

FILTER CARTRIDGE CATALOGUE

2025

EDITION FOR
REDAWATER GROUP



MELT BLOWN FILTER CARTRIDGE



[Product Description]

Melt blown filter cartridges are tubular filter cartridges made of non-toxic, odorless PP particles after heating, melting, spinning, drawing and forming. If the raw material is mainly PP, it is called as PP melt blown filter cartridge. Melt blown filter cartridge are not only used in large quantities for water purification, but also have excellent chemical compatibility suitable for the filtration of strong acids, strong bases and organic solvents. It has great dirt holding capacity, long service life and low production cost. In addition, melt blown filter cartridges are high quality and are available at an affordable price. We have a variety of product models. All our raw materials are scientifically tested and play an important role in filtration.

[Benefits]

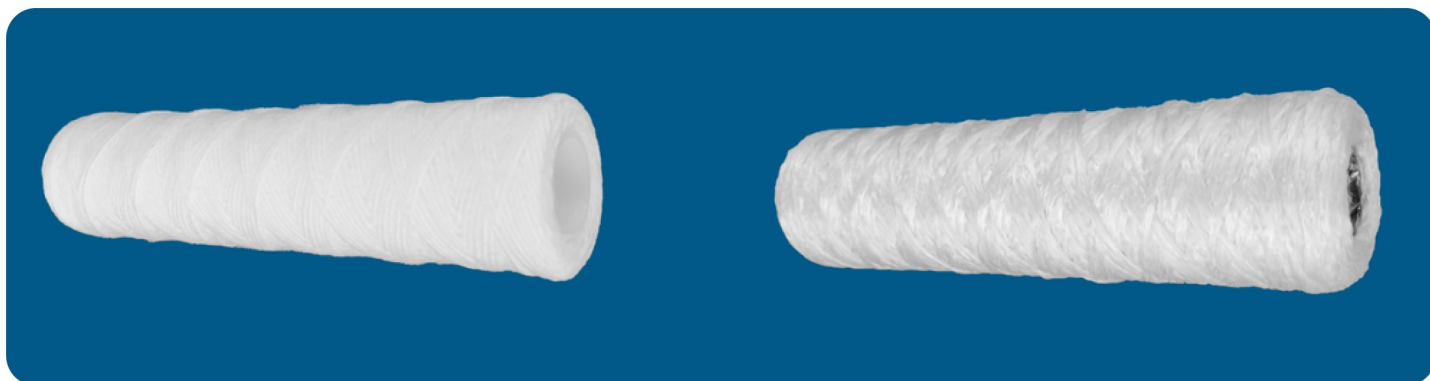
- High filtration efficiency, accurate filter rating, uniform filter cartridge pores. Up to 85% filtration efficiency.
- Low filtration resistance, high flow, high dirt holding capacity and long service life. During the production process, the fiber diameter and gap are adjustable. The filter cartridge pore is small in inner layers and large in outer layers, which enhances its flow and dirt holding capacity and makes the filter cartridge is not easily clogged, thereby extending its service life.
- High cleanness, no pollution to water quality, great resistant to acids, bases, organic solvents and corrosion.
- High strength. When the differential pressure between the filter inlet and outlet exceeds 0.4 MPa, the filter cartridge will not deform; when the temperature is greater than 90 °C, the filtration efficiency will be significantly reduced.
- It has high hydrophilicity after PP treatment and can absorb 10 times the weight of water, so it can be used in oil and water separation applications.

[Application]

- Microelectronics: electroplating liquids, cleaning fluids, chemicals, solvents
- Food & beverage: soft drinks, alcoholic beverage, bottled water
- Petrochemicals: oilfield flooding, fine chemicals, acid-base solvents
- Biological medicine: eye drops, oral liquids and medicament prefiltration
- Water treatment: RO systems, seawater desalination, tap water prefiltration
- Drinking water: water purifiers, water dispensers, filters

Filter rating	1, 5, 10, 25, 50, 75, 100 µm
pH range	1-13
Differential pressure	Positive, 0.4 MPa
Operating temperature	At 0.25 MPa, < 70 °C
Endotoxin	The Water extract of filtration column shall be tested by IAL and the endotoxin content shall not be lower than 0.5 EU/ml.

