

# Memtrex NY

## Pleated Filters with Hydrophilic Nylon 66 Membrane



Figure 1: Memtrex NY Filters

### Description and Use

Memtrex NY (MNY) filters (Figure 1) are uniquely constructed for superior performance with a serial membrane layer design that incorporates a large pore-size membrane layer upstream of the final membrane layer. The first membrane acts like a prefilter to increase the life and efficiency of the cartridge. It is also highly effective in retaining difficult contaminants such as gelatinous particles. The final membrane layer ensures consistent retention characteristics.

MNY filters are designed to ensure maximum downstream cleanliness. GE Water & Process Technologies Nylon 66 membranes are naturally hydrophilic, non-shedding and do not contain leachable wetting agents. Thermoplastic sealing

technologies are used in the cartridge construction eliminating the need for potentially contaminating adhesives. Each cartridge is manufactured under strict production control and is individually integrity tested. GE is your complete source for filters, crossflow membranes, housings and other filtration equipment.

### Typical Applications

MNY filters have excellent chemical compatibility making them the ideal choice for a broad range of applications such as high purity water, strong solvents, photoresists and other critical process fluid systems. Typical applications include:

- Filtration of pharmaceutical intermediates
- Filtration of positive photoresists
- Final filtration of beverages

### General Properties

Memtrex NY filters are available the following absolute pore size micron ratings: 0.1, 0.2, 0.45, 0.65 and 1.0  $\mu\text{m}$ . Tables 1, 2, 3, 4 and 5 show further details on materials of construction, dimensions, operational limits, integrity testing and flow performance.

Table 1: Materials of Construction

Media	2 layers of Nylon 66 Membrane (prefilter layer over final layer)
Support Layers	Polyester Microfiber
Core and Cage	Polypropylene
Endcaps and Adapters	Polyester

Table 2: Dimensions

Nominal O.D.	Nominal I.D.	Effective Filtration Area
2.75" (70mm)	1.25" (31mm)	6.9 ft <sup>2</sup> (0.64 m <sup>2</sup> )



Find a contact near you by  
visiting [gewater.com](http://gewater.com) or  
e-mailing [custhelp@ge.com](mailto:custhelp@ge.com).

**Global Headquarters**  
Trevose, PA  
+1-215-355-3300

**Americas**  
Watertown, MA  
+1-617-926-2500

**Europe/Middle East/Africa**  
Heverlee, Belgium  
+32-16-40-20-00

**Asia/Pacific**  
Shanghai, China  
+86 (0) 411-8366-6489

**Table 3: Operational Limits**

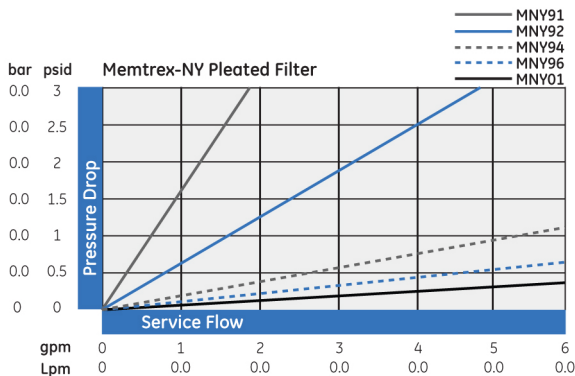
Maximum Forward Differential Pressure	60 psi (4.1 bar) @ 70°F (21°C)
Maximum Reverse Differential Pressure	30 psi (2.1 bar) @ 70°F (21°C)
Maximum Operating Temperature	180°F (82°C) at 10 psid (0.7 bar) in water

**Table 4: Integrity Testing**

Pore Size Rating	Specification
0.1 µm	≤ 50 cc/min at 40 psi (2.76 bar)
0.2 µm	≤ 50 cc/min at 30 psi (2.07 bar)
0.45 µm	≤ 50 cc/min at 15 psi (1.03 bar)
0.65 µm	≤ 50 cc/min at 12 psi (0.83 bar)
1.0 µm	≤ 50 cc/min at 5 psi (0.34 bar)

Air diffusion per 10" module after saturation with clean water

**Table 5: Flow Performance in Clean Water<sup>1</sup>**



<sup>1</sup> Data based on 10" length filter

**Additional Information**

- Memtrex NY filters may be autoclaved or in situ steam sterilized (up to 257°F [125°C], 30-minute cycles) for a maximum accumulated exposure of 10 hours. Alternately, the filters may be sanitized with compatible chemical agents.



**Table 6: Ordering Information**

Type	Absolute Micron Rating	Nominal Cartridge Length	End #1 Adapter	End #2 Adapter	Elastomer Material
MNY	91 = 0.1 µm 92 = 0.2 µm 94 = 0.45 µm 96 = 0.65 µm 01 = 1.0 µm	1 = 10 inch 2 = 20 inch 3 = 30 inch 4 = 40 inch	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring E = 222 O-Ring F = 226 O-Ring J = 020 O-Ring Q = 222 O-Ring Stainless Steel Insert Z = 226 O-Ring Stainless Steel Insert	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring G = Closed End Cap H = Fin Adapter	B = Buna-N E = EPDM S = Silicone T = Teflon <sup>2</sup> Encapsulated (Only in 222 and 226 Sizes) V = Viton <sup>2</sup>

<sup>2</sup>Teflon and Viton are registered trademarks of DuPont.

- GE certifies that the material contained in its Memtrex NY pleated filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact GE technical services. Memtrex NY filters meet the test criteria for USP class VI-121°C Plastics.
- Aqueous extracts from Memtrex NY filters contain less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues.
- GE filter cartridges 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 your GE distributor for more information.
- Table 6 provides additional ordering information.