Graver Technologies

Filtration | Separation | Purification

TefTEC™ PTFE Membrane Filter Series

Absolute Rated PTFE Membrane Filter Cartridges

TefTEC cartridge filters are constructed with naturally hydrophobic PTFE membrane and polypropylene support layers and components. The HIMA retentive PTFE membrane offers superior hydrophobicity and water intrusion resistance compared to PVDF and polypropylene membranes, and the cartridge construction offers a cost-effective alternative to all-fluorocarbon filters. TefTEC filters are ideal for gas/vent applications and the filtration of aggressive chemicals and solvents.

TefTEC Filter Features–Benefits

- High surface area, single-layer construction provides superior flow rates and minimizes filtration system size
- 100% Flushed with 18 MΩ-cm DI water and integrity tested
- Meets applicable CFR criteria and USP Class VI Biological Test for Plastics
- Filters are manufactured, flushed, tested and packaged in an ISO Class 7 Cleanroom Environment.
- Manufactured using current Good Manufacturing Practices
- Each filter element stamped with pore size, lot and serial number for identification and traceability.

Filter Specifications

Media:	*Gore-Tex® expanded PTFE membrane*
Inner core, end caps, cage:	*Polypropylene*
Support layers:	*Polypropylene*
O-Rings:	*Buna-N, EPDM, Silicone, Viton, Teflon Encapsulated Viton*
Micron ratings:	*0.05 µm, 0.1 µm, 0.2 µm, 0.45 µm, 1.0 µm*
Dimensions and Operating Parameters	
Typical Nominal lengths:	9.75'', 10'', 20", 30'', 40'' 24.8, 25.4, 50.8, 76.2 101.6cm)
Outside diameter:	*2.7'' (6.9 cm)*
Inside diameter:	*1.0'' (2.54 cm)*
Surface area:	*8.5 ft². (0.79m²) – 10 inch element*
Maximum operating temperature:	*203°F (95°C)*
Maximum operating pressure:	*75 psid @ 70°F (5.2 bar @ 21°C) 40 psid @ 176°F (2.8 bar @ 80°C) 15 psid @ 203°F (1.03 bar @ 95°C)*
Maximum reverse differential pressure:	*40 psid @ 70°F (2.8 bar @ 21°C)*

Performance Specifications

Steam/Autoclave

Cartridges will withstand at least 100 steam/autoclave 30 minute cycles @ 275°F (135°C)

Integrity Test Values

Air Diffusion per 10 inch cartridge wet with 60/40 IPA/water. Contact Graver Technologies for specific method.

Pore Size	Specification
0.05 µm:	≤ 50 cc/min @ 22 psig (1.5 bar)
0.1 µm:	≤ 50 cc/min @ 18 psig (1.2 bar)
0.2 µm:	≤ 20 cc/min @ 12 psig (0.8 bar)
0.45 µm:	≤ 15 cc/min @ 5 psig (0.34 bar)
1.0 µm:	≤ 15 cc/min @ 3 psig (0.2 bar)

Applications

- Aggressive chemicals
- Strong acids/bases
- Solvents
- Pharmaceutical Intermediates
- Fermentation air
- Tank Vents
- Compressed gases
- Photoresists
- Hot DI water

TefTEC Nomenclature Information

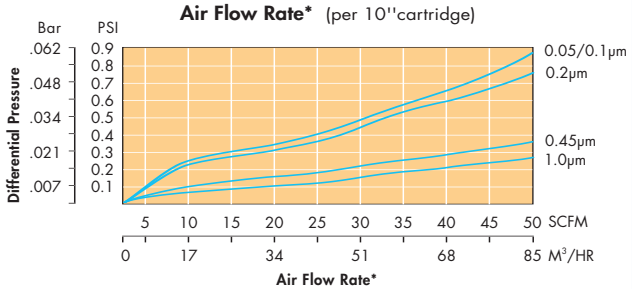
TefTEC	0.1	-20	P2	S
Filter Type TefTEC Series Filters		**Nominal Length (inches)** **-9.75** **-10** **-20** **-30** **-40**		**Gasket or O-Ring** **S** Silicone **B** Buna-N **E** EPDM **V** Viton **T** Teflon encap. Viton (O-Rings only)

Retention Rating (microns)
0.05
0.1
0.2
0.45
1

End Configuration
P Double Open End
P2 226/Flat Single Open End
P3 222/Flat Single Open End
P7 226/Fin Single Open End
P8 222/Fin Single Open End
AM Single open end, internal O-Ring

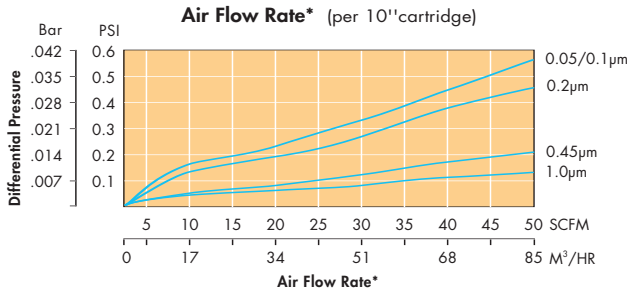
Example: TefTEC 0.1-20 P2S

TefTEC AIR FLOW RATE



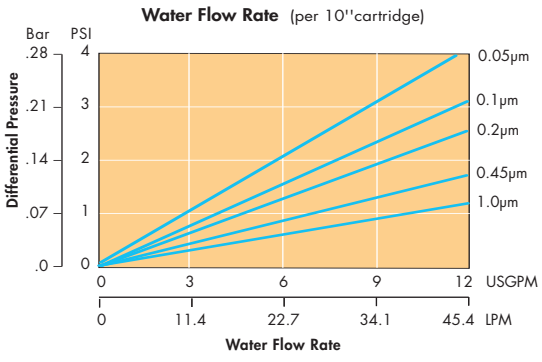
*Test conditions: System pressure at <10 psig (vent), 65° F (18°C), outlet open to atmosphere.

TefTEC AIR FLOW RATE



*Test conditions: System pressure at 30 psig, 65°F (18°C)

TefTEC WATER FLOW RATE



For more information

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