

PORFLUX II

Description

PORFLUX II pleated filter cartridge filters are designed for application where high flow rate and precise particles removal rating is required. This filters which is designed with 131mm out diameter have five times more filtration area comparison with normal filters.

Highly recommended for generation from 7 to 8 of PDP, LCD, AM-OLED(Active Matrix Organic Light-Emitting Diode), etc.



Features

- Suitable for 7~8 generation LCD
- Large filtration surface area
- High flow rate and efficiency
- Low maintenance cost
- Manufactured in clean room environment (class 1,000)

Applications

Electronic Industry	LCD, PDP, AM-OLED, photo-resist, etchant, developer, stripper
Film & Fiber Industry	Monomer, slurry additive, floppy disc coating, computer tape coating, audio and videotape
General Process Industry	Adhesive, automotive paint, Ink and dye, acid, base, and oxidant
Chemical & Petrochemical Industry	Monomer, polymer, glycol, mono-ethanol-amine and di-ethanol-amine for gas scrubbing, acid, base and product polishing, rinse and solvent
Pharmaceutical & Biological industry	Ointment, pure water for dialysis, diagnostic, LVPs, SVPs, tissue culture media, extraction chemicals, re-crystallization chemical, serum
Food & Beverage Industry	Corn syrup, edible oil, bottle water, beer, soft drink and distilled spirits, wine, beer, fruit Juice
General Water Process	DI water , process water
Gases Industry	Tank vents, compressed gases, sterile venting of holding tanks, sterile CO ₂

Specifications

Dimension & Structure	Length	10" inch / 250 mm (nominal)
	ID	52 mm
	OD	131 mm
	Effective filtration area	PP : 1.4 ~ 2.1m ² , PES : 1.9 ~ 2.1m ² , PTFE : 2.1 ~ 2.6m ²
Materials of Construction	Filtration media	Polypropylene, PES, PTFE, PP membrane, Fiber glass
	Support layers	Polypropylene, polyester
	Core & case	Polypropylene
	O-rings	Silicone, EPDM, Viton, TEV
Operating Conditions	Maximum differential pressure	30 psid / 2.1 bar at 60 °C 60 psid / 4.2 bar at 30 °C
	Maximum operating temperature	176 °F / 80 °C

Liquid Particle Removal Ratings

Polypropylene micro fiber	Absolute : 0.6, 0.8, 1, 5, 10, 20 Nominal : 0.2, 0.45, 1, 3, 5, 10, 30
PES Membrane	0.04, 0.1, 0.2, 0.45, 0.6, 0.8, 1.2
PTFE Membrane	0.05, 0.1, 0.2, 0.45, 0.7, 1, 3, 5
PP Membrane	0.1, 0.2
Fiber glass	0.45, 1, 5, 10

(Polypropylene nominal)

Removal Rating (μm)	$\beta = 1,000$ 99.90 %	$\beta = 100$ 99.00 %	$\beta = 10$ 90.00 %
0.2	2.1	< 0.89 *	< 0.24 *
0.45	4.4	2.3	< 0.51 *
1	10	3.9	< 0.87 *
3	15	7.5	2.86
5	24	11.8	4.65
10	32	15.5	8.75
30	40.85	34	28.7

* Extrapolated value

Bubble Point for 10 inch Cartridge (Single layer) - PES membrane

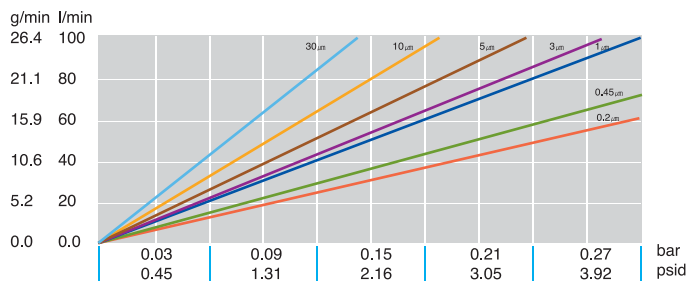
Pore size (μm)	0.04	0.1	0.2	0.45	0.6	0.8	1.2
Bar	> 1.9	> 1.6	> 3.1	> 1.9	> 1.2	> 0.7	> 0.55
Psi	> 27.4	> 23.0	> 44.8	> 27.4	> 19.2	> 15.5	> 9.8
Measured	In IPA			In Water			
Retention of bacteria (log.red.value)	6			6			
Bacteria	Acholeplasma laid lawii		Brevundimonas diminuta	Serratia marcescens	Sacch cerevisiae		

Bubble Point for 10 inch Cartridge (Single layer) - PTFE membrane

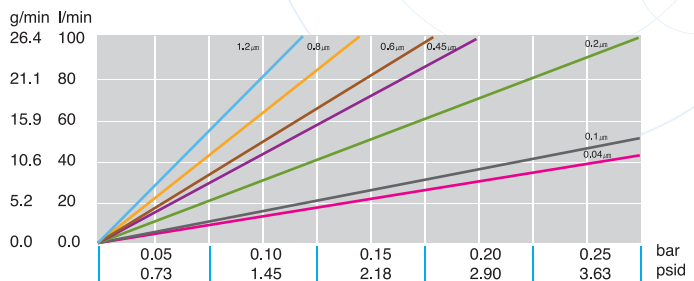
Pore size (μm)	0.05	0.1	0.2	0.45	0.7	1.0	3.0	5.0
Bar	> 1.8	> 1.2	> 0.9	> 0.3	> 0.21	> 0.18	-	-
Psi	> 25.9	> 17.2	> 12.9	> 1.3	> 3.0	> 2.8	-	-
Measured	In IPA							
Retention of bacteria (log.red.value)	11		11		11		11	
Bacteria	Acholeplasma laid lawii		Brevundimonas diminuta		Serratia marcescens		Sacch cerevisiae	

Pressure Drop vs. Water Flow Rate

(Polypropylene nominal)



(PES membrane)



(PTFE membrane)

