PP Filter Cartridge

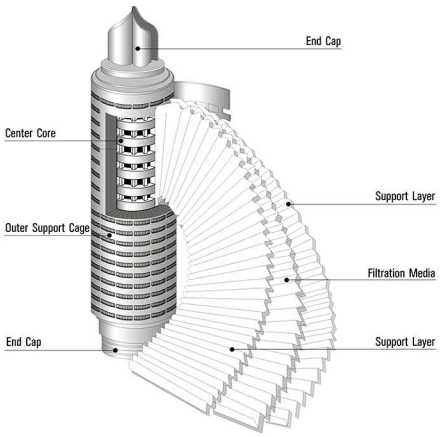
INTRODUCTION

[Filtration Media]: PP (polypropylene)
[Support Layer]: Non-Woven Fabric
[Outer Support Cage]: PP (polypropylene)
[Center Core]: Polypropylene/316L stainless steel
[End Cap]: Polypropylene/polypropylene + stainless steel
[O-Rings/Gaskets]: Silicone rubber/EPDM rubber/nitrile rubber/fluororubber
[Connection process]: Sealed by hot melt welding, no adhesive
[Typical applications]: Seawater RO pretreatment, condensate filtration, food and beverage industry, biopharmaceutic al industry, microelectronics industry, chemical industry, petroleum industry

PRODUCT FEATURES

- Made of multi-layer polypropylene ultrafine fiber filter material, no fiber shedding
- Large membrane filtration area, large dirt holding capacity
- With gradient pore size and high-strength support layer
- High particle interception rate, protecting the terminal filter element from sterilization
- Low pressure difference, long service life
- Wide chemical compatibility

PRODUCT STRUCTURE DIAGRAM

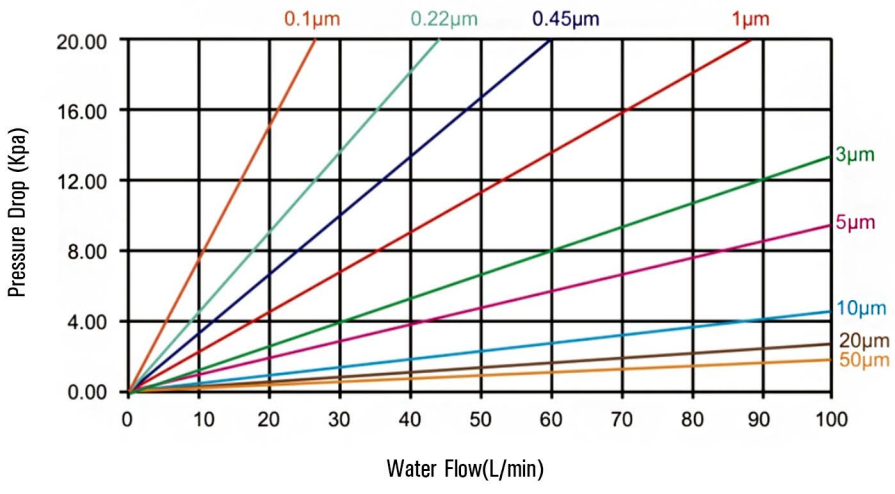


Made from **100%** polypropylene,
All materials comply with **CFR 21** requirements

PP FILTER CARTRIDGE SPECIFICATIONS

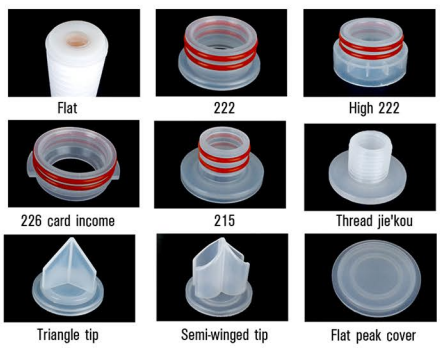
Product Size	Filtration accuracy: 0.1um,0.22um,0.45um,1um,3um,5um,10um,20um,50um
	Length: 10-70 inches (20-40 inches can be made into one piece)
	Diameter: OD.60mm,64mm,68mm,84mm,131mm (Error ±1) ID.28mm
End Cap Type	Port type: 215,222,High 222,226,Triangle tip,Semi-winged tip,Flat peak cover,Flat
Operating Conditions	Normal operating temperature: ≤55°C
	Temperature(max): 80°C, △P≤0.10Mpa
	Differential Pressure (max): 25°C, △P≤0.42Mpa
Note	Stainless steel insert option required for all cartridges being hot water sanitized or steam sterilized

PURE WATER FLOW RATE TEST DATA



END CAP DISPLAY

Commonly used interfaces are as follows, other models are welcome to consult.



