

1. Filter Cartridge

1.1 Membrane Pleated Filter Cartridge

1.1.1 PES (Poly Ether Sulfone) Series Pleated Filter Cartridge

PES Hydrophilic Membrane Pleated Filter Cartridge

The PES pleated filter cartridge is constructed of imported asymmetric hydrophilic PES membrane media and PP support layers. All construction process is thermally welded without using any glue or adhesives to get low extraction level. It has advantages of absolute rate, high porosity, and homogeneous pore distribution, which make it ideal product for final bacterial removal.

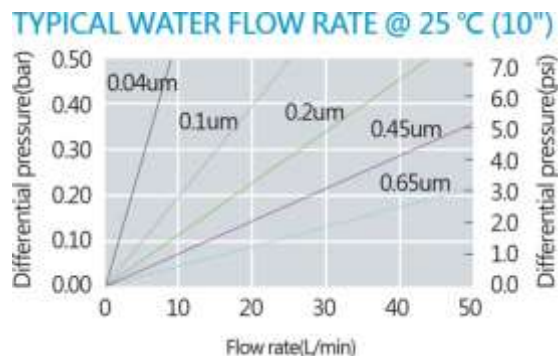


Features

- * Highly asymmetric PES filter media provides high dirt holding capacity and long life
- * Absolute rate inherently hydrophilic PES membrane filter for final sterilizing grade filtration
- * Higher throughput and flow-rate than any other sterilizing grade filter cartridge
- * Low protein binding, suit for a broad range of pharmaceutical products
- * Excellent resistance to hydrolysis allows use in Ultra-Pure Water(UPW) system
- * 100% integrity test

Application

- Bacterial removal of API, LPV, blood serum, biologicals, buffers, culture media and other pharmaceuticals
- Sterile filtration for water, mineral water, wine, beer, and other beverages
- Ultrapure water and disk, display, multi silicon process water in electronics
- Fine chemicals, water process



Specifications

Construction Materials	Filter Media	Hydrophilic symmetric/asymmetric Poly ether sulfone membrane
	Support Layers	Polypropylene
	Inner core	Polypropylene
	Outer cage, End Cap	Polypropylene
	Seal Method	Thermal Bonding, No Adhesives
	O-rings/ Gaskets	Silicone/EPDM/Viton/PTFE/Nitrile
Technical Data	Micron Rating	0.04,0.1,0.2,0.45,0.65,0.85,1.2 um
	Operating Temperature	Normal <60°C (140 °F) Max. <85°C (185 °F)
	Normal Flow Direction pressure	4.2 bar (60.9 psi) at 25°C (77°F)
	Reverse Flow Direction pressure	2.1 bar (30.5 psi) at 25°C (77°F)
	pH Value Compatibility	2-13
	Sterilization	Flush with hot water at 121±2°C for 30 minutes, at Δ P≤1.0 bar (14.5psi) Cumulative Time: 8 hours
Cartridge Size	Outer Diameter	Φ 69 mm(2.75'')
	Inner diameter	Φ 33 mm(1.30'')
	Length(based on DOE end cap)	5'', 10'', 20'', 30'', 40''
	Filtration Area(m ²)	0.65 m ² /10''
Biosecurity	Endotoxin	<0.25 EU/ml
	Extractable	≤30 mg/10''
100% Integrity test Purified water at 25°C (77 °F)	0.04 um	≥3.0 bar (43 psi)
	0.10 um	≥2.1 bar (30 psi)
	0.20 um	≥3.2 bar (46 psi)
	0.45 um	≥2.0 bar (29 psi)
	0.65 um	≥1.4 bar (20 psi)

Double PES Asymmetric Membranes Pleated Filter Cartridge

The Double PES pleated filter cartridge are double imported PES membranes and has better dirt holding capacity and long life. All construction processes are thermally welded without using any glue or adhesives to get low extraction level. It has advantages of absolute rate, high porosity, and homogeneous pore distribution, which make it ideal product for final bacterial removal.

Features

- * Double PES Asymmetric membranes provides better dirt holding capacity, long life and better bacterial filtration efficiency
- * Absolute rate inherently hydrophilic PES membrane filter for final sterilizing grade filtration
- * Higher throughput and flow-rate than any other sterilizing grade filter cartridge
- * Low protein binding, suit for a broad range of pharmaceutical products
- * Excellent resistance to hydrolysis allows use in Ultra-Pure Water (UPW) system
- * 100% integrity test

Application

- * Sterile filtration of blood serum, biologicals, buffers, culture media and other pharmaceuticals
- * Sterile filtration for water, mineral water, wine, beer and other beverages

Specifications

Construction Materials	Filter Media	Double Hydrophilic symmetric/asymmetric PES membrane
	Support Layers	Polypropylene
	Inner core	Polypropylene
	Outer cage, End Cap	Polypropylene
	Seal Method	Thermal Bonding, No Adhesives
	O-rings/ Gaskets	Silicone/EPDM/Viton/PTFE/Nitrile
Technical Data	Micron Rating	0.2+0.1, 0.2+0.2, 0.45+0.2 um(accept private orders)
	Operating Temperature	Normal <60°C (140 °F) Max. <85°C (185 °F)
	Normal Flow Direction pressure	4.2 bar (60.9 psi) at 25°C (77°F)
	Reverse Flow Direction pressure	2.1 bar (30.5 psi) at 25°C (77°F)
	pH Value Compatibility	2-13

	Sterilization	Flush with hot water at 121±2°C for 30 minutes, at $\Delta P \leq 1.0$ bar (14.5psi) Cumulative Time: 8 hours
Cartridge Size	Outer Diameter	Φ 69 mm(2.75")
	Inner diameter	Φ 33 mm(1.30")
	Length(based on DOE end cap)	5", 10", 20", 30", 40"
	Filtration Area(m ²)	0.65 m ² /10"
Biosecurity	Endotoxin	<0.25 EU/ml
	Extractable	≤30 mg/10"
100% Integrity test Purified water at 25°C (77 °F)	0.2+0.1 um	≥4.0 bar (58 psi)
	0.2+0.2 um	≥3.7 bar (53 psi)
	0.45+0.2 um	≥3.5 bar (50 psi)