FILTER BAGS

Felt Filter Bags
Standard Felt Filter Bags
Polyweld® Filter Bags
Extended Life Filter Bags (POEX/PEEX)
MAX PONG Filter Bags
PolyFold™ Filter Bags

Polymicro Microfiber Filter Bags
POMF Filter Bags

Seamless Absolute-Rated
BOS Filter Bags
BOS Gradient Filter Elements
BOS MAX Filter Bags

Mesh Filter Bags

Filter Fabric Qualities / Filter Bag Data

Filter Bag Flow Rates / Micron Rating & Availability

Innovative Solutions. Clear Results.

www.fsifilters.com
610-646-6980
FILTER BAGS

Felt Filter Bags

**Standard Felt Filter Bags | Polyweld® Filter Bags | Extended Life Filter Bags (POEX/PEEX)**

MAX PONG Filter Bags | Polyfold™ Filter Bags

**Polymicro Microfiber Filter Bags**

POMF Filter Bags

**Seamless-Absolute Rated**

BOS Filter Bags | BOS Gradient Filter Elements | BOS MAX Filter Bags

**Mesh Filter Bags**

FELT FILTER BAGS

Standard Felt Filter Bags

**FSI Felt Bags are the Answer**

When it comes to felt filter bags, FSI has the answer. Our years of experience give us an advantage over our competitors, and our felt filter bags show it. Our felt bags are designed to withstand higher solid loading, and are suitable for applications using vessel or open filtration systems.

FSI's “Comprehensive Manufacturing Control” philosophy insures that we will maintain our status as the industry leader in all phases of the filter business. Our integrated technology, control over our manufacturing and quality leads to consistent performance. With FSI filter bags, you can count on a quality product every time.

We start with the finest material possible. FSI makes its own fiber to produce the felt material used in our felt filter bags inhouse, guaranteeing the highest quality. Our Extended Life filter bag provides superior filtration of all sized particles, as well as up to twice the dirt holding capacity of a standard filter bag.

Our no-bypass welded seams eliminate the possibility of fluid bypass through needle holes. We provide a variety of glazed and singed finishes to inhibit fiber migration. FSI also offers polyester inserted felts. These inserted felts include a reinforcing scrim needled inside the felt material, to provide added strength and durability, when a restrainer basket is not being used.

**Features**

- We offer a full line of felt materials and micron ratings
- Conventional sewn bags or the PolyWeld® welded seam bags available
- FSI PolyLoc® ring or other common bag rings available on most bags
- Heavy Duty and Extended Life designs available to suit your filtration needs
Specifications

- **Available Materials**
  - PO = Felt, Polypropylene
  - PE = Felt, Polyester
  - N = Felt, Nylon
  - HT = Felt, High Temperature
  - TFE = Felt, Teflon

- **Maximum Operating Temperature**
  - Polypropylene: 200-220° F (93-104° C)
  - Polyester: 275-325° F (135-162° C)
  - Nylon: 275-300° F (135-149° C)
  - High Temperature: 400-450° F (204-232° C)
  - Teflon: 450-500° F (232-260° C)

- **Suggested Differential Pressure**
  - 35 PSI maximum — dirty
  - 10-15 PSI optimum change out

- **Micron Rating**
  - PO = 1, 3, 5, 10, 25, 50, 100
  - PE = 1, 3, 5, 10, 25, 50, 75, 100, 200
  - N = 5, 10, 25, 50, 100
  - HT = 5, 10, 25, 50, 100, 200
  - TFE = 1, 5, 10, 25

- **Sizes**
  - #1: 7” x 16” (17.78 cm x 40.65 cm)
  - #2: 7” x 32” (17.78 cm x 81.28 cm)
  - #3: 4” x 8.25” (10.16 cm x 20.96 cm)
  - #4: 4” x 14” (10.16 cm x 35.56 cm)
  - #5: 6 7/8” x 34” (17.46 cm x 86.36 cm)
  - #6: 7 7/8” x 16” 1/2” (17.46 cm x 41.91 cm)
  - #7: 5 1/2” x 16” (13.97 cm x 40.64 cm)
  - #8: 5 1/2” x 22” (13.97 cm x 55.88 cm)
  - #9: 5 1/2” x 33” (13.97 cm x 83.82 cm)

- **Rings**
  - P = Polypropylene PolyLoc®
  - PE = Polyester PolyLoc®
  - N = Nylon PolyLoc®
  - C = Cuno
  - S = Snap ring metal
  - SSS = Stainless steel snap ring
  - CO = Commercial steel ring
  - COP = Commercial plastic ring
  - RP = Ronningen-Petter snap ring
  - RPP = Ronningen-Petter plastic ring
  - RPF = Ronningen-Petter flange

- **Types of Filter**
  - B = Filter Bag
  - N = Non-inserted felt
  - I = Inserted felt (polyester only)
  - G = Glazed finish
  - F = Fuzzy finish (polyester only)

