

Mem-Pleat SG & Pur-MAXX SG

Sterilizing Grade Polyethersulfone Elements

▪ Final filtration of WFI & CIP Water

▪ Cell Culture Purification

▪ Vaccines

▪ Diagnostics

▪ Buffer Solutions

▪ LVP (Large Volume Parenterals)

Strainrite's [Sterilizing Grade Pleated Cartridges](#) are engineered to meet the highest standards of microorganism control for sterile fluids. These filter elements are validated for complete removal of *Brevundimonas diminuta* (ATCC 19146) at test concentrations of 107 CFU/cm² (Colony Forming Units).

This product is ideally suited for applications where microorganism contamination causes product defects or extra processing time due to increase fluid instability. These cartridges are produced utilizing a unique multi-pleated configuration integrating highly asymmetric and hydrophillic polyethersulfone membrane with exceptional pleat support materials. This novel multi-pleated approach increases cartridge life, strength and durability, and allows our filter cartridges to withstand multiple sterilization cycles without sacrificing product integrity.

These cartridges comply with FDA CFR Title 21 and USP Biological Reactivity for Class VI Plastics. By combining these ultra pure components with the low protein binding features of highly asymmetric hydrophillic polyethersulfone membrane makes them perfect for applications in the biopharmaceutical and bottled water industries.

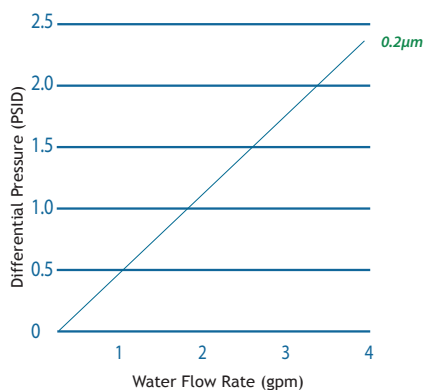


Features & Benefits

Mem-Pleat SG & Pur-MAXX SG

- Validated 0.2 µm absolute rated membrane configuration
- High surface area membrane offers excellent life and flux rates while providing absolute filtration
- Absolute-rated dual layer 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
- Pleat design for greater surface area: longer service life, fewer change outs and reduced operating costs
- 100% Thermally bonded construction
- Integrity tested
- High strength design allowing for extended use and multi autoclave and hot water sanitization cycles
- 316 SS reinforced end treatments
- All materials of construction are FDA compliant with CFR Title 21 and are bio-safe in accordance with USP Class VI
- [Validation guide available on request](#)

Performance Characteristics



Integrity Test Values

Pore Size	Bubble Point	Test Pressure	Air Diffusion
0.2-SG	50 psig	40 psig	≤16mL/min

USP Physiochemical Tests for Plastics

Ultrapure water extracts from multiple lots of cartridges were tested and shown to have values that comply with USP limits.

Test	Results	USP Limit
Non volatile residue	<2mg	<15mg
Heavy Metals	<1ppm	<1ppm
Residue on Ignition	<2mg	<5mg
Buffering Capacity	<1mL	<10ml

Specifications

Absolute Rated Retention

0.20

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

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

Sealing

Thermal Bond

Reinforcing Ring

316 Stainless Steel

Dimensions

Mem-Pleat SG

Outside Diameter
 2.55" (6.48cm)

Approx. Surface Area
 6.5ft² per 10" equivalent

Lengths

5" (12.7cm)
 10" (25.4cm)
 20" (50.8cm)
 30" (76.2cm)
 40" (102cm)

Pur-MAXX SG

Outside Diameter
 2.7" (6.87cm)

Approx. Surface Area
 6.5ft² per 10" equivalent

Lengths

5" (12.7cm)
 10" (25.4cm)
 20" (50.8cm)
 30" (76.2cm)
 40" (102cm)

Ordering Information

