

Industrial Process Fans

Performance Supplement

- Engineering Information
- Air Performance
- Sound Performance
- Dimensional Data



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Aided Product Selection program, CAPS. Online, you can also find electronic copies of our product literature as well as storage, installation and maintenance information in our Installation and Operation Manuals.

And, of course, you can always count on the personal service and expertise of our national and international representative organization. To locate your nearest Greenheck representative call 715-359-6171 or visit our Web site at www.greenheck.com

To-Scale Drawings and Fan Specifications

To-scale CAD drawings along with detailed centrifugal specifications can be found online at greenheck.com or within our Computer Aided Product Selection program (CAPS).



Greenheck certifies that the Industrial Process Fans shown herein are licensed to bear the AMCA Seal.

The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Motor Selection

Greenheck industrial process fans can be supplied with any motor that is commercially available and is appropriate for the fan size and performance required. The table shows motor frame sizes corresponding to those motors readily available. See the maximum motor frame size chart below if motor is for arrangement 9 or 10 fans.

- Notes:
1. Fractional horsepower motor frame sizes shown may change due to variations in voltage, special features and manufacturer.
 2. Motors shown are ball bearing, continuous duty. Two speed motors are two winding, 1/3 reduction in RPM.
 3. Single phase motors are capacitor start.
 4. Open frame motors have a 1.15 service factor. TE motors have a 1.0 service factor.
- *Single speed three phase motors of 200 volts are available up to 100 horsepower, 230 volts up to 125 horsepower and 460 or 575 volts up to 150 horsepower.
- **Two speed three phase motors of 200 volts are available up to 10 horsepower, 230 volts up to 10 horsepower and 460 or 575 volts up to 25 horsepower.

1800 RPM Motors										
HP	Single Speed								2 Speed 2 Winding	
	Open			TE		Explosion Resistant		High Efficiency		Open
	115V 1PH	230V 1PH	* 3PH	115V 230V 1PH	* 3PH	115V 230V 1PH	* 3PH	230V 460V 3PH	230V 460V 3PH	115V 230V 1PH
										** 3PH
¼	48	48	48	48	48	48	48			48
⅓	48	48	56	56	56	56	56			56
½	56	56	56	56	56	56	56			56
¾	56	56	56	56	56	56	56			56
1	56	56	143T	56	143T		56	143T	143T	56
1½	145T	145T	145T	145T	145T		145T	145T	145T	56
2	182T	182T	145T	182T	145T		145T	145T	145T	182T
3			182T		182T		182T	182T	182T	184T
5			184T		184T		184T	184T	184T	215T
7½			213T		213T		213T	213T	213T	254T
10			215T		215T		215T	215T	215T	256T
15			254T		254T		254T	254T	254T	256T
20			256T		256T		256T	256T	256T	284T
25			284T		284T		284T	284T	284T	286T
30			286T		286T		286T	286T	286T	324T
40			324T		324T		324T	324T	324T	326T
50			326T		326T		326T	326T	326T	365T
60			364T		364T		364T	364T	364T	
75			365T		365T		365T	365T	365T	
100			405T		405T		405T	405T	405T	
125			405T		444T		444T	405T	444T	
150			444T		445T		445T	444T	445T	

3600 RPM Motors*										
HP	Single Speed									
	Open			TE		Explosion Resistant		High Efficiency		
	115V 1PH	230V 1PH	* 3PH	115V 230V 1PH	* 3PH	115V 230V 1PH	* 3PH	230V 460V 3PH	230V 460V 3PH	
¼	48	48			56					
⅓	48	48	56	56	56					
½	56	56	56	56	56					
¾	56	56	56	56	56					
1	56	56	56	56	56					
1½	143T	143T	143T	143T	143T			143T	143T	143T
2	145T	145T	145T	145T	145T			145T	145T	145T
3	182T	182T	145T	182T	182T			182T	145T	182T
5		184T	182T	182T	184T			184T	182T	184T
7½		213T	184T	184T	213T			213T	184T	213T
10		215T	213T	213T	215T			215T	213T	215T
15			215T		254T			254T	215T	254T
20					256T			256T	254T	256T
25			256T		284TS			284TS	256T	284TS
30			284TS		286TS			286TS	284TS	286TS
40			286TS		324TS			324TS	286TS	324TS
50			324TS		326TS			326TS	324TS	326TS

*3600 RPM motors are recommended for fan speed over 2700 RPM

Maximum Motor Horsepower and Frame Sizes

Arrangement 9 and 10 fans have specific motor size limitations based on fan size. The chart below should be used to verify the motor selected will physically fit on the fan.

Fan Size	Maximum Motor Horsepower		Maximum Motor Frame Size			
			Arrangement 9		Arrangement 10	
	Standard Duty	Heavy Duty	Standard Duty	Heavy Duty	Standard Duty	Heavy Duty
5	2	NA	145T	NA	145T	NA
7	10	NA	215T	NA	184T	NA
9	20	NA	256T	NA	215T	NA
11	30	50	256T	256T	254T	NA
13	50	75	286T	286T	284T	NA
15	60	100	286T	286T	284T	NA
17	75	125	326T	326T	324T	NA
19	100	150	365T	365T	326T	NA
21	125	200	365T	365T	NA	NA
23	150	200	365T	365T	NA	NA
26	200	300	405T	405T	NA	NA
29	200	350	405T	405T	NA	NA
33	300	450	405T	405T	NA	NA
37	350	550	405T	405T	NA	NA
41	400	700	405T	405T	NA	NA

Engineering Data

Motor Starting Torque

When selecting a motor for an industrial process fan, the motor must be capable not only of driving the fan at operating speed, but also must be capable of accelerating the fan wheel, shaft and drive to the operating speed.

The fan performance tables and curves in this catalog show the brake horsepower required to operate the fan once it is brought to speed. For applications requiring a large air volume at a low static pressure, the Bhp required at the fan's operating RPM may not be sufficient to initially start the fan. If the time required to bring the fan to speed is excessive, the motor winding insulation can be damaged due to excessive temperature rise and the life of the motor seriously affected.

For a belt drive industrial process fan the required motor starting torque capability can be expressed by the following formula:

$$WR_M^2 = WR_F^2 \times \left(\frac{FRPM}{MRPM} \right)^2 \times (1.1)$$

WR_M^2 = The moment of inertia that the motor must be capable of turning at the motor shaft, lb-ft²

WR_F^2 = The moment of inertia of the fan wheel, lb-ft²

FRPM = Fan RPM

MRPM = Motor RPM

V-Belt Drives

Constant Speed Drives

Advantages of constant speed drives include low vibration levels, ease of assembly and low cost. Fan speed changes can be accomplished in most cases simply by changing the motor pulley.

Constant speed drives are recommended over variable speed drives for applications that require motors 15 HP and larger, and all applications requiring 3600 RPM motors.

Variable Speed Drives

Variable speed drives allow the fan speed to be changed by adjusting the pitch diameter of the motor pulley. The power to the fan must be off and locked out, and the belts must be removed before manually adjusting the variable pitch pulley.

High Temperature Operating Limits

Temperature	Material	Arrangement	Options Included
-20 to 250°F	Steel Aluminum Stainless Steel	1, 4, 8, 9 and 10	Standard operating range for industrial process fans
251 to 500°F	Steel Stainless Steel	1, 8, 9 and 10	<ul style="list-style-type: none"> Heat Slinger Shaft Seal Motor Heat Shield on Arrangements 9 and 10 High Temperature Paint
501 to 800°F	Steel Stainless Steel	1 and 8	<ul style="list-style-type: none"> Heat Slinger Shaft Seal High Temperature Grease High Temperature Paint
801 to 1000°F	Stainless Steel	1 and 8	Consult the factory for specific application

Moments of Inertia (lb-ft²)

Moments of inertia are shown for steel industrial process wheels. Aluminum wheels are one-third of the value shown.

Fan Size	IPO Wheel		IPW Wheel		IPA Wheel	
	Standard Duty	Heavy Duty	Standard Duty	Heavy Duty	Standard Duty	Heavy Duty
5	1	NA	1	NA	1	NA
7	1	NA	2	NA	3	NA
9	2	NA	5	NA	8	NA
11	6	8	12	15	20	21
13	12	16	24	28	42	42
15	28	28	56	56	79	79
17	46	46	92	92	134	153
19	71	88	141	159	202	230
21	142	144	258	263	319	361
23	205	206	372	377	456	515
26	333	757	607	672	745	841
29	521	1186	949	1048	1304	1304
33	877	1995	2017	2342	2455	2455
37	1652	3145	3172	3698	3831	3831
41	2477	4707	4749	5523	5807	5807

Fan RPM Limitations

The maximum allowable wheel RPM shown on the fan performance pages are for fans of standard steel operating at 70°F. Since the strength of the fan wheel, shaft and bearings decreases with an increase in temperature, maximum allowable speeds must be reduced by the correction factors shown below.

Maximum RPM Correction Factors For High Temperatures			
Temperature (°F)	Wheel Material		
	Aluminum	Steel	316 SS
70	1.00	1.00	1.00
200	1.00	.97	.92
250	.95	.96	.89
300		.95	.87
400		.93	.83
500		.90	.80
600		.85	.77
700		.80	.75
800		.72	.72
900			.71
1000			.69

Effect of Air Density

Ratings in the fan performance tables and curves of this catalog are based on standard air (clean, dry air with a density of 0.075 pounds per cubic foot, barometric pressure at sea level of 406.75 inches wg, temperature of 70°F.). Selecting a fan to operate at conditions other than standard air requires an adjustment to both static pressure and brake horsepower.

One cubic foot of air has a constant volume regardless of temperature or elevation. However, air density changes with non-standard temperature or elevation. Therefore, when selecting a fan to operate at a non-standard air density using standard air density tables and curves, corrections must be made to parameters affected by air density. These parameters are static pressure and brake horsepower.

For example, a size 26 IPO industrial fan is to deliver 15,000 cfm at 16 inches static pressure. Elevation is 2000 feet, temperature is 400°F.

The 16 inches static pressure refers to the static pressure at the operating air density, in this case at 2000 feet, 400°F. Intuitively, we realize that at higher than standard elevations and temperatures, air density will be lower than standard. Therefore, we must determine what static pressure at standard air density will equate to 16 inches static pressure at our operating density. Since standard air density is greater than operating air density in this case, we would expect the corrected static pressure to be greater than the operating static pressure.

Dry Air Density Correction Factor (I-P)													
Multiply Standard Air Density, 0.075 lb _m /ft ³ by the Factor to obtain Density at Condition p _b													
Altitude, (Z)	ft.	-1000	Sea Level	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
Barometric Pressure (p _b)	in. Hg	31.02	29.92	28.85	27.82	26.82	25.84	24.89	23.98	23.09	22.22	21.39	20.58
	in. wg	421.71	406.75	392.21	378.20	364.61	351.29	338.37	326.00	313.90	302.07	290.79	279.78
Temperature °F, (t)	-40	1.309	1.262	1.217	1.174	1.131	1.090	1.050	1.012	0.974	0.937	0.902	0.868
	0	1.195	1.152	1.111	1.071	1.033	0.995	0.959	0.924	0.889	0.856	0.824	0.793
	40	1.099	1.060	1.022	0.986	0.950	0.915	0.882	0.850	0.818	0.787	0.758	0.729
	70	1.037	1.000	0.964	0.930	0.896	0.864	0.832	0.801	0.772	0.743	0.715	0.688
	100	0.981	0.946	0.913	0.880	0.848	0.817	0.787	0.759	0.730	0.703	0.677	0.651
	150	0.901	0.869	0.838	0.808	0.779	0.750	0.723	0.696	0.670	0.645	0.621	0.598
	200	0.832	0.803	0.774	0.747	0.720	0.693	0.668	0.644	0.620	0.596	0.574	0.552
	250	0.774	0.746	0.720	0.694	0.669	0.645	0.621	0.598	0.576	0.554	0.534	0.513
	300	0.723	0.697	0.672	0.648	0.625	0.602	0.580	0.559	0.538	0.518	0.498	0.480
	350	0.678	0.654	0.631	0.608	0.586	0.565	0.544	0.524	0.505	0.486	0.468	0.450
	400	0.639	0.616	0.594	0.573	0.552	0.532	0.513	0.494	0.475	0.458	0.440	0.424
	450	0.604	0.582	0.561	0.541	0.522	0.503	0.484	0.467	0.449	0.432	0.416	0.401
	500	0.572	0.552	0.532	0.513	0.495	0.477	0.459	0.442	0.426	0.410	0.395	0.380
	550	0.544	0.525	0.506	0.488	0.470	0.453	0.436	0.420	0.405	0.390	0.375	0.361
	600	0.518	0.500	0.482	0.465	0.448	0.432	0.416	0.401	0.386	0.371	0.357	0.344
	700	0.474	0.457	0.440	0.425	0.409	0.394	0.380	0.366	0.352	0.339	0.327	0.314
	800	0.436	0.420	0.405	0.391	0.377	0.363	0.350	0.337	0.324	0.312	0.301	0.289
	900	0.404	0.390	0.376	0.362	0.349	0.336	0.324	0.312	0.301	0.289	0.278	0.268
	1000	0.376	0.363	0.350	0.337	0.325	0.313	0.302	0.291	0.280	0.269	0.259	0.250

Adapted from AMCA Standard 99-09, section 0200, Charts and Tables, with written permission from Air Movement and Control Association International, Inc.

The accompanying table gives air density correction factors for non-standard temperatures and elevations.

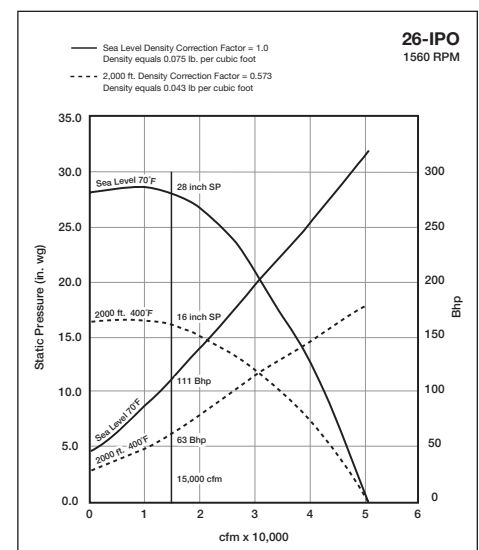
The example below shows the relationship of fan performance at sea level and at 2000 ft. elevation and 400°F.

Example:

The following example shows how to properly select the fan described above:

1. Since the air volume delivered by the fan is not affected by density, airflow remains 15,000 cfm.
2. Determine correction factor from chart for an elevation of 2000 feet and air temperature of 400°F. The correction factor is 0.573.
3. Divide the specified operating static pressure by the correction factor to determine the standard air density equivalent static pressure. Corrected static pressure = 16 in. ÷ 0.573 correction factor = 28 in. static pressure
4. Refer to the fan performance table for a 26 IPO. At 15,000 cfm and 28 in. static pressure: Fan RPM = 1560, BHP = 111.
5. 1560 Fan RPM is required to produce the desired performance.
6. Since the horsepower selected refers to standard air density, this must be corrected to reflect actual BHP at the lighter operating air.
Operating BHP = Standard BHP x 0.573, or 111 x 0.573 = 63.6 BHP.

If a fan is selected to operate at high temperatures, the motor must be of sufficient horsepower to handle the increased load at any lower operating temperature where the air is more dense. Assume the air entering the 26 IPO fan at start-up is 0°F. For 0°F and 2000 feet elevation the air density correction factor is 1.071. BHP at 0°F = 111 x 1.071 = 118.9, therefore, a 125 HP motor is required.



Conveying Velocities

Minimum Conveying Velocities for Materials

The following chart lists recommended conveying velocities for various industrial materials. The chart is intended to be used as a reference. That is, these velocities are not guaranteed to produce trouble-free operation of a material conveying system. Instead, they offer a guide as to the velocities that can be expected when conveying a particular material.

Special considerations should be made when selecting a velocity for material conveying. If the velocity in the ductwork is too high, erosion of elbows and transitions in the ductwork will likely occur. If the velocity in the ductwork is too low, the material in the airstream will not be conveyed. Instead it will settle out and cause plugging.

The nature of the material being conveyed must also be considered. A particularly corrosive material can deteriorate fan components. Long, fibrous material may wrap itself around the fan wheel and shaft and reduce fan performance. A wheel or housing that is continually bombarded by particles during operation will increase maintenance while decreasing the fan life. Proper cleaning of the fan and removal of accumulating material from the housing can prevent these problems from occurring.

Material Conveying Velocities

Minimum Conveying Velocity			
Material	ft./min.	Material	ft./min.
Aluminum dust	4200	Limestone dust	3500
Brass turnings	4000	Malt	4800
Cast iron dust	4000	Metal turnings	4500
Cement	7000	Molding dust	2500
Clay dust	3500	Oats	4500
Coal ashes	5500	Paper trimmings	5000
Coal dust	4000	Plastic dust	3800
Cocoa dust	3300	Sand	7000
Cork	3500	Sawdust, heavy or wet	3500
Flour dust	2500	Sawdust, light or dry	3000
Foundry dust	4500	Silica dust	3500
Grain dust	3000	Soap dust	3000
Grinding dust	4500	Soapstone dust	3500
Jute dust	3500	Wheat	6000
Jute lint	3000	Wood dust	3500
Lead dust	4500	Wood shavings	4500
Leather dust	3500	Wool	5000

Direct Drive Arrangements

Direct Drive Arrangements

Greenheck offers direct drive Industrial Process Fans in two arrangements, 4 and 8.

Arrangement 4 fans involve mounting the fan wheel directly to the motor shaft without any additional bearings to support the overhung fan wheel. For this reason, arrangement 4 fans are limited to IPO and IPW wheels in sizes 5 - 19, standard duty construction, and 11 - 19 in heavy duty construction. Fan sizes larger than 19 have wheels which are too heavy to be supported by the motor bearings alone.

Arrangement 8 fans are similar to an arrangement 1 fan in that they share the same drive pedestal which supports the overhung fan wheel with two externally mounted bearings. The arrangement 8 adds an extended motor base to allow direct coupling of the fan and motor shafts. This arrangement is available in fan sizes 5 - 41 in standard duty construction and 11 - 41 in heavy duty construction.

Dimensions for arrangement 4 and 8 fans are based on specific performance points and motor requirements. Consult the factory for submittal drawings.

Direct drive fans offer distinct advantages over belt drive fans.

Advantages of arrangement 4 fans include:

- No belts to tension or maintain.
- No external bearings to grease.
- No drives to cause horsepower loss.

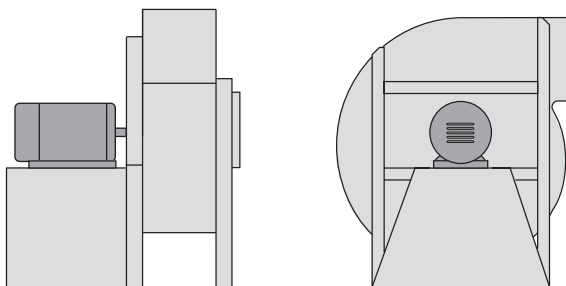
Advantages of arrangement 8 fans include:

- No belts to tension or maintain.
- No drives to cause horsepower loss.
- Shaft couplings offer high resistance to grease, dirt, oil and moisture.
- Rarely a need to remove and realign shafts of connected fans.
- Optional heat fan packages for high temperature construction up to 800° F.
- Motors can be serviced or replaced easily.

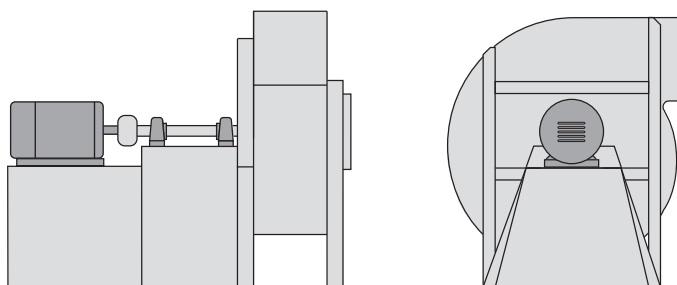
Direct drive fans require a special design for each application. One choice is to use a synchronous motor speed and a full width fan wheel. This choice offers the least expensive of direct drive options because no wheel or housing modifications are necessary. A second choice would be to use a Variable frequency drive with a full width fan wheel. Again, no modifications are made to the fan wheel or housing reducing additional engineering costs. Also, any stable operating point along the fan's operating curve is obtainable using the variable frequency drive. A third choice is to use a synchronous motor speed with a partial width fan wheel.

The following drawings show the differences between an arrangement 4 and an arrangement 8 direct drive industrial process fan.

Arrangement 4



Arrangement 8

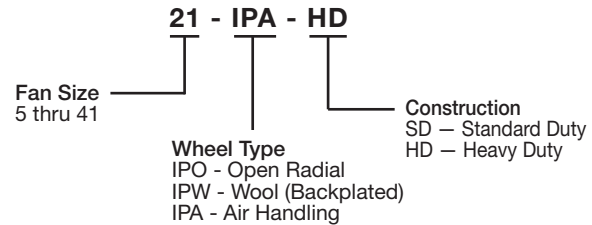


Sample Fan Selection

The purpose of these two pages is to demonstrate the manual industrial process fan selection process. These pages also contain helpful tips to check your fan selection as well as a step by step set of instructions on how to use this manual to properly select an industrial process fan.

An important point to remember when manually selecting an industrial fan is that more than one fan is available to meet the desired performance (cfm and static pressure). Selection criteria such as unit size, efficiency, speed, outlet velocity, horsepower, or construction material may also dictate which fan is chosen.

The following example explains the model number code for industrial process fans.



A Industrial fans are sized and cataloged according to the diameter of the fan inlet (shown in inches) and the wheel type. O for Open Radial, W for Wool Type and A for Air Handling wheels.

B Wheel diameters are listed for each fan size.

C The Outlet Area is used to find the Outlet Velocity, $OV = CFM/OA$.

D The Minimum Starting HP is determined by the inertia (wr^2) of the fan wheel and motor. See page 4 for a complete motor starting torque chart.

E The Maximum Fan RPM, Motor HP, and Motor Frame Size is listed for each fan according to duty.

F The most efficient performance selections for each size are highlighted with bold face type in the performance tables.

G Constant HP curves are plotted for each Motor HP size.

H The % WOV is used to identify the fan operating point. The lines in the fan curve or the equation can be used.

A 21 IPA

B Wheel Diameter = 36½ in.

C Outlet Area = 2.34 ft²

Tip Speed = 9.56 x RPM

D Minimum Starting HP = 2

E

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1779	125	365T	NA
Heavy	2093	200	365T	NA



CFM	OV	Static Pressure in Inches wg															
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	2074	451	1.37	569	2.37	666	3.42	755	4.55	837	5.78	912	7.05	986	8.95	1055	11.1
5450	2261	467	1.58	582	2.64	678	3.77	763	4.96	842	6.21	917	7.56	991	9.55	1060	11.7
5900	2448	484	1.81	597	2.95	691	4.15	772	5.39	850	6.71	922	8.08	991	9.55	1055	11.1
6350	2634	503	2.07	612	3.28	703	4.55	785	5.87	858	7.23	929	8.67	996	10.2	1060	11.7
6800	2821	521	2.36	628	3.64	717	4.98	797	6.37	869	7.80	937	9.29	1003	10.8	1065	12.4
7250	3008	540	2.67	644	4.04	732	5.45	810	6.90	882	8.41	947	9.94	1011	11.6	1072	13.2
7700	3195	559	3.01	660	4.46	747	5.94	824	7.47	894	9.05	959	10.7	1019	12.3	1078	13.7
8150	3381	578	3.39	678	4.92	762	6.47	838	8.08	907	9.72	971	11.4	1031	13.1	1086	14.5
8600	3568	598	3.79	696	5.41	779	7.05	853	8.72	924	10.4	984	12.2	1044	14.0	1099	15.8
9050	3755	618	4.24	714	5.94	795	7.65	868	9.39	935	11.2	997	13.0	1056	14.9	1112	16.8
9500	3941	639	4.72	732	6.51	811	8.30	884	10.1	950	12.0	1011	13.9	1069	15.8	1124	17.8
9950	4128	660	5.25	751	7.12	829	8.99	900	10.9	965	12.8	1026	14.8	1082	16.8	1137	18.8
10400	4315	681	5.82	770	7.77	847	9.72	916	11.7	980	13.7	1041	15.7	1097	17.8	1150	19.9
10850	4502	703	6.43	789	8.46	865	10.5	933	12.5	996	14.6	1056	16.7	1111	18.9	1164	21.0
11300	4688	724	7.08	808	9.19	883	11.3	949	13.4	1012	15.6	1071	17.8	1126	20.0	1178	22.2
11750	4875	746	7.78	828	9.97	902	12.2	967	14.4	1029	16.6	1087	18.9	1141	21.2	1193	23.5

CFM	OV	Static Pressure in Inches wg															
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	3368	1196	18.2	1249	20.1	1300	22.1	1350	24.1	1398	26.1	1444	28.2	1495	32.0	1538	34.2
8600	3568	1207	19.6	1259	21.5	1308	23.5	1357	25.6	1404	27.7	1450	29.8	1495	32.0	1538	34.2
9200	3817	1218	21.0	1269	23.0	1318	25.1	1366	27.2	1411	29.3	1457	31.6	1501	33.9	1544	36.2
9800	4066	1234	22.6	1281	24.6	1329	26.8	1376	29.0	1422	31.2	1466	33.4	1508	35.7	1551	38.1
10400	4315	1251	24.2	1298	26.4	1343	28.6	1387	30.8	1432	33.1	1476	35.5	1518	37.9	1560	40.2
11000	4564	1268	25.9	1315	28.2	1359	30.5	1403	32.8	1444	35.2	1487	37.6	1529	40.1	1570	42.5
11600	4813	1285	27.7	1331	30.1	1376	32.5	1419	34.9	1461	37.4	1501	39.8	1540	42.3	1581	44.9
12200	5062	1303	29.6	1348	32.1	1393	34.6	1436	37.1	1477	39.7	1517	42.2	1556	44.8	1594	47.4
12800	5311	1323	31.6	1367	34.2	1410	36.8	1453	39.4	1494	42.1	1534	44.7	1573	47.4	1610	50.1
13400	5560	1343	33.7	1387	36.4	1429	39.1	1470	41.8	1511	44.5	1551	47.3	1589	50.1	1627	52.9
14000	5809	1363	36.0	1406	38.7	1448	41.5	1489	44.3	1528	47.1	1568	50.0	1606	52.9	1643	55.8
14600	6058	1383	38.3	1426	41.1	1468	44.0	1508	46.9	1547	49.8	1585	52.7	1623	55.7	1660	58.7
15200	6307	1404	40.7	1446	43.7	1488	46.6	1528	49.7	1567	52.7	1605	55.7	1641	58.7	1677	61.8
15800	6556	1425	43.3	1467	46.3	1508	49.4	1548	52.5	1587	55.6	1624	58.8	1661	61.9	1696	65.0
16400	6804	1447	46.0	1489	49.1	1529	52.3	1568	55.5	1607	58.7	1644	61.9	1680	65.2	1715	68.4
17000	7053	1469	48.8	1511	52.1	1550	55.3	1589	58.6	1627	61.9	1664	65.2	1700	68.6	1735	72.0

CFM	OV	Static Pressure in Inches wg															
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	F	1636	43.7	1675	46.2	1714	48.7	1752	51.3	1789	53.9	1825	56.4	1869	62.8	1904	65.5
10800	4481	1645	46.7	1684	49.3	1723	51.9	1761	54.6	1798	57.3	1834	60.0	1878	66.6	1912	69.5
11600	4813	1659	50.1	1697	52.8	1734	55.4	1770	58.1	1806	60.9	1842	63.7	1878	66.6	1912	69.5
12400	5145	1674	53.7	1711	56.3	1748	59.3	1784	62.1	1819	64.9	1854	67.7	1888	70.6	1921	73.5
13200	5477	1693	57.5	1728	60.3	1763	63.2	1798	66.1	1834	69.1	1868	72.1	1902	75.1	1935	78.1
14000	5809	1715	61.6	1750	64.6	1783	67.5	1816	70.5	1848	73.5	1882	76.6	1916	79.7	1949	82.8
14800	6141	1737	65.9	1772	69.0	1805	72.1	1838	75.2	1870	78.3	1902	81.4	1933	84.6	1963	87.7
15600	6473	1760	70.3	1794	73.6	1828	76.8	1861	80.0	1893	83.3	1924	86.6	1955	89.9	1985	93.2
16400	6804	1783	75.0	1817	78.3	1850	81.7	1883	85.1	1915	88.5	1946	91.9	1977	95.4	2007	98.8
17200	7136	1809	80.0	1842	83.4	1873	86.8	1906	90.4	1938	93.9	1969	97.5	1999	101	2029	105
18000	7468	1835	85.2	1868	88.8	1899	92.4	1930	95.9	1960	99.5	1991	103	2022	107	2052	111
18800	7800	1862	90.7	1894	94.4	1925	98.1	1956	102	1986	106	2016	110	2045	113	2075	117
19600	8132	1889	96.3	1921	100	1952	104	1983	108	2013	112	2042	116	2071	120		
20400	8464	1916	102	1947	106	1979	110	2009	114	2039	118	2068	122				
21200	8796	1944	109	1975	113	2005	117	2036	121	2066	125						
22000	9128	1973	115	2004	119	2034	124	2063	128								

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

Fan Selection Procedure

STEP 1

Enter the performance table with the desired CFM and static pressure. Obtain the fan RPM, operating BHP and duty.

EXAMPLE: For this example we will use 8600 CFM at 9.0 in. wg. This gives us a fan RPM of 1153 requiring 17.6 BHP, in standard duty construction.