PES Filter Cartridge

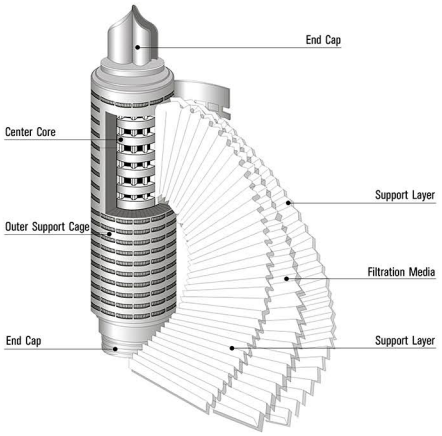
INTRODUCTION

[Filtration Media]: PES (Polyethersulfone)
[Support Layer]: Non-Woven Fabric
[Outer Support Cage]: PP (polypropylene)
[Center Core]: Polypropylene/Polyethersulfone
[End Cap]: Polypropylene/polyvinylidene fluoride
[O-Rings/Gaskets]: Silicone rubber/EPDM rubber/nitrile rubber/fluororubber
[Connection process]: Sealed by hot melt welding, no adhesive
[Typical applications]: Pharmaceutical industry, food and beverage， biotechnology and life sciences，water treatment， electronics and semiconductor manufacturing， chemical industry

PRODUCT FEATURES

– High flow rate and low pressure difference
– Excellent microbial retention capacity
– Large membrane filtration area, large dirt holding capacity
– Wide chemical compatibility, suitable for treating a variety of aqueous or non-aqueous liquids
– Uniform pore size, excellent filtration efficiency
– No additives, low precipitates
– Naturally hydrophilic, excellent hydrophilic properties

PRODUCT STRUCTURE DIAGRAM



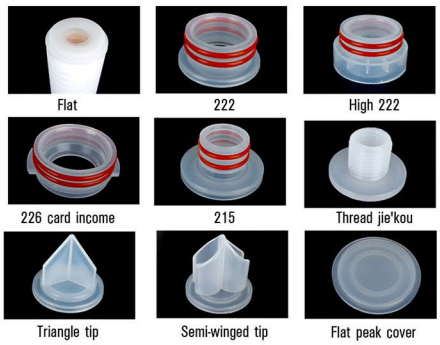
Filtration media is **100%** made of Polyethersulfone, All materials comply with **CFR 21** requirements

PES FILTER CARTRIDGE SPECIFICATIONS

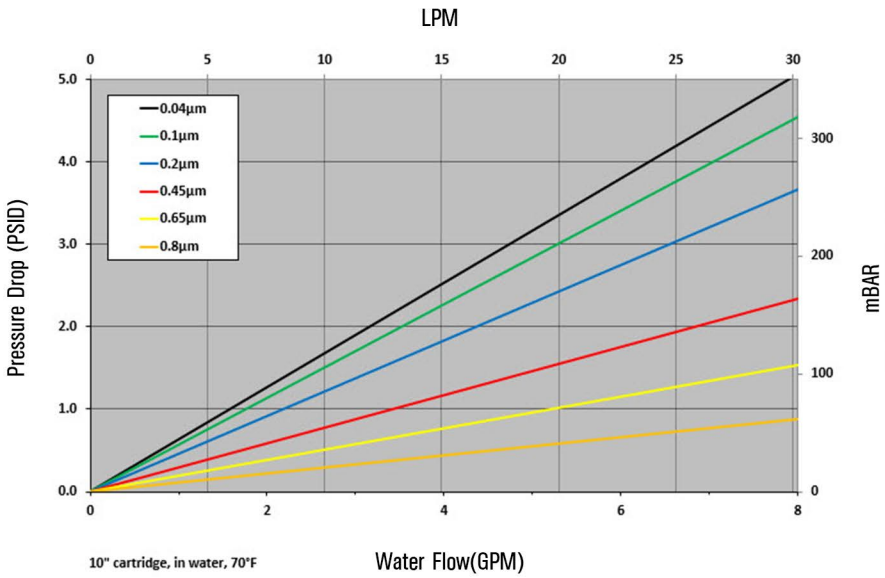
Product Size	Filtration accuracy: 0.04um,0.1um,0.2um,0.45um,0.65um,0.8um
	Length: 10-70 inches (20-40 inches can be made into one piece)
	Diameter: OD.60mm,64mm,68mm,84mm,131mm (Error ±1) ID.28mm
End Cap Type	Port type: 215,222,High 222,226,Triangle tip,Semi-winged tip,Flat peak cover,Flat
Operating Conditions	Normal operating temperature: ≤80°C
	Temperature(max): 80°C, △P≤0.20Mpa
	Differential Pressure (max): 25°C, △P≤0.5Mpa
Note	All filter elements must be sterilized with hot water or steam, and stainless steel linings can be selected as required

END CAP DISPLAY

Commonly used interfaces are as follows, other models are welcome to consult.



