

# Filtration - Capsule Filters

Membrane Solutions

## Lab Filtration

Syringe Filter

Membrane Filter

Vacuum Filter

Microbiology Test

Special Paper

## Lab Instrument

Sample Vials

Cell Culture

Bottles and Tubes

Plates

Others

## Industry Liquid Filtration

Cartridge Filters

Membrane Media

Liquid Filter Bag

**Capsule Filter**

PES Capsule Filter

PTFE Capsule Filter

PP Capsule Filter

Nylon Capsule Filter

MCE Capsule Filter

Capsule Filter OEM

## Capsule Filters



MS® capsule filters are designed for critical, small volume filter applications in the coatings, fine chemicals, pharmaceuticals and microelectronics markets. They contain pleated, absolute-rated, filter media providing excellent retention of particles at fast flow rate. polypropylene construction offers superior chemical resistance and durability in demanding process applications.

Considering different applications require specific filtration devices for different needs, customizing is our mainly service on this iter. Welcome to tell us your requirements, and we will design unique device for you.

Type	Dimension(mm)
<a href="#">PES</a>	Ø67×90M Ø65×46H Ø75×165M Ø67×112M
<a href="#">PTFE</a>	Ø67×90M Ø65×46H Ø75×165M Ø67×112M
<a href="#">PP</a>	Ø67×90M Ø67×112M
<a href="#">Nylon</a>	Ø67×90M Ø65×46H Ø75×165M Ø67×112M
<a href="#">MCE</a>	Ø67×112M

For other products

Dimension(mm)	Connection	Available Material
<a href="#">Ø67×90M</a>	1/4" MNPT	PP, Nylon, PES
<a href="#">Ø65×46H</a>	3/8" HOSEBARB	PP, Nylon, PES
<a href="#">Ø65×46M</a>	3/8" MNPT	PP, Nylon, PES
<a href="#">Ø75×165M</a>	1/2" MNPT	PP, Nylon, PES
<a href="#">Ø67×112M</a>	1/4" MNPT	PP, Nylon, PES, PTFE

## Features

- Purification for various chemical material and medicament.
- Filtration for high additional liquid, Small flux liquid and precious metal.
- Filtration for strong corrosive solvent and gas filtration.
- Filtration for pharmaceutical industry, chemical industry and biotechnology.
- The filter material can be Nylon, PES, PP, PTFE, MCE.
- Different pore size of 0.1µm, 0.22µm, 0.45µm, 0.8µm, 1.0µm, 3.0µm, 5.0µm are all available.

