

BNM Capsule Filters

Nylon 6,6 Membrane



Designed for sterilizing filtration

Optimized for retention

Final filtration of USP Purified Water and WFI, buffers

Bioburden reduction in SVPs and LVPs

Broad solvent compatibility

Applications

- ◆ Buffers and Feedstocks
- ◆ WFI Water
- ◆ Solvents
- ◆ SVPs
- ◆ LVPs
- ◆ Vaccines

Biopharmaceutical grade NM capsules are designed to be used for sterilizing grade filtration. The Nylon 6,6 membrane is optimized for retention. BNM capsule filter elements are 100% integrity tested during production.

BNM capsules see broad service in bioburden management for filling operations as well as for buffers, feedstocks, purified water, WFI, and other media.

Additional applications for BNM capsule filters include filtration of solvents, alcohols and other excipients. Nylon is particularly suited for the filtration of solvents because of its broad compatibility and low level of extractables.

Biopharmaceutical Grade

BNM Capsule Filters - Filtration Area

Media	Capsule Length				
	2"	5"	10"	20"	30"
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 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	0.10 μm	0.22 μm	0.45 μm	0.65 μm
GPM	0.14	0.25	0.43	0.60
LPM	0.53	0.95	1.63	2.27

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

Construction Materials

Housing	Polypropylene
Filtration Media	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)

