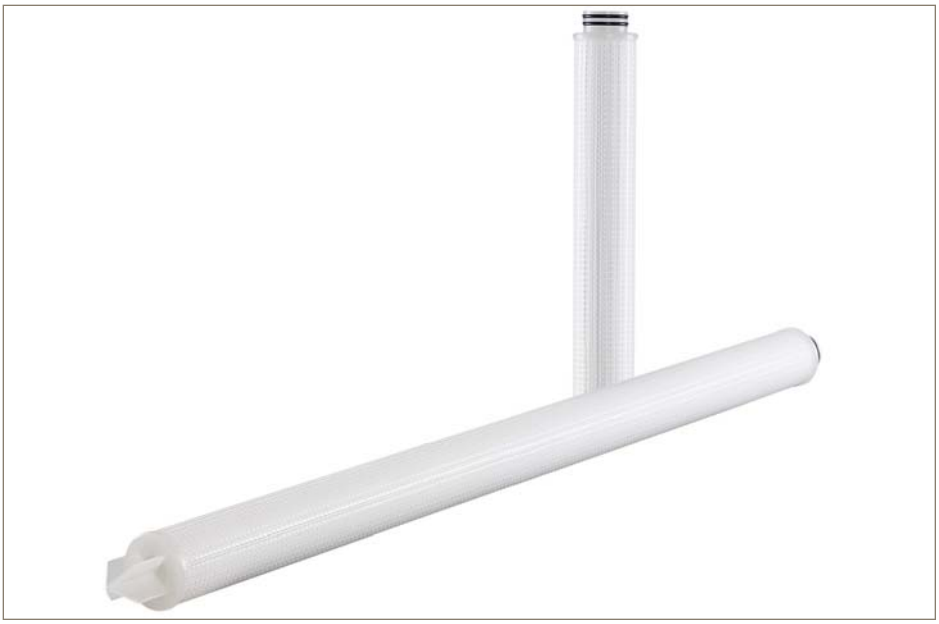
Glass-Mate™ Cartridges

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 point-of-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.



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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
- 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

Parker domnick hunter

ENGINEERING YOUR SUCCESS.

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 Temperature
Glass 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
- 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):
Clean ΔP x Length Factor
Viscosity x Flow Factor

Clean ΔP:
Flow Rate x Viscosity x Flow Factor
Length Factor

Notes:
1. Clean ΔP is psi differential at start.
2. Viscosity is centistokes. Use Conversion Tables for other units.
3. Flow Factor is ΔP/GPM at 1cks for 10 in. (or single).
4. Length Factors convert flow or ΔP from 10 in. (single length) to required cartridge length.

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

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

Flow Rate Capability Glass-Mate Length Factor

Length (in.)	Length 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.	ß=5000 Abso-lute	ß=1000 99.8%	ß=100 99%	ß=20 95%	ß=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

Ordering Information

PMG [ ] – [ ] [ ] [ ] – [ ] [ ]

Particle Removal Rating

CODE	MICRON
002	0.2
004	0.45
010	1.0
020	2.0
030	3.0
050	5.0
100	10
200	20
400	40

Nominal Length

CODE	INCHES	mm
9	9 5/8"	244
10	9 13/16"	249
19	19 5/8"	498
20	19 15/16"	506
29	29 1/4"	743
30	30 1/16"	764
39	39"	991
40	40"	1016

Support Construction

CODE	MATERIAL
F	Glass-filled polypropylene core & pure polypropylene extruded outer cage
P	Polyester core, end caps & outer netting
G[1]	304 Stainless Steel core with polyester outer netting
X	Coreless Cartridge

[1]Stainless steel end caps incl. only on DO code option

Seal Material

CODE	MATERIAL
P	Polyethylene Foam (DOE gasket only)
E	EPR
N	Buna-N
S	Silicone
T[2]	PFA Encapsulated Viton® (222, 226 O-ring only)
V	Viton®
X	No seal material

[2]PFA/Viton is O-ring only; for DOE

End Cap Configuration

CODE	DESCRIPTION	CODE	DESCRIPTION
AR	020 O-ring/ Recessed cap	TC	222 O-ring/Flat Cap
DO	Double open end (DOE)	TF	222 O-ring/Fin
DX	Double open end/ extended core	TX	222 O-ring/Flex Fin
LL[3]	120 O-ring/ Recessed Cap	XB	Ext. core open end/ Polypropylene spring closed end
LR	120 O-ring/Recessed[3]	SSC	SS inserted 226 O-ring/Closed
OB	Std. open end/ Polypropylene spring closed end	SSF	SS inserted 226 O-ring/Fin
PR	213 O-ring/ Recessed cap[3]	STC	SS inserted 222 O-ring/Closed
SC	226 O-ring/Flat Cap	STF	SS inserted 222 O-ring/Fin
SF	226 O-ring/Fin		

[3]Available only in 9 5/8" (-9) and 19 5/8" (-19) lengths

Special Options

CODE	DESCRIPTION
Blank	None
Z6	Individual Poly bag only
Z15	Individual poly bag 15/ctn. (20", 30", 40")
Z30	Individual poly bag 30/ctn. (10")