# Filtration - Capsule Filters

## Capsule Filters



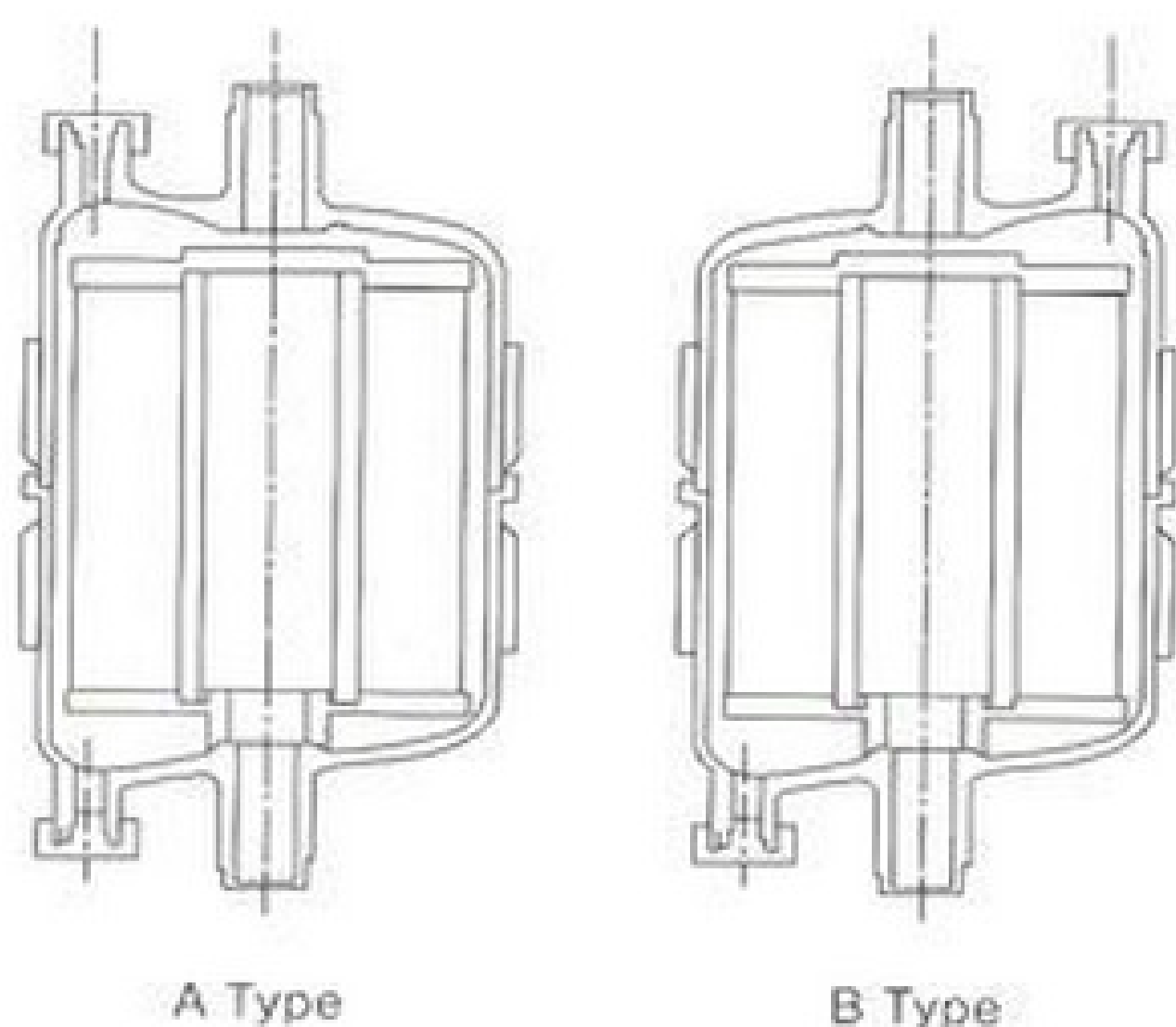
### Features

- Easy to use, Efficient, Suited for use on small to medium scale production lines
- Tapered Pore Medium
- Fixed Pore Structure
- No housing required
- Without any pre-treatment, because all the product have been
- No solids unloading or media migration
- Manufactured in clean room (Class 1,000)
- Negligible level of extractables
- ISO 9001, ISO 14001 Certified Quality System

### Application

- General Service : rinse water, reverse osmosis system pre-filtration, etc.
- General Process Industries : electroplating solutions, metal etching solutions, automotive paints, coatings, etc.
- Electronic Industries : D.I. Water pre-filtration, bases, etc.
- Food & Beverage : potable liquid, wine, beer, soft drink, flavors, storage tank/reactor vents, edible oils, etc.
- Cosmetics : oils, lotions, creams, shampoos, body rinses, etc.
- Power Generation Industries : makeup water, laundry drain wastewater, etc.

### Capsule Type



A Type

B Type

### Specifications

- Dimensions  
Outer(mm) :  $\varnothing 72$       Length : 139mm  
Connector : PT 1/4 inch
- Removal Ratings  
SPZN™ (Nominal Grade) : 0.2, 0.45, 1  $\mu\text{m}$   
SPZA™ (Absolute Grade) : 0.6, 1.2, 2.5, 4.5, 10  $\mu\text{m}$   
SPZES™ : 0.1, 0.2, 0.45, 1.2  $\mu\text{m}$   
SPZPTH™ : 0.1, 0.2, 0.45, 1, 3, 10  $\mu\text{m}$   
SPZPT™ : 0.1, 0.2, 0.45, 1, 3, 10  $\mu\text{m}$   
SPZN™ : 0.1, 0.2, 0.45  $\mu\text{m}$
- Materials  
Filter Medium  
: SPZN™ (Polypropylene), SPZA™ (Polypropylene),  
SPZES™ (PES Membrane), SPZPTH™ (Hydrophilic  
PTFE Membrane), SPZPT™ (Hydrophobic PTFE Membrane),  
SPZN (Nylon 66)  
Support & Drain layer : Polypropylene  
Core, Cage, End Cap, Shell : Polypropylene
- Operating Condition  
Maximum Operating Temperature : 80°C  
Maximum Differential Pressure / Temperature  
: 4.0kgf/cm<sup>2</sup> (60psid) at 40°C

