# MicroSentry™ MS Series

Wound Filter Cartridges





- Precision winding patterns ensure accurate filtration ratings and high retention efficiencies
- State-of-the-art computerized production machinery eliminates product variability
- Various fibers and core materials for compatibility with a broad range of chemicals and high temperature applications
- · Suitable for filtration of liquids, compressed air and gases
- Cost-effective and proven versus melt blown, spun-bond and resin-bonded cartridges
- Available in standard 2 1/2" and 4 1/2" (BB Style) cartridge diameter configurations and other

#### **Applications**

Oils Air / Gas
Petrochemicals Photo Solutions
Magnetic Coatings Process Water
Food & Beverage Solvents
Pre-filtration Paint / Inks
Water & Wastewater Chemicals

#### **Specifications & Operating Parameters**

**Pore Sizes** 0.5, 1, 3, 5, 10, 20, 25, 30, 50, 75, 100, 150 microns

**Nominal Lengths** 4 3/4", 4 7/8", 9 3/4", 9 7/8", 10", 19 1/2", 20", 29 1/4", 30", 39", 40"

**Outside Diameters** 2", 2 3/8", 2 1/2", 2 3/4", 4 1/2"

Inside Diameter 1"

#### **Materials of Construction**

Filter Media: Fibrillated Polypropylene FDA Polypropylene, Industrial Polypropylene, Natural Cotton, FDA Bleached Cotton, Industrial Bleached Cotton, Polyester, Glass Fiber, Nylon, Rayon

Core: Polypropylene, 304 Stainless Steel, 316 Stainless Steel, Tin Steel

#### Maximum Operating Temperature

Material	Polypropylene Core	Metal Core
Cotton	140°F (60°C)	250°F (121°C)
Glass	140°F (60°C)	750°F (402°C)
Nylon	140°F (60°C)	275°F (135°C)
Polypropylene	140°F (60°C)	180°F (82°C)
Polyester	140°F (60°C)	275°F (135°C)
Rayon	140°F (60°C)	275°F (135°C)

### Recommended Change-out Differential Pressure

20 psid (1.4 bar)

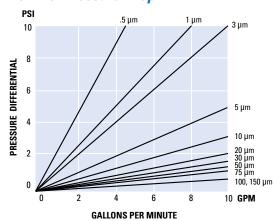
#### FDA and USP Compliance

FDA Bleached Cotton and FDA Polypropylene filters are manufactured of materials that comply with FDA requirements for food contact per CFR Title 21

FILTER MEDIUM	FDA COTTON	COTTON	FDA POLYPROPYLENE	INDUSTRIAL POLYPROPYLENE	RAYON	POLYESTER	GLASS FIBER	NYLON
Compatible with								
Potable liquids, water	4	0	4	0	3	3	1	1
Organic Solvents	4	4	3	3	4	4	4	4
Oils	4	4	2	2	4	3	4	4
Organic Acids	3	3	4	4	3	3	4	2
Alkalies	3	3	4	4	3	0	1	4
Oxidizing Acids	2	2	1	1	2	3	4	2
Strong Inorganic Acids	0	0	4	4	1	2	4	0
DiluteInorganic Acids	2	2	4	4	2	3	4	1

<sup>0 =</sup> Not Recommended, 1 = Poor, 2 = Fair, 3 = Good, 4 = Excellent

#### Flow vs. Pressure Drop



This chart represents the typical flow rate of polypropylene media per 10' cartridge length. The test fluid is water at ambient temperature. Extrapolations for multiple lengths tend to be linear, but as flows increase the differential pressure across the housing becomes more apparent.

## **Ordering Guide (Example: MS10FP5)**

MS	10	F	P	5			
PRODUCT CODE	LENGTH	MEDIA	CORE	MICRON	CORE COVER	DIAMETER	END CAP CONFIGURATION
MS	47 = 4 3/4" 5 = 4 7/8" 97 = 9 3/4" 98 = 9 7/8" 10 = 10" 195 = 19.5" 20 = 20" 294 = 29.25" 30 = 30" 40 = 40"	B = Fribilated Polypropylene C = FDA Bleached Cotton E = Polyester F = FDA Polypropylene G = Glass Fiber N = Nylon P = Industrial Polypropylene R = Rayon U = Natural Cotton W = Industrial Bleached Cotton	P = Polypropylene S = 304 Stainless Steel G = 316 Stainless Steel T = Tin Steel	0.5 1 3 5 10 20 25 30 50 75 100	Blank = None N = Non Woven W= Woven	Blank = 2.5" 45 = 4.5"+ 2 = 2" 3 = 23/8" 4 = 23/4"	Blank = None S1 = DOE w/ Gasket S3 = 222 w/ Fin End S4 = 222 w/ Flat End S5 = 226 w/ Fin End S6 = 226 w/ Flat End S8 = SOE w/Spring S12 = 222 w/ spring F = Fin End Only FL = Flat End Only EXP = PP Extended Core EXS = SS Extended Core

<sup>+</sup> Available without end cap





204 N. Link Lane #7

Fort Collins, CO 80524 Office: 970-204-4758 Fax: 970-204-4764 Brandon@IndustrialFilterSource.com

IndustrialFilterSource.com

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