

# PES-E

## Polyethersulfone For Microelectronics

▪ Liquid Clarification

▪ General Water Filtration

▪ Electronics

▪ High Purity Chemical Filtration

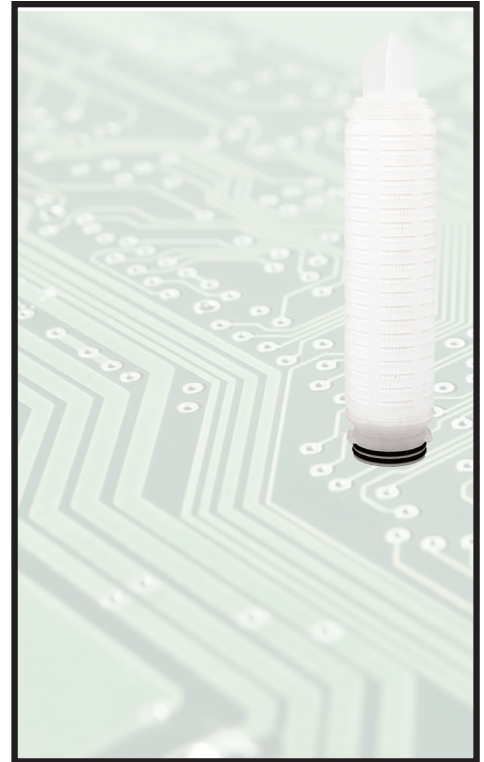
▪ Semiconductor

▪ Deionized Water Systems

The PES-E was developed for microelectronics industry where a high degree of particle retention and/or constant bacterial barrier for effective sterilization is required.

Hydrophilic asymmetric polyethersulfone membranes ensure excellent flow rates, broad chemical compatibility, low protein binding, low extractability, high mechanical strength, and temperature resistance in a variety of applications in the microelectronics industry. The PES-E is 100% integrity testable and utilizes Strainrite's double rinse process to ensure extremely low extractables. Polyethersulfone offers a broad range of chemical compatibility and temperature performance.

The PES-E meets USP Biological Reactivity Test, in vivo for class VI-121°C plastics. Sterilizable using industry recognized and accepted methods.

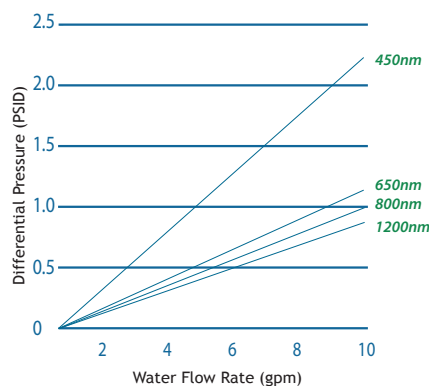
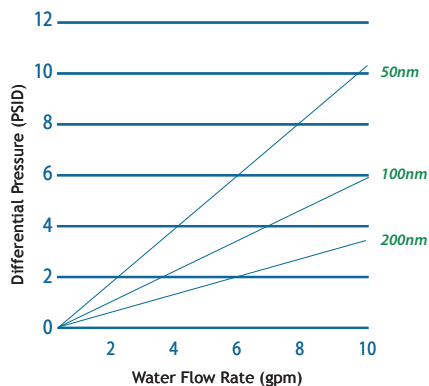


## Features & Benefits

### PES-E

- High surface area membrane offers excellent life and flux rates while providing absolute filtration
- Absolute-rated membrane provides reliable, consistent and repeatable filtrate quality
- Low pressure drops yield higher flow rates and reduced processing time
- Non-fiber shedding polypropylene support materials eliminate fiber migration
- Integrity testable
- Maximum pleat design for greater surface area, ensuring longer service life, fewer change outs and reduced operating costs per element
- Thermally bonded construction without the use of adhesives or binders, resulting in lower extractables
- High strength design allowing for extended use

## Performance Characteristics



## Specifications

### Absolute Rated Retention (nanometers)

50, 100, 200, 450, 650, 800, 1200

### Maximum Differential Pressure

Forward: 75 psid (5.1 bar) @ 75°F (24°C)

40 psid (2.8 bar) @ 180°F (82°C)

Reverse: 50 psid (3.4 bar) @ 75°F (24°C)

### Maximum Operating Temperature

180°F (82°C) Continuous Duty

### Toxicity

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

### Sterilization

Cartridge can be sterilized via steam or

Autoclave: 20 times at 275°F (135°C)

Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

### DI Water Specifications

All Cartridges are 18 megohm flushed

### Packaging Economy

Bulk packaging in case quantities to reduce material disposal:

5 inch	48 per carton
10 inch	24 per carton
20 inch	12 per carton
30 inch	12 per carton
40 inch	9 per carton

## Materials of Construction

### Filter Media

Polyethersulfone

### End Caps

Polypropylene

### Pleat Support Material

Polypropylene

### Cage/Core

Polypropylene

### Seals

Buna N

Fluorocarbon

EPDM

Silicone

PTFE

FEP Encapsulated Fluorocarbon

FEP Encapsulated Silicone

### Sealing

Thermal Bond

## Dimensions

### PES-E

### Outside Diameter

2.7" (6.87cm)

### Approx. Surface Area

6.8ft<sup>2</sup> per 10" equivalent

### Lengths

5" (12.7cm)

10" (25.4cm)

20" (50.8cm)

30" (76.2cm)

40" (102cm)

## Ordering Information

