



# Airscrew 105 to 170 Vmax Vaneaxial Fans

## General Vaneaxial Information

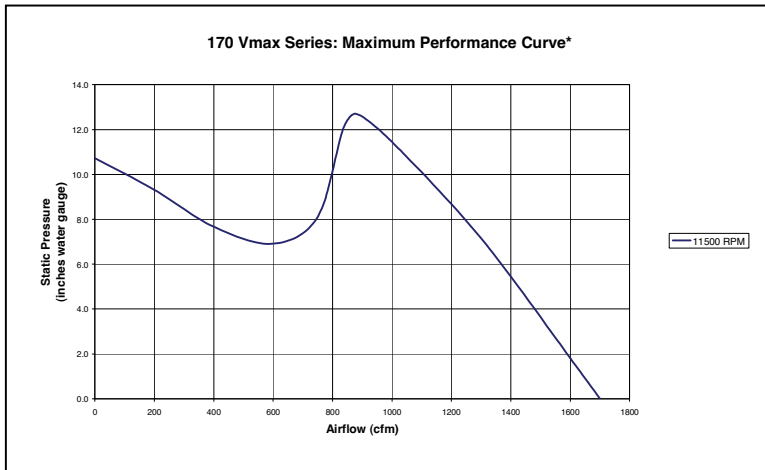
Vmax Vaneaxial Fans comprise a combination of rotating impeller and stationary guide vanes, housed within an axial duct known as the fan case. The function of the guide vanes is to increase the pressure capability of the fan. Higher aerodynamic efficiencies are achieved with true airfoil blade designs.

These fans typically operate up to the aerodynamic stall point. The axial configuration allows easy installation into ducted systems, with cooling air

passing over the integral motor, allowing compact motor design with high power demand in small packages. The Vaneaxial designs are suitable for operation in severe environments, including sand scavenge applications.

Vmax Fans are available in AC or DC supply configuration and can be supplied with thermal protection, speed sensing and customized interfaces.

## 170 Vmax Fan



\*Individual Performance Curve Characteristics Available Upon Request

### General

- Physical Envelope: 6.69" x Ø 6.93" (170mm x Ø176mm)
- Weight: 7.1lbs. (3.22Kg)
- Airflows up to 1695 CFM (800l/s)
- Static Pressures: up to 12.0 IWG (3.0kPa)
- Designed to Mil Specs
- Suitable for Sand Scavenge Applications

### Materials and Finishes

- Aluminium alloy anodized dyed black impeller, guide vanes and case
- Stainless steel S80D shaft
- High precision, sealed ABEC 7, maintenance free bearings
- Stator wound to class H insulation
- Stainless steel blades for sand scavenge applications
- Chrome impeller track for erosion protection

