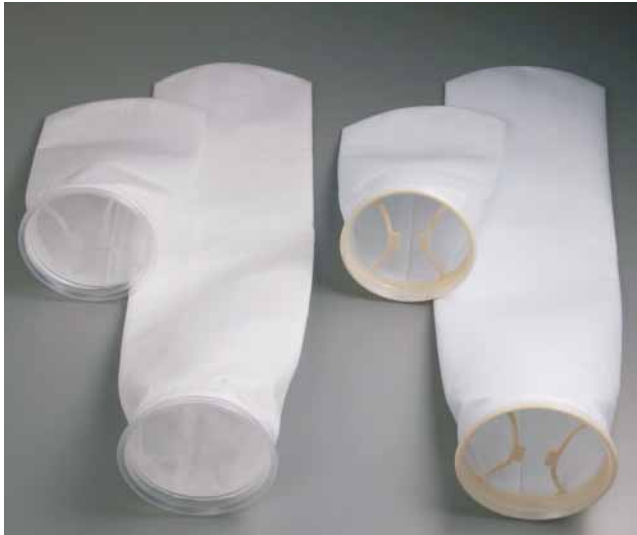


CUNO Series NB Felt Bags for Liquid Filtration



CUNO's unrivaled filtration media development capabilities and advanced manufacturing processes enables the production of the CUNO Series NB polypropylene and polyester felt bag filters. Meeting the most demanding customer specifications, the Series NB bag filters are highly reliable with predictable and repeatable performance. The Series NB bag filters are designed for applications where 1 to 200 micron filtration at up to 180 gpm (#2 bag size) is required. Benefits include:

- Inside-Outside Flow Configuration – resulting in capture of contaminants on the inside
- Ease of Disposal – bags are collapsible
- Ability to handle viscous fluids
- Low unit cost

Markets Served

Industrial	Coatings
Chemicals	Hydrocarbon & Refining
Food & Beverage	Electronics
Pharmaceutical & Healthcare	

Improved Bag Design from the Leader in Liquid Filtration

CUNO offers a line of Size #1 and #2 felt filter bags in grades ranging from 1 to 200 μ m in various collar/media configurations (see ordering guide) with the following important features:

Predictable Removal Efficiencies – Through controlled media specifications and advanced manufacturing processes.

Media Migration Control – Through thermal treatment of the exterior surface of the filter media and the use of state-of-the-art procedures to properly weld the media seams and the media to the collar.

Proper Sealing – All CUNO felt filter bags come standard with a specially designed plastic collar for proper sealing of the Series NB bags in conventional bag housings. This design feature is important as improper sealing can result in fluid bypass and contamination of the downstream fluid. Utilizing the latest technology, the bag filter media is welded to the collar preventing problems associated with stitched collars. The collar includes an ergonomically designed handle to allow for easy removal of the bag filter. For ease of identification and traceability, the handles include an engraved tab providing micron grade and manufacturing lot information.



CUNO's sales support teams are dedicated to working with you to identify the optimum liquid filter product for your application. With CUNO's complete line of filter product solutions, you can be sure that you are getting the best filter solution for your application. For new installations, CUNO offers a full line of bag filter housings, contact your local CUNO sales representative for more details.

Features	Benefits
■ Controlled media specifications	■ Predictable performance for desired filter effluent quality
■ Specially Designed Sealing Collar	■ Manufacturing processes do not use silicone or adhesives
	■ Proper sealing into most filter bag manufacturer's housings
	■ Ergonomically designed handle for ease of bag removal
■ Welded side seams and thermal treated exterior surfaces	■ Grade and lot information etched on collar for identification and traceability
	■ Control of fiber migration and subsequent downstream fluid contamination

Materials/Construction

Each CUNO felt bag filter grade is manufactured from high performance fibers selected based on extensive media performance testing. No adhesives, binders, or silicone are used in the media manufacturing process. The polypropylene materials are 21 CFR compliant. For control of fiber migration and subsequent downstream contamination, bag filter side seams are welded and the exterior surfaces thermally treated. The quality management system associated with the manufacturing of the CUNO Series NB filter bags is ISO 9001:2000 certified.

