



Rotron / Airscrew



# Rotron NANOS Small Vaneaxial Fans

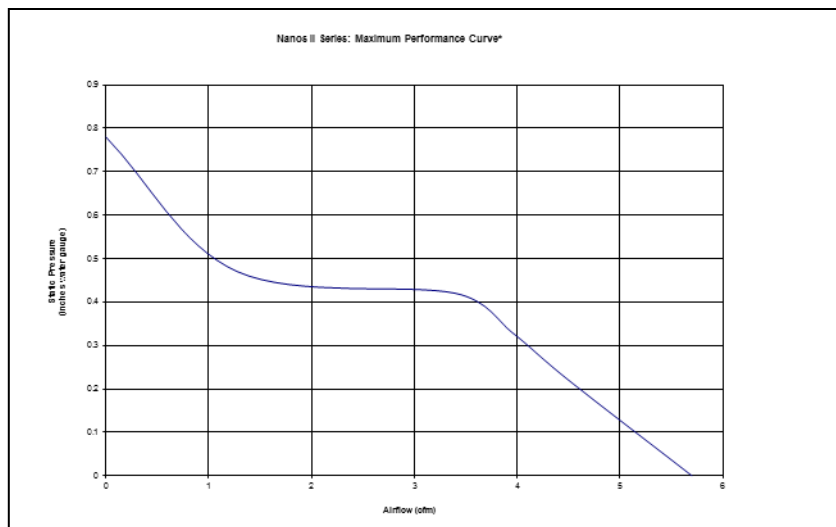
## Nanos Small Vaneaxial Information

Nanos Small Vaneaxial Fans are compact, high-speed fans with axial airflow. The impeller and guide vanes are of airfoil configuration for maximum aerodynamic efficiency and minimum acoustical noise.

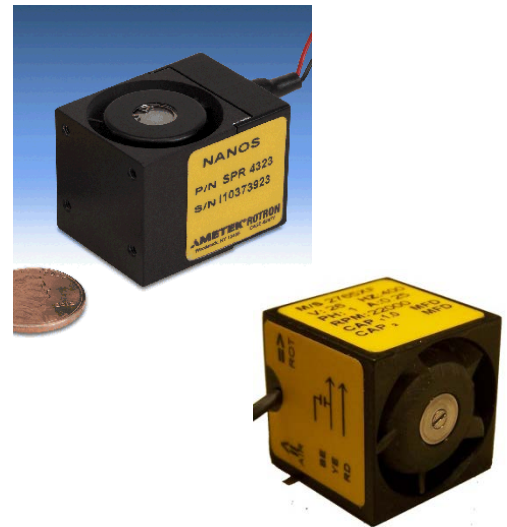
These fans are designed for use in tightly packaged spot cooling applications where size and weight must be held to an absolute minimum, reliability is critical, and high heat loads must be dissipated with cooling air.

Nanos Small Vaneaxial Fans come in a variety of voltages and frequencies and are available with lead wire connections.

## Rotron NANOS



\*Individual Performance Curve Characteristics Available Upon Request



### General

- Physical envelope: 1.02" x 1.02" x 1.32"<sup>1</sup> (DC)  
1.02" x 1.02" x 1.02"<sup>1</sup> (AC)
- Weight: approximately 1.8 oz. AC, 2.0 oz. DC
- Specially designed for spot cooling of electronics and optics
- AC Units available in a round case configuration<sup>2</sup>
- Lead wire configurations only

<sup>1</sup> See specific part-number drawing for complete product dimensions

<sup>2</sup> Please contact the Application Engineering Department for further information

### Materials and Finishes

- All aluminum components finished with a black anodize per MIL-C-8625
- Corrosion-resistant stainless steel shaft and hardware
- Impeller runs on two high-precision, double-shielded, stainless steel ball bearings (ABEC Class 5) for a long, maintenance-free life
- Motors use either Class F or Class H insulation for continuous high temp. operational capability



### AC Line Powered Units

- 1-phase permanent-split capacitor motor design
- Fixed speeds (performance) based on input frequency
- Meets or exceeds the requirements of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications<sup>2</sup>
- Max free delivery airflow of 6 CFM at 400 Hz<sup>1</sup>
- Ambient temperature range: -54°C to 85 C<sup>1</sup>
- Acoustic levels as low as 48 dBA<sup>1</sup>