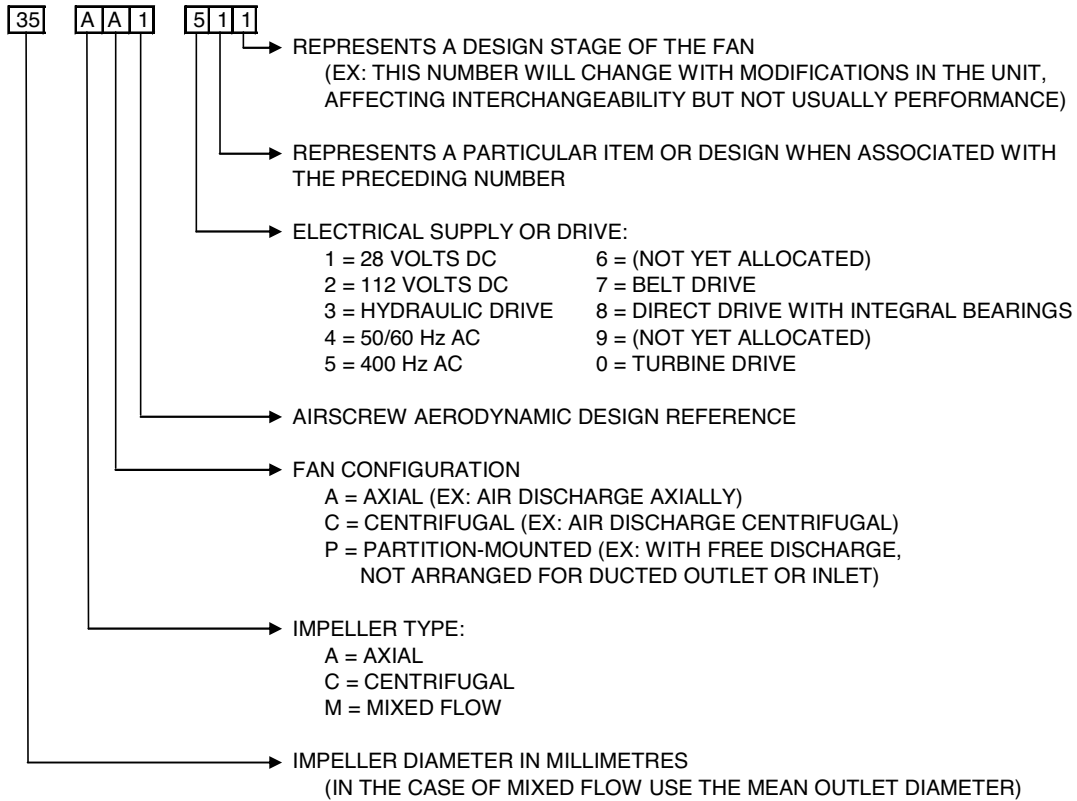
## Options/Accessories

- Speed Sensors
- Thermal Sensors
- Thermal Protection
- Finger Guards



### 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.



EXAMPLE: 35, AA1, 551  
WHERE: 35 = 35MM IMPELLER DIAMETER, A = AXIAL IMPELLER, A = AIR DISCHARGE AXIALLY,  
1 = AERODYNAMIC DESIGN REFERENCE, 5 = 400 Hz AC LINE ELECTRICAL SUPPLY, 1 = FIRST  
INSTALLATION DESIGN STAGE

### Ordering Information

When ordering, please specify the specific Airscrew 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.



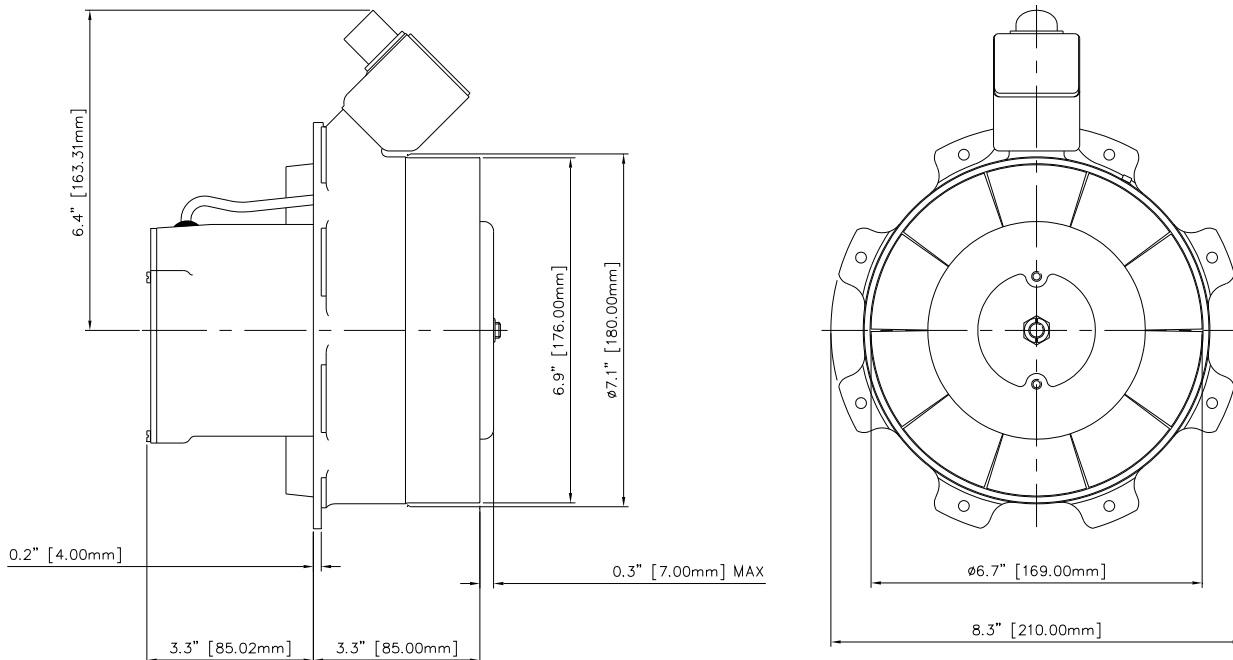
### Standard Product Offering of AC Line Powered Models

