

GNC Cartridge Filters

Positively Charged Nylon 6,6 Membrane



General Service Grade, Positively Charged Nylon 6,6 Membrane Filter Cartridges are designed for general purpose use wherever a fluid contains negatively charged contaminants and a pleated membrane filter is required. Designed to hold the maximum amount of filter media that can be completely and effectively utilized in a cartridge, GNC filters lower the cost of filtration. GNC cartridges are flushed with 17+ megohm-cm water to remove potential extraneous manufacturing debris.

Construction Materials

Filtration Media	Positively Charged Nylon 6,6 Membrane (absolute rated)
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding
O-rings	Buna, Viton® (or FKM), EP, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)

Dimensions

Length	5 to 40 in. (12.7 to 101.6 cm) nominal
Outside Diameter	2.75 in. (7.0 cm) nominal
Filtration Area	7.0 ft ² (0.65 m ²) per 10 in. length

Applications

- ◆ Process Water
- ◆ DI Water
- ◆ Chemicals
- ◆ Inks & Dyes
- ◆ Solvents

Integrity Test Information

Representative samples from each lot are tested for integrity to ensure consistent performance.

Maximum Operating Parameters

Differential Pressure	
• Forward	50 psid (3.4 bard) at 20 °C (68 °F)
• Reverse	40 psid (2.7 bard) at 20 °C (68 °F)
Operating Temperature	82 °C (180 °F) at 10 psid (0.69 bard) in water

Recommended Changeout Pressure	35 psid (2.4 bard)
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Sanitization/Sterilization

Filtered Hot Water	90 °C (194 °F), 30 minutes, multiple cycles, max 3 psid forward flow
Autoclave	121 °C (250 °F), 30 min, multiple cycles
In-line Steam	135 °C (275 °F), 30 min, multiple cycles

For all elevated temperature procedures above, a stainless steel support ring is required.

Chemical Sanitization

Nylon does not tolerate aggressive chemical sanitization protocols. Nylon membrane cartridges are best sanitized with 1% hydrogen peroxide or 1% hydrogen peroxide and peracetic acid. Various manufacturers use different concentrations of active ingredients. Refer and adhere to the manufacturer's instructions for sanitizing nylon membrane.

Total Performance

Critical Process Filtration, Inc. is a vertically integrated manufacturer of filtration products to industries in which filtration is considered a critical part of the manufacturing process. We supply a complete line of products and services to help you cost effectively satisfy all your filtration requirements from a single source.

Extractables

GNM filters generally exhibit low levels of non-volatile residues.

Quality Assurance and Standards

Our goal is to ensure our customers the greatest possible value for their filtration dollar. Our state of the art manufacturing facility and quality management system both meet ISO 9001:2008 standards. Each operation from assembly and test to cleaning, drying, and packaging is done in appropriately rated clean rooms. A sophisticated MRP system collects and processes real time data from manufacturing centers and inspection points. This allows variable and attribute data to be quickly and easily analyzed driving constant improvements in both quality and cost.

Flow Rate

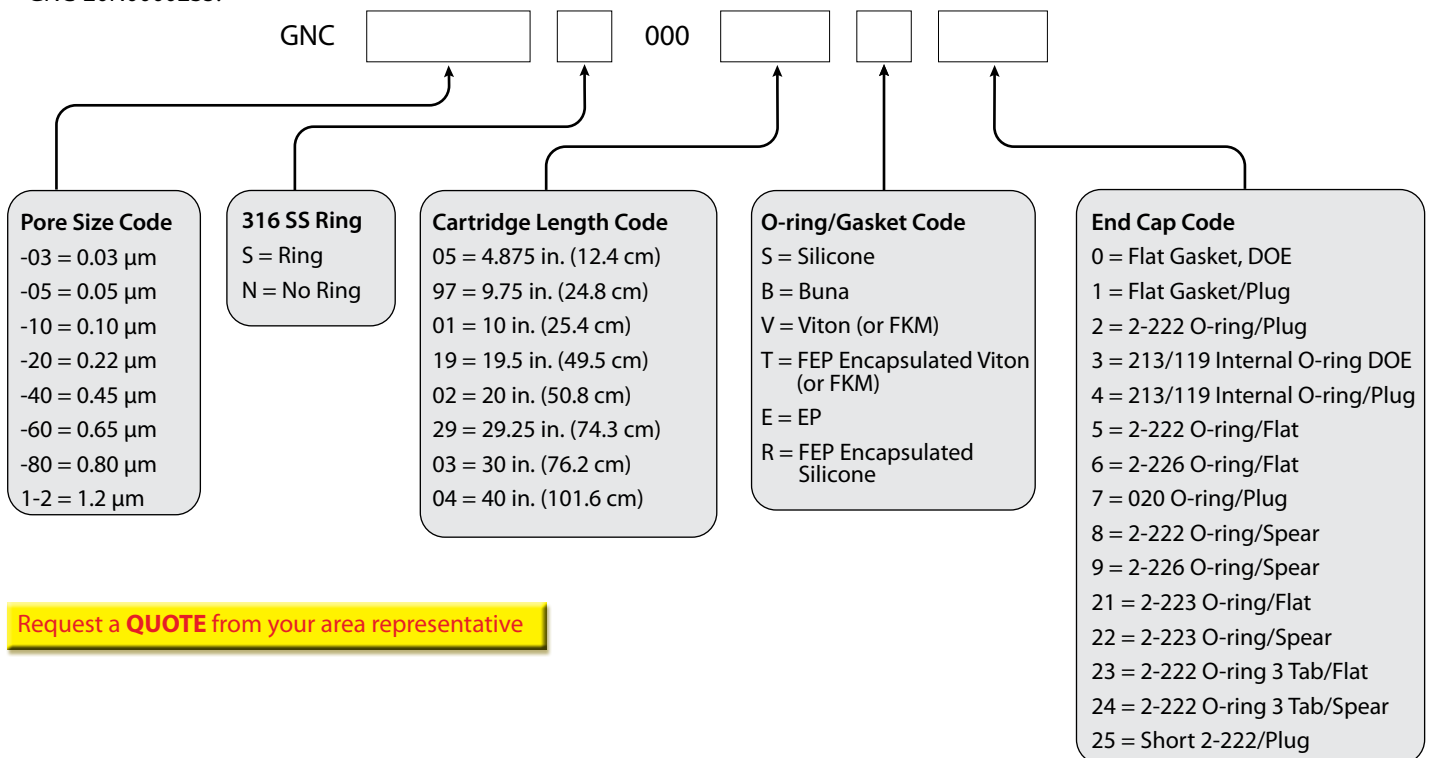
The Typical Flow Rates table represents typical water flow at a 1 psid (69 mbard) pressure differential across a single 10 in. cartridge element. The test fluid is water at ambient temperature. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Typical Flow Rates

Pore Size	0.03 µm	0.05 µm	0.10 µm	0.22 µm	0.45 µm	0.65 µm	0.8 µm	1.2 µm
GPM	0.3	0.6	1.0	1.8	3.0	4.2	5.0	7.0
LPM	1.14	2.27	3.79	6.81	11.36	15.90	18.93	26.50

Ordering Information

Cartridge order numbers have several variables from pore size to end cap type. For example, General Service Grade, Positively Charged Nylon 6,6 Membrane, 0.22 Micron Pore Size Rating, No SS Support Ring, 20" Length, Silicone O-Rings, 2-222/Flat End Cap Configuration = GNC-20N00002S5.



Request a **QUOTE** from your area representative



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