### DC Line Powered Units – E.C.D.C.<sup>®</sup>

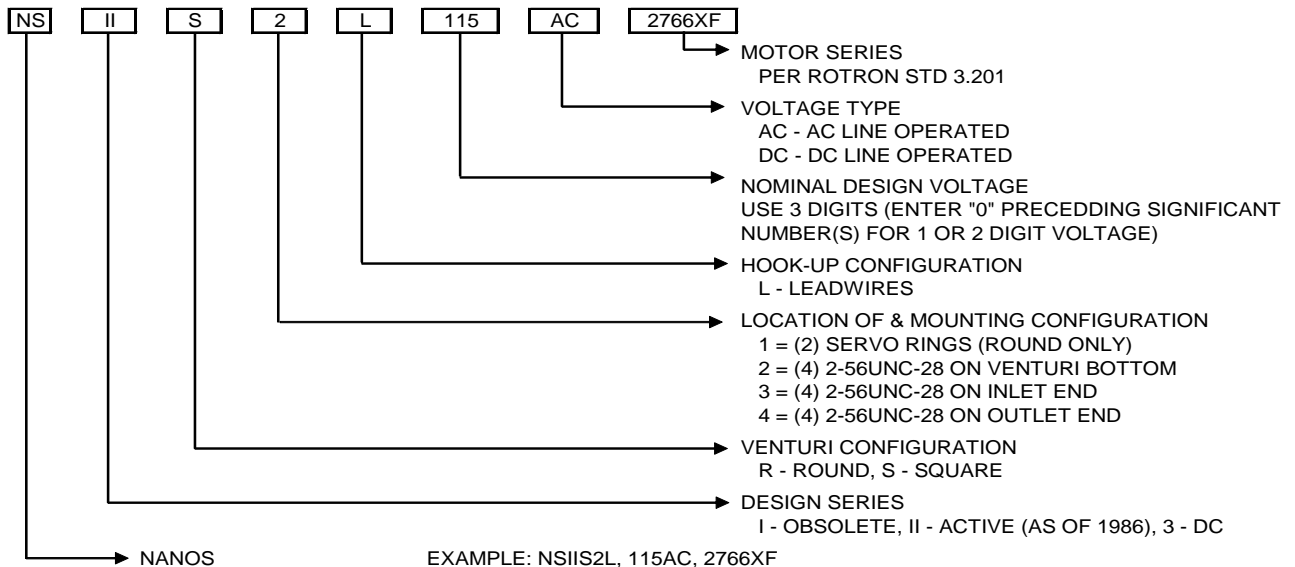
- Integral inverter driven induction motor (DC Line Operated)
- Speed (performance) fixed by input voltage
- Meets or exceeds the requirements of MIL-B-28873 and other applicable U.S. military and commercial aerospace specifications<sup>2</sup>
- Max free delivery airflow of 5.7 CFM<sup>1</sup>
- Ambient temperature range: -54°C to 85 °C<sup>1</sup>
- Acoustic levels as low as 63 dBA<sup>1</sup>

<sup>1</sup> Airflow, maximum ambient and acoustic levels will vary depending on design parameters

<sup>2</sup> Please call for further information concerning applicable U.S. military and commercial aerospace specifications

### Unit Description Key

The unit description key is for reference only and should not be confused with a part number. While most units are custom configurations, not all variations of the key shown below are possible. Please contact the Application Engineering department for more information regarding possible custom configurations.



\* "X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE

### Ordering Information

When ordering, please specify the specific Rotron part number listed on the following model table. Further ordering information, based on the configuration and motor series, may be obtained by contacting customer service. Please refer to the Unit Description Key explanation above.



Rotron / Airscrew



## Standard Product Offering of AC Line Powered Models

Part #	Prod. Desc.	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (°C)	Weight (lbs)	Volts	Phase	Hz	Capacitor	Airflow Source Data	Features
035108000	NSII S2L 2765XF	6	0.8	22000	6	0.3	80	0.1	26	1	400	1.0/100	A348-11	SQUARE CASE, LEADS, LSWD
034946000	NSII R1L 2904XF	6	1.0	21000	6	0.3	80	0.1	26	2	400	1.5/100	A540-22	ROUND CASE, LEADS, LSWD
034833000	NSII S2L 2766XF	6	0.8	22000	7	0.3	80	0.1	115	1	400	1.0/100 .8/100	A348-11A	SQUARE CASE, LEADS, LSWD
041251000	NSII R1L 2766XF	6	0.8	22000	7	0.3	80	0.1	115	1	400	1.0/100 .8/100	A348-11A	ROUND CASE, LEADS, LSWD
041230000	NSII S4L 2766XF	6	0.8	22000	7	0.3	80	0.1	115	1	400	1.0/100 .8/100	A348-11A	ROUND CASE, LEADS, LSWD