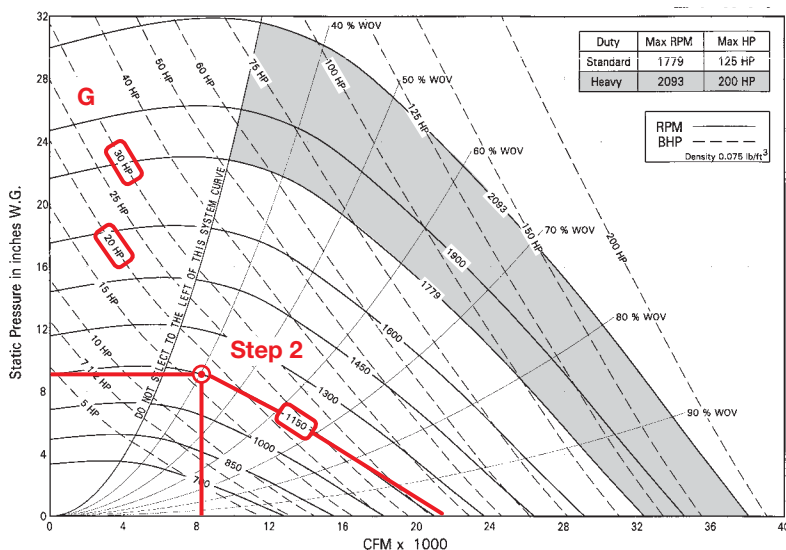
NOTE: The motor size can be compared to the maximum motor frame size table found at the top of the performance table. Motor frame sizes are based on fan arrangement.

STEP 2

Enter the fan curve with the desired CFM and static pressure. Obtain the fan operating point, % WOV, operating HP, free air HP and verify fan duty using the curve shading.

EXAMPLE: For this example the fan operating point is at 41% WOV using a 20 HP motor. The free air HP is 30 and can be found by following the fan RPM curve down to 0 in. static pressure.

NOTE: The free air HP for industrial fans must be considered because the wheels have overloading characteristics. This means the required motor horsepower increases as static pressure decreases.



H % WOV = (CFM X 100) / (RPM X 18.2)

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	$L_{wi}A$
450	100	91	82	75	71	71	69	61	61	76
	80	88	78	71	68	66	61	56	55	72
	60	85	76	68	63	61	56	50	43	67
	40	87	75	66	62	59	54	47	41	67
	30	85	75	67	62	59	54	47	41	67
600	100	96	92	84	79	77	76	70	67	84
	80	93	89	80	76	73	69	64	61	80
	60	90	86	77	72	68	64	58	52	76
	40	92	86	76	70	66	62	56	50	75
	30	90	86	77	70	67	62	56	50	75
850	100	112	111	96	88	85	86	81	76	98
	80	108	108	92	85	82	80	74	71	94
	60	106	105	89	81	78	73	68	64	91
	40	102	101	86	79	75	71	65	62	87
	30	100	100	85	78	74	70	65	62	86
1150	100	108	114	103	95	93	92	93	86	103
	80	107	108	98	91	89	88	84	80	97
	60	107	104	95	88	86	82	76	72	93
	40	105	102	93	86	83	79	74	70	91
	30	105	102	94	87	83	79	74	70	92
1550	100	113	118	117	104	100	99	99	96	111
	80	113	114	111	100	96	95	92	88	106
	60	112	112	106	97	93	90	85	80	102
	40	110	110	104	95	91	88	82	78	100
	30	110	111	105	96	91	88	82	78	101
2093	100	119	122	128	114	107	106	105	106	121
	80	118	121	120	109	104	102	100	97	115
	60	117	120	116	106	100	98	94	88	111
	40	115	118	114	105	99	96	91	86	109
	30	115	118	115	105	99	96	91	86	111

Outlet Sound Power, L_{W0}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{WA}
450	100	96	93	83	76	73	69	62	57	82
	80	94	92	82	75	71	66	59	52	80
	60	91	89	80	73	69	64	56	49	78
	40	91	89	79	72	69	64	55	49	77
	30	91	89	79	72	69	64	55	49	77
600	100	104	99	88	83	80	76	69	66	88
	80	102	98	89	82	77	71	65	60	87
	60	99	94	86	78	72	66	60	54	83
	40	98	93	84	76	70	65	59	53	82
	30	97	93	83	75	70	64	58	53	81
850	100	118	117	101	92	87	85	79	75	103
	80	117	116	99	91	85	80	73	69	102
	60	113	112	96	88	82	77	72	68	98
	40	110	109	94	86	80	75	70	66	95
	30	109	108	93	85	80	75	70	65	94
1150	100	116	120	110	100	95	93	90	84	107
	80	118	115	106	99	94	90	85	80	104
	60	115	110	103	96	92	88	84	79	101
	40	116	114	102	93	89	85	82	78	101
	30	116	115	102	93	88	85	81	77	101
1550	100	121	125	123	110	103	100	98	93	117
	80	123	123	118	108	102	98	94	88	113
	60	120	120	113	105	100	96	92	88	110
	40	121	122	115	102	97	93	90	86	110
	30	121	122	116	102	97	93	89	85	111
2093	100	126	129	133	121	111	108	105	103	126
	80	128	131	127	117	111	106	103	97	122
	60	125	128	123	115	108	104	101	96	118
	40	126	129	126	112	105	101	98	94	120
	30	126	129	127	112	105	101	97	93	120

The sound power level ratings shown are in decibels, referred to 10^{-12} watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

21 IPA

STEP 3

Enter the fan sound table with the fan RPM from the performance table and the % WOV from the fan curve. Obtain the eight octave ratings for inlet (L_{wi}) and outlet (L_{wo}) sound power.

EXAMPLE: For this example, the eight octave ratings are circled in the fan sound table.

NOTE: The exact % WOV for your desired performance point can be found using the equation at the top of the fan sound table if it is not published. The eight octave ratings can then be found using interpolation.

5 IPO

Wheel Diameter = 8¾ in.

Outlet Area = 0.12 ft²

Tip Speed = 2.29 x RPM

Minimum Starting HP = ¼

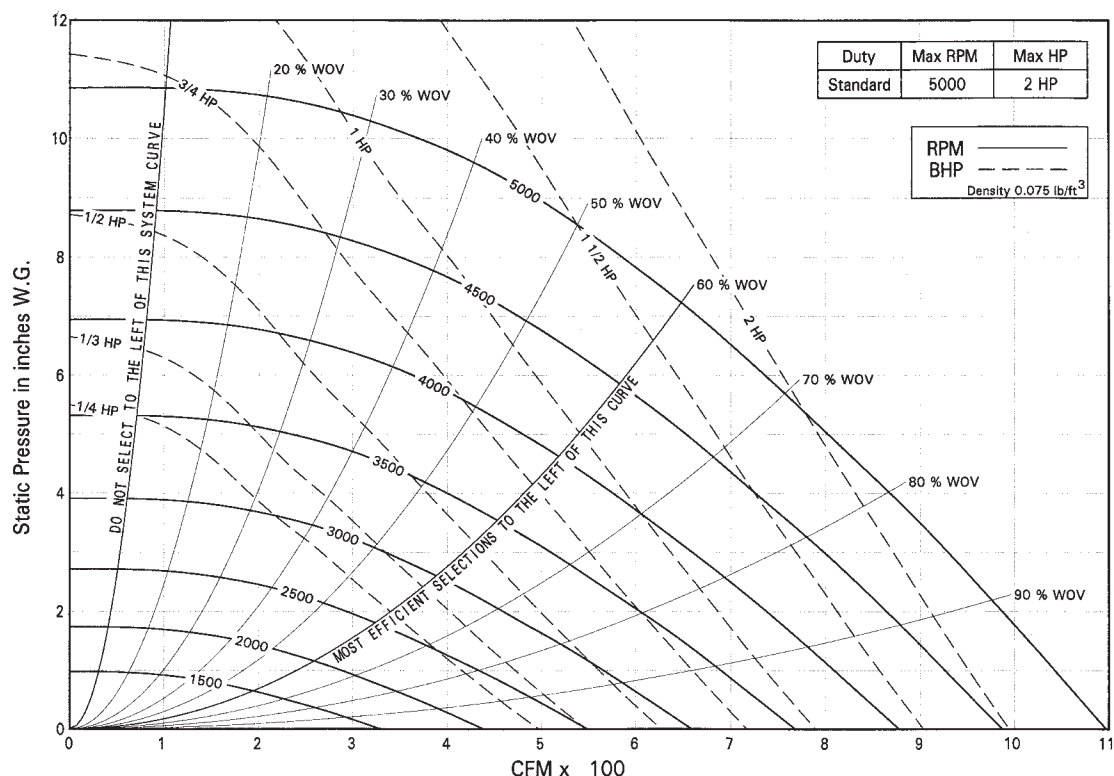
Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
5000	2	145T	145T



CFM	OV	Static Pressure in Inches wg																			
		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00		2.25		2.50	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
50	359	780	0.01	1084	0.01	1321	0.02	1522	0.02	1699	0.03	1861	0.04	2010	0.05	2149	0.06	2279	0.07	2403	0.08
75	539	818	0.01	1107	0.01	1339	0.02	1535	0.03	1711	0.04	1871	0.04	2018	0.05	2155	0.06	2283	0.08	2405	0.09
100	719	875	0.01	1145	0.02	1368	0.02	1560	0.03	1732	0.04	1888	0.05	2031	0.06	2168	0.07	2296	0.08	2417	0.10
125	899	943	0.01	1198	0.02	1407	0.03	1595	0.04	1761	0.05	1913	0.06	2056	0.07	2189	0.08	2315	0.10	2433	0.11
150	1079	1019	0.02	1260	0.03	1461	0.04	1636	0.05	1799	0.06	1948	0.07	2086	0.08	2215	0.10	2340	0.11	2459	0.12
175	1258	1102	0.02	1329	0.03	1520	0.04	1691	0.06	1845	0.07	1987	0.08	2124	0.10	2253	0.11	2373	0.12	2487	0.14
200	1438	1189	0.03	1404	0.04	1586	0.05	1750	0.07	1900	0.08	2039	0.10	2168	0.11	2291	0.12	2411	0.14	252	0.16
225	1618	1279	0.04	1484	0.05	1659	0.07	1816	0.08	1960	0.09	2095	0.11	2223	0.13	2342	0.14	2454	0.16	2564	0.18
250	1798	1373	0.05	1568	0.06	1735	0.08	1887	0.09	2026	0.11	2157	0.13	2278	0.14	2397	0.16	2509	0.18	2615	0.20
275	1978	1470	0.06	1654	0.08	1815	0.09	1962	0.11	2096	0.13	2223	0.15	2343	0.16	2455	0.18	2564	0.20	2670	0.22
300	2158	1568	0.07	1743	0.09	1899	0.11	2039	0.13	2171	0.15	2293	0.17	2409	0.19	2520	0.21	2626	0.23	2726	0.25
325	2338	1669	0.09	1833	0.11	1985	0.13	2121	0.15	2247	0.17	2367	0.19	2479	0.21	2587	0.23	2691	0.26	2790	0.28
350	2517	1772	0.11	1928	0.13	2073	0.15	2205	0.17	2327	0.20	2443	0.22	2554	0.24	2658	0.26	2758	0.29	2856	0.31
375	2697	1876	0.13	2024	0.15	2162	0.18	2291	0.20	2410	0.22	2521	0.25	2630	0.27	2733	0.29	2831	0.32	2924	0.34
400	2877	1981	0.16	2122	0.18	2253	0.21	2379	0.23	2495	0.25	2604	0.28	2707	0.30	2808	0.33	2905	0.36	2998	0.38
425	3057	2087	0.18	2221	0.21	2347	0.24	2468	0.26	2581	0.29	2688	0.32	2789	0.34	2885	0.37	2981	0.39	3073	0.42

CFM	OV	Static Pressure in Inches wg																			
		2.75		3.00		3.25		3.50		3.75		4.00		4.25		4.50		4.75		5.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
75	539	2521	0.10	2633	0.11	2740	0.13	2844	0.14	2943	0.15	3040	0.17	3133	0.19	3224	0.20	3312	0.22	3398	0.24
105	755	2536	0.11	2646	0.12	2752	0.14	2854	0.15	2952	0.17	3047	0.18	3139	0.20	3229	0.21	3316	0.23	3401	0.24
135	971	2556	0.13	2663	0.14	2767	0.15	2869	0.17	2967	0.19	3062	0.20	3155	0.22	3244	0.23	3331	0.25	3416	0.27
165	1187	2586	0.15	2694	0.16	2797	0.18	2896	0.19	2992	0.21	3085	0.23	3174	0.24	3261	0.26	3346	0.27	3431	0.29
195	1402	2626	0.17	2730	0.19	2829	0.20	2927	0.22	3023	0.24	3115	0.26	3205	0.27	3292	0.29	3377	0.31	3459	0.33
225	1618	2672	0.19	2775	0.21	2875	0.23	2970	0.25	3063	0.27	3152	0.29	3238	0.31	3323	0.33	3408	0.35	3490	0.37
255	1834	2727	0.22	2824	0.24	2921	0.26	3016	0.28	3108	0.30	3197	0.32	3284	0.34	3368	0.36	3449	0.38	3529	0.41
285	2050	2793	0.25	2889	0.27	2982	0.29	3071	0.31	3157	0.33	3244	0.36	3330	0.38	3414	0.40	3495	0.42	3575	0.45
315	2266	2860	0.29	2955	0.31	3047	0.33	3136	0.35	3222	0.38	3305	0.40	3386	0.42	3464	0.44	3541	0.47	3621	0.49
345	2482	2937	0.33	3028	0.35	3115	0.37	3203	0.40	3288	0.42	3371	0.44	3451	0.47	3529	0.49	3606	0.52	3680	0.54
375	2697	3017	0.37	3107	0.39	3193	0.42	3277	0.44	3358	0.47	3438	0.49	3518	0.52	3596	0.55	3671	0.57	3745	0.60
405	2913	3101	0.41	3187	0.44	3273	0.47	3356	0.49	3436	0.52	3514	0.55	3590	0.58	3663	0.60	3738	0.63	3812	0.66
435	3129	3190	0.47	3274	0.49	3356	0.52	3435	0.55	3515	0.58	3593	0.61	3668	0.64	3741	0.67	3813	0.70	3883	0.72
465	3345	3281	0.52	3364	0.55	3445	0.58	3522	0.61	3598	0.64	3673	0.67	3747	0.70	3820	0.73	3891	0.77	3961	0.80
495	3561	3373	0.58	3455	0.62	3535	0.65	3612	0.68	3687	0.71	3759	0.74	3830	0.77	3900	0.81	3971	0.84	4040	0.87
525	3776	3471	0.65	3549	0.69	3627	0.72	3703	0.75	3777	0.79	3849	0.82	3919	0.85	3987	0.89	4054	0.92	4120	0.95

CFM	OV	Static Pressure in Inches wg																			
		5.50		6.00		6.50		7.00		7.50		8.00		8.50		9.00		9.50		10.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
75	539	3564	0.27																		
115	827	3569	0.29	3725	0.32	3876	0.36	4022	0.40	4163	0.44	4300	0.48	4432	0.53	4560	0.57	4685	0.62	4806	0.67
155	1115	3589	0.32	3745	0.36	3895	0.40	4039	0.44	4178	0.48	4313	0.52	4443	0.57	4570	0.61	4693	0.66	4813	0.70
195	1402	3619	0.37	3771	0.40	3916	0.44	4060	0.49	4199	0.53	4333	0.58	4463	0.62	4590	0.67	4713	0.72	4833	0.77
235	1690	3660	0.42	3812	0.46	3957	0.51	4098	0.55	4233	0.60	4364	0.64	4491	0.69	4614	0.73	4734	0.78	4853	0.83
275	1978	3713	0.48	3859	0.53	4000	0.57	4139	0.62	4274	0.67	4405	0.72	4532	0.77	4655	0.82	4775	0.87	4892	0.93
315	2266	3774	0.54	3920	0.59	4061	0.65	4196	0.70	4326	0.75	4453	0.80	4575	0.86	4697	0.91	4816	0.97	4933	1.03
355	2553	3845	0.61	3982	0.66	4122	0.72	4257	0.78	4387	0.84	4513	0.89	4636	0.95	4754	1.01	4870	1.07	4983	1.13
395	2841	3932	0.70	4068	0.75	4199	0.81	4325	0.87	4449	0.92	4575	0.99	4697	1.05	4815	1.11	4931	1.18		
435	3129	4021	0.78	4156	0.85	4287	0.91	4413	0.97	4534	1.03	4652	1.09	4766	1.16	4877	1.22	4992	1.29		
475	3417	4121	0.88	4249	0.95	4376	1.01	4501	1.08	4622	1.15	4739	1.22	4853	1.28	4963	1.35				
515	3705	4226	0.99	4353	1.06	4476	1.13	4595	1.20	4711	1.27	4828	1.34	4941	1.42						
555	3992	4334	1.11	4459	1.19	4581	1.26	4699	1.34	4813	1.41	4923	1.48								
595	4280	4452	1.25	4571	1.32	4688	1.40	4805	1.48	4918	1.56										
635	4568	4572	1.39	4690	1.47	4804	1.56	4915	1.64												
675	4856	4693	1.55	4810	1.64	4924	1.72														



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.219)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1200	100	95	98	79	65	58	52	45	39	83
	70	92	94	74	60	52	47	41	36	79
	40	89	91	69	56	48	44	39	35	76
	20	92	93	68	56	46	43	39	36	77
	0	86	88	68	56	47	44	39	35	73
1600	100	100	101	88	74	65	59	53	48	87
	70	99	98	81	68	59	54	47	42	83
	40	98	90	73	62	53	49	43	37	77
	20	98	89	72	60	49	47	41	37	76
	0	100	90	72	60	51	47	41	37	78
2100	100	102	100	94	83	73	67	61	58	89
	70	100	97	88	76	66	60	55	50	84
	40	101	93	83	68	59	55	49	45	81
	20	95	89	80	67	56	53	48	45	77
	0	100	91	83	67	57	53	47	44	80
2800	100	104	105	105	90	80	75	70	65	98
	70	100	100	99	82	73	68	63	59	92
	40	99	97	84	74	66	62	57	54	84
	20	99	94	80	70	63	59	54	52	81
	0	103	93	85	72	65	60	55	53	82
3800	100	110	111	101	96	88	83	78	74	100
	70	104	105	96	90	81	77	71	68	94
	40	103	100	90	81	74	70	65	62	88
	20	103	98	87	78	71	67	62	60	85
	0	107	98	92	80	73	68	62	61	88
5000	100	114	117	112	101	97	91	86	82	107
	70	109	111	106	95	91	84	79	75	101
	40	107	107	100	86	83	77	73	69	95
	20	107	106	97	82	80	74	70	67	94
	0	112	108	100	85	82	76	70	67	96

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1200	100	95	97	82	73	64	55	47	39	82
	70	87	88	72	63	54	48	40	35	74
	40	84	86	69	59	50	45	39	35	71
	20	85	87	70	59	50	45	39	35	72
	0	86	87	70	59	49	44	39	35	73
1600	100	100	97	89	81	72	64	56	49	86
	70	97	91	80	71	62	55	48	42	79
	40	92	88	77	67	57	50	45	39	75
	20	89	87	77	67	56	50	45	39	74
	0	86	86	78	67	55	48	45	40	74
2100	100	106	99	97	90	80	72	65	58	92
	70	101	93	89	80	70	63	56	50	84
	40	97	88	82	73	63	56	52	47	78
	20	94	88	83	75	63	56	52	48	78
	0	91	87	84	76	63	55	52	48	79
2800	100	110	101	107	97	87	80	74	68	100
	70	108	98	100	89	79	72	66	60	93
	40	103	93	88	83	71	64	60	55	85
	20	103	93	91	84	71	63	60	55	86
	0	103	92	95	85	71	63	61	55	88
3800	100	117	110	117	120	97	90	84	78	117
	70	108	103	106	105	89	82	75	69	104
	40	107	100	98	89	80	73	69	63	93
	20	106	98	97	98	83	72	68	62	96
	0	110	103	101	101	86	74	70	65	100
5000	100	122	119	120	125	113	98	92	86	123
	70	113	111	110	110	102	90	84	78	109
	40	112	109	104	94	90	82	77	71	100
	20	110	107	103	102	95	82	76	71	102
	0	114	112	108	106	99	85	78	73	106

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

7 IPO

Wheel Diameter = 12¹/₈ in.

Outlet Area = 0.26 ft²

Tip Speed = 3.17 x RPM

Minimum Starting HP = ¼

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
5000	10	215T	184T

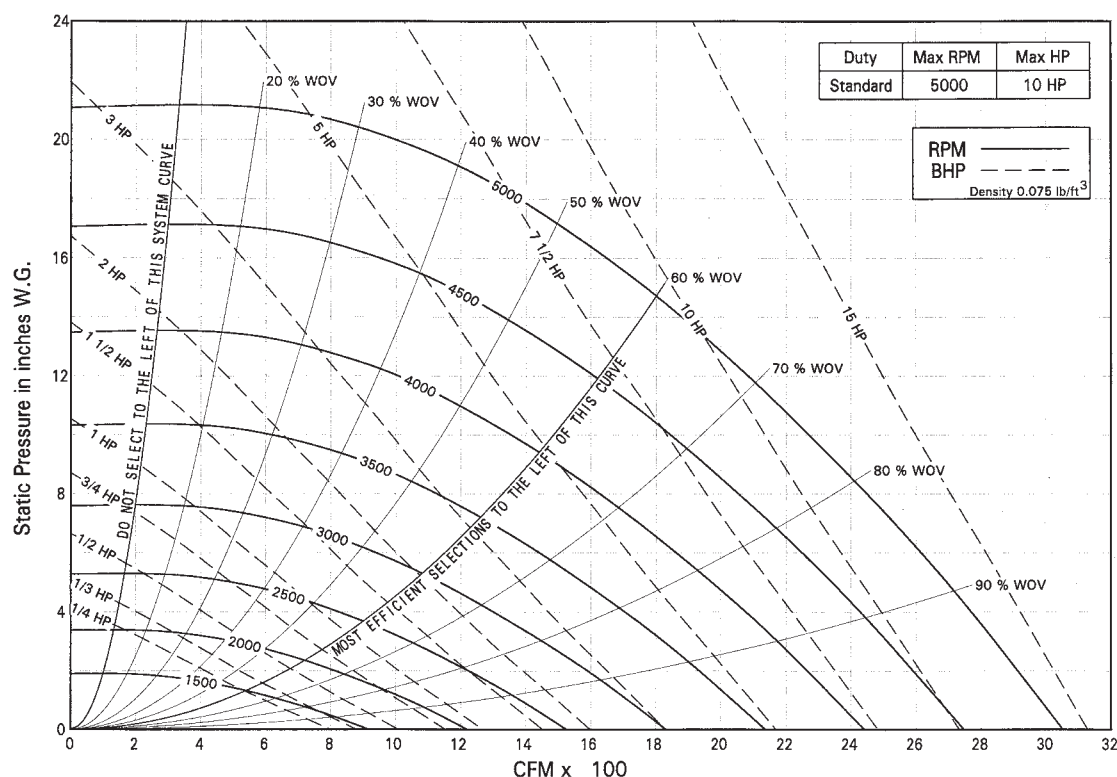


CFM	OV	Static Pressure in Inches wg																			
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
150	551	788	0.02	1093	0.05	1336	0.08	1540	0.12	1720	0.16	1883	0.21	2033	0.25	2173	0.30				
200	735	813	0.03	1110	0.06	1343	0.10	1545	0.14	1725	0.18	1888	0.23	2038	0.28	2177	0.34	2308	0.39	2432	0.45
250	919	849	0.04	1132	0.08	1362	0.12	1558	0.16	1731	0.21	1893	0.26	2043	0.31	2182	0.37	2313	0.43	2437	0.49
300	1102	892	0.05	1161	0.09	1383	0.14	1576	0.18	1749	0.24	1906	0.29	2050	0.34	2187	0.40	2318	0.47	2442	0.53
350	1286	940	0.06	1197	0.11	1410	0.16	1599	0.21	1768	0.27	1924	0.32	2068	0.39	2202	0.45	2328	0.51	2447	0.58
400	1470	993	0.08	1240	0.13	1445	0.19	1626	0.24	1792	0.30	1943	0.36	2087	0.43	2221	0.50	2346	0.57	2465	0.64
450	1654	1049	0.10	1284	0.16	1485	0.22	1660	0.28	1820	0.34	1970	0.41	2108	0.47	2239	0.55	2365	0.62	2484	0.70
500	1838	1108	0.12	1335	0.19	1528	0.25	1698	0.32	1854	0.38	1997	0.45	2135	0.53	2264	0.60	2385	0.68	2502	0.76
550	2022	1170	0.15	1387	0.22	1572	0.29	1740	0.36	1891	0.43	2033	0.51	2164	0.58	2291	0.66	2412	0.74	2526	0.83
600	2205	1235	0.18	1441	0.25	1622	0.33	1784	0.41	1933	0.49	2070	0.56	2200	0.65	2322	0.73	2439	0.81	2553	0.90
650	2389	1301	0.21	1499	0.29	1674	0.38	1830	0.46	1977	0.54	2111	0.63	2237	0.71	2358	0.80	2473	0.89	2581	0.98
700	2573	1369	0.25	1559	0.34	1727	0.43	1881	0.52	2021	0.61	2155	0.70	2279	0.79	2395	0.88	2509	0.97	2617	1.07
750	2757	1437	0.30	1620	0.39	1783	0.48	1933	0.58	2069	0.67	2199	0.77	2322	0.87	2438	0.97	2547	1.06	2654	1.16
800	2941	1507	0.35	1684	0.45	1841	0.55	1986	0.64	2121	0.75	2245	0.85	2366	0.95	2481	1.06	2589	1.16	2692	1.27
850	3124	1578	0.40	1749	0.51	1900	0.61	2040	0.72	2173	0.82	2296	0.93	2411	1.04	2525	1.15	2633	1.26	2735	1.38
900	3308	1652	0.47	1815	0.58	1961	0.69	2098	0.80	2226	0.91	2348	1.02	2462	1.14	2569	1.25	2677	1.37	2779	1.49

CFM	OV	Static Pressure in Inches wg																			
		5.5		6.0		6.5		7.0		7.5		8.0		8.5		9.0		9.5		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	735	2550	0.51	2662	0.57	2770	0.63	2875	0.70	2977	0.77										
275	1011	2557	0.58	2670	0.65	2778	0.72	2881	0.79	2982	0.86	3079	0.94	3173	1.01	3264	1.09	3353	1.17	3439	1.25
350	1286	2564	0.65	2677	0.72	2785	0.80	2889	0.88	2989	0.96	3086	1.04	3180	1.12	3271	1.21	3360	1.29	3446	1.38
425	1562	2588	0.74	2696	0.82	2799	0.90	2899	0.97	2996	1.06	3093	1.14	3187	1.23	3278	1.32	3367	1.42	3453	1.51
500	1838	2615	0.84	2724	0.93	2827	1.01	2927	1.10	3023	1.19	3116	1.28	3206	1.37	3294	1.46	3379	1.55	3462	1.65
575	2113	2649	0.95	2753	1.04	2855	1.13	2955	1.23	3051	1.32	3144	1.42	3234	1.52	3322	1.62	3407	1.72	3490	1.82
650	2389	2689	1.07	2793	1.17	2893	1.27	2989	1.37	3081	1.47	3172	1.57	3262	1.68	3350	1.78	3435	1.89	3518	2.00
725	2665	2738	1.21	2837	1.31	2934	1.42	3030	1.52	3122	1.63	3212	1.74	3298	1.85	3383	1.96	3464	2.07	3546	2.19
800	2941	2793	1.37	2891	1.48	2986	1.59	3077	1.70	3164	1.81	3253	1.92	3339	2.04	3423	2.16	3505	2.28	3585	2.40
875	3216	2855	1.55	2948	1.66	3040	1.78	3131	1.90	3219	2.01	3303	2.13	3385	2.25	3465	2.37	3546	2.50	3626	2.63
950	3492	2920	1.73	3013	1.86	3102	1.98	3189	2.11	3273	2.23	3358	2.36	3440	2.49	3520	2.62	3597	2.75	3673	2.88
1025	3768	2986	1.94	3078	2.07	3167	2.21	3253	2.34	3336	2.47	3417	2.61	3495	2.74	3574	2.88	3652	3.02	3727	3.16
1100	4044	3057	2.16	3145	2.30	3233	2.44	3319	2.59	3401	2.73	3481	2.87	3559	3.02	3635	3.16	3709	3.30	3782	3.45
1175	4319	3134	2.40	3220	2.55	3302	2.70	3385	2.85	3467	3.00	3547	3.16	3624	3.31	3700	3.46	3773	3.62	3845	3.77
1250	4595	3212	2.65	3297	2.81	3379	2.97	3458	3.13	3535	3.29	3613	3.45	3690	3.62	3765	3.78	3838	3.94	3910	4.11
1325	4871	3291	2.93	3375	3.10	3456	3.27	3535	3.44	3611	3.61	3685	3.78	3757	3.94	3832	4.12	3904	4.29	3975	4.46

