

FILTRATION GROUP

SENTINEL FAN POWERED UNIT



- Low filter pressure drop combined with the unique unit design reduces energy consumption
- Low profile design allows for installations with minimal overhead space
- Low operating noise levels
- UL Listed (120 V, 240 V, 277V)
- Walk-able plenum
- Tested to meet latest IEST Recommended Practices



DESCRIPTION

The Aerostar Sentinel Fan Filter Unit is designed for optimum performance and energy savings. The unit operates at only 170 watts, with a low noise level of 49 dBA and a low profile of less than 13". Available in efficiencies 99.99% at 0.3 μm , 99.9995% at 0.12 μm and sizes 2x4, 2x3.5, 2x3 and 2x2.

The Sentinel Fan has many options such as:

- Solid State Speed Control
- Room-Side Replaceable unit available
- Airflow Indicator Light, allows external monitoring of unit operation
- Collars available for direct connection to air conditioning supply
- Unit available painted or in stainless steel

- Power cord provides plug-in connection for non-permanent applications
- Test port for aerosol challenge when testing the filters.

BENEFITS

- Three-speed switch featuring low, medium and high setting standard on all 2 ft x 4 ft units
- Solid State Speed Control standard on all other sizes
- Each unit has a pre-filter
- 0.55" w.g. external static capability at 90 ft/min with HEPA filter.

APPLICATIONS

The Sentinel is designed to optimize performance in filtration applications for the pharmaceutical, medical, semiconductor, microelectronic, biotechnology industry, bio-safety cabinets and for surgical suites.



PERFORMANCE DATA

SENTINEL FAN HEPA Model 1/5 Hp Motor	HIGH SPEED		MEDIUM SPEED		LOW SPEED		90 ft/min (0.45 m/s)		70 ft/min (0.35 m/s)		AVERAGE AIRFLOW ft ³ /min (m ³ /hr)	UNIT WEIGHT lbs (kg)
	120V, 220V, 277V 60/50 Hz		120V, 220V, 277V 60/50 Hz		120V, 220V, 277V 60/50 Hz		120V, 220V, 277V 60/50 Hz		120V, 220V, 277V 60/50 Hz			
	Airflow ft/min (m/s)	Watts 60 Hz (50 Hz)	Airflow ft/min (m/s)	Watts 60 Hz (50 Hz)	Airflow ft/min (m/s)	Watts 60 Hz (50 Hz)	Airflow ft/min (m/s)	Watts 60 Hz (50 Hz)	Airflow ft/min (m/s)	Watts 60 Hz (50 Hz)		
STANDARD (STD) MODEL												
2 ft x 4 ft 600 mm x 1,210 mm	140 (0.71)	317 (256)	120 (0.61)	244 (186)	100 (0.51)	170 (145)	90 (0.45)	160 (145)	70 (0.35)	140 (128)	644 (1,095)	65 (29)
2 ft x 3.5 ft 600 mm x 1,058 mm	149 (0.75)	298 (258)	125 (0.63)	244 (186)	111 (0.56)	175 (139)	90 (0.45)	160 (151)	70 (0.35)	140 (122)	560 (952)	63 (29)
2 ft x 3 ft 600 mm x 905 mm	188 (0.95)	294 (248)	N/A	N/A	N/A	N/A	90 (0.45)	140 (113)	70 (0.35)	120 (94)	477 (811)	52 (24)
2 ft x 2 ft 600 mm x 600 mm	260 (1.30)	286 (224)	N/A	N/A	N/A	N/A	90 (0.45)	72 (67)	NOT ACHIEVABLE	NOT ACHIEVABLE	310 (527)	41 (19)
ROOM-SIDE REPLACEABLE (RSR) MODEL												
2 ft x 4 ft 600 mm x 1,210 mm	150 (0.76)	297 (247)	130 (0.66)	200 (180)	100 (0.51)	144 (136)	90 (0.45)	160 (160)	70 (0.35)	140 (131)	500 (850)	71 (32)
2 ft x 3.5 ft 600 mm x 1,058 mm	142 (0.71)	280 (247)	118 (0.59)	209 (182)	99 (0.50)	167 (137)	90 (0.45)	160 (154)	70 (0.35)	140 (123)	430 (731)	68 (31)
2 ft x 3 ft 600 mm x 905 mm	164 (0.82)	268 (238)	N/A	N/A	N/A	N/A	90 (0.45)	140 (134)	70 (0.35)	120 (114)	360 (612)	54 (24)
2 ft x 2 ft 600 mm x 600 mm	253 (1.27)	230 (213)	N/A	N/A	N/A	N/A	90 (0.45)	98 (88)	NOT ACHIEVABLE	NOT ACHIEVABLE	220 (374)	44 (20)