STRING WOUND FILTER CARTRIDGE



[Product Description]

String wound filter cartridge is a kind of filter cartridge for depth filtration at low viscosity and low impurity content conditions. It is made of textile fiber yarn (polypropylene yarn, skim cotton yarn, etc.). These yarns are precisely wound on the porous skeleton (PP or stainless steel) to form a honeycomb structure that is loose outside and dense inside. As a result, it offers excellent filtration and absorption performance and can effectively remove suspended solids, fine particles, rust and other impurities from fluids. String wound filter cartridges are high quality and are available at an affordable price.

[Benefits]

High filtration accuracy, low differential pressure, high flow, high dirt holding capacity and long service life.

Filter pores are small inside and large outside to offer good depth filtration effect.

Filter cartridges are made of various materials to meet the filtration requirements of various liquids and achieve an ideal filtration effect.

[Application]

- Microelectronics: electroplating liquids, cleaning fluids, chemicals, solvents
- Food & beverage: soft drinks, alcoholic beverage, bottled water
- Petrochemicals: oilfield flooding, fine chemicals, acid-base solvents
- Biological medicine: eye drops, oral liquids and medicament prefiltration
- Water treatment: RO systems, seawater desalination, tap water prefiltration
- Inks & paints: inks, ink-jet printers, paints, coatings

Outer dimensions	10", 20", 30", 40"
Microns	1 µm, 3 µm, 5 µm, 10 µm, 20 µm, 30 µm, 50 µm, 70 µm, 100 µm
Temperature resistance	Plastic skeleton polypropylene yarn core: 70 °C; Stainless steel skeleton polypropylene yarn core: < 90 °C; Stainless steel skeleton absorbent cotton yarn core: <120 °C.
Flow rating	Take filter cartridge with a length of 10" at a differential pressure of 0.02 MPa and media is clear water at room temperature as an example. Filter rating (µm): 1, 3, 5, 10, 20, 30, 50 High flow rating (m³/h) 0.3, 0.4, 0.5, 1.1, 1.5, 2, 2.5

PP PLEATED FILTER CARTRIDGE



[Product Description]

PP pleated filter cartridge is made of ultra-fine PP fiber membrane and non-woven fabric or woven nets, inner and outer support layers by pleating. The cage, core and end cap are fabricated by thermal bond technology. It contains no adhesive, no leakage and no secondary pollution. The pleated design offers a large membrane filter area, high dirt holding capability, low differential pressure and long service life. The whole filter cartridge is made of 100% pure PP to offer a wide range of chemical compatibility.

[Advantages]

Pure PP filter material.

Wide range of chemical compatibility, pH 1–14 resistance, high flow, low differential pressure and long service life.

Wide range of filter ratings for your option to meet the demands of various applications.

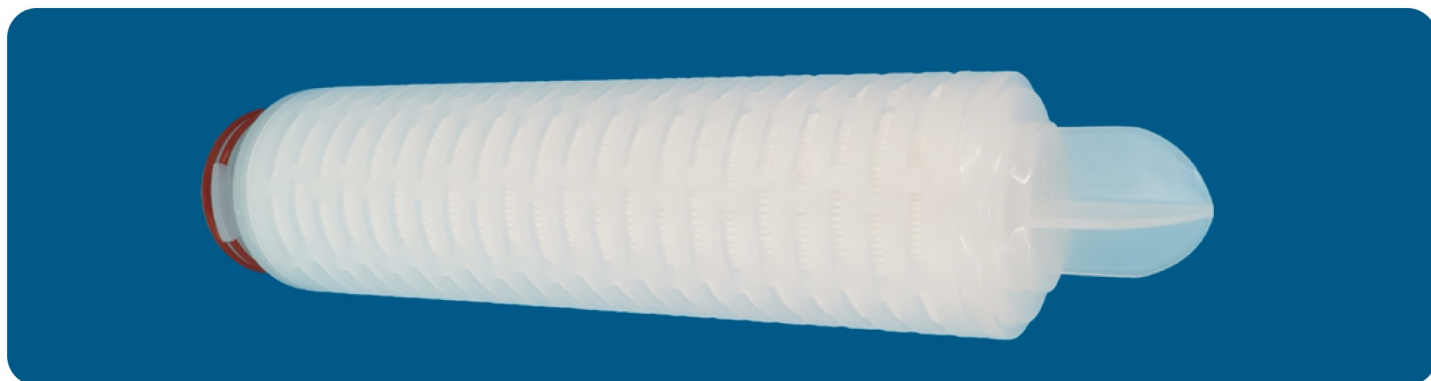
Thermal bond technology, firm structure and no foreign matter release.

