

PNC Capsule Filters

Positively Charged Nylon 6,6 Membrane



Positively charged to enhance removal of particles smaller than the rated pore size

Bacteria and endotoxin control in water, bulk chemicals

Excellent throughput

Applications

- ◆ Dialysis water
- ◆ Medical device rinse water
- ◆ WFI water
- ◆ Endotoxin control

PNC Capsules are hydrophilic and manufactured with the highest quality charged Nylon 6,6 membrane. The capsules are sterilizing grade and the positive charge enhances its ability to remove particles smaller than its rated pore size, such as endotoxins in water streams or water based solutions. PNC capsule elements are 100% integrity tested during production.

PNC capsule filters are ideal for bacteria and endotoxin control in water systems, including WFI, rinse water for vials and other packaging, water-based bulk chemicals, and SVPs and LVPs.

PNC capsule filters are made using FDA listed Nylon 6,6 membrane layers and FDA listed polypropylene molded components. The filter materials passed all standard USP material safety tests for products used in the making of pharmaceutical products.

Pharmaceutical Grade

PNC Capsule Filters - Filtration Area

| Media | Capsule Length | | | | |
|-----------------------------------|---|--|--|--|--|
| | 2" | 5" | 10" | 20" | 30" |
| 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 | 0.10 µm | 0.22 µm | 0.45 µm | 0.65 µm |
|------------|---------|---------|---------|---------|
| GPM | 0.14 | 0.18 | 0.43 | 0.79 |
| LPM | 0.53 | 0.68 | 1.63 | 2.99 |

* 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) |

