

# 3M™ Series NB Filter Bags

## Nylon Monofilament Filter Bags

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3M™ series NB Nylon Monofilament (NMO) filter bags are produced using manufacturing processes that result in highly reliable filters with predictable and repeatable performance. The 3M series NB NMO filter bags are designed for applications where 25 to 1200 micron filtration at up to 180 gpm (#2 bag size) is required. The quality management system associated with the manufacturing of the 3M series NB filter bags is ISO 9001:2008 certified. Features of the 3M series NB NMO filter bags include:



- **Consistent Pore Size:** The uniform openings of monofilament bags make their use ideal in applications where it is desired that certain size particles in the incoming fluid pass through the filter (i.e. metallic paints...) while reliably removing larger undesirable particles.
- **High Strength Construction:** Since each thread is a single filament, monofilament bags have excellent strength controlling fiber migration and subsequent downstream fluid contamination.
- **High Temperature/Alkali Compatibility:** This makes the filters an appropriate choice for high temperature cleaning applications.
- **Availability in Coarser Grades:** The nature of monofilament materials allows for construction of bags with well defined larger pore openings for applications where it is desired to filter coarser particles.

Markets Served
Industrial
Chemicals
Coatings
Hydrocarbon & Refining
Electronics

#### Sealing

All NMO bags come standard with a galvanized metal ring for sealing into the bag housing. To avoid "lumping" of material around the ring and potential fluid bypass, special design considerations have been incorporated in the fastening of the media to the ring. This allows for proper sealing of 3M series NB filter bags in conventional bag housings. For ease of removal from the filter bag vessel, a flexible handle is affixed to the filter. For identification and traceability, grade and lot information is included on a removable tag.

#### Materials/Construction

Each 3M series NB NMO filter bag grade is manufactured from industry proven and accepted monofilament fibers. no adhesives or binders are used in the media manufacturing process. NMO bag filters are compatible with a wide range of fluids and operating conditions.

### Features & Benefits

#### Uniform Pore Sizing

- Allows desired undersized particles to pass through (metallic paints...)
- Effective removal of oversized contaminants

#### Continuous Fiber Construction

- High fiber strength reducing the likelihood of bag rupture and downstream fluid contamination

#### High Temperature/Alkali Compatibility

- Appropriate choice for filtration of high temperature cleaning solutions

#### Available in Coarser Grades (>200µm)

- Cost effective filtration solution for those applications requiring removal of coarse particles only

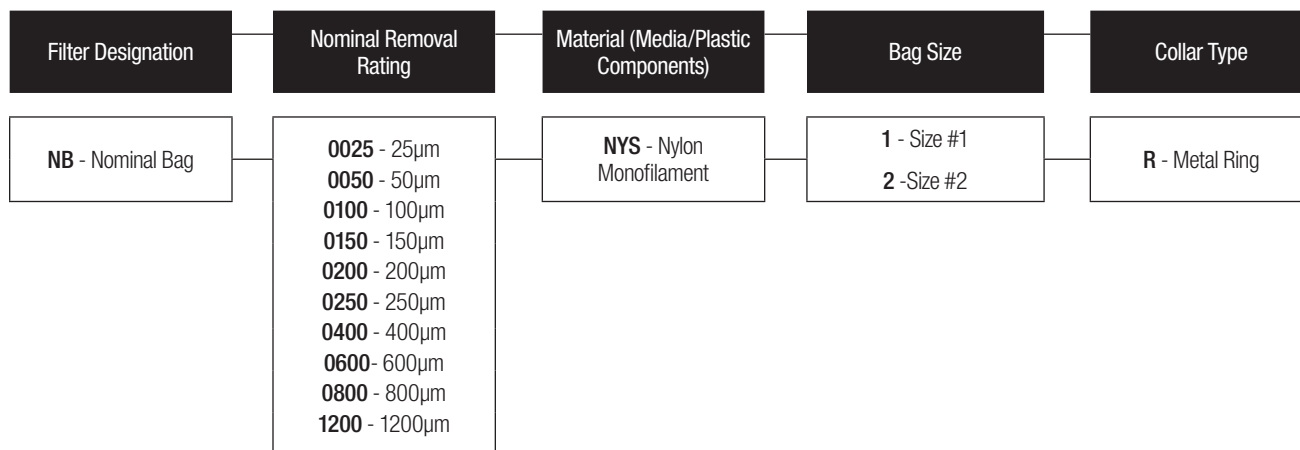
Chemical Compatibility*	
Chemical	Compatibility Rating
Strong Acids	Poor
Weak Acids	Fair
Strong Alkalis	Excellent
Weak Alkalis	Excellent
Solvents	Good

\*Thermal and chemical resistance data presented in this brochure is for guidance only. Factors such as duration, degree of concentration of a substance in a fluid and temperature should also be considered.

Specifications & Operating Conditions*		
Dimension	Nylon Monofilament Bag Filters	
	#1 Size	#2 Size
Nominal Removal Ratings (micron)	25, 50, 100, 150, 200, 250, 400, 600, 800, and 1200	
Filter Diameter	7 in / 17.8 cm	
Filter Length (in/cm)	17.5 in / 44.5 cm	32 in / 81.3 cm
Maximum Recommended Flow Rate (gpm/lpm)*	90 gpm / 340 lpm	180 gpm / 681 lpm
Maximum Operating Temperature	300°F / 149° C	
Maximum Forward Differential Pressure	35 psid @ 68°F (2.4 bar @ 20°C)	
Recommended Change-out Differential Pressure	20 psid (1.4 bar)	

\*For aqueous solutions (1 cps) based on maintaining clean pressure drop (media only) of <2 psid (0.14 bar).

## 3M™ Series NB Nylon Monofilament Filter Bag Ordering Guide



To aid bag installation, an optional bag installation tool is available, order part number 6042931

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 70-0202-1136-6 REV 0512b