[Application]

- Chemicals: organic solvent and ink filtration.
- Electronics: reverse osmosis water system prefiltration, deionized water system prefiltration.
- Gas filtration: compressed air, nitrogen and carbon dioxide filtration.
- Others: Filtration of electroplating fluids, metal cutting fluids, photoresist and magnetic media, etc.

Filter rating	0.1, 0.22, 0.45, 1, 3, 5, 10, 20, 30, 50 µm
Length	5", 10", 20", 30", 40"
Diameter	OD: φ68 mm; ID: φ28 mm
Connection type	215 222 226 M30 M36

PES PLEATED FILTER CARTRIDGE



[Product Description]

PES series filter cartridge is constructed of hydrophilia asymmetric PES membrane and non-woven fabric and woven nets as support layer by pleating. The cage, core and end cap are fabricated by thermal bond technology. No adhesives are used and the whole production process is finished in clean rooms. 100% integrity tests are performed and are washed by high purity water. It is suitable for filtering weak acid solutions, weak base solutions and high purity water.

[Benefits]

Asymmetric membrane structure.

100% filter cartridge integrity test.

Good hydrophilia filter membrane, high flow, evenly distributed pores.

Asymmetric membrane structure enhances the dirt holding capacity of the filter cartridge and extends its lifespan.

No adhesive or surfactant is used to effectively reduce the risk of precipitation.

[Specification]

Product dimensions [OD]: $\Phi 69$ mm
[Length]: 10", 20", 30", 40"

Construction material [Media]: Asymmetric PES membrane
[Support/drainage layer]: PP
[Cage/core/end cap]: PP

Technical data [Max. operating temperature]: 80 °C
[Max. operating differential pressure]: 4 bar@21 °C
2.4 bar@80 °C

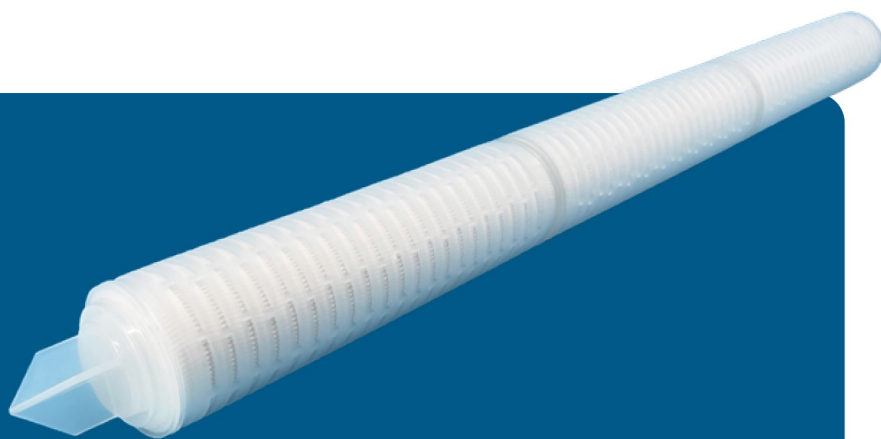


[Application]

- Pharmaceuticals
- Food & beverage

- Microelectronics
- Fine chemicals

HYDROPHILIC PTFE PLEATED FILTER CARTRIDGE



[Product Description]

Hydrophilic PTFE pleated filter cartridge is constructed of hydrophilic PTFE membrane. It has excellent chemical compatibility and corrosion resistant capability. It can filter aqueous solutions without pre-wetting due to its hydrophilic nature, which greatly saves the operating time and cost.

[Benefits]

PTFE membrane has great chemical compatibility and good tolerance to various feed liquids and can filter various strong corrosive liquids.

It has good resistance to various chemicals and can be used to filter corrosive liquids such as etching and stripping liquids.

PTFE membrane provides high filtration efficiency to ensure the removal of impurity particles.