Part #	Prod Description	FLOW (CFM)	Max Pressure (IWG)	Nom RPM	Nom Watts	Line Amps (A)	Max Amb (C)	Weight (lbs)	Phase	Hz	Volts	Airflow Source Data
040230000	6952 MOD 2	713	10.08	11500	1667	6.3	70	10.12	3	400	200	AS005-23
040194000	11922	583.55	7.55	11000	614	2.34	70	5.35	3	400	200	AS001-11
040260000	140-AA0-534-1	773	11.24	11350	1750	0.5	70	12.98	3	400	200	AS001-12
040261000	140-AA0-543	776.36	11.16	11500	1660	5.74	70	11.94	3	400	200	AS018-14
040226000	165-AA1-514	1421.6	11.59	11500	3020	10.78	70	14.88	3	400	200	AS005-18
040259000	108-AA4-511	504.3	11.33	11500	900	3.35	70	5.3	3	400	200	AS018-23
040195000	7021 MOD 2	1700	12.7	11000	3800	14	70	12.76	3	400	200	AS001-5

### Standard Product Offering of DC Line Powered Models

Part #	Prod Description	FLOW (CFM)	Max Pressure (IWG)	Nom RPM	Nom Watts	Line Amps (A)	Max Amb (C)	Weight (lbs)	Volts	Airflow Source Data
018053000	105-AA2-141	3536	9.24	12000	840-	30	70	7.75	28	AS002-20
018061000	6804	188.58	3.23	8800	119	4.25	85	5.50	28	AS005-12
018063000	6894-1	233.08	5.67	12000	336	9.7	75	5.07	28	AS005-17
018060000	7166 Mod 1	233.08	5.67	12000	300	9.7	70	5.50	28	AS005-10
018073000	7166 Mod 1	186.87	2.61	7000	120	4.29	70	5.50	28	AS020-6

### 170 Vmax Fan\*



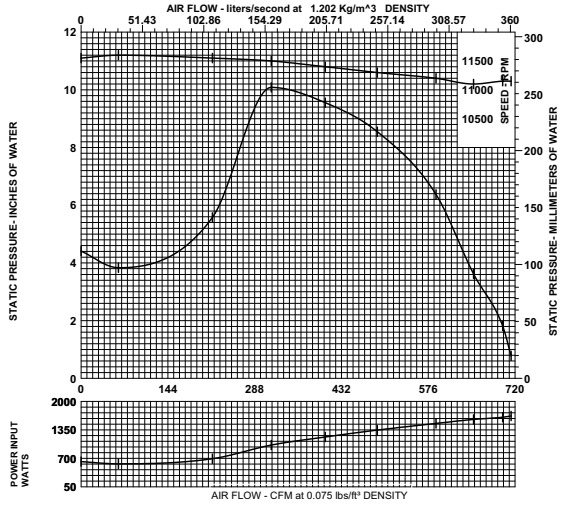
\*Part Number Specific Drawings Available Upon Request



