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livan Palatek

Above & Beyond

**Compressed Air & Gas Filtration** 

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livan Palat

### Why is Compressed Air Filtration Required?

In one cubic foot of atmospheric air, there are millions of particles that are potentially harmful to your machines and equipment. These particles are primarily made up of dust, bacteria, viruses, smoke, fumes, hydrocarbons, water, oil and other contaminates derived from human and industrial activities. Roughly 80% of the contaminates are so small that they will easily pass through your compressors intake filter. When this air is drawn into the compressor intake and compressed to 100 PSIG the concentration of contamination is increased eight fold. The concentrated contaminates will easily find their way into your process lines, causing frequent and expensive downtime of your pneumatic equipment or adversely affect the quality of your products.

The incorporation of filtration into your compressed air system will produce benefits in both productivity and product quality.

### Sullivan-Palatek Filter Grades

Sullivan-Palatek has developed a comprehensive range of filter grades to meet to the requirements of various compressed air and gas applications.



#### High Efficiency Coalescing

- High Quality Compressed Air Filtration
  99.9999% Efficiency
- Particle Removal Down to 0.01 Micron
  - Max. Oil Carryover 0.008 PPM w/w
  - Nominal Pressure Drop 1.2 PSID
    ISO 8573 (Class 1)

### Utility Grade Coalescing

- General Compressed Air Filtration
  99.999% Efficiency
- Particle Removal Down to 0.1 Micron
  Max. Oil Carryover 0.4 PPM w/w
- Nominal Pressure Drop 0.75 PSID
  ISO 8573 (Class 2)



# Advanced Housing Features

- Bi-directional aluminum differential pressure gauge,which is standard on housings with 3/4" to 3" NPT connections.
- Aluminum housing with powder coated interior and exterior.
  - Automatic float drain with manual override





### **Particulate Filtration**

- Particulate removal or coalescing prefiltration
   99.99% efficiency
- Particle removal down to 1 micron
- Nominal pressure drop 0.5 PSID

### Carbon Adsorbtion Filtration

- High purity extended surface area activated carbon removes hydrocarbon mist and vapor.
- Max. Oil Carryover 0.002 PPM w/w
  Nominal Pressure Drop 1.2 PSID



#### Macro Molecular Molecular **Micro Particle Range Macro Particle Range Particle Range Particle Range** Carbon **Milled Flour Paint Pigment** Water Mist Beach Sand **Oil Vapors Human Hair Collodial Silica Particles Coal Dust** Viruses **Bacteria** Tobacco Smoke Pollen 0.01 0.1 1.0 10 100 1000 Micrometers = Microns = µm

### Element Design that is Above + Beyond



- All Sullivan-Palatek filter elements utilize a pleated media design to increase surface area. The higher surface area decreases pressure drop and extends the elements contaminant holding capacity.
- Inner and outer stainless steel element retainer.
- Machined aluminum end caps to ensure a positive element to housing seal.

### **Condensate Drains**





#### External Autodrain

### Model Number Nomenclature

Series		Connection		Bowl Length		Accessories		Element Grade										
XXX		XX		X		XX		X										
SPT	Inline T-Type	02	1/2"	1	Short	М	Manual Drain	н	High Efficiency									
SPAT	ASME T-Type	03	3/4"	2	Middle	G	6	6	6	6	C		C	C	Delta Pressure		Coalescing	
SPAF	ASME F-Type	04	1"	3	Long		Gauge	U	Utility Grade									
		06	1-1/2"			А	Auto Float Drain	0	Coalescing									
		08	2"					Р	Particulate									
		10	2-1/2"					V	Activated Carbon									
		12	3"					v	Adsorber									

### **Specifications & Dimensions**

High Efficiency Coalescing	Utility Coalescing	Particulate	rticulate Activated Carbon		Capacity In SCFM @		Dimensions			
Model #	Model #	Model #	Model #	Model # Conn. 1		100 PSIG	Α	В	С	D
SPT-021A-H	SPT-021A-U	SPT-021M-P	SPT-021-V	1/2	29	25	3.4	6.9	0.8	2.4
SPT-022A-H	SPT-022A-U	SPT-022M-P	SPT-022-V	1/2	41	35	3.4	8.2	0.8	3
SPT-023A-H	SPT-023A-U	SPT-023M-P	SPT-023-V	1/2	55	47	3.4	8.2	0.8	3.5
SPT-031GA-H	SPT-031GA-U	SPT-031GM-P	SPT-031G-V	3/4	82	70	3.4	11	0.8	3.5
SPT-041GA-H	SPT-041GA-U	SPT-041GM-P	SPT-041G-V	1	136	116	5.1	12.4	1.7	5.3
SPT-061GA-H	SPT-061GA-U	SPT-061GM-P	SPT-061G-V	1-1/2	236	201	5.1	16.3	1.7	9.3
SPT-062GA-H	SPT-062GA-U	SPT-062GM-P	SPT-062G-V	1-1/2	374	318	5.1	20.2	1.7	13.2
SPT-063GA-H	SPT-063GA-U	SPT-063GM-P	SPT-063G-V	1-1/2	553	470	5.1	28.1	1.7	20.7
SPT-081GA-H	SPT-081GA-U	SPT-081GM-P	SPT-081G-V	2	724	616	6.5	32.4	1.9	20.5
SPT-101GA-H	SPT-101GA-U	SPT-101GM-P	SPT-101G-V	2-1/2	1085	923	6.5	42.2	1.9	30.3

