



Bioflo PP Junior

Absolute Rated Pleated / Polypropylene Cartridge / Filters Small-Scale Applications

A range of absolute rated cartridge filters from Envirogen Group Italy, designed for retrofitting into existing junior-style housings. Featuring the latest developments in meltblown polypropylene filter media technology, Bioflo PP Junior cartridges are based on a robust all polypropylene construction, offering removal ratings from 0.5 to 5 micron absolute.

Bioflo PP Junior 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 Bioflo PP Junior cartridges helps to achieve lower running costs and a smaller process footprint.

The Bioflo PP Junior are also resistant to integrity failure caused by steam sterilisation and have excellent chemical compatibility characteristics. They are suitable for applications ranging from bioburden reduction and the clarification of a wide range of process liquids and end products.

Typical Applications

- Small-scale pharmaceuticals
- Ophthalmic solutions
- Electronics and semiconductors
- Small-scale fine chemicals
- Pilot-scale studies
- Inks and coatings

Features and Benefits

- Graded multi-layer media.
- High filtration area.
- Guaranteed removal ratings.
- Suitable for steam and hot water sanitisation.
- Environmentally friendly.
- 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)

Diameter: 56mm (2.2")
 Length: 77.5mm (2.5")
 136mm (5")

Effective Filtration Area

Up to 0.15m² (1.6ft²) per 136mm module (depending on pore rating).

Cartridge Treatment

Standard: Cleaned without further treatment.
 Flushed: Flushed with pyrogen-free water.
 Rinsed: Ultra-clean, pulse flushed to give a system resistivity of 18MΩ.cm.

Gaskets and O-Rings

J-style: Silicone (other materials are available on request).
 S-style: Not supplied.

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

Operating Temperature

Maximum continuous: 80°C (176°F)

Sterilisation

J-style: In situ steam 70 x 25 minute cycles at 125°C (257°F).
 S-style: Autoclave 100 x 25 minute cycles at 125°C (257°F).

Extractables

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

Integrity Testing

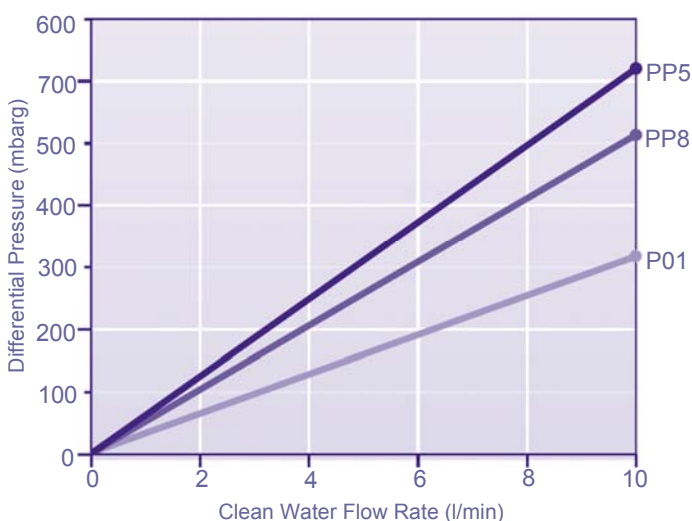
Bioflo PP Junior filter cartridges are batch tested for integrity using the Bubble Point Test. Procedural details are available from **Envirogen**.

Clean Water Flow Rates

Typical clean water flow rate:
 A 136mm (5") Bioflo PP Junior 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.



PART NUMBER

Code	Micron Rating	Length	Seals
PP	20 = 0,2 micron	25	2,5"
	45 = 0,45 micron	50	5"
	E5 = 0,5 micron		
	E8 = 0,8 micron		
	01 = 1 micron		
	02 = 2 micron		
	05 = 5 micron		
			A Ethylene Propylene B Silicone C Viton® D Nitrile E FEP Encapsulated Viton® F FEP Encapsulated Silicone

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