# LENNTECH

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# VARAFINE<sup>™</sup> 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 μm
- 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 μm

#### 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:

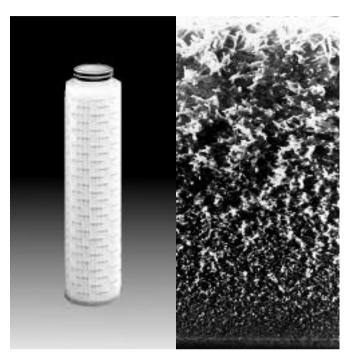
Cartridge resists most acids and bases, pH 1-14, and most oxidizing agents. Consult factory for specific application information.

# 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).



# **Product Specifications**

#### Materials of Construction:

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

### Dimensions (nominal):

Outside Diameter:	2 ¾" (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 Flov GPM/PSID	v (10" equivalent) Ipm/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	C
050	0.05 µm	4
100	0.1 μm	1
200	0.2 μm	2
450	0.45 μm	3
650	0.65 μm	4
800	0.8 µm	2
1200	1.2 µm	_

ode	Cartridge Lengths (nominal)
	4"
0	10"
20	20"
0	30"
0	40"

 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
Ν	Buna N (standard gaskets)
Μ	White Silicone (O-rings)
Т	FEP Encapsulated Silicone (O-rings)
F	FEP Encapsulated Fluoroelastomer (O-rings)
Т	Expanded PTFE (gaskets)

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info@lenntech.com www.lenntech.com Tel. +31-15-261.09.00 Fax. +31-15-261.62.89 Pall Corporation has offices and plants throughout the world in locations including: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, Hong Kong, India, Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Poland, Puerto Rico, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, United States, and Venezuela. Distributors are located in all major industrial areas of the world.

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