm(PP); E-AR = 80mm(HDPE); N-AR = 64mm(PP)

Retention Efficiency: >99.9% under muti-pass test





### **Pleated Filter with Microfiber media**

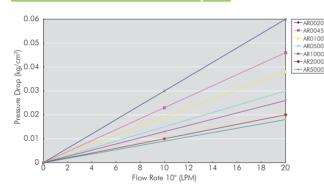
#### **Efficiency of Filtration**

	Retention Efficiency (%)							
spec.	0.2	0.3	0.5	1.0	5.0	10	20	50
	micron	micron	micron	micron	micron	micron	micron	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

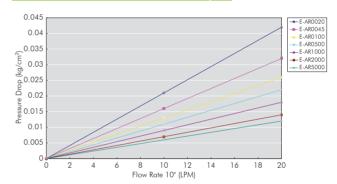
# Suggested equivalent products

	- 1 10
<ul> <li>Millipore</li> </ul>	Polygard-CN
<ul><li>Pall</li></ul>	HDC II Filter
<ul><li>Pall</li></ul>	Ultipleat Profile
• 3M	Betafine D
• 3M	Polypro
<ul><li>Pall</li></ul>	Poly-Fine II

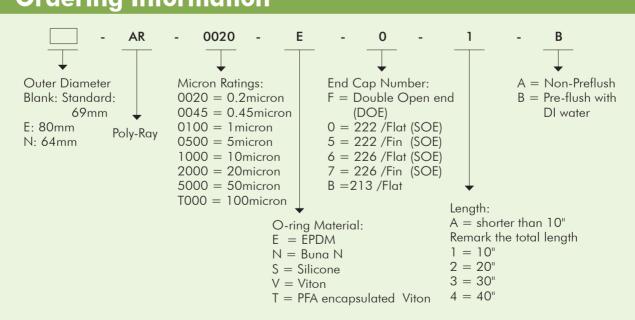
#### AR Initial Pressure Drop



#### E-AR Initial Pressure Drop



## **Ordering Information**



<sup>\*</sup> Multi-pass Test