

PGF

Absolute Rated Pleated Glass Fibre Cartridge Filters



A range of absolute rated cartridge filters are manufactured, featuring the latest developments in borosilicate glass fibre filter media technology; PGF cartridges are constructed from robust glass fibre and polypropylene filtration layers, offering removal ratings from 0.5 to 5 micron absolute.

PGF cartridges are suitable for absolute removal of unwanted particulates and for pre-filtration to membrane filters. PGF cartridges incorporate a polypropylene pre-filtration layer, combined with a high dirt capacity glass fibre media. This has the effect of longer service life, improved operating costs and smaller process footprint.

PGF filter cartridges are highly resistant to integrity failure caused by steam sterilisation and have excellent chemical compatibility characteristics.

High viscosity PGF HV versions of this range are available upon request.

Typical Applications

- Foods and beverages
- Process water systems
- Pharmaceuticals and bio-processing
- Fine chemicals
- Cosmetics

Features and Benefits

- Zeta potential
- High filtration area
- Guaranteed removal ratings
- Suitable for steam and hot water sanitisation
- Resistance to Cleaning-In-Place (CIP) regimes
- Full traceability
- Controlled manufacturing environment

Ordering Information

1: Pre-Filter		2: Pore rating		3: Version		4: Length (Nominal)		5: End fitting		6: Seals		7 Additional	
CF-M	PGF	P5	0.5 µm	R	Rinsed	1	10" (254mm)	A	Code 3	A	Ethylene Propylene	A	N+U
		P8	0.8µm	S	Standard Hard Cage	2	20" (508mm)	B	Code 7	B	Silicone	N	Non-steamable (no insert)
		01	1 µm			3	30" (762mm)	C	Code 8	C	Viton	P	Pharma Grade
		02	2 µm			4	40" (1016mm)	F	N SOE	D	Nitrile	U	Unbranded
		05	5 µm			5	5" (125mm)	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				

Product Code: 1 2 3 4 5 6 7

Specifications

Materials of Manufacture

Filter media:	Glass fiber
Pre-filtration layer:	Polypropylene
Support layers:	Polypropylene
Inner core:	Polypropylene
Outer support:	Polypropylene
End fittings:	Polypropylene
Support ring:	Stainless steel

Cartridge Dimensions (Nominal)

Effective Filtration Area:	0.4m ² (4.4ft ²) per 10" module.	
Diameter:	70mm (2.8")	
Length:	1 module (short):	125mm (5")
	1 module:	254mm (10")
		508mm (20")
	2 modules:	762mm (30")
		1016mm (40")

Cartridge Treatment

Standard:	Cleaned without further treatment
Flushed:	Flushed with pyrogen-free water

Gaskets and O-Rings

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

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: 80°C (176°F).

Sterilisation

In situ steam 20 x 30 minute cycles at 130°C (266°F) Hot water 200 x 20 minute cycles at 85-90°C (185-194°F)

Extractables

Minimum total extractables. Please refer to the PGF Validation Guide.

Integrity Testing

PGF 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") PGF 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 diff