### Ordering Information

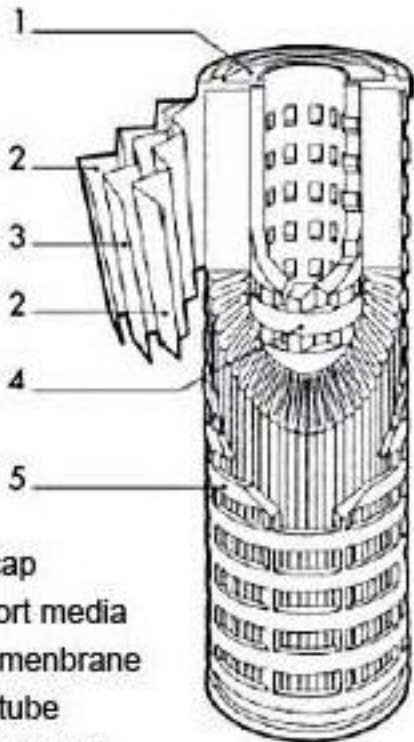
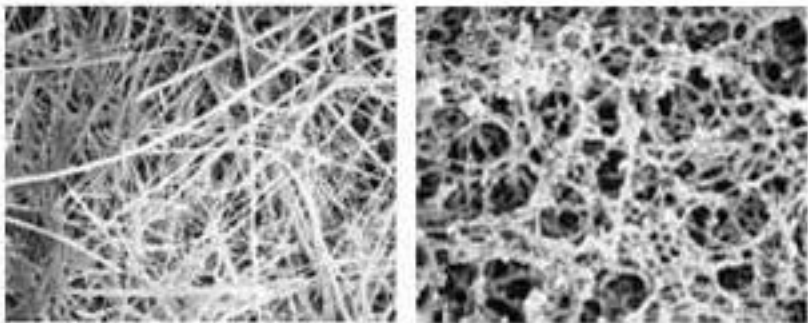


MS® Cartridge Filter

Membrane Solutions cartridge filters are simply quality filters, well packaged, and offered at a fair and competitive price. The Classic range is available in all of the major membranes including Nylon, PVDF PTFE, PES, MCE and PP which comes in various sizes for filtration volumes of a few liters to several hundred thousand liters.

Cartridge filters are specially designed and developed for bioburden reduction and sterilization of liquids in SVP, LVP, Sterile API, Fermentation and Vaccine manufacture.

Despite the attractive pricing, the emphasis is very much on quality. Membrane materials are supplied by the best names in the industry and the ISO9000 certified manufacturing is carried out to the highest standards, in certified clean room conditions, using the latest manufacturing technology to ensure a high quality, consistent product.



- 1. End cap
- 2. Support media
- 3. Final membrane
- 4. Core tube
- 5. Outer sleeve

Order Information:

PP Cartridge Filter	Nylon Cartridge Filter	PES Cartridge Filter	Size (Length)	Connect Type	O-Ring
CRPP005022HB	CRNL00502266	CRPES005022HL	5"	DOE 222/Flat 226/Flat 222/Fin 226/Fin	EPDM Siticone Viton
CRPP010022HB	CRNL01002266	CRPES010022HL	10"		
CRPP020022HB	CRNL02002266	CRPES020022HL	20"		
CRPP030022HB	CRNL03002266	CRPES030022HL	30"		
CRPP040022HB	CRNL04002266	CRPES040022HL	40"		