100% filter cartridge integrity test

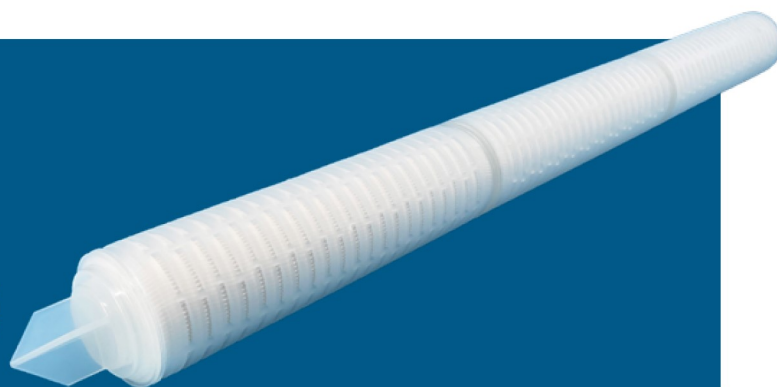
[Specification]

Product dimensions	[OD]: $\Phi 69$ mm	Technical data	[Max. operating temperature]: 80 °C
	[Length]: 10", 20", 30", 40"		[Max. operating differential pressure]: 4 bar@21 °C 2.4 bar@80 °C
Construction material	[Media]: hydrophilic PTFE membrane		
	[Support/drainage layer]: PP		
	[Cage/core/end cap]: PP		
	[Seal material]: MVQ, EPDM, NBR, FPM, Teflon rubber, Teflon-coated FPM		

[Application]

- Pharmaceuticals
- Food & beverage
- Microelectronics
- Fine chemicals

HYDROPHOBIC PTFE PLEATED FILTER CARTRIDGE



[Product Description]

Hydrophobic PTFE filter cartridge is constructed of hydrophobic PTFE membrane to offer great chemical compatibility and corrosion resistant capability. It is suitable for filtering strong corrosive and oxidizing liquids and gases.

[Benefits]

PTFE membrane has great chemical compatibility and good tolerance to various feed liquids and can filter various strong corrosive liquids and gases.

Good resistance to impact and back pressure, and can withstand repeated high temperature steam sterilization.

Made of bonded PTFE and PP, no adhesive, clean and stable.

Suitable for pharmaceutical industry with high requirements.

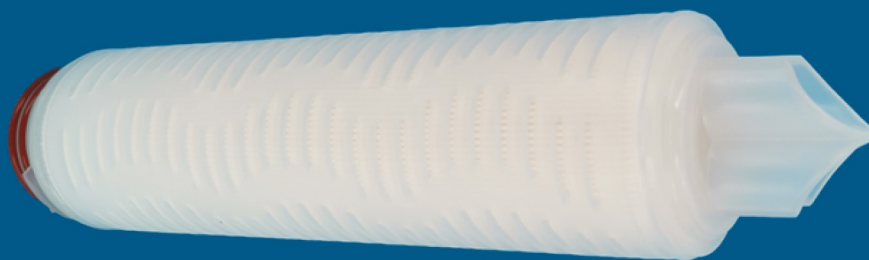
[Specification]

Product dimensions	[OD]: $\Phi 69$ mm	Technical data	[Max. operating temperature]: 80 °C
	[Length]: 10", 20", 30", 40"		[Max. operating differential pressure]: 4 bar@21 °C 2.4 bar@80 °C
Construction material	[Media]: Hydrophobic PTFE membrane		
	[Support/drainage layer]: PP		
	[Cage/core/end cap]: PP		
	[Seal material]: MVQ, EPDM, NBR, FPM, Teflon rubber, Teflon-coated FPM		

[Application]

- Sterile storage tank respirator, air fermentation tank filtration;
- Solvent filtration: various esters such as butyl acetate and ethyl acetate, and various alcohols such as acetone and dimethyl sulfoxide
- Sterilization and filtration of compressed air and nitrogen
- Suitable for pharmaceuticals, microelectronics, food & beverage, fine chemical, etc.

NYLON PLEATED FILTER CARTRIDGE



[Product Description]

Nylon membrane filter cartridge takes nylon microfiltration membrane as filter material. We have 0.1µm, 0.22µm, 0.45µm, 1µm and 5µm pore sizes for you to choose from. Thermal bond technology is adopted, no adhesives and no foreign matter falling off. Every filter cartridge must pass integrity test to ensure the stability of the product performance. In addition, nylon membrane filter cartridges are high quality and are available at an affordable price.

[Benefits]

Nylon membrane is hydrophilic and no pre-wetting is required.

Uniform pores and great flexibility and effectively ensure the retention capability of the filter cartridge to meet the application requirements of fine filtration.

It has great chemical compatibility and is compatible with various chemical reagents, and can withstand 50% H₂O₂ and 6% bleaching agent.