CFM	OV	Static Pressure in Inches wg																			
		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0		20.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
300	1102	3608	1.47	3767	1.65	3920	1.83	4067	2.02	4209	2.21	4347	2.42	4482	2.63						
400	1470	3618	1.66	3777	1.85	3929	2.05	4076	2.26	4218	2.47	4355	2.68	4488	2.90	4617	3.12	4742	3.35	4865	3.59
500	1838	3627	1.85	3786	2.06	3939	2.28	4086	2.50	4228	2.72	4365	2.96	4498	3.19	4627	3.43	4752	3.68	4874	3.93
600	2205	3659	2.09	3812	2.31	3959	2.53	4100	2.75	4237	2.98	4374	3.23	4507	3.49	4636	3.74	4762	4.01	4884	4.27
700	2573	3696	2.36	3849	2.60	3996	2.84	4137	3.08	4273	3.33	4405	3.58	4532	3.84	4656	4.10	4777	4.36	4894	4.62
800	2941	3739	2.65	3887	2.90	4033	3.16	4174	3.42	4310	3.69	4442	3.97	4569	4.24	4693	4.52	4814	4.80	4931	5.09
900	3308	3793	2.97	3940	3.24	4081	3.52	4217	3.79	4348	4.07	4479	4.36	4607	4.66	4730	4.96	4851	5.26	4968	5.57
1000	3676	3855	3.33	3995	3.61	4135	3.90	4271	4.20	4402	4.50	4528	4.81	4651	5.11	4770	5.42	4888	5.74		
1100	4044	3927	3.75	4066	4.05	4200	4.34	4329	4.64	4456	4.96	4583	5.28	4705	5.61	4824	5.94	4940	6.28		
1200	4411	4005	4.19	4140	4.51	4273	4.84	4401	5.16	4525	5.49	4645	5.81	4761	6.14	4879	6.49	4995	6.85		
1300	4779	4091	4.68	4223	5.02	4350	5.36	4474	5.71	4598	6.06	4717	6.41	4833	6.76	4946	7.12				
1400	5147	4179	5.21	4310	5.57	4436	5.94	4558	6.30	4676	6.67	4791	7.04	4906	7.42						
1500	5514	4267	5.76	4398	6.16	4523	6.55	4645	6.94	4762	7.33	4876	7.73	4986	8.12						
1600	5882	4369	6.38	4491	6.79	4612	7.20	4732	7.62	4849	8.04	4962	8.46								
1700	6249	4472	7.03	4593	7.47	4709	7.90	4822	8.34	4937	8.78										
1800	6617	4577	7.73	4696	8.20	4812	8.66	4924	9.12												

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.610)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1200	100	101	102	88	75	68	63	58	53	88
	70	99	96	82	71	63	61	57	54	82
	40	98	86	75	68	61	59	57	54	76
	20	97	83	76	70	61	59	57	54	75
	0	99	87	76	72	63	60	57	53	77
1600	100	103	100	92	83	76	70	65	61	89
	70	103	98	86	78	70	65	61	58	85
	40	102	94	80	73	65	62	58	55	82
	20	102	93	78	72	64	62	58	55	81
	0	103	100	82	72	64	63	59	56	86
2100	100	107	105	101	91	83	78	73	69	95
	70	106	102	96	84	77	72	67	63	91
	40	104	98	90	79	71	67	62	60	86
	20	104	96	88	77	69	65	61	59	85
	0	108	97	89	78	69	65	61	60	87
2800	100	116	113	116	101	90	85	81	77	108
	70	115	110	109	94	84	79	75	71	102
	40	113	107	100	87	78	73	69	67	95
	20	113	106	93	84	76	72	68	66	93
	0	116	106	91	83	76	71	67	66	94
3800	100	119	116	111	106	99	94	90	86	108
	70	119	114	105	100	93	88	84	81	103
	40	116	110	100	94	86	81	77	74	98
	20	117	108	96	90	84	79	75	72	97
	0	120	109	95	90	83	77	73	71	98
5000	100	124	124	118	116	107	102	97	94	117
	70	123	123	114	110	101	96	92	88	112
	40	121	120	110	104	95	89	85	81	108
	20	122	120	107	99	92	87	82	79	106
	0	124	122	107	98	91	86	80	77	108

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1200	100	100	98	93	82	72	66	59	53	88
	70	99	90	85	75	65	62	56	50	80
	40	94	84	80	73	63	61	56	50	76
	20	91	86	81	73	63	61	56	50	77
	0	89	87	82	73	63	61	56	50	77
1600	100	109	106	101	89	80	74	67	61	96
	70	105	99	93	82	72	68	61	57	88
	40	101	93	86	77	66	64	59	55	82
	20	99	95	87	78	67	64	59	55	83
	0	98	96	88	79	67	63	59	55	84
2100	100	112	107	106	98	89	82	75	70	101
	70	108	102	100	90	81	74	67	63	95
	40	102	95	92	85	73	67	62	60	87
	20	100	94	92	86	73	66	61	59	87
	0	98	93	92	89	73	66	61	59	88
2800	100	120	111	117	105	96	90	84	78	110
	70	118	108	111	98	89	83	77	72	104
	40	114	102	102	90	82	75	70	67	96
	20	110	99	103	90	80	72	67	65	96
	0	105	97	108	92	81	72	67	64	100
3800	100	118	114	116	113	105	99	93	88	113
	70	116	111	113	108	97	91	85	80	108
	40	114	108	107	101	91	84	79	75	102
	20	110	105	105	100	89	81	76	73	101
	0	108	103	105	100	90	80	74	71	101
5000	100	123	123	120	125	113	107	102	96	123
	70	121	120	117	121	106	100	93	88	119
	40	119	118	112	115	99	93	87	82	113
	20	115	114	109	113	98	90	84	80	111
	0	113	112	108	113	99	90	81	78	111

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

9 IPO

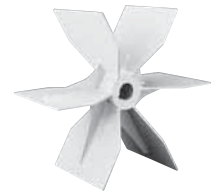
Wheel Diameter = 15⁵/₈ in.

Outlet Area = 0.44 ft²

Tip Speed = 4.09 x RPM

Minimum Starting HP = ¼

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
4156	20	256T	215T

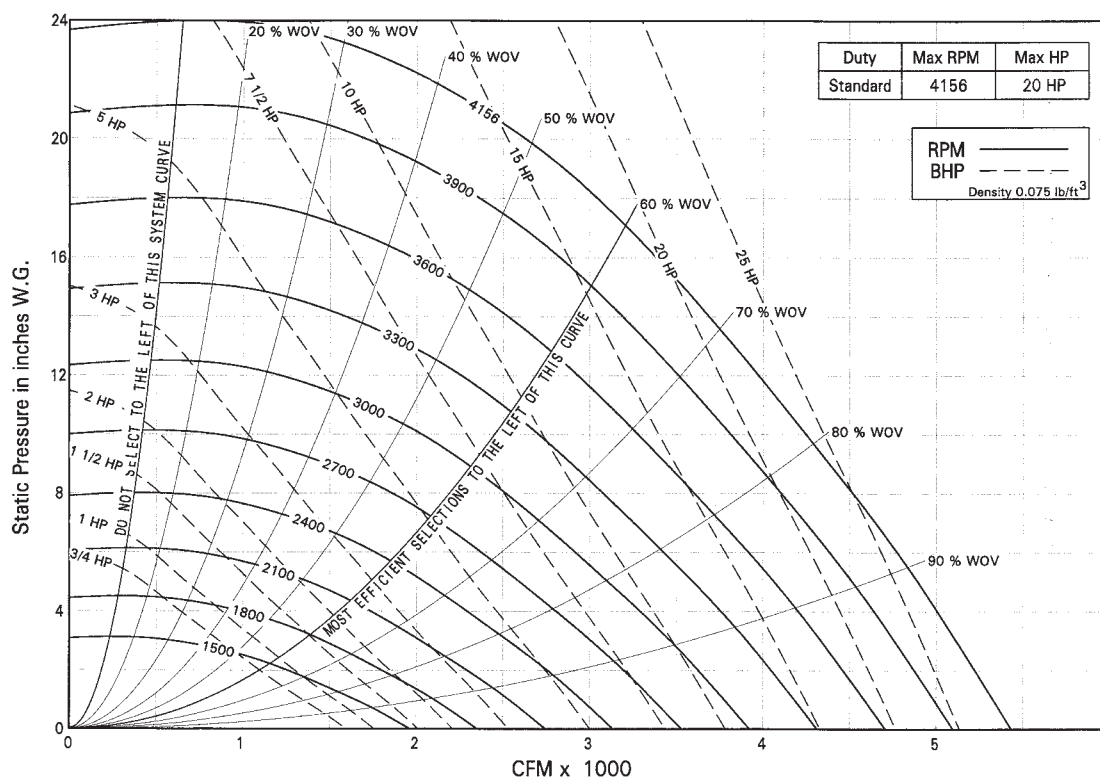


CFM	OV	Static Pressure in Inches wg																			
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
250	564	613	0.04	853	0.08	1041	0.13	1201	0.19	1341	0.25	1470	0.32	1588	0.40						
350	790	637	0.05	866	0.10	1048	0.16	1206	0.22	1346	0.29	1473	0.37	1589	0.44	1698	0.52	1800	0.61	1896	0.70
450	1015	669	0.07	889	0.13	1065	0.19	1218	0.26	1352	0.34	1479	0.42	1595	0.51	1703	0.60	1805	0.69	1902	0.79
550	1241	713	0.09	917	0.16	1089	0.24	1235	0.31	1370	0.40	1491	0.49	1603	0.58	1709	0.67	1811	0.77	1907	0.88
650	1467	760	0.13	952	0.20	1115	0.29	1261	0.37	1390	0.46	1509	0.56	1621	0.66	1725	0.76	1823	0.87	1915	0.98
750	1693	815	0.16	996	0.25	1149	0.34	1288	0.44	1416	0.54	1533	0.64	1640	0.75	1742	0.86	1840	0.97	1932	1.09
850	1918	871	0.21	1042	0.31	1189	0.41	1321	0.51	1443	0.62	1559	0.74	1666	0.85	1766	0.97	1859	1.09	1950	1.21
950	2144	929	0.27	1092	0.38	1234	0.49	1359	0.60	1477	0.72	1587	0.84	1692	0.97	1792	1.10	1885	1.23	1974	1.36
1050	2370	990	0.33	1147	0.45	1280	0.58	1404	0.70	1515	0.82	1621	0.96	1723	1.09	1819	1.23	1912	1.37	2000	1.51
1150	2595	1053	0.41	1202	0.54	1330	0.68	1450	0.81	1559	0.95	1659	1.08	1757	1.23	1851	1.37	1939	1.52	2027	1.68
1250	2821	1117	0.50	1259	0.64	1385	0.79	1496	0.93	1604	1.08	1703	1.23	1795	1.38	1885	1.53	1974	1.69	2057	1.85
1350	3047	1182	0.60	1317	0.76	1440	0.92	1548	1.07	1650	1.23	1749	1.39	1840	1.55	1925	1.71	2008	1.87	2091	2.05
1450	3273	1248	0.72	1378	0.89	1496	1.06	1603	1.23	1699	1.39	1795	1.57	1885	1.74	1970	1.91	2050	2.08	2127	2.25
1550	3498	1316	0.85	1441	1.03	1554	1.21	1658	1.40	1753	1.58	1841	1.75	1931	1.94	2015	2.12	2095	2.31	2171	2.49
1650	3724	1385	1.01	1504	1.20	1612	1.39	1714	1.58	1808	1.77	1894	1.96	1978	2.15	2061	2.35	2140	2.55	2216	2.74
1750	3950	1456	1.18	1568	1.38	1672	1.58	1771	1.78	1863	1.99	1949	2.19	2029	2.39	2108	2.60	2186	2.81	2261	3.02

CFM	OV	Static Pressure in Inches wg																			
		5.5		6.0		6.5		7.0		7.5		8.0		9.0		10.0		11.0		12.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
400	902	1990	0.83	2078	0.93	2162	1.03	2244	1.15	2324	1.26	2400	1.39	2475	1.51	2547	1.64				
550	1241	1999	0.99	2086	1.10	2170	1.21	2251	1.32	2329	1.44	2404	1.56	2477	1.68	2548	1.81	2617	1.93	2685	2.06
700	1580	2012	1.15	2096	1.27	2179	1.39	2259	1.52	2337	1.65	2413	1.78	2486	1.92	2557	2.06	2626	2.20	2693	2.34
850	1918	2038	1.34	2122	1.48	2202	1.61	2280	1.75	2355	1.88	2427	2.02	2498	2.17	2566	2.31	2634	2.46	2701	2.62
1000	2257	2071	1.57	2152	1.71	2229	1.85	2306	2.00	2381	2.15	2453	2.31	2523	2.46	2592	2.62	2658	2.78	2723	2.95
1150	2595	2111	1.83	2191	1.99	2268	2.14	2343	2.30	2414	2.46	2484	2.62	2551	2.78	2618	2.95	2684	3.12	2748	3.30
1300	2934	2154	2.12	2231	2.28	2308	2.46	2382	2.64	2454	2.81	2523	2.99	2590	3.17	2655	3.35	2719	3.52	2781	3.70
1450	3273	2205	2.44	2281	2.62	2354	2.81	2424	2.99	2494	3.18	2563	3.38	2630	3.58	2695	3.77	2758	3.97	2820	4.17
1600	3611	2265	2.80	2335	2.99	2406	3.19	2476	3.40	2543	3.60	2609	3.81	2672	4.01	2735	4.22	2798	4.44	2860	4.65
1750	3950	2332	3.22	2401	3.43	2468	3.64	2532	3.84	2595	4.05	2660	4.28	2724	4.50	2785	4.73	2845	4.95	2904	5.18
1900	4288	2401	3.68	2469	3.91	2535	4.13	2598	4.36	2660	4.58	2719	4.80	2777	5.03	2837	5.26	2897	5.51	2955	5.75
2050	4627	2470	4.18	2538	4.43	2603	4.67	2666	4.92	2727	5.16	2786	5.40	2843	5.64	2900	5.88	2954	6.12	3008	6.36
2200	4966	2547	4.74	2608	4.99	2672	5.25	2735	5.52	2795	5.78	2854	6.04	2911	6.30	2966	6.56	3021	6.82	3074	7.08
2350	5304	2628	5.36	2688	5.63	2747	5.90	2805	6.17	2864	6.45	2923	6.73	2979	7.01	3034	7.29	3088	7.57	3141	7.85
2500	5643	2710	6.03	2770	6.32	2827	6.61	2883	6.90	2937	7.18	2993	7.47	3049	7.77	3103	8.07	3157	8.37	3209	8.67
2650	5981	2794	6.76	2853	7.07	2909	7.38	2964	7.69	3018	7.99	3070	8.29	3121	8.60	3173	8.91	3226	9.23	3278	9.54

CFM	OV	Static Pressure in Inches wg																			
		13.0		14.0		15.0		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
550	1241	3059	2.91	3175	3.23	3287	3.56	3395	3.90	3501	4.26										
730	1647	3067	3.30	3181	3.62	3291	3.95	3398	4.28	3501	4.61	3601	4.96	3699	5.31	3794	5.66	3887	6.02	3978	6.42
910	2054	3077	3.74	3191	4.09	3301	4.44	3408	4.81	3511	5.18	3612	5.55	3709	5.93	3804	6.32	3897	6.71	3987	7.11
1090	2460	3096	4.21	3205	4.58	3311	4.95	3418	5.34	3521	5.74	3622	6.15	3719	6.57	3814	6.99	3907	7.41	3997	7.84
1270	2866	3127	4.76	3236	5.16	3342	5.57	3445	5.98	3544	6.39	3641	6.81	3734	7.24	3826	7.67	3917	8.12	4008	8.58
1450	3273	3162	5.37	3268	5.77	3373	6.21	3476	6.66	3575	7.11	3672	7.57	3765	8.03	3857	8.50	3946	8.97	4033	9.44
1630	3679	3209	6.08	3314	6.53	3416	6.98	3514	7.43	3609	7.88	3703	8.35	3796	8.85	3888	9.35	3977	9.86	4064	10.4
1810	4085	3257	6.83	3362	7.33	3463	7.82	3561	8.31	3656	8.81	3748	9.31	3838	9.81	3925	10.3	4011	10.8	4095	11.3
1990	4492	3309	7.64	3409	8.16	3510	8.70	3608	9.24	3703	9.78	3795	10.3	3885	10.9	3972	11.4	4057	12.0	4141	12.5
2170	4898	3370	8.54	3469	9.10	3565	9.66	3658	10.2	3751	10.8	3843	11.4	3932	12.0	4020	12.6	4105	13.1		
2350	5304	3435	9.51	3531	10.1	3627	10.7	3719	11.3	3809	11.9	3896	12.5	3981	13.1	4068	13.7	4153	14.4		
2530	5711	3514	10.6	3605	11.2	3692	11.8	3782	12.5	3871	13.1	3958	13.8	4043	14.4	4125	15.1				
2710	6117	3595	11.8	3685	12.5	3772	13.1	3856	13.8	3938	14.4	4020	15.1	4105	15.8						
2890	6523	3677	13.1	3766	13.8	3852	14.5	3936	15.2	4017	15.9	4097	16.6								
3070	6930	3760	14.5	3849	15.3	3934	16.0	4017	16.7	4098	17.5										
3250	7336	3845	16.0	3932	16.8	4017	17.6	4100	18.4												

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 1.31)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1000	100	101	89	85	74	71	64	59	56	81
	70	100	85	76	65	64	58	54	49	77
	40	94	84	68	59	58	55	51	45	72
	20	91	82	65	56	55	54	51	44	70
	0	95	100	68	59	57	55	52	45	84
1300	100	106	95	92	84	78	72	66	63	88
	70	105	91	85	75	70	66	61	57	83
	40	99	89	80	68	64	61	58	53	78
	20	96	88	77	65	61	60	58	53	76
	0	99	104	86	68	63	61	59	53	89
1800	100	111	107	100	93	87	82	76	72	97
	70	112	104	94	85	80	75	69	65	92
	40	105	98	87	77	72	69	64	61	86
	20	103	98	86	73	69	66	62	59	85
	0	106	101	88	75	71	67	63	59	88
2400	100	118	111	119	104	96	90	85	81	111
	70	114	107	104	95	89	83	78	74	99
	40	110	106	96	88	82	77	71	68	94
	20	108	102	85	85	79	72	68	65	89
	0	112	107	93	88	80	73	68	65	94
3200	100	123	117	112	108	103	99	94	89	110
	70	117	113	107	102	96	92	86	82	104
	40	115	110	102	95	89	85	80	76	99
	20	114	110	100	93	87	82	77	74	98
	0	116	114	104	95	88	81	76	73	101
4156	100	127	127	117	117	109	107	101	96	118
	70	121	122	114	111	103	99	94	89	112
	40	119	120	110	104	96	93	87	83	108
	20	119	119	109	102	95	89	84	80	107
	0	121	122	114	104	96	89	83	79	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1000	100	101	107	95	78	73	66	60	55	93
	70	96	95	81	70	65	59	54	51	81
	40	93	88	78	66	62	56	52	49	75
	20	90	90	78	65	60	55	50	48	76
	0	87	92	78	63	57	53	49	47	78
1300	100	105	112	105	90	81	75	68	62	100
	70	101	100	92	80	73	67	62	58	88
	40	98	93	87	76	69	64	59	56	82
	20	95	95	88	75	67	62	58	55	83
	0	92	97	89	74	65	60	56	53	84
1800	100	109	113	109	98	91	85	78	73	103
	70	108	107	101	91	84	78	72	67	97
	40	104	101	96	86	79	73	68	65	91
	20	101	99	93	82	75	69	65	62	88
	0	98	99	94	82	74	68	63	60	89
2400	100	128	122	123	113	101	94	88	84	117
	70	112	112	112	101	92	86	80	75	105
	40	108	108	102	94	87	82	76	71	98
	20	106	105	104	96	84	76	71	68	98
	0	105	104	105	96	84	75	69	66	99
3200	100	119	119	123	118	108	102	96	91	118
	70	117	118	117	109	101	95	89	84	112
	40	114	115	112	104	97	91	85	80	107
	20	112	113	110	102	94	88	82	77	105
	0	110	110	110	102	91	84	77	73	104
4156	100	124	126	126	129	116	110	104	98	127
	70	121	123	123	120	109	103	97	91	119
	40	118	121	119	114	105	99	93	87	115
	20	116	119	117	112	102	96	90	84	113
	0	115	117	115	113	100	92	85	80	112

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

11 IPO

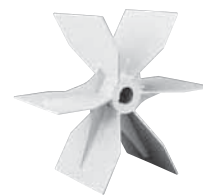
Wheel Diameter = 19 1/8 in.

Outlet Area = 0.66 ft²

Tip Speed = 5.01 x RPM

Minimum Starting HP = 1/3

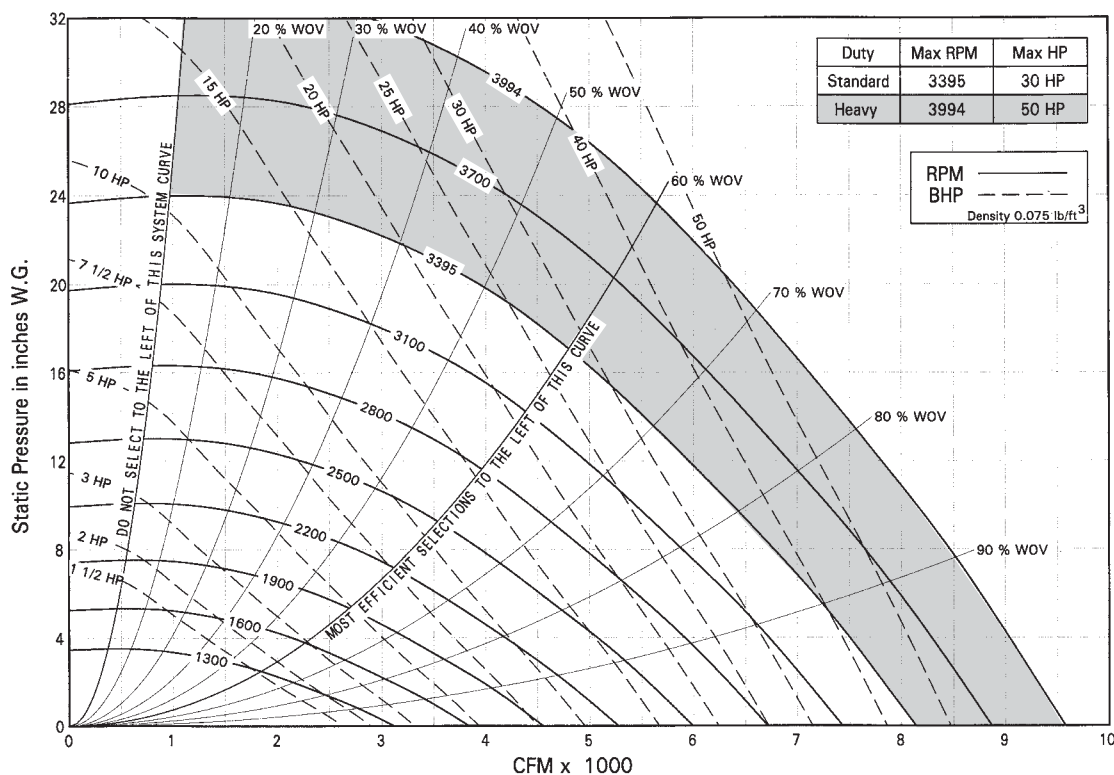
Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	3395	30	256T	254T
Heavy	3994	50	256T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
475	719	703	0.14	984	0.32	1202	0.52	1386	0.75	1550	1.03										
650	984	723	0.19	993	0.39	1207	0.62	1391	0.88	1553	1.15	1699	1.45	1834	1.76	1960	2.10	2080	2.49	2193	2.89
825	1250	749	0.24	1009	0.47	1218	0.73	1396	1.01	1558	1.32	1704	1.64	1839	1.98	1964	2.34	2082	2.71	2193	3.09
1000	1515	784	0.32	1034	0.58	1235	0.85	1411	1.17	1567	1.49	1710	1.84	1844	2.21	1970	2.60	2087	3.00	2199	3.41
1175	1780	826	0.41	1061	0.70	1260	1.01	1429	1.34	1584	1.70	1724	2.07	1853	2.46	1975	2.86	2093	3.29	2204	3.74
1350	2045	871	0.51	1094	0.83	1285	1.18	1453	1.55	1602	1.92	1741	2.32	1870	2.74	1990	3.18	2103	3.62	2210	4.07
1525	2310	922	0.64	1135	1.00	1316	1.38	1479	1.78	1627	2.19	1762	2.61	1887	3.04	2007	3.51	2120	3.99	2227	4.47
1700	2575	975	0.79	1178	1.19	1350	1.59	1508	2.02	1653	2.47	1787	2.93	1911	3.40	2026	3.87	2136	4.37	2243	4.89
1875	2840	1030	0.97	1223	1.40	1392	1.85	1541	2.30	1681	2.78	1812	3.28	1936	3.78	2051	4.30	2159	4.81	2262	5.33
2050	3106	1085	1.17	1273	1.65	1435	2.13	1580	2.62	1714	3.12	1841	3.65	1961	4.19	2076	4.74	2184	5.30	2286	5.86
2225	3371	1144	1.40	1325	1.93	1480	2.44	1622	2.97	1750	3.50	1874	4.05	1990	4.62	2101	5.21	2209	5.81	2311	6.41
2400	3636	1204	1.67	1378	2.23	1527	2.79	1666	3.36	1792	3.93	1908	4.49	2023	5.10	2132	5.71	2235	6.33	2337	6.98
2575	3901	1264	1.97	1432	2.58	1578	3.18	1710	3.77	1836	4.39	1950	5.00	2057	5.60	2165	6.26	2267	6.92	2364	7.58
2750	4166	1326	2.31	1487	2.95	1630	3.60	1757	4.23	1879	4.89	1993	5.54	2099	6.19	2198	6.84	2300	7.54	2396	8.24
2925	4431	1389	2.69	1543	3.37	1684	4.06	1808	4.74	1924	5.42	2037	6.12	2142	6.81	2241	7.50	2334	8.19	2429	8.93
3100	4696	1452	3.11	1602	3.84	1737	4.57	1860	5.29	1972	6.00	2081	6.74	2185	7.48	2283	8.21	2376	8.94	2464	9.67

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
700	1060	2192	2.92	2300	3.35	2403	3.79														
950	1439	2197	3.32	2303	3.74	2404	4.17	2501	4.61	2594	5.06	2684	5.52	2772	5.99	2857	6.52	2941	7.07	3022	7.64
1200	1818	2205	3.78	2311	4.25	2412	4.72	2509	5.20	2602	5.70	2692	6.20	2779	6.72	2864	7.24	2946	7.78	3025	8.32
1450	2196	2220	4.30	2321	4.78	2419	5.28	2516	5.81	2610	6.35	2700	6.90	2787	7.46	2871	8.02	2953	8.60	3033	9.19
1700	2575	2243	4.89	2345	5.42	2442	5.96	2535	6.51	2625	7.07	2712	7.64	2795	8.21	2879	8.81	2961	9.44	3041	10.1
1950	2954	2272	5.56	2370	6.10	2466	6.68	2559	7.29	2649	7.89	2735	8.51	2819	9.13	2900	9.76	2979	10.4	3055	11.1
2200	3333	2308	6.33	2405	6.93	2498	7.54	2587	8.15	2673	8.76	2759	9.41	2842	10.1	2923	10.8	3002	11.5	3079	12.2
2450	3712	2344	7.15	2441	7.81	2534	8.48	2623	9.15	2709	9.82	2792	10.5	2872	11.2	2950	11.9	3026	12.6	3102	13.3
2700	4090	2387	8.05	2479	8.74	2570	9.46	2659	10.2	2745	10.9	2827	11.7	2907	12.4	2985	13.1	3060	13.9	3134	14.6
2950	4469	2434	9.03	2525	9.79	2613	10.6	2697	11.3	2781	12.1	2864	12.9	2943	13.7	3021	14.5	3096	15.3	3169	16.1
3200	4848	2488	10.1	2572	10.9	2660	11.7	2744	12.5	2825	13.4	2903	14.2	2980	15.0	3057	15.9	3132	16.7	3205	17.6
3450	5227	2549	11.4	2632	12.2	2712	13.0	2791	13.8	2872	14.7	2950	15.6	3026	16.5	3099	17.4	3170	18.3	3242	19.2
3700	5606	2611	12.7	2693	13.6	2773	14.5	2849	15.4	2923	16.2	2997	17.1	3072	18.1	3146	19.0	3217	20.0	3286	20.9
3950	5984	2673	14.2	2755	15.1	2834	16.1	2910	17.0	2984	17.9	3055	18.9	3124	19.8	3193	20.7	3264	21.8	3333	22.8
4200	6363	2737	15.7	2818	16.7	2896	17.7	2972	18.7	3045	19.7	3116	20.7	3184	21.7	3251	22.7	3316	23.7	3380	24.7
4450	6742	2808	17.5	2882	18.5	2960	19.5	3034	20.6	3107	21.7	3177	22.7	3245	23.8	3312	24.8	3376	25.9	3439	26.9