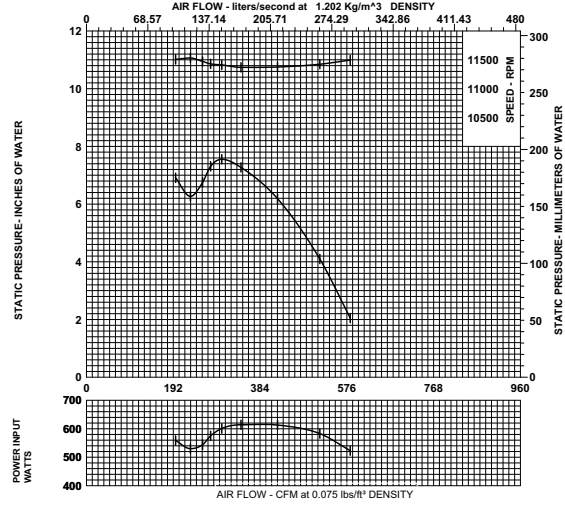
Rotron / Airscrew



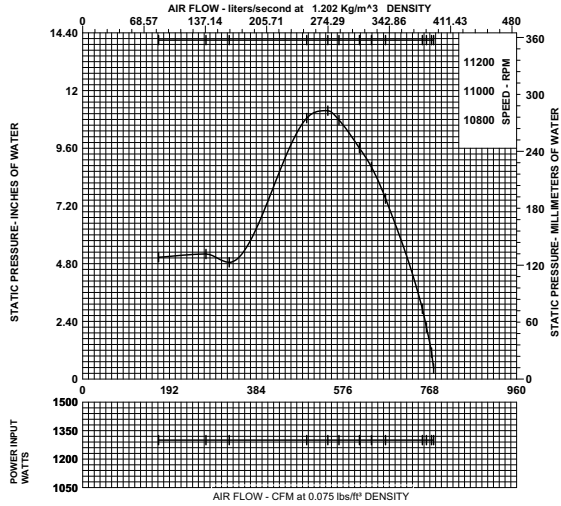
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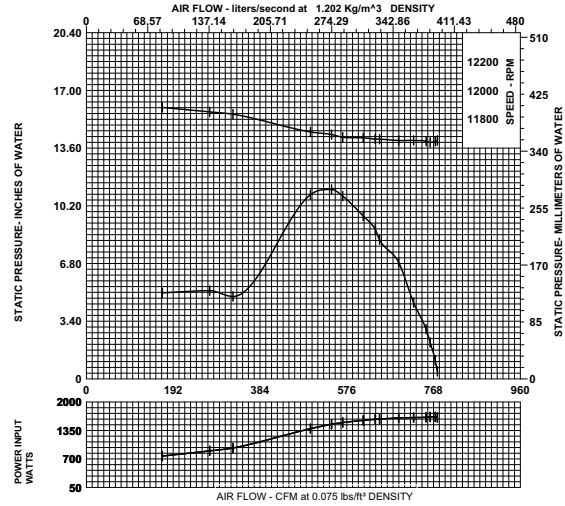
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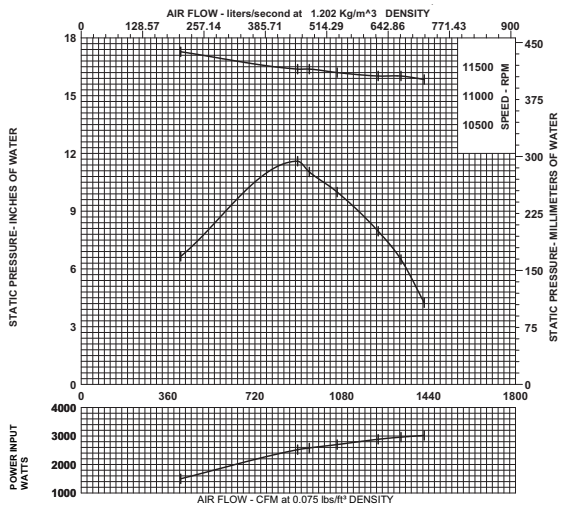
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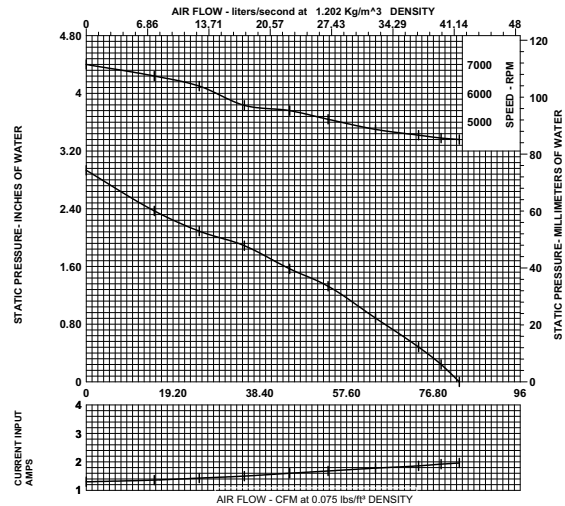
P/N 040261000 140-AA0-543 AS018-14



