



FILTER TECHNOLOGY

# HIGH FLOW FILTER CATALOG





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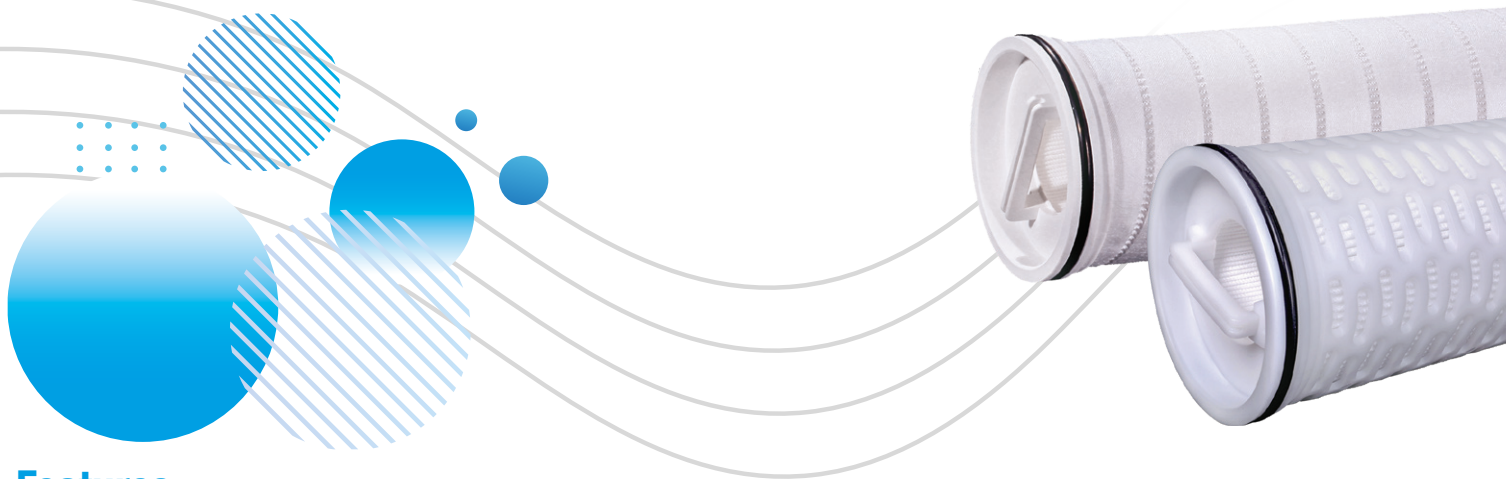
# HFH Series

## High Flow Pleated Cartridges



# HFH Series High Flow Pleated Filter Cartridges

HFH Series High Flow Pleated Filter Cartridges are made of depth fine PP non-woven fabrics. The pleated filter cartridge is single open ended and in diameter of 6inch/152mm, inside to outside flow design ensures that the unwanted particles are trapped with the element. One HFH filter replaces few standard 10" filter cartridges to reduce the operating costs and make change out quickly and easily for critical applications. The multiple layers with depth pleated design provides higher removal efficiency and longer service life than other cartridges of equal efficiency. All the PP configuration with good chemical compatibility ensures that can be used for wide applications.



## Features

- Available in economic/nominal/absolute structure, particle removal rating from 0.5 to 100 micron
- 100% polypropylene components provide wide chemical compatibility, suitable for use in a variety of fluids
- With depth fine non-woven fabrics and scientific design, the filter is in a good structure, having high dirt holding capacity and resulting in longer service life
- The pleated media in large diameter reduces operating costs, makes change out quickly and easily and makes cartridge in longer service life
- Higher dirt holding capacity with large diameter reduces the changes times of cartridges

## Applications

- Food & Beverage
- RO Pre-Filtration
- Process water(Pre-RO, Cooling...)
- Ground/Reclaimed/Wastewater
- Sea water desalination
- Oil & Chemical
- Power plant water treatment
- Machinery & Equipment

## Dimension

Outer Diameter	154mm
Length	20", 40", 60"

## Material of Constructions

Media	PP, GF
Cage / Core / End Cap	PP
Sealing	Silicone, EPDM, FKM, E-FKM

## Performance

Max. Operating Temperature	80°C
Max. Operating DP	2.4 bar@20°C
Recommended Change out DP	2.2 Bar@20°C