- **Cover**
  - P = Plain
  - PEM = Polyester multifilament
  - NMO = Nylon monofilament

- **Size**
  - 1, 2, 3, 4, 5*, 6*, 7, 8, 9

- **Suffix**
  - WE** = Welded Seam Construction
  - A = Auto Construction (seam inside bag)
  - C = Cotton Handle
  - N = Nylon Handle
  - LOOPS = Loops

* SIZES 5, 6, AVAILABLE WITH 5 RING ONLY
** AVAILABLE IN SIZES 1 AND 2, POLYPROPYLENE AND POLYESTER NON-INSERTED ONLY

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**FELT FILTER BAGS**

**Standard Felt Filter Bags**

<table>
<thead>
<tr>
<th>Item #</th>
<th>BPONG10P2PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Filter</td>
<td>B = Filter Bag</td>
</tr>
<tr>
<td>Material</td>
<td>See specifications</td>
</tr>
<tr>
<td>N = Non-inserted felt</td>
<td></td>
</tr>
<tr>
<td>I = Inserted felt (polyester only)</td>
<td></td>
</tr>
<tr>
<td>G = Glazed finish</td>
<td></td>
</tr>
<tr>
<td>F = Fuzzy finish (polyester only)</td>
<td></td>
</tr>
</tbody>
</table>

| Micron Rating | See specifications |
| Cover | P = Plain |
| PEM = Polyester multifilament |
| NMO = Nylon monofilament |
| Size | 1, 2, 3, 4, 5*, 6*, 7, 8, 9 |
| Ring | See specifications |
| Suffix | WE** = Welded Seam Construction |
| A = Auto Construction (seam inside bag) |
| C = Cotton Handle |
| N = Nylon Handle |
| LOOPS = Loops |

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**How To Install a Bag Properly**

**Locate Your Sales Representative**

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FILTER SPECIALISTS, INC.
www.fsifilters.com
610-646-6980

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- MAX PONG Filter Bags | PolyFold™ Filter Bags

Polymicro Microfiber Filter Bags
- POMF Filter Bags

Seamless-Absolute Rated
- BOS Filter Bags | BOS Gradient Filter Elements | BOS MAX Filter Bags

Mesh Filter Bags

FELT FILTER BAGS
Polyweld® Filter Bags

FSI’s PolyWeld® filter bags hold a distinct advantage over all types of needle-sewn bags. The welded seams completely eliminate the possibility of unfiltered liquid bypass occurring due to needle holes. The result is a tighter seam, higher bag efficiencies and improved finish product yields. In addition, the fused edges of our PolyWeld bag provide a fiber-free finish and virtually eliminate unwanted fiber migration. Since the PolyWeld bag is not constructed with thread, the possibility of silicone contamination from this source is also removed. FSI’s PolyWeld filter bags are available in standard and extended life polypropylene felt, and standard and extended life polyester felt.

Features

- Welded construction of bags completely eliminates unfiltered liquid bypass from occurring due to needle holes
- Available in standard polypropylene, polyester and extended life felt for broad range of product compatibility
- Glazed finish eliminates fiber migration for clearer results
- PolyLoc® ring creates a hermetic seal that prevents liquid bypass and produces clearer results
- Polypropylene is FDA food grade compliant to government standards
- FDA Compliant Polyester felt is available (non-standard)
- Silicone free to eliminate cratering for improved surface results
- Available from stock for quick delivery
Specifications

- **Available Materials**
  Polypropylene, Polyester Standard and FDA Compliant Polyester
  Polypropylene and Polyester Extended Life

- **Maximum Operating Temperature**
  Polypropylene: 200-220° F (93-104°C)
  Polyester: 275-325° F (135-162°C)

- **Suggested Differential Pressure**
  35 PSIG maximum — dirty
  10-15 PSIG optimum change out

- **Micron Rating**
  BPONG = 1, 3, 5, 10, 25, 50, 100
  BPENG = 1, 3, 5, 10, 25, 75, 100
  BPEX = 1, 5, 10, 25, 50, 100
  BPOEX = 5, 10, 25, 50

- **Sizes**
  #1: 7" x 16" (17.78 cm x 40.65 cm)
  #2: 7" x 32" (17.8 cm x 81.3 cm)

- **Plastic PolyLoc® Rings**
- **Welded Seam Construction**

### Polyweld® Filter Bags

#### Item # BPONG100P2PWE

<table>
<thead>
<tr>
<th>Type of Filter</th>
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<td>Standard:</td>
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<tr>
<td></td>
<td>PENG = Polyester</td>
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<tr>
<td></td>
<td>Extended Life:</td>
</tr>
<tr>
<td></td>
<td>POEX = Polypropylene</td>
</tr>
<tr>
<td></td>
<td>PEEX = Polyester</td>
</tr>
<tr>
<td>Micron Rating</td>
<td>See specifications</td>
</tr>
<tr>
<td>Cover</td>
<td>P = Plain (no cover)</td>
</tr>
<tr>
<td>Size</td>
<td>1, 2</td>
</tr>
<tr>
<td>Ring</td>
<td>P = Polypropylene PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>PE = Polyester PolyLoc®</td>
</tr>
<tr>
<td>Suffix</td>
<td>WE = Welded Seam Construction</td>
</tr>
<tr>
<td></td>
<td>F = FDA Compliant Polyester</td>
</tr>
</tbody>
</table>

