

Fluorofil™ F100

PTFE Membrane Cartridges for Solvent Filtration



FluorofilTM F100 cartridges are manufactured using a highly hydrophobic 1 micron PTFE membrane. The enhanced PTFE membrane offers exceptionally high liquid flow rates at low pressure differentials, making FluorofilTM F100 cartridges ideally suited to solvent filtration.

For solvent and aggressive chemical filtration applications, FluorofilTM F100 cartridges offer a wide range of chemical compatibility with high thermal stability. Suitable for the most demanding microfiltration applications, the cartridges can be used for the filtration of aggressive chemical solutions including acids, alkalis, solvents and etchants.

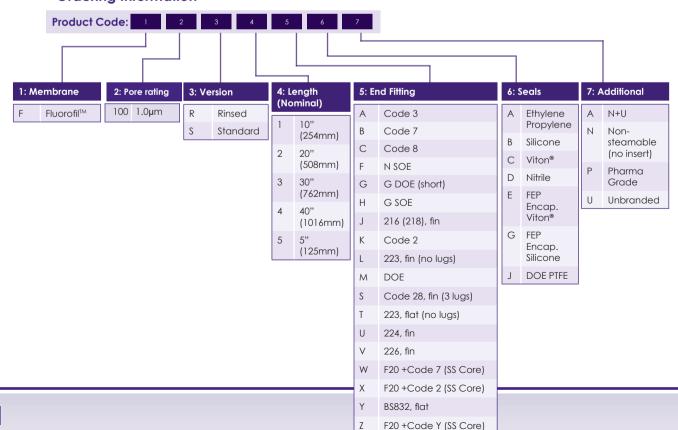
Ordering Information

Typical Applications

- · Carbon fines removal
- Fine chemical and solvents
- Photoresists and developers

Features and Benefits

- Guaranteed particle retention in a liquid challenge
- Cartridge integrity and low TOC levels
- Solvents and aggressive chemicals
- · Full traceability
- Controlled manufacturing environment



Specifications

Materials of Manufacture

Filter membrane: PTFE

Membrane support: Polypropylene Irrigation mesh (support): Polypropylene Drainage layer: Polypropylene Inner core: Polypropylene Outer support: Polypropylene End fittings: Polypropylene Sealing: Fusion bonding

Cartridge Dimensions (Nominal)

Effective Filtration Area:

0.68m² (7.3ft²) per 10" module Diameter:

70mm (2.8")

Length: 1 module: 254mm (10")

2 modules: 508mm (20") 3 modules: 762mm (30") 4 modules: 1016mm (40")

Cartridge Treatment

Standard: Cleaned and flushed, without further

treatment

Rinsed: Ultra-clean, pulse flushed to give a system

resistivity of $18M\Omega.cm$

Gaskets and O-Rings

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

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)

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 (in water)

Maximum continuous: 80°C (176°F)

Extractables

Minimum total extractables. Please refer to the Fluorofil™ F100 Validation Guide.

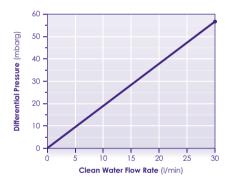
Integrity Testing

Each Fluorofil™ F100 module of every cartridge is individually integrity tested using the Reverse Bubble Point Test, which correlates to the particle retention rating determined by the modified OSU F-2 Single Pass Challenge Test. Non-destructive integrity testing, using the Reverse Bubble Point Test, can be performed by the end user. Please contact us for procedural details.

Clean Water Flow Rates

(after Solvent Pre-wet and Water Flush)

- Typical clean water flow rate:
 A 254mm (10") Fluorofil™ F100 single cartridge with
 1.0µm particle retention rating exhibits the flow-∆P
 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.



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