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

- Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR.
- Materials used to produce filter media and hardware meet the specifications for biological safety per USP Class VI-121 °C for plastics.
- Passed European Commission Directives (EU10/2011)

The figure consists of four subplots, each representing a different flow rate: HFA, HFE, HFN, and HFS. Each subplot shows the relationship between pressure drop and liquid flow rate for water at 20°C / 40 inch. The x-axis for all plots is 'Liquid Flow Rate (TPH) Water at 20°C / 40inch', ranging from 0 to 60. The left y-axis is 'Pressure Drop (Kpa)', ranging from 0 to 100. The right y-axis is 'Pressure Drop (Psi)', ranging from 0 to 14. Each plot contains multiple lines representing different pore sizes: 0.5μm, 1μm, 3μm, 5μm, 10μm, 20μm, 40μm, 70, 100μm. The lines show that pressure drop increases with flow rate and is higher for smaller pore sizes. HFA and HFE show the highest pressure drops, while HFN and HFS show the lowest.

Technical drawing of a double-arched roof structure. The drawing shows a cross-section of the roof with two arches. The dimensions are given as follows:

- Overall width:  $\varnothing 161,3 \pm 0,5 \text{ mm}$
- Inner width:  $\varnothing 159,5 \pm 0,5 \text{ mm}$
- Inner width (right side):  $\varnothing 154 \pm 0,5 \text{ mm}$

The label 'a' is located below the drawing.

	20"	40"		60"
a	528.0+2	1016.0+2	1022.0+2	1538.0+3

Eg.=> HFAG0050PB20S

ORDERING INFORMATION					
Grade	Media Structure	Hardware Material	Appearance	Length	Seal Material
HFA = Absolute HFN = Nominal HFE = Economic	G0050 = PP0.5µm G0100 = PP1µm G0300 = PP3µm G0500 = PP5µm G1000 = PP10µm G2000 = PP20µm G4000 = PP40µm G7000 = PP70µm G9900 = PP100µm	P = PP	B = Belt C = Cage	20 = 20" 40 = 40" 60 = 60"	S = Silicon E = EPDM V = FKM F = E-FKM

Eg.=> HFS0050B20SP

ORDERING INFORMATION					
Hardware Material	Media Structure	Appearance	Length	Seal Material	Core
S = Glass fiber	0050 = 0.5µm 0100 = 1µm 0300 = 3µm 0500 = 5µm 1000 = 10µm 2000 = 20µm	B = Belt C = Cage	20 = 20" 40 = 40" 60 = 60"	S = Silicon E = EPDM V = FKM F = E-FKM	Blank = No P = PP core

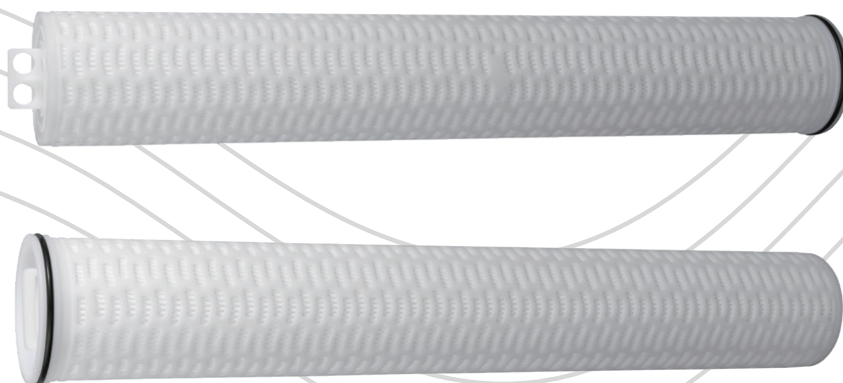


# **HFD Series**

## **High Flow Filter Cartridges**

# HFD Series High Flow Filter Cartridges

HFD Series High Flow Filter Cartridges can be taken from filters conveniently with two stretchable handles on both ends. The single open-ended filter is designed with a large input whose diameter of 6 inches. The design of super high flow can thus better improve the efficiency of filter cartridges and filters and save the cost. This filter cartridge also adopts depth fine PP fiber membrane as the main filtration layer.