## Standard Product Offering of DC Line Powered Models

Part #	Prod. Desc.	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (°C)	Weight (lbs)	Volts	Airflow Source Data	Features
012404000	NS3 S2LF 3927RF	6	1.1	22000	8	0.3	85	0.125	28	A822-14A	Leadwires Only, Front Exit
012405000	NS3 S2LT 3927RF	6	1.1	22000	8	0.3	85	0.125	28	A822-14A	Leadwires Only, Top Exit

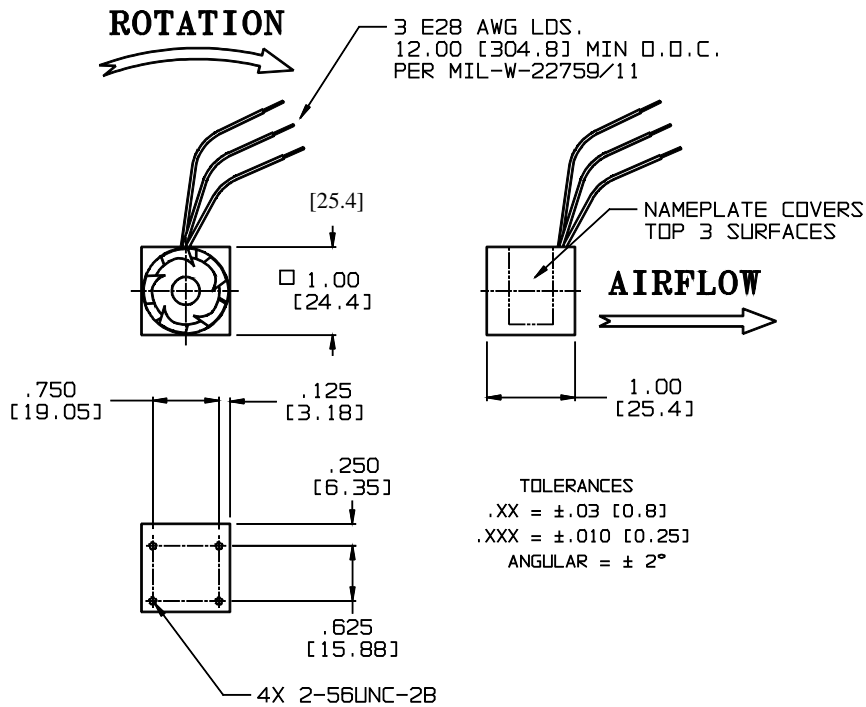


Rotron / Airscrew

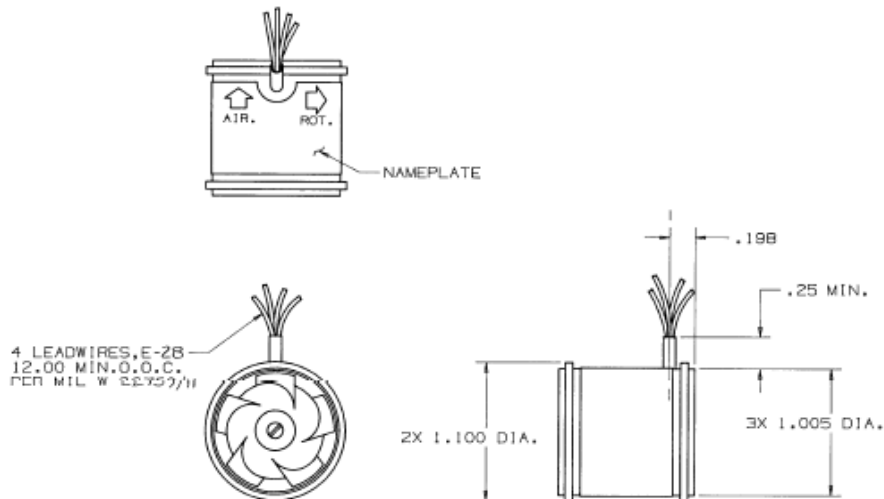


# NANOS II – AC\*

NSII S2L



NSII R1L