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- Extended Life Filter Bags (POEX/PEEX)
- MAX PONG Filter Bags
- PolyFold™ Filter Bags

Polymeric Microfiber Filter Bags

- POMF Filter Bags

Seamless-Absolute Rated

- BOS Filter Bags
- BOS Gradient Filter Elements
- BOS MAX Filter Bags

Mesh Filter Bags

FELT FILTER BAGS
Extended Life Filter Bags (POEX/PEEX)

The Extended Life filter bags (POEX and PEEX) provide outstanding performance on many types of contaminants such as gels, particles with wide ranges of sizes, and particles with various irregular shapes. The coarse, pre-filtering layer is designed to provide long service life, capturing a large amount of contaminants without excess surface loading. The POEX has been field-proven to hold up to twice the amount of contaminants as a standard felt bag, reducing waste volume and bag changes. The Extended Life filter bag is ideal for automotive coatings, chemicals, resins, edible oils and other fluid applications.

Features

- Excellent filtration on many contaminants - gels, particles with wide range of sizes and particles with irregular shapes
- A coarse inner layer, graded pore structure, greater depth than standard bags provides excellent filtration performance
- Available in polyester (PEEX) and polypropylene (POEX)
- Twice the standard dirt-holding capacity of traditional felt bags to provide longer service life, fewer change-outs and reduced waste
- Polypropylene bags are FDA compliant
- Micron rating for polypropylene 5-100; polyester 1-100
- PolyWeld® seam construction with hermetically sealing PolyLoc® ring eliminates liquid bypass
- Glazed finish eliminates unwanted fiber migration
Specifications

- **Available Materials**
  - Polypropylene
  - Polyester

- **Maximum Operating Temperature**
  - Polypropylene: 200-220°F (93-104°C)
  - Polyester: 275-325°F (135-162°C)

- **Suggested Differential Pressure**
  - 35 PSIG maximum — dirty
  - 10-15 PSIG optimum change out

- **Micron Rating**
  - PEEX = 1, 5, 10, 25, 50, 100
  - POEX = 5, 10, 25, 50, 100

- **Sizes**
  - #1: 7" x 16" (17.78 cm x 40.65 cm)
  - #2: 7" x 32" (17.8 cm x 81.3 cm)

- **Plastic PolyLoc® Rings**

- **Welded Seam Construction**

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**FEEL FILTER BAGS**

### Extended Life Filter Bags (POEX/PEEX)

<table>
<thead>
<tr>
<th>Item #</th>
<th>BPOEX10P2PWE</th>
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<table>
<thead>
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<th>B = Filter Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>PEEX = Polyester extended life felt</td>
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<tr>
<td></td>
<td>POEX = Polypropylene extended life felt</td>
</tr>
<tr>
<td>Micron Rating</td>
<td>See specifications</td>
</tr>
<tr>
<td>Cover</td>
<td>P = Plain</td>
</tr>
<tr>
<td>Size</td>
<td>1, 2</td>
</tr>
<tr>
<td>Ring</td>
<td>P = Polypropylene PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>PE = Polyester PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>S = Steel Ring*</td>
</tr>
<tr>
<td>Suffix</td>
<td>WE = Welded Seam Construction</td>
</tr>
</tbody>
</table>

* AVAILABLE WITH SEWN SEAMS ONLY

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**How To Install a Bag Properly**

**Locate Your Sales Representative**
FELT FILTER BAGS

MAX PONG

The PONG Heavy Duty Extended Life filter bag (MAX PONG) is the leader in high-efficiency, low-cost filtration. Its seamless micro-fiber graded density cartridge insert removes trace oils that frequently occur in process fluids, and provides up to four times the dirt-holding capacity of conventional polypropylene bags. Combined with its welded seam felt cover and PolyLoc® ring for elimination of unfiltered bypass, it becomes the perfect choice for uses where longer-lasting, high-efficiency filter bags are needed. The MAX PONG Heavy Duty Extended Life filter bag is ideal for continuous flow applications such as e-coat and phosphate baths, and batch applications including oils, edible oils and syrups, or any final or polishing filter requirements.