P/N 040226000 165-AA1-514 AS005-18



P/N 040259000 108-AA4-511 AS018-23



Specifications subject to change without notice



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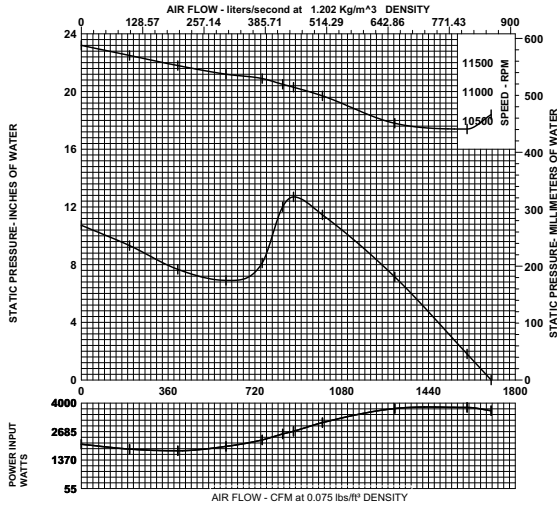
[www.ametekaerodefense.com](http://www.ametekaerodefense.com)



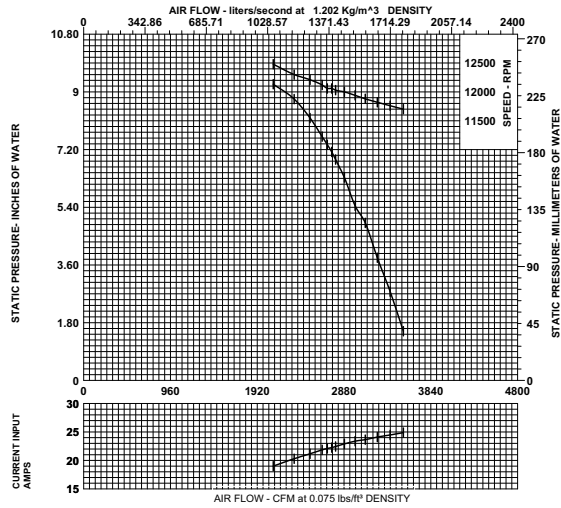
Rotron / Airscrew



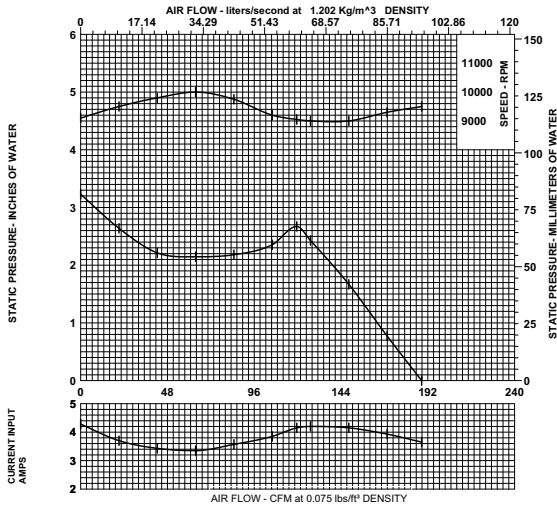
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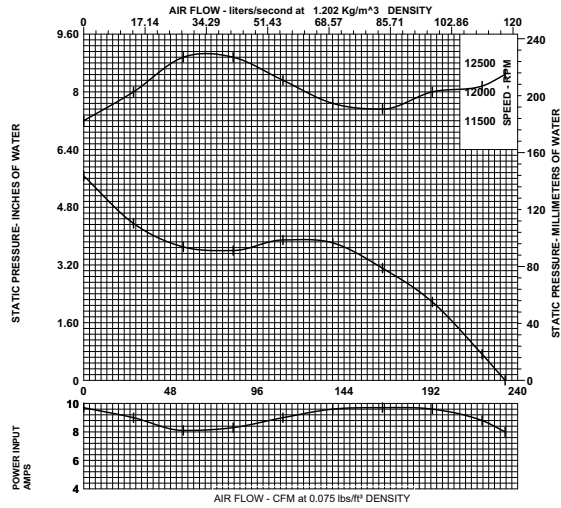
