

CES Type (Polyethersulfone Membrane)

The CES cartridges are hydrophilic membrane filters, constructed of Polyethersulfone media and polypropylene components. The CES cartridges are suitable for the filtration of liquids in the food/beverage and chemical industries

Features

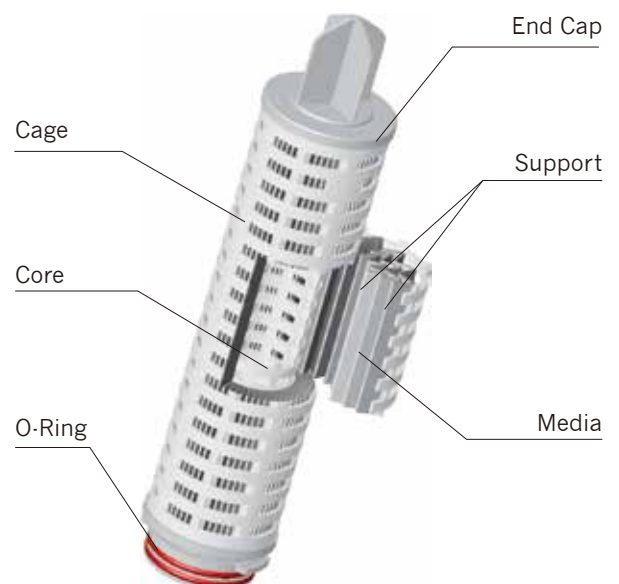
- Structured of asymmetrical membrane, the CES cartridges provide longer service life and higher flow rates
- All CES cartridges are integrity tested and flushed with electronic grade DI water prior to shipment, which provides high reliability
- The CES cartridges can be used for the filtration of aqueous solutions without hydrophilic treatment, since the Polyethersulfone media has an inherent hydrophilic radical
- The CES cartridges are constructed using thermal bonding, thus the extractables of the cartridges are minimal
- The CES cartridges have the superior durability while repeated at SIP (steam sterilization) and CIP sanitization (sodium hydroxide 3%, 80°C)



Major Applications

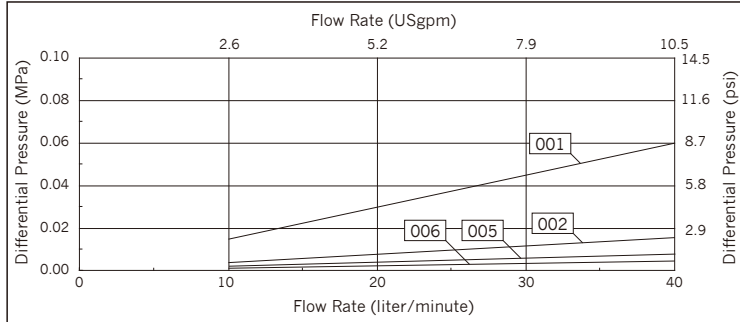
- Mineral water
- Beer
- Wine
- Syrup
- Flavor and Fragrance
- Vinegar
- Ultra pure water
- Chemicals
- Others

Materials of Construction



Differential Pressure vs Flow Rate

Fluid: Refined Water 20°C (68°F)
Cartridge Length: 250mm



※The data do not include piping pressure drop.

*The above data are based on our test condition, and are not guaranteed value.

Bacteria Challenge Test

CES Filter Cartridge (LRV)

Grade	Biological Indicator	LRV
001	Brevundimonas diminuta	>11
002	Brevundimonas diminuta	>11
005	Lactobacillus brevis	>11
	Alicyclobacillus acidoterrestris	>11
006	Lactobacillus brevis	8

Ordering Information

250 L - CES - 002

S

7

B

[Nominal Length]
125 = 125mm
250 = 250mm
500 = 500mm
750 = 750mm

[Product Type]

[Micron Rating]
001 = 0.1μm
002 = 0.2μm
005 = 0.45μm
006 = 0.65μm

[Gasket/O-Ring]
S = Silicone
E = EPDM
N = NBR
V = FKM
T = FEP Encapsulated FKM (for 0, 5, 7)
PTFE (for F)

[End Cap Code]
F = Flat Gaskets
O = 2-222 O-Ring
5 = 2-222 O-Ring+Fin
7 = 2-226 O-Ring+Fin

[Packaging Code]
A = 1pc
B = 6pcs
C = 10pcs
F = 25pcs

Specification

Product Type		CES			
Grade		001	002	005	006
Micron Rating (μm)		0.1	0.2	0.45	0.65
E.F.A. (m ² /250L)		0.75			
Dimensions	Length (mm)	125 / 250 / 500 / 750			
	O.D. (mm)	70.0			
	I. D. (mm)	26.1 (for F) / 25.6 (for 0, 5) / 30.0 (for 7)			
Materials Media	Media	Polyethersulfone (PES) Membrane			
	Support	Polypropylene			
	Core	Polypropylene			
	Cage	Polypropylene			
	End Cap	Polypropylene			
Gasket/O-Ring		Silicone / EPDM / NBR / FKM / FEP Encapsulated FKM (for 0, 5, 7) / PTFE (for F)			
Maximum ΔP at 20°C (68°F)		0.49MPa (71psi)			
Maximum Operating Temp		80°C (176°F)			
Applicable Sterilization ※1		CIP / In-Line-Steam Sterilization / Autoclave			
Hot water sanitization		90°C (194°F)×30min×150cycle			
In-line steam sterilization		135°C (275°F)×30min×50cycle			
Adaptable Food Sanitation Standard		All raw materials meet the requirement of FDA 21 CFR			

※1 Applicable to Only code 7 with silicone O-Rings

※If you need further information on specifications (length, end cap type, etc.), please contact us.

The products are manufactured under control by the quality management system registered as conforming to the ISO9001 standard.



Scope: Manufacture of Filter cartridges

End Cap Code



*The contents of the catalog is subject to change without notice.