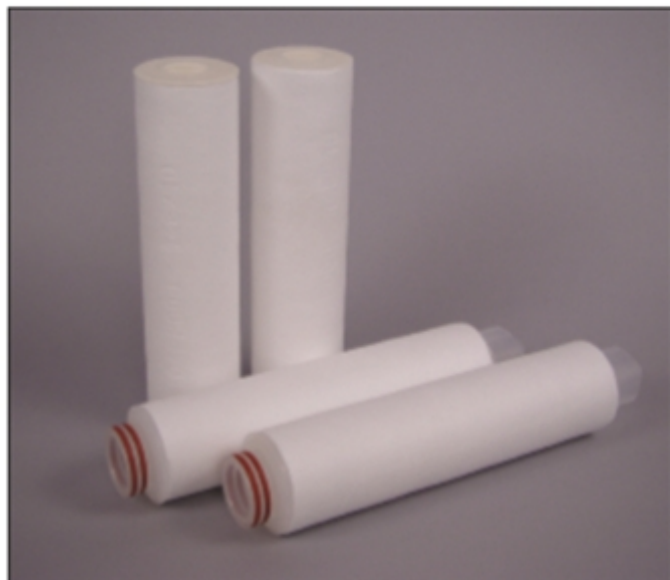


# Microfine ExPleat PSS Series Cartridges

Symmetric Polyethersulfone Media Cartridges for Superior Filtration at Reduced Costs



ExPleat PSS 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 symmetric Polyethersulfone membrane provides high filtration efficiency with a long filter life. The symmetric PES membrane is especially suited for applications where filter change out is carried out periodically without taking into consideration the differential pressure across the cartridge.

## Construction Materials

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

## Dimensions

<b>Length</b>	9.75 in to 40 in. (24.8 to 101.6 cm) nominal
<b>Outside Diameter</b>	2.75 in. (6.9 cm) nominal
<b>Filtration Area</b>	6.0 ft <sup>2</sup> (0.55 m <sup>2</sup> )

## 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

<b>Differential Pressure</b>	24 psid (1.7 barg) at 80 °C (176 °F)
• Forward	78 psid (5.4 barg) at 20 °C (68 °F)

<b>Operating Temperature</b>	80 °C (176 °F)
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<b>Recommended Changeout Pressure</b>	35 psid (2.4 barg)
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## Sanitization/Sterilization

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

<b>Standard</b>	No Rinse
<b>Pre-Flushed</b>	Rinsed with surfactant–Silicone free
<b>Pre-Rinsed</b>	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.

## FDA and EC Compliance

All Microfine Filter cartridge filters are designed to meet the FDA requirements for processing food and beverage products. The materials used to construct NPP filters are listed by the FDA for use in articles intended for repeated food contact as specified in Title 21 CFR sections 174.5, 177.1500, 177.1520, 177.1630, 177.2440 and 177.2600 as appropriate. NPP filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters. All materials used to make the filters are listed in European Commission Regulation EU/10/2011, Annex 1.

## Quality Assurance and Standards

Our goal is to ensure our customers the greatest possible value for their filtration dollar. Our state of the art manufacturing facility and quality management system both meet ISO 9001:2008 standards. Each operation from assembly and test to cleaning, drying, and packaging is done in appropriately rated clean rooms.

## Flow Rate vs Differential Pressure

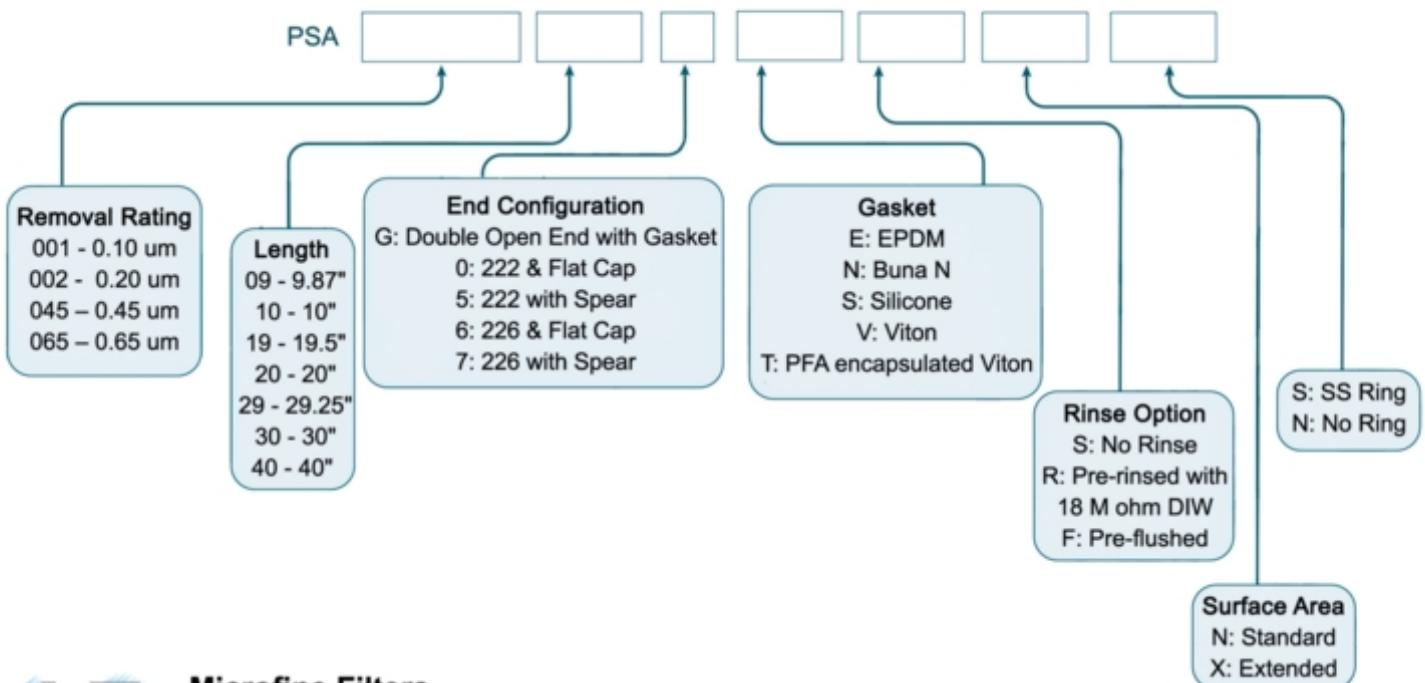
The Flow Rates vs Differential table represents typical pressure drop at 8 gallons per min flow across a single 10 in. cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

### Typical Flow Rates Vs Differential Pressure

Micron Rating		0.10 µm	0.20 µm	0.45 µm	0.65 µm
Differential Pressure	psid	7.68	3.41	2.99	2.56
	bar	0.53	0.24	0.21	0.18

## Ordering Guide

Cartridge order numbers have several variables from pore size to end cap type. For example Symmetric PES Membrane, 0.2 Micron Rating, 20" Length, 222 Flat cap with Silicone O-Rings, No Rinse and Standard Surface Area, No SS Ring =PSS002200SSNN.



### Microfine Filters

For Technical queries, please drop us an email at: [technical@microfinefilters.com.tw](mailto:technical@microfinefilters.com.tw)

For all matters related to sales or distributorship please contact us at: [sales@microfinefilters.com.tw](mailto:sales@microfinefilters.com.tw)

For more details visit our website: [www.microfinefilters.com.tw](http://www.microfinefilters.com.tw)