\*Part Number Specific Drawings Available Upon Request



North America  
T: +1 845-679-1361  
F: +1 845-679-1870

United Kingdom  
T: +44 (0) 1932 765822  
F: +44 (0) 1932 761098

Specifications subject to change without notice

Europe  
T: +49 8145 951767  
F: +49 8145 951768

Asia Pacific  
T: +65 6484 2388  
F: +65 6481 6588

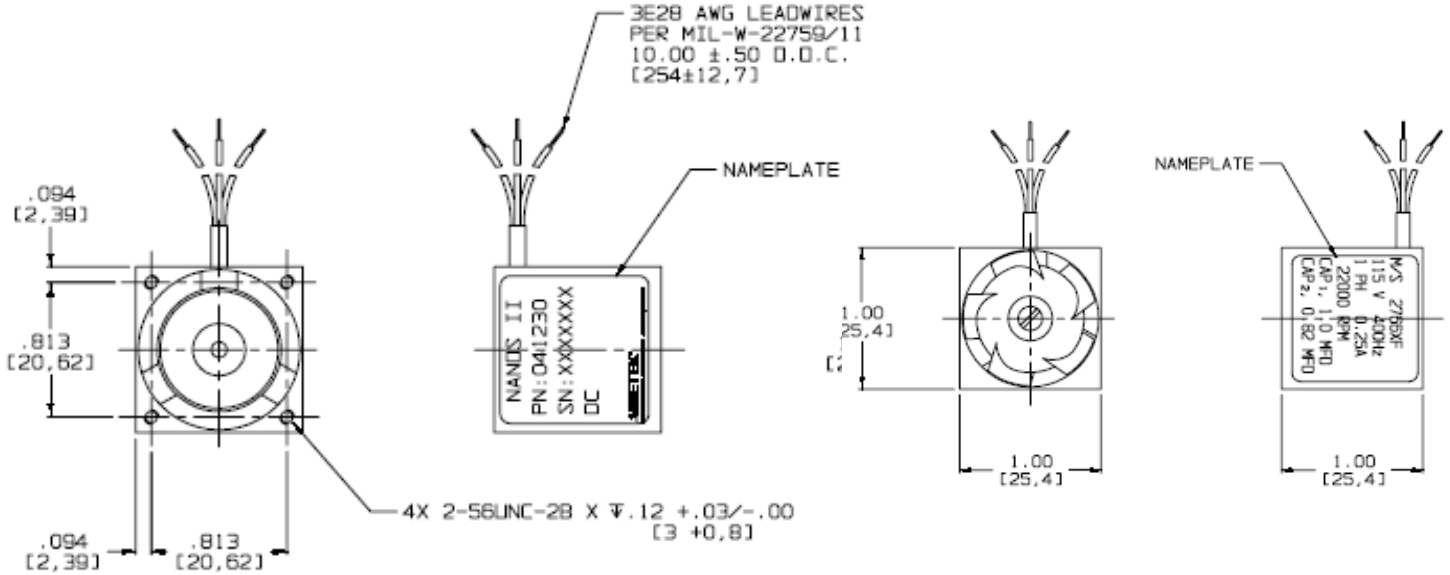
Contact E-mail: [milinquiry@ametek.com](mailto:milinquiry@ametek.com)



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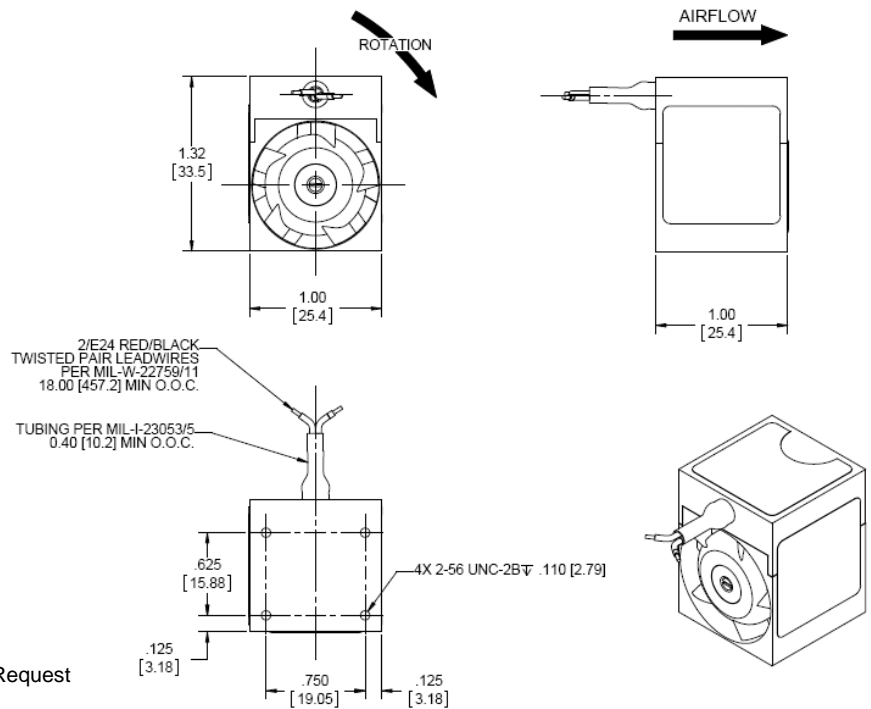


