

STERLITECH

Nylon Capsule Filters

Nylon Capsule Filters have unique polyester and polypropylene construction for enhanced reliability and usefulness. Polyester housing and support layers ensure and maintain capsule integrity, while a nylon prefilter membrane layer over a final membrane layer significantly enhances filter life. They are suitable for a broad range of applications, meeting worldwide demand for functionality in chemical, beverage, and water processing.

FEATURES AND BENEFITS

- Naturally Hydrophilic Nylon Membrane (Absolute Rated)
- Small Disposable Capsule
- Ease of Scale-up
- Low Filter Extractables

APPLICATIONS

- | | |
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| • Solvents | • Parts Cleaning |
| • Fine Chemicals | • Electronics |
| • Ink Jets | • Pharmaceuticals |
| • Process Water | • Biologics |
| • Beverages | • Dyes |
| • Cosmetics | • Lacquers |

PRODUCT DESCRIPTION

Sterlitech Nylon filter capsules are highly retentive naturally hydrophilic Nylon membrane filters that have been specially designed for critical gas and liquid applications. The Nylon membrane in an all-polypropylene construction provides excellent chemical compatibility and superior flow per surface area as compared to other membrane capsules. No adhesives, binders, or surfactants are used in the manufacturing process and all capsules are rinsed with high purity water to reduce extractables and downtime.

The naturally hydrophilic Nylon membrane does not require pre-wetting with IPA and flushing with DI water, thereby eliminating a potential source of contamination and hazardous waste. In addition, the hydrophilic membrane reduces the potential for bubble formation by not de-wetting in outgassing fluids unlike hydrophobic filters such as polypropylene. All filter capsules are 100% integrity tested to ensure filter performance each and every time out of the package. Sterlitech Nylon filter capsules are well suited for critical applications where superior flow and particle removal efficiency at 0.1, 0.2, 0.45, and 0.65 micron is required.



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MATERIALS OF CONSTRUCTION

Membrane	Naturally Hydrophilic Nylon 6
Membrane Supports	Polyester Microfiber
Cage, Core, End Caps	Polyester and Polypropylene
Fitting Connections	MNPT, FNTF, Compression, Flare, Sanitary Flange, Hose Barb

DIMENSIONS (NOMINAL)

Lengths Available	3.5-5.0" (9-13 cm) 7.6-9.1" (19-23 cm) 11.5-13.0" (29-33 cm)
Diameter	3.5 in (9 cm)
Effective Filtration Area	0.8 ft ² (748 cm ²) 3.0 ft ² (2806 cm ²) 5.9 ft ² (5500 cm ²)

OPERATING CONDITIONS

Max Operational Pressure	80 psi (5.5 bar) @ 70°F (21°C) in Liquid 55 psi (3.8 bar) @ 70°F (21°C) in Gas
Max Differential Pressure	60 psi (4.1 bar) @ 70°F (21°C)
Max Operating Temperature	110°F (43°C) at ≤30 psi (2.1 bar) Operating Pressure

*Varies with connection style.

Sterlitech Nylon Capsule Filters may be sanitized with a variety of commonly used chemical agents; however, acidic solutions should be avoided. The capsules may be repeatedly autoclaved (121°C 30 min) for up to 5 cycles.

Sterlitech certifies that the materials contained in its Nylon Capsule filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact the Sterlitech Technical Department. Sterlitech Nylon filters meet the test criteria for USP class VI-121°C Plastics.

Sterlitech filter capsules are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact Sterlitech for more information.

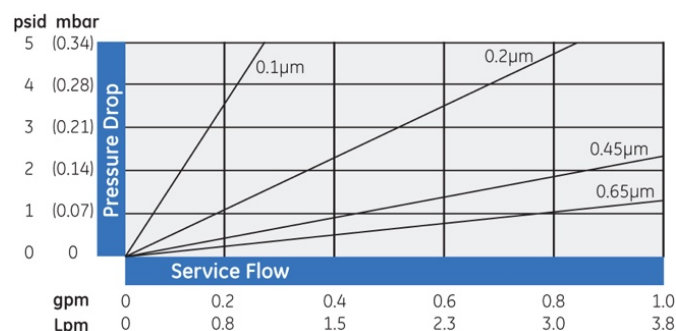


Figure 1. Small capsule flow rate performance in clean water.

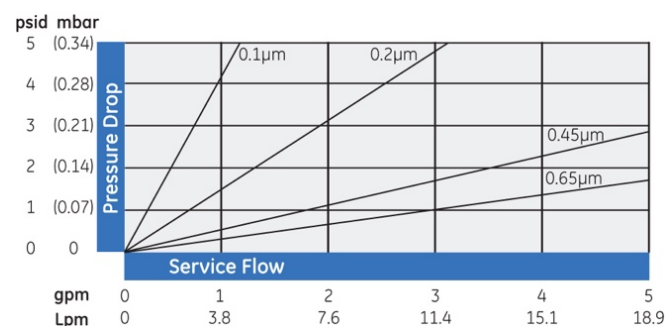


Figure 2. Medium capsule flow rate performance in clean water.

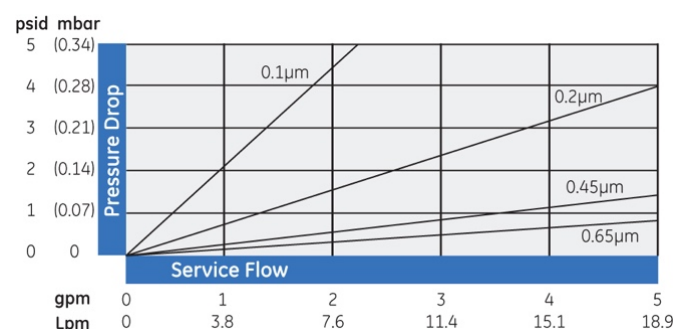


Figure 3. Large capsule flow rate performance in clean water.