## Features

- Big filtration area, high flow rate
- Double handles, both ends are easily accessible
- Optional remove ratings
- Manufactured in cleanroom environment

## Applications

- General purpose: RO system prefiltration
- Industrial: process water, cooling water, waste water filtration
- Chemical: filtration of various acids, bases, solvents, chilled water, saline
- Condensate water filtration in power plant

## Dimension

Diameter	154 mm
Length	20", 40"

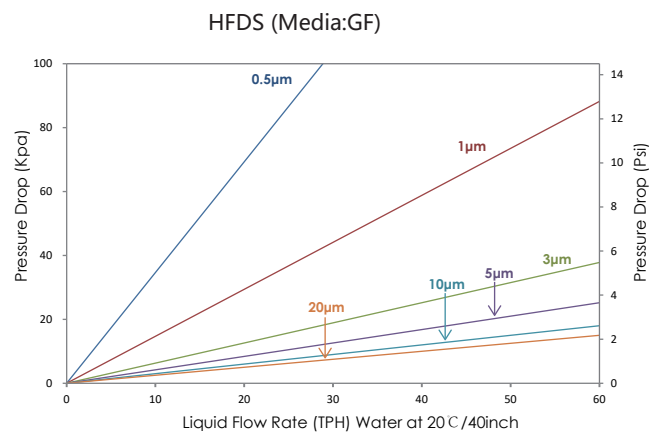
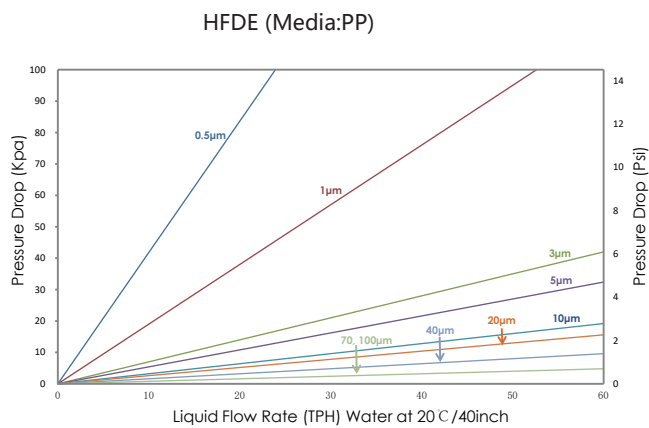
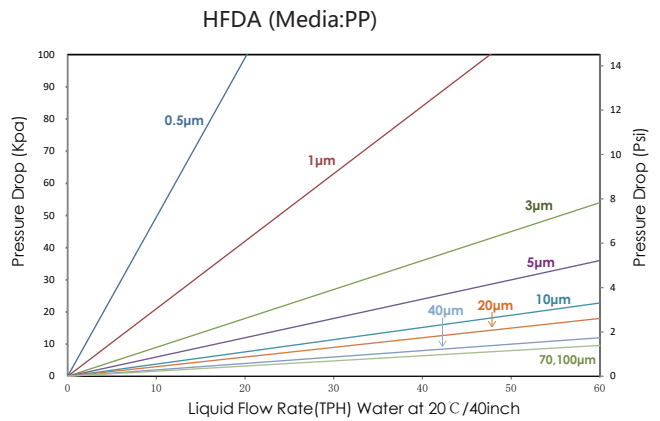
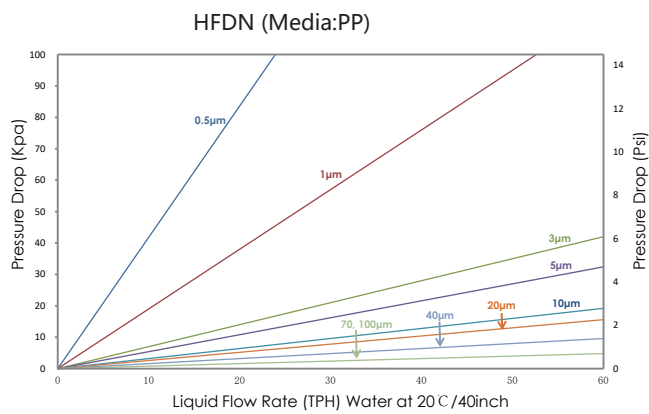
## Material of Constructions