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1363	3023	7.57	3102	8.14																
1200	1818	3025	8.32	3103	8.87	3179	9.43	3253	10.0	3325	10.6	3396	11.2	3533	12.4	3668	13.8	3797	15.2	3923	16.6
1500	2272	3034	9.37	3112	10.0	3188	10.6	3262	11.2	3334	11.8	3405	12.5	3542	13.8	3674	15.1	3801	16.5	3925	17.9
1800	2727	3044	10.4	3121	11.1	3197	11.8	3271	12.4	3343	13.1	3414	13.8	3551	15.2	3683	16.6	3811	18.1	3934	19.6
2100	3181	3069	11.7	3144	12.4	3217	13.1	3288	13.8	3357	14.5	3425	15.2	3560	16.7	3692	18.2	3820	19.8	3943	21.4
2400	3636	3098	13.1	3172	13.8	3245	14.6	3316	15.3	3385	16.1	3453	16.8	3585	18.4	3712	20.0	3835	21.6	3953	23.2
2700	4090	3134	14.6	3205	15.4	3275	16.1	3345	16.9	3414	17.7	3482	18.6	3614	20.2	3740	21.9	3863	23.7	3981	25.4
3000	4545	3177	16.4	3248	17.2	3318	18.0	3386	18.9	3452	19.7	3517	20.5	3644	22.2	3769	24.0	3891	25.8		
3300	5000	3220	18.2	3291	19.1	3361	20.0	3429	20.9	3495	21.8	3560	22.7	3686	24.5	3808	26.4	3925	28.2		
3600	5454	3267	20.2	3335	21.1	3404	22.1	3472	23.1	3538	24.0	3603	25.0	3729	27.0	3850	28.9	3967	30.9		
3900	5909	3323	22.4	3391	23.4	3457	24.4	3521	25.4	3584	26.4	3647	27.4	3772	29.5	3894	31.6				
4200	6363	3380	24.7	3447	25.8	3513	26.9	3577	27.9	3639	29.0	3701	30.1	3820	32.2	3937	34.4				
4500	6818	3451	27.4	3513	28.5	3573	29.5	3633	30.6	3696	31.7	3757	32.9	3876	35.2	3991	37.5				
4800	7272	3524	30.3	3585	31.4	3645	32.5	3704	33.7	3761	34.8	3817	35.9	3933	38.3						
5100	7727	3599	33.4	3659	34.6	3718	35.8	3777	37.0	3833	38.2	3889	39.4								
5400	8181	3674	36.6	3734	37.9	3793	39.2	3850	40.5	3907	41.8	3962	43.1								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 2.40)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
800	100	126	96	84	73	69	65	59	55	100
	70	115	90	76	66	63	60	57	52	90
	40	102	84	70	62	59	59	56	52	77
	20	102	84	69	61	59	59	56	52	77
	0	102	84	69	60	59	59	57	52	78
1100	100	109	97	94	84	79	73	68	65	90
	70	108	93	85	74	72	67	63	58	85
	40	102	92	79	68	66	63	60	54	80
	20	99	90	76	65	63	62	60	53	78
	0	103	107	81	68	65	63	60	54	92
1500	100	114	106	101	93	89	82	77	74	97
	70	115	102	93	85	81	75	70	67	93
	40	108	97	86	76	74	69	66	62	87
	20	106	97	83	73	71	67	64	60	85
	0	109	100	85	76	72	68	64	60	88
2100	100	122	112	123	104	98	93	87	84	115
	70	118	108	108	96	91	85	80	77	102
	40	114	108	100	89	84	79	74	71	96
	20	111	103	89	88	80	75	70	68	92
	0	116	108	97	89	82	75	70	68	96
2900	100	127	119	116	111	107	102	97	93	114
	70	121	115	111	104	100	95	89	86	108
	40	119	113	105	98	93	88	83	80	103
	20	119	112	103	96	90	85	80	78	101
	0	121	117	106	98	91	84	79	76	104
3994	100	133	132	122	122	115	112	106	101	123
	70	127	127	119	115	108	104	99	94	117
	40	125	124	115	109	102	98	92	88	113
	20	124	124	114	106	100	94	89	85	112
	0	126	127	118	109	101	94	88	84	115

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
800	100	114	101	90	79	72	66	60	54	91
	70	101	90	80	72	65	60	55	50	79
	40	97	87	77	69	62	58	54	49	76
	20	99	86	77	68	61	57	54	48	76
	0	100	86	76	67	60	57	53	47	77
1100	100	108	115	105	89	82	75	69	64	102
	70	104	103	91	80	74	68	63	59	89
	40	101	95	87	76	70	65	61	58	84
	20	98	98	88	75	68	63	59	57	85
	0	95	100	89	73	66	62	58	56	86
1500	100	112	117	107	98	91	85	79	74	104
	70	111	109	101	90	85	79	73	69	97
	40	107	102	95	85	80	74	69	66	91
	20	103	100	93	82	75	70	66	64	89
	0	101	101	93	81	74	68	64	62	89
2100	100	131	124	127	113	102	96	90	86	120
	70	115	115	116	101	94	88	82	77	108
	40	111	111	106	95	90	84	78	74	101
	20	110	108	108	97	85	78	74	71	101
	0	109	106	109	97	85	76	72	69	102
2900	100	123	123	128	120	111	105	99	94	122
	70	121	121	121	112	104	99	92	87	115
	40	118	119	115	107	100	94	88	83	110
	20	116	117	113	105	97	91	85	81	108
	0	115	113	114	104	94	86	80	76	108
3994	100	129	131	131	133	121	115	109	103	132
	70	127	129	128	124	114	108	102	96	124
	40	124	126	124	119	110	104	98	92	120
	20	122	124	122	117	107	101	95	89	118
	0	120	122	120	118	105	97	90	85	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

13 IPO

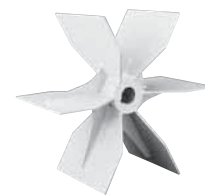
Wheel Diameter = 22⁵/₈ in.

Outlet Area = 0.92 ft²

Tip Speed = 5.92 x RPM

Minimum Starting HP = 1/2

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	2870	50	286T	284T
Heavy	3377	75	286T	NA

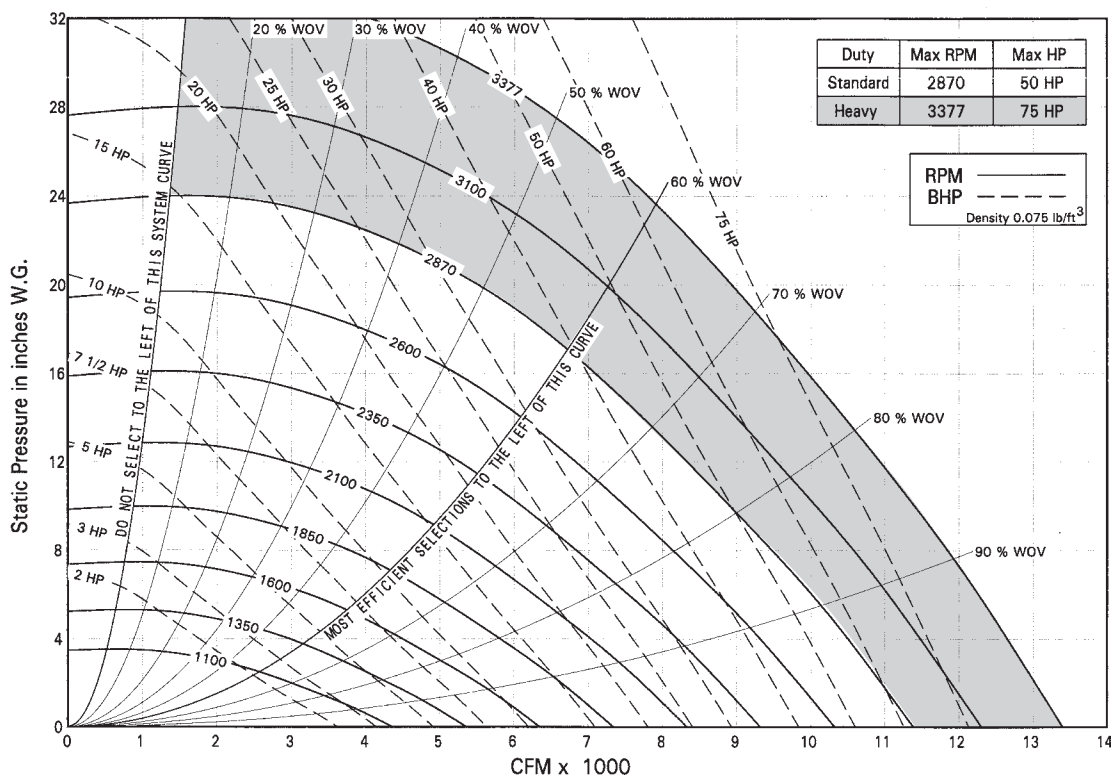


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	852	602	0.23	834	0.49	1018	0.80	1174	1.15	1310	1.52	1435	1.92	1550	2.39	1658	2.89				
1040	1108	622	0.30	846	0.60	1023	0.94	1178	1.32	1315	1.74	1439	2.17	1552	2.63	1658	3.11	1758	3.61	1852	4.13
1280	1364	647	0.39	864	0.73	1037	1.11	1186	1.52	1319	1.96	1443	2.44	1557	2.94	1663	3.46	1762	4.00	1856	4.56
1520	1620	680	0.50	885	0.89	1054	1.30	1200	1.75	1331	2.23	1450	2.72	1561	3.25	1667	3.82	1767	4.40	1861	5.00
1760	1876	716	0.63	910	1.06	1075	1.53	1217	2.01	1345	2.51	1464	3.06	1573	3.63	1675	4.20	1771	4.80	1865	5.45
2000	2132	756	0.79	940	1.27	1097	1.77	1238	2.31	1364	2.86	1478	3.41	1587	4.02	1689	4.65	1784	5.29	1875	5.95
2240	2388	799	0.98	975	1.51	1124	2.05	1259	2.63	1385	3.23	1498	3.85	1603	4.46	1702	5.11	1798	5.81	1888	6.51
2480	2643	843	1.21	1011	1.78	1156	2.37	1286	2.99	1406	3.63	1519	4.30	1624	4.98	1721	5.66	1813	6.35	1902	7.09
2720	2899	888	1.46	1050	2.09	1191	2.74	1314	3.38	1432	4.07	1540	4.78	1644	5.51	1742	6.25	1833	7.00	1920	7.75
2960	3155	935	1.75	1092	2.45	1227	3.14	1349	3.84	1459	4.55	1566	5.31	1666	6.07	1763	6.87	1854	7.68	1940	8.49
3200	3411	984	2.09	1136	2.84	1264	3.58	1384	4.35	1492	5.10	1593	5.88	1692	6.70	1784	7.52	1875	8.38	1961	9.25
3440	3667	1034	2.47	1180	3.28	1305	4.08	1420	4.89	1527	5.71	1625	6.52	1719	7.36	1811	8.24	1898	9.13	1982	10.0
3680	3923	1085	2.90	1225	3.76	1348	4.62	1457	5.47	1563	6.35	1660	7.23	1750	8.09	1838	9.00	1925	9.95	2006	10.9
3920	4179	1136	3.39	1271	4.30	1391	5.22	1497	6.12	1599	7.05	1695	7.99	1785	8.91	1869	9.83	1952	10.8	2033	11.8
4160	4434	1188	3.92	1318	4.89	1435	5.87	1540	6.84	1636	7.79	1732	8.79	1820	9.78	1904	10.8	1982	11.7	2061	12.8
4400	4690	1241	4.51	1366	5.54	1480	6.58	1583	7.61	1677	8.62	1768	9.65	1856	10.7	1939	11.8	2017	12.8	2092	13.8

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1279	1855	4.41	1944	4.97	2030	5.55	2112	6.14	2192	6.81	2269	7.51	2344	8.24	2417	8.98	2487	9.74		
1550	1652	1861	5.06	1951	5.68	2036	6.32	2118	6.97	2197	7.64	2273	8.33	2347	9.02	2418	9.73	2487	10.5	2555	11.2
1900	2025	1869	5.72	1957	6.39	2043	7.10	2125	7.81	2204	8.55	2280	9.29	2353	10.1	2425	10.8	2494	11.6	2561	12.4
2250	2398	1889	6.53	1975	7.25	2057	7.99	2136	8.73	2212	9.48	2286	10.3	2360	11.1	2431	11.9	2500	12.8	2568	13.6
2600	2771	1910	7.39	1995	8.17	2077	8.98	2156	9.79	2231	10.6	2305	11.5	2375	12.3	2444	13.2	2510	14.0	2575	14.9
2950	3144	1940	8.45	2022	9.27	2100	10.1	2176	10.9	2251	11.8	2324	12.7	2395	13.6	2464	14.6	2530	15.5	2595	16.4
3300	3518	1970	9.57	2052	10.5	2131	11.4	2206	12.3	2279	13.2	2349	14.1	2416	15.0	2484	16.0	2550	17.0	2615	18.0
3650	3891	2003	10.8	2083	11.7	2161	12.7	2236	13.7	2309	14.7	2379	15.7	2446	16.7	2512	17.7	2576	18.7	2638	19.7
4000	4264	2042	12.1	2120	13.2	2194	14.2	2267	15.2	2339	16.3	2409	17.4	2477	18.5	2542	19.6	2606	20.7	2668	21.8
4350	4637	2085	13.6	2160	14.7	2234	15.8	2305	16.9	2373	18.0	2440	19.1	2507	20.3	2573	21.5	2636	22.7	2698	23.8
4700	5010	2136	15.3	2206	16.4	2274	17.5	2345	18.7	2413	19.9	2479	21.1	2543	22.3	2605	23.5	2667	24.8	2729	26.0
5050	5383	2187	17.1	2258	18.3	2325	19.5	2390	20.7	2453	21.9	2519	23.2	2582	24.5	2644	25.8	2705	27.1	2763	28.4
5400	5756	2240	19.1	2310	20.4	2377	21.7	2441	22.9	2503	24.2	2564	25.5	2622	26.8	2684	28.1	2744	29.5	2803	30.9
5750	6130	2294	21.2	2363	22.6	2429	24.0	2493	25.3	2555	26.7	2615	28.0	2673	29.4	2729	30.7	2784	32.1	2842	33.6
6100	6503	2351	23.5	2416	24.9	2482	26.4	2546	27.9	2607	29.3	2666	30.8	2724	32.2	2780	33.7	2835	35.1	2889	36.5
6450	6876	2413	26.1	2475	27.5	2536	29.0	2599	30.6	2660	32.1	2719	33.7	2776	35.2	2832	36.7	2887	38.3	2940	39.8

CFM	OV	Static Pressure in Inches wg																			
		21.0		22.0		23.0		24.0		25.0		26.0		27.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1599	2554	11.0	2620	11.8	2684	12.6	2748	13.4	2810	14.3	2871	15.2	2989	17.0	3102	18.9				
1900	2025	2561	12.4	2627	13.2	2691	14.0	2754	14.9	2815	15.7	2874	16.6	2990	18.3	3102	20.1	3210	22.0	3314	23.8
2300	2452	2569	13.8	2634	14.7	2698	15.6	2761	16.5	2822	17.4	2882	18.3	2998	20.2	3109	22.2	3217	24.1	3321	26.2
2700	2878	2581	15.3	2644	16.2	2706	17.2	2768	18.1	2829	19.1	2889	20.1	3005	22.2	3117	24.2	3224	26.4	3329	28.5
3100	3304	2604	17.1	2667	18.1	2728	19.1	2788	20.1	2847	21.1	2904	22.1	3016	24.2	3124	26.3	3232	28.6	3336	30.9
3500	3731	2626	18.9	2690	20.0	2751	21.1	2811	22.2	2870	23.3	2927	24.4	3039	26.6	3146	28.9	3249	31.2	3349	33.5
3900	4157	2659	21.2	2720	22.2	2779	23.3	2836	24.4	2893	25.5	2950	26.7	3061	29.1	3168	31.5	3272	34.0	3372	36.5
4300	4584	2694	23.5	2754	24.7	2813	25.9	2870	27.1	2927	28.3	2982	29.4	3088	31.8	3191	34.2	3295	36.9		
4700	5010	2729	26.0	2789	27.3	2848	28.6	2905	29.8	2961	31.1	3016	32.4	3123	35.0	3225	37.6	3324	40.2		
5100	5437	2769	28.7	2826	30.0	2883	31.4	2940	32.7	2996	34.1	3051	35.5	3157	38.3	3260	41.0	3359	43.8		
5500	5863	2814	31.7	2871	33.1	2926	34.5	2981	35.9	3034	37.3	3086	38.7	3192	41.7	3295	44.7				
5900	6289	2860	34.7	2916	36.3	2972	37.8	3026	39.3	3079	40.8	3131	42.3	3232	45.3	3330	48.4				
6300	6716	2918	38.4	2970	39.8	3020	41.3	3072	42.8	3124	44.5	3176	46.1	3277	49.3	3373	52.5				
6700	7142	2976	42.2	3028	43.8	3079	45.4	3128	46.9	3176	48.5	3224	50.1	3322	53.4						
7100	7569	3036	46.3	3087	48.0	3138	49.7	3187	51.3	3235	53.0	3282	54.7	3374	58.0						
7500	7995	3096	50.6	3147	52.4	3197	54.2	3246	56.0	3294	57.8	3341	59.5								

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 3.97)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
700	100	128	90	85	73	72	66	61	56	103
	70	118	84	76	66	65	62	58	54	93
	40	105	80	70	62	61	61	58	54	79
	20	105	81	69	62	61	61	58	54	80
	0	105	81	69	61	61	62	58	54	80
1000	100	112	100	96	85	82	75	70	68	92
	70	111	97	87	76	75	70	65	61	88
	40	106	95	80	70	69	66	63	56	83
	20	102	93	77	67	66	65	62	56	81
	0	106	111	79	70	68	66	63	56	95
1300	100	116	108	101	94	89	83	78	76	98
	70	116	103	93	86	82	76	71	68	94
	40	109	98	86	77	76	71	67	63	87
	20	107	99	82	74	72	68	65	61	86
	0	110	102	84	77	74	69	65	61	89
1800	100	122	115	122	103	99	93	88	85	114
	70	119	109	108	96	92	86	81	78	102
	40	115	107	100	89	85	79	75	72	97
	20	112	101	91	89	81	75	71	70	92
	0	117	107	98	89	82	76	71	69	96
2500	100	130	118	119	111	108	103	97	94	115
	70	124	115	112	104	101	96	90	87	109
	40	122	112	106	98	94	89	84	81	103
	20	121	112	103	96	91	86	81	79	102
	0	123	117	106	98	91	85	79	78	105
3377	100	135	130	124	121	116	112	106	102	123
	70	129	126	120	115	109	105	99	95	117
	40	127	123	115	108	102	98	92	89	112
	20	126	123	113	106	100	95	89	86	111
	0	129	127	117	108	100	94	88	85	114

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
700	100	117	98	91	79	73	67	61	55	92
	70	104	88	81	73	66	61	57	51	81
	40	100	85	78	70	63	59	55	50	78
	20	101	85	78	69	62	59	55	49	78
	0	103	84	77	68	62	58	55	48	78
1000	100	112	119	106	90	84	78	71	66	104
	70	108	106	92	82	77	71	65	62	92
	40	104	99	89	78	73	68	63	61	87
	20	101	101	89	76	71	66	62	60	87
	0	98	104	90	74	69	64	60	58	89
1300	100	115	119	107	98	92	86	80	75	106
	70	113	111	100	91	86	80	74	70	98
	40	108	104	95	86	80	75	70	68	92
	20	105	102	93	82	76	71	68	65	90
	0	103	104	93	81	75	69	66	64	90
1800	100	132	126	127	112	103	96	91	87	119
	70	117	117	115	100	95	89	83	78	108
	40	113	111	106	96	90	84	79	75	101
	20	112	109	108	96	84	78	75	72	102
	0	110	108	109	96	85	77	73	70	102
2500	100	126	124	132	119	111	106	100	95	124
	70	124	123	122	111	105	99	93	88	116
	40	121	121	116	107	101	95	89	84	111
	20	119	118	114	105	98	92	86	82	109
	0	117	115	116	103	94	87	81	78	109
3377	100	131	132	135	131	121	115	109	104	131
	70	129	130	129	123	114	108	102	96	124
	40	126	127	125	118	110	104	98	93	120
	20	124	125	122	116	107	101	95	90	118
	0	122	123	122	116	104	97	90	85	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

15 IPO

Wheel Diameter = 26 $\frac{1}{8}$ in.

Outlet Area = 1.23 ft²

Tip Speed = 6.84 x RPM

Minimum Starting HP = $\frac{1}{2}$

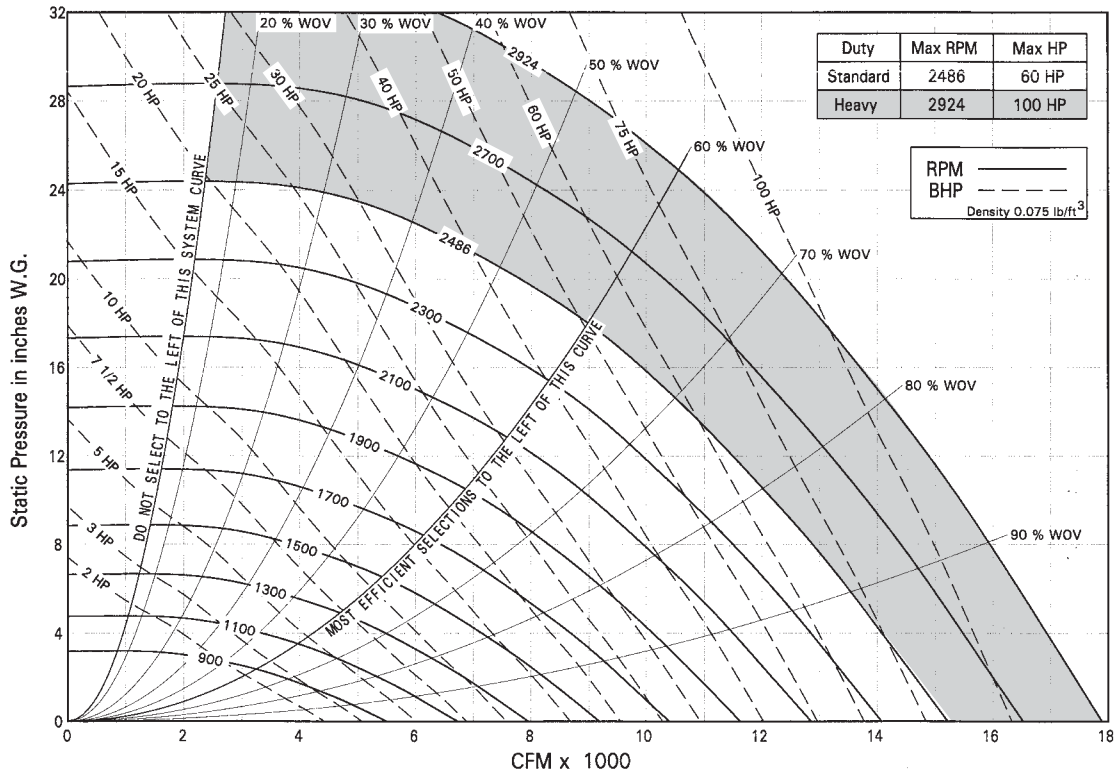
Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	2486	60	286T	284T
Heavy	2924	100	286T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1209	538	0.40	728	0.77	879	1.17	1012	1.65	1129	2.16	1236	2.71	1334	3.28	1425	3.88	1510	4.50		
1800	1451	560	0.52	741	0.93	891	1.39	1017	1.87	1132	2.40	1239	2.99	1337	3.61	1428	4.26	1513	4.92	1594	5.61
2100	1693	586	0.66	760	1.13	903	1.62	1029	2.17	1141	2.72	1242	3.28	1340	3.95	1431	4.64	1516	5.35	1597	6.09
2400	1935	613	0.82	781	1.35	920	1.90	1042	2.48	1153	3.09	1254	3.72	1347	4.36	1434	5.02	1519	5.78	1600	6.56
2700	2177	645	1.01	804	1.61	939	2.21	1058	2.83	1165	3.48	1266	4.17	1359	4.88	1445	5.59	1526	6.31	1603	7.04
3000	2419	679	1.23	831	1.89	961	2.56	1077	3.23	1182	3.93	1278	4.64	1371	5.41	1457	6.19	1538	6.97	1615	7.76
3300	2661	715	1.50	859	2.21	984	2.94	1098	3.68	1200	4.42	1295	5.19	1383	5.96	1469	6.80	1550	7.65	1628	8.51
3600	2903	753	1.80	888	2.56	1011	3.37	1120	4.17	1221	4.97	1314	5.78	1401	6.62	1483	7.46	1563	8.35	1639	9.28
3900	3145	791	2.15	921	2.97	1039	3.83	1145	4.69	1243	5.56	1334	6.43	1420	7.32	1501	8.22	1578	9.13	1652	10.1
4200	3387	831	2.54	955	3.41	1067	4.33	1172	5.27	1265	6.20	1356	7.14	1441	8.07	1520	9.02	1597	10.0	1669	11.0
4500	3629	872	2.98	991	3.93	1097	4.88	1199	5.89	1292	6.89	1378	7.88	1462	8.89	1541	9.89	1615	10.9	1687	12.0
4800	3870	913	3.47	1028	4.50	1131	5.50	1227	6.55	1320	7.63	1404	8.69	1484	9.75	1562	10.8	1636	11.9	1706	13.0
5100	4112	955	4.03	1066	5.12	1165	6.17	1257	7.27	1347	8.41	1431	9.55	1509	10.7	1584	11.8	1658	13.0	1728	14.1
5400	4354	999	4.66	1104	5.80	1201	6.92	1290	8.07	1375	9.25	1459	10.5	1536	11.7	1609	12.9	1680	14.1	1749	15.3
5700	4596	1043	5.35	1143	6.54	1238	7.74	1324	8.93	1405	10.2	1486	11.4	1563	12.7	1635	14.0	1704	15.2	1771	16.5
6000	4838	1087	6.11	1184	7.35	1275	8.62	1358	9.86	1438	11.1	1514	12.5	1591	13.8	1663	15.1	1731	16.5	1795	17.8

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1612	1596	5.93	1673	6.67	1747	7.43	1817	8.22	1885	9.02	1950	9.83	2014	10.7	2075	11.5				
2430	1959	1601	6.61	1677	7.42	1751	8.25	1821	9.10	1889	9.96	1955	10.9	2018	11.8	2079	12.7	2139	13.6	2197	14.6
2860	2306	1609	7.42	1682	8.19	1755	9.07	1826	9.98	1894	10.9	1959	11.9	2022	12.8	2084	13.8	2143	14.8	2201	15.8
3290	2653	1627	8.48	1700	9.35	1769	10.2	1836	11.1	1901	12.0	1964	12.9	2027	13.9	2088	15.0	2148	16.1	2206	17.1
3720	3000	1644	9.59	1717	10.5	1787	11.5	1854	12.5	1918	13.5	1980	14.4	2040	15.4	2098	16.4	2155	17.4	2210	18.4
4150	3346	1666	10.8	1735	11.8	1804	12.8	1871	13.9	1935	15.0	1997	16.0	2057	17.1	2116	18.2	2172	19.3	2227	20.4
4580	3693	1692	12.2	1761	13.3	1827	14.4	1890	15.4	1953	16.5	2015	17.7	2075	18.9	2133	20.1	2189	21.2	2244	22.4
5010	4040	1721	13.7	1788	14.9	1854	16.0	1917	17.2	1977	18.4	2036	19.5	2092	20.7	2150	22.0	2207	23.2	2262	24.5
5440	4387	1752	15.4	1818	16.6	1882	17.9	1943	19.1	2004	20.3	2062	21.6	2119	22.9	2174	24.1	2227	25.4	2279	26.7
5870	4733	1784	17.2	1850	18.5	1913	19.9	1974	21.2	2032	22.5	2089	23.8	2146	25.1	2201	26.5	2254	27.9	2306	29.2
6300	5080	1822	19.2	1883	20.6	1944	22.0	2005	23.4	2063	24.8	2120	26.2	2175	27.6	2228	29.0	2281	30.4	2332	31.9
6730	5427	1861	21.3	1922	22.8	1981	24.3	2037	25.7	2094	27.2	2151	28.8	2205	30.3	2258	31.8	2310	33.3	2360	34.7
7160	5774	1901	23.5	1961	25.1	2019	26.7	2075	28.3	2130	29.9	2182	31.4	2237	33.1	2289	34.7	2341	36.3	2391	37.9
7590	6120	1941	25.9	2001	27.6	2059	29.3	2114	31.0	2168	32.7	2220	34.4	2271	36.0	2321	37.7	2372	39.4	2422	41.1
8020	6467	1982	28.4	2041	30.2	2098	32.0	2154	33.9	2207	35.6	2259	37.4	2309	39.2	2358	41.0	2406	42.7	2453	44.5
8450	6814	2030	31.3	2083	33.1	2139	35.0	2194	36.9	2247	38.8	2298	40.7	2348	42.6	2397	44.4	2444	46.3	2491	48.2

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2700	2177	2200	15.4	2256	16.4	2311	17.4	2365	18.4	2418	19.5	2469	20.5	2569	22.7	2665	24.9	2757	27.2		
3125	2520	2204	16.6	2260	17.7	2316	18.8	2369	19.9	2422	21.0	2473	22.1	2573	24.4	2669	26.8	2761	29.2	2851	31.7
3550	2862	2208	17.9	2265	19.1	2320	20.2	2374	21.4	2426	22.6	2478	23.8	2577	26.2	2673	28.7	2766	31.2	2855	33.8
3975	3205	2220	19.6	2273	20.7	2326	21.7	2378	22.9	2431	24.1	2482	25.4	2582	28.0	2678	30.6	2770	33.2	2860	36.0
4400	3548	2237	21.6	2291	22.7	2343	23.9	2394	25.1	2444	26.2	2492	27.4	2587	29.8	2682	32.5	2774	35.3	2864	38.1
4825	3891	2254	23.6	2308	24.9	2360	26.1	2411	27.4	2461	28.6	2509	29.9	2604	32.5	2695	35.0	2783	37.6	2868	40.3
5250	4233	2272	25.7	2325	27.1	2377	28.4	2428	29.8	2478	31.1	2527	32.5	2621	35.2	2712	38.0	2800	40.7	2885	43.5
5675	4576	2293	28.1	2344	29.4	2395	30.8	2445	32.2	2495	33.6	2544	35.1	2638	38.0	2729	41.0	2817	43.9	2902	46.9
6100	4919	2320	30.7	2370	32.1	2419	33.5	2467	34.9	2515	36.3	2561	37.8	2656	40.9	2747	44.0	2834	47.2	2919	50.3
6525	5262	2346	33.4	2397	34.9	2446	36.4	2494	37.9	2541	39.4	2587	41.0	2686	44.0	2764	47.1	2852	50.5		
6950	5604	2376	36.3	2425	37.9	2473	39.4	2520	41.0	2567	42.7	2613	44.3	2702	47.5	2788	50.7	2871	54.0		
7375	5947	2406	39.5	2455	41.1	2503	42.8	2549	44.4	2595	46.0	2640	47.7	2729	51.1	2814	54.6	2897	58.0		
7800	6290	2437	42.8	2486	44.5	2533	46.3	2580	48.0	2625	49.7	2669	51.5	2756	54.9	2841	58.5				
8225	6633	2471	46.2	2517	48.0	2564	49.9	2610	51.8	2656	53.6	2700	55.4	2786	59.1	2869	62.7				
8650	6975	2509	49.9	2554	51.8	2598	53.7	2641	55.7	2686	57.6	2731	59.5	2817	63.4	2899	67.3				
9075	7318	2547	53.8	2592	55.8	2636	57.8	2679	59.8	2721	61.8	2762	63.8	2847	67.9						



