SUPAPLEAT HFC

High Surface Area Pleated Cartridge

SupaPleat HFC high surface area cartridges utilise pleated depth media offering maximum efficiency and exceptionally high flow capabilities. Developed to suit industrial processes where high performance is required, the low pressure loss and high dirt capacity makes them the ideal choice for fine polishing applications. In-house developments have optimised the pleat pack thus ensuring rigidity is maintained at all flow rates.

Two media options are offered as standard, the PP and GP .The PP features the specific CRY cryptosporidium grade designed for Food and Beverage applications. The standard range is manufactured using all-polypropylene end caps and internal support core.

Amazon Filters manufactures cartridges manufactured with stainless steel cage and core and PP or nylon end fittings. These are particularly suited for applications where higher temperature ratings are required or compatibility may be an issue. Thermal welding processes seal all components, eliminating adhesives and extractables and optimising cartridge integrity

SupaPleat HFC-PP cartridges feature:

- Melt blown polypropylene media
- The option of extended-life versions
- Wide chemical compatibility
- Materials that meet US FDA title 21 requirements
- Materials that meet the requirements for food contact as detailed in European Regulation (EC) Number 1935/2004

SupaPleat HFC-GP cartridges feature:

- Glass microfibre media
- Extremely high dirt holding capacity

Absolute Rated Filter Media

- Available from 0.5 to 90µm
- Consistently reliable performance
- Beta 5000 Rating

Product Features

SupaPleat HFC filter cartridges are produced using an improved manufacturing process resulting in the following features:

- High surface area, resulting in low clean Ap and excellent dirt holding capacity
- 100% thermally welded construction for maximum integrity and strength, up to 1541mm (60")



- Internal support core for resistance to back pressure
- More robust stainless steel cage and core option available
- Nylon end caps option available

Amazon Filters manufactures a comprehensive range of filter housings for the SupaPleat HFC cartridges. Available in many materials and sizes to suit all flow rates, please consult our sales office for further details on our full range.

Features and Benefits

- Absolute removal ratings for consistent and reliable performance
- Filters can be sterilised by steam or sanitised by hot water or chemicals
- PP Wide chemical compatibility using materials that meet FDA requirements
- XP Extended life version for more challenging applications
- GP Glass microfibre media gives excellent dirt holding capacity
- Stainless steel cage and core and nylon end caps versions available for more aggressive processes
- Low maintenance fewer number of cartridges
- Cryptosporidium grade (CRY) with typical 104 log reduction value for use in Food and Beverage applications
- All individual packing bags are anti static

See product guides for further details of test methods and rated efficiencies

Industries and Applications

Food and Beverage **Pharmaceutical**

Bottled water, Beers, Wines, Polishing lines, General clarification Solvent discharge, Raw water supplies, batch transfers

Fine Chemicals

Polymers, Acids, Bases, Solvents

Water Treatment **Automotive**

Pre reverse osmosis, UV protection, Resin trap

Oil & Gas **Power Generation** Wash solutions, Cooling fluid, Blanking wash oils, Electrophoretic paints

Water injection systems, Amine streams, Glycols

Water treatment (boiler feed sweetening), return condensate lines



SupaPleat HFC Technical Data

Dimensions

Outside Diameter: 160mm Core Diameter: 75mm Typical Surface Area: 15PP: 6.1 - 7.5m² 15GP: 6.2 - 6.7m²

15XP: 4.0m²

Sterilisation and Sanitisation*1

Steam or Autoclave: 121°C for 10 Cycles Hot Water: 90°C for 30 mins

Maximum Operating Conditions

Temperature Core/Assembly P & S: 80°C

Core/Assembly N: 100°C

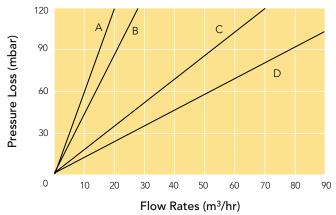
Normal operating mode is inside to outside flow direction Recommended change-out differential pressure: 2.5 Bar*1

Temperature°C	Maximum ΔP
@ 20°C	3.4 (PP & GP)

 $^{^{\}star}1$ Amazon Filters recommend that SupaPleat HFC cartridges are changed at a differential pressure of 2.5 bar in normal service - the operating conditions above should be treated as maximum differential pressures for short term use without causing cartridge collapse problems.

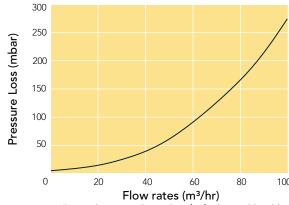
Product validation guide available on request. All SupaPleat HFC cartridges are manufactured under strict control with batch number identification, giving full traceability on all components.

Flow Rates for Water - GF Media (40" Element)



A= $0.5 \, \mu m$ B= $1.0/2.0 \, \mu m$ C= $5.0 - 20 \, \mu m$ D= $35 \, \mu m +$

Fixed Pressure Drop Values for Cartridges

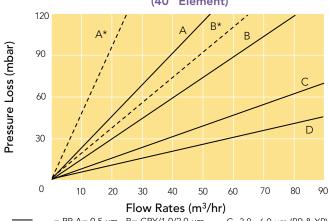


For total pressure drop values for final assembly add media pressure drop to fixed pressure drop

Only flow rates graphs for 40" products are shown below for clarity. To obtain the flow rates for the 20", 60" and 80" products, multiply the media flow rates by the correct factors below:

Filter Length (inches)	Correction Factor			
20	0.5			
40	1.0			
60	1.5			
80	2.0			

Flow Rates for Water - PP & XP Media (40" Element)



= PP A= 0.5 μm B= CRY/1.0/2.0 μm C=3.0 - 6.0 μm (PP & XP) = XP A*= 0.5 μm B*= 1.0/2.0 μm D=10 - 50 μm+ (PP & XP)

Ordering Guide

15P P 005 - 20 C S A

Media	Grade	Micron Rating (μm)	Length (mm)	Connections	Seal	Branding
15G - Glass Microfibre 15P - Polypropylene 15X - Extended Life Polypropylene* ⁴	P - Polypropylene S - Polypropylene End Caps, 304 St.5t Core and cage N - Nylon End Caps, 304 St.St Core and cage	CRY - Crypto*2 010 - 10 000 - 0.5µm 020 - 20 001 - 1.0 035 - 35 002 - 2.0*3 040 - 40 003 - 3.0*2 050 - 50*2 004 - 4.5*2 070 - 70*2 005 - 5.0 090 - 90*2 006 - 6.0	20 - 522 40 - 1038 60 - 1541	C - Flange	B - Buna E - EPDM F - FEP / Silicone S - Silicone V - Viton	A - Amazon

Example: Example: 15PP005-20CSA = Polypropylene media and core, 5µm rating, single length 522mm (20") long, C flange connection with Silicone seal.

*2 Polypropylene media only *3 Glass microfibre media only *4 Available for all Polypropylene micron ratings except the CRY.

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