PTFE Cartridge Filter	PVDF Cartridge Filter	MCE Cartridge Filter	Size (Length)	Connect Type	O-Ring
CRPTFE005022GS	CRPVDF005022HB	CRMCE005022HL	5"	DOE 222/Flat 226/Flat 222/Fin 226/Fin	EPDM Siticone Viton
CRPTFE010022GS	CRPVDF010022HB	CRMCE010022HL	10"		
CRPTFE020022GS	CRPVDF020022HB	CRMCE020022HL	20"		
CRPTFE030022GS	CRPVDF030022HB	CRMCE030022HL	30"		
CRPTFE040022GS	CRPVDF040022HB	CRMCE040022HL	40"		



### MS® MCE Cartridge Filters



#### Description:

MCE Cartridges are made of Mixed Cellulose Ester with Uniform pore distribution to ensure maximum performance in Bacterial retentions. Its upstream & down stream polyester support ensure resistance to pressure shocks. Mixed Cellulose Ester membrane is hydrophilic in nature, it allows easy integrity testing for all applications where daily controls are required. The membrane possesses broad chemical compatibilities & contains no surfactants. MCE Cartridges are produced in controlled environments & under stringent production conditions that ensure filter quality & cleanliness. Their assembly is performed integrally by thermowelding. This process minimizes the presence of oxidization of substance & yield a durable filter cartridges suitable for extended use. This can be sanitizes by chemical agents or by inline steaming. MCE and polypropylene the unique two materials used in cartridge manufacturing are chemically inert not shedding and biologically safe according to F.D.A., USP and EEC requirements for pharmaceutical and food contact use. The filtration area of each cartridge is as high as 0.70 m<sup>2</sup>. Therefore it offers High flow rate, Low pressure drop & Long service life.

#### Technical Specifications:

##### Sizes

- 5", 10", 20", 30" and 40" Long

##### Micron Rating

- 0.1~5.0 Micron

##### Filtration Area

- More Than 0.7 m<sup>2</sup> Per 10" cartridge

##### Outer Diameter

- 70 mm

##### Inner Diameter

- 28 mm

##### Maximum Differential Pressure(25°C)

- Positive direction: 0.42Mpa
- Reverse direction: 0.21Mpa

##### Applicable PH value

- 3~7.5

##### Working Temperature & Differential Pressure

- ≤80°C(Differential Pressure:0.2 Mpa)

##### Construction

- Double Open Type (DOE Type)
- Code 7 F (226 O Ring Design)
- Code 7 S (226 O Ring Design/flat)
- Code 3 F (222 O Ring Design)
- Code 3 S (222 O Ring Design/flat)

##### Construction

- |                    |  |
|--------------------|--|
| • Filter Media     | 100 % MCE (Mixed Cellulose Ester) Membrane |
| • Support Media    | Polypropylene Fiber                        |
| • Inner Core       | High Strength Polypropylene                |
| • Outer Core       | High Strength polypropylene                |
| • End Caps         | High Strength Polypropylene                |
| • O Ring / Gaskets | EPDM / Buna N / Silicone / Viton           |

#### Features & Benefits:

- The membrane stack consists of MCE reinforced type micropore membrane and imported deflector layer.
- Better hydrophilicity; great water flux and better cutoff effect
- Small adsorbability
- Possessing better performance of high-temperature resistance
- Experiencing 100% integrity test before ex-factory
- Each Pharmaceutical Grade filter cartridge has been washed by injection water

#### Applications:

- |   |                              |
|---|------------------------------|
| • Great infusion for medical purpose        | • Food & Beverage etc        |
| • Variety of pure water and medicine liquid | • Filter for high pure water |
| • Terminal filter for mineral water         | • Much finer prefiltration   |
| • Pure water after reverse osmosis          |                              |





## Nylon Cartridge Filters



### Description:

Nylon cartridges are precisely manufactured for use in critical filtration applications within food, pharmaceuticals, biotech, dairy, beverages, brewing, semiconductor, water treatment & other demanding process industries. It's upstream & down stream polyester support ensure resistance to pressure shocks. Nylon membrane is hydrophilic in nature .The membrane possesses broad chemical compatibilities & contains no surfactants. Nylon Cartridges are produced in controlled environments & under stringent production conditions that ensure filter quality & cleanliness. Their assembly is performed integrally by thermowelding. This process minimizes the presence of oxidization of substance & yield a durable filter cartridges suitable for extended use. This can be sanitizes by chemical agents or by inline steaming. Nylon and polypropylene the unique two materials used in cartridge manufacturing are chemically inert not shedding and biologically safe according to F.D.A., USP and EEC requirements for pharmaceutical and food contact use. The filtration area of each cartridge is as high as 0.70 m<sup>2</sup>. Therefore it offers High flow rate, Low pressure drop & Long service life.