Media	PP, GF
Support	PP
Cage	PP

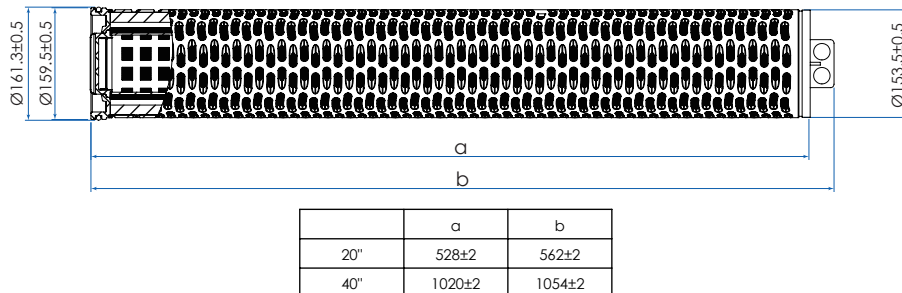
## Performance

Max. Operating Temperature	80°C
Max. Operating DP	2.4 bar@20°C
Recommended Change out DP	2.2 Bar@20°C





## Drawing



Eg.=> HFD40AG0050S

ORDERING INFORMATION				
Length	Remove Rating	Media		Seal Material
20 = 20"	A = Absolute	G0050 = PP0.5µm	G1000 = PP10µm	S = Silicon
40 = 40"	N = Nominal	G0100 = PP1µm	G2000 = PP20µm	E = EPDM
	E = Economic	G0300 = PP3µm	G4000 = PP40µm	B = NBR
		G0500 = PP5µm	G7000 = PP70µm	V = FKM
			G9999 = PP100µm	F = E-FKM

Eg.=> HFD40S0050S

ORDERING INFORMATION			
Length	Media		Seal Material
20 = 20"	S0050 = GF0.5µm	S0500 = GF5µm	S = Silicon
40 = 40"	S0100 = GF1µm	S1000 = GF10µm	E = EPDM
	S0300 = GF3µm	S2000 = GF20µm	B = NBR
			V = FKM
			F = E-FKM

# HFM Series

## High Flow Pleated Cartridges

# HFM Series High Flow Pleated Filter Cartridges

HFM Series High Flow Filter Cartridges are made of high performance media with horizontal pleat design that provides higher filtration area and longer service life. The media construction of multiple layers ensures the high dirt holding capacity with high efficiency per filter. The filter has a big diameter of 6.5inch/165mm. "Twist to lock" seating mechanism provides positive seal. One HFM filter replaces few standard 10" filter cartridges to reduce the operating costs and making change out quickly and easily for critical applications. All the PP configuration with good chemical ensures the wide applications.



## Features

- Available in nominal structure, particle removal rating from 0.5 to 100 micron
- Horizontal pleat, high filtration area, high flow rate
- High performance fiber matrix with no adhesives or surfac-tants, non-fiber releasing to keep the high quality fluid, highly stable structure, and high dirt holding capacity
- 100% polypropylene components provide wide chemical compatibility , suitable for use in a variety of fluids
- Fewer cartridges required, reducing operating, saving space and system footprint
- The long service life results in low investment and less manpower in many applications

## Applications

- Food & Beverage
- Process water(Pre-RO, Cooling...)
- Ground/Reclaimed/Wastewater
- Sea water desalination
- Oil & Chemical
- Power plant water treatment
- Machinery & Equipment
- Chemicals
- Refing(Amine, Final product)
- Machine coolants

## Dimension

Outer Diameter	165 mm
Length	40", 60"

## Food Contact Compliance

- Material of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR.
- Materials used to produce filter media and hardware meets the specifications for biological safety per USP Class VI-121C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)

## Material of Constructions

- Media: PP
- Support: PP
- Cage / Core / End cap: PP
- Sealing: Silicone, EPDM, FKM, E-FKM

