### FILTER BAGS

HIGH EFFICIENCY, HIGH CAPACITY





### Quality Filter Bags.... Consistent Filtration....

- High solids collection capacity with solids being contained in bag for easy disposal.
- Interior of vessel remains clean after bag removal. This reduces filter clean up time while minimizing filter downtime.
- Welded or sewn construction. Silicon Free.
- Bags are available with ring (metal or plastic) or molded plastic tops. Other bag sealing mechanisms are available.
- Multi-layer EXTENDED LIFE BAGS are available for increased dirt holding capacity. (2x the capacity of a standard felt bag)
- Multi-layer PLEATED BAGS are available for the highest dirt holding capacity in the industry. (Up to 20x the capacity of a standard felt bag)
- OIL ABSORB BAGS are available to remove trace amounts of oil and petroleum based products from paints, coatings and other fluids.

### SPECIFICATIONS

### **FILTER GRADES:**

Standard filters grades are 0.5 to 800 microns including 0.5, 1, 3, 5, 10, 15, 25, 50, 75, 100, 150, 200, 250, 300, 400, 600, 800 µm. Other filter grades are available.

### **BAG SIZES** (In-Stock)

#1, #2, #3, #4, #5, #6, #7, #8, #9, #12, C1, C2 and RP Bags. Custom Bags are available. See Bag Dimensional Information (Page 4)

### **AVAILABLE BETA RATINGS:**

2 To 5000

### **RECOMMENDED BAG SIZING DIFFERENTIAL PRESSURE:**

Bag Only: 1.0 PSID (0.06 BAR) Max. Recommended in Clean Condi-

System, including housing, bag, bag retainer basket Max. Recommended: 2.0 PSID (0.14 BAR) in Clean Condition. See Bag Pressure Drop Curve (Page 5)

**RECOMMENDED CHANGE-OUT DIFFERENTIAL PRESSURE:** 

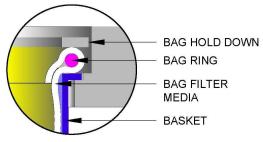
25 PSID (1.7 BAR)

### **MAXIMUM TEMPERATURE RATING:**

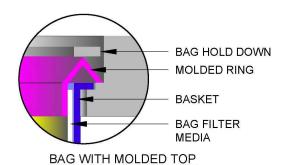
See Material Selection Guide (Page 3)

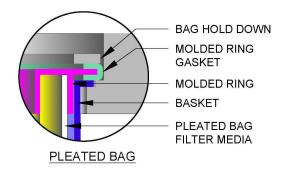
Polyester Felt, Polypropylene Felt, Polyester Multifilament, Nylon Monofilament Mesh, Polypropylene Microfiber, Polyester Microfiber, Oil Removal, Oilex, Cellulose, K-Media, Microglass and others.

\* Bags constructed from FDA materials are available. FDA bags are manufactured of materials that comply with FDA requirements for food contact per CFR Title 21. Please consult factory.



BAG WITH RING TOP





<sup>\*</sup> The above are representative illustrations only. Other bags designs are available.

### **APPLICATIONS**

### **PAPER**

- · Clay Slurry
- Coatings
- Fresh water
- White water
- Showers
- Starch
- Water
- Additives
- Cooling Water
- Dves
- Pump Seals

### **FOOD**

- Peanut Butter
  - Corn Syrup
  - Lard
  - Dextrose
  - Chocolates
  - Jelly
  - Juices
  - Milk Sugar
  - Edible Oils • Soybean
  - Concentrate
  - City and Well
  - Water
  - Tea Liquor
  - Extracts

### Amine

- Crude
- Feedstock
- Pump Seals
- Water • Fuel Oil
- Motor Oil
- Hydraulic Oil
- Synthetic
- Lubricants
- Completion Fluids
- Injection Fluids
- Cooling Tower Water

### PETROLEUM CHEMICAL

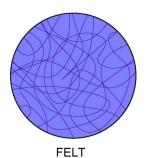
- Acetic Acid
- Brine
- · Calcium Carbonate
- Ethylene
- Glycol Herbicides
- Hydrochloric Acid
- Polymers
- Resins
- · Sulphuric Acid

### FILTER BAGS

HIGH EFFICIENCY, HIGH CAPACITY

### **BAG STYLES**

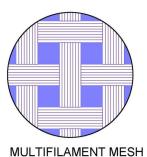
**Quality Filter Bags.... Consistent Filtration....** 



### **FELT FILTER BAGS:**

Felt filter bags are made from synthetic fibers of polypropylene or polyester. The gradient density fiber structure with the proper combination of fiber diameter, weight and thickness result is a economical depth type filter media. Bags are supplied with a glazed finish to reduce fiber migration.