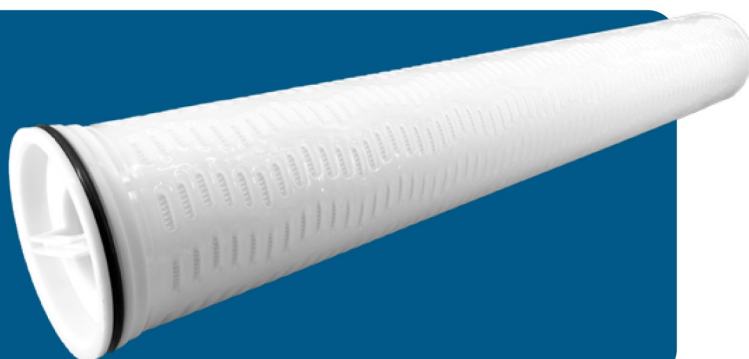
It features no fiber shedding and low precipitation matters and complies with the application requirements of pharmaceutical and chemical industries.

[Application]

- The filtration of electronics, microelectronics, semiconductors and other industrial water
- The filtration of solvent solutions
- The filtration of high purity chemical products
- The filtration of beer, mineral water and beverage

Filter rating	0.1, 0.22, 0.45, 1, 5 µm
Filter media	Nylon microfiltration membrane
Support/drainage	PP
Cage/core/end cap	PP
Seal method	Thermal bond
Effective filter area	≥0.60 m ² / 10"
Filter cartridge diameter	69.0 mm

HFSW1 HIGH FLOW FILTER CARTRIDGE



[Product Description]

HFSW1 high flow filter cartridge is constructed of deep fine polypropylene or glass fiber membrane as filter media, with a large diameter of 6 inches / 152 mm, with center tube and one-way opening. It is specially designed to flow the liquid from inside to outside to ensure that all contaminant particles are trapped inside the cartridge. The extra high flow design allows for a significant reduction in the number of cartridges and filters used in the same flow rate applications, greatly saving equipment input costs and labor costs.

[Benefits]

Large effective filter area, low pressure drop and high flow.

Made of deep fine membrane material, its scientifically designed multi-layer gradient pore sizes enables the filter cartridge featuring high dirt holding capacity and reduced user costs.

Filter rating ranges from 1 µm to 100 µm to meet different filtration requirements. 20", 40" and 60" are available in length.

[Specification]

Product dimensions

[OD]: 6" (152mm); [ID]: 3" (76mm)

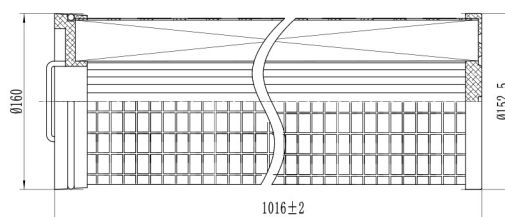
[Length]: 20", 40", 60"

Construction material

[Media]: PP

[Cage/core/end cap]: PP

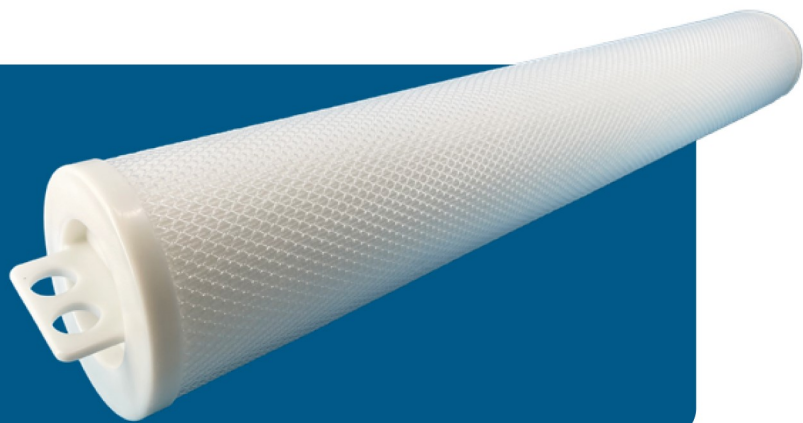
[Seal material]: EPDM(Normal), Silicone rubber, fluororubber, NBR(Normal)



