

Datasheet TechPleat PP

TechPleat PP - Pleated PP Filter Cartridges

TechPleat PP filter cartridges utilize a high-performance, pleated polypropylene media engineered for demanding and critical filtration applications in the Food & Beverage, water treatment, inks and power generation industries.

The media is integrated into a 100% polypropylene hardware assembly, including end caps, core, and outer cage, ensuring broad chemical compatibility.

The combination of PP media and PP support layers delivers high flow rates and low clean differential pressure while maintaining excellent filtration efficiency. Combining efficient particle retention with a pleated media configuration, TechPleat PP elements are ideally suited to applications requiring tightly controlled particle removal and extended service life.

The pleated depth structure enables significantly higher flow rates compared with traditional depth filters while maintaining high contaminant-holding capacity.



Filtration Efficiency

TechPleat PP media is carefully selected and tested to ensure Beta 5000 retention at the specified micron rating.

The filtration media is supported by upstream and downstream support layers to promote flow distribution and provide mechanical strength to the pleated structure.

Available micron ratings include:

0.3 µm	0.6 µm	1 µm
3 µm	5 µm	10 µm
20 µm	30 µm	50 µm
75 µm	100 µm	

Typical Applications

- Process water
- Aseptic processing applications
- Food & beverage applications
- Edible oils
- Inks and coatings
- Fine chemicals
- Plating solutions
- Bulk chemical processing

Maximum Operating Conditions

Differential Pressure Limits

- Forward flow: 50 psid (3.4 bar) at 20°C (68°F)
- Reverse flow: 40 psid (2.7 bar) at 20°C (68°F)

Operating Temperature

- Maximum continuous temperature: 82°C (180°F) at a differential pressure of 10 psid (0.69 bar) in water

Recommended Cartridge Changeout

- 35 psid (2.4 bar)

Construction Materials

- **Media:** Polypropylene
- **Support Layers:** Polypropylene
- **End Caps:** Polypropylene
- **Inner Core:** Polypropylene
- **Outer Cage:** Polypropylene
- **Construction method:** Thermal bonding
- **O-rings:** Si, EPDM, Viton

Regulatory & Safety Compliance

Biological Safety

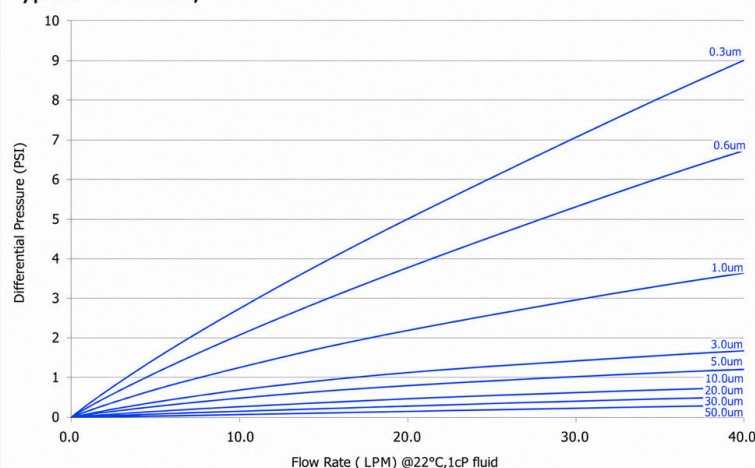
All materials comply with biological safety requirements in accordance with USP Class VI (tested at 121°C for plastic components).

Food Contact Compliance

- Materials of construction comply with FDA regulations for food and beverage contact per 21 CFR (U.S. Code of Federal Regulations).
- Filter media and hardware materials conform to the applicable requirements of Regulation (EC) No 1935/2004 and Commission Regulation (EU) No 10/2011 for food-contact applications.

Flow Rate Data (10" element)

Typical Flow Rate, 10"



Ordering information

Code	Micron rating (µm)	Length (inch)	End Caps	O-ring
TF-PP	030 - 0.3 µm	5 - 5"	FH - Code 7	S - Silicone
	060 - 0.6 µm	10 - 10"	EH - Code 8	V - Viton
	01 - 1 µm	20 - 20"	EG - Code 3	E - EPDM
	03 - 3 µm	30 - 30"	AA - DOE	N - Nitrile
	05 - 5 µm	40 - 40"	ZH - 224 / fin	T - FEP
	10 - 10 µm			
	20 - 20 µm			
	30 - 30 µm			
	50 - 50 µm			
	75 - 75 µm			
	100 - 100 µm			

Example article code:

TF-PP0120FHE

Example article description:

TechPleat PP 1µm 20" C7 EPDM

Disclaimer

Information provided is based on standard product data and is subject to change without notice. Techno Filter B.V. accepts no liability for incorrect application or improper use of the product.