Felt Filter Bags have a nominal micron rating and are available in micron ratings from 1 to 200  $\mu$ m. Filter efficiency is between 50% and 95% depending on micron rating.



### **MULTIFILAMENT MESH BAGS:**

Polyester multifilament mesh bags are suitable for surface filtration. This disposable fabric is woven from threads made of small fibers twisted together. Bags made from this material are low cost and are considered disposable.

Multifilament Bags are available in micron ratings from 100 to 800  $\mu$ m. Filter efficiency is between 80% and 95% depending on micron rating.

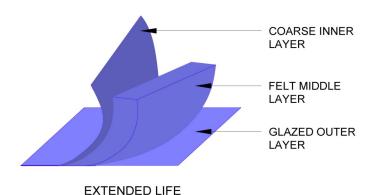


### **MONOFILAMENT MESH BAGS:**

Nylon Monofilament mesh bags have a woven fabric with evenly spaced holes. Each thread is a single filament resulting in excellent strength characteristics. Monofilament bags and considerably easier to clean then multifilament bags.

Multifilament Bags are available in micron ratings from 25 to 800  $\mu$ m. Filter efficiency is about 90% or more.





### **EXTENDED LIFE BAGS:**

Extended life bags are constructed from 100% polypropylene or polyester felt. They are a specially designed filter bag with a coarse inner layer and a middle layer of felt constructed with finer fibers, more pores and thicker media. The outside layer is glazed, by melting fibers together, to form a tight, secure downstream matrix which prevents fiber migration.

Extended life bags are available in micron ratings from 1 to 200  $\mu m$  and have over 2x the capacity of a standard felt bag.

### FILTER BAGS

### HIGH EFFICIENCY, HIGH CAPACITY

### **BAG STYLES**

## INNER CORE MICROFIBER MICROFIBER FINAL FILTER OUTER COVER

SPUN BONDED

### MICROFIBER OIL ABSORPTION

### Quality Filter Bags.... Consistent Filtration....

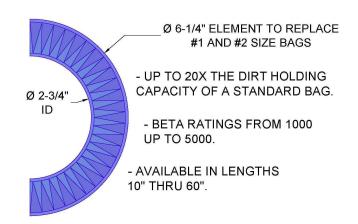
### **MICROFIBER OIL ABSORB BAGS:**

Microfiber filter bags are constructed from polypropylene and provide high efficiency and high contaminant holding capacity.

Polypropylene microfiber repels water yet it will absorb up to 25 times its own weight in oil and other petrochemicals. It is the ideal solution for removing trace contaminants from water based products.

Microfiber oil absorption bags are available in micron ratings from 1-100 µm. Filter efficiency is 95% or more.

# INNER DRAINAGE LAYER PLEATED MIDDLE LAYER CONSTRUCTED FROM MULTIPLE MEDIA LAYERS OUTER DRAINAGE LAYER



### **PLEATED BAGS:**

Pleated bag elements have high flow capacity, high efficiency and inside to outside flow. By increasing the surface area through pleating and incorporating multiple layers of media the pleated bag design provides far longer life and superior dirt holding capacity when compared to a standard non-pleated bag.

Pleated bags are supported at both ends with one end being flanged and the other end being capped. The filtering media is then attached to the ends and core via a thermal bond to prevent any possibility of by-pass at media sealing points. Outer supports in polypropylene or tinned steel prevent fiber migration while integral flange seals ensure easy replacement of standard #1 and #2 sized bags.

A wide array of filter media is available in the pleated bag design to suit each individual application. A 100% pure polypropylene element is available making incineration an option for disposal.

Pleated filter bags are available in micron ratings from 0.5-40 µm. Filter efficiency is 90% or more.