**PALL type High Flow Filter Cartridge
Outside View**

Model	Filter rating (µm)	Size	Max. flow rating	End Cap	Note
HFSW1 - 20	1,5,10,25,50,100	20" (without core)	15 m³/h		Max. pressure difference 1.5bar, < 80°C
HFSW1 - 20C	1,5,10,25,50,100	20" (with core)	15 m³/h		
HFSW1 - 40	1,5,10,25,50,100	40" (without core)	30 m³/h		
HFSW1 - 40C	1,5,10,25,50,100	40" (with core)	30 m³/h		
HFSW1 - 60	1,5,10,25,50,100	60" (without core)	45 m³/h		
HFSW1 - 60C	1,5,10,25,50,100	60" (with core)	45 m³/h		

HFSW2 DOUBLE SEAL TYPE HIGH FLOW FILTER CARTRIDGE



[Product Description]

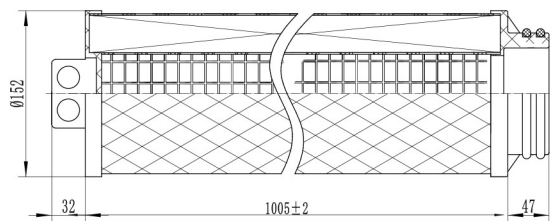
HFSW2 Double Seal high flow filter cartridge is a replacement cartridge for the depth filtration and other 2-1/2" diameter cartridges for the high flow applications, such as reverse osmosis pre-filtration and similar applications that nominal efficiency can meet corresponding requirements. The flow rate of 60" filter cartridge is as high as 60 m³/h, which significantly reduce the number of filter cartridges and housing dimensions.

The treatment capacity of a HFSW2 Double Seal filter cartridge is equivalent to that of 10 pcs filter cartridges with an outer diameter of 2-1/2" and a length of 40".

[Benefits]

- High dirt holding capacity, longer service life.
- Less cartridge changes out to save the labor cost.
- O-ring design causes no bypass to ensure the filtration efficiency.
- Easy handling results in less manpower.
- Wide chemical compatibility for different applications.

[Outline Drawing]



Parker type High Flow Filter Cartridge (double O rings)

[Specification]

Product dimensions

[OD]: 6" (152mm); [ID]: 100mm



[Length]: 20", 40", 60"

Construction material

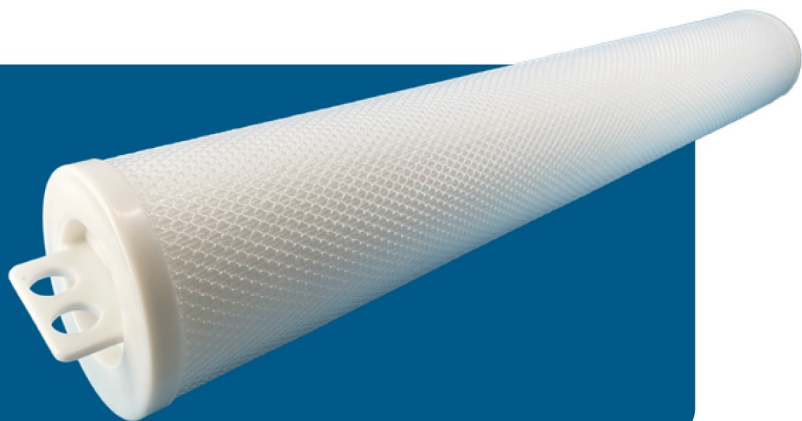
[Media]: PP

[Cage/core/end cap]: PP

[Seal material]: EPDM(Normal), Silicone rubber, fluororubber, NBR(Normal)

Model	Filter rating (µm)	Size	Max. flow rating	End Cap	Note
HFSW2 - 20C	1,5,10,15,20, 40,70,100	20" (with core)	20 m ³ /h		Max. pressure difference 1.2bar, < 80°C
HFSW2 - 40C	1,5,10,15,20, 40,70,100	40" (with core)	40 m ³ /h		
HFSW2 - 60C	1,5,10,15,20, 40,70,100	60" (with core)	60 m ³ /h		

HFSW3 SINGLE SEAL TYPE HIGH FLOW FILTER CARTRIDGE



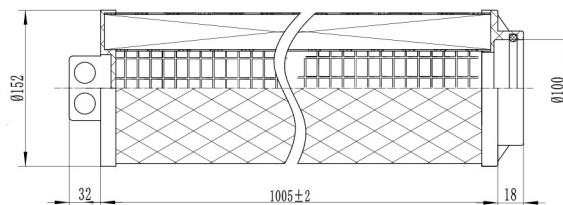
[Product Description]

