Glass-Mate[™] Cartridges

Absolute-rated and economical filtration with pleated microglass

Glass-Mate[™] cartridges offer an economical choice for absolute-rated efficiency, high flow rate capability and long service life. A wide variety of construction components, end fittings and seal options make this product line ideal for pre-filtration and pointof-use filtration for many industrial applications.

Glass-Mate cartridges are available in 0.2, 0.45, 1.0, 2.0, 3.0, 5.0, 10, 20 and 40µm absolute-rated pore sizes.



Contact Information

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Benefits

- Absolute-rated media provides reliable removal efficiency
- Thermal bonding eliminates
 particle bypass
- Laminated media/support layer maximizes flow capacity and media utilization and minimizes media migration
- Variety of construction/seal options for increased compatibility
- End fitting options provide competitive housing retrofit capability
- All materials of construction are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21 (except 200 & 400 micron)

- High surface area yields high flow rate, low differential pressure
- Non-fiber-releasing media with minimal extractables provides high- purity filtrate
- ISO 9001 registered company

Applications

- Chemicals
- Coatings
- Water
- R.O. Pre-filtration



Glass-Mate[™] Cartridges

SPECIFICATIONS

Effective Filtration Area

5 ft²/10 in. (0.46 m²/254 mm) minimum

Materials of Construction

Filter Medium: Borosilicate microfiberglass w/ acrylic binder

Support/Drainage Layers: Spunbonded polyester; laminated on the downstream side

Recommended Operating Conditions

Maximum TemperatureGlass Filled Polypropylene:200°F @ 35ΔP (93°C/2.4bar)Polyester:140°F @ 35ΔP (60°C/2.4bar)Stainless Steel:275°F @ 35ΔP (135°C/2.4bar)

Change-out Differential Pressure 35psi (2.4bar)

Maximum Flow Rate 10gpm per 10 in. length (38 lpm/254 mm)

Design Flow Rate 5gpm per 10 in. length (9.5 lpm/254 mm)

Maximum Differential Pressure Glass-Filled Polypropylene:

90psi @ 75°F (6.2bar/24°C)

Polyester: 70psi @ 75°F (4.8bar/24°C)

Stainless Steel: 75psi @ 275°F (5.1bar/135°C)

Biological Safety/Product Purity

• All components FDA listed per CFR, Title 21 (except 20 & 40 micron)

Non-fiber releasing per FDA

Sterilization/Sanitization

Hot water ("F" construction): 180°F (82°C) for 30 minutes at maximum 15psid (1bar).

In-Line Steam/Autoclave ("F" construction with stainless steel sleeve): 60 minutes at 255°F (140°C) at 2psid (0.14bar) maximum pressure.

Flow Rate and Pressure Drop Formulas

Flow Rate (gpm): <u>Clean $\Delta P \times Length Factor</u>$ Viscosity x Flow Factor</u>

Clean ∆P:

Flow Rate x Viscosity x Flow Factor Length Factor

Notes:

- 1. Clean ΔP is psi differential at start.
- Viscosity is centistokes. Use Conversion Tables for other units.
 Flow Factor is ΔP/GPM at 1cks for 10 in.
- How ractor is ΔF/Gr M at receipt for 10 m. (or single).
 Length Factors convert flow or ΔP from 10 in.
- Length Factors convert flow or ΔP from 10 in (single length) to required cartridge length.

Glass-Mate Flow Factor (psid/gpm @ 1cks)

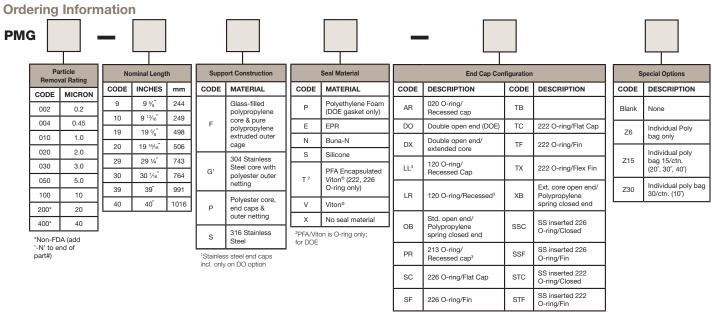
Flow Rate Capability Glass-Mate Length Factor

Rating (µm)	Flow Factor		
0.2	0.115		
0.45	.108		
1.0	.102		
2.0	.095		
3.0	.090		
5.0	.072		
10	.060		
20	.042		
40	.018		

Length Length (in.) Factor 9 1.0 10 1.0 19 2.0 20 2.0 29 3.0 30 3.0 39 4.0 40 4.0

Liquid Particle Retention Ratings (µm) @ Removal Efficiency of:

Cart.	β=5000 Abso- lute	β=1000 99.8%	β=100 99%	β=20 95%	β=10 90%
PMG002	0.2	0.15	<0.1	<0.1	<0.1
PMG004	0.45	0.3	<0.1	<0.1	<0.1
PMG010	1.0	0.6	0.2	<0.1	<0.1
PMG020	2.0	1.2	0.4	0.2	0.1
PMG030	3.0	1.8	0.6	0.3	0.2
PMG050	5.0	3	1.3	0.5	0.4
PMG100	10	7	3.5	1.6	1.2
PMG200	20	16	8	4	2.5
PMG400	40	32	20	11	8



³Available only in 9 $\frac{5}{8}$ (-9) and 19 $\frac{5}{8}$ (-19) lengths

Specifications are subject to change without notification.

For User Responsibility Statement, see www.parker.com/safety

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