

PP II

Absolute Rated Pleated Polypropylene Cartridge Filters



A range of absolute rated cartridge filters are created, featuring the latest developments in meltblown polypropylene filter media technology. PP II cartridges are based on a robust all polypropylene construction, offering removal ratings from 0.5 to 150 micron absolute.

PP II cartridges are suitable for absolute removal of unwanted particulates and for pre-filtration to membrane filters. The graded multi-layer polypropylene media provide pre-filtration of the process fluid prior to the absolute rated final layer. The unique design of the PP II cartridges helps to achieve lower running costs and a smaller process footprint.

PP II filters are also highly resistant to integrity failure caused by steam sterilisation and have excellent chemical compatibility characteristics.

Typical Applications

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

Features and Benefits

- Graded multi-layer media
- High filtration area
- Guaranteed removal ratings
- Suitable for steam and hot water sanitisation
- 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-P	PP II	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		
		03	3 µm			5	5" (125mm)	G	G DOE (short)	E	FEP Encap. Viton		
		05	5 µm					H	G SOE	G	FEP Encap. Silicone		
		07	7 µm					J	216 (218), fin	J	DOE PTFE		
		10	10 µm					K	Code 2				
		15	15 µm					L	223, fin (no lugs)				
		20	20 µm					M	DOE				
		30	30 µm					S	Code 28, fin (3 lugs)				
		40	40 µm					T	223, flat (no lugs)				
		60	60 µm					U	224, fin				
		90	90 µm					V	226, fin				
		105	105 µm					Y	BS832, flat				

Product Code:

1	2	3	4	5	6	7
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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:	Up to 0.6m ² per 10" module (depending on pore rating).		
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
Rinsed:	Ultra-clean, pulse flushed to give a system resistivity of 18M Ω .cm

Gasket and O-Rings

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

Maximum Differential Pressure

Normal flow direction at:

20°C (68°F):	6.0 bar (87psi)
80°C (176°F):	4.0 bar (58psi)
100°C (212°F):	3.0 bar (44psi)
120°C (248°F):	2.0 bar (29psi)
125°C (257°F):	1.5 bar (22psi)

Reverse flow direction at:

20°C (68°F):	2.1 bar (30lb/in ²)
80°C (176°F):	1.0 bar (15lb/in ²)
100°C (212°F):	0.5 bar (7lb/in ²)

Operating Temperature

Maximum continuous:	80°C (176°F)
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Sterilisation

In situ steam 80 x 30 minute cycles at 135°C (275°F)
Hot water 200 x 20 minute cycles at 85-90°C (185-194°F)

Extractables

Minimum total extractables. Please refer to the PP II Validation Guide.

Integrity Testing

PP II 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") PP II single cartridge exhibits the flow- Δ P 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.