HFSW3 Single Seal high flow filter cartridge is a replacement cartridge for the depth filtration and other 2-1/2" diameter cartridges for the high flow applications, such as reverse osmosis pre-filtration and similar applications that nominal efficiency can meet corresponding requirements. The flow rate of 60" filter cartridge is as high as 60 m³/h, which significantly reduce the number of filter cartridges and housing dimensions. The treatment capacity of a HFSW3 Single Seal filter cartridge is equivalent to that of 10 pcs filter cartridges with an outer diameter of 2-1/2" and a length of 40".

[Benefits]

- High dirt holding capacity, longer service life.
- Less cartridge changes out to save the labor cost.
- O-ring design causes no bypass to ensure the filtration efficiency.
- Easy handling results in less manpower.
- Wide chemical compatibility for different applications.

[Outline Drawing]



Parker type High Flow Filter Cartridge (Single O ring)

[Specification]

Product dimensions

[OD]: 6" (152mm); [ID]: 110mm



[Length]: 20", 40", 60"

Construction material

[Media]: PP

[Cage/core/end cap]: PP

[Seal material]: EPDM(Normal), Silicone rubber, fluororubber, NBR(Normal)

Model	Filter rating (µm)	Size	Max. flow rating	End Cap	Note
HFSW3 - 20C	1,5,10,15,20, 40,70,100	20" (with core)	20 m ³ /h		Max. pressure difference 1.2bar, < 80°C
HFSW3 - 40C	1,5,10,15,20, 40,70,100	40" (with core)	40 m ³ /h		
HFSW3 - 60C	1,5,10,15,20, 40,70,100	60" (with core)	60 m ³ /h		

HFSW4 TYPE HIGH FLOW FILTER CARTRIDGE



[Product Description]

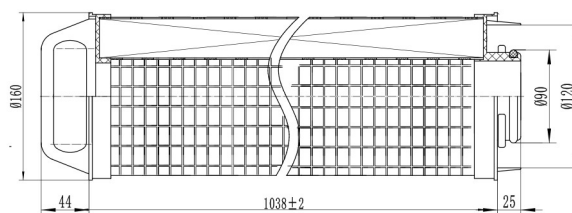
High flow filter cartridge adopts high performance PP non-woven fabrics to optimize its filtration performance and fluid quality to ensure our customers' satisfaction. The filter cartridge adopts vertical pleats design to make the filter cartridge has a large effective filter area. Meltdown PP microfibers have strictly controlled fiber diameters to ensure its absolute filter rating. Pleating technology ensures the filter material is pleated in a more uniform way. The evenly distributed liquids in the whole filter material makes the full use of the filter area. In this design, we can ensure the filtration effect in a more compact and smaller space and its large inner diameter allows the flow of single 60" cartridge up to 45 m³/h.

[Specification]


Product dimensions	[OD]: Φ165 mm [ID]: 85mm [Length]: 20", 40", 60"
Construction material	[Media]: PP [Cage/core/end cap]: PP [Seal material]: EPDM(Normal), Silicone rubber, fluororubber, NBR(Normal)

[Benefits]

- Gradient pore size structure
- When filtering water, the flow of a single cartridge is up to 15-45 m³/h.
- **The size of the filter system can be reduced by 50%.**
- Filter cartridges are available in 20", 40" and 60" in length.
- The outside to inside flow direction ensures all impurities are trapped outside the filter cartridge.



Outline Drawing

Model	Filter rating (μm)	Size	Max. flow rating	End Cap	Note
HFSW4 - 20	1,5,10,15,20,25,40,60,70	20" (without core)	15 m ³ /h		Max. pressure difference 1.5bar, < 80°C
HFSW4 - 20C	1,5,10,15,20,25,40,60,70	20" (with core)	15 m ³ /h		
HFSW4 - 40	1,5,10,15,20,25,40,60,70	40" (without core)	30 m ³ /h		
HFSW4 - 40C	1,5,10,15,20,25,40,60,70	40" (with core)	30 m ³ /h		
HFSW4 - 60	1,5,10,15,20,25,40,60,70	60" (without core)	45 m ³ /h		
HFSW4 - 60C	1,5,10,15,20,25,40,60,70	60" (with core)	45 m ³ /h		



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