

GD PES-Series DuoGrade™ Serial Layer Polyethersulfone

GD PES-Series DuoGrade™ Serial Layer Polyethersulfone Filter Cartridges deliver extended life and excellent retention. Featuring a Microglass prefiltration layer, this serial construction makes the GD PES an ideal choice for clarification of particulate-heavy solutions in a variety of food/beverage, pharmaceutical, biological, and chemical applications. With excellent flowrates, low pressure drops, and superior throughput volumes, GD PES cartridges can be used as final filters or to protect downstream sterilizing grade cartridges. Each cartridge is flushed with 18 megaohm High Purity deionized water and is integrity tested to ensure the delivery of clean effluent with low extractables.

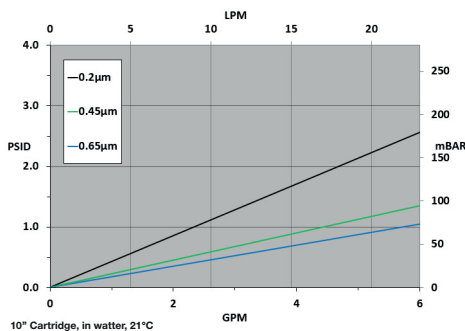
Designed to tolerate repeated hot water sanitization and *in-situ* steam sterilization cycles for maximum service life.

Microbial Retention Performance

Rating	Challenge Microbe	Log Reduction Value (LRV)
0,2µ	<i>Brevundimonas diminuta</i>	7,6
0,45µ	<i>Serratia marcescens</i>	6,6
0,65µ	<i>Saccharomyces cerevisiae</i>	4,8

*Independently tested in accordance with ASTM F838

Flow Rate vs Pressure Drop



Ordering Information

GD PES	Rating(µ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
	0,2		10" (25,4 cm)		2 = DOE Flat Gasket ¹	B = Buna-N		CS = 316SS Compression Spring
	0,45		20" (50,8 cm)		3 = 222 w/Fin	E = EPDM		I = Stainless Steel Insert
	0,65		30" (76,2 cm)		4 = 222 w/Flat Cap	S = Silicone		
			40" (101,6 cm)		6 = 226 w/Flat Cap	T = FEP FKM		
					7 = 226 w/Fin	V = FKM		
					16 = 213 Internal O-Ring ²	Z = FEP Silicone		
					28 = 222 3-Tabs w/ Fin			

¹If code 2 (DOE) is applied, options T and Z are not available.
²Silicone and EPDM only.

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. For additional technical support, a product Performance Guide is available upon request.

DS_GDPES_D033A_EN



Construction Materials

Media.....Fiber Glass / Polyethersulfone
Support Media.....Polypropylene
End Caps.....Polypropylene
Center Core.....Polypropylene
Outer Support Cages.....Polypropylene
O-Rings/Gaskets.....Buna, EPDM, Silicone, FEP Silicone, FKM, FEP FKM

Sanitization/Sterilization

Filtered Hot Water.....80°C for 30 min.
Steam Sterilization.....121°C for 30 min., multiple cycles

Chemicals : Cartridges are compatible with most chemical sanitizing agents.

Note : Stainless steel insert option required for all cartridges being hot water sanitized or steam sterilized, for the 222 and 226 connections.

Typical Applications

- Wine, Beer, & Spirits
- Bottled Water, Juices, Soft Drinks
- Cell Culture Media
- Large Volume Parenterals
- Bulk Pharmaceutical Solutions

Dimensions

Length : 25,4 to 101,6 cm nominal
Outside Diameter : 7,0 cm nominal

Operating Conditions

Change Out ΔP (recommended).....2,4 bar
Temperature (max).....80°C
Differential Pressure (max).....3,4 bar at 20°C

Toxicity

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

Food Safety Compliance

Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are deemed safe for use in contact with foodstuffs in accordance with EU Directives 1935/2004 and/or 10/2011.