

Hydrofil™ Plus

Dual Nylon 6.6 Layer Membrane Cartridge Filters



Hydrofil™ Plus microbial rated cartridges have been developed and manufactured for the filtration of liquids in the pharmaceutical, biotechnology and other critical applications. Hydrofil™ Plus utilises a naturally hydrophilic Nylon 6.6 membrane with a mirrored asymmetric pore structure. The cartridge's unique built in pre-filtration membrane layer provides longer life and higher throughput.

When combined with quality all-polypropylene components and high integrity manufacturing techniques, the Hydrofil™ Plus filter cartridge is ideally suited to the most demanding process conditions.

Ordering Information

Product Code:							
1	2	3	4	5	6	7	
1: Membrane	2: Pore rating	3: Version	4: Length (Nominal)	5: End Fitting	6: Seals	7: Additional	
HTP	Hydrofil™ Plus	10 0.1µm 20 0.2µm	R S	Rinsed Standard	A B C F G H J K L M S U V W X Y Z	Ethylene Propylene Silicone Viton® Nitrile FEP Encap. Viton® G SOE Code 28, fin (3 lugs) 224, fin 226, fin F20 +Code 7 (SS Core) F20 +Code 2 (SS Core) BS832, flat F20 +Code Y (SS Core)	N+U Non-steamable (no insert) Pharma Grade Unbranded
			1 2 3 4 5	10" (254mm) 20" (508mm) 30" (762mm) 40" (1016mm) 5" (125mm)	Code 3 Code 7 Code 8 N SOE G DOE (short) G SOE 216 (218), fin Code 2 223, fin (no lugs) DOE Code 28, fin (3 lugs) 224, fin 226, fin F20 +Code 7 (SS Core) F20 +Code 2 (SS Core) BS832, flat F20 +Code Y (SS Core)		

Features and Benefits

- Guaranteed microbial ratings
- Excellent chemical compatibility
- Cartridge integrity and low TOC levels
- Suitable for steam sterilising
- Full traceability
- Controlled manufacturing environment

Specifications

Materials of Manufacture

Pre-filter membrane:	Nylon 6.6
Final membrane:	Nylon 6.6
Membrane support:	Polypropylene
Irrigation mesh (support):	Polypropylene
Drainage layer:	Polypropylene
Inner core:	Polypropylene
Outer support:	Polypropylene
End fittings:	Polypropylene
Support ring:	Stainless steel

Cartridge Dimensions (Nominal)

Effective Filtration Area:	0.63m ² (6.8ft ²) per 10" module
Diameter:	70mm (2.8")
Length:	1 module: 254mm (10") 2 modules: 508mm (20") 3 modules: 762mm (30") 4 modules: 1016mm (40")

Other size formats (including juniors) are available upon request.

Cartridge Treatment

Standard:	Cleaned and flushed with pyrogen-free water
Rinsed:	Ultra-clean, pulse flushed to give a system resistivity of 18MΩ.cm

Gaskets and O-Rings

FDA approved Ethylene Propylene, FEP encapsulated, Silicone, Viton® or Nitrile

Maximum Differential Pressure

Normal flow direction at:

20°C (68°F):	6.0bar (87psi)
80°C (176°F):	4.0bar (58psi)
100°C (212°F):	3.0bar (44psi)
120°C (248°F):	2.0bar (29psi)

Reverse flow direction at:

20°C (68°F):	2.1bar (30psi)
80°C (176°F):	1.0bar (15psi)
100°C (212°F):	0.5bar (7psi)

Operating Temperature

Maximum continuous: 60°C (140°F)

Sterilisation

In situ steam up to 40 x 25 min cycles at 121°C (250°F).

Extractables

Minimum total extractables. Please refer to the Hydrofil™ Validation Guide.

Integrity Testing

Each Hydrofil™ Plus module of every cartridge is individually integrity tested using the Diffusive Flow Test, which correlates to the HIMA and ASTM F838-05 bacterial challenge tests. Non-destructive integrity tests, such as Pressure Hold, Diffusive Flow and Bubble Point, can be performed by customers. Please contact us for procedural details.

Clean Water Flow Rates

- Typical clean water flow rate:
A 254mm (10") Hydrofil™ Plus single cartridge exhibits the flow-ΔP characteristics indicated below, for solutions with a viscosity of 1 centipoise.
- Other solutions:
For solutions with a viscosity other than 1 centipoise, multiply the indicated differential pressure by the viscosity in centipoise.