PURE WATER FLOW RATE TEST DATA



NMO Filter Cartridge

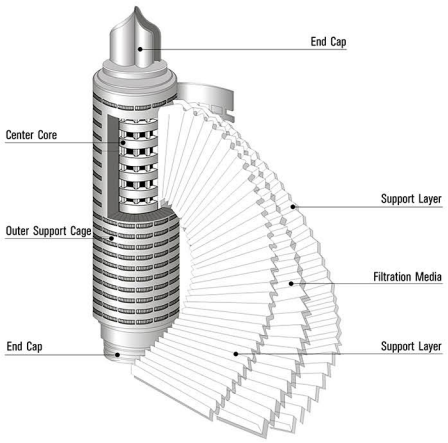
INTRODUCTION

[Filtration Media]: NMO (nylon)
[Support Layer]: Non-Woven Fabric
[Outer Support Cage]: PP (polypropylene)
[Center Core]: Polypropylene/316L stainless steel
[End Cap]: Polypropylene/polyvinylidene fluoride
[O-Rings/Gaskets]: Silicone rubber/EPDM rubber/nitrile rubber/fluororubber
[Connection process]: Sealed by hot melt welding, no adhesive
[Typical applications]: Ink and coating filtration, industrial water treatment, food and beverage processing, chemical industry, automotive painting and electrophoresis process, oil recovery and liquid reuse

PRODUCT FEATURES

- Symmetrical hole shape, uniform hole diameter.
- Wide range of filtration accuracy, providing multiple filtration levels.
- High strength, tear resistance, good pressure resistance
- Nylon monofilament has good mechanical strength, the filter element is not easy to break or deform.
- Good chemical compatibility, resistant to most neutral aqueous solutions, oils and other industrial liquids.
- High flow rate, low pressure drop.

PRODUCT STRUCTURE DIAGRAM



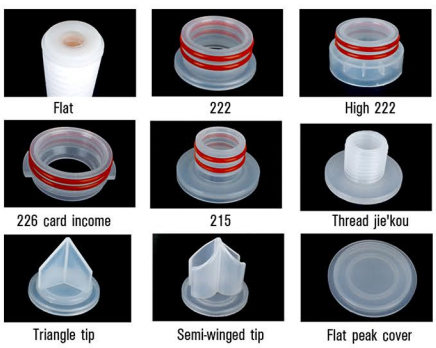
Filtration media is **100%** made of nylon,
All materials comply with **CFR 21** requirements

NMO FILTER CARTRIDGE SPECIFICATIONS

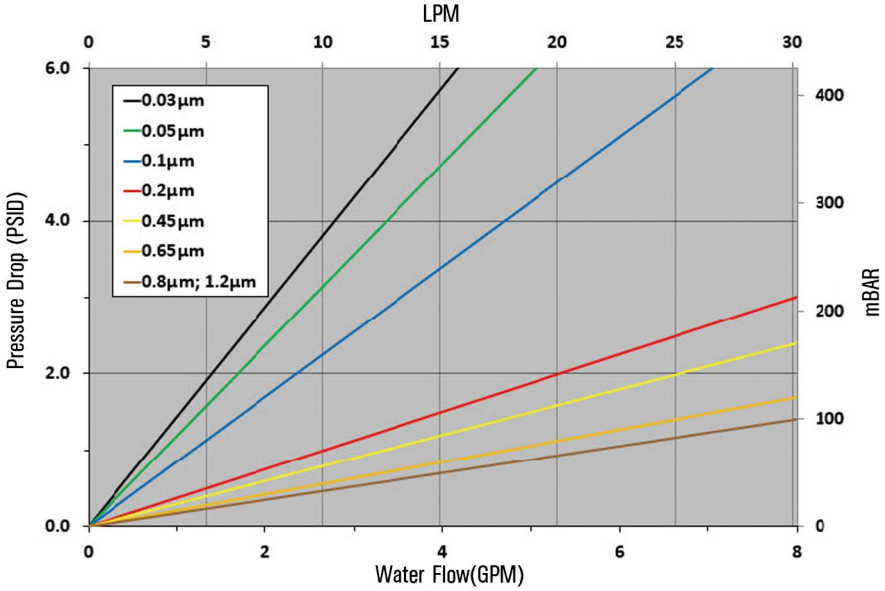
Product Size	Filtration accuracy: 0.03um,0.05um,0.1um,0.2um,0.45um,0.65um,0.8um,1.2um
	LLength: 10-70 inches (20-40 inches can be made into one piece)
	Diameter: OD.60mm,64mm,68mm,84mm,131mm (Error ±1) ID.28mm
End Cap Type	Port type: 215,222,High 222,226,Triangle tip,Semi-winged tip,Flat peak cover,Flat
Operating Conditions	Normal operating temperature: ≤80°C
	Temperature(max): 80°C, △P≤0.10Mpa
	Differential Pressure (max): 25°C, △P≤0.55Mpaar
Note	Stainless steel insert option required for all cartridges being hot water sanitized or steam sterilized

END CAP DISPLAY

Commonly used interfaces are as follows, other models are welcome to consult.



