

PES-E

Polyethersulfone For Microelectronics

- ▶ HIGH PURITY CHEMICAL FILTRATION
- ▶ LIQUID CLARIFICATION
- ▶ GENERAL WATER FILTRATION

- ▶ SEMICONDUCTOR ELECTRONICS
- ▶ DEIONIZED WATER SYSTEMS



Strainrite's 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.



- ▶ 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

ORDER GUIDE



PESE50-10PPC1SET

| ABSOLUTE RATED RETENTION (NANOMETERS) | | | |
|---|---------------|------------------------------------|---------------|
| 50, 100, 200, 450, 650, 800, 1200 | | | |
| MAXIMUM DIFFERENTIAL PRESSURE | | | |
| Forward: | | Reverse: | |
| 75 psid (5.1 bar) @ 75°F (24°C) | | 50 psid (3.4 bar) @ 75°F (24°C) | |
| 40 psid (2.8 bar) @ 180°F (82°C) | | | |
| MAXIMUM OPERATING TEMPERATURE | | | |
| 180°F (82°C) Continuous Duty Polypropylene | | | |
| 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 | | | |
| FILTER MEDIA | END CAPS | PLEAT SUPPORT MATERIAL | CAGE/CORE |
| Polyethersulfone | Polypropylene | Polypropylene | Polypropylene |
| SEALS | | | |
| Buna N Fluorocarbon EPDM Silicone FEP Encapsulated Fluorocarbon FEP Encapsulated Silicone PTFE Foam PTFE Hard | | | |
| CONSTRUCTION METHOD | | | |
| Thermal Bond | | | |
| OUTSIDE DIAMETER | | APPROXIMATE SURFACE AREA | |
| 2.7" (6.87cm) | | 6.8 square feet per 10" equivalent | |
| LENGTHS | | | |
| 5 inch (12.7 cm) 10 inch (25.4 cm) 20 inch (50.8 cm) 30 inch (76.2 cm) 40 inch (102 cm) | | | |
| PERFORMANCE CHARACTERISTICS | | | |
| | | | |

ORDER OPTIONS

| CARTRIDGE | |
|-----------------------------------|---------------------------|
| PESE | PES-E |
| NANOMETER RATINGS | |
| 50, 100, 200, 450, 650, 800, 1200 | |
| CARTRIDGE LENGTH | |
| 5, 10, 20, 30, 40 | |
| PLEAT SUPPORT | |
| PP | Polypropylene |
| END CAP CONFIGURATIONS | |
| C1 | Double Open Ends |
| C2 | 213/Recessed Cup |
| C3 | Flat/222 |
| C4 | Single Open End/Flat |
| C5 | Recessed Cup/222 |
| C6 | Flat/226 |
| C7 | Fin/226 |
| C8 | Fin/222 |
| GASKET/O-RING MATERIAL | |
| S | Silicone |
| B | Buna N |
| V | Fluorocarbon |
| E | EPDM |
| TF | PTFE Foam |
| TH | PTFE Hard |
| TV | Encapsulated Fluorocarbon |
| TS | Encapsulated Silicone |
| CARTRIDGE GRADE | |
| E | Electronics |
| CARTRIDGE OPTIONS | |
| I | 316 SS Insert |
| T | Integrity Tested |