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 6.12)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
600	100	100	99	84	76	70	64	59	57	85
	70	97	90	77	67	64	59	53	51	77
	40	97	82	72	62	61	57	48	45	74
	20	96	79	71	61	60	55	47	41	73
	0	99	83	71	61	59	54	47	41	75
850	100	106	107	99	88	81	75	69	66	95
	70	103	101	91	80	73	69	64	59	88
	40	103	97	85	75	69	66	60	54	84
	20	103	95	82	74	68	65	59	52	83
	0	105	98	85	74	67	64	58	52	85
1200	100	117	119	107	97	91	86	80	76	106
	70	113	115	100	89	83	78	73	70	101
	40	105	106	92	83	77	73	68	65	92
	20	106	107	91	81	75	71	66	64	92
	0	113	114	94	83	76	72	67	62	99
1600	100	116	114	110	104	99	95	91	87	107
	70	115	109	104	97	92	87	82	78	101
	40	111	104	99	91	87	82	76	73	96
	20	109	101	96	90	84	79	74	73	93
	0	113	102	98	91	85	79	74	71	95
2200	100	122	118	122	113	108	104	99	96	117
	70	120	114	113	105	101	96	92	89	109
	40	116	109	115	102	96	91	86	83	108
	20	117	108	116	101	94	89	85	82	108
	0	120	110	120	103	96	90	84	81	112
2924	100	127	126	126	124	115	112	107	104	124
	70	124	123	119	115	108	104	100	96	116
	40	121	119	118	114	104	99	95	91	115
	20	122	119	119	114	102	97	93	89	115
	0	125	121	122	118	104	98	93	88	118

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
600	100	113	98	89	78	73	66	59	56	90
	70	101	90	82	70	67	61	53	50	80
	40	92	85	79	66	65	59	50	48	75
	20	97	83	78	64	62	55	48	45	75
	0	97	83	78	64	62	55	47	43	75
850	100	119	113	101	91	83	77	70	65	100
	70	107	103	93	84	76	72	65	59	91
	40	98	96	89	80	73	69	62	57	85
	20	103	98	88	78	70	66	59	54	86
	0	103	98	88	79	70	66	59	52	86
1200	100	128	130	113	100	94	88	81	77	115
	70	116	118	104	94	87	81	75	71	104
	40	107	109	99	89	81	76	71	67	96
	20	110	112	99	86	79	73	67	63	98
	0	111	113	98	86	79	73	66	62	98
1600	100	121	125	118	107	102	97	91	87	114
	70	119	119	112	101	96	90	84	80	108
	40	114	113	107	97	92	86	80	76	102
	20	112	111	104	93	88	82	76	72	100
	0	110	111	105	92	87	80	73	68	100
2200	100	125	124	130	118	111	107	102	99	123
	70	123	123	123	113	106	101	96	92	117
	40	120	119	125	108	101	96	91	89	117
	20	120	119	125	106	98	94	89	86	117
	0	124	121	123	106	97	93	87	83	115
2924	100	130	131	134	130	120	115	110	107	130
	70	128	130	129	124	114	109	104	100	125
	40	125	126	129	122	109	104	100	96	123
	20	125	126	129	121	107	102	97	93	123
	0	129	129	128	120	106	101	96	90	122

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

17 IPO

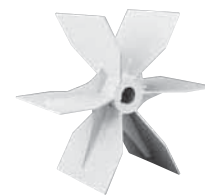
Wheel Diameter = 29⁵/₈ in.

Outlet Area = 1.56 ft²

Tip Speed = 7.76 x RPM

Minimum Starting HP = ³/₄

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	2192	75	326T	324T
Heavy	2579	125	326T	NA

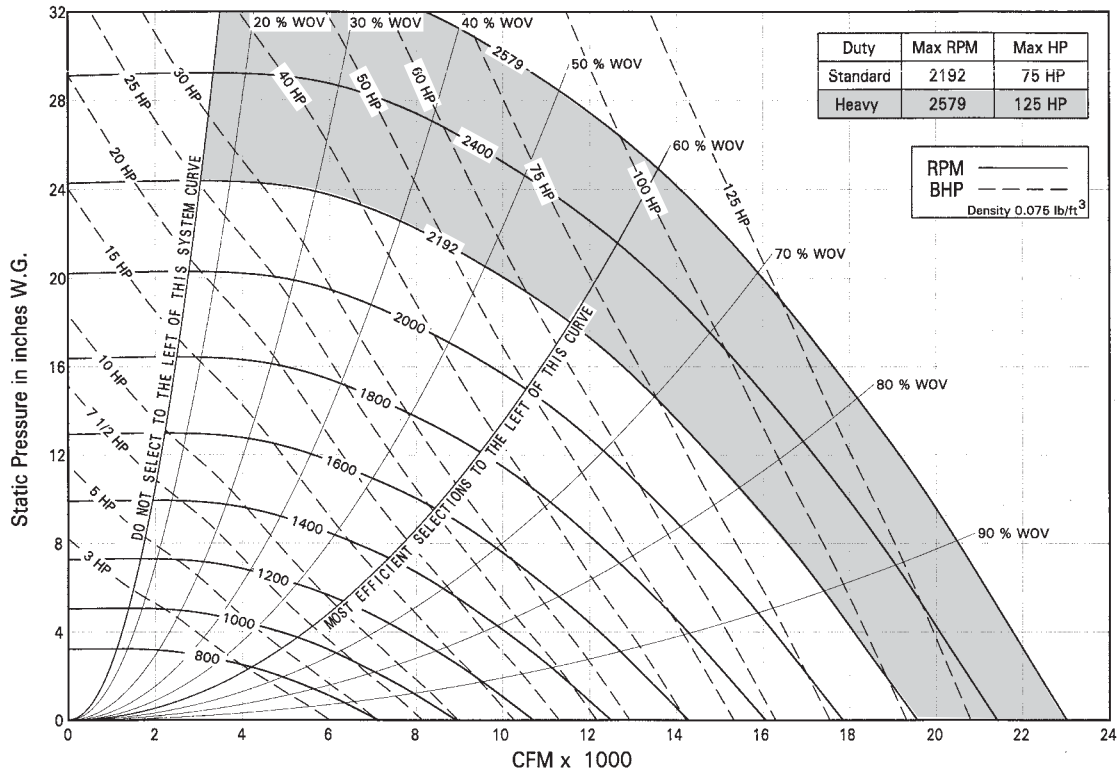


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1700	1069	465	0.44	636	0.88	773	1.39	891	1.98	994	2.60	1088	3.27	1174	3.97						
2075	1305	481	0.57	656	1.07	779	1.61	893	2.21	997	2.90	1091	3.62	1177	4.38	1257	5.17	1333	5.99	1404	6.84
2450	1540	501	0.73	659	1.28	789	1.89	901	2.54	1000	3.20	1093	3.98	1180	4.80	1260	5.65	1335	6.53	1407	7.43
2825	1776	524	0.91	676	1.54	800	2.19	911	2.91	1010	3.65	1099	4.40	1182	5.22	1263	6.12	1338	7.06	1409	8.03
3200	2012	548	1.12	694	1.83	816	2.56	922	3.30	1020	4.12	1109	4.95	1191	5.80	1267	6.66	1341	7.60	1412	8.62
3575	2248	576	1.37	715	2.16	833	2.96	937	3.78	1031	4.61	1119	5.53	1201	6.45	1277	7.39	1349	8.34	1416	9.30
3950	2484	606	1.66	739	2.53	852	3.41	954	4.28	1046	5.20	1130	6.12	1212	7.13	1288	8.14	1359	9.17	1427	10.2
4325	2720	638	2.00	762	2.93	873	3.90	972	4.86	1062	5.83	1146	6.83	1223	7.84	1298	8.92	1370	10.0	1437	11.2
4700	2955	670	2.40	788	3.38	896	4.43	991	5.47	1080	6.53	1162	7.58	1239	8.68	1311	9.77	1380	10.9	1448	12.1
5075	3191	703	2.84	817	3.90	920	5.02	1013	6.15	1099	7.28	1180	8.41	1255	9.55	1327	10.7	1394	11.9	1458	13.1
5450	3427	737	3.34	846	4.47	944	5.65	1036	6.87	1119	8.08	1198	9.30	1273	10.5	1343	11.7	1410	13.0	1474	14.3
5825	3663	772	3.89	877	5.12	971	6.35	1060	7.65	1142	8.95	1217	10.2	1291	11.5	1360	12.8	1426	14.1	1490	15.5
6200	3899	808	4.51	909	5.83	999	7.13	1084	8.48	1165	9.88	1240	11.3	1310	12.6	1379	14.0	1444	15.4	1506	16.8
6575	4135	844	5.21	941	6.62	1029	7.97	1109	9.39	1189	10.9	1263	12.3	1332	13.8	1398	15.2	1463	16.7	1524	18.2
6950	4371	881	6.00	974	7.47	1059	8.91	1138	10.4	1213	11.9	1287	13.5	1355	15.0	1419	16.6	1481	18.1	1543	19.7
7325	4606	919	6.87	1008	8.40	1091	9.94	1167	11.5	1238	13.0	1310	14.7	1378	16.3	1442	18.0	1502	19.6	1561	21.2

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	1572	1407	7.51	1475	8.46	1540	9.42	1602	10.4	1662	11.4	1719	12.5	1775	13.6						
3050	1918	1411	8.38	1479	9.41	1544	10.5	1606	11.5	1665	12.7	1723	13.8	1779	14.9	1833	16.1	1886	17.3	1937	18.5
3600	2264	1417	9.36	1483	10.4	1547	11.5	1610	12.7	1669	13.9	1727	15.1	1783	16.3	1837	17.6	1890	18.8	1941	20.1
4150	2610	1432	10.7	1497	11.8	1558	12.9	1617	14.0	1674	15.1	1731	16.4	1787	17.7	1841	19.1	1893	20.4	1945	21.8
4700	2955	1448	12.1	1512	13.3	1573	14.5	1632	15.8	1689	17.0	1744	18.3	1797	19.5	1848	20.8	1898	22.0	1948	23.5
5250	3301	1465	13.6	1527	14.9	1589	16.2	1648	17.6	1704	18.9	1759	20.3	1812	21.7	1863	23.1	1913	24.4	1961	25.8
5800	3647	1489	15.4	1549	16.8	1607	18.1	1663	19.5	1720	20.9	1774	22.4	1827	23.9	1878	25.4	1928	26.9	1977	28.4
6350	3993	1513	17.3	1573	18.8	1631	20.2	1686	21.7	1740	23.2	1791	24.7	1843	26.2	1894	27.8	1944	29.5	1992	31.1
6900	4339	1540	19.5	1599	21.0	1655	22.5	1710	24.1	1763	25.7	1815	27.3	1864	28.9	1913	30.5	1960	32.1	2007	33.8
7450	4685	1568	21.7	1626	23.4	1682	25.1	1736	26.7	1787	28.4	1838	30.1	1888	31.8	1936	33.5	1983	35.3	2029	37.0
8000	5031	1600	24.2	1655	25.9	1709	27.7	1763	29.5	1814	31.3	1864	33.1	1913	34.9	1960	36.7	2007	38.5	2052	40.4
8550	5377	1635	26.8	1688	28.7	1740	30.6	1790	32.5	1842	34.4	1891	36.3	1940	38.3	1986	40.2	2032	42.1	2076	43.9
9100	5723	1669	29.7	1723	31.7	1774	33.7	1824	35.7	1871	37.7	1919	39.7	1967	41.8	2013	43.8	2059	45.9	2103	47.9
9650	6069	1704	32.7	1757	34.8	1808	37.0	1858	39.1	1905	41.3	1951	43.4	1996	45.5	2041	47.7	2086	49.9	2130	52.0
10200	6415	1740	35.9	1792	38.2	1843	40.5	1892	42.8	1939	45.0	1985	47.3	2030	49.6	2073	51.8	2115	54.0	2158	56.3
10750	6761	1781	39.4	1829	41.7	1878	44.2	1927	46.6	1974	49.0	2019	51.4	2064	53.8	2107	56.2	2148	58.6	2189	60.9

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3300	2075	1939	19.2	1988	20.5	2037	21.8	2084	23.1	2131	24.4	2176	25.8	2264	28.5	2349	31.3				
3925	2468	1943	21.1	1993	22.5	2041	23.9	2089	25.3	2135	26.7	2180	28.1	2268	31.1	2353	34.1	2434	37.1	2513	40.2
4550	2861	1947	23.0	1997	24.5	2046	26.0	2093	27.4	2139	29.0	2185	30.5	2273	33.6	2357	36.8	2439	40.1	2518	43.4
5175	3254	1959	25.5	2007	26.9	2053	28.3	2098	29.7	2144	31.3	2189	32.9	2277	36.2	2362	39.6	2443	43.0	2522	46.6
5800	3647	1977	28.4	2024	29.9	2070	31.5	2115	33.0	2159	34.5	2202	36.1	2285	39.2	2366	42.4	2448	46.0	2527	49.8
6425	4040	1994	31.5	2041	33.1	2087	34.8	2132	36.4	2176	38.1	2219	39.8	2302	43.2	2383	46.6	2460	50.0	2535	53.5
7050	4433	2012	34.6	2059	36.4	2105	38.2	2150	40.0	2193	41.8	2236	43.6	2320	47.2	2400	50.9	2477	54.6	2552	58.3
7675	4827	2038	38.4	2083	40.2	2126	41.9	2169	43.7	2211	45.6	2254	47.5	2337	51.4	2417	55.4	2495	59.3	2570	63.3
8300	5220	2065	42.3	2110	44.2	2153	46.2	2195	48.1	2237	50.0	2288	52.0	2356	55.8	2435	60.0	2512	64.2		
8925	5613	2094	46.6	2137	48.6	2180	50.6	2222	52.7	2263	54.7	2304	56.8	2382	61.0	2458	65.1	2531	69.3		
9550	6006	2125	51.3	2168	53.4	2210	55.5	2251	57.6	2291	59.7	2331	61.9	2409	66.3	2485	70.8	2558	75.2		
10175	6399	2156	56.1	2199	58.4	2241	60.7	2282	63.0	2322	65.2	2361	67.5	2437	72.0	2511	76.6				
10800	6792	2192	61.4	2232	63.7	2272	66.1	2313	68.6	2353	71.0	2392	73.4	2468	78.2	2541	83.0				
11425	7185	2231	66.9	2270	69.5	2309	72.0	2347	74.5	2384	77.0	2423	79.6	2499	84.7	2572	89.8				
12050	7578	2270	72.8	2309	75.5	2348	78.2	2385	80.8	2422	83.5	2459	86.1	2530	91.5						
12675	7971	2309	79.0	2348	81.8	2387	84.7	2424	87.5	2461	90.3	2497	93.1	2567	98.7						

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 8.92)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
550	100	99	94	83	77	71	66	61	58	82
	70	92	87	77	70	65	60	54	48	76
	40	89	85	75	67	63	58	50	43	73
	20	90	86	75	67	63	58	50	44	74
	0	92	87	76	67	63	58	51	45	75
750	100	107	107	97	87	80	74	69	66	94
	70	104	100	89	79	73	69	63	60	87
	40	104	95	84	74	70	66	59	54	84
	20	104	93	81	72	68	65	58	51	82
	0	106	96	83	72	68	64	57	51	84
1000	100	117	116	103	95	89	83	78	74	102
	70	113	109	96	86	82	76	71	68	96
	40	105	99	89	80	76	71	66	64	87
	20	106	99	88	78	74	69	65	63	87
	0	113	105	91	80	75	69	65	61	92
1400	100	117	114	110	103	99	94	91	87	107
	70	116	108	103	96	92	87	81	78	100
	40	112	102	98	90	87	81	76	73	95
	20	110	99	95	89	84	78	73	73	92
	0	114	100	98	90	85	79	74	71	94
1900	100	122	118	122	111	107	103	99	96	116
	70	120	113	113	104	100	96	91	88	108
	40	116	109	114	99	95	91	86	83	107
	20	116	108	115	98	93	88	84	82	107
	0	119	110	119	100	94	88	83	80	111
2579	100	128	126	128	122	115	111	107	104	124
	70	126	122	119	114	108	104	100	96	116
	40	122	118	120	112	103	99	94	91	115
	20	123	117	122	112	101	97	92	89	115
	0	126	120	126	115	104	98	92	88	119

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
550	100	103	99	89	80	74	67	60	57	87
	70	94	90	80	72	67	61	55	50	78
	40	95	89	76	68	64	59	51	46	76
	20	95	89	76	68	65	59	51	46	77
	0	95	89	77	68	65	59	52	46	77
750	100	120	111	100	90	83	76	70	65	99
	70	108	102	93	82	76	71	64	59	90
	40	99	95	89	78	73	69	61	57	85
	20	105	96	88	76	71	66	59	54	85
	0	105	96	88	77	71	66	58	52	85
1000	100	128	124	108	97	92	85	79	75	110
	70	116	113	101	90	85	79	73	69	100
	40	107	105	96	85	79	74	69	66	93
	20	110	108	96	82	77	71	65	62	94
	0	111	108	94	82	77	70	64	60	94
1400	100	122	126	116	106	102	96	90	87	113
	70	120	120	110	100	96	90	83	80	107
	40	115	113	106	95	91	85	79	76	102
	20	113	111	103	91	88	81	75	72	99
	0	111	112	103	90	87	79	72	68	99
1900	100	126	124	130	116	111	106	102	99	123
	70	124	123	123	110	105	100	95	91	116
	40	120	119	124	105	100	95	91	88	116
	20	120	120	123	103	97	93	88	86	116
	0	124	121	122	103	96	92	85	82	114
2579	100	131	131	136	128	119	115	110	107	130
	70	129	130	130	122	114	109	103	99	124
	40	126	126	131	119	109	104	99	96	124
	20	126	126	130	118	106	102	97	93	123
	0	130	129	129	117	106	101	95	90	122

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

19 IPO

Wheel Diameter = 33 in.
 Outlet Area = 1.94 ft²
 Tip Speed = 8.64 x RPM
 Minimum Starting HP = 1

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1968	100	365T	326T
Heavy	2315	150	365T	NA

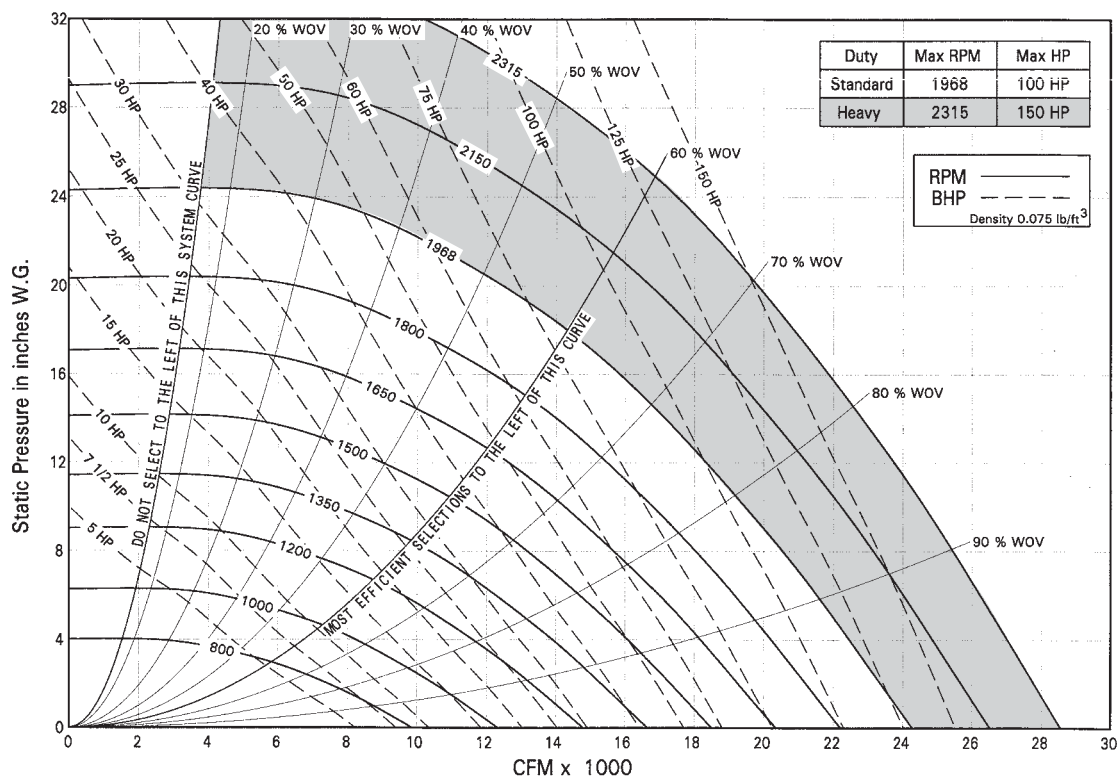


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1010	414	0.52	569	1.04	693	1.67	799	2.38	892	3.14	976	3.95								
2500	1262	430	0.68	579	1.29	698	1.95	801	2.70	894	3.54	979	4.42	1056	5.35	1128	6.32	1196	7.33	1260	8.38
3000	1515	448	0.89	591	1.57	708	2.32	808	3.11	897	3.94	981	4.90	1059	5.91	1131	6.95	1198	8.04	1262	9.16
3500	1767	470	1.13	606	1.91	718	2.72	818	3.61	906	4.52	986	5.45	1061	6.46	1133	7.59	1201	8.75	1265	10.0
4000	2020	493	1.41	624	2.30	734	3.20	828	4.13	916	5.15	996	6.19	1069	7.25	1138	8.32	1204	9.47	1268	10.7
4500	2272	521	1.75	645	2.74	750	3.74	843	4.77	927	5.82	1006	6.96	1079	8.12	1148	9.30	1212	10.5	1273	11.7
5000	2525	550	2.15	668	3.24	768	4.35	860	5.46	942	6.62	1017	7.78	1090	9.02	1158	10.3	1222	11.6	1283	12.9
5500	2777	581	2.62	691	3.79	790	5.02	877	6.25	958	7.47	1033	8.74	1102	10.0	1168	11.4	1232	12.8	1293	14.2
6000	3030	612	3.16	717	4.42	812	5.76	896	7.09	976	8.43	1048	9.76	1117	11.2	1182	12.6	1242	13.9	1303	15.5
6500	3282	644	3.78	745	5.14	835	6.56	918	8.01	994	9.45	1066	10.9	1133	12.4	1197	13.9	1258	15.4	1315	16.9
7000	3535	678	4.48	774	5.95	859	7.44	941	9.01	1015	10.6	1084	12.1	1151	13.7	1213	15.2	1273	16.9	1330	18.5
7500	3787	712	5.27	804	6.86	886	8.44	964	10.1	1037	11.8	1104	13.4	1169	15.1	1231	16.8	1290	18.4	1346	20.1
8000	4040	746	6.16	835	7.87	914	9.53	987	11.3	1060	13.1	1127	14.8	1188	16.6	1249	18.4	1307	20.2	1363	22.0
8500	4292	782	7.18	866	8.98	944	10.7	1015	12.6	1083	14.4	1149	16.3	1211	18.2	1268	20.1	1325	22.0	1380	23.9
9000	4545	818	8.31	899	10.2	974	12.1	1043	14.0	1107	15.9	1172	17.9	1233	19.9	1290	21.9	1345	23.9	1398	25.9
9500	4797	855	9.56	932	11.5	1004	13.5	1071	15.5	1134	17.5	1195	19.6	1256	21.8	1313	23.9	1367	26.0	1418	28.1

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1515	1262	9.16	1323	10.3	1382	11.5	1437	12.7	1491	14.0	1543	15.3								
3750	1893	1266	10.3	1327	11.6	1385	12.9	1441	14.3	1495	15.6	1547	17.0	1597	18.4	1645	19.9	1693	21.3	1738	22.8
4500	2272	1273	11.7	1331	12.9	1389	14.4	1445	15.8	1499	17.3	1551	18.8	1601	20.3	1649	21.9	1696	23.5	1742	25.1
5250	2651	1288	13.5	1345	14.9	1401	16.3	1454	17.7	1505	19.1	1554	20.6	1604	22.2	1653	23.9	1700	25.6	1746	27.3
6000	3030	1303	15.5	1361	17.0	1416	18.6	1469	20.1	1520	21.7	1569	23.3	1616	24.9	1662	26.5	1707	28.1	1751	29.7
6750	3409	1323	17.7	1377	19.2	1431	20.9	1484	22.6	1535	24.3	1584	26.1	1631	27.8	1677	29.6	1722	31.4	1765	33.2
7500	3787	1346	20.1	1400	21.9	1452	23.6	1502	25.4	1550	27.1	1599	29.0	1646	30.9	1692	32.9	1737	34.8	1781	36.7
8250	4166	1372	22.9	1424	24.7	1475	26.6	1525	28.5	1573	30.5	1619	32.4	1664	34.3	1708	36.2	1752	38.3	1796	40.4
9000	4545	1398	25.9	1451	27.9	1501	30.0	1549	32.0	1596	34.0	1643	36.1	1687	38.2	1731	40.3	1773	42.4	1814	44.4
9750	4924	1429	29.2	1478	31.4	1528	33.5	1576	35.7	1623	37.9	1667	40.1	1711	42.2	1754	44.5	1796	46.8	1837	49.0
10500	5303	1462	32.8	1511	35.1	1557	37.4	1603	39.7	1649	42.1	1694	44.4	1737	46.8	1779	49.1	1820	51.4	1860	53.8
11250	5681	1497	36.6	1545	39.1	1591	41.6	1635	44.1	1678	46.6	1721	49.1	1764	51.6	1806	54.1	1847	56.6	1886	59.1
12000	6060	1531	40.7	1579	43.4	1625	46.1	1669	48.7	1711	51.4	1753	54.1	1793	56.7	1833	59.4	1874	62.1	1913	64.8
12750	6439	1567	45.1	1613	48.0	1659	50.8	1703	53.7	1745	56.5	1786	59.4	1826	62.2	1865	65.0	1903	67.8	1940	70.7
13500	6818	1608	50.0	1650	52.9	1694	55.9	1737	59.0	1779	62.0	1820	65.0	1860	68.0	1898	71.0	1936	74.0	1973	77.0
14250	7196	1650	55.3	1692	58.4	1732	61.5	1772	64.6	1814	67.8	1855	71.0	1894	74.2	1932	77.4	1970	80.6	2006	83.7

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	2020	1740	23.6	1784	25.1	1828	26.7	1871	28.3	1912	30.0	1953	31.6	2032	35.0						
4850	2449	1744	26.1	1789	27.8	1832	29.5	1875	31.3	1916	33.0	1957	34.8	2036	38.4	2112	42.2	2185	46.0	2256	49.8
5700	2878	1748	28.7	1793	30.5	1837	32.4	1879	34.2	1921	36.1	1961	38.0	2040	41.9	2116	45.9	2190	50.0	2260	54.1
6550	3308	1761	32.2	1804	34.0	1845	35.7	1886	37.5	1925	39.3	1966	41.3	2045	45.5	2121	49.7	2194	54.0	2265	58.4
7400	3737	1779	36.2	1821	38.2	1862	40.1	1903	42.0	1942	44.0	1981	46.0	2055	49.9	2127	53.9	2198	58.1	2269	62.8
8250	4166	1796	40.4	1838	42.5	1879	44.6	1920	46.8	1959	48.9	1998	51.0	2072	55.4	2144	59.7	2214	64.1	2281	68.5
9100	4595	1817	45.0	1857	47.2	1897	49.3	1937	51.6	1976	54.0	2015	56.3	2090	61.0	2161	65.7	2231	70.4	2298	75.2
9950	5025	1843	50.3	1883	52.6	1922	54.9	1960	57.2	1997	59.5	2034	61.9	2107	66.7	2179	71.8	2248	76.9		
10800	5454	1870	55.9	1909	58.3	1948	60.8	1986	63.3	2023	65.8	2060	68.4	2130	73.4	2198	78.4	2265	83.6		
11650	5883	1901	62.1	1939	64.7	1977	67.3	2014	69.9	2050	72.4	2086	75.2	2157	80.6	2224	86.0	2290	91.4		
12500	6313	1931	68.7	1970	71.5	2007	74.3	2044	77.1	2080	79.8	2115	82.6	2183	88.2	2251	93.9				
13350	6742	1966	75.7	2002	78.6	2038	81.6	2075	84.6	2110	87.6	2145	90.6	2214	96.6	2279	103				
14200	7171	2004	83.3	2039	86.4	2074	89.6	2108	92.7	2141	95.8	2176	99.0	2244	105	2310	112				
15050	7601	2042	91.3	2077	94.7	2112	98.0	2146	101	2179	105	2212	108	2275	115						
15900	8030	2081	99.8	2116	103	2150	107	2184	111	2217	114	2249	118	2312	125						
16750	8459	2120	109	2155	113	2189	116	2223	120	2256	124	2288	128								

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 12.3)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
500	100	102	94	84	78	72	67	62	60	83
	70	94	87	77	71	66	61	55	49	76
	40	91	85	75	68	64	59	51	44	74
	20	93	86	76	68	64	58	51	45	75
	0	94	87	76	68	64	58	51	46	75
700	100	109	109	97	88	82	76	70	68	96
	70	107	102	90	80	75	71	65	62	89
	40	107	96	85	75	72	68	60	56	85
	20	106	93	83	74	70	67	59	53	84
	0	108	97	84	73	70	66	59	53	86
950	100	120	118	104	97	92	86	80	77	104
	70	116	111	98	88	84	78	73	71	98
	40	108	100	91	82	78	73	68	67	89
	20	109	100	90	80	76	71	67	66	89
	0	116	105	93	82	77	72	67	63	94
1300	100	119	116	111	105	101	96	93	89	108
	70	117	111	104	97	93	88	83	80	102
	40	113	105	100	92	88	83	77	75	97
	20	111	102	97	90	85	80	76	75	94
	0	114	102	99	92	86	80	75	73	96
1700	100	122	120	122	112	108	104	100	97	116
	70	120	114	112	104	101	96	92	89	108
	40	116	112	113	100	96	91	87	84	106
	20	116	111	114	98	93	89	85	83	106
	0	119	114	117	101	95	89	84	81	110
2315	100	130	126	130	122	116	112	108	105	125
	70	127	123	121	114	109	105	100	97	117
	40	124	118	123	111	104	100	95	92	116
	20	125	117	124	110	102	98	93	91	117
	0	128	119	128	113	104	98	93	89	120

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
500	100	105	99	89	81	75	68	61	58	87
	70	97	90	80	73	68	62	56	52	79
	40	97	89	76	69	66	59	52	47	77
	20	97	89	76	69	66	59	52	47	77
	0	97	89	77	69	66	60	52	47	77
700	100	123	112	101	91	84	78	71	67	101
	70	111	103	94	83	78	73	65	61	92
	40	102	97	91	79	75	70	62	59	86
	20	107	97	89	77	73	67	60	56	87
	0	107	97	90	78	73	67	59	54	87
950	100	131	126	110	99	94	87	81	78	112
	70	119	115	103	92	88	81	75	72	101
	40	110	107	98	87	82	76	71	69	95
	20	113	109	97	84	79	73	67	65	96
	0	114	110	96	84	80	73	66	62	96
1300	100	124	129	117	107	103	98	92	88	115
	70	123	122	111	102	98	91	85	82	109
	40	117	115	107	97	93	87	81	78	104
	20	115	113	104	93	89	83	77	74	101
	0	113	114	104	92	89	81	74	70	101
1700	100	127	127	129	117	111	107	102	100	122
	70	125	125	122	111	105	100	96	92	116
	40	121	122	122	106	100	96	92	89	115
	20	122	122	121	103	98	94	89	87	114
	0	125	123	120	103	97	93	86	83	113
2315	100	133	132	138	128	120	115	111	108	132
	70	131	132	131	122	114	109	104	100	125
	40	128	127	133	118	109	105	100	97	125
	20	128	128	132	116	107	103	97	95	125
	0	132	129	131	116	106	102	95	91	123

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

21 IPO

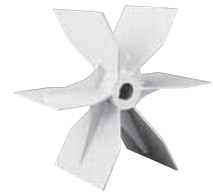
Wheel Diameter = 36½ in.

