

# Fiber Reinforced Plastics(FRP)Filter Housing

## Corrosion Resistant and Economical Filter



### **Description**

FRPH series fiber reinforced plastics filter is suitable for filtering corrosive liquids such as seawater desalination, featuring corro- sion resistance, high-pressure tolerance, leak-proof performance, easy disassembly & assembly,and long service life. The filter adopts a single filter cartridge design, which can be freely combined with ultrafiltration (UF) and reverse osmosis(RO) systems. It can also be configured into multiple filtration units according to the on-site environment, demonstrating strong adaptability to different field conditions.



## **Features and Advantages**

- Modular design allows for easy combination and high cost performance.
- Compact equipment with an aesthetic appearance: the surface adopts a baked enamel process for elegance, using ecofriendly materials
- Features convenient disassembly/assembly,flexible design, reliable operation,and optimized component design
- It offers better corrosion resistance than stainless steel filter housing
- It has superior pressure resistance compared to PVC filter housing

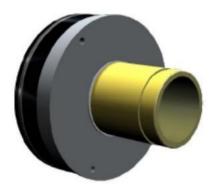


#### **Basic Parameters**

	She11	FRP		
	Saddle	Rubber		
Materials	Strap	Stainless Steel/Rubber		
	Sealing Ring	EPDM/Silicone/FKM		
	Design Pressure	1.0Mpa		
	Operation Temperature	-10°C-65°C		
	Number of Filter Cartridges	1		
Connection	Length of Filter Cartridges	20inch, 40inch, 60inch		
	Filter Cartridges	High Flow Filter Cartridge		
	Water Inlet and Outlet Mode	Inner Inlet and Outer Outlet (Internal Pressure Type)		



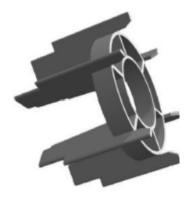
## **Common Accessories**



End Outlet Sealing End Cap



Side Outlet Sealing End Cap



Filter Support



Stainless Steel Stopper



PVC Coupling



Saddle



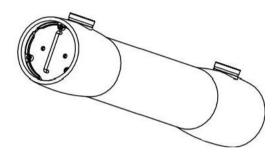
Sealing Ring

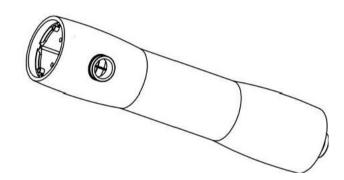




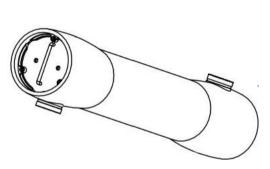
# **Ordering Information**

Series	Size	Water Inlet and Outlet	Inlet and Outlet Connections*	Sealing Ring	Туре
FRPH	20=20" 40=40" 60=60"	A=Side Inlet and Side Outlet (Same Side) B=Side Inlet and Side Outlet (Opposite Sides) C=Side Inlet and End Outlet D=End Inlet and End Outlet	C80=Coupling DN80	S=Silicone F=FKM E=EPDM	P=600 FlowPure L=LinePure



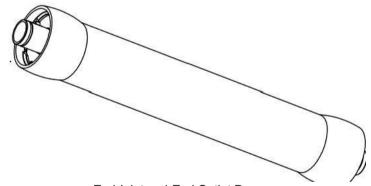


Side Inlet and Side Outlet-A



Side Inlet and Side Outlet-B

Side Inlet and End Outlet-C



End Inlet and End Outlet-D

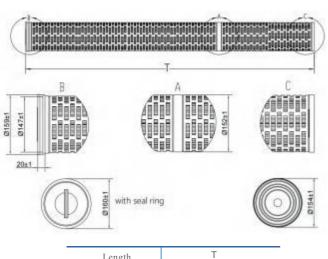
# MS 600 FlowPure-HF Filter Cartridge





600 FlowPure-HF high flow series pleated filter cartridge has a large diameter of 6inch(152mm), no core, and a single opening design. The large diameter ensures a larger filtration area and increases the flux, thereby reducing the number of filters and cartridges. Long service life and high flow rate reduce investment costs.