Features

- High-efficiency, low-cost filtration is ideal for continuous flow applications
- Welded seam construction eliminates unfiltered bypass due to needle holes
- Large dirt-holding capacity and lower pressure drop provide long service life
- Adsorbs smaller particles and filters wide range of particle sizes
- Pure polypropylene microfiber insert contains no sizing, bonding adhesive, resin, lubricant, silicone or antistatic chemicals
- FDA compliant to meet food grade government standards
- PolyLoc® ring creates hermetic seal to prevent liquid bypass
Specifications

- **Available Materials**
  Polypropylene filter bag with 100% polypropylene rigid insert

- **Maximum Operating Temperature**
  Polypropylene: 200-220° F (93-104° C)

- **Suggested Differential Pressure**
  35 PSIG maximum — dirty
  10-15 PSIG optimum change out

- **Micron Rating**
  1, 5, 10, 25, 50, 100

- **Sizes**
  #1: 7" x 16" (17.78 cm x 40.64 cm)
  #2: 7" x 32" (17.78 cm x 80 cm)

- **Plastic PolyLoc® Rings**

- **Welded Seam Construction**

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**MAX PONG Filter Bags**

<table>
<thead>
<tr>
<th>Item #</th>
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<tr>
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<tr>
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<td>Micron Rating</td>
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<tr>
<td>Size</td>
<td>1, 2</td>
</tr>
<tr>
<td>Ring</td>
<td>P = PolyLoc®</td>
</tr>
<tr>
<td>Suffix</td>
<td>WE = Welded Seam Construction</td>
</tr>
</tbody>
</table>

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**How To Install a Bag Properly**

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FELT FILTER BAGS

PolyFold™ Filter Bag

The PolyFold™ is our proprietary filter bag constructed of dual-sided extended life felt. It features 2.4X additional surface area for high dirt-holding capacity and long service life.

Features

• The dual-sided, extended life felt construction provides maximum dirt holding and a high flow rate
• 240% more surface area than a standard bag
• Fits in a standard basket, so no retrofit is required
• 4X+ dirt holding capacity* results in longer life and fewer change outs
• Polypropylene center tube supports filtration media, aids in insertion of filter bag, and accepts a bag magnet
• PolyLoc® ring eliminates liquid bypass
• Mesh cover assists in insertion and removal of filter bag

*Compared to a standard felt bag. Based on lab testing using water and test dust.
Felt Filter Bags

Standard Felt Filter Bags | Polyweld® Filter Bags | Extended Life Filter Bags (POEX/PEEX)

MAX PONG Filter Bags | PolyFold™ Filter Bags

Polymicro Microfiber Filter Bags

POMF Filter Bags

Seamless-Absolute Rated

BOS Filter Bags | BOS Gradient Filter Elements | BOS MAX Filter Bags

Mesh Filter Bags

Specifications

- **Available Materials**
  Polypropylene Extended Life Felt

- **Maximum Operating Temperature**
  200-220°F (93-104°C)

- **Suggested Differential Pressure**
  35 PSIG maximum — dirty
  10-15 PSIG optimum change out

- **Micron Rating**
  5, 10, 25, 50, 100

- **Sizes**
  #2: 7" x 32" (17.8 cm x 81.3 cm)

- **Polypropylene PolyLoc® Rings**
- **Polypropylene Center Tube**

Patent Pending

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**PolyFold™ Felt Filter Bags**

<table>
<thead>
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<tbody>
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<td><strong>Type of Filter</strong></td>
<td>B = Filter Bag</td>
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<tr>
<td><strong>Material</strong></td>
<td>POF = Polypropylene extended life felt</td>
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<tr>
<td><strong>Micron Rating</strong></td>
<td>See specifications</td>
</tr>
<tr>
<td><strong>Cover</strong></td>
<td>P400 = Polyester Multifilament Mesh (400 Micron)</td>
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<tr>
<td><strong>Size</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Ring</strong></td>
<td>P = Polypropylene PolyLoc®</td>
</tr>
</tbody>
</table>

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**Clear Water Pressure Drop**

![Chart showing pressure drop vs. flow rate for different PolyFold models](chart.png)
POLYMICRO MICROFIBER FILTER BAGS
POMF Filter Bags

The Polymicro microfiber filter bag (POMF) provides outstanding performance for applications requiring higher filtration efficiency. The POMF contains three layers: a pre-filtering layer that removes coarse debris; the primary layer, composed of micro pores (for efficient particle retention); and an outer cover that prevents fiber migration. The finish-free fibers are non-foaming, which is ideal for food, beverage, water, chemical and coating applications.

Features

• Proprietary polypropylene, triple-layer construction adsorbs hydrocarbons from air, gas and aqueous streams for clearer results
• Outer cover prevents fiber migration to reduce waste
• Non-foaming microfiber offers product cleanliness, high performance and longer service life
• High void volume means longer service life, higher contaminant loading and reduced waste loads
• Easy change-out reduces down time
• PolyLoc® ring creates a hermetic seal within a vessel housing to prevent liquid bypass
• POMF 1A, 2A, 10A and 25A bags are made from FDA-compliant materials
• POMF1A, 2A, 10A & 25A are available with NSF Standard 61 Certification
• Available in stock for quick, one-week delivery
POLYMICRO MICROFIBER FILTER BAGS