### Technical Specifications:

<b>Sizes</b>	<b>Working Temperature &amp; Differential Pressure</b>
• 5",10", 20",30" and 40" Long	• ≤80°C(Differential Pressure:0.2 Mpa)
<b>Micron Rating</b>	<b>Construction</b>
• 0.2~5.0 Micron	• Double Open Type (DOE Type)
<b>Filtration Area</b>	• Code 7 F (226 O Ring Design)
• More Than 0.7 m <sup>2</sup> Per 10" cartridge	• Code 7 S (226 O Ring Design/flat)
<b>Outer Diameter</b>	• Code 3 F (222 O Ring Design)
• 70 mm	• Code 3 S (222 O Ring Design/flat)
<b>Inner Diameter</b>	<b>Construction</b>
• 28 mm	• Filter Media 100 %Nylon Membrane
<b>Maximum Differential Pressure(25°C)</b>	• Support Media Polypropylene Fiber
• Positive direction: 0.42Mpa	• Inner Core High Strength Polypropylene
• Reverse direction: 0.21Mpa	• Outer Core High Strength polypropylene
<b>Applicable PH value</b>	• End Caps High Strength Polypropylene
• 4~13	• O Ring / Gaskets EPDM / Buna N / Silicone / Viton

### Features & Benefits:

- The membrane stack consists of reinforced type nylon filter membrane and imported deflector layer
- The membrane is hydrophilic, has uniform pore size and good filter effect
- Possessing better performance high strength and alkali-resistance
- Experiencing 100% integrity test before ex-factory
- Each Pharmaceutical Grade filter cartridge has been washed by injection water
- Each Electronic Grade filter cartridge has been washed by ultra pure water

### Applications:

- Terminal filter for ultra pure water electronic industry
- Sterilization filtration for food, beverage and wine
- Drug liquid in medicine industry
- Much finer prefiltration





PTPE Cartridge Filters



Description:

PTFE Cartridges are made of polytetrafluoroethylene. PTFE are characterized by high chemical inertness. These are specifically designed for sterile filtration applications of Air & Gas Streams. They are certified bio safe, non pyrogenic & fully validated to pharmaceutical standard. PTFE and polypropylene the unique two materials used in cartridge manufacturing are chemically inert not shedding and biologically safe according to FDA, USP and EEC requirements for pharmaceutical and food contact use. PTFE Cartridge Membrane Is Used In Filtering The Highly Corrosive Solutions Such As Strong Such As Strong Acids, Bases Solution And Solvents. The membrane has about 80 – 95 % porosity & uniform pore size distribution. Moreover, the filtration area of each cartridge is as high as 0.7 m². Therefore it offers High flow rate, Low pressure drop & Long service life. These can be steam sterilize direct or reverse as per standard operating data.

Technical Specifications:

<b>Sizes</b>	<b>Applicable PH value</b>
• 5",10", 20",30" and 40" Long	• 1.0~14.0
<b>Micron Rating</b>	<b>Working Temperature &amp; Differential Pressure</b>
• 0.1~0.65 Micron	• ≤80°C(Differential Pressure:0.2 Mpa)
<b>Filtration Area</b>	Code 3 S (222 O Ring Design/flat)
• More Than 0.7m² Per 10" cartridge	<b>Construction</b>
<b>Outer Diameter</b>	• Filter Media 100 % PTFE (Poly Tetrafluoroethylene) Membrane
• 70 mm	• Support Media Polypropylene Fiber
<b>Inner Diameter</b>	• Inner Core High Strength Polypropylene
• 28 mm	• Outer Core High Strength polypropylene
<b>Maximum Differential Pressure(25°C)</b>	• End Caps High Strength Polypropylene
• Positive direction: 0.42Mpa	• O Ring / Gaskets EPDM / Buna N / Silicone / Viton
• Reverse direction: 0.21Mpa	