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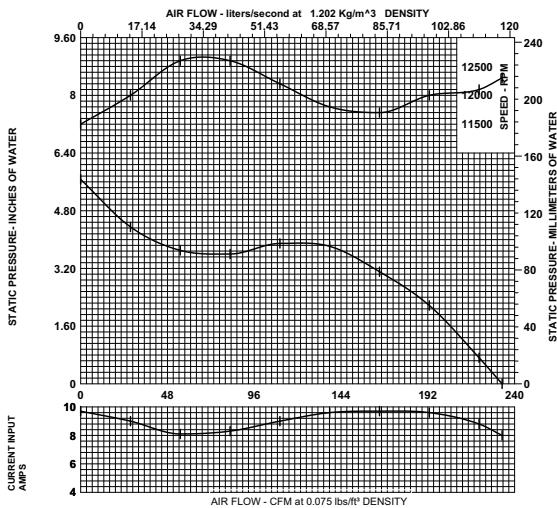
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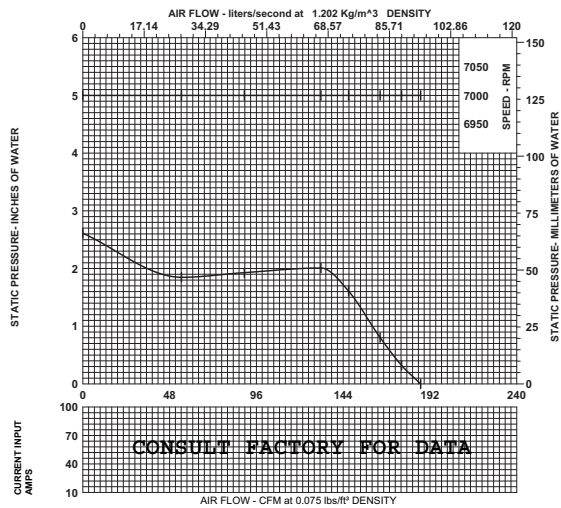
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P/N 018060000 7166 Mod 1 AS005-10



P/N 018073000 7166 Mod 1 AS020-6





Rotron / Airscrew



NOTES:

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