Outlet Area = 2.34 ft²

Tip Speed = 9.56 x RPM

Minimum Starting HP = 1

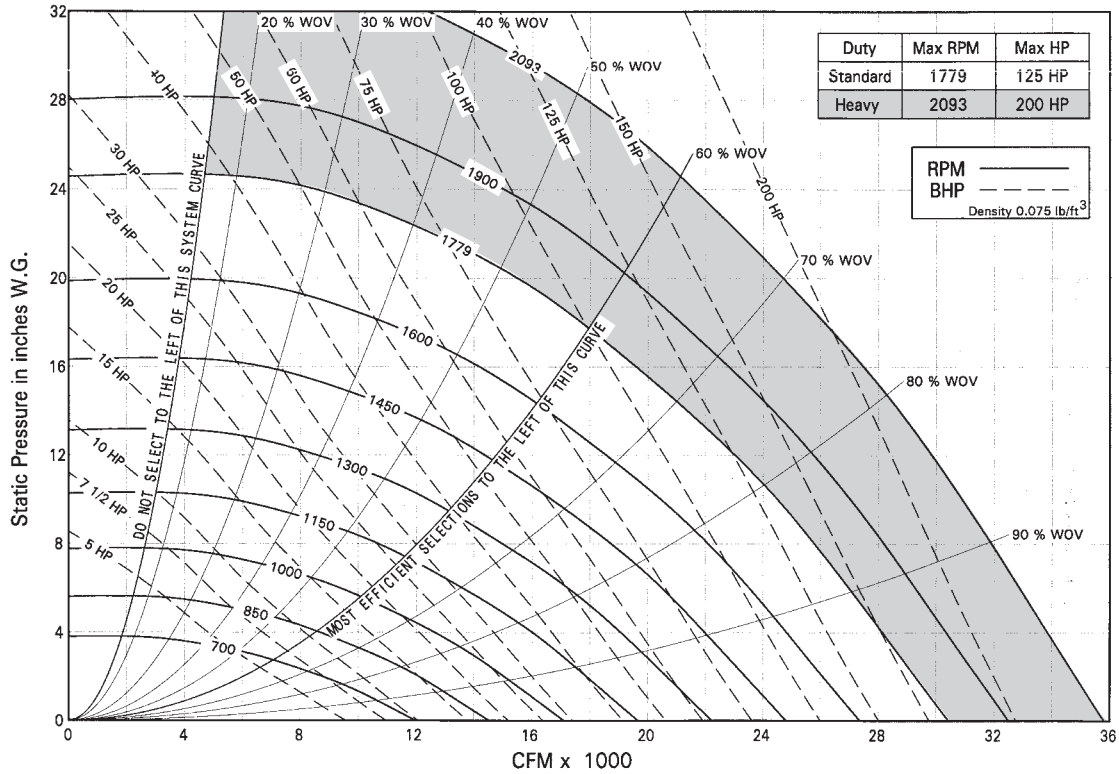
	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1779	125	365T	NA
Heavy	2093	200	365T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2700	1120	379	0.71	516	1.38	626	2.13	719	2.94	803	3.85	879	4.82	948	5.84	1013	6.89				
3275	1358	393	0.91	526	1.69	632	2.52	724	3.42	806	4.36	880	5.37	950	6.47	1015	7.62	1076	8.81	1134	10.0
3850	1597	409	1.15	537	2.04	642	2.98	731	3.95	812	4.98	885	6.07	953	7.18	1017	8.36	1078	9.64	1136	11.0
4425	1836	428	1.43	551	2.42	653	3.48	741	4.56	819	5.67	892	6.82	959	8.05	1022	9.30	1082	10.6	1138	11.9
5000	2074	448	1.75	565	2.86	664	4.01	751	5.22	829	6.45	900	7.70	966	8.97	1028	10.3	1088	11.7	1144	13.1
5575	2313	470	2.14	583	3.37	678	4.63	763	5.92	840	7.27	910	8.64	975	10.0	1036	11.4	1094	12.9	1150	14.4
6150	2551	493	2.59	602	3.93	693	5.29	776	6.70	851	8.15	921	9.64	985	11.1	1046	12.7	1103	14.2	1157	15.8
6725	2790	517	3.10	622	4.55	710	6.04	790	7.56	864	9.10	932	10.7	996	12.3	1056	14.0	1113	15.6	1167	17.3
7300	3029	542	3.70	642	5.25	730	6.87	805	8.47	878	10.2	945	11.8	1008	13.6	1067	15.3	1123	17.1	1176	18.9
7875	3267	568	4.38	665	6.04	749	7.77	824	9.50	893	11.3	959	13.1	1020	14.9	1079	16.7	1135	18.6	1188	20.6
8450	3506	596	5.15	687	6.91	769	8.74	843	10.6	910	12.5	974	14.4	1035	16.3	1092	18.3	1146	20.2	1199	22.3
9025	3744	624	6.03	710	7.87	790	9.82	863	11.8	929	13.8	989	15.8	1049	17.8	1106	19.9	1159	22.0	1211	24.1
9600	3983	654	7.01	735	8.94	812	11.0	882	13.1	948	15.2	1008	17.3	1064	19.4	1120	21.7	1174	23.9	1224	26.1
10175	4221	683	8.10	760	10.1	835	12.3	903	14.5	967	16.7	1027	19.0	1082	21.2	1135	23.5	1188	25.8	1239	28.1
10750	4460	713	9.31	786	11.5	858	13.7	925	16.0	987	18.3	1046	20.7	1101	23.1	1153	25.5	1203	27.9	1253	30.3
11325	4699	743	10.6	813	12.9	881	15.2	947	17.6	1008	20.1	1066	22.6	1121	25.1	1172	27.6	1220	30.1	1268	32.6

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	1659	1136	11.2	1191	12.6	1243	14.0	1293	15.4	1342	16.9	1388	18.4	1434	20.0	1477	21.5	1520	23.1		
4875	2022	1142	12.8	1196	14.3	1246	15.7	1296	17.2	1345	18.9	1391	20.5	1437	22.2	1480	23.9	1523	25.6	1564	27.4
5750	2385	1151	14.8	1205	16.4	1256	18.0	1304	19.6	1351	21.2	1397	22.9	1441	24.6	1483	26.3	1526	28.1	1567	30.0
6625	2748	1165	17.0	1217	18.7	1266	20.4	1314	22.1	1361	23.9	1406	25.7	1450	27.6	1492	29.5	1534	31.3	1574	33.2
7500	3112	1180	19.4	1231	21.3	1281	23.2	1328	25.0	1373	26.9	1417	28.8	1459	30.7	1502	32.7	1543	34.8	1583	36.9
8375	3475	1198	22.1	1248	24.1	1296	26.1	1342	28.2	1388	30.2	1423	32.3	1474	34.4	1515	36.5	1555	38.7	1594	40.8
9250	3838	1216	24.8	1266	27.0	1314	29.3	1360	31.5	1404	33.8	1447	36.0	1489	38.3	1530	40.6	1569	42.9	1608	45.2
10125	4201	1237	28.0	1285	30.3	1331	32.6	1377	35.0	1422	37.5	1464	39.9	1506	42.4	1546	44.8	1585	47.3	1623	49.8
11000	4564	1259	31.3	1307	33.8	1353	36.3	1397	38.9	1440	41.4	1482	44.0	1523	46.6	1563	49.3	1602	52.0	1640	54.6
11875	4927	1284	34.9	1330	37.6	1375	40.3	1419	43.0	1462	45.8	1502	48.5	1542	51.2	1581	54.0	1620	56.8	1658	59.7
12750	5290	1313	39.0	1357	41.8	1398	44.6	1441	47.5	1484	50.4	1524	53.3	1564	56.2	1602	59.2	1639	62.1	1676	65.0
13625	5653	1342	43.3	1386	46.3	1427	49.3	1467	52.3	1506	55.3	1547	58.4	1586	61.5	1624	64.7	1661	67.8	1697	70.9
14500	6016	1372	47.9	1415	51.1	1456	54.4	1496	57.5	1534	60.7	1572	63.9	1608	67.1	1646	70.4	1683	73.8	1719	77.1
15375	6379	1402	52.9	1445	56.3	1486	59.7	1525	63.1	1563	66.5	1600	69.9	1636	73.3	1671	76.6	1706	80.0	1742	83.6
16250	6742	1434	58.2	1475	61.8	1516	65.4	1555	69.0	1593	72.7	1630	76.2	1665	79.8	1700	83.4	1734	86.9	1767	90.5
17125	7105	1468	64.1	1507	67.8	1546	71.5	1585	75.3	1623	79.1	1659	83.0	1694	86.7	1729	90.5	1763	94.3	1795	98.1

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	2074	1564	27.8	1605	29.6	1644	31.4	1682	33.3	1720	35.1	1756	37.1	1827	40.9	1896	44.9				
6000	2489	1568	30.8	1608	32.8	1647	34.7	1685	36.8	1723	38.8	1760	40.9	1831	45.1	1899	49.3	1965	53.7	2029	58.2
7000	2904	1578	34.8	1617	36.8	1655	38.8	1692	40.8	1728	42.8	1764	44.9	1834	49.2	1902	53.8	1968	58.5	2032	63.3
8000	3319	1588	39.0	1627	41.2	1665	43.4	1703	45.6	1739	47.8	1775	50.1	1844	54.6	1910	59.2	1974	63.9	2036	68.6
9000	3734	1604	43.9	1642	46.2	1679	48.5	1715	50.7	1750	53.0	1785	55.4	1854	60.3	1921	65.3	1985	70.4	2047	75.5
10000	4149	1621	49.1	1659	51.6	1695	54.1	1731	56.6	1767	59.1	1801	61.6	1868	66.7	1932	71.7	1995	77.0	2057	82.5
11000	4564	1640	54.6	1677	57.3	1713	60.0	1748	62.7	1783	65.4	1818	68.1	1884	73.6	1949	79.1	2011	84.7	2071	90.2
12000	4979	1660	60.4	1697	63.3	1733	66.2	1768	69.1	1803	72.1	1836	75.0	1901	80.8	1965	86.8	2027	92.7	2087	98.7
13000	5394	1682	66.6	1717	69.6	1753	72.8	1788	75.9	1823	79.0	1856	82.2	1921	88.5	1984	94.8	2045	101		
14000	5809	1707	73.5	1742	76.7	1777	79.9	1810	83.1	1843	86.3	1876	89.7	1942	96.4	2004	103	2065	110		
15000	6224	1732	80.8	1767	84.2	1802	87.6	1835	91.1	1868	94.5	1900	97.9	1962	105	2024	112	2085	119		
16000	6639	1758	88.4	1793	92.0	1827	95.7	1860	99.4	1893	103	1925	107	1987	114	2047	121				
17000	7053	1791	96.9	1823	101	1855	104	1886	108	1918	112	1950	116	2012	124	2072	132				
18000	7468	1824	106	1856	110	1887	114	1918	118	1948	122	1977	126	2038	134						
19000	7883	1858	116	1890	120	1921	124	1951	128	1981	132	2010	136	2066	145						
20000	8298	1892	126	1923	130	1954	135	1984	139	2014	143	2043	148								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 17.1)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
450	100	98	90	81	77	73	67	63	60	81
	70	92	82	73	69	65	60	56	53	73
	40	84	76	67	63	60	55	52	46	67
	20	84	73	64	60	58	54	50	46	65
	0	99	76	67	61	59	55	51	48	74
600	100	103	100	91	85	81	76	71	68	89
	70	97	92	83	77	73	68	64	60	82
	40	89	86	77	71	67	63	60	55	75
	20	89	84	74	68	65	62	58	54	73
	0	104	92	77	70	66	63	59	56	81
850	100	112	108	100	95	91	86	82	78	99
	70	106	102	92	88	84	78	74	70	92
	40	99	96	87	80	76	72	68	65	85
	20	95	93	84	77	74	70	66	63	82
	0	100	97	87	79	74	71	67	65	85
1150	100	114	112	107	104	100	96	92	89	106
	70	111	105	100	97	93	88	84	81	99
	40	108	99	95	90	86	81	77	74	93
	20	104	97	95	88	82	78	74	72	91
	0	106	101	97	89	84	79	75	73	93
1550	100	119	120	116	111	108	104	100	97	114
	70	116	114	109	104	101	97	92	89	107
	40	113	110	104	99	94	90	85	81	102
	20	109	107	103	98	91	86	82	79	100
	0	111	110	106	99	92	88	83	80	102
2093	100	125	128	125	119	116	113	108	105	123
	70	122	125	118	112	109	105	100	96	116
	40	118	121	112	107	102	98	93	89	111
	20	114	117	111	108	99	95	90	86	109
	0	116	119	114	109	101	96	91	87	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
450	100	106	100	88	80	75	68	63	60	88
	70	97	90	80	71	66	60	55	51	78
	40	90	86	73	64	61	55	50	46	73
	20	90	87	71	62	59	53	48	43	73
	0	91	86	72	63	59	53	47	42	73
600	100	111	109	99	90	83	77	71	67	96
	70	102	99	90	81	75	69	63	59	87
	40	95	94	85	74	68	64	58	54	82
	20	95	94	84	72	67	62	57	52	81
	0	96	95	84	73	67	62	56	51	82
850	100	120	116	109	100	94	88	82	78	105
	70	114	110	101	92	86	80	75	70	98
	40	106	104	95	85	79	74	69	67	92
	20	105	104	94	82	75	70	65	61	91
	0	106	103	94	82	75	70	65	61	91
1150	100	122	123	116	109	103	98	94	91	113
	70	121	115	109	101	96	91	86	83	105
	40	115	109	106	94	89	85	80	76	100
	20	114	108	104	92	86	81	77	73	99
	0	112	109	103	91	84	78	72	68	98
1550	100	128	130	127	118	112	107	102	98	122
	70	126	124	119	111	104	100	95	91	115
	40	120	118	114	107	97	93	89	85	110
	20	119	117	113	105	94	90	85	81	108
	0	117	117	113	103	93	87	81	76	108
2093	100	133	136	137	128	121	116	110	106	131
	70	131	134	129	121	112	109	103	99	124
	40	125	128	122	119	105	102	97	93	119
	20	124	127	121	117	103	99	93	89	118
	0	123	126	123	115	102	97	90	85	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

23 IPO

Wheel Diameter = 40 in.
 Outlet Area = 2.8 ft²
 Tip Speed = 10.47 x RPM
 Minimum Starting HP = 2

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1623	150	365T	NA
Heavy	1910	200	365T	NA

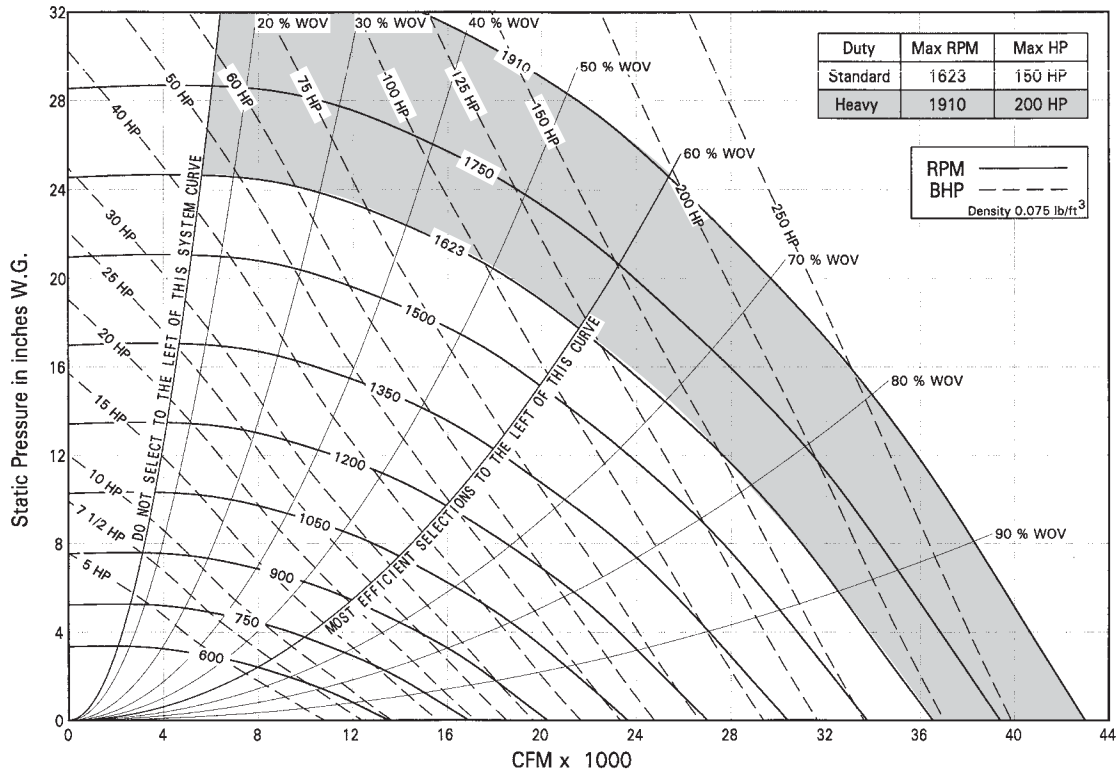


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1027	342	0.78	469	1.55	569	2.40	655	3.38	732	4.44	801	5.56	865	6.74						
3675	1258	353	1.00	477	1.89	574	2.84	659	3.88	734	4.97	803	6.20	866	7.49	926	8.83	981	10.2	1034	11.7
4350	1489	366	1.26	486	2.28	582	3.35	664	4.47	739	5.68	806	6.93	868	8.24	927	9.69	983	11.2	1035	12.7
5025	1720	383	1.57	497	2.70	591	3.92	672	5.17	744	6.44	811	7.81	873	9.23	931	10.7	985	12.2	1037	13.8
5700	1952	401	1.93	510	3.20	601	4.53	681	5.91	753	7.33	818	8.77	878	10.3	936	11.9	990	13.5	1041	15.1
6375	2183	419	2.35	524	3.75	613	5.20	691	6.72	761	8.26	826	9.85	886	11.5	942	13.1	995	14.8	1046	16.6
7050	2414	439	2.84	541	4.38	626	5.96	702	7.57	772	9.27	835	11.0	894	12.7	950	14.5	1002	16.3	1052	18.1
7725	2645	460	3.39	558	5.08	639	6.78	715	8.55	782	10.3	845	12.2	904	14.1	959	16.0	1011	17.9	1060	19.8
8400	2876	482	4.05	576	5.85	656	7.71	728	9.58	794	11.5	856	13.5	914	15.5	968	17.5	1019	19.6	1069	21.7
9075	3107	505	4.80	595	6.72	674	8.72	742	10.7	807	12.8	868	14.9	924	17.0	979	19.1	1030	21.3	1078	23.6
9750	3339	529	5.63	615	7.69	691	9.81	759	12.0	820	14.1	881	16.4	936	18.6	989	20.8	1040	23.2	1088	25.6
10425	3570	554	6.60	635	8.75	709	11.0	776	13.3	837	15.6	894	17.9	949	20.3	1001	22.7	1050	25.1	1098	27.6
11100	3801	580	7.67	656	9.91	728	12.3	794	14.8	854	17.2	909	19.6	962	22.1	1014	24.7	1063	27.2	1109	29.8
11775	4032	606	8.87	679	11.2	748	13.8	812	16.3	871	18.9	926	21.5	976	24.1	1027	26.8	1076	29.5	1122	32.2
12450	4263	632	10.2	702	12.7	769	15.3	831	18.0	889	20.7	943	23.5	993	26.2	1040	28.9	1089	31.8	1135	34.7
13125	4494	659	11.7	725	14.3	789	17.0	850	19.8	906	22.6	960	25.6	1010	28.5	1057	31.4	1102	34.2	1148	37.3

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1712	1037	13.8	1087	15.4	1135	17.2	1181	18.9	1225	20.7	1267	22.6	1309	24.5	1349	26.4	1387	28.3	1425	30.3
5925	2029	1043	15.6	1092	17.3	1138	19.0	1183	20.9	1227	22.8	1270	24.8	1311	26.8	1351	28.9	1390	31.0	1427	33.1
6850	2345	1050	17.6	1099	19.5	1145	21.4	1190	23.4	1233	25.3	1274	27.3	1314	29.3	1353	31.4	1392	33.6	1430	35.9
7775	2662	1061	20.0	1108	21.9	1153	23.9	1197	26.0	1240	28.1	1282	30.3	1322	32.5	1360	34.7	1398	36.9	1435	39.2
8700	2979	1073	22.5	1120	24.6	1165	26.8	1208	29.0	1249	31.2	1289	33.4	1329	35.8	1368	38.2	1405	40.6	1442	43.0
9625	3296	1086	25.2	1132	27.5	1176	29.9	1219	32.3	1261	34.7	1301	37.1	1339	39.5	1377	41.9	1413	44.4	1449	46.9
10550	3613	1100	28.0	1146	30.6	1190	33.1	1232	35.7	1273	38.2	1312	40.9	1351	43.5	1389	46.1	1425	48.8	1460	51.4
11475	3929	1116	31.1	1160	33.7	1204	36.5	1246	39.3	1287	42.1	1326	44.8	1363	47.6	1400	50.5	1437	53.3	1472	56.2
12400	4246	1134	34.5	1177	37.3	1219	40.1	1260	43.0	1301	46.0	1340	49.0	1378	52.0	1414	55.0	1450	58.1	1484	61.1
13325	4563	1151	38.0	1195	41.1	1237	44.2	1277	47.2	1316	50.2	1354	53.4	1392	56.6	1428	59.8	1464	63.0	1498	66.3
14250	4880	1172	41.9	1213	45.1	1255	48.4	1295	51.6	1333	54.9	1371	58.2	1407	61.4	1442	64.7	1478	68.2	1512	71.6
15175	5196	1195	46.2	1234	49.5	1273	52.8	1313	56.3	1351	59.8	1388	63.3	1424	66.7	1459	70.2	1493	73.7	1527	77.2
16100	5513	1218	50.7	1258	54.2	1296	57.7	1332	61.3	1369	64.9	1406	68.6	1442	72.3	1477	76.0	1511	79.7	1544	83.3
17025	5830	1242	55.5	1281	59.2	1319	63.0	1355	66.7	1390	70.4	1424	74.2	1460	78.1	1495	82.0	1529	85.9	1561	89.8
17950	6147	1266	60.5	1305	64.5	1343	68.5	1379	72.5	1414	76.4	1447	80.4	1480	84.3	1513	88.2	1546	92.4	1579	96.5
18875	6464	1290	65.9	1329	70.1	1366	74.4	1402	78.5	1437	82.7	1471	86.9	1503	91.0	1535	95.1	1566	99.3	1597	104

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	2054	1428	33.3	1464	35.5	1500	37.7	1535	39.9	1569	42.2	1603	44.5	1667	49.2	1730	53.9				
7175	2457	1431	36.9	1467	39.2	1503	41.6	1538	44.0	1572	46.5	1606	49.0	1670	54.0	1733	59.1	1793	64.4	1851	69.7
8350	2859	1439	41.6	1475	43.9	1510	46.3	1544	48.7	1577	51.2	1609	53.6	1673	58.9	1736	64.4	1796	70.0	1854	75.7
9525	3261	1449	46.5	1484	49.1	1519	51.7	1553	54.4	1586	57.0	1619	59.7	1682	65.1	1742	70.6	1801	76.2	1857	81.8
10700	3664	1462	52.2	1497	54.9	1531	57.6	1563	60.3	1596	63.0	1628	66.0	1691	71.8	1752	77.8	1810	83.8	1867	89.9
11875	4066	1477	58.3	1512	61.2	1545	64.2	1578	67.2	1610	70.1	1642	73.1	1703	79.1	1761	85.2	1820	91.6	1876	98.1
13050	4469	1494	64.7	1528	67.9	1561	71.0	1593	74.3	1625	77.5	1657	80.7	1717	87.3	1776	93.8	1833	100	1887	107
14225	4871	1512	71.5	1546	74.9	1578	78.4	1611	81.8	1642	85.3	1673	88.7	1732	95.7	1791	103	1847	110	1902	117
15400	5273	1531	78.6	1564	82.3	1596	86.0	1628	89.7	1660	93.4	1690	97.1	1750	105	1807	112	1862	120		
16575	5676	1553	86.6	1585	90.4	1616	94.2	1647	98.0	1678	102	1708	106	1768	114	1825	122	1880	130		
17750	6078	1575	95.0	1607	99.1	1639	103	1669	107	1699	111	1729	115	1786	124	1843	132	1898	141		
18925	6481	1598	104	1630	108	1661	113	1692	117	1722	121	1751	126	1808	134	1863	143				
20100	6883	1626	114	1656	118	1684	122	1715	127	1744	132	1774	136	1830	146	1885	155				
21275	7285	1656	124	1685	129	1714	133	1741	138	1769	143	1796	147	1853	157	1907	167				
22450	7688	1686	135	1715	140	1743	145	1771	150	1798	155	1825	160	1876	170						
23625	8090	1716	147	1745	152	1773	157	1801	163	1828	168	1854	173	1906	183						