Features & Benefits:

- PTFE membrane has excellent chemical resistance
- End caps and connectors are sealed by thermal bond, free binder.
- Low pressure drop and high flow rate due to High Filtration area of 0.7m2 Per 10" cartridge
- Inherently Hydrophobic Expanded PTFE Micro Porous Membrane For Broad Chemical compatibility & to prevent moisture obstruction in venting & wet air filtration
- Absolute rated & precisely controlled pore size distribution for superior & constant bacterial retention
- Autoclave or in situ team sterilization features
- Integrity test is possible
- FDA Approved

Applications:

<b>Pharmaceuticals</b>	<b>Electronics Industries</b>
• Sterilization of Inlet & exhaust Flow	• Semi Conductors
• Vent Filter	• CD- R & DVD – R Factory
• Gas Purification (Like Nitrogen & Others)	• Fine Filtration of DI water
• Compressed Air (Sterile Grade)	• Photoelectron Chemical Filtration
• Acid / Solvents & Base Filtration	
• Wet Etching Process	
• Much firer prefiltration	



### PVDF Cartridge Filters



#### Description:

PVDF Cartridges are made of polyvinylidene Fluoride, PVDF are characterized by High protein binding, low extractable levels, wide chemical compatibility, and high chemical inertness. They are certified bio safe, non pyrogenic & fully validated to pharmaceutical standard. PVDF and polypropylene the unique two materials used in cartridge manufacturing are chemically inert not shedding and biologically safe according to FDA, USP and EEC requirements for pharmaceutical and food contact use. PVDF Cartridge Membrane is used In filtering the highly corrosive Solutions such as strong acids, bases solution and solvents. The membrane has about 80 – 95 % porosity & uniform pore size distribution. Moreover, the filtration area of each cartridge is as high as 0.7 m<sup>2</sup>. Therefore it offers High flow rate, Low pressure drop & Long service life. These can be steam sterilize direct or reverse as per standard operating data.

#### Technical Specifications:

##### Sizes

- 5", 10", 20", 30" and 40" Long

##### Micron Rating

- 0.2~5.0 Micron

##### Filtration Area

- More Than 0.7 m<sup>2</sup> Per 10" cartridge

##### Outer Diameter

- 70 mm

##### Inner Diameter

- 28 mm

##### Maximum Differential Pressure(25°C)

- Positive direction: 0.42Mpa
- Reverse direction: 0.21Mpa

##### Applicable PH value

- 1.0~14.0

##### Working Temperature & Differential Pressure

- ≤80°C(Differential Pressure:0.2 Mpa)

##### Configuration

- Double Open Type (DOE Type)
- Code 7 F (226 O Ring Design)
- Code 7 S (226 O Ring Design/flat)
- Code 3 F (222 O Ring Design)
- Code 3 S (222 O Ring Design/flat)

##### Construction

- |                    |  |
|--------------------|--|
| • Filter Media     | 100 % PTFE (Poly Tetrafluoroethylene) Membrane |
| • Support Media    | Polypropylene Fiber                            |
| • Inner Core       | High Strength Polypropylene                    |
| • Outer Core       | High Strength polypropylene                    |
| • End Caps         | High Strength Polypropylene                    |
| • O Ring / Gaskets | EPDM / Buna N / Silicone / Viton               |

#### Features & Benefits:

- The membrane stack consists of reinforced-type PVDF filter membrane and imported deflector layer, and possesses superior properties of heat- resistance and chemical-resistance.
- Hydrophobic membrane with small adsorption.
- Possessing better performance of oxidation resistance and heat-resistance and wide application Experiencing 100% integrity test before ex-factory .
- Each Pharmaceutical Grade filter cartridge has been washed by injection water; Each Electronic Grade filter cartridge has been washed by ultra pure water.