### NSII S4L



## NANOS 3 – DC\*

### NS3 S2LF



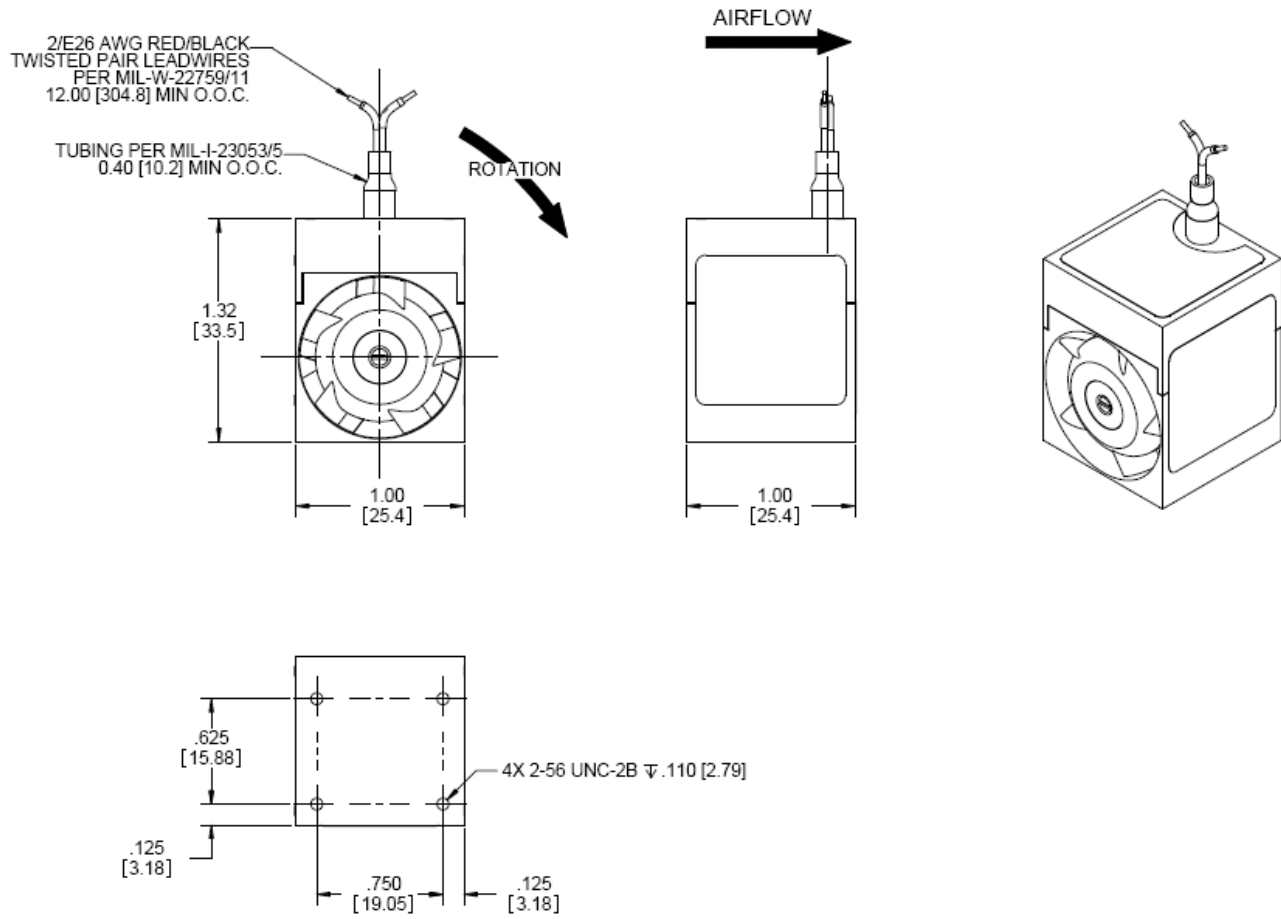
\*Part Number Specific Drawings Available Upon Request