### **BAG COMPATIBILITY**

MATERIAL	COMPATIBILITY WITH								
	ORGANIC SOLVENTS	ANIMAL, VEGE- TABLE & PETRO OILS	MICRO- ORGANISMS	ALKALIES	ORGANIC AGENTS	OXIDIZING AGENTS	MINERA ACIDS	L TEMPERATURE LIMITATIONS °F / (°C)	
POLYESTER	Excellent	Excellent	Excellent	Good	Good	Good	Good	300°F/(149°C)	
POLYPROPYLENE	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good	200°F / (93°C)	
NYLON	Excellent	Excellent	Excellent	Good	Fair	Poor	Poor	325°F / (163°C)	
WWW.FILTERSOLUTIONS.COM			TEL. 905-637-3030 FA			(. 905-637-3	031	Bulletin BF-100, Issue 1	

### FILTER BAGS

HIGH EFFICIENCY, HIGH CAPACITY

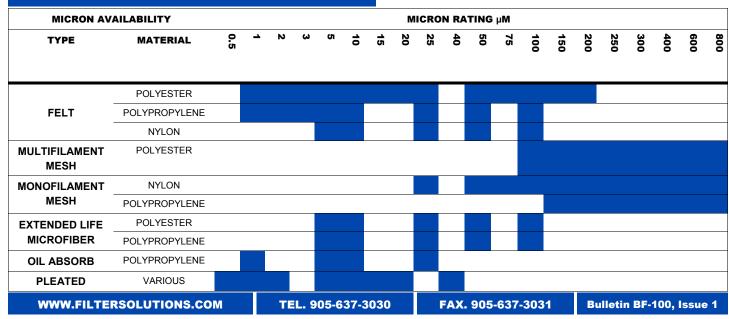
### **BAG SIZES**

**Quality Filter Bags.... Consistent Filtration....** 

BAG SIZE	DIAMETER IN / (MM)	LENGTH IN / (MM)	SURFACE AREA FT <sup>2</sup> / ( CM <sup>2</sup> )	VOLUME USGAL / (LITRE)	INSTALL IN THE FOLLOWING MANUFACTURER'S BRANDS
#1	7.06 / (179)	16.50 / (420)	2.0 / (1858)	2.1 / (7.9)	Fits all standard length housings manufactured by <b>FILTER SOLUTIONS</b> , Eaton, FSI, GAF, Pentair, Rosedale, Strainrite and others.
#2	7.06 / (179)	32.00 / (813)	4.4 / (4088)	4.6 / (17.4)	Fits all double length housings manufactured by <b>FILTER SOLUTIONS</b> , Eaton, FSI, GAF, Pentair, Rosedale, Strainrite and others.
#3	4.13 / (105)	8.00 / (203)	0.5 / (465)	0.5 / (1.9)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Eaton, FSI, Pentair, Rosedale Model 4-6 and others.
#4	4.13 / (105)	14.00 / (356)	1.0 / (929)	1.0 / (3.8)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Eaton, FSI Model FS-35, Pentair, Rosedale Model 4-12 and others.
#7	5.63 / (143)	15.00 / (381)	1.3 / (1208)	1.3 / (4.9)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Pentair, Rosedale Model 6-12 and others.
#8	5.63 / (143)	21.00 / (533)	2.0 / (1858)	1.5 / (5.7)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Pentair, Rosedale Model 6-18 and others.
#9	5.63 / (143)	32.00 / (813)	3.4 / (3159)	2.8 / (10.6)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Pentair, Rosedale Model 6-30 and others.
#11	8.38 / (213)	16.50 / (420)	2.9 / (2695)	3.0 / (11.3)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Rosedale Model LLC-8-30 and others.
#12	8.38 / (213)	32.00 / (813)	5.6 / (5203)	6.0 / (22.7)	Fits housings manufactured by <b>FILTER SOLUTIONS</b> , Rosedale Model LLC-8-30 and others.
#C1	7.31 / (186)	16.50 / (419)	2.0 / (1858)	2.6 / (9.8)	Fits all Commercial Parker Filters standard length housings.
#C2	7.31 / (186)	32.00 / (813)	4.4 / (4088)	5.0 / (19.1)	Fits all Commercial Parker Filters standard length housings.
#PC1	9.00 / (229)	20.00 / (508)	2.5 / (2323)	4.9 / (18.6)	Fits Cuno Model PC1 housings.
#PC2	9.00 / (229)	30.00 / (762)	5.0 / (4645)	7.4 / (27.9)	Fits Cuno Model PC2 housings.
#RP1	8.00 / (203)	30.00 / (762)	3.5 / (3252)	5.7 / (21.70)	Fits Ronningen Petter Size #1
#RP2	8.00 / (203)	40.00 / (1016)	4.7 / (4366)	7.7 / (28.96)	Fits Ronningen Petter Size #2