#### Applications:

- |  |   |
|--|---|
| • Sterilized gas filtration for food & beverage and wine;    | • Petrochemical industry;                                   |
| • High pure electronic chemical liquor;                      | • Sterilized transport of compressed air;                   |
| • Pharmaceutical;  | • Oxidizing gas and liquid;                                 |
| • Food, beverage and making wine;                            | • Fine filtration for solvent, liquor and printing ink etc; |
| • Filtration of gas with high and low temperature and steam; | • Much finer prefiltration                                  |



### PES Cartridge Filters



#### Description:

PES Cartridges are made of Poly EtherSulphone with Uniform pore distribution to ensure maximum performance in Bacterial retentions. Its upstream & down stream polyester support ensure resistance to pressure shocks. Polyethersulphone membrane is hydrophilic in nature, it allows easy integrity testing for all applications where daily controls are required. The membrane possesses broad chemical compatibilities & contains no surfactants. PES Cartridges are produced in controlled environments & under stringent production conditions that ensure filter quality & cleanliness. Their assembly is performed integrally by thermowelding. This process minimizes the presence of oxidization of substance & yield durable filter cartridges suitable for extended use. This can be sanitized by chemical agents or by inline steaming. PES and polypropylene the unique two materials used in cartridge manufacturing are chemically inert not shedding and biologically safe according to F.D.A., USP and EEC requirements for pharmaceutical and food contact use. The filtration area of each cartridge is as high as 0.56 m<sup>2</sup>. Therefore it offers High flow rate, Low pressure drop & Long service life.

#### Technical Specifications:

##### Sizes

- 5", 10", 20", 30" and 40" Long

##### Micron Rating

- 0.22, 0.45 Micron

##### Filtration Area

- More Than 0.56m<sup>2</sup> Per 10" cartridge

##### Outer Diameter

- 70 mm

##### Inner Diameter

- 28 mm

##### Maximum Differential Pressure(25°C)

- Positive direction: 0.42Mpa
- Reverse direction: 0.21Mpa

##### Applicable PH value

- 1.0~14.0

##### Working Temperature & Differential Pressure

- ≤80°C(Differential Pressure:0.2 Mpa)

##### Construction

- |                    |                                   |
|--------------------|-----------------------------------|
| • Filter Media     | PES (Poly Ethersulphone) Membrane |
| • Support Media    | Polyester Fiber                   |
| • Inner Core       | High Strength Polypropylene       |
| • Outer Core       | High Strength polypropylene       |
| • End Caps         | High Strength Polypropylene       |
| • O Ring / Gaskets | EPDM / Buna N / Silicone / Viton  |

#### Features & Benefits:

- The membrane stack consists of reinforced type nylon filter membrane and Imported deflector layer
- The membrane is hydrophilic, has uniform pore size and good filter effect
- Possessing better performance high strength and alkali-resistance
- Experiencing 100% integrity test before ex-factory
- Each Pharmaceutical Grade filter cartridge has been washed by injection water
- Each Electronic Grade filter cartridge has been washed by ultra pure water

#### Applications:

- Sterilization filtration in pharmaceutical and biological industry
- Sterilization filtration for drinking water, beverage, wine and various liquids
- Terminal filtration and point-of-use filtration for high pure water and deionized water
- Purification filtration for various chemical raw material and medicament
- Much finer prefiltration





PP Cartridge Filters



**Description:**  
Polypropylene filter cartridges are precisely manufactured for use in critical filtration applications within food, pharmaceuticals, biotech, dairy, beverages, brewing, semiconductor, water treatment & other demanding process industries.  
Polypropylene Pleated cartridges use the very latest gradient density micro fiber media technology to provide a combination of excellent micro ratings, high flow rates and high contaminant holding capacities. A special combination of polypropylene media with variation in the fiber diameter has created a gradient density matrix, ranging from open on the outside to finer on the inside. Thereby providing a filter with in filter, which considerably increases contamination holding capacity & throughputs.  
All components used in the manufacture are biologically safe, chemically inert and meet GMP and other international quality requirements. Polypropylene offers an extremely broad chemical compatibility making it suitable for many applications.