Rotron / Airscrew



# NS3 S2LT



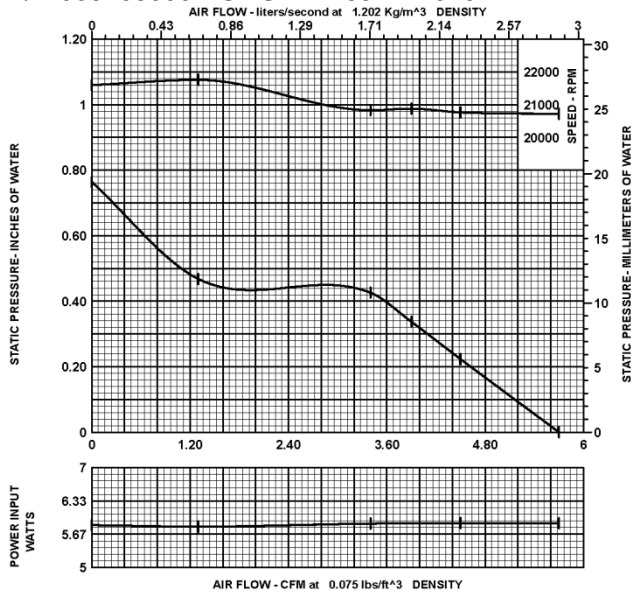
\*Part Number Specific Drawings Available Upon Request



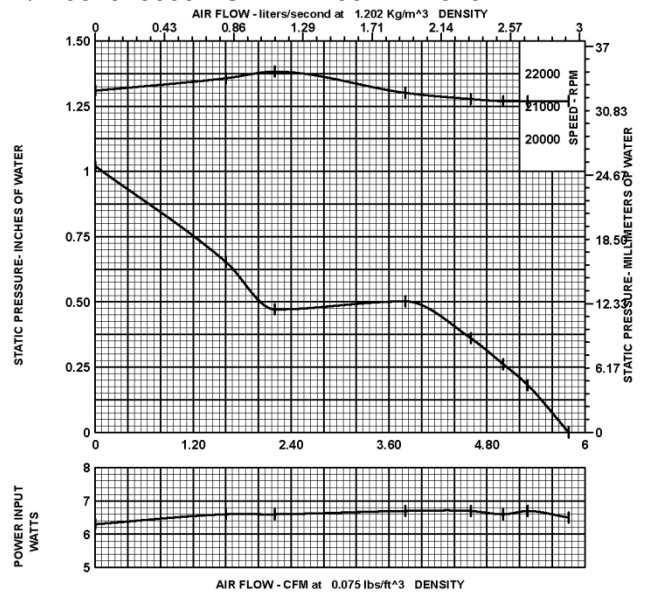
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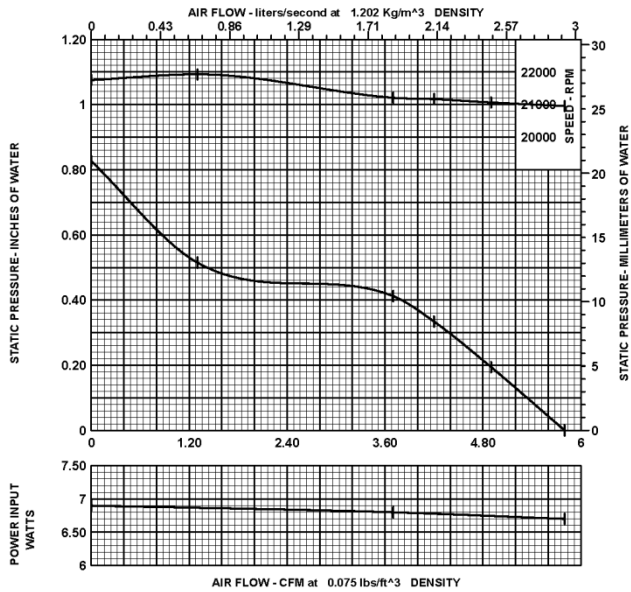
P/N 035108000 NSII S2L 2765XF A348-11



