

# PES Membrane Filter Cartridge

## Features

- ◇ PES membrane with excellent hydrophilization
- ◇ Mirrored asymmetric structure
- ◇ Polyethersulfone membrane is a permanent hydrophilic membrane without additives, surface active agents or post-treatments
- ◇ The highly porous asymmetric membrane ensures lower pressure drop and extended service life
- ◇ Manufactured under sterile conditions, high clean cartridge
- ◇ Assurance of product integrity and effectiveness in operation. End caps and connectors sealed by thermal bond, free of binder



## Applications

- ◇ Terminal fine filtration of DI water
- ◇ Filtration of photoelectric industry of clean and rinse
- ◇ Fine chemicals

- ◇ BOE, photoresists of filtration
- ◇ Terminal fine filtration of DI water system
- ◇ Terminal fine filtration of food and beverage

## Specifications

Membrane	Polyethersulfone hydrophilic membrane
Support	High Strength Polypropylene
Micron rating	0.04, 0.1, 0.2, 0.45, 0.65, 1.2 and Other Micron
ID / OD	28mm / 64mm ; 28mm / 69mm / 28mm / 80mm

## Integrity Test

Product Code	Micron Rate	Bubble Point Test (psi)	Diffusion Rate Test	
			Flow Rate (c.c./ min)	Pressure (psi)
PES-004	004	45	≤25	65
PES-010	0.1	33	≤40	65
PES-020	0.2	37	≤35	30
PES-045	0.45	30	≤20	24
PES-065	0.65	17	≤20	13

## Operating Conditions

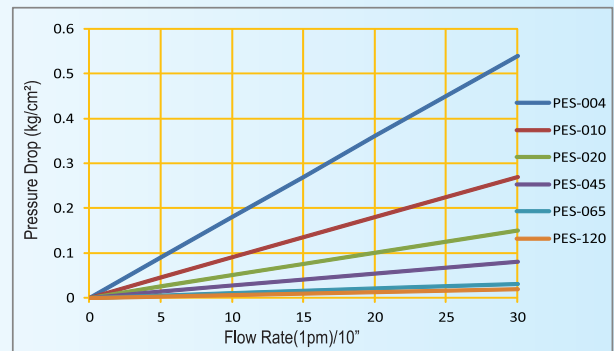
Max. operating forward pressure	80°C : 1.7kg / cm <sup>2</sup>
	20°C : 5.5kg / cm <sup>2</sup>
Max. operating temperature	80°C / 176°F
Filtration Area	PESN ≥ 0.55 m <sup>2</sup>
	PES ≥ 0.98 m <sup>2</sup>
	PESE ≥ 0.92 m <sup>2</sup>

Sterilization: Autoclave: 121°C / 30 min ≥ 10 times  
 Steam: 121°C / 30 min ≥ 10 times  
 Hot water: 80°C / 30min ≥ 30 times

Bubble Point Test Liquid : IPA: Water = 60 : 40

## Initial Pressure Drop

Flow vs. Differential Pressure



## Product Code

**PES** — **010** — **E** — **0** — **1** — **A** — **B**

OD	Micron Rate	Gasket	Ending Cap	Length	Pre - wet	Integrity Test
Blank : OD 69 mm N : OD 64mm E : OD 80 mm	004 : 0.04 micron 010 : 0.1 micron 020 : 0.2 micron 045 : 0.45 micron 065 : 0.65 micron 120 : 1.2 micron *Other micron	No Symbol : No Gasket A : EVA E : EPDM N : Buna N S : Silicone V : Viton T : Teflon Encapsulated Viton	No Symbol=DOE F : DOE 0 : 222 Flat 5 : 222 Fin 6 : 226 Flat 7 : 226 Fin A : 213 B : 213 Flat C : 213 Fin	1 : 10" 2 : 20" 3 : 30" 4 : 40" S : Customized Length (mm)	A : Non Pre-wet B : Pre-wet	A : Non Integrity Test B : Integrity Test