Cuno is a registered trademark of 3M Company, Eaton is a registered trademark of Eaton Corporation, FSI is a registered trademark of Filter Specialists, Inc., GAF is a registered trademark of GAF Corporation, Parker is a registered trademark of Parker Hannifin Corporation, Pentair is a registered trademark of Rosedale Product, Inc., Ronningen Petter is a registered trademark of Eaton Corporation, Strainrite is a registered trademark of The Strainrite Companies.

### BAG MICRON RATINGS

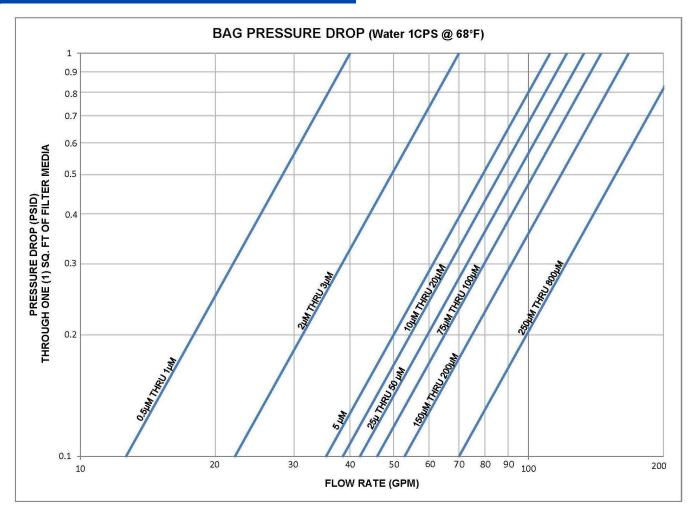


### FILTER BAGS

HIGH EFFICIENCY, HIGH CAPACITY

### BAG PRESSURE DROP

**Quality Filter Bags.... Consistent Filtration....** 



BAG CORRE	SIZE ECTION	BAG S CORRE		VISCOSITY CORRECTION		
BAG SIZE	MULTIPLY BY	BAG STYLE	MULTIPLY BY	VISCOSITY	MULTIPLY BY	
#1	0.11	BASIC FELT	1.0	50	4.5	
#2	0.05	BASIC	1.0	100	8.3	
#3	0.46	MESH		200	16.6	
#4	0.23	EXTENDED LIFE	15.0	400	27.7	
#5	0.14	LIFE		800	50.0	
#7	0.18	MICRO- FIBER	15.0	1000	56.2	
		FIDER		1500	77.2	
#8	0.15	PLEATED	15.0	2000	113.6	
#9	0.08	PLEATED	25.0	4000	161.0	
#11	0.08	MICRO-		6000	250.0	
#12	0.04	GLASS		8000	325.0	
				10000	430.0	

### **EXAMPLE PROCEDURE:**

Based on water flow at 80 GPM calculate the clean pressure drop through a #2 size 100 $\mu$ m (approx. 90% efficient) extended life bag.

Step 1: Using the above chart the pressure drop (psid/sq. ft.) of 100µm Filter Media at 80 GPM is **0.3** psid/Sq.

Step 2: For a #2 size bag the correction factor is 0.05. (0.3  $\times$  0.05 = 0.015 psid)

<u>Step 3</u>: For a extended life bag the bag style correction factor is 15.  $(0.015 \times 15 = 0.225 \text{ psid})$ 

Step 4: Multiply the value obtained in step 3 by the Specific Gravity of the Fluid (Water = 1.0). (0.225 x 1.0 = 0.225 psid)

<u>Step 5</u>: Multiply the value obtained in step 4 by the viscosity correction factor (Water = 1.0). (0.225 psid x 1.0 = 0.225 psid)

The above chart is based on public information provided by filter media manufacturer's. Filter Solutions does not warrant the accuracy of the above information. User's should perform their own tests to determine final suitability. The above information is to be used as a guide only.

