

Microfine ExPleat PSA Series Cartridges

Highly Asymmetric Polyethersulfone Media Cartridges for Superior Filtration



ExPleat PSA Series membrane filters are designed for ultra high purity DI water and chemical filtration applications where very fine removal ratings and high flow rates are required. The Extended Pleat design along with a highly asymmetric Polyethersulfone membrane provides very low pressure drop and long service life of filters.

Construction Materials

Filtration Media	Asymmetric Polyethersulfone (PES) Membrane
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding
O-rings	Buna, Viton® (or FKM), EPDM, Silicone, FEP Encapsulated Viton (or FKM)

Dimensions

Length	9.75 in to 40 in.(24.8 to 101.6 cm) nominal
Outside Diameter	2.75 in. (6.9 cm) nominal
Filtration Area	6.0 ft ² (0.55 m ²) and 9.0 ft ² (0.80 m ²) per 10 in. length

Applications

- ◆ Process Water
- ◆ Chemicals
- ◆ DI Water
- ◆ Cosmetics
- ◆ Inks and Dyes
- ◆ HDD Part Washing
- ◆ Bioburden Reduction

Integrity Test Information

Representative samples from each manufacturing lot are tested for integrity to ensure consistent performance. 100% integrity testing for critical applications is also available.

Maximum Operating Parameters

Differential Pressure	24 psid (1.7 barg) at 80 °C (176 °F)
• Forward	78 psid (5.4 barg) at 20 °C (68 °F)
Operating Temperature	80 °C (176 °F)
Recommended Changeout Pressure	35 psid (2.4 barg)

Sanitization/Sterilization

Filtered Hot Water	80 °C (176 °F), 30 minutes, 30 cycles, max 3 psid forward flow
Autoclave	121 °C (250 °F), 30 min, 10 cycles
In-line Steam	121 °C (250 °F), 30 min, 10 cycles

For all elevated temperature procedures above, a stainless steel support ring is required.

Chemical Sanitization

Performed using industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals.

Available Rinse Options

Standard	No Rinse
Pre-Flushed	Rinsed with surfactant–Silicone free
Pre-Rinsed	Rinsed with 18 M ohm water

Total Performance

Microfine Filters is a manufacturer of filtration products to industries in which filtration is considered a critical part of the manufacturing process. We supply a complete line of products and services to help you cost effectively satisfy all your filtration requirements from a single source.

