



## VARAFINE™ VFSG Series Filter Cartridges

### High Flow Asymmetric Membrane Filter Cartridge

- Absolute Rated at >99.9% Efficiency With Retention Ratings of 0.05, 0.1, 0.2, 0.45, 0.65, 0.8, or 1.2  $\mu\text{m}$
- Patented Highly Asymmetric Membrane Ensures Superior Flow Rates And Long Life
- Contaminants Trapped and Held by Positive Mechanical Retention
- Manufactured in an ISO Class 7 Cleanroom
- Pre-Flushed and Tested with Ultrapure 18 Megohm-cm Water
- Compatible with Most Sanitizing Agents

### Performance Specifications

Filter Grades (>99.9% Retention Rating by Standard Latex Bead Challenge):

0.05, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2  $\mu\text{m}$

Maximum Differential Pressure:

20 psid (1.4 bard) @ 203°F (95°C)

80 psid (5.5 bard) @ 68°F (20°C)

Recommended Change Out Differential Pressure<sup>1</sup>:

35 psid (2.4 bard)

Chemical Compatibility:

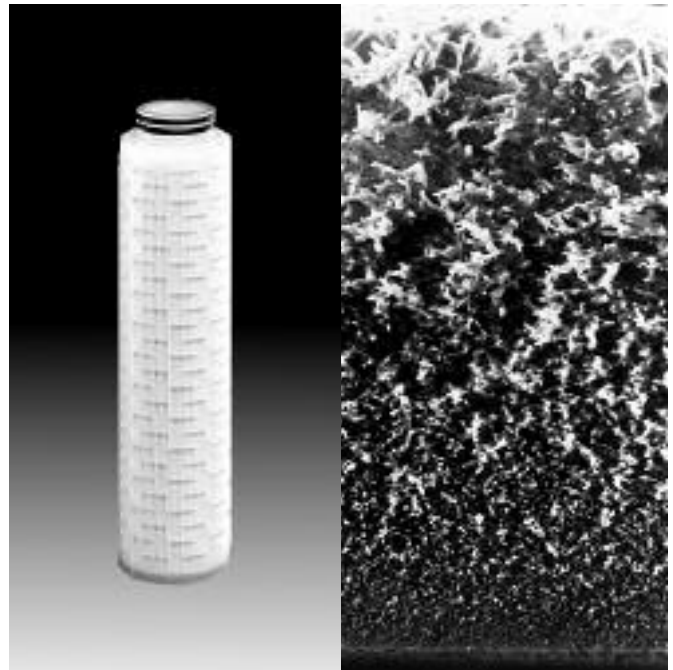
Cartridge resists most acids and bases, pH 1-14, and most oxidizing agents. Consult factory for specific application information.

Sanitizing Agents:

Cartridge may be sanitized in place with common oxidizing agents. Consult factory for compatibility information.

Rinse-Up:

Cartridges will rinse-up to 18 Megohm-cm in less than 6 minutes at a flow rate of 2.6 gpm (10 lpm).



*Cross-section of the Varafine VFSG Series membrane (thickness approx. 125  $\mu\text{m}$ ).*

### Product Specifications

Materials of Construction:

Filter Media:	Hydrophilic Highly Asymmetric Polysulfone Membrane
Support Material:	Polypropylene
Hardware:	Polypropylene
Surface Treatment:	Hydroxypropylcellulose
Sealing:	Thermal Bond
Gaskets/O-rings:	Silicone Elastomer, EPDM, Buna N, Fluoroelastomer, Expanded PTFE, FEP Encapsulated Silicone, FEP Encapsulated Fluoroelastomer, White Silicone

Dimensions (nominal):

Outside Diameter:	2 $\frac{3}{8}$ " (6.6 cm)
Lengths:	4" (10.2 cm), 10" (25.4 cm), 20" (50.8 cm), 30" (76.2 cm), 40" (102 cm)
Surface Area:	6.1 ft <sup>2</sup> (0.57 m <sup>2</sup> ) per 10" (25.4 cm) equivalent

<sup>1</sup> - Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.

## Liquid Flow Specifications

Filter Grade (µm)	DI Water Flow (10" equivalent) GPM/PSID	lpm/mbard
0.05	1.0	0.05
0.1	1.7	0.09
0.2	3.0	0.16
0.45	5.5	0.30
0.65	6.0	0.33
0.8	7.0	0.38
1.2	8.0	0.44

## Part Numbers/Ordering Information

VFSG ■ - ● ▼ ◆ (e.g., VFSG100-10M3S)

Code ■	Filter Grades	Code ●	Cartridge Lengths (nominal)
050	0.05 µm	4	4"
100	0.1 µm	10	10"
200	0.2 µm	20	20"
450	0.45 µm	30	30"
650	0.65 µm	40	40"
800	0.8 µm		
1200	1.2 µm		

<sup>2</sup> - For details, contact Pall Corporation.

Code ▼	End Configurations
M2	SOE flat closed end, fits housings with 020 O-ring post
M3	SOE flat closed end, external 222 O-rings (retrofits other manufacturers' Code 0) <sup>2</sup>
M5	DOE, internal 120 O-rings (retrofits 213 O-ring style) <sup>2</sup>
M6	SOE flat closed end, external 226 O-rings (retrofits other manufacturers' Code 6) <sup>2</sup>
M7	SOE fin end, external 226 O-rings (retrofits other manufacturers' Code 7) <sup>2</sup>
M8	SOE fin end, external 222 O-rings (retrofits other manufacturers' Code 5) <sup>2</sup>
M10	DOE, internal O-rings (fits other manufacturers' housings) <sup>2</sup>
M11	SOE flat closed end, internal 120 O-ring (retrofits other manufacturers' X-style) <sup>2</sup>
DOE	DOE with elastomer gasket seals & end caps

Code ◆	Gasket/O-ring Materials
S	Silicone (standard O-rings)
E	Nordel
V	Fluoroelastomer
N	Buna N (standard gaskets)
M	White Silicone (O-rings)
T	FEP Encapsulated Silicone (O-rings)
F	FEP Encapsulated Fluoroelastomer (O-rings)
T	Expanded PTFE (gaskets)



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