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**Bulletin BF-100, Issue 1** 

## FILTER BAGS

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### **ORDERING GUIDE**

NON-PLEATED BAGS (EXAMPLE PE-25-P-2-S-H)

The example shown below is a polyester felt bag, 25 micron filtration, standard bag finish, size 2 with a carbon steel ring and bag handle.

PE-25	P	2			S	Н	
MATERIAL—NOMINAL MICRON RATING	BAG FINISH OR COVER	BAG SIZE			BAG STYLE	OPTIONS	
PE = Felt, Polyester  Microns: 1,3,5,10,15,25,50,75,100,150,200  PO = Felt, Polypropylene  Microns: 1,3,5,10,25,50,100  NMO = Mesh, Monofilament Nylon  Microns: 25,50,75,100,150,200,250,300,  400,600,800  PMO = Mesh, Monofilament Polypropylene  Microns: 150,200,250,300,400,600,800  PEM = Mesh, Multifilament Polyester  Microns: 100,150,200,250,300,400,600,800  POXL = Extended Life, Polypropylene  Microns: 5,10,25,50,100  PEXL = Extended Life, Polyester  Microns: 5,10,25,50,100  FOS = Oil Absorb  Microns: 1,5,10,25  OLX = Oilex  Microns: 1,5,10,25	P = None (Standard) G = Fiber free glazed PEM = Polyester multifilament mesh cover NMO = Nylon multi- filament mesh cover C = Cerex spun bonded nylon cover.	Symbol  1  2  3  4  5  7  8  9  11  12  C1  C2  PC1  PC2  RP1  RP2	Dia. (in.) 7-1/16" 7-1/16" 4-1/8" 4" 5-5/8" 5-5/8" 5-5/8" 8-3/8" 7-5/16" 7-5/16" 9" 8" 8"	Length (in.) 16-1/2" 32" 8" 14" 24" 15" 21" 32" 16-1/2" 32" 20" 30" 30" 40"	S = Carbon steel plated ring SS = Stainless steel ring PP = Polypropylene ring P = Polypropylene flange PE = Polyester flange N = Nylon flange DS = Draw string DST = Draw strap RP = Ronnigen-Petter C = Commercial ring SP = 7" Plastic Internal Ring R = Tie On	H = Handle HH = Heavy duty handle W = Weld WW = Weld Side and Bottom D = Dap Sealant on stiching	

### **ORDERING GUIDE**

PLEATED BAGS (EXAMPLE JCX-P-732-02-C-B-F-P)

The example shown below is a pleated polypropylene bag to replace a standard length #2 size bag, 2 micron filtration at 99% efficiency, Buna-N flanged bag seal with polypropylene end caps.

JCX	Р	732		02	C	В	F	P	
BAG TYPE	MEDIA	BAG SIZE (Replace #1 and #2 size bags)		MICRON	EFFICIENCY	SEAL	SEAL TYPE	END CAPS	
				RATING					
JCX = Pleated	P = Polypropylene	Symbol	Dia. (in.)	Length (in.)	00 = 0.5 μm	A = 99.98%	B = Buna	O = O-ring	P = Polypropyl-
	E = Polyester	716	7-1/16"	16"	01 = 1.0 μm	B = 99.9%	V = Viton	F = Flange Gasket	ene
	N = Nylon	724	7-1/16"	24"	<b>02</b> = 2.0 μm	<b>C</b> = 99%	N = Neoprene		M = Galvanized Metal
	G = Microglass	726	7-1/16"	26"	05 = 5.0 μm	D = 98%	S = Silicon		
	C = Cellulose	728	7-1/16"	28"	10 = 10.0 μm	E = 95%	T = Teflon		
	K = K-Media	730	7-1/16"	30"	15 = 15.0 µm	F = 90%	E = EPR		
		732	7-1/16"	32"	20 = 20.0 μm	G = 99.5%			
				40 = 40.0 µm FILTER SOLUTIONS INC.					
				649 ENFIELD ROAD				JAD	
Filter Solutions Inc. has representatives worldwide. For more information please visit www.filtersolutions.com.					BURLINGTON, ONTARIO				TARIO
Changes in technology related to products, systems, and/or services described herein are subject to change.					L7T 2X9, CANADA				DA