



GTM grade

PTFE Membrane Media Filter Cartridges
Engineered and Manufactured for Cost Effective Filtration

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GTM grade PTFE cartridges are designed for general purpose use wherever a cost effective PTFE membrane filter is required. Manufactured with inherently hydrophobic PTFE membrane, these cartridges are designed for use in the filtration of aggressive solvents, and as compressed gas and vent filters. These cartridges are found in the manufacturing processes of pharmaceutical companies, semi-conductor manufacturers and bulk chemical companies. The cartridge surface area, filter core design, pleat configuration and pleat packing density have been optimized to provide increased cartridge life resulting in lower filtration operating costs. Each cartridge module is integrity tested.

Construction Materials ¹

Filtration Media: PTFE

Filtration Media Support: Polypropylene

End Caps: Polypropylene

Center Core: Polypropylene

Outer Support Cage: Polypropylene

Sealing Method: Thermal Bonding

O-rings: ... Buna, Viton®, EP, Silicone, Teflon® Encapsulated Silicone, Teflon® Encapsulated Viton®.

¹All materials of construction are FDA accepted. Final assemblies have been validated to pass USP class 6 Toxicology extractable tests, oxidizable substances for plastics, endotoxin level and other quality tests.

Maximum Operating Parameters

Forward Differential Pressure: 50 psi (3.4 bar) at 20°C.

Reverse Differential Pressure: 40 psi (2.7 bar) at 20°C.

Operating Temperature: 180°F (82°C) at 10 psid (0.69 bar) in water.

Dimensions

Length: 5 to 40 inches (12.7 to 101.6 cm) nominal

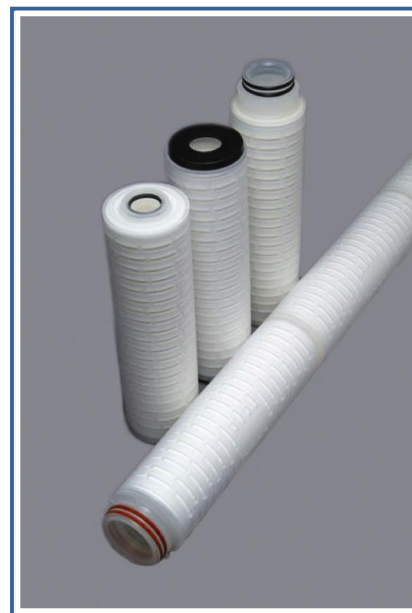
Outside Diameter: 2.75 inches (7.0 cm) nominal

Filtration Area: 7.0 ft² (0.65 m²) Per 10" length

Flow Rate

The following table represents typical water flow and air flow rates. These values are approximations because of the differences in pressure drop encountered in housings and piping systems. Extrapolation to multiple length cartridges in multi-round housings can be done for sizing purposes. Exact flow rates will be installation dependent.

Pore Size	0.1 µm	0.22 µm	0.45 µm
SCFM	>26 SCFM/psid/10 inch cartridge length	>42 SCFM/psid/10 inch cartridge length	>68 SCFM/psid/10 inch cartridge length
GPM	1.25 gpm/psid/10 inch cartridge length	2.8 gpm/psid/10 inch cartridge length	5.7 gpm/psid/10 inch cartridge length
Pore Size	1.0 µm	3.0 µm	
SCFM	>85 SCFM/psid/10 inch cartridge length	>120 SCFM/psid/10 inch cartridge length	
GPM	9.0 gpm/psid/10 inch cartridge length	11 gpm/psid/10 inch cartridge length	



Applications

Final Filtration of:

- Compressed Air
- Solvents
- Pressurized Gases
- Tank Ventilation

Sanitization / Sterilization

Filtered Hot Water: 194°F (90°C)

Autoclave: 250°F (121°C), 30 min, multiple cycles

In-line Steam: 275°F (135°C), 30 min, multiple cycles

Chemical Sanitization: Industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals. Sanitization protocols designed to extend the useful life of GTM cartridges are available from Critical Process Filtration, Inc.®.

Integrity Test Specifications

(per 10 inch length) (60/40, IPA/water wetted membrane)

Pore Size	Bubble Point
0.1 µm	22 psig
0.22 µm	15 psig
0.45 µm	9 psig
1.0 µm	6 psig
3.0 µm	3 psig

Quality Standards

Our goal is to ensure our customers the greatest possible value for their filtration dollar. We equipment is highly automated, reducing hand operations that achieve both low cost manufacture and high quality by employing state of the art manufacturing equipment. This computer controlled compromise quality. Each operation including assembly, testing, cleaning, drying and packaging is done in appropriately rated clean rooms. Critical Process Filtration manages an ISO 9000 facility that produces validated products to rigorous standards. Manufacturing is controlled using sophisticated MRP software that is networked to work stations in manufacturing centers and inspection points. During the manufacturing and inspection processes, data is collected "real time" from machinery and measuring instruments. This allows variable and attribute data to be quickly and easily analyzed to facilitate constant improvements in both quality and cost.

Total Performance

Critical Process Filtration, Inc.® is a vertically integrated supplier of filtration products and services to industries in which filtration is considered to be a critical part of the manufacturing process. We manufacture a complete line of products to help you achieve all your filtration requirements from a single source.



Ordering Information

The cartridge catalog number is made up of several variable characters i.e. pore size, length, O-ring material, and end cap code. For example: a 0.1 µm, 20 inch (50.8 cm) long cartridge with 2-222, Teflon® encapsulated Viton® O-rings, no spear (flat top) and no 316 SS Ring would be designated as: GTM*10N00002T5.

GTM		000		
Pore size code *10 = 0.10 μm *20 = 0.22 μm *40 = 0.45 μm 1*0 = 1.0 μm 3*0 = 3.0 μm	316 SS Ring S = Ring N = No Ring	Cartridge Length 05 = 4.875 inches (12.4 cm) 97 = 9.75 inches (24.6 cm) 01 = 10 inches (25.4 cm) 19 = 19.5 inches (49.5 cm) 02 = 20 inches (50.8 cm) 29 = 29.25 inches (74.3 cm) 03 = 30 inches (76.2 cm) 04 = 40 inches (101.6 cm)	O-ring code S = Silicone B = Buna V = Viton® T = Teflon® Encapsulated Viton® E = EP R = Teflon® Encapsulated Silicone	End cap code 0 = Flat Gasket, DOE 1 = Flat Gasket / Plug 2 = 2-222 O-ring / Plug 3 = 213/119 Internal O-ring DOE 4 = 213/119 Internal O-ring / Plug 5 = 2-222 O-ring / Flat 6 = 2-226 O-ring / Flat 7 = 020 O-ring / Plug 8 = 2-222 O-ring / Spear 9 = 2-226 O-ring / Spear 21 = 2-223 O-ring / Flat 22 = 2-223 O-ring / Spear 23 = 2-222 O-ring 3 Tab / Flat 24 = 2-222 O-ring 3 Tab / Spear



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