

Trapfil™

Polypropylene Guard Filters for Clear, Bright Beverages



The Trapfil™ filter has been specifically developed for the retention of diatomite and polyvinylpyrrolidone (PVPP) particles. It is manufactured from materials which are 100% FDA (Food and Drug Administration) approved and fully welded for strength and integrity.

The all-polypropylene construction enables the Trapfil™ filter to be resistant to hot caustic solution and standard CIP practices. It is also compatible with steam and hot water sanitising procedures.

Designed to be backflushed *in situ* to remove diatomite and PVPP particles, it has been industry proven to withstand up to 100 backflush cycles with hot caustic solution at 70-80°C (158-176°F). This backflushing process regenerates the Trapfil™ filter providing improved economics.

The Trapfil™ filter is available in a variety of lengths and industry standard adaptors. Trapfil™ cartridges are available in 5, 10 and 15 micron ratings, validated at Beta 5000. Each Trapfil™ filter carries a unique serial number to enable full traceability of material components.

Typical Applications

- Stabilisation
- Clarification

Ordering Information

Product Code: **1** **2** **3** **4** **5** **6** **7**

1: Pre-Filter		2: Pore rating		3: Version		4: Length (Nominal)		5: End Fitting		6: Seals		7: Additional	
R	Trapfil™	05	5µm	S	Standard Hard Cage	1	10" (254mm)	A	Code 3	A	Ethylene Propylene	P	Supplied with Certificate of Quality
		10	10µm			2	20" (508mm)	B	Code 7	B	Silicone	U	Unbranded
		15	15µm			3	30" (762mm)	C	Code 8	C	Viton®		
						4	40" (1016mm)	F	N SOE	D	Nitrile		
								G	G DOE (short)	E	FEP Encap. Viton®		
								H	G SOE	G	FEP Encap. Silicone		
								J	216 (218), fin	J	DOE PTFE		
								K	Code 2				
								L	223, fin (no lugs)				
								M	DOE				
								S	Code 28, fin (3 lugs)				
								T	223, flat (no lugs)				
								U	224, fin				
								V	226, fin				
								Y	BS832, flat				

Features and Benefits

- Backflushing
- Chemical regeneration
- Suitable for steam and hot water sanitisation
- Guaranteed removal ratings
- Full traceability
- Controlled manufacturing environment

Specifications

Materials of Manufacture

Filter media:	Polypropylene
Support layers:	Polypropylene
Inner core:	Polypropylene
Outer support:	Polypropylene
End fittings:	Polypropylene
Support ring:	Stainless steel

Cartridge Dimensions (Nominal)

Effective Filtration Area:	0.53m ² (5.7ft ²) per 10" module.	
Diameter:	70mm (2.8")	
Length:	1 module:	254mm (10"), 508mm (20")
	2 modules:	762mm (30"), 1016mm (40")

Cartridge Treatment

Standard: Cleaned and flushed with pyrogen-free water

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)
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: 80°C (176°F)

Sterilisation

In situ steam 100 x 30 minute cycles at 125°C (257°F)
Hot water 250 x 20 minute cycles at 85-90°C (185-194°F)

Extractables

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

Integrity Testing

Trapfil™ filter cartridges are batch tested for integrity using the Bubble Point Test. Please contact us for procedural details.

Clean Water Flow Rates

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