## Performance

### Operating Conditions

Max. Operating Temperature

80 °C

Max. Operating DP

3.0 bar@ 20 °C

Recommended Change out

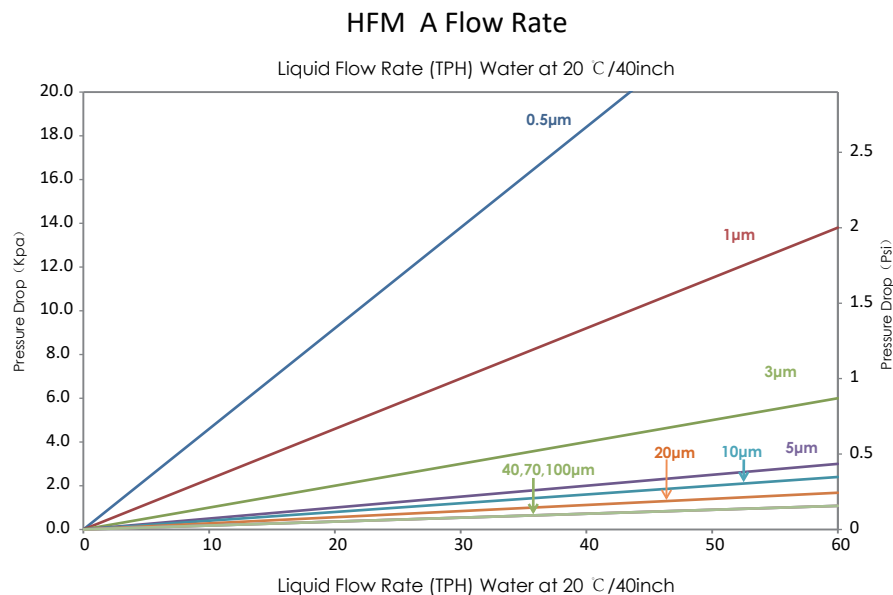
Differential Pressure

2.4 Bar@20°C

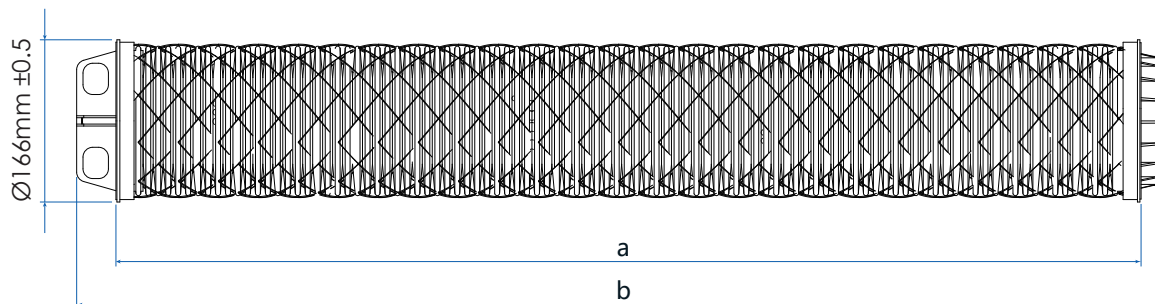
## Quality

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

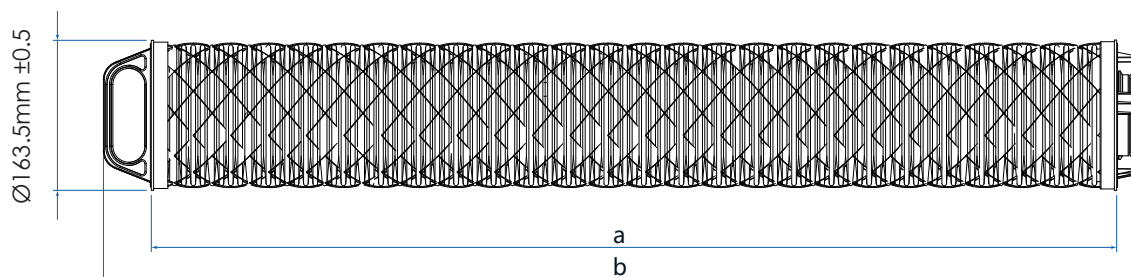
## Flow rate



## Dimensions



	40"	60"
a	930.0±2	1548.0±3
b	995.0±2	1612.0±3



	40"	60"
a	1043.0±2	1553.0±3
b	1117.0±2	1627.0±3

Eg.=> HFMG0050PAB40S

ORDERING INFORMATION					
Media Type	Hardware Material	End Cap Type	Appearance	Length	Seal Material
G = PP	P = PP	A = In-line handle and big outlet	B = Netting	40 = 40"	S = Silicon
G0050 = PP0.5µm		B = Cross handle and small outlet	C = Cage	60 = 60"	E = EPDM
G0100 = PP1µm					V = FKM
G0300 = PP3µm					F = E-FKM
G0500 = PP5µm					
G1000 = PP10µm					
G2000 = PP20µm					
G4000 = PP40µm					
G7000 = PP70µm					
G9900 = PP100µm					



# **HFP Series**

## **High Flow Pleated Cartridges**

# HFP Series High Flow Pleated Filter Cartridges

HFP Series High Flow Pleated Filter Cartridges are single open-ended cartridges in 6.7 inch diameter with outside to inside flow pattern. It offers a high flow rate solution with quick changes for advanced water filtration systems including industrial and commercial osmosis type water and sea water filtration. It provides a cost effective alternative to 2.5 inch OD style filter cartridges in high flow applications.