POMF Filter Bags

**Item # BPOMF1AP2P**

<table>
<thead>
<tr>
<th>Type of Filter</th>
<th>B = Filter Bag</th>
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<td>Material</td>
<td>POMF = Polypropylene microfiber</td>
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<tr>
<td>Micron Rating</td>
<td>See specifications</td>
</tr>
<tr>
<td>Cover</td>
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<tr>
<td>Size</td>
<td>1, 2, 3, 4</td>
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<tr>
<td>Ring</td>
<td>P = PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>S = Snap fit metal</td>
</tr>
<tr>
<td></td>
<td>RPP = Ronningen-Petter plastic ring</td>
</tr>
<tr>
<td></td>
<td>CO = Commercial steel ring</td>
</tr>
<tr>
<td></td>
<td>COP = Commercial plastic ring</td>
</tr>
<tr>
<td></td>
<td>RP = Ronningen-Petter snap fit</td>
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</table>

**Item # BPOMF1APP2P61**

Type of Filter, Material, Micron Rating, Size and Ring nomenclature same for NSF 61 Certified bags. See Above.

<table>
<thead>
<tr>
<th>Cover</th>
<th>PP = Special NSF Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suffix</td>
<td>61 = NSF 61 Certified</td>
</tr>
</tbody>
</table>

Specifications

- **POMF1A, 2A, 10A & 25A**
  Available with NSF Standard 61 Certification

- **POMF 1A, 2A, 10A and 25A**
  Bags are made from FDA-compliant materials (OA bags also include an additional layer of oil removing material)

- **Auto Construction**
  (Seams on Inside)

- **Available Materials**
  Polypropylene microfiber

- **Maximum Operating Temperature**
  160° F (93° C)

- **Suggested Differential Pressure**
  35 PSIG maximum — dirty
  10-15 PSIG optimum change out

- **Micron Rating**
  1A: 1 micron
  2A: 2 micron
  10A: 10 micron
  25A: 25 micron
  50A: 50 micron
  90A: 90 micron
  120A: 120 micron
  OA: Special purpose 25 micron (includes an additional layer of oil removing material)

- **Sizes**
  #1: 7” dia. x 16” long, 65 GPM
  #2: 7” dia. x 32” long, 125 GPM
  #3: 4” dia. x 8.25” long, 20 GPM
  #4: 4” dia. x 14” long, 35 GPM

- **Available Rings**
  (See chart on right for all available rings)
SEAMLESS-ABSOLUTE RATED

BOS Filter Bags

The BOS filter bag is a Polymicro® seamless filter bag, constructed entirely without seams. This unique material composition allows for a higher efficiency, with graded pore-size distribution creating absolute filtration. Thermally bonded microfibers create a seamless filter bag that has high tensile strength, providing superior resistance to channeling, unloading, bypass and other forms of traditional leakage that result from pulsating water.

The benefit of using this advanced filter bag is precise particle retention. The BOS filter bag is an ideal product for use in a wide variety of high-purity applications, where absolute filtration is required.

Features

- Seamless construction offers unequalled benefit of eliminating fluid bypass
- Absolute rated (98%) 3-100 microns for highest efficiency and consistent quality
- Microfiber-graded pore design provides lower initial pressure drop
- Thermally-bonded microfibers contain no sizing, bonding adhesive, resin or silicone
- FDA compliant
- Can be incinerated for easy disposal
- Available with NSF Standard 61 Certification
SEAMLESS-ABSOLUTE RATED

BOS Filter Bags

Item # BOS5PM2P

<table>
<thead>
<tr>
<th>Code</th>
<th>BOS = Polymicro seamless</th>
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<tbody>
<tr>
<td>Micron Rating</td>
<td>See specifications</td>
</tr>
<tr>
<td>Cover</td>
<td>PM = Polypropylene</td>
</tr>
<tr>
<td>Size</td>
<td>1, 2</td>
</tr>
<tr>
<td>Ring</td>
<td>P = Polypropylene PolyLoc®</td>
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</table>

Item # BOS5PP2P61

<table>
<thead>
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<tbody>
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<td>Micron Rating</td>
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<tr>
<td>Cover</td>
<td>PP = Special NSF Construction</td>
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<tr>
<td>Size</td>
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<td>Ring</td>
<td>P = Polypropylene PolyLoc®</td>
</tr>
<tr>
<td>Suffix</td>
<td>61 = NSF 61 Certified</td>
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</table>

Specifications

- **Available Materials**
  Polypropylene

- **Seamless Construction**

- **Maximum Operating Temperature**
  160° F (71° C)

- **Suggested Differential Pressure**
  35 PSIG maximum – dirty
  10-15 PSIG optimum change out

- **Absolute (98%) Micron Rating**
  3, 5, 10, 25, 35, 50, 75, 100

- **Sizes**
  #1: 7” x 16” (17.8 cm x 40.65 cm)
  #2: 7” x 32” (17.8 cm x 81.3 cm)

- **Plastic PolyLoc® Rings**

- **Available with NSF Standard 61 Certification**

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SEAMLESS-ABSOLUTE RATED
BOS Gradient Filter Elements

BOS Gradient Filter element is the first of its kind, with seamless design and true gradient density. This absolute rated element provides users with the depth of a cartridge and the convenience of a bag. This 100% polypropylene microfiber product adsorbs up to 16 times its own weight in hydrocarbons (oils) and will last up to 18 times the life of other products (depending on particle distribution and application).

