

PSS03 Cartridge

(Pleated membrane cartridge)

The PSE cartridge series, which features a high particle-capturing performance and a long life, is newly enriched with 0.03μm cartridge.

Excellent performance in production lines requiring removal of ultra fine particles.

Features

1. Excellent collection performance

The internal dense layer unique to the PSE membrane effectively catches ultra fine particles of 0.03μm size.

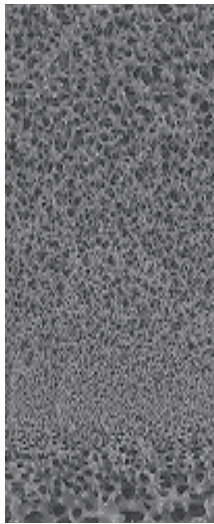
2. High flow rate

There is almost no reduction in the flow rate compared to the current 0.05μm cartridge.

3. Long life

A long life is realized due to the unique structure of the PSE membrane.

(Inlet side)



SEM photograph of the cross-section of a PSE membrane

(Outlet side)

Applications

Since the PSE membrane is being used, this cartridge is ideally suitable for production lines that require the removal of ultra fine particles such as the following.

- Final filtration of planting fluid, developing fluid, etc.
- Filtration of pure water or chemicals of the cleaning system in a wafer manufacturing process.

Performance Table

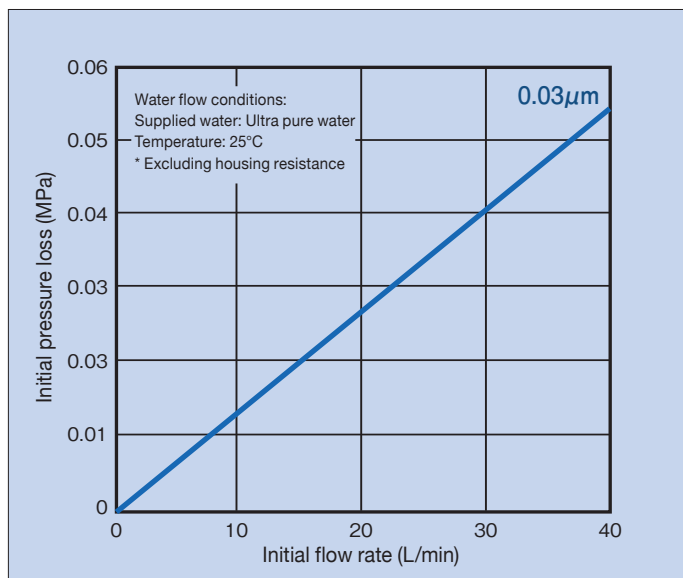
Parameter	Unit	Performance	Remarks
Pore size	μm	0.03	
Size	Length	—	(Note 1)
	Outer diameter	70	
Maximum pressure difference	25°C	MPa	0.54 (Positive pressure)
	25°C	MPa	0.34 (Back pressure)
Max heat resistance	°C	90	(Note 2)
Applicable pH range		1~14	(Note 3)

Note 1: See "Cartridge length"

Note 2: Continuously applied temperature

Note 3: In case of chemical fluid filtration, a pre-test should be formed under user's own condition.

Initial Flow Rate and Initial Pressure Loss



Cartridge Length (mm)

Shape	Length code	Total length
M type	S (Single)	264
	D (Double)	512
	T (Triple)	761
MP type	S (Single)	313
	D (Double)	561
	T (Triple)	810
P type	S (Single)	319
	D (Double)	568
	T (Triple)	816
PM type	S (Single)	264
	D (Double)	512
	T (Triple)	761

Chemical Resistance

The data presented below were obtained from 24-hours immersion at room temperature. Please check the chemical compatibility with respect to your actual operating conditions before use.

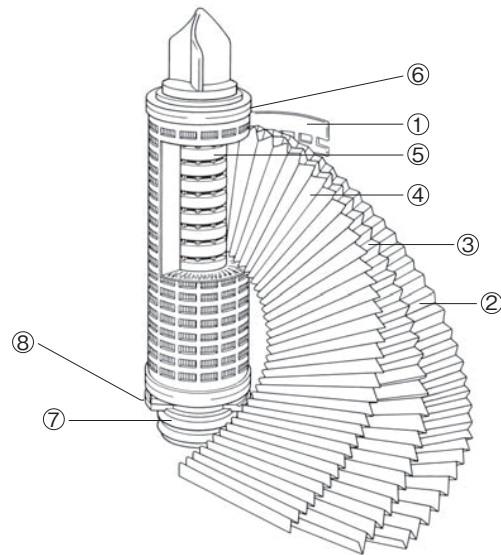
Classification	Chemicals	Compatibility
Hydrocarbon	Benzene	×
Halogenated hydrocarbon	Trichloro ethylene	×
Ether	Ethyl ether	×
Glycol	Propylene glycol	○
Alcohol	Methanol	○
	Ethanol	○
	Isopropanol	○
	Benzyl alcohol	×
Ketone	Acetone	×
Ester	Ethyl acetate	×
Others	Nitric acid (6 mol/L)	○
	Sulfuric acid (3 mol/L)	○
	Hydrochloric acid (6 mol/L)	○
	Sodium hydroxide (6 mol/L)	○
	Aqueous ammonia (1 mol/L)	○

○--- Compatible
 ×--- Incompatible

Construction and Materials

The polysulfone membrane is formed into pleats along with the polypropylene filter support and integrated into the cartridge structure by the thermal fusion bonding method. (Example: P type)

- (1) Guard — Polypropylene
- (2) Filter support (Inlet side) — Non-woven polypropylene fabric
- (3) Membrane filter — Polysulfone
- (4) Filter support (Outlet side) — Non-woven polypropylene fabric
- (5) Core — Polypropylene
- (6) End caps — Polypropylene
- (7) O-ring — EPDM (standard)
- (8) Reinforcing ring — Polysulfone



Product Code

PSSC 03 PP

Code	Shape
M	222 O-ring
MP	222 O-ring with fin
P	226 O-ring with (twist lock) fin
PM	226 O-ring

Code	Length
S	10 inches
D	20 inches
T	30 inches

Code	Package unit
1	1 unit
6	6 units
12	12 units (only Single)

Code	Product washed before shipping
W	Normally washed
WY	Fully washed

Code	O-ring material
None (standard)	EPDM
V	Viton
VB	Acid-proof Viton
CV	Teflon capsule Viton
SI	Silicone

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<http://www.fujifilm.com/products/microfilter/>

TEL: +81-3-6271-3008