

# FILTRATION | SEPARATION | PURIFICATION



### **Product Specifications**

Media: Polypropylene

End caps/Center Core: Polypropylene

#### Gaskets/O-Rings:

Buna-N, EPDM, Santoprene, Silicone, Teflon Encapsulated Viton (O-Rings only), Viton

#### Micron rating:

 $0.3, 0.5 1, 3, 5, 10, 20, 30, 50, 70, 100 \mu m$ 

#### **Dimensions**

# **Nominal lengths:**

5", 9.75", 10", 19.5", 20", 29.25", 30", 39", 40" (12.7, 24.8, 25.4, 49.5, 50.8, 74.3, 76.2, 99.1, 101.6 cm)

Outside diameter: 2.5" (6.35 cm) Inside diameter: 1.0" (2.54 cm)

#### **Operating Parameters**

# Maximum differential pressure:

150 psid @ 68°F (10.3 bar @ 20°C) 90 psid @ 150°F (6.2 bar @ 66°C) 35 psid @ 176°F (2.4 bar @ 80°C)

Recommended change-out pressure: 35 psid (2.4 bar)

#### **Steam Sterilization:**

Stratum single open end style filters may be autoclaved under no end load conditions for 30 minutes at 121°C. Filters should be cooled to normal operating temperatures prior to use.







filter zone

Inner pre-Final pre-

filter zone



tion zone

# Stratum<sup>®</sup> A Series **Filter Cartridges**

# Absolute Rated Melt Blown Filters

Stratum A Series melt blown depth filters deliver 99.9% efficiency at the stated micron for the most demanding applications. By utilizing ultra fine fibers and controlled thermal bonding, the Stratum A series retains captured contaminant even at higher differential pressures.

# **FEATURES & BENEFITS**

- Absolute retention ratings from 0.3 to 100 microns
- Multi-zone melt blown depth filter with a graded pore structure for maximum dirt holding capacity
- · Thermally bonded fibers for high void volume and long on-stream life
- · Lot traceable filters come with certificate of conformance
- 100% pure virgin polypropylene
- Molded center core for higher temperature and pressure capability
- Free of surfactants, binders and adhesives

#### CERTIFICATIONS

- USP Class VI: Meets USP Class VI Biological Test for Plastics
- FDA Listed Materials: All materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, and 177.1520, as applicable for food and beverage contact.
- NSF 61: Certified to NSF/ANSI STD 61 for materials requirements only — Component
- European Directive for Direct Food Contact: European Regulation No. 1935/2004 and European Regulation 10/2011: Tested for migration behavior and is suitable for contact with all kinds of foodstuffs with minimal rinse-up. Data available upon request.

# TYPICAL APPLICATIONS

- Chemicals
- Food and beverages
- Plating

- Pharmaceuticals
- Water

 Cosmetics CMP Slurry

- Paint/Inks
- Microelectronics

STRATUM A NOMENCLATURE INFORMATION								
Product Series	Retention Rating (microns)		Nominal Length (inches)		End Configuration		Gasket or O-Ring	
STA Series	0.3 0.5 1 3	20 30 50 70	-5 -9.75 -10 -19.5	-29.25 -30 -39 -40	P P2 P3 P6	Double Open End (Hard Endcaps)  226/Flat Single Open End  222/Flat Single Open End  Self-Seal Spring on One End	B E N S	Buna-N EPDM None Silicone
Frank (	10	100	-20		P7 P8 PX N DBG	226/Fin Single Open End 222/Fin Single Open End Extended Core None (Cut Ends) Direct Bond Santoprene Gaskets	V	Teflon encap. Viton (O-Rings only) Viton
Example: STA 0.5–30NN		20		AM	Single Open End, Internal O-Ring	N		
STA	0.5		-30		N		N	

STRATUM A FLOW RATE									
Typical Flow Rate Clean Water at Ambient Temperature (per 10" cartridge)									
BAR PSI 0.35 \ 5.0 4.5 4.0 3.5 3.5 2.5 0.14 - 2.0 1.5 1.5 0.0 0.0 0.0	0.3 μm 0.5 μm 1 μm 3 μm 5 μm  10 μm  20 μm 30 μm 50 μm 70, 100 μm								
	0 2 4 6 8 USGPM								
For liquids other t	0 7.6 15.1 22.7 30.3 LPM han water, multiply pressure drop by the fluid viscosity in centipoise								

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters.

Testing was conducted using the single-pass test method, water at 3 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

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materials requirements only.					
COMPONENT					

REMOVAL EFFICIENCY							
Beta Ratio Efficiency	Beta 1000 99.9%	Beta 100 99%	Beta 10 90%				
0.3 μm	0.5	0.4	0.3				
0.5 μm	0.6	0.5	0.4				
1 μm	1.0	0.8	0.5				
3 μm	3.0	2.3	1.4				
5 μm	5.0	4.0	2.7				
10 μm	10.0	7.0	4.0				
20 μm	20.0	15.0	12.0				
30 μm	30.0	20.0	14.0				
50 μm	50.0	34.0	25.0				
70 μm	70.0	50.0	39.0				
100 μm	100.0	85.0	60.0				

**Upstream particle counts** Beta Ratio = -**Downstream particle counts** 

#### FOR MORE INFORMATION

GTX-238 2-20

Customer Service/Technical Support: 1-888-353-0303 Asia: +65 9671 9966



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