Features/Benefits

Gradient Density provides:
• Up to 18 times extended life compared to other products, dependent upon particle distribution and application
• Longer life means fewer bag changes which results in lower labor costs and less loss of product
• Not compressible in operation providing greater dirt holding capacity
• Designed for typical broad particle distribution applications.
• Will allow more efficient filtration (lower micron) without sacrificing product life

Polypropylene Microfiber Material
• Adsorbs up to 16 times its own weight in hydrocarbons (oils)
• Inventory reduction. Eliminates need for stocking “oil” bags
• Thermally bonded, with no lubricants or surface active agents
• Available with NSF Standard 61 Certification

Fits existing FSI standard basket
• No retrofit costs
SEAMLESS-ABSOLUTE RATED

### BOS Gradient Filter Elements

<table>
<thead>
<tr>
<th>Item #</th>
<th>BOSG50PM2P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code</strong></td>
<td>BOS = Seamless Polypropylene</td>
</tr>
<tr>
<td><strong>Type of Filter</strong></td>
<td>G = Gradient</td>
</tr>
<tr>
<td><strong>Micron Rating</strong></td>
<td>See specifications</td>
</tr>
<tr>
<td><strong>Cover</strong></td>
<td>PM = Polypropylene</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Ring</strong></td>
<td>P = Polypropylene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item #</th>
<th>BOSG50PP2PG61</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code</strong></td>
<td>BOS = Seamless Polypropylene</td>
</tr>
<tr>
<td><strong>Type of Filter</strong></td>
<td>G = Gradient</td>
</tr>
<tr>
<td><strong>Micron Rating</strong></td>
<td>See specifications</td>
</tr>
<tr>
<td><strong>Cover</strong></td>
<td>PP = Special NSF Construction</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Ring</strong></td>
<td>P = Polypropylene</td>
</tr>
<tr>
<td><strong>Suffix</strong></td>
<td>G61 = NSF 61 Certified</td>
</tr>
</tbody>
</table>

Specifications:
- **Available Materials**
  Polypropylene Microfiber
- **Seamless Construction**
- **Maximum Operating Temperature**
  160° F (71° C)
- **Suggested Differential Pressure**
  20 PSIG maximum – dirty
  10-15 PSIG optimum change out
- **Absolute (98%) Micron Rating**
  3, 5, 10, 25, 50, 75, 100, 125
- **Sizes**
  #2: 7” X 32” (17.8 cm X 81.32 cm)
- **Thermally Bonded Ring**
- **Available with NSF Standard 61 Certification**

**How To Install a Bag Properly**

**Locate Your Sales Representative**
SEAMLESS-ABSOLUTE RATED

BOS MAX Filter

The innovative BOS MAX heavy duty seamless filter bags have an advanced design that provides extended life and increased efficiency with a greater depth filtration than conventional filter bags. It provides all of the benefits of the standard BOS filter bag with a semi-rigid microfiber insert that increases the dirt holding capacity of the filter while providing the absolute filtration of the BOS filter bag.

Features

- BOS MAX Heavy Duty Extended Life Bags contain a semi-rigid, microfiber cartridge insert for up to four times the life of standard BOS bags and are ideal for high-purity applications
- Absolute rated 3-100 microns for high efficiency and consistent quality
- Thermally-bonded microfibers contain no sizing, bonding adhesive, resin or silicone
- Contaminant free to eliminate craters providing better surface results
- PolyLoc® ring creates hermetic seal within a vessel housing to prevent liquid bypass
SEAMLESS-ABSOLUTE RATED

BOS MAX Filter Bags

<table>
<thead>
<tr>
<th>Item #</th>
<th>BOS5PM2PMAX</th>
</tr>
</thead>
</table>

| Code | BOS = Polymicro seamless |
| Micron Rating | See specifications |
| Cover | PM = Polypropylene |
| Size | 1, 2 |
| Ring | P = Polypropylene PolyLoc® |
| Suffix | MAX = Maximum life |

Specifications

- **Available Materials**
  Polypropylene

- **Seamless Construction**

- **Maximum Operating Temperature**
  160° F (71° C)

- **Suggested Differential Pressure**
  35 PSIG maximum – dirty
  10-15 PSIG optimum change out

- **Absolute (98%) Micron Rating**
  3, 5, 10, 25, 35, 50, 75, 100

- **Sizes**
  #1: 7” x 16” (17.8 cm x 40.65 cm)
  #2: 7” x 32” (17.8 cm x 81.3 cm)

- **Plastic PolyLoc® Rings**
Mesh Filter Bags

Monofilament Mesh is a woven fabric where each thread is a single filament, boasting excellent strength with no fiber migration.