## Features

- Available in economic/nominal/absolute structure, particle removal rating from 0.5 to 100 Micron
- 100% polypropylene components provide broad chemical compatibility, suitable for a variety of fluids
- High dirt holding capacity and longer service life

## Applications

- Food & Beverage
- RO Pre-Filtration
- Process Water
- Wastewater
- Sea water desalination
- Oil&Chemical
- Power plant water treatment
- Machinery&Equipment

## Dimension

Outer Diameter	172 mm
Inner Diameter	76mm
Length	40", 60"

## Material of Constructions

- |                    |               |
|--------------------|---------------|
| • Media:           | Polypropylene |
| • Support:         | Polypropylene |
| • Endcap Material: | Polypropylene |
| • Sealing:         | Buna          |

## Performance

- Max Operating Temperature 82 °C
- Max Operating DP 35Psid

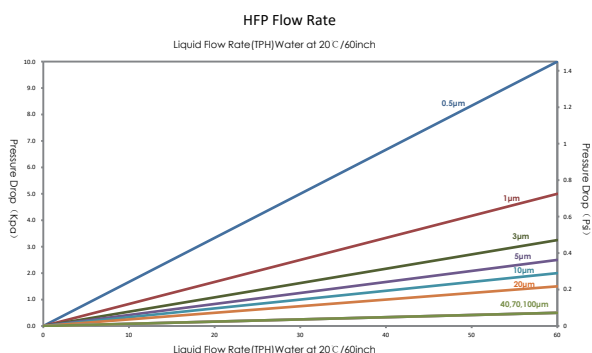
## Quality

- Manufactured in a clean room environment
- Manufactured according to ISO9001:2015 certified Quality Management System

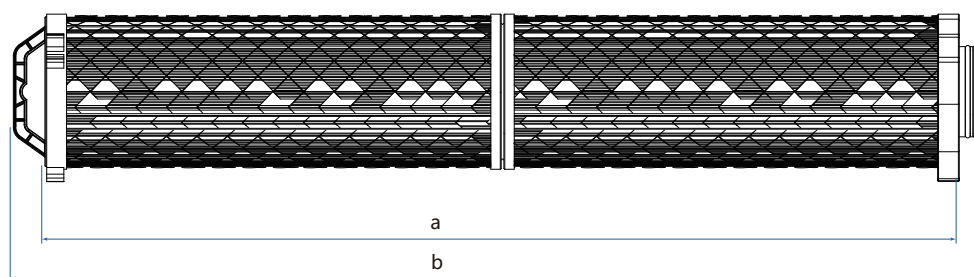
## Food Contact Compliance

- Material of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations 21CFR.
- Materials used to produce filter media and hardware meets the specifications for biological safety per USP Calss VI-121 °C for plastics.
- Filter cartridges passed European Commission Directives (EU10/2011)