#### Technical Parameters



Length	Т		
20"	5 2 5 ± 3 mm		
40"	1016±3 mm/1025±3 mm		

Filter Membrane  Support/Shell  PP  End Cap  O-rings  S/E/N  Welding Method  Hot-melt Welding(No Adhesive)  Outer Diameter  Length  20"/40"/60"  Length  Connection  Carrying Handle Type  Operating Temperature  Maximum Differential Pressure  PP/Glass Fiber  PP  Construction  PP  Adhesive  Adhesive  Adhesive  Outer Diameter  152mm(6")  Carrying Handle Type  Operating Temperature  Adaptive Adhesive  PP Shell < 80°C  Address Fiber  Support/Shell PP  PP  Adhesive  Ad					
Materials of End Cap PP  Construction  O-rings S/E/N  Welding Method Hot-melt Welding(No Adhesive)  Outer Diameter 152mm(6")  Length 20"/40"/60"  Filtration Area 6 m² @40"  Connection Carrying Handle Type  Operating Temperature  Maximum Differential Area 3.4 bar @ 80°C  Pressure		Filter Membrane	PP/Glass Fiber		
Construction  O-rings  S/E/N  Welding Method Hot-melt Welding(No Adhesive)  Outer Diameter 152mm(6")  Length 20"/40"/60"  Filtration Area 6 m² @40"  Connection Carrying Handle Type  Operating PP Shell < 80°C  Temperature  Maximum Differential 3.4 bar @ 80°C		Support/Shell	PP		
O-rings S/E/N  Welding Method Hot-melt Welding(No Adhesive)  Outer Diameter 152mm(6")  Length 20"/40"/60"  Filtration Area 6 m² @40"  Connection Carrying Handle Type  Operating PP Shell < 80°C  Temperature  Maximum Differential Pressure  3.4 bar @ 80°C	Materials of	End Cap	PP		
Outer Diameter 152mm(6")  Length 20"/40"/60"  Filtration Area 6 m² @40"  Connection Carrying Handle Type  Operating PP Shell < 80°C  Temperature  Maximum Differential 3.4 bar @ 80°C  Pressure	Construction	O-rings	S/E/N	1	
Filter Dimensions  Filtration Area 6 m² @40"  Connection Carrying Handle Type  Operating PP Shell < 80°C Temperature  Maximum Differential 3.4 bar @ 80°C Pressure		Welding Method	Hot-	melt Welding(No Adhesive)	
Dimensions  Filtration Area 6 m² @40"  Connection Carrying Handle Type  Operating PP Shell < 80°C  Temperature  Maximum Differential Pressure  3.4 bar @ 80°C	Filter	Outer Diameter	152n	nm(6")	
Filtration Area 6 m @40°  Connection Carrying Handle Type  Operating PP Shell < 80°C  Temperature  Maximum Differential 3.4 bar @ 80°C  Pressure		Length	20"/4	20"/40"/60"	
Operating Temperature  Maximum Differential Pressure  PP Shell < 80°C  3.4 bar @ 80°C	Dimensions	Filtration Area	6 m <sup>2</sup>	@40"	
Temperature  Maximum Differential Operating  PP Shell < 80 °C  3.4 bar @ 80 °C		Connection Carr		ying Handle Type	
Operating Pressure 3.4 bar @ 80°C				PP Shell < 80°C	
Conditions	-			3.4 bar @ 80°C	
Recommended Replacement Differential Pressure  2.4 bar @ 20°C	Conditions			2.4 bar @ 20°C	
Flow Direction Inside to Outside		Flow Direction		Inside to Outside	

\*The length can be adjusted according to the requirements.

#### Features

- Filter material has gradient pore structure
- Flow rate is 5 times that of ordinary pleated filter cartridge
- 50% less investment in the overall system
- \* Uses hot-melt welding technology

### Typical Applications

- $\bullet~$  RO prefiltration, desalination plants and industrial process water
- Filtration of power plants, condensed water
- Drinking water, food and beverage, edible oil, etc.
- Filtration of oilfield reinjection water
- High-purity water process pretreatment in biopharmaceutical industry



	Filter Material	Length	Removal Rating	Filtration Efficiency	Sealing	Appearance	Core
CRHF	PP=Polypropylene GF=GlassFiber	020=20" 040=40" 060=60"	010=0.1 μm 100=1 μm 300=3 μm 500=5 μm 1000=10 μm 2000=20 μm 3000=30 μm 5000=50 μm 7000=70 μm 10000=100 μm	Blank=Nominal A=Absolute	S=Silicone E=EPDM N=NBR F=FKM	B=Bind Belt Type C=Shell Type	Blank=No core P=PP core

<sup>\*</sup>This ordering information is a guide for selecting filter element specifications. For other special connections or installation details, please contact MS.

