

Ultipor® N66 Membrane Filter Discs

Description

Pall Ultipor® N66 membrane filter discs are made from pure Nylon 6,6 polymer, with and without polyester support, for broad chemical compatibility. They are widely used in sterilization, HPLC and other fine filtration of small volume aqueous, alcohol and organic solvent solutions. Durable Ultipor N66 membrane discs are available in a variety of sizes and removal ratings.



- Pure solvent-resistant Nylon 6,6
- Instantly wettable in water
- High reliability of sterilization
- Steamable in situ (SIP)
- Suitable for filtration of serum and most protein solutions
- Internally reinforced grades withstand severe use conditions
- Unsupported grades for higher flows and lowest extractables
- Manufactured for use in conformance with cGMP
- ISO 9000 Certified Quality System
- Same medium as in Ultipor N66 membrane filter cartridges

Specifications

Materials of Construction

- FDA-listed materials per 21CFR
- Membrane: Pure Nylon 6,6
- Reinforced grades only: Polyester non-woven internal support

Microbial Removal Ratings¹

- NX: 0.45 µm, sterilizing grade²
- NR: 0.2 µm, sterilizing grade³
- NT: 0.1 µm, sterilizing grade⁴

Filter Diameters⁵

- 47-293 mm

Integrity Test Values Minimum Bubble Point⁶

Grade Pressure

NX(G) 29 psi (2000 mbar)

NR(G) 46 psi (3165 mbar)

NT(G) 90 psi (6200 mbar)

Autoclaving/Steaming

Cumulative Exposure Time⁷

- Up to 12hrs. at 257°F (125°C)
- Up to 4 hours at 280°F (138°C)
- Typical cycles: 30-60 min.

Operating Conditions

- Max. Temperature: 284°F (140°C)
1. Membrane lot samples retain >107cfu/cm² per mod. ASTM F838-83 and FDA guidelines of:
 2. *Serratia marcescens*,
 3. *Brevundimonas diminuta*.
 4. *B. diminuta*. Also retains *Acholeplasma laidlawii* mycoplasma.
 5. Smaller diameter discs (8-25 mm) are also available. See Pall Laboratory catalogue or your Pall laboratory supply distributor.
 6. Water wet, air test pressure.
 7. Lab tests (1hr. cycles) establish multi-cycle resistance. Filters should be qualified in actual use. Contact Pall for recommended procedures.

Performance

Quality/Bio-Safety

Integrity (Lot Sample Release Test):

- Correlated to microbial retention.

Biological Tests:

- Meets USP Biological tests for Class VI-121 °C plastics, *in vivo* and Cytotoxicity tests *in vitro*.

Effluent Quality Tests:

- Lot sample soak/effluents tested for cleanliness and lack of oxidizables, pyrogenicity and pH shift.
- Non-fiber-releasing per 21CFR

Typical Water Flow Rate cc/min

Filter Grade ⁸	Micron Rating	Diam.	Area (nom.)	Flow Rate ⁹ cc/min
NX	0.45 µm	47 mm	(15 cm ²)	435
NXG	0.45 µm	47 mm	(15 cm ²)	255
NR	0.2 µm	47 mm	(15 cm ²)	195
NRG	0.2 µm	47 mm	(15 cm ²)	135
NTG	0.1 µm	47 mm	(15 cm ²)	32
NX	0.45 µm	90 mm	(58 cm ²)	1,682
NXG	0.45 µm	90 mm	(58 cm ²)	986
NR	0.2 µm	90 mm	(58 cm ²)	754
NRG	0.2 µm	90 mm	(58 cm ²)	522
NTG	0.1 µm	90 mm	(58 cm ²)	122
NX	0.45 µm	142 mm	(150 cm ²)	4,350

NXG	0.45 µm	142 mm	(150 cm ²)	2,550
NR	0.2 µm	142 mm	(150 cm ²)	1,950
NRG	0.2 µm	142 mm	(150 cm ²)	1,350
NTG	0.1 µm	142 mm	(150 cm ²)	315
NX	0.45 µm	293 mm	(650 cm ²)	8,850
NXG	0.45 µm	293 mm	(650 cm ²)	11,050
NR	0.2 µm	293 mm	(650 cm ²)	8,450
NRG	0.2 µm	293 mm	(650 cm ²)	5,850
NTG	0.1 µm	293 mm	(650 cm ²)	1,365

⁸ G indicates reinforced single layer with internal polyester non-woven. Grades without G designation are unsupported and double layer for added reliability.

⁹ Typical initial clean flow with water 77°F (25°C) at 10 psid (0.7 barg). Flow rates listed represent initial flow for a liquid with viscosity of 1 centipoise, before filter plugging is detectable. Flow rates at other differential pressures are proportional to applied differential pressure. Actual initial flow rates may differ from the typical values given here based on filter disc holder design.

Ordering Information

Part Number	Rating	Diam.	Feature	No./Pkg.
NX047100	0.45 µm	47 mm	Double Layer	100
NXG047100	0.45 µm	47 mm	Reinforced	100
NR047100	0.2 µm	47 mm	Double Layer	100
NRG047100	0.2 µm	47 mm	Reinforced	100
NTG047100	0.1 µm	47 mm	Reinforced	100
NX09025	0.45 µm	90 mm	Double Layer	25
NXG09025	0.45 µm	90 mm	Reinforced	25
NR09025	0.2 µm	90 mm	Double Layer	25
NRG09025	0.2 µm	90 mm	Reinforced	25
NTG09025	0.1 µm	90 mm	Reinforced	25
NX14225	0.45 µm	142 mm	Double Layer	25
NXG14225	0.45 µm	142 mm	Reinforced	25
NR14225	0.2 µm	142 mm	Double Layer	25
NRG14225	0.2 µm	142 mm	Reinforced	25
NTG14225	0.1 µm	142 mm	Reinforced	25
NX29325	0.45 µm	293 mm	Double Layer	25
NXG29325	0.45 µm	293 mm	Reinforced	25
NR29325	0.2 µm	293 mm	Double Layer	25

NRG29325	0.2 µm	293 mm	Reinforced	25
NTG29325	0.1 µm	293 mm	Reinforced	25

Notes: Minimum order quantities may be required. For Validation Studies or Special Orders, discs from any cartridge grade media are available upon request. Other grades and media are also available. Contact your local Pall distributor or Pall Sciences (laboratory) distributor for more information, including other grades and sizes.

Specifications and Availability: The information provided is a guide to the part number structure and possible options. Product availability may be subject to change without notice. All specifications are nominal. This literature was reviewed for accuracy at the time of publication. For current information on the products and test methodologies, consult your local Pall distributor.

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