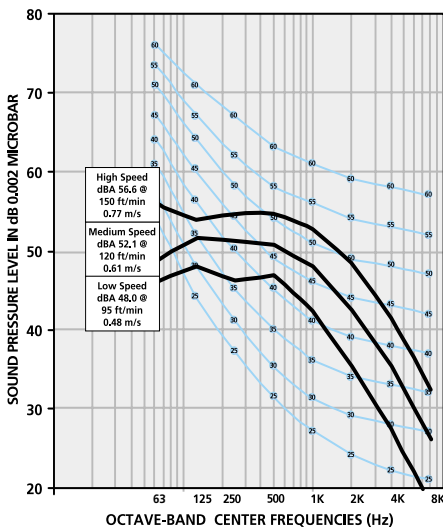
* Full-Load Amp 120V / 60Hz / 1 Ph=3.0; 220V / 50/60Hz / 1 Ph=1.5; 277V / 60Hz / 1 Ph=1.2

Custom size units available.

SENTINEL FAN-SOUND CURVE

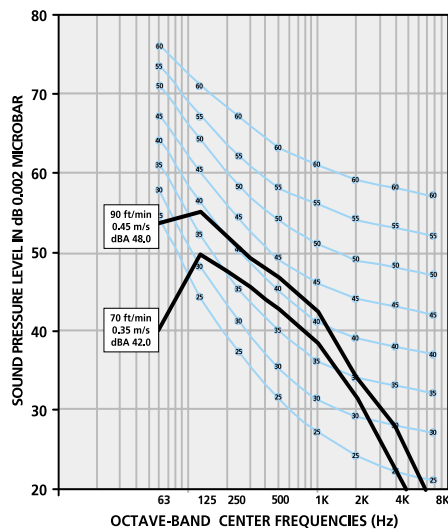
2 ft x 4 ft (600 mm x 1,120 mm)
STANDARD HEPA-60 Hz
HIGH, MEDIUM AND LOW SPEED DATA

Sound Measured at 30 in (762 mm) from Filter Face


SENTINEL FAN-SOUND CURVE

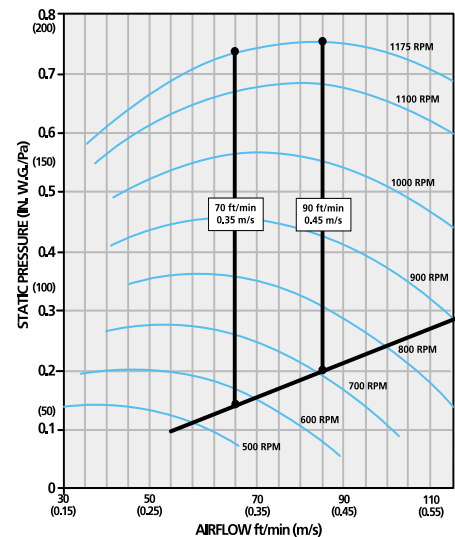
2 ft x 4 ft (600 mm x 1,120 mm)
STANDARD HEPA-60 Hz
90 AND 70 FPM DATA

Sound Measured at 30 in (762 mm) from Filter Face


SENTINEL FAN-FAN CURVE

2 ft x 4 ft (600 mm x 1,120 mm)
STANDARD HEPA-60 Hz

Airflow Measured with Velgrid with 6 in (152 mm)
Standoff and Eight Readings Across Filter Face



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