

GNC Capsule Filters

Positively Charged Nylon 6,6 Membrane



High quality, hydrophilic membrane

Cost effective pleated membrane capsule

For critical applications in a wide range of liquids

Applications

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

GNC capsules are hydrophilic and manufactured with high quality, positively charged Nylon 6,6 membrane for critical applications in the processing of a wide range of liquids.

The GNC capsules are designed for general purpose use wherever a fluid contains negatively charged particles and a cost effective pleated membrane capsule filter is required.

GNC capsule filters are flushed with high purity water to remove manufacturing debris. These cartridge modules are also batch tested for integrity before release.

GNC Capsule Filters - Filtration Area

Media	Capsule Length				
	2"	5"	10"	20"	30"
Positively Charged Nylon 6,6 Membrane	1.0 ft ² (930cm ²)	3.0 ft ² (2788cm ²)	7.0 ft ² (6503cm ²)	14.0 ft ² (13006cm ²)	21.0 ft ² (19509cm ²)

Flow Rate / Filtration Area

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 2 inch capsule with 1.0 ft² (930 cm²) of media with 1/2" FNPT ports. The test fluid is water at ambient temperature. Higher pressure drops are acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

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	0.04	0.09	0.14	0.25	0.43	0.60	0.71	1.0
LPM	0.15	0.34	0.53	0.95	1.63	2.27	2.69	3.79

* For approximate flow rates for 5" through 30" capsules, refer to the appropriate cartridge data sheet

Construction Materials

Housing	Polypropylene
Filtration Media	Positively Charged Nylon 6,6 Membrane
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding

Maximum Operating Parameters

Liquid Operational Pressure	80 psi (5.5 bar) at 20 °C (68 °F)
Gases Operational Pressure	60 psi (4.1 bar) at 20 °C (68 °F)
Operating Temperature	43 °C (110 °F) at 30 psi (2.1 bar) in water
Forward Differential Pressure	50 psid (3.4 bard) at 20 °C (68 °F)
Reverse Differential Pressure	40 psid (2.7 bard) at 20 °C (68 °F)
Recommended Changeout Pressure	35 psid (2.4 bard)

Sanitization/Sterilization

Autoclave..... 250° F (121° C), 30 min, multiple cycles

Chemical SanitizationNylon does not tolerate aggressive chemical sanitization protocols. Nylon membrane cartridges are best sanitized with 1% hydrogen peroxide or 1% hydrogen peroxide and peracetic acid. Follow the manufacturers instructions for use on nylon filter devices.

Note GNC capsules are not to be used in steam.

Extractables

GNC capsule filters generally exhibit low levels of non-volatile residues.

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.

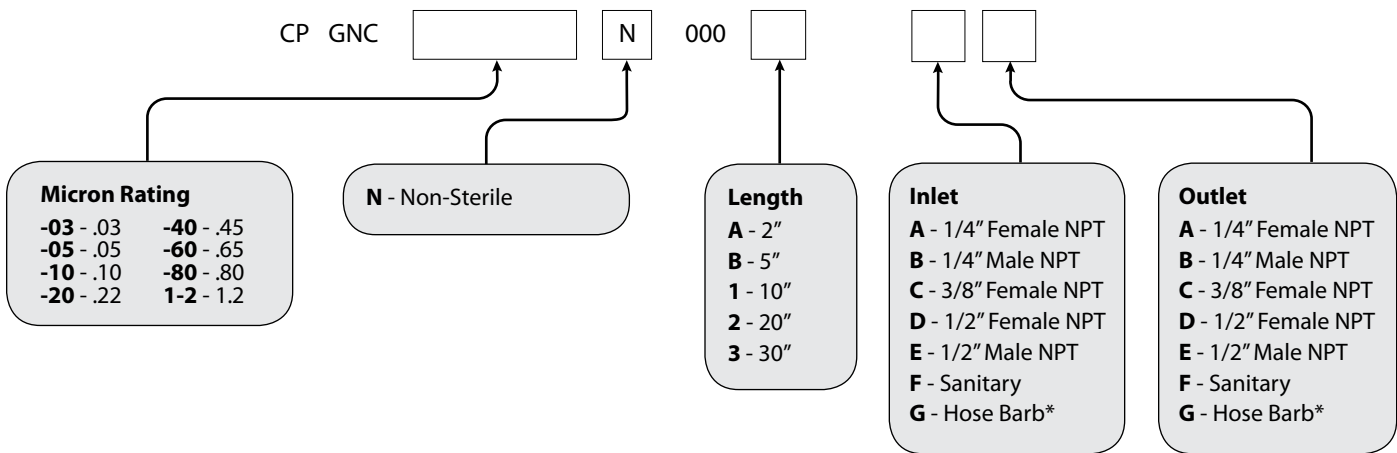
Quality Assurance and Standards

Critical Process Filtration uses state of the art computer controlled equipment to consistently produce high quality products as well as significantly reduce hand operations that can compromise quality. All manufacturing and testing is continuously monitored in real time so that data can be quickly and easily analyzed to facilitate improvements in both quality and cost.

The Critical Process Filtration manufacturing and quality systems meet rigorous ISO 9001:2008 standards. Each operation, including assembly, testing, cleaning, drying and packaging, is done in an appropriately rated clean room. Manufacturing is controlled using a sophisticated manufacturing system that networks work stations, manufacturing centers and inspection points. During the manufacturing and inspection processes, data is collected in real time to allow continuous quality monitoring and full traceability of all materials and processes.

Ordering Information

Capsule order number example: General Service Grade, Positively Charged Nylon 6,6 Membrane, 0.22 Micron Rating, Non-Sterile, 10" Length, Sanitary Inlet, Sanitary Outlet = CPGNC-20N0001FF.



Hose Barb Diameter Ranges*

	Minimum	Maximum
Outer Diameters	11/32" (8.6mm)	9/16" (14.0mm)
Inner Diameters	5/32" (4.0mm)	13/32" (10.5mm)

Request a QUOTE from your area representative



Critical Process Filtration, Inc.

One Chestnut Street • Nashua, NH 03060

Tel: 603.880.4420 • Fax: 603.880.4536

criticalprocess.com • sales@criticalprocess.com

The information contained herein is subject to change without notice.

The Critical Process Filtration logo is a trademark of Critical Process Filtration, Inc.

Viton is a trademark of DuPont Performance Elastomers L.L.C.

© 1998-2016 Critical Process Filtration, Inc. • All Rights Reserved • Data Sheet CPGNCD50316 Rev-