Table 1. - Felt Bag Filter Element Specifications

Dimension	Felt Filter Bags	
	#1 Size	#2 Size
Nominal Removal Ratings (microns)	1, 5, 10, 25, 50, 100, and 200	
Filter Diameter (inches/cm)	7 / 17.8	
Filter Length (inches/cm)	18/45.7	32/81.3

Table 2. - Operating Parameters

Operating conditions	Polypropylene (Collar and Media)		Polyester (Collar and Media)	
	#1 Size	#2 Size	#1 Size	#2 Size
Maximum Operating Temperature (°F / °C)	180 / 82		300 / 149	
Maximum Recommended Flow Rate (gpm / lpm)*	90 / 340	180 / 681	90 / 340	180 / 681
Maximum Forward Differential Pressure	35 psid @ 68°F (2.4 bar @ 20°C)			
Recommended Change-out Differential Pressure	20 psid (1.4 bar)			
CFR Compliant	All polypropylene component materials are listed for food contact per 21 CFR 177.1520			

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

Table 3. - Felt Filter Media Chemical Compatibility*

Chemical	Compatibility Rating	
	Polypropylene	Polyester
Strong Acids	Excellent	Good
Weak Acids	Excellent	Excellent
Strong Alkalis	Excellent	Poor
Weak Alkalis	Excellent	Fair
Solvents	Fair	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.

CUNO Series NB Polypropylene & Polyester Felt Filter Bag Ordering Guide

Filter Designation	Nominal Removal Rating	Material (Plastic Collar/Media)	Bag Size	Collar Type
NB – Nominal Bag	0001 - 1µm 0005 - 5µm 0010 - 10µm 0025 - 25µm 0050 - 50µm 0100 - 100µm 0200 - 200µm	PPS – Polypropylene/Polypropylene EES – Polyester/Polyester	1 – Size #1 2 – Size #2	C – Plastic Collar

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

Important Notice

CUNO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Since a variety of factors can affect the use and performance of a CUNO product in a particular application, some of which are uniquely within the user's knowledge and control, user is responsible for determining whether or not the CUNO product is fit for a particular purpose and suitable for user's method of application.

Limitation of Remedies and Liability

If the CUNO product is proved to be defective, THE EXCLUSIVE REMEDY, AT CUNO'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OR TO REPAIR OR REPLACE THE DEFECTIVE PRODUCT. CUNO shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty or strict liability.

WARRANTY

Seller warrants its equipment against defects in workmanship and material for a period of 12 months from date of shipment from the factory under normal use and service and otherwise when such equipment is used in accordance with instructions furnished by Seller and for purposes disclosed in writing at the time of purchase, if any. Any unauthorized alteration or modification of the equipment by Buyer will void this warranty. Seller's liability under this warranty shall be limited to the replacement or repair, F.O.B. point of manufacture, of any defective equipment or part which, having been returned to the factory, transportation charges prepaid, has been inspected and determined by the Seller to be defective. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR USE, OR ANY OTHER MATTER. Under no circumstances shall Seller be liable to Buyer or any third party for any loss of profits or other direct or indirect costs, expenses, losses or consequential damages arising out of or as a result of any defects in or failure of its products or any part or parts thereof or arising out of or as a result of parts or components incorporated in Seller's equipment but not supplied by the Seller.



a 3M company

CUNO Incorporated

400 Research Parkway
 Meriden, CT 06450, U.S.A.
 Tel: (800) 243-6894
 (203) 237-5541
 Fax: (203) 630-4530
 www.cuno.com

CUNO and ChemSecure are trademarks of 3M used under license.

© 2007 3M Company. All Rights Reserved.

70020211358

LITSNB1.0808