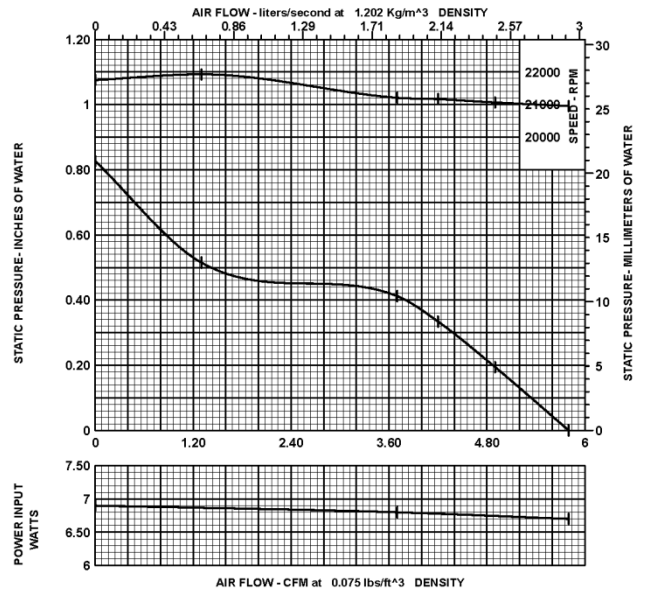
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P/N 034833000 NSII S2L 2766XF A348-11A



P/N 041251000 NSII R1L 2766XF A822-14A A348-11A

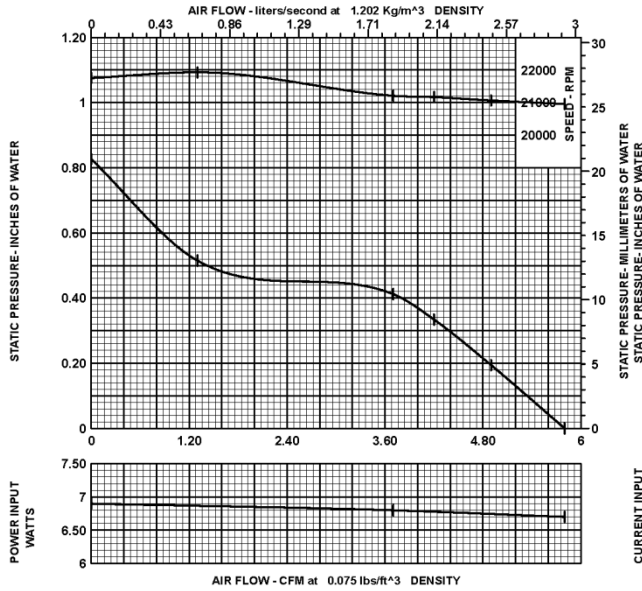




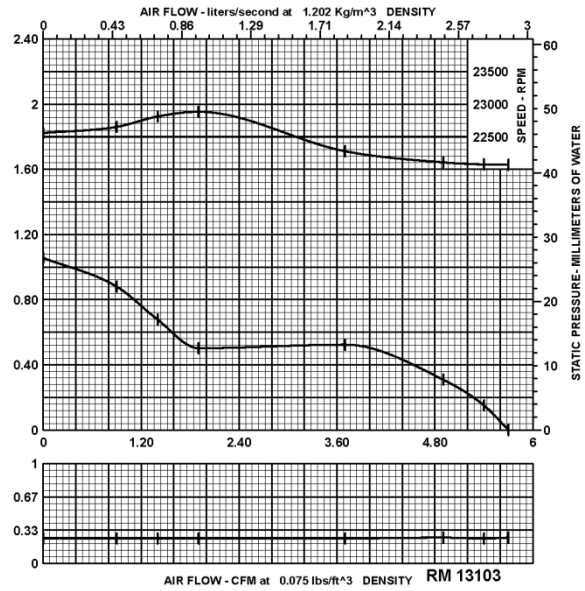
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P/N 041230000 NSII S4L 2766XF A348-11A



P/N 012405000 NS3 S2LF 3927RF A822-14A



P/N 012404000 NS3 S2LT 3927RF A822-14A