## Flow rate



## Dimensions



	40"	60"
a	1016.0±2	1080.0±2
b	1525.0±2	1589.0±2

Eg.=> HFPAG0050P40SP

### ORDERING INFORMATION

Grade	Media Type(PP)	Hardware Material	Length	Seal Material	Core
HFA = Absolute	G0050 = 0.5µm	P = PP	40 = 40"	S = Silicon	P = PP
HFPN = Nominal	G0100 = 1µm		60 = 60"	E = EPDM	
HFPE = Economic	G0300 = 3µm			V = FKM	
	G0500 = 5µm			F = E-FKM	
	G1000 = 10µm				
	G2000 = 20µm				
	G4000 = 40µm				
	G7000 = 70µm				
	G9900 = 100µm				

# CHD Series

## High Flow Filter Housing

# High Flow Filter Housing

High flow filter housing are designed to accommodate our HFH series filter cartridge and mainly used for large fluid flow rate applications, especially in water treatment. Our high flow filter housings are available in a variety of sizes from 1 to 7 filter elements in length of 20-inch, 40-inch and 60-inch lengths. SS high flow cartridge housing is manufactured by high quality SS304 or SS316L, suitable for high temperature, acid, alkali and chemical resistance filtration systems. The horizontal option to maximize ease of operation, or the vertical to minimize the system's footprint is available. Our housings are available in standard designs, as well as custom-izable configurations to suit your specific needs.



## Features

- It adopts sanitary housing body, internal:  $Ra < 0.6 \mu m$ , suitable for various filtering requirements
- It can be used with large size cartridges for high volume liquid filtration which has low cost-investment and high filtration efficiency
- Vertical and horizontal type can be provided according to customer requirements

## Applications

- For general use: pre-filtration of RO system
- Water treatment: filtration of process water, condensed water, cooling water and waste water etc
- Chemical industry: filtration of acid and alkaline liquids, solvents, chilled water and saline water etc
- Power and energy: condensed water filtration in power plants etc

## Surface Finish

Finish Type                      Passivated, Electropolished, Mechpolished, Sand blasting

Polishing Type                      Internal:  $Ra \leq 0.6\mu m$   
External:  $Ra \leq 0.8\mu m$



## Material

Filter Shell	304, 316L
Vent Valve	304, 316L
Eyebolt	304
Leg	304
Seal Material	Silicone, FKM, EPDM

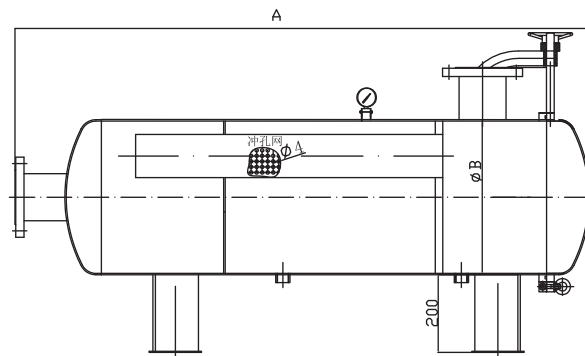
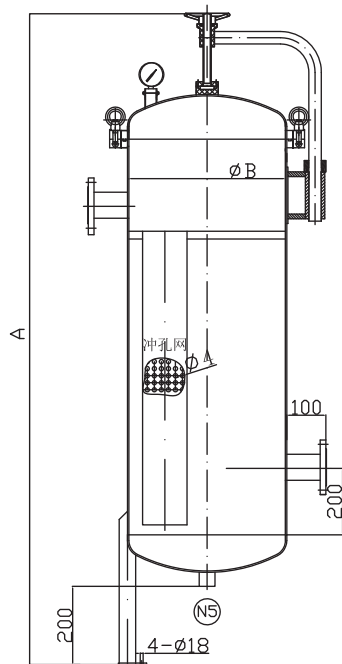
## Operating Conditions

Design Pressure	0.6Mpa (6bar)
Max. Operating Temperature	150°C

## Connection

Shell Connection	Eyebolt
Inlet & Outlet	Tri-clamp / Flange G
Pressure Gauge Type	1/4" bottom

## Drawing



## Dimension

		Single round				2 round				3 round			
		Vertical		Horizontal		Vertical		Horizontal		Vertical		Horizontal	
		40"	60"	40"	60"	40"	60"	40"	60"	40"	60"	40"	60"
A	Total height (except pressure gauge)	1950	2450	2000	2500	1950	2450	2000	2500	1950	2450	2000	2500
B	Diameter	219	219	219	219	400	400	400	400	450	450	450	450