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 22.5)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
400	100	96	91	82	75	71	66	61	56	80
	70	88	83	74	69	65	61	56	50	73
	40	80	77	69	66	64	58	52	45	69
	20	78	75	68	65	64	58	51	44	68
	0	80	77	70	66	64	58	51	45	69
550	100	104	100	91	85	81	76	71	68	89
	70	98	92	83	78	73	68	64	61	82
	40	91	85	76	71	68	64	60	55	76
	20	91	83	74	68	65	62	58	54	74
	0	105	90	77	70	67	63	60	56	81
750	100	112	106	98	95	91	85	81	77	98
	70	107	100	91	87	83	77	73	70	91
	40	99	95	85	80	76	71	68	65	84
	20	96	92	82	76	73	69	66	63	82
	0	101	96	86	78	74	70	67	64	84
1050	100	115	113	107	104	100	96	92	89	107
	70	112	106	100	97	93	88	84	82	99
	40	109	100	95	90	86	81	77	74	93
	20	105	98	96	87	83	78	74	72	91
	0	107	102	97	89	84	79	75	74	93
1400	100	120	119	116	112	108	104	100	97	114
	70	117	113	109	104	101	96	92	89	107
	40	114	108	104	99	94	90	85	82	101
	20	110	106	103	97	91	86	82	79	99
	0	112	109	106	98	92	87	83	80	101
1910	100	126	128	126	119	117	113	108	105	123
	70	123	125	119	112	110	105	100	97	116
	40	119	121	113	107	103	98	94	90	111
	20	115	118	111	108	99	95	90	87	109
	0	118	120	115	109	101	96	92	88	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
400	100	103	100	91	81	74	67	61	56	88
	70	92	89	81	73	67	61	55	48	78
	40	87	84	76	69	65	60	53	47	74
	20	87	84	76	69	65	59	53	47	73
	0	87	84	76	68	64	59	53	46	73
550	100	113	109	99	89	84	77	71	68	96
	70	103	99	90	81	75	69	63	59	87
	40	96	95	84	74	69	64	59	54	82
	20	97	95	82	72	67	62	57	52	81
	0	98	95	83	72	67	62	56	51	82
750	100	120	115	108	98	93	87	81	77	104
	70	114	108	99	90	85	79	74	70	97
	40	106	103	93	83	78	73	69	66	90
	20	106	103	92	80	74	69	64	61	90
	0	106	102	92	80	74	69	64	61	90
1050	100	124	125	116	109	104	98	94	91	113
	70	122	116	108	100	97	91	87	83	106
	40	116	110	106	93	89	85	81	77	101
	20	115	109	104	91	87	81	77	74	99
	0	113	110	103	90	85	78	73	68	99
1400	100	129	130	126	118	112	107	102	99	121
	70	127	124	118	110	104	100	95	91	114
	40	121	117	114	105	97	93	89	85	109
	20	120	116	113	103	94	90	85	81	107
	0	118	117	113	102	93	87	81	76	107
1910	100	134	137	137	128	121	116	111	107	131
	70	132	135	129	120	112	109	103	99	124
	40	127	129	123	118	105	102	97	93	119
	20	125	128	122	116	102	99	94	89	118
	0	124	126	123	115	102	97	90	85	118

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

26 IPO

Wheel Diameter = 45 $\frac{1}{8}$ in.
 Outlet Area = 3.58 ft²
 Tip Speed = 11.81 x RPM
 Minimum Starting HP = 5

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1439	200	405T	NA
Heavy	1693	300	405T	NA

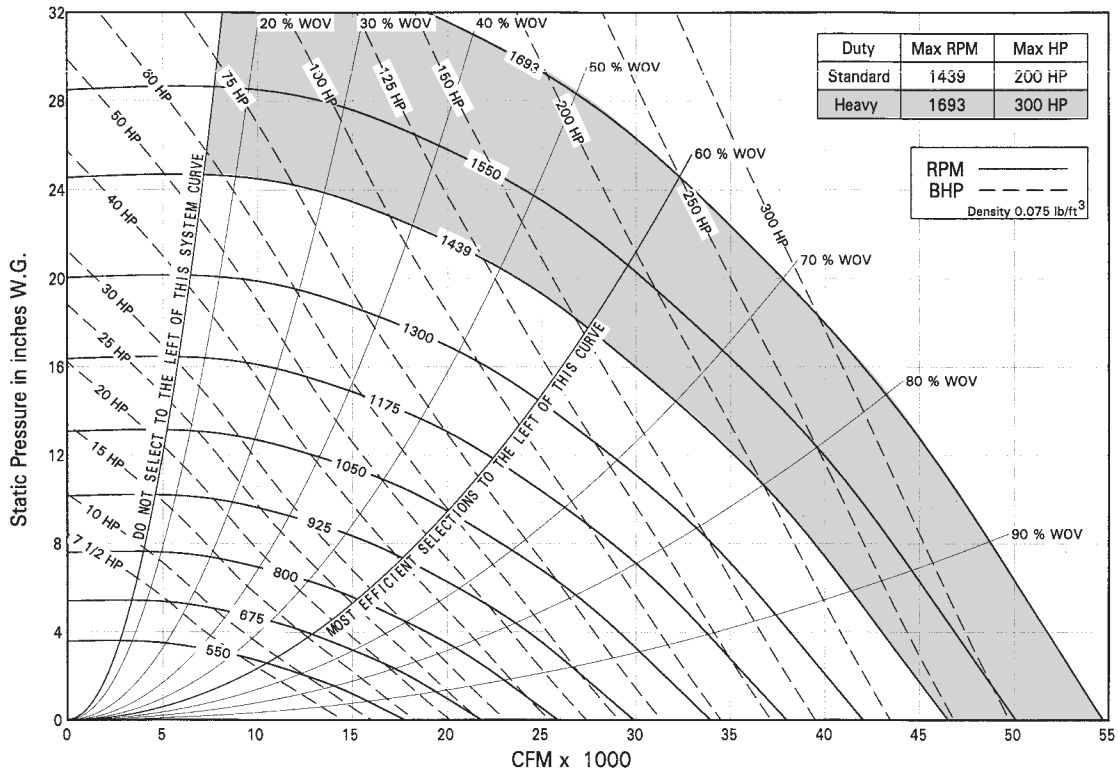


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	1078	305	1.05	417	2.05	505	3.17	581	4.41	649	5.79	710	7.25	767	8.78						
4825	1300	315	1.33	424	2.49	510	3.72	585	5.06	651	6.46	712	8.04	768	9.70	821	11.4	870	13.2	916	15.1
5650	1522	327	1.65	432	2.97	517	4.36	589	5.79	655	7.36	715	8.97	770	10.6	822	12.5	871	14.4	918	16.4
6475	1745	341	2.04	441	3.50	525	5.06	596	6.66	660	8.29	719	10.1	774	11.9	825	13.7	873	15.6	920	17.7
7300	1967	356	2.48	452	4.11	533	5.81	604	7.58	667	9.39	725	11.2	779	13.1	830	15.2	878	17.2	923	19.3
8125	2190	372	3.00	464	4.78	543	6.64	613	8.56	675	10.5	732	12.6	785	14.6	835	16.7	882	18.9	928	21.1
8950	2412	389	3.59	479	5.56	554	7.56	622	9.61	684	11.8	740	13.9	793	16.2	842	18.4	888	20.7	932	22.9
9775	2634	406	4.27	494	6.40	566	8.55	633	10.8	693	13.1	749	15.4	800	17.8	849	20.2	895	22.6	939	25.1
10600	2857	425	5.06	509	7.33	580	9.68	644	12.1	703	14.5	758	17.0	809	19.5	857	22.1	903	24.7	947	27.3
11425	3079	445	5.96	525	8.38	595	10.9	656	13.4	714	16.0	768	18.6	818	21.3	866	24.1	911	26.8	954	29.6
12250	3301	465	6.97	542	9.55	610	12.2	670	14.9	725	17.6	779	20.5	828	23.3	875	26.1	920	29.1	963	32.0
13075	3524	486	8.11	559	10.8	625	13.6	685	16.6	738	19.4	790	22.4	839	25.4	885	28.4	929	31.4	972	34.6
13900	3746	508	9.39	577	12.2	641	15.2	700	18.3	753	21.4	802	24.4	850	27.6	896	30.8	939	33.9	980	37.2
14725	3969	530	10.8	595	13.8	658	16.9	715	20.1	768	23.4	816	26.6	861	29.9	907	33.3	950	36.6	991	40.0
15550	4191	552	12.4	615	15.5	675	18.8	730	22.1	782	25.6	831	29.0	875	32.4	918	35.9	961	39.4	1002	43.0
16375	4413	575	14.1	635	17.4	693	20.8	747	24.3	797	27.9	845	31.5	890	35.1	931	38.7	972	42.4	1013	46.1

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	1617	919	16.9	963	19.0	1005	21.2	1046	23.3	1085	25.6	1123	27.9	1159	30.2	1195	32.6				
7125	1920	922	18.9	965	21.0	1007	23.3	1048	25.7	1087	28.1	1125	30.6	1161	33.1	1197	35.6	1231	38.2	1264	40.9
8250	2223	928	21.4	971	23.7	1013	26.0	1052	28.4	1090	30.8	1127	33.3	1163	35.9	1199	38.7	1233	41.5	1266	44.3
9375	2526	936	24.0	978	26.4	1019	29.0	1058	31.6	1096	34.2	1133	36.9	1168	39.6	1203	42.3	1236	45.0	1269	47.8
10500	2830	946	27.0	987	29.7	1027	32.3	1065	35.0	1103	37.7	1139	40.6	1175	43.5	1209	46.4	1242	49.4	1275	52.4
11625	3133	956	30.2	997	33.0	1037	35.9	1075	38.8	1112	41.8	1147	44.7	1182	47.6	1215	50.7	1249	53.8	1281	57.0
12750	3436	968	33.6	1009	36.6	1048	39.7	1085	42.9	1122	46.0	1157	49.2	1192	52.4	1225	55.6	1257	58.8	1289	62.1
13875	3739	980	37.1	1021	40.4	1060	43.8	1097	47.1	1133	50.5	1167	53.9	1202	57.3	1235	60.8	1267	64.3	1298	67.7
15000	4043	994	41.0	1033	44.4	1072	48.0	1109	51.6	1145	55.2	1179	58.9	1213	62.5	1245	66.1	1277	69.8	1308	73.6
16125	4346	1009	45.2	1048	48.9	1085	52.6	1121	56.2	1157	60.1	1191	64.0	1225	67.9	1257	71.8	1289	75.7	1319	79.6
17250	4649	1025	49.6	1063	53.5	1100	57.5	1136	61.5	1170	65.4	1203	69.3	1237	73.5	1269	77.7	1301	81.8	1331	86.0
18375	4952	1043	54.4	1078	58.4	1115	62.7	1151	66.9	1185	71.1	1218	75.3	1250	79.5	1281	83.7	1313	88.1	1343	92.6
19500	5256	1062	59.6	1097	63.9	1131	68.2	1166	72.6	1200	77.1	1233	81.6	1265	86.0	1296	90.5	1326	95.0	1356	99.4
20625	5559	1082	65.2	1117	69.7	1151	74.2	1183	78.7	1215	83.3	1248	88.1	1280	92.8	1311	97.6	1341	102	1370	107
21750	5862	1102	71.0	1137	75.8	1171	80.6	1203	85.4	1234	90.2	1264	94.9	1295	99.9	1326	105	1356	110	1385	115
22875	6165	1123	77.2	1157	82.3	1190	87.4	1223	92.4	1253	97.5	1283	103	1313	108	1341	113	1371	118	1400	123

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	2156	1266	43.5	1298	46.3	1330	49.2	1361	52.1	1391	55.0	1421	58.0	1478	64.0	1534	70.2	1587	76.6		
9500	2560	1269	48.3	1301	51.1	1333	54.2	1364	57.3	1394	60.5	1424	63.7	1481	70.2	1537	76.9	1590	83.7	1641	90.6
11000	2964	1278	54.4	1309	57.5	1340	60.7	1370	63.8	1400	67.0	1429	70.2	1484	76.6	1539	83.6	1593	90.9	1644	98.3
12500	3369	1286	60.8	1318	64.2	1348	67.6	1379	71.0	1408	74.5	1437	78.0	1493	85.0	1546	92.2	1598	99.4	1648	107
14000	3773	1300	68.4	1330	71.9	1360	75.4	1389	78.9	1418	82.5	1445	86.1	1501	93.6	1555	101	1607	109	1657	117
15500	4177	1313	76.2	1343	80.0	1373	83.9	1402	87.8	1431	91.7	1459	95.5	1513	103	1565	111	1615	119	1665	128
17000	4582	1329	84.6	1358	88.7	1388	92.8	1416	97.0	1444	101	1472	105	1526	114	1578	122	1628	131	1676	140
18500	4986	1345	93.3	1374	97.8	1403	102	1432	107	1460	111	1487	116	1540	125	1591	134	1641	143	1690	152
20000	5390	1362	103	1391	107	1420	112	1448	117	1476	122	1503	127	1555	136	1606	146	1655	156		
21500	5795	1382	113	1410	118	1438	123	1465	128	1492	133	1519	138	1571	148	1622	159	1671	169		
23000	6199	1402	124	1430	129	1458	135	1485	140	1512	145	1538	150	1588	161	1638	172	1687	183		
24500	6603	1423	135	1451	141	1478	147	1505	152	1532	158	1558	164	1608	175	1657	186				
26000	7008	1449	148	1475	154	1500	160	1525	165	1552	171	1578	177	1628	189	1676	201				
27500	7412	1475	162	1501	168	1526	174	1551	180	1575	186	1599	192	1648	205						
29000	7816	1502	176	1528	183	1553	189	1577	195	1601	202	1625	208	1670	221						
30500	8221	1529	191	1554	198	1579	205	1604	212	1628	218	1651	225								

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 32.3)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
350	100	97	90	81	75	71	65	61	56	80
	70	90	82	74	69	66	60	56	49	73
	40	82	76	68	66	64	58	52	44	69
	20	79	74	68	66	64	57	51	44	69
	0	81	76	69	67	64	57	51	44	69
500	100	106	100	91	86	82	77	72	69	90
	70	100	92	83	79	74	69	65	62	83
	40	93	86	77	72	69	65	61	56	76
	20	93	83	74	69	67	64	59	55	74
	0	107	89	77	71	68	64	61	58	83
700	100	115	107	100	97	92	87	83	79	99
	70	109	101	92	89	84	79	75	72	92
	40	102	96	86	81	78	73	69	67	86
	20	98	94	83	78	75	71	67	65	83
	0	103	97	87	79	76	72	69	66	86
950	100	117	114	108	105	101	97	93	90	107
	70	113	107	101	98	94	89	85	83	100
	40	109	101	96	91	87	82	78	75	94
	20	106	100	96	88	84	79	75	74	92
	0	108	104	97	89	85	80	76	75	94
1250	100	122	120	116	112	109	104	101	98	115
	70	119	113	109	105	102	97	92	90	108
	40	115	107	104	99	95	90	85	82	102
	20	112	105	104	97	91	87	83	80	100
	0	114	109	106	98	92	88	84	81	102
1693	100	127	129	126	120	117	113	109	105	123
	70	124	124	119	113	110	106	101	97	116
	40	121	120	113	108	103	99	94	90	111
	20	117	117	112	107	100	95	91	88	109
	0	119	120	115	108	101	97	92	89	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
350	100	105	99	90	79	73	67	61	55	87
	70	94	88	80	72	67	61	55	48	77
	40	88	83	75	69	65	59	53	47	73
	20	88	83	75	68	65	59	53	46	73
	0	89	83	75	68	65	59	52	46	73
500	100	115	109	99	90	84	78	72	69	97
	70	105	100	90	81	76	70	64	60	88
	40	98	96	83	74	70	64	60	55	83
	20	99	96	82	72	68	63	58	53	82
	0	100	96	83	73	68	62	57	52	83
700	100	123	116	109	100	95	88	83	79	106
	70	117	110	100	92	87	81	76	71	98
	40	109	104	94	84	80	75	70	68	92
	20	108	104	93	81	76	71	66	63	91
	0	109	104	94	81	76	71	65	62	91
950	100	125	126	116	109	104	99	95	92	114
	70	123	118	109	101	97	92	88	84	107
	40	117	111	106	94	90	86	81	78	101
	20	116	111	105	91	87	82	78	75	100
	0	115	112	103	90	85	79	73	69	99
1250	100	130	131	126	118	112	107	102	99	122
	70	128	123	118	110	105	100	95	92	114
	40	123	116	115	104	98	93	89	85	109
	20	122	116	113	102	95	90	85	82	108
	0	120	117	113	101	93	87	81	76	107
1693	100	136	138	136	128	121	116	111	107	131
	70	134	134	128	120	113	109	104	100	124
	40	128	128	123	117	106	102	97	93	119
	20	127	127	122	115	103	99	94	90	117
	0	125	126	123	113	102	97	90	85	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

29 IPO

Wheel Diameter = 50½ in.

Outlet Area = 4.54 ft²

Tip Speed = 13.22 x RPM

Minimum Starting HP = 10

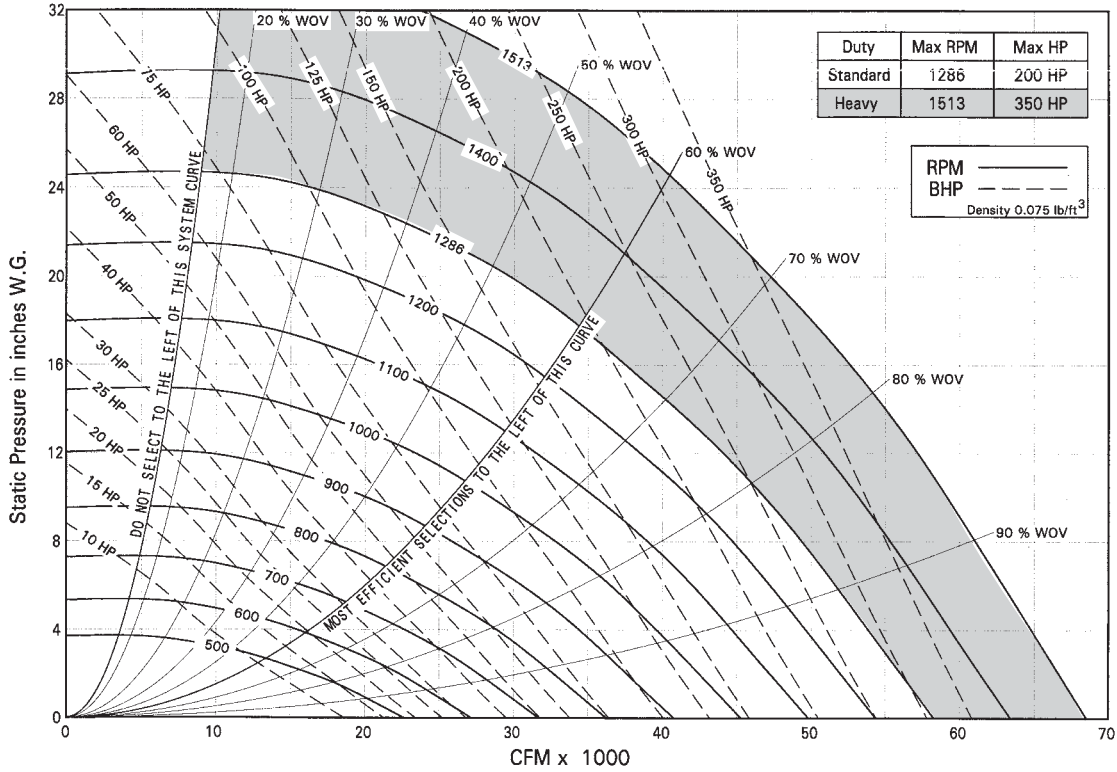
Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1286	200	405T	NA
Heavy	1513	350	405T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1086	273	1.31	372	2.56	451	3.97	519	5.52	580	7.24	635	9.07	685	11.0						
5875	1277	280	1.60	378	3.03	455	4.54	522	6.20	581	7.94	636	9.90	686	12.0	733	14.1	777	16.3	819	18.6
6750	1467	288	1.93	384	3.52	460	5.20	525	6.96	584	8.86	637	10.8	687	12.9	734	15.2	778	17.6	820	20.0
7625	1657	299	2.32	390	4.06	465	5.91	530	7.82	588	9.82	641	11.9	690	14.1	735	16.4	779	18.8	821	21.4
8500	1847	310	2.75	398	4.66	472	6.68	535	8.77	592	10.9	644	13.1	693	15.5	739	17.9	782	20.3	822	22.8
9375	2038	321	3.24	406	5.33	478	7.49	541	9.76	598	12.1	649	14.4	697	16.8	742	19.4	785	22.0	826	24.7
10250	2228	333	3.80	416	6.06	486	8.39	548	10.8	604	13.3	655	15.8	702	18.4	746	21.0	789	23.8	829	26.6
11125	2418	346	4.44	427	6.88	494	9.37	555	11.9	610	14.6	661	17.3	708	20.1	752	22.9	793	25.7	833	28.5
12000	2608	359	5.14	438	7.76	503	10.4	563	13.2	617	16.0	667	18.9	713	21.8	757	24.8	799	27.8	838	30.8
12875	2798	373	5.94	449	8.72	513	11.6	571	14.5	624	17.4	674	20.5	720	23.6	763	26.7	804	29.9	843	33.1
13750	2989	388	6.84	461	9.76	524	12.8	580	15.9	633	19.0	681	22.2	727	25.5	770	28.8	810	32.1	849	35.5
14625	3179	403	7.84	474	10.9	535	14.2	590	17.4	641	20.7	689	24.0	733	27.4	776	30.9	817	34.5	855	38.0
15500	3369	418	8.93	486	12.2	547	15.6	601	19.0	649	22.4	697	26.0	741	29.5	783	33.1	823	36.9	862	40.6
16375	3559	434	10.2	500	13.6	558	17.1	612	20.7	660	24.3	706	28.0	750	31.8	791	35.5	830	39.3	868	43.3
17250	3750	451	11.5	513	15.0	570	18.7	623	22.6	671	26.4	714	30.1	758	34.1	799	38.0	838	42.0	875	46.0
18125	3940	467	13.0	527	16.6	583	20.5	634	24.5	682	28.5	725	32.5	766	36.5	807	40.7	846	44.8	882	49.0

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000	1521	820	20.4	860	22.9	898	25.5	934	28.2	969	30.9	1003	33.7								
8425	1831	822	22.7	862	25.4	899	28.2	936	31.1	971	34.1	1004	37.1	1037	40.1	1069	43.3	1099	46.5	1129	49.7
9850	2141	827	25.7	866	28.5	903	31.4	938	34.2	972	37.3	1006	40.5	1039	43.8	1070	47.1	1101	50.5	1131	54.0
11275	2451	833	28.9	872	32.0	908	35.1	944	38.2	978	41.4	1010	44.7	1042	47.9	1073	51.2	1103	54.6	1133	58.3
12700	2760	842	32.6	879	35.8	915	39.0	949	42.3	983	45.8	1016	49.3	1048	52.9	1079	56.5	1108	60.1	1137	63.7
14125	3070	851	36.6	888	40.1	924	43.6	958	47.1	991	50.7	1023	54.3	1054	57.9	1084	61.8	1114	65.7	1143	69.6
15550	3380	862	40.8	898	44.5	933	48.3	967	52.2	1000	56.1	1032	59.9	1062	63.9	1092	67.8	1121	71.7	1149	75.7
16975	3690	873	45.1	909	49.2	944	53.4	977	57.5	1009	61.6	1041	65.8	1071	70.0	1101	74.3	1130	78.5	1158	82.8
18400	4000	885	49.9	920	54.2	955	58.6	988	63.1	1020	67.5	1051	72.0	1081	76.4	1110	80.9	1139	85.5	1167	90.1
19825	4309	898	55.2	933	59.7	966	64.2	999	68.9	1031	73.6	1062	78.4	1092	83.2	1121	88.0	1149	92.9	1176	97.7
21250	4619	912	60.7	947	65.6	980	70.4	1012	75.3	1042	80.1	1073	85.1	1102	90.3	1131	95.4	1159	101	1187	106
22675	4929	927	66.6	960	71.7	993	76.9	1025	82.1	1056	87.3	1085	92.5	1114	97.7	1142	103	1170	109	1198	114
24100	5239	945	73.2	977	78.4	1007	83.7	1039	89.3	1069	94.8	1099	100	1127	106	1155	111	1182	117	1209	123
25525	5548	963	80.1	994	85.7	1024	91.3	1053	96.9	1083	103	1112	109	1141	114	1168	120	1195	126	1222	132
26950	5858	981	87.4	1012	93.4	1042	99.3	1071	105	1099	111	1126	117	1154	123	1182	130	1209	136	1235	142
28375	6168	1000	95.2	1031	102	1060	108	1089	114	1117	120	1143	127	1169	133	1196	139	1223	146	1249	152

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	2173	1131	54.4	1160	58.0	1188	61.5	1216	65.2	1243	68.8	1270	72.5	1321	80.1	1370	87.9	1418	95.8		
12000	2608	1135	60.9	1163	64.4	1191	68.2	1219	72.2	1246	76.1	1272	80.2	1324	88.4	1373	96.7	1421	105	1467	114
14000	3043	1143	69.1	1171	73.0	1198	77.0	1225	81.0	1251	85.0	1277	89.0	1327	97.2	1376	106	1423	115	1469	124
16000	3478	1152	77.9	1179	82.0	1206	86.3	1233	90.7	1259	95.1	1285	100	1335	109	1383	118	1429	127	1474	136
18000	3913	1164	88.0	1191	92.5	1218	97.1	1244	102	1270	106	1294	111	1343	120	1391	130	1437	140	1482	150
20000	4347	1177	98.6	1204	104	1231	109	1257	114	1282	119	1307	124	1355	134	1402	144	1447	154	1490	164
22000	4782	1193	110	1219	115	1245	121	1271	126	1295	131	1320	137	1368	148	1414	159	1459	170	1502	181
24000	5217	1208	122	1234	128	1260	133	1286	139	1311	145	1335	151	1382	163	1427	174	1472	186		
26000	5652	1226	135	1252	141	1276	147	1301	153	1326	159	1350	166	1397	178	1442	191	1486	203		
28000	6086	1245	149	1270	156	1295	162	1320	169	1343	175	1367	181	1412	194	1458	208	1501	222		
30000	6521	1264	164	1290	171	1314	178	1338	185	1362	192	1385	199	1430	212	1474	226				
32000	6956	1288	181	1311	188	1334	195	1358	202	1381	210	1404	217	1449	232	1493	246				
34000	7391	1313	199	1336	206	1358	214	1380	221	1402	228	1424	236	1468	252	1512	267				
36000	7826	1338	218	1361	226	1383	233	1405	241	1427	249	1448	257	1489	273						
38000	8260	1364	238	1386	246	1409	254	1430	263	1452	271	1473	280								
40000	8695	1390	259	1412	268	1434	277	1456	286	1477	294	1498	303								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 45.3)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
300	100	98	88	79	74	70	64	60	55	79
	70	90	80	72	68	65	59	55	47	72
	40	82	74	67	66	64	56	51	42	68
	20	80	73	66	66	63	56	49	42	68
	0	82	75	68	67	64	56	50	43	69
400	100	104	96	88	84	79	74	70	67	87
	70	97	87	80	76	71	66	63	59	79
	40	90	81	73	70	66	62	58	52	73
	20	90	79	71	67	64	61	57	52	71
	0	102	82	73	68	66	62	58	55	78
600	100	114	106	99	96	91	86	82	79	98
	70	109	99	91	89	83	78	74	71	91
	40	102	94	84	81	77	72	69	66	85
	20	98	92	82	77	74	70	67	64	82
	0	103	95	85	78	75	71	68	66	84
800	100	115	112	107	104	100	96	92	89	106
	70	110	105	100	97	92	88	84	82	99
	40	106	100	94	90	85	81	77	75	93
	20	103	99	94	86	82	78	75	73	90
	0	106	102	95	88	83	79	76	74	92
1100	100	123	121	116	113	109	104	101	98	115
	70	120	114	108	105	101	96	92	90	108
	40	117	108	103	99	94	90	85	83	102
	20	113	106	104	96	91	86	83	81	100
	0	115	110	105	97	92	88	84	82	101
1513	100	129	129	125	121	117	113	109	106	123
	70	126	123	118	113	110	106	101	98	117
	40	122	118	113	108	103	99	94	91	111
	20	119	116	112	107	100	96	91	88	109
	0	121	119	115	108	101	97	92	89	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
300	100	105	98	87	77	73	65	60	54	86
	70	94	87	78	70	66	59	54	46	76
	40	89	82	73	67	65	57	52	45	72
	20	89	82	73	67	64	57	52	45	72
	0	89	82	73	67	64	57	51	45	72
400	100	113	105	94	86	81	74	70	67	93
	70	103	96	86	78	73	67	61	57	84
	40	96	91	78	71	67	61	57	52	79
	20	97	91	77	69	65	60	55	50	78
	0	98	91	77	69	65	59	54	49	78
600	100	123	115	107	98	94	87	82	78	104
	70	117	108	98	90	86	80	75	70	97
	40	109	102	92	83	79	74	70	68	91
	20	109	102	91	79	75	70	65	62	90
	0	109	102	91	79	75	70	65	62	90
800	100	125	123	114	108	103	98	94	92	112
	70	120	115	106	100	96	91	86	83	105
	40	114	110	103	93	89	84	80	76	99
	20	113	109	101	90	86	81	77	74	97
	0	113	109	99	89	83	77	72	67	97
1100	100	132	132	125	117	112	107	102	100	122
	70	130	124	117	109	105	100	95	92	114
	40	124	118	115	102	98	93	89	85	109
	20	123	117	113	100	95	90	85	82	108
	0	121	118	112	99	93	86	81	76	107
1513	100	137	139	136	127	121	116	111	108	131
	70	135	133	128	120	113	109	104	100	124
	40	130	127	123	116	106	102	98	94	119
	20	128	126	122	113	103	99	94	90	117
	0	127	126	122	112	102	97	90	85	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

33 IPO

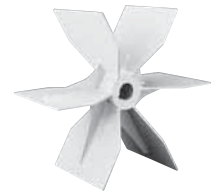
Wheel Diameter = 57½ in.

