



## Filter Data Sheet

### High Purity - Polysulfone (PS) Membrane

Hydrophilic Polysulfone Membrane for Water and Aqueous Solutions

#### Hydrophilic Polysulfone Membrane

**Cartridges** are an exceptional choice for ultra-high purity water and aqueous fluid applications. GHPS series cartridges offer extremely high flowrates and service-life while filtering to 0.05-1.2µm. GHPS cartridges are constructed using high purity polypropylene support materials and hardware and assembled using the latest thermal-bonding equipment. This results in an exceptionally clean cartridge that rinses to 18 MΩ with minimal throughput. The Extended Area option (GHPSX) 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

Rating (µ)	DI Water Flow per 1 PSID (gpm/10" (25.4cm) equivalent)
0.05	1.1 (4.2 lpm)
0.1	1.9 (7.2 lpm)
0.2	3.3 (12.5 lpm)
0.45	6.0 (22.7 lpm)
0.65	6.6 (24.9 lpm)
0.8	7.7 (29.1 lpm)
1.2	8.4 (31.8 lpm)

\*Data represents GHPS. For GHPSX option, multiply given flowrate by 1.4.

#### Typical Applications

- Deionized Water Systems
- General-Use Water Filtration
- Liquid Clarification
- Recirculating Fluids
- Chemical Filtration

#### Ordering Information

GHPS	Rating (µ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
GHPSX	0.05		10" (25.4 cm)		2 = DOE Flat Gasket	B = Buna		I = Stainless Steel Insert
	0.1		20" (50.8 cm)		3 = 222 w/ Fin	E = EPDM		HP = Heavy Poly Core
	0.2		30" (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone		R = 18 Megohm Rinse
	0.45		40" (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton®		CS = 316ss Compression Spring
	0.65				7 = 226 w/ Fin	T = Teflon® Encapsulated Viton®		
	0.8				16 = 213 Internal O-Ring	Z = Teflon® Encapsulated Silicone		
	1.2							

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.

#### Construction Materials

**Membrane** ..... Polysulfone  
**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** ..... 80°C for 30 min.  
**Steam Sterilization** ..... 121°C for 30 min., multiple cycles

**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 Recommended Operating Conditions

**Temperature** ..... 176°F (80°C)

#### 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.

#### Toxicity

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