

GDB Polypropylene Membrane Media Filter Cartridge



GDB Series is high efficiency pleated filter cartridge, offer an economical solution for your filtration needs. Cartridges are constructed of 100% virgin polypropylene media providing high particle retention and broad chemical compatibility high flow polypropylene membranes, capable of protecting your gas, air and liquid processes. Made of pleated polypropylene micro fiber, provide high efficiency and high purity filtration. We use high intensity PP mesh net in order to protect filter membrane. Cartridges are designed to meet the special needs of the electronics and high purity chemical and water industries. Excellent dirt holding capacities, reliable retention characteristics, and non-fiber releasing.

Features

1. High filtering efficiency – Fixed pore construction eliminates dirt unloading as differential pressure increases and provides ultimate particle retention efficiency.
2. Cartridges are designed to meet the special needs of the electronics and high purity chemical and water industries. High degree of clean – Advantage cartridges are non-fiber releasing.
3. Safety – Membrane of construction are FDA listed as acceptable for potable and edible liquid contact according to 21 CFR 177, 1520. All media and structural components comply with biological, USP XXI Class VI-70 degree C requirements for plastic classification test.
4. Sterilization – GDP filters may be autoclaved (121°C, 30minutes cycles) or in situ steam sterilized (125°C, 30 minutes cycles) for a maximum accumulated exposure of 10 hours.
5. Larger Flow Rate – Greater flow rates by high surface area due to high intensity PP mesh net instead of PP outer cage; lower pressure drop and more importantly, longer service life by special design.

Applications

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|--|--------------------|------------------------|
| 1. DI-RO treatment | 5. Magnetic Media | 9. Ultrapure Chemicals |
| 2. Aqueous Solutions | 6. Food & Beverage | 10. Steam Gas |
| 3. Solvents, Acid, Bases and Ink | 7. Cosmetics | 11. N ₂ |
| 4. Etchants, Photoresists and Developers | 8. Medical | 12. CDA |

Specifications

End Caps:	Polypropylene
Core:	Polypropylene
Filter membrane:	Polypropylene
Filter Support:	Polypropylene
Protector:	PP Net
Micron Retention Rating:	0.1 、 0.2 、 0.45 、 1 、 2 、 3 、 5 、 10 、 30 、 40 、 70 um

Effective Filtration Area: Per 10 inch equivalent

Micron Retention Rating	Ft ²	m ²
0.1	6.1	0.57
0.2	6.1	0.57
0.45	6.1	0.57
1	6.7	0.62
2	6.7	0.62
3	6.9	0.64
5	6.9	0.64
10	7.2	0.67
30	7.2	0.67
40	7.2	0.67
70	7.2	0.67

Operational Data

1. Maximum recommended differential pressure: 70psi (4.8 bar) to 68°F (20°C)
50psi (3.4 bar) to 122°F (50°C)
20psi (1.4 bar) to 194°F (90°C)
2. Maximum recommended differential pressure under reserve flow: 50psi (3.4 bar) at 68°F (20°C)
3. Maximum recommended operating temperature: 176°F (80°C)
4. Recommended maximum change out pressure drop: 35psi (2.4 bar)
5. Maximum steam temperature: 140°C

Ordering Information

Filter Selection Guide for Grace GDP Series (Select one from each column)						
Type	Pore Size	Normal Type	Nominal Length/inches	Gasket/O-Ring Options	End Cap Options	
GDB	001 – 0.1 um	N	9-7/8"	S-Silicone	0: Flat Gasket	
PP Membrane Media	002 – 0.2 um		10-10"	V-Viton	Double Open end	
Filter Cartridge	005 – 0.45 um		20-20"	B-Buna-N		
	010 – 1 um		30-30"	E-EPDM	5: 2-222 O-Ring with Flat end	
	020 – 2 um		40-40"	T-Teflon Encapsulated		
	030 – 3 um		Other Customized Size	Viton	6. 2-226 O-Ring with Flat End	
	050 – 5 um					
	100 –10um					8: 2-222 O-Ring with Fin
	400 –40um					
		700- 70um				9: 2-226 O-Ring with Fin
GDB -	- 050 -	- N -	- 10 -	- S -	- 5	
PP Membrane	- 5um -	- Normal-	- 10 inch Length	- Silicone-	2-222 O-Ring with Flat end	
Media Filter Cartridge						

Performance