Multifilament Mesh is a woven fabric where each strand consists of many smaller diameter threads.

MESH FILTER BAGS

All FSI mesh bags are constructed using a woven or knitted fabric. Whether your particular environment requires a single filament mesh that provides excellent strength with no fiber migration, or a woven multi-strand mesh designed for economical filtration bags, we have your needs covered. The yarn in all of our mesh filter bags is abrasion resistant, compatible with a broad range of chemicals, unaffected by metal fatigue or corrosion, and boasts high tensile strength.

Features

- Available in nylon monofilament, polyester multifilament and polypropylene monofilament offering broad range of chemical compatibility and price ranges
- Monofilament mesh bags provide extra strength and abrasion resistance
- Precision mesh materials produce predictable results for consistent performance
- Offered in standard and custom sizes to provide a perfect fit for standard and unique applications
- Offered in micron ratings 1-1500 with plastic and metal rings for versatility
- Silicone free to prevent cratering for a better surface finish
## Specifications

- **Available Materials**
  - Nylon Monofilament
  - Polyester Multifilament
  - Polypropylene Monofilament

- **Micron Rating**
  - NMO = 1, 5, 10, 25, 35, 45, 55, 65, 75, 100, 125, 150, 175, 200, 250, 400, 600, 800, 1200
  - PEM = 75, 100, 125, 150, 200, 250, 400, 800, 1500
  - PMO = 100, 150, 200, 250, 300, 600, 800

- **Sizes**
  - #1: 7” x 16” (17.78 cm x 40.65 cm)
  - #2: 7” x 32” (17.78 cm x 80 cm)
  - #3: 4” x 8 1/4” (10.16 cm x 20.96 cm)
  - #4: 4” x 14” (10.16 cm x 35 cm)
  - #5: 6 7/8” x 34” (17.46 cm x 86.36 cm)
  - #6: 6 7/8” x 16 1/2” (17.46 cm x 41.91 cm)
  - #7: 5 1/2” x 16” (13.97 cm x 40.64 cm)
  - #8: 5 1/2” x 22” (13.97 cm x 55.88 cm)
  - #9: 5 1/2” x 33” (13.97 cm x 83.82 cm)

  - SGP: 5 Gallon Pail (19L)
  - 12X18D: 12” x 18” Drawstring (30.48 cm x 45.72 cm)
  - 18X24D: 18” x 24” Drawstring (45 cm x 60.96 cm)
  - 18X28D: 18” x 28” Drawstring (45 cm x 71.12 cm)

## MESH FILTER BAGS

**Item # BPEM100P1PA**

<table>
<thead>
<tr>
<th>Type of Filter</th>
<th>B = Filter Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>NMO = Mesh, Nylon monofilament</td>
</tr>
<tr>
<td></td>
<td>PEM = Mesh, Polyester multifilament</td>
</tr>
<tr>
<td></td>
<td>PMO = Mesh, Polypropylene monofilament</td>
</tr>
<tr>
<td>Micron Rating</td>
<td>See specifications</td>
</tr>
<tr>
<td>Cover</td>
<td>P = Plain (no cover)</td>
</tr>
<tr>
<td>Size</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9</td>
</tr>
<tr>
<td></td>
<td>5GP (5 Gallon Pail)</td>
</tr>
<tr>
<td></td>
<td>12X18D, 18x24D, 18x28D (D = Draw-string)</td>
</tr>
<tr>
<td>Ring</td>
<td>P = Polypropylene PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>PE = Polyester PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>C = Cuno</td>
</tr>
<tr>
<td></td>
<td>N = Nylon PolyLoc®</td>
</tr>
<tr>
<td></td>
<td>S = Snap fit metal</td>
</tr>
<tr>
<td></td>
<td>SSS = Stainless steel snap fit</td>
</tr>
<tr>
<td></td>
<td>CO = Commercial steel ring</td>
</tr>
<tr>
<td></td>
<td>COP = Commercial plastic ring</td>
</tr>
<tr>
<td>Suffix</td>
<td>WE = Welded Seam Construction <em>(available on sizes 3 &amp; 4 NMO only)</em></td>
</tr>
<tr>
<td></td>
<td>A = Auto Construction</td>
</tr>
<tr>
<td></td>
<td>LOOPS = Loops</td>
</tr>
<tr>
<td></td>
<td>C = Cotton Handle</td>
</tr>
<tr>
<td></td>
<td>N = Nylon Handle</td>
</tr>
</tbody>
</table>

---

**How To Install a Bag Properly**

**Locate Your Sales Representative**
FILTER BAGS

Felt Filter Bags
- Standard Felt Filter Bags
- Polyweld® Filter Bags
- Extended Life Filter Bags (POEX/PEEX)
- MAX PONG Filter Bags
- PolyFold™ Filter Bags

Polymicro Microfiber Filter Bags
- POMF Filter Bags

Seamless-Absolute Rated
- BOS Filter Bags
- BOS Gradient Filter Elements
- BOS MAX Filter Bags