### AQUANOMICS

#### Description

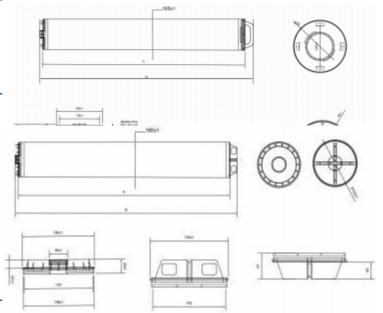
Combining high flow rates and high solids is a challenge for most filters. MS CrossPure-T filters incorporates a special radial pleat, puts an extraordinary amount of surface area into a single cartridge, so it meets the challenge with the highest flow and dirt holding combination available. Each grade of MS High Flow filter element is manufactured with meltblown polypropylene microfiber media or resin bonded glass fiber, providing high particle removal efficiency with broad chemical compatibility. All supported layers and hardware are constructed with polypropylene.

#### Technical Parameters

Materials of	Filter Material  Support/Drainage	Deep pleated polypropylene,Pleated Glass Fibe		
Construction	End Cap	Polypropylene FKM, EPDM		
	O-ring	Radial		
	Pleat Type			
	Outer Diameter	6.5" (165mm)		
Filter Dimensions	Length	20", 40", 60" 8 m" @40"		
	Filtration Area			
	Maximum Operatir	Deep pleated polypropylene: 80°C		
	Temperature	Resin synthetic glass fiber: 120°C		
Recommended	Maximum Operatir	Deep pleated polypropylene: 3.4 bar@80°C Resin synthetic glass fiber: 3.4 bar@120°C		
Performance		2.4 bar@20°C		
Parameters	Recommended pressur	Outside to Inside		
	cartridge replacement			
	Flow Direction			



High Flow Dimensional Drawing\*



#### Features

- Designed to fit inside existing 3M housings and provide an O-ring seal without housing modification
- · Special radial pleat design
- · Ergonomically designed handle- facilitates easy cartridge installation and removal
- "Twist to lock" seating mechanism provides positive seal
- · High flow capability of up to 500gpm per cartridge

### Typical Applications

- . Aqueous Salt Solution
- Boiler Condensate

#### Code B



## Ordering Information\*

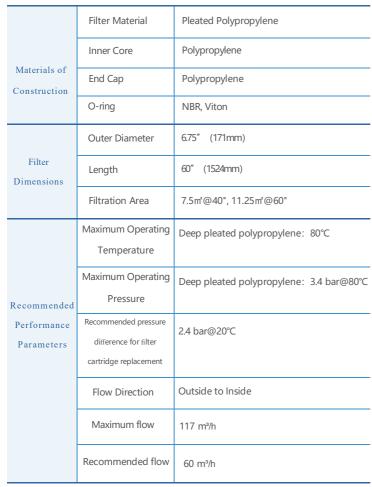
	Filter Material	Length	Removal Ra	atings	Filtration Efficiency	Sealing	Type of End Cap	Core	
CRHC	PP=Deep pleated polypropylene	020= 20" 040= 40" 060= 60"	300=3 μm 500=5 μm 1000=10 μm	000=20 μm 000=30 μm 000=50 μm 000=70 μm 0000=100 μm	Blank=Nominal A=Absolute	S=Silicone E=EPDM N=NBR F=FKM	A=Type A  B=Type B	Blank=PP core	Т

 $<sup>\</sup>star$ This ordering information is a guide for selecting filter element specifications. For other special connections or installation details, please contact MS.

#### Description

MS LinePure filter has been designed for ease of use whilst increasing productivity when compared to conventional filter formats. LinePure is available in 6.75 inch diameter and 60 inch length, and materials are available in polypropylene media, a PVC core, and a proprietary o-ring seal. LinePure liquid filters support high flow pre-RO filtration in desalination and industry water treatment systems. The larger filtration area and flow rate, requires few changeout, and maintains a low cost of operation.





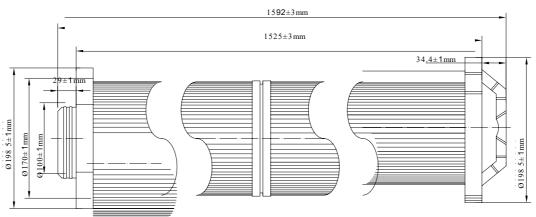


#### **Features**

- · Absolute beta 5000 efficiency
- · Enable consistent particle removal with high dirt capacity
- · Proprietary o-ring seal
- Multi layer pleated construction with optimized surface area
- · Outside-in flow provides maximum flow rates