		4 round				5 round				6 round			
		Vertical		Horizontal		Vertical		Horizontal		Vertical		Horizontal	
		40"	60"	40"	60"	40"	60"	40"	60"	40"	60"	40"	60"
A	Total height (except pressure gauge)	1950	2450	2000	2500	1950	2450	2000	2500	1950	2450	2000	2500
B	Diameter	500	500	500	500	550	550	550	550	600	600	600	600

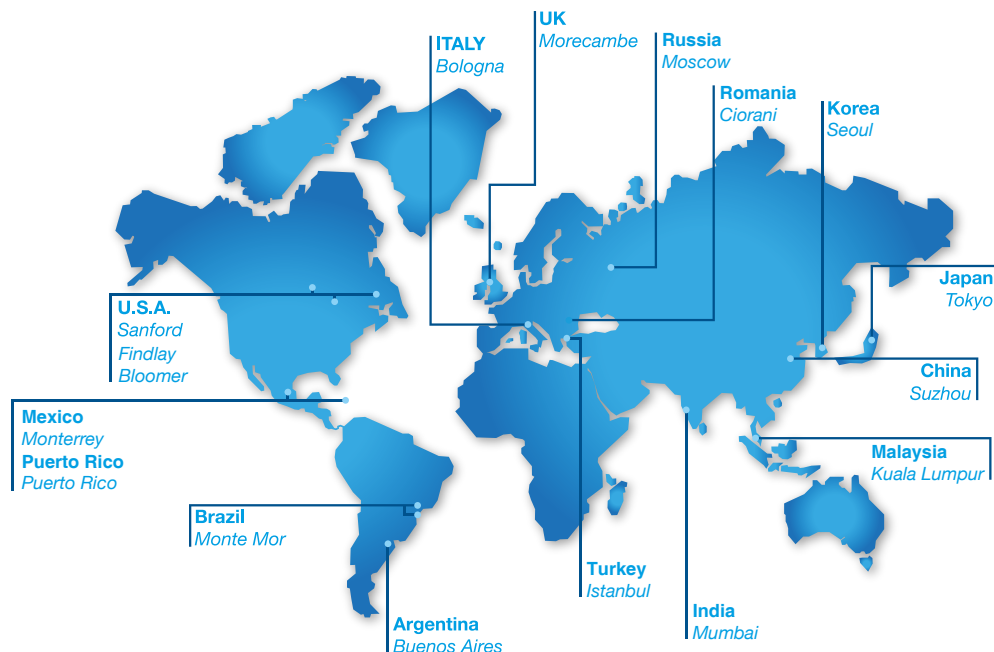
		8 round				10 round			
		Vertical		Horizontal		Vertical		Horizontal	
		40"	60"	40"	60"	40"	60"	40"	60"
A	Total height (except pressure gauge)	1950	2450	2000	2500	1950	2450	2000	2500
B	Diameter	700	700	700	700	800	800	800	800

Eg.=> CHDHJ0120T20SEEX

### ORDERING INFORMATION

Series	Connection	Shell Material	QTY	Length	Inlet&Outlet	Seal Material	Surface Finish (inside)	Surface Finish (outside)	Design Pressure
CHD =	H = HFH	J = 304	01 = 1	20 = 20"	T20=TC 3/4"	S = Silicone	E = Electropolished	E = Electropolished	X=Vertical inner pressure
Filter		K = 316L	02 = 2	40 = 40"	T25=TC 1"	E = EPDM	M = Mechpolished	M = Mechpolished	Y=Horizontal inner pressure
housing		L = Carbon steel	03 = 3	60 = 60"	T32=TC 1.25"	V = FKM	P = Passivated	S = Sand blasting	W=Vertical outer pressure
			04 = 4		T40=TC 1.5"				Z=Horizontal outer pressure
			05 = 5		T50=TC 2"				
			06 = 6		F20=Flange 3/4"				
			08 = 8		F25=Flange 1"				
			10 = 10		F32=Flange 1.25"				
					F40=Flange 1.5"				
					F50=Flange 2"				





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## PRODUCT COLLECTION - High flow filter

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