PharmBiologic Solutions, LLC Advancing custom solutions

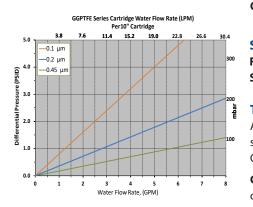


High Purity - General Grade PTFE Hydrophobic Teflon[®] Membrane for Liquid and Air Applications

General Grade PTFE Cartridges are designed for multi-purpose use wherever a cost effective PTFE membrane cartridge is required. GGPTFE series cartridges are hydrophobic and resist wetting in critical air/vent applications. Priced well below special purpose PTFE membrane cartridges, General Grade PTFE cartridges are still manufactured with the same careful attention to quality and performance.

The Extended Area option (GGPTFEX) offers up to 40% more surface area. This additional area results in significant increases in flowrate and loading capacity in the same footprint.

Flow Rate vs Pressure Drop



*Data represents GGPTFE. For GGPTFEX option, multiply given flowrate by 1.4

Ordering Information

Construction Materials

| Membrane | Teflon® | | | |
|--|-----------------------|--|--|--|
| Support Media | Polypropylene | | | |
| End Caps | Polypropylene | | | |
| Center Core | Polypropylene | | | |
| Outer Support Cage | Polypropylene | | | |
| O-Rings/Gaskets | Buna, EPDM, Silicone, | | | |
| Viton [®] , Teflon [®] Encapsulated Viton [®] | | | | |

Sanitization/Sterilization

| Filtered Hot Water | | | | |
|---------------------|--------------------|--|--|--|
| Steam Sterilization | 121°C for 30 min., | | | |
| | multiple cycles | | | |

Toxicity

All polypropylene components meet the specifications for biological safety per USP Class VI – 121°C for plastics.

Chemicals: Cartridges are chemically compatible with most chemicals and sanitizing agents.

Note: Stainless steel insert option needed for all cartridges being hot water sanitized or steam sterilized.

Dimensions

Length: 10 to 40 inches (25.4 to 101.6 cm) nominal Outside Diameter: 2.70 inches (7.0 cm) nominal

Maximum Differential Pressures

| Forward | 50 PSI (3.4 bar) at 20°C |
|---------|--------------------------|
| Reverse | 40 PSI (2.7 bar) at 20°C |

FDA Listed Materials

Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations.

Typical Applications

- Aggressive Fluids
- Fermentation Feed Air
- Venting
- Photoresists
- Inert gases

| GGPTFE | Rating (µ) | А | Length | С | End Cap Style | O-Rings/Gaskets | - | Adders |
|---------|------------|---|----------------|---|--------------------------|---|---|-------------------------------|
| GGPTFEX | 0.1 | | 10″ (25.4 cm) | | 2 = DOE Flat Gasket | B = Buna | | I = Stainless Steel Insert |
| | 0.2 | | 20″ (50.8 cm) | | 3 = 222 w/ Fin | E = EPDM | | CS = 316ss Compression Spring |
| | 0.45 | | 30″ (76.2 cm) | | 4 = 222 w/ Flat Cap | S = Silicone | | |
| | | | 40" (101.6 cm) | | 6 = 226 w/ Flat Cap | V = Viton® | | |
| | | | | | 7 = 226 w/ Fin | T = Teflon [®] Encapsulated Viton [®] | | |
| | | | | | 16 = 213 Internal O-Ring | Z = Teflon [®] Encapsulated Silicone | | |

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.