#### Typical Applications

- Water treatment
- · Sea water and brackish water
- The filtration of bottled water, soft drinks and other beverage
- Microelectronics process water





	Filter Material	Length	Removal Rating	Filtration Efficiency	Sealing	Core
CRLP	PP=Polypropylene GF=Glass Fiber	020=20" 040=40" 060=60"	$\begin{array}{cccc} 010{=}0.1\mu m & 2000{=}20\mu m \\ 100{=}1\mu m & & & & \\ 3000{=}30\mu m & & & \\ 300{=}3\mu m & & & \\ 500{=}50\mu m & & \\ 500{=}5\mu m & & \\ 1000{=}10\mu m & & \\ 10000{=}100\mu m & \\ \end{array}$	Blank=Nominal A=Absolute	S=Silicone E=EPDM N=NBR F=FKM	Blank=PP core



# MS CrossPure Pleated Filter Cartridge

#### Description



Combining high flow rates and high solids is a challenge for most filters. MS CrossPure filters

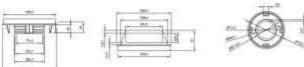
meet this challenge with the highest flow and dirt holding combination available. Fewer filter change-outs means less costs associated with labor, disposal, and fluid losses. It can be used for a variety of hardware and for different flow rate request. The large diameter with bigger filtration area insures to reduce the number of filter cartridges and the dimension of housing required.

#### Technical Parameters

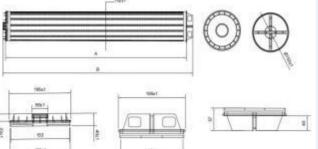
		Filter Material	Deep pleated polypropylene/Resinsynthetic glass fiber
	Materials of	Support/Drainage	PP
	Construction	End Cap	Polypropylene
		O-ring	FKM, EPDM
	Filter	Outer Diameter	6" (152.4mm)
111	Dimensions	Length	20 " ,40 " ,60 "
100		Filtration Area	6.5 m² @40″
		Maximum Operating	Deep pleated polypropylene: 80°C
		Temperature	Resin synthetic glass fiber: 120°C
		Maximum Operating	Deep pleated polypropylene: 3.4 bar@80°C
	Recommended	Pressure	Resin synthetic glass fiber: 3.4 bar@120°C
	Performance	Recommended pressure	
	Parameters	difference for filter	2.4 bar@20°C
		cartridge replacement	
I		Removal Ratings	1~70μm
		Flow Direction	Outside to Inside

#### High Flow Dimensional Drawing





Length	A	В
40"	$1040\pm3\text{mm}$	1109±3 mm



#### **Features**

- Designed to fit inside existing 3M housings and provide an O-ring seal without housing modification
- . High dirty holding capacity, longer service life Less cartridge change out to save the cost
- $\cdot\,$  O-ring design cause no bypass to ensure the filtration efficiency
- It is available in a variety of filter media to meet industry standards and chemical compatibility

Code B



Length	A	В
40"	935±3 mm	1000±3 mm

<sup>\*</sup>The length can be adjusted according to the requirements.

- · Industrial- Municipal Water, RO Prefiltration, Coolants
- · Chemical- Quench water, Final Products
- Electronics- RO Prefiltration, Process Water
- Food & Beverage- Process Water
- Pharmaceutical- Process Water

#### Ordering Information\*

	Filter Material	Length	Removal Ratings	Filtration Efficiency	Sealing	Type of End Cap	Core
CRHC	PP=Deep pleated polypropylene GF=Resin synthetic glass fiber	020= 20" 040= 40" 060= 60"	010=0.1μm 2000=20μm 100=1μm 3000=30μm 300=3μm 5000=50μm 500=5μm 7000=70μm 1000=10μm 10000=100μm	Blank=Nominal A=Absolute	S=Silicone E=EPDM N=NBR F=FKM	A=Type A  B=Type B	Blank=PP core

## **CONTACT US**

#### **Corporate Office**

B-2, 3rd Floor, Greater Kailash Enclave-II,

New Delhi-110048, India

Phone: +91-11-41435945/46

**Corporate Office** 

Fax: +91-11-41435965

Mail: info@aquanomics.net

#### **Registered Office**

B-2, 3rd Floor, Greater Kailash Enclave-II, New Delhi-110048, India

"Elora Fiesta", Office No. 605, Plot No. 8,

Sector-11, Sanpada Near Juinagar Railway

Station, Navi-Mumbai - 400705,

Maharashtra, India.

Phone: +91-22-27759467/68/69

Mail: info@aquanomics.net Website:

www.aquanomics.co.in