Technical Specifications:

- |  |  |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |
|--|--|----------------|-----------------------------------|-----------------|-----------------|--------------|-----------------------------|--------------|-----------------------------|------------|-----------------------------|--------------------|----------------------------------|
| <p><b>Sizes</b></p> <ul style="list-style-type: none"><li>• 5", 10", 20", 30" and 40" Long</li></ul> <p><b>Micron Rating</b></p> <ul style="list-style-type: none"><li>• 0.2~5.0 Micron</li></ul> <p><b>Filtration Area</b></p> <ul style="list-style-type: none"><li>• More Than 0.56m<sup>2</sup> Per 10" cartridge</li></ul> <p><b>Outer Diameter</b></p> <ul style="list-style-type: none"><li>• 70 mm</li></ul> <p><b>Inner Diameter</b></p> <ul style="list-style-type: none"><li>• 28 mm</li></ul> <p><b>Maximum Differential Pressure(25°C)</b></p> <ul style="list-style-type: none"><li>• Positive direction: 0.42Mpa</li><li>• Reverse direction: 0.21Mpa</li></ul> | <p><b>Applicable PH value</b></p> <ul style="list-style-type: none"><li>• 3~7.5</li></ul> <p><b>Working Temperature &amp; Differential Pressure</b></p> <ul style="list-style-type: none"><li>• ≤80°C(Differential Pressure:0.21 Mpa)</li></ul> <p>Code 3 S (222 O Ring Design/flat)</p> <p><b>Construction</b></p> <table border="0"><tr><td>• Filter Media</td><td>PES (Poly Ethersulphone) Membrane</td></tr><tr><td>• Support Media</td><td>Polyester Fiber</td></tr><tr><td>• Inner Core</td><td>High Strength Polypropylene</td></tr><tr><td>• Outer Core</td><td>High Strength polypropylene</td></tr><tr><td>• End Caps</td><td>High Strength Polypropylene</td></tr><tr><td>• O Ring / Gaskets</td><td>EPDM / Buna N / Silicone / Viton</td></tr></table> | • Filter Media | PES (Poly Ethersulphone) Membrane | • Support Media | Polyester Fiber | • Inner Core | High Strength Polypropylene | • Outer Core | High Strength polypropylene | • End Caps | High Strength Polypropylene | • O Ring / Gaskets | EPDM / Buna N / Silicone / Viton |
| • Filter Media   | PES (Poly Ethersulphone) Membrane  |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |
| • Support Media  | Polyester Fiber  |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |
| • Inner Core   | High Strength Polypropylene  |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |
| • Outer Core   | High Strength polypropylene  |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |
| • End Caps   | High Strength Polypropylene  |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |
| • O Ring / Gaskets   | EPDM / Buna N / Silicone / Viton   |                |                                   |                 |                 |              |                             |              |                             |            |                             |                    |                                  |

Features & Benefits:

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• All Polypropylene Construction</li><li>• Absolute &amp; Nominal Efficiency</li><li>• 0.1 to 40 Micron Ratings</li><li>• Gradient Density Micron Fiber Media</li><li>• High Surface Area more than 0.5 m<sup>2</sup></li><li>• Robust Outer Cage</li></ul> | <ul style="list-style-type: none"><li>• Biologically Safe</li><li>• Wide Compatibility</li><li>• Non Fibber Migration</li><li>• Thermally Welded Construction</li><li>• FDA Approved Filters</li><li>• End connections to fit all standard housings</li></ul> |
|---|---|

Applications:

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"><li>• <b>Fine Chemicals and Pharmaceuticals</b><ul style="list-style-type: none"><li>D.I. Water</li><li>R.O. Pre filtration</li><li>Biological Fluids</li><li>Oral Drugs</li><li>Ophthalmic Liquids</li></ul></li><li>• <b>Photographic Film &amp; Paper</b><ul style="list-style-type: none"><li>Anti-Halation Coatings</li><li>Developer Chemicals</li><li>Emulsions</li><li>Gelatins</li></ul></li></ul> | <ul style="list-style-type: none"><li>• <b>Beverages</b><ul style="list-style-type: none"><li>Wine</li><li>Alcohols</li><li>Fruit Juice</li><li>Beer</li></ul></li><li>• <b>Electronic and Semi-Conductor</b><ul style="list-style-type: none"><li>De-ionized Water Prefiltration</li><li>Photoresists</li><li>Magnetic tapes</li></ul></li></ul> | <ul style="list-style-type: none"><li>• Metal Oxide Dispersions</li><li>• Premix Resins</li><li>• Solvents</li><li>• Tape Coatings</li></ul> |
|---|---|--|