Fujifilm Micro Filter

AstroPore

PPE Cartridge UXL Type

(Pleated membrane cartridge)

Suitable for the manufacturing of giant liquid-crystal display substrates
Extra high flow rate PPE cartridge filter compared with the conventional type

Optimized for the production of 8th- to 10th-generation large liquid-crystal display substrates

An extra high flow rate type PPE cartridge has been added to the PPE cartridge series, a series highly valued for both its highly efficient pre-filtration performance and chemical resistance. It supports the manufacturing of 8th- to 10th-generation LCD panels.

Major Applications

- For pre- and clarifying-filtration in the wet processes for extra large size LCD panels
- For high flow rate pre- and clarifying- filtration of various chemical fluid such as acid or alkaline chemicals, and reagents

Specific Features

1. Extra high flow rate

The cartridge realizes an extra high flow rate by the optimized design for filtration performance with large surface area of the filter.

2. Excellent clarifying-filtration performance

Compact non-woven fabric performs reliable clarifying filtration.

3. Excellent pre-filtration performance

Prior to the precise filtration by membrane filters, PPE cartridge effectively captures bulky impurities. It effectively sustains filtration systems for longer durations.

4. Remarkable chemical resistance

Since the PPE cartridge is made of polypropylene, it is stable against acids, alkalis, and various organic solvents.

Examples of the Capturing Efficiency

Unit: %

Article code	Capturing grade	Particle size (μm)			
		3.0	5.0	10.0	30.0
PPECJM025	2.5	99	—	—	—
PPECJM045	4.5	—	99	—	—
PPECJM100	10	—	—	99	—
PPECJM200	20	—	—	—	99

Measurement conditions (025 045) Test particles: ISO Fine Test Dust
Test liquid turbidity: 10 ppm Flow rate: 11.34 L/min
Measurement conditions (100 200) Test particles: ISO Medium Test Dust
Test liquid turbidity: 10 ppm Flow rate: 11.34 L/min

Flow Rate Characteristics (for each pore size cartridge)

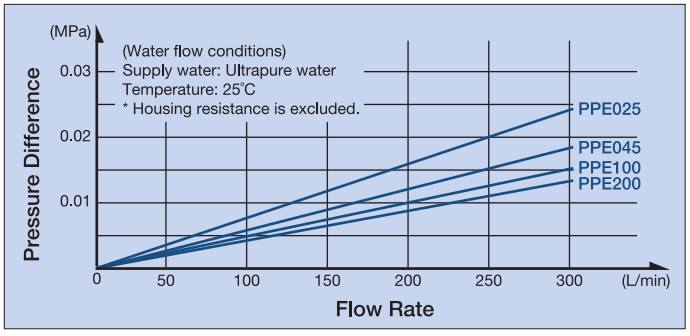


Table of Performance Characteristics

Item		Unit	Performance			
			PPE025	PPE045	PPE100	PPE200
Pore size		μm	2.5	4.5	10	20
Size	Length	mm	265			
	Outer diameter	mm	131			
Max. differential pressure (under positive pressure)	25°C	MPa	0.34			
Applicable pH range			1 ~ 14 (Note)			

(Note) In case of chemical fluid filtration, a pre-test should be performed under users' own condition.

[Materials]

Name of part	Material
Non-woven fabric	Polypropylene
Support	Polypropylene
Body	Polypropylene
O-ring	EPDM (Standard)

O-ring size JIS-P65 (AS568-334 or equivalent)

Product Codes

P P E C J M □ U X L S □ 1 — Package unit: One

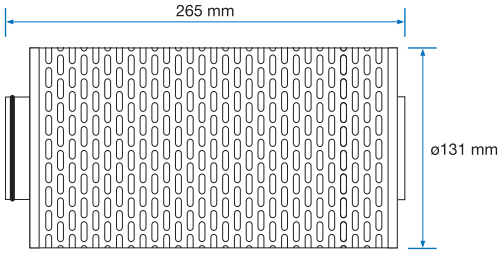
Capturing grade

025	2.5 μm
045	4.5 μm
100	10 μm
200	20 μm

O-ring material

None	EPDM
V	Viton
T	Teflon capsule Viton

Size



Applicable Housings

Two types of dedicated housing, specially designed to optimize the PPE cartridge performance, are available.

- FPSUX TE 1 (made of polypropylene)
- PS6LJM 1-1 50 FET 1 (made of stainless steel)