

Filter Data Sheet

GNM^{grade} Nylon Membrane Media Filter Cartridges engineered and manufactured for maximum efficiency and value

Dist. by: H.R. Peterson Co. - 814 Prior Ave. No. - St. Paul, MN 55104
Telephone: 651-646-4529 Toll Free: 1-800-646-4505 Fax: 651-646-8792

GNM grade Nylon Media cartridges are designed for general purpose use wherever a cost effective pleated membrane filter is required. Designed to hold the maximum amount of filter media that can be completely and effectively utilized in a cartridge, GNM filters lower the cost of filtration. GNM cartridges are flushed with 17+ megohm-cm water to remove potential extraneous manufacturing debris. These cartridge modules are also individually tested. Priced below special purpose cartridges, GNM cartridges are still manufactured with the same careful attention to both quality and performance.

Flow Rate

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore	0.03 µm	0.10 µm	0.22 µm	0.45 µm	0.65 µm
GPM	0.75	1.0	1.25	3.0	5.5

Dimensions

Length:10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter:2.75 inches (7.0 cm) nominal

Maximum Differential Pressures

Forward: 50 psi (3.4 bar) at 20°C.
Reverse: 40 psi (2.7 bar) at 20°C.

Ordering Information

The cartridge catalog number is made up of several variable characters i.e. pore size, length, O-ring material, and end cap code. For example: a 0.10 µm, 20 inch (50.8 cm) long cartridge with 2-222, Teflon® Encapsulated Viton O-rings, no spear (flat top) and no 316 SS Ring would be designated as: GNM*10N00002T5.

GNM 0000

<p><u>Pore size code</u></p> <p>*03 = 0.03 µm *10 = 0.10 µm *20 = 0.22 µm *40 = 0.45 µm *60 = 0.65 µm</p>	<p><u>316 SS Ring</u></p> <p>S = Ring N = No Ring</p>	<p><u>Cartridge Length</u></p> <p>1 = 10 inches (25.4 cm) 2 = 20 inches (50.8 cm) 3 = 30 inches (76.2 cm) 4 = 40 inches (101.6 cm)</p>	<p><u>O-ring code</u></p> <p>S - Silicone B - Buna V - Viton T - Teflon® Encapsulated Viton E - EPR R - Teflon® Encapsulated Silicone</p>	<p><u>End cap code</u></p> <p>0 - Flat Gasket, double open end 5 - 2-222 O-ring 7 - 020 O-ring 8 - 2-222 O-ring with Spear 9 - 2-226 O-ring with Spear</p>
---	--	---	--	--

Construction Materials¹

Filtration Media:Nylon
Filtration Media Support:Polypropylene
End Caps:Polypropylene
Center Core:Polypropylene
Outer support Cage:Polypropylene
O-rings: Buna, Viton, EPR, Silicone, Teflon® Encapsulated Silicone, Teflon® Encapsulated Viton

¹ All materials of construction are FDA accepted. Final assemblies have been validated to pass USP class 6 Toxicology extractable tests, oxidizable substances for plastics, endotoxin level and other quality tests.

Sanitization/Sterilization

Filtered Hot Water:90°C

Chemical Sanitization:Industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals. Sanitization protocols designed to extend the useful life of GNM cartridges are available from Critical Process Filtration, Inc.®.

Integrity Test Specifications (per 10 inch length) (water wetted membrane)

Pore Size	Air Diffusion Rate
0.03 µm	≤ 55 cc/min. at 60 psi (4137 mbar)
0.1 µm	≤ 55 cc/min. at 48 psi (3307 mbar)
0.22 µm	≤ 55 cc/min. at 35 psi (2412 mbar)
0.45 µm	≤ 55 cc/min. at 20 psi (1378 mbar)
0.65 µm	≤ 55 cc/min. at 15 psi (1034 mbar)