PURE WATER FLOW RATE TEST DATA



PTFE Filter Cartridge

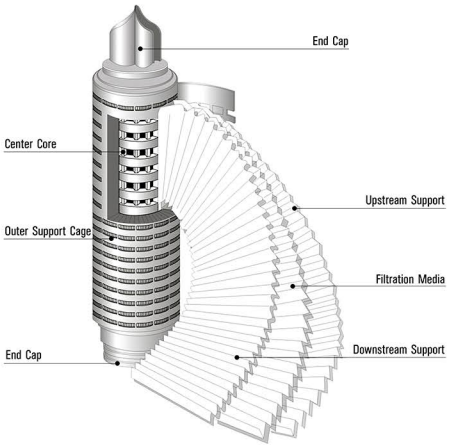
INTRODUCTION

[Filtration Media]: Hydrophilic PTFE/ Hydrophobic PTFE
[Support Layer]: Non-Woven Fabric
[Outer Support Cage]: PP (polypropylene)
[Center Core]: Polypropylene/316L stainless steel
[End Cap]: Polypropylene/polypropylene + stainless steel
[O-Rings/Gaskets]: Silicone rubber/EPDM rubber/nitrile rubber/fluororubber/teflon rubber
[Connection process]: Sealed by hot melt welding, no adhesive
[Typical applications]: Pharmaceutical industry, food and beverage industry, chemical industry, electronics industry, water treatment industry, ink filtration

PRODUCT FEATURES

- Tolerant to strong acids, strong alkalis and organic solvents
- High temperature resistance and corrosion resistance
- High strength and toughness, long service life
- High filtration efficiency and high retention rate
- Hydrophobic PTFE filter element is mainly used for gas filtration
- Hydrophilic PTFE filter element is mainly used for liquid filtration

PRODUCT STRUCTURE DIAGRAM



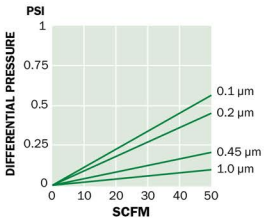
Filtration Media is **100%** made of PTFE ,
All materials comply with **CFR 21** requirements

PP FILTER CARTRIDGE SPECIFICATIONS

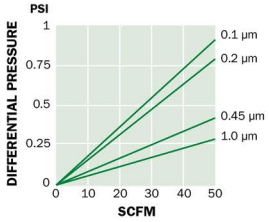
Product Size	Filtration accuracy: 0.1um,0.22um,0.45um,1um
	Length: 10-70 inches (20-40 inches can be made into one piece)
	Diameter: OD.60mm,64mm,68mm,84mm,131mm (Error ±1) ID.28mm
End Cap Type	Port type: 215,222,High 222,226,Triangle tip,Semi-winged tip,Flat peak cover,Flat
Operating Conditions	Normal operating temperature: Liquid. 90°C, Gas. 100°C
	Temperature(max): Liquid.80°C, △P≤0.30Mpa Gas.100°C, △P≤0.20Mpa
	Differential Pressure (max): 25°C, △P≤0.55Mpa
Note	Stainless steel insert option required for all cartridges being hot water sanitized or steam sterilized

FLOW VS. PRESSURE DROP

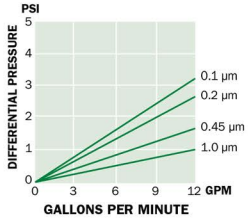
Air Flow Rate
System pressure at 30 psig, 65 °F (18 °C)



Air Flow Rate
System pressure at <10 psig (vent), 65°F(18°C).
Outlet open to atmosphere.



Water Flow Rate
This chart represents the typical water flow per 10" cartridge length.



Integrity Testing

PORE SIZE	AIR DIFFUSION RATE
0.1µm	<50cc/min@18 psig (1.2 bar)
0.2µm	<20cc/min@12 psig (0.8 bar)
0.45µm	<15cc/min@5 psig (0.34 bar)
1.0 µm	<15cc/min@3 psig (0.2 bar)

Per 10" length with 60/40 IPA/water wetted membrane

END CAP DISPLAY

Commonly used interfaces are as follows, other models are welcome to consult.