Mesh Filter Bags

Filter Fabric Qualities

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Cotton</th>
<th>Polyester</th>
<th>Glass</th>
<th>Nylon</th>
<th>Nomex</th>
<th>Polypropylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>1.55</td>
<td>1.38</td>
<td>2.56</td>
<td>1.14</td>
<td>1.14</td>
<td>0.9</td>
</tr>
<tr>
<td>Abrasion &amp; Flex</td>
<td>Fair</td>
<td>Very Good</td>
<td>Poor</td>
<td>Excellent</td>
<td>Very Good</td>
<td>Very Good</td>
</tr>
<tr>
<td>Weak Acids</td>
<td>Poor</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Fair</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Strong Acids</td>
<td>Poor</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td>Poor</td>
<td>Excellent</td>
</tr>
<tr>
<td>Weak Alkali</td>
<td>Excellent</td>
<td>Good</td>
<td>Fair</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Strong Alkali</td>
<td>Excellent</td>
<td>Poor</td>
<td>Poor</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Solvents</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td>Temperature (F°)</td>
<td>200 - 240°</td>
<td>275 - 325°</td>
<td>500 - 600°</td>
<td>275 - 300°</td>
<td>400 - 450°</td>
<td>200 - 220°</td>
</tr>
</tbody>
</table>

Filter Bag Data

<table>
<thead>
<tr>
<th>Bag Size</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>X01</th>
<th>XL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Area Per Bag (ft²/m²)</td>
<td>2.0/0.19</td>
<td>4.4/0.41</td>
<td>0.5/0.05</td>
<td>1.0/0.9</td>
<td>2.0/0.19</td>
<td>5.3/0.49</td>
</tr>
<tr>
<td>Volume Per Bag (gal*/liter)</td>
<td>2.1/7.9</td>
<td>4.6/17.3</td>
<td>0.37/1.4</td>
<td>0.67/2.5</td>
<td>2.1/7.9</td>
<td>5.5/0.51</td>
</tr>
<tr>
<td>Bag Diameter (inch/cm)</td>
<td>7.0/17.8</td>
<td>7.0/17.8</td>
<td>4.0/10.2</td>
<td>4.0/10.2</td>
<td>6.0/15.2</td>
<td>9.25/23.5</td>
</tr>
<tr>
<td>Bag Length (inch/cm)</td>
<td>16/40.65</td>
<td>32.0/81.3</td>
<td>8.25/20.9</td>
<td>14.0/35.5</td>
<td>22/55.9</td>
<td>32/81.3</td>
</tr>
<tr>
<td>FSI Filter Vessel Model Number</td>
<td>FSPN-40</td>
<td>FSPN-85</td>
<td>FSPN-250</td>
<td>FSPN-20 BFN-13</td>
<td>FSPN-35 BFN-14</td>
<td>X100B</td>
</tr>
</tbody>
</table>

*gal* = gallons
FLOW RATES OF FILTER BAGS

In most filtration applications, fluid viscosities do not exceed 50 cps. Using the following Flow Rates Per #2 Size Bag as a guide, the suggested flow rates should result in a CLEAN Pressure Drop under 2 PSID.

<table>
<thead>
<tr>
<th>Material Used</th>
<th>Micron Rating</th>
<th>Flow Rate (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt</td>
<td>1 &amp; 3</td>
<td>80 GPM/#2 BAG</td>
</tr>
<tr>
<td>Felt</td>
<td>5 THRU 200</td>
<td>120 GPM/#2 BAG</td>
</tr>
<tr>
<td>Mesh</td>
<td>1, 3, 5 &amp; 100</td>
<td>100 GPM/#2 BAG</td>
</tr>
<tr>
<td>Mesh</td>
<td>25 THRU 100</td>
<td>125 GPM/#2 BAG</td>
</tr>
<tr>
<td>Mesh</td>
<td>150 THRU 800</td>
<td>150 GPM/#2 BAG</td>
</tr>
<tr>
<td>Microfiber</td>
<td>1A and 2A</td>
<td>60 GPM/#2 BAG</td>
</tr>
<tr>
<td>Microfiber</td>
<td>10A, 25A, 90A &amp; 0A</td>
<td>80 GPM/#2 BAG</td>
</tr>
</tbody>
</table>

MICON RATING & AVAILABILITY

<table>
<thead>
<tr>
<th>Micron Rating</th>
<th>Micron Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>35</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>65</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>75</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>90</td>
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<tr>
<td>100</td>
<td>Polyester Felt Felt</td>
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<tr>
<td>125</td>
<td>Polyester Felt Felt</td>
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<tr>
<td>150</td>
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<tr>
<td>200</td>
<td>Polyester Felt Felt</td>
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<tr>
<td>250</td>
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<tr>
<td>300</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>400</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>600</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>700</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>800</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>1200</td>
<td>Polyester Felt Felt</td>
</tr>
<tr>
<td>1500</td>
<td>Polyester Felt Felt</td>
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</tbody>
</table>