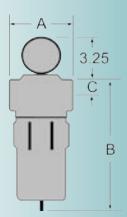
#### Notes:

Capacity is in SCFM @ Specified Pressure & 100°F Dimensions are in inches Dimension "D" is minimum bowl removal clearance Connections are in NPT

#### SPT Series Housing Specifications:

Maximum Pressure:235Maximum Temperature:140Housing Material:AluPort Connection:NPSeals:Nitr

235 PSIG 140°F Aluminum NPT Standard Nitrile



## Large Capacity ASME Housings

### Large Capacity Filter Grades

- HB = High Efficiency Coalescing with
  - Pleated Prefilter
  - General filtration 0.01 micron
    - 99.9999% Efficient
- Max. oil carryover 0.008 PPM w/w
- Nominal pressure drop 1.0 PSID

#### P = Particulate Filtration

- 99.99% Efficiency
- Particle removal down to 1.0 micron
- Nominal pressure drop 0.75 PSID

- M = Mist Eliminator Coalescing Filter
  - General filtration 0.01 micron
    99.97% efficient
- Max. oil carryover 0.09 PPM w/w
- Nominal pressure drop 0.5 PSID

#### A = Activated Carbon Adsorber

- High purity extended surface area activated carbon removes hydrocarbon mist and vapor.
- Max. Oil Carryover 0.002 PPM w/w

### **Specifications & Dimensions**

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Model Number	Capacity in SCFM @ 120 PSIG 100 PSI		In/Out	Housing Type	Height	Width			
SPA-T123F-HB	1765	1500	3" Flg	Т-Туре	43.1	15			
SPA-F123F-HB	1765	1500	3" Flg	Floor Mount	59.0	15			
SPA-T161F-HB	2353	2000	4" Flg	T-Type	42.7	20			
SPA-F161F-HB	2353	2000	4" Flg	Floor Mount	63.3	20			
SPA-F241F-HB	3530	3000	6" Flg	Floor Mount	75.3	26			
SPA-F242F-HB	5295	4500	6" Flg	Floor Mount	76.6	30			
SPA-F321F-HB	7060	6000	8" Flg	Floor Mount	87.3	34			
SPA-F401F-HB	12350	10500	10" Flg	Floor Mount	96.0	34			
SPA-T123F-P	2941	2500	3" Flg	T-Type	43.1	15			
SPA-F123F-P	2941	2500	3" Flg	Floor Mount	59.0	15			
SPA-T161F-P	3918	3330	4" Flg	T-Type	42.7	20			
SPA-F161F-P	3918	3330	4" Flg	Floor Mount	63.3	20			
SPA-F241F-P	5860	4980	6" Flg	Floor Mount	75.3	26			
SPA-F242F-P	8825	7500	6" Flg	Floor Mount	76.6	30			
SPA-F321F-P	11715	9960	8" Flg	Floor Mount	87.3	34			
SPA-F401F-P	20588	17500	10" Flg	Floor Mount	96.0	34			
SPA-T123F-M	2059	1750	3" Flg	T-Type	43.1	15			
SPA-F123F-M	2059	1750	3" Flg	Floor Mount	59.0	15			
SPA-T161F-M	2706	2300	4" Flg	T-Type	42.7	20			
SPA-F161F-M	2706	2300	4" Flg	Floor Mount	63.3	20			
SPA-F241F-M	4000	3400	6" Flg	Floor Mount	75.3	26			
SPA-F242F-M	6175	5250	6" Flg	Floor Mount	76.6	30			
SPA-F321F-M	8235	7000	8" Flg	Floor Mount	87.3	34			
SPA-F401F-M	14410	12250	10" Flg	Floor Mount	96.0	34			
SPA-T123F-V	1765	1500	3" Flg	T-Type	43.1	15			
SPA-F123F-V	1765	1500	3" Flg	Floor Mount	59.0	15			
SPA-T161F-V	2353	2000	4" Flg	T-Type	42.7	20			
SPA-F161F-V	2353	2000	4" Flg	Floor Mount	63.3	20			
SPA-F241F-V	3530	3000	6" Flg	Floor Mount	75.3	26			
SPA-F242F-V	5295	4500	6" Flg	Floor Mount	76.6	30			
SPA-F321F-V	7060	6000	8" Flg	Floor Mount	87.3	34			
SPA-F401F-V	12350	10500	10" Flg	Floor Mount	96.0	34			



Floor Mount ASME Filter Housing

#### Notes:

Capacity is in SCFM @ Specified pressure & 100°F Maximum Pressure: 150 PSIG @ 225°F Materials: Carbon Steel Shell Seals: Inorganic Gasket Housings Meet ASME Section VIII Division 1 Dimensions are in Inches



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