

Datasheet TechPleat HF

TechPleat HF High Flow Filters

High Flow Filter Cartridges are engineered for the efficient filtration of large liquid volumes in industrial and chemical processing applications. The high flow rate capability and dirt holding capacity allow reduced system downtime and enable fast, efficient filter change-out.

Manufactured using pleated polypropylene, glass fibre, or polyester filter media, and incorporating multiple prefiltration and drainage layers to ensure extended service life before blockage, TechPleat HF cartridges are designed for reliable removal of general particulate contaminants

Both cartridge types are designed to protect downstream equipment, ensure consistent process performance, and are suitable for use in high-flow filtration systems. The high surface area design enables high flow rates with extended service life, reducing operational costs and maintenance frequency.



Typical Applications

- Process water filtration
- Pre-filtration for reverse osmosis (RO) and membrane systems
- Cooling water and condensate treatment
- Protection of pumps, valves, and heat exchangers
- Utility water and chemical process streams
- Filtration of wash water and cleaning effluents
- Prefiltration in food and beverage applications
- Completion fluids
- Fuels and oils
- High-volume liquid processing circuits

Key Features

Feature	PP/GF/PE Cartridge
Filter Medium	Polypropylene Glass Fibre Polyester
Filtration Rating	1–50 µm absolute (Beta 5000)
Filtration Mechanism	Depth filtration
Housing Compatibility	Standard high-flow housings
Available Lengths	10 – 60 inches
Flow Direction	Inside-to-out

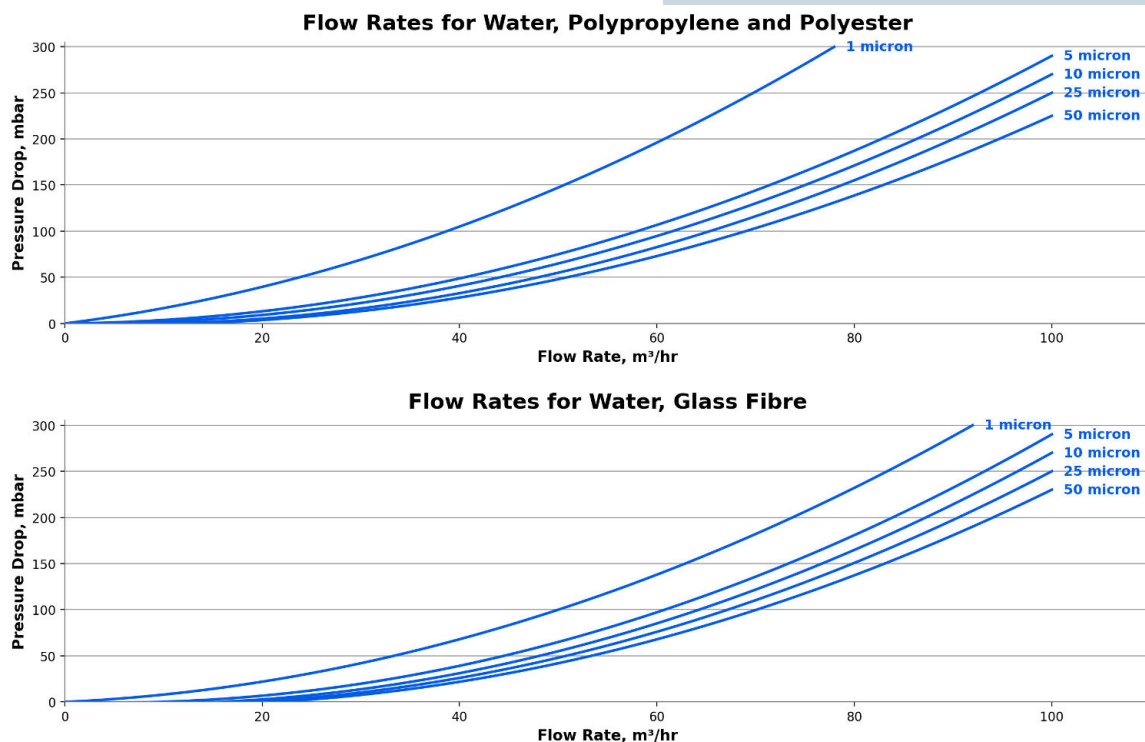
Technical Specifications

Feature	PP Cartridge
Flow Rate	80 m³/h (40" element)
Change-out dP	1.5 bar
Maximum dP	3.5 bar
Operating Temperature	4 – 60 °C
Max. Temperature	80 °C
End Cap Material	Polypropylene
Surface Area	up to 6 m² per 40"
Outer Cage	Rigid moulded polypropylene
Inner Core	Polypropylene

Highlights

- Inside-to-out flow retains contaminants within the element, enabling cleaner change-out
- Robust moulded outer cage delivers strength
- High surface area (up to 6 m² per 40" element) maximises flow capability and allows for high contaminant loading
- Wide range of media available
 - Polypropylene
 - Polyester
 - Glass Fibre
- Absolute micron ratings are tested to Beta 5000 using the industry-standard single-pass OSU-F2 test method
- Fast and efficient element replacement compared to conventional filter elements
- Pleated with a spacer layer to ensure low differential pressure, high flow rates, and efficient liquid distribution through the pleat pack
- Unique multilayer design incorporating pre-filtration and drainage layers extends service life before blockage.

Flow Properties



Flow graphs based on 40" elements using water.

Ordering information				
Code	Micron rating (µm)	Media	Length (inch)	O-ring
TF-HF	045 - 0.45µm	PP - Polypropylene PE - Polyester GF - Glass Fibre	10 - 10"	E - EPDM
	01 - 1µm		20 - 20"	S - Silicone
	05 - 5µm		40 - 40"	N - Nitrile
	10 - 10µm		60 - 60"	V - Viton
	25 - 25µm			
	50 - 50µm			
	100 - 100µm			

Example article code: TF-HF01PP40E

Example article description: TechPleat HF 1um PP media 40" length EPDM

Disclaimer

All information is indicative and subject to change without prior notice. Final suitability must be confirmed by application-specific evaluation and testing.