Outlet Area = 5.87 ft²

Tip Speed = 15.05 x RPM

Minimum Starting HP = 20

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1129	300	405T	NA
Heavy	1329	450	405T	NA

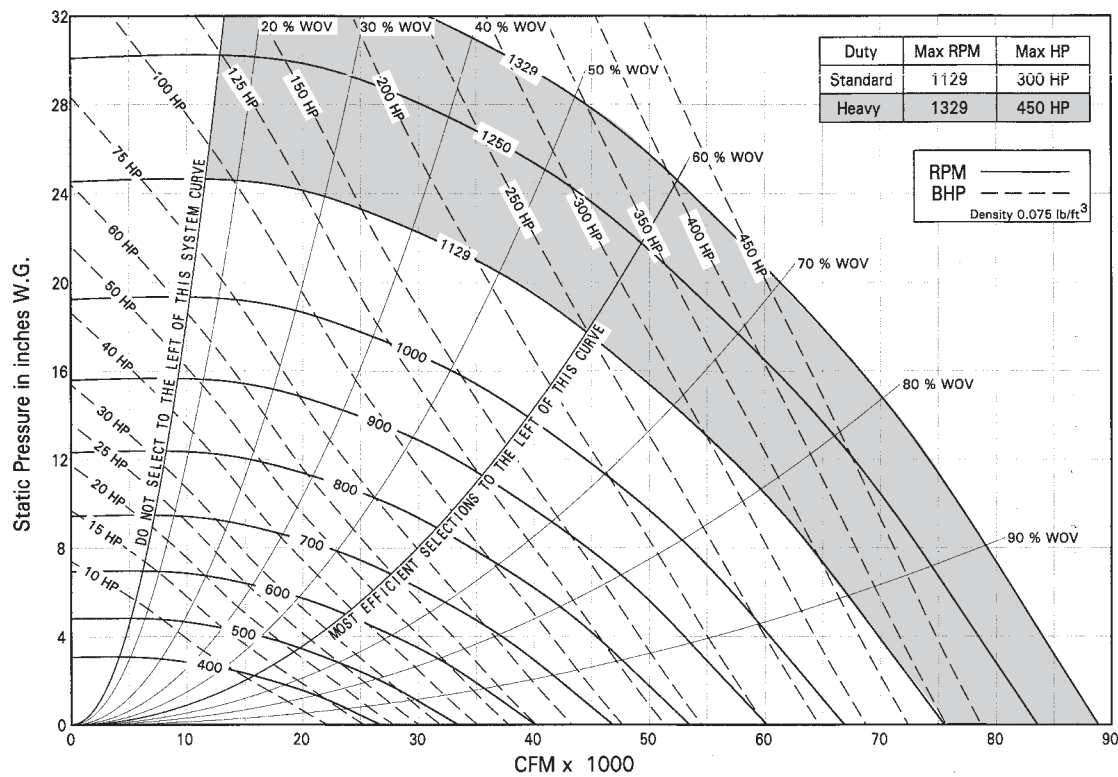


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	1001	237	1.56	326	3.11	395	4.83	456	6.85	509	9.01	557	11.3								
7250	1210	244	1.94	330	3.72	399	5.65	457	7.72	510	10.0	558	12.5	602	15.1	643	17.8	682	20.6		
8500	1419	252	2.40	336	4.42	403	6.54	461	8.81	512	11.2	559	13.7	603	16.5	644	19.4	683	22.4	720	25.5
9750	1627	261	2.94	342	5.18	408	7.55	465	10.0	516	12.6	562	15.3	605	18.1	646	21.0	684	24.2	721	27.5
11000	1836	272	3.56	349	6.03	414	8.64	470	11.3	520	14.1	566	17.0	609	20.0	649	23.1	686	26.3	722	29.5
12250	2045	283	4.26	357	6.98	421	9.80	476	12.8	525	15.8	571	18.9	612	22.0	652	25.3	690	28.7	725	32.2
13500	2253	295	5.08	367	8.04	428	11.1	482	14.3	531	17.6	576	20.9	618	24.3	656	27.7	693	31.2	729	34.9
14750	2462	307	6.01	378	9.24	436	12.5	489	15.9	538	19.4	582	23.0	623	26.6	662	30.3	698	34.0	732	37.8
16000	2671	320	7.05	388	10.5	445	14.1	497	17.7	544	21.4	588	25.3	629	29.1	667	33.1	703	37.1	738	41.1
17250	2879	334	8.26	399	12.0	456	15.8	505	19.6	552	23.6	595	27.6	635	31.8	673	35.9	709	40.2	743	44.5
18500	3088	348	9.62	411	13.5	466	17.6	514	21.7	560	25.9	602	30.1	642	34.5	679	38.9	715	43.4	748	47.9
19750	3297	363	11.1	424	15.3	477	19.6	525	24.0	568	28.3	610	32.9	649	37.4	686	42.0	721	46.8	755	51.6
21000	3505	378	12.8	436	17.2	488	21.7	535	26.4	578	31.0	618	35.8	657	40.6	693	45.4	728	50.3	761	55.4
22250	3714	394	14.7	449	19.3	500	24.1	546	29.0	588	33.9	626	38.8	665	43.9	701	49.0	735	54.1	768	59.3
23500	3923	410	16.8	463	21.6	512	26.6	557	31.7	599	37.0	637	42.1	673	47.3	709	52.7	743	58.1	775	63.5
24750	4131	427	19.1	477	24.1	525	29.4	568	34.6	610	40.2	647	45.7	683	51.1	717	56.6	751	62.3	783	68.0

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9000	1502	720	26.3	755	29.6	788	32.9	820	36.4	851	39.9										
11050	1844	722	29.6	757	33.2	790	36.8	822	40.6	853	44.5	882	48.4	911	52.4	939	56.5	966	60.6	992	64.8
13100	2186	728	34.1	761	37.8	794	41.5	825	45.3	855	49.1	884	53.3	913	57.6	940	62.0	967	66.5	993	71.0
15150	2529	734	38.8	767	42.7	799	46.9	830	51.1	860	55.3	889	59.6	917	64.0	944	68.4	970	72.8	995	77.2
17200	2871	743	44.3	775	48.6	807	52.9	837	57.3	866	61.7	894	66.4	922	71.2	949	75.9	975	80.8	1001	85.6
19250	3213	752	50.1	784	54.8	815	59.6	845	64.4	874	69.2	902	74.1	929	78.9	955	83.8	981	88.9	1006	94.2
21300	3555	763	56.3	795	61.5	825	66.6	854	71.8	883	77.1	911	82.4	938	87.7	964	93.0	989	98.4	1014	104
23350	3898	774	62.9	805	68.5	836	74.1	865	79.7	893	85.4	920	91.1	947	96.8	972	103	998	108	1022	114
25400	4240	787	70.4	818	76.2	847	82.0	875	88.0	904	94.1	931	100	957	106	982	113	1007	119	1031	125
27450	4582	800	78.3	831	84.6	860	90.9	888	97.1	915	103	941	110	968	117	993	123	1018	130	1042	136
29500	4924	815	86.8	844	93.4	873	100	901	107	928	114	954	121	979	127	1004	134	1028	141	1052	148
31550	5267	833	96.3	860	103	887	110	914	117	941	125	967	132	992	139	1016	146	1040	153	1063	161
33600	5609	850	106	878	114	904	121	929	129	954	136	980	144	1005	151	1029	159	1053	167	1076	174
35650	5951	868	117	895	125	921	133	947	141	971	149	995	156	1019	164	1043	173	1066	181	1089	189
37700	6293	886	129	913	137	939	145	964	154	988	162	1012	170	1035	179	1057	187	1080	195	1102	204
39750	6636	904	141	931	150	957	159	982	167	1006	176	1029	185	1052	194	1074	202	1095	211	1116	220

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	2003	993	67.7	1018	72.1	1043	76.6	1067	81.1	1091	85.7	1114	90.4	1159	100						
14650	2445	995	75.7	1020	80.5	1045	85.4	1070	90.4	1093	95.4	1117	101	1162	111	1205	121	1247	132	1287	143
17300	2888	1001	86.1	1026	91.0	1050	95.9	1074	101	1097	106	1119	111	1164	122	1207	133	1249	145	1290	157
19950	3330	1008	97.2	1033	103	1057	108	1081	114	1104	119	1127	125	1170	136	1213	148	1253	159	1293	171
22600	3772	1019	110	1043	116	1067	122	1090	127	1112	133	1134	139	1178	151	1220	164	1260	176	1300	189
25250	4215	1031	124	1055	130	1078	137	1101	143	1123	149	1145	156	1187	168	1228	181	1268	194	1307	208
27900	4657	1044	139	1067	146	1090	153	1113	159	1134	166	1156	173	1199	187	1239	201	1279	215	1317	229
30550	5100	1058	155	1081	162	1104	169	1126	177	1148	184	1169	192	1211	206	1251	221	1290	236	1328	252
33200	5542	1073	172	1096	179	1118	187	1140	195	1162	203	1183	211	1224	227	1264	243	1303	259		
35850	5984	1090	190	1113	199	1135	207	1156	215	1177	223	1197	231	1238	248	1278	266	1316	283		
38500	6427	1108	210	1130	219	1152	228	1173	237	1194	245	1214	254	1254	272	1292	289				
41150	6869	1128	232	1148	241	1169	250	1190	259	1211	269	1231	278	1271	297	1309	316				
43800	7312	1151	255	1171	265	1191	274	1210	284	1229	293	1248	303	1288	323	1326	344				
46450	7754	1173	280	1193	290	1213	300	1232	311	1251	321	1270	331	1306	351						
49100	8196	1196	306	1216	317	1236	328	1255	339	1274	350	1292	361	1328	382						
51750	8639	1219	334	1239	346	1259	357	1278	369	1296	380	1315	392								

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 66.9)$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
300	100	102	92	83	78	74	68	64	59	83
	70	94	83	76	72	69	63	59	51	76
	40	86	78	71	70	67	60	54	46	72
	20	84	77	70	70	67	59	53	46	72
	0	86	79	72	71	68	60	53	47	73
400	100	108	100	92	88	83	78	74	71	91
	70	101	91	84	80	75	70	67	63	83
	40	94	85	77	74	70	66	62	56	77
	20	94	83	75	71	68	65	61	56	75
	0	106	86	77	72	69	66	62	59	82
550	100	115	107	101	98	92	87	84	80	100
	70	110	100	93	90	85	79	76	73	93
	40	103	95	86	82	78	74	70	68	86
	20	100	93	83	79	76	72	69	66	83
	0	104	96	86	80	76	73	70	68	86
750	100	117	114	109	106	102	98	95	92	108
	70	112	107	102	99	94	90	87	84	101
	40	107	102	96	92	87	83	79	77	95
	20	104	101	95	89	84	80	77	75	92
	0	108	104	97	90	85	81	78	77	94
1000	100	126	123	117	114	110	105	102	99	116
	70	123	116	109	107	103	98	94	91	109
	40	119	110	104	100	96	91	87	84	103
	20	115	109	105	97	92	88	84	82	101
	0	117	113	106	98	94	89	85	83	103
1329	100	131	129	125	121	118	113	110	107	124
	70	128	123	118	114	111	106	102	99	117
	40	124	117	113	108	104	99	95	91	111
	20	120	115	113	106	100	96	92	89	109
	0	122	119	115	108	101	97	93	90	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
300	100	109	102	91	81	76	69	64	58	90
	70	98	90	82	74	70	63	57	50	80
	40	93	86	77	71	69	61	56	49	76
	20	93	86	77	71	68	61	56	49	76
	0	93	86	77	71	68	61	55	48	76
400	100	117	109	98	90	85	78	74	70	97
	70	107	100	90	82	77	70	65	61	88
	40	100	95	82	75	71	65	61	56	83
	20	101	95	81	73	69	64	59	54	82
	0	102	95	81	73	69	63	58	53	82
550	100	124	116	108	100	95	89	84	80	106
	70	117	109	99	92	87	81	76	72	98
	40	110	103	93	84	81	75	72	70	92
	20	110	103	91	81	76	71	67	64	91
	0	110	103	91	81	77	71	66	64	90
750	100	128	125	116	110	105	100	96	94	114
	70	122	117	108	102	98	93	89	86	106
	40	116	112	104	95	91	86	82	79	101
	20	115	111	102	92	88	83	79	76	99
	0	115	111	101	91	85	79	74	69	99
1000	100	134	135	125	118	113	108	104	101	123
	70	132	127	118	110	106	101	96	93	116
	40	126	120	116	102	99	94	90	86	111
	20	125	119	114	100	96	91	86	84	109
	0	124	121	113	99	94	87	82	77	109
1329	100	139	140	135	127	121	116	112	108	131
	70	137	133	127	119	114	109	104	101	124
	40	131	126	124	114	107	103	98	94	118
	20	130	125	122	112	104	99	94	91	117
	0	129	126	122	111	102	96	90	86	116

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

37 IPO

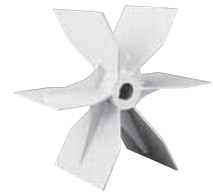
Wheel Diameter = 64³/₈ in.

Outlet Area = 7.36 ft²

Tip Speed = 16.85 x RPM

Minimum Starting HP = 25

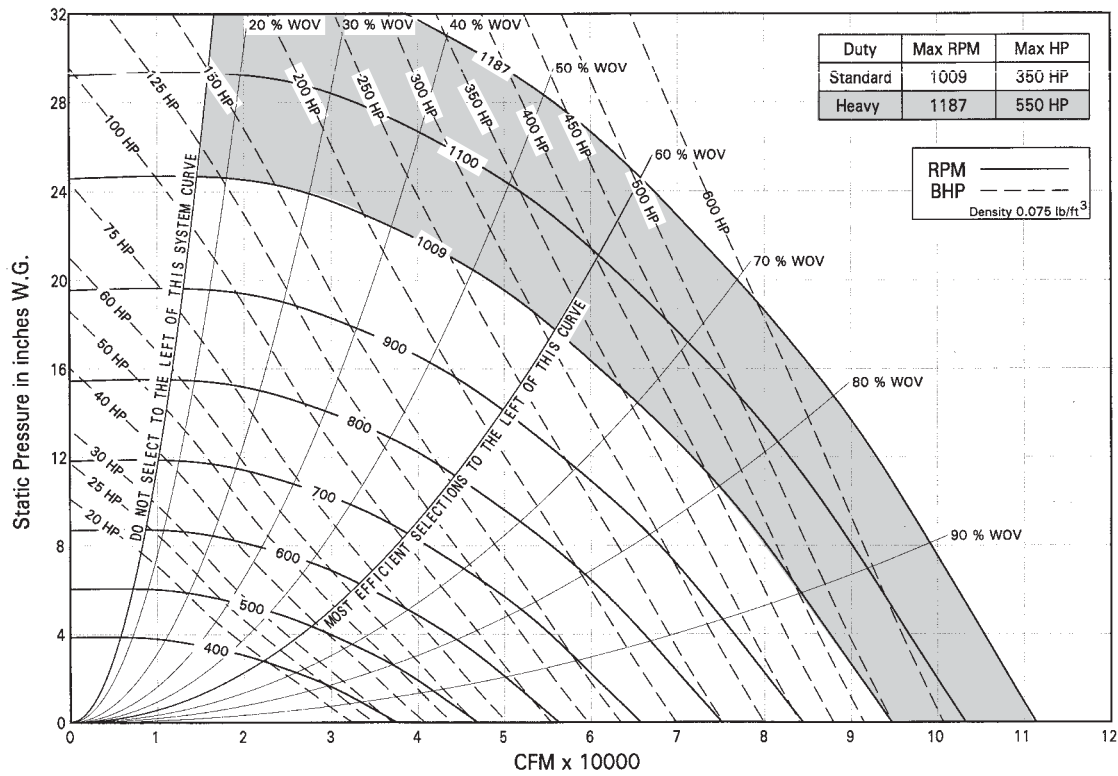
Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1009	350	405T	NA
Heavy	1187	550	405T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1065	213	2.10	292	4.11	354	6.37	407	8.89	455	11.7	498	14.6	537	17.7						
9450	1258	219	2.56	296	4.86	357	7.32	409	9.99	456	12.8	499	16.0	538	19.3	575	22.8	609	26.4	642	30.1
10900	1451	226	3.11	301	5.68	360	8.39	412	11.3	458	14.3	500	17.5	539	20.9	576	24.6	610	28.4	643	32.4
12350	1644	234	3.74	306	6.57	365	9.57	415	12.7	461	15.9	503	19.4	541	22.9	577	26.5	611	30.5	644	34.7
13800	1837	243	4.47	312	7.57	370	10.8	420	14.2	465	17.7	505	21.3	544	25.1	579	29.0	613	33.0	645	37.0
15250	2030	252	5.27	319	8.67	375	12.2	425	15.9	469	19.6	509	23.5	547	27.4	582	31.5	616	35.8	648	40.1
16700	2223	262	6.21	326	9.88	381	13.7	430	17.6	474	21.7	514	25.8	551	30.0	585	34.2	619	38.7	650	43.3
18150	2416	272	7.26	335	11.2	388	15.3	435	19.5	479	23.8	518	28.3	555	32.7	590	37.3	622	41.9	653	46.5
19600	2609	283	8.44	344	12.7	395	17.0	442	21.5	484	26.1	524	30.8	560	35.6	594	40.4	627	45.3	657	50.3
21050	2802	294	9.77	353	14.3	403	19.0	449	23.7	490	28.5	529	33.5	565	38.6	599	43.7	631	48.9	662	54.2
22500	2996	306	11.3	363	16.1	412	21.1	455	26.0	497	31.2	535	36.3	570	41.7	604	47.1	636	52.6	666	58.1
23950	3189	317	13.0	373	18.0	421	23.3	464	28.6	504	33.9	541	39.4	576	44.9	610	50.7	641	56.5	671	62.3
25400	3382	330	14.8	383	20.1	430	25.7	472	31.3	510	36.8	548	42.7	582	48.5	615	54.3	647	60.5	676	66.6
26850	3575	343	16.9	394	22.4	439	28.2	481	34.2	519	40.1	554	46.1	589	52.2	621	58.4	652	64.6	682	71.1
28300	3768	356	19.1	404	24.9	449	31.0	490	37.2	528	43.5	562	49.7	596	56.1	628	62.6	658	69.1	687	75.6
29750	3961	369	21.6	415	27.6	460	34.0	499	40.4	537	47.1	571	53.6	602	60.2	635	67.0	665	73.8	693	80.6

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	2003	725	31.7	758	35.1	791	38.7	823	42.6	853	46.6	883	50.7	912	54.8	939	59.0	966	63.3	993	67.7
14525	2424	731	37.2	765	41.2	798	45.2	829	49.3	858	53.4	887	57.6	915	61.8	942	66.1	969	70.6	995	75.3
17050	2846	742	43.9	775	48.2	806	52.5	836	56.8	865	61.2	894	65.9	922	70.6	949	75.4	975	80.2	1000	85.0
19575	3267	754	51.1	786	55.8	817	60.7	847	65.5	876	70.5	903	75.4	930	80.3	956	85.3	982	90.3	1007	95.6
22100	3689	767	58.8	799	64.2	829	69.5	859	74.9	887	80.2	914	85.7	941	91.2	967	96.7	992	102	1017	108
24625	4111	782	67.5	813	73.2	842	78.9	871	84.8	900	90.8	927	96.8	953	103	979	109	1003	115	1028	121
27150	4532	798	77.1	829	83.3	858	89.5	886	95.7	913	102	940	108	966	115	991	122	1016	128	1040	135
29675	4954	817	87.6	845	94.2	874	101	902	108	929	115	955	121	980	128	1005	135	1029	142	1053	149
32200	5375	838	99.4	866	107	892	114	918	121	945	128	971	136	996	143	1020	150	1044	158	1067	165
34725	5797	860	112	887	120	914	128	939	135	963	143	988	150	1012	158	1037	166	1060	174	1083	182
37250	6218	882	126	909	134	935	143	960	151	985	159	1008	167	1031	175	1053	183	1077	192	1100	201
39775	6640	905	141	931	150	957	159	982	168	1006	176	1030	185	1052	194	1074	203	1096	211	1117	220
42300	7061	930	158	955	167	979	176	1004	185	1028	195	1051	204	1074	214	1096	223	1117	232	1138	242
44825	7483	955	176	979	186	1003	195	1026	205	1050	215	1073	225	1096	235	1117	245	1139	255	1159	264
47350	7904	980	196	1005	206	1028	216	1051	226	1073	236	1096	246	1118	257	1139	268	1160	278	1181	289
49875	8326	1006	217	1030	227	1054	238	1076	249	1098	260	1120	270	1140	281	1162	292	1183	303		

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	2130	887	87.7	910	93.4	932	99.2	954	105	975	111	996	117	1036	129	1075	142				
19250	2563	889	97.9	912	104	934	110	956	116	977	123	998	129	1038	143	1077	156	1114	170	1150	184
22500	2996	896	111	918	118	939	124	961	130	981	137	1001	143	1041	157	1079	171	1116	185	1152	201
25750	3428	903	125	924	132	946	139	967	146	987	153	1008	160	1047	175	1084	189	1121	204	1156	219
29000	3861	912	142	934	149	955	156	975	164	995	171	1015	178	1053	194	1091	209	1127	226	1162	242
32250	4294	923	159	944	167	965	175	985	183	1005	191	1024	199	1062	215	1099	231	1134	248	1168	265
35500	4727	934	177	955	186	976	194	996	203	1015	212	1034	220	1072	238	1109	256	1144	274	1178	291
38750	5159	946	196	967	206	988	215	1008	225	1027	234	1046	243	1083	262	1119	281	1154	300		
42000	5592	960	218	980	227	1000	237	1020	247	1039	257	1058	267	1095	288	1130	308	1165	328		
45250	6025	975	241	995	251	1015	262	1034	272	1052	282	1071	293	1107	314	1142	336	1177	358		
48500	6458	990	265	1010	276	1030	287	1049	299	1067	310	1085	321	1121	343	1155	365				
51750	6890	1009	292	1027	303	1045	314	1064	326	1082	338	1100	350	1136	374	1170	398				
55000	7323	1028	321	1046	333	1064	345	1081	357	1098	369	1116	381	1151	406	1184	432				
58250	7756	1048	351	1066	364	1084	377	1101	390	1118	402	1134	415	1166	441						
61500	8189	1068	384	1086	397	1103	411	1121	424	1137	438	1154	451	1186	478						
64750	8621	1088	418	1106	432	1124	447	1141	461	1157	475	1174	490								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 93.8)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
250	100	99	89	81	77	72	66	62	57	80
	70	91	81	74	71	67	61	57	48	74
	40	84	75	70	69	65	58	52	44	70
	20	81	74	70	69	65	57	51	44	70
	0	83	76	71	69	65	58	51	44	71
350	100	107	99	91	87	82	77	74	71	90
	70	100	90	84	80	75	70	67	63	83
	40	93	84	77	74	70	66	62	56	77
	20	92	81	74	71	68	65	60	56	75
	0	102	85	77	72	69	66	62	59	79
500	100	116	107	102	98	93	88	85	81	100
	70	110	100	94	91	85	80	77	74	93
	40	103	95	87	83	79	75	72	69	87
	20	100	93	84	80	77	73	70	67	84
	0	104	96	86	81	77	74	71	69	86
650	100	116	113	109	106	101	97	94	91	108
	70	110	106	102	98	94	89	86	84	100
	40	104	101	96	91	87	82	79	77	94
	20	102	101	94	88	83	79	77	75	92
	0	106	103	95	89	85	80	78	77	93
900	100	126	123	117	115	110	106	103	100	117
	70	122	116	110	108	103	98	95	92	110
	40	118	111	105	101	96	91	87	85	103
	20	115	109	105	97	93	88	85	83	101
	0	117	113	106	98	94	89	86	84	103
1187	100	132	130	125	122	118	114	110	107	124
	70	129	123	118	115	111	106	102	99	117
	40	125	117	113	108	104	99	95	92	111
	20	122	115	113	106	101	96	92	90	109
	0	124	119	115	107	102	97	93	91	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
250	100	107	98	88	79	74	67	62	56	87
	70	96	88	79	73	68	61	55	48	77
	40	90	83	75	70	66	59	54	47	74
	20	91	83	75	70	66	59	53	46	74
	0	91	83	75	70	66	59	53	46	73
350	100	116	107	97	90	84	78	74	70	96
	70	106	98	89	81	76	70	65	61	87
	40	100	93	81	75	70	65	60	56	81
	20	101	93	79	73	69	63	58	53	81
	0	101	93	80	73	68	62	57	52	81
500	100	124	116	108	101	95	89	85	81	106
	70	118	109	100	93	88	82	77	73	98
	40	111	103	93	85	81	76	73	71	92
	20	111	103	91	81	77	72	68	65	91
	0	110	103	91	82	77	72	67	65	91
650	100	128	123	115	109	104	99	96	94	113
	70	120	115	107	102	97	92	88	85	105
	40	114	112	102	95	90	86	82	78	100
	20	113	110	99	92	87	82	79	76	98
	0	114	110	98	90	84	78	73	69	97
900	100	135	135	125	118	113	108	104	102	123
	70	132	126	118	110	107	101	97	94	116
	40	126	121	115	103	100	95	91	87	110
	20	125	120	113	100	97	91	87	84	109
	0	124	121	112	99	94	88	83	78	108
1187	100	140	141	135	127	121	116	112	109	131
	70	138	133	127	119	114	109	105	101	124
	40	133	126	124	113	107	103	98	94	119
	20	132	126	123	110	104	99	95	91	117
	0	130	127	122	110	102	96	91	86	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

41 IPO

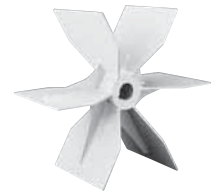
Wheel Diameter = 71¼ in.

Outlet Area = 9.09 ft²

Tip Speed = 18.65 x RPM

Minimum Starting HP = 40

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	911	400	405T	NA
Heavy	1072	700	405T	NA

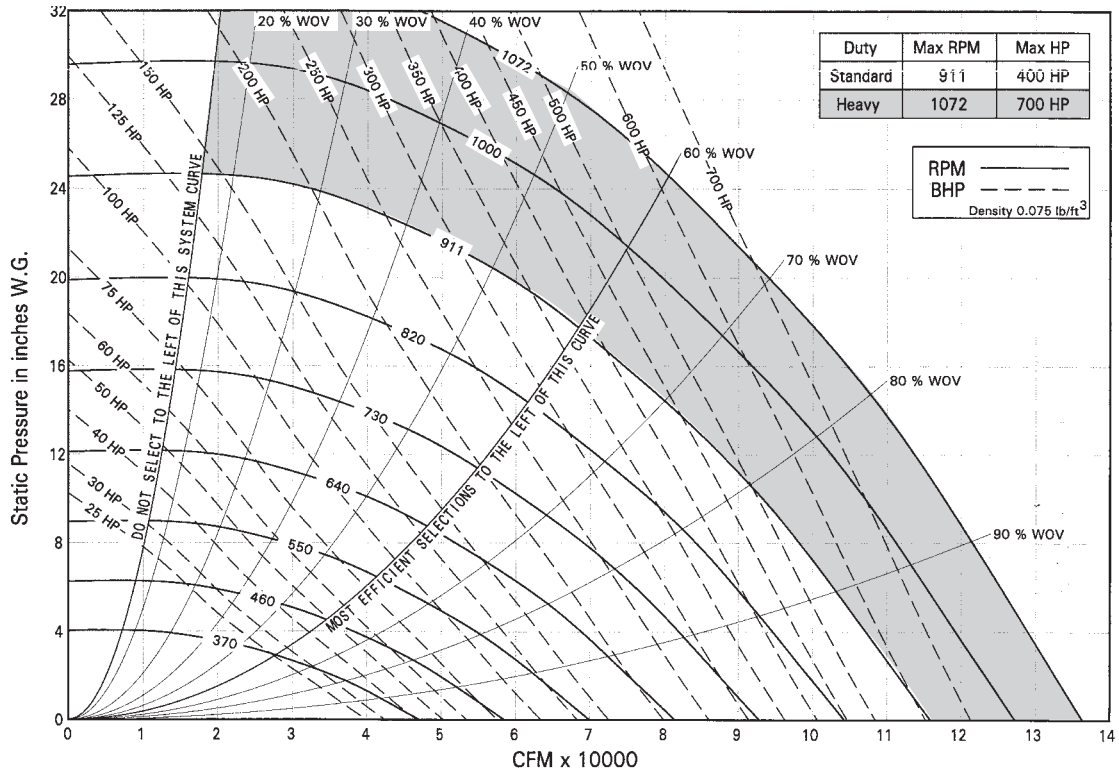


CFM	OV	Static Pressure in Inches wg																			
		1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0										
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1088	193	2.63	264	5.12	320	7.93	368	11.0	411	14.5	450	18.1	485	21.9						
12000	1305	199	3.29	268	6.19	323	9.25	370	12.6	412	16.1	451	20.0	486	24.1	520	28.4	551	32.9	580	37.5
14000	1523	206	4.07	273	7.35	327	10.8	373	14.4	415	18.3	452	22.2	487	26.4	520	31.0	552	35.8	581	40.7
16000	1741	215	5.01	279	8.62	332	12.5	377	16.5	418	20.5	455	24.9	490	29.4	522	34.0	553	38.7	582	43.9
18000	1958	224	6.07	286	10.1	337	14.3	382	18.7	422	23.1	459	27.7	493	32.4	525	37.4	555	42.5	584	47.7
20000	2176	234	7.30	293	11.7	343	16.3	387	21.0	427	25.9	463	30.9	497	35.9	528	41.0	558	46.5	587	52.1
22000	2393	245	8.72	302	13.6	350	18.5	393	23.5	432	28.9	468	34.2	501	39.7	532	45.2	562	50.7	590	56.5
24000	2611	255	10.3	311	15.6	357	20.8	399	26.4	437	31.9	473	37.7	506	43.6	537	49.5	566	55.5	594	61.6
26000	2829	267	12.2	320	17.8	365	23.5	406	29.4	444	35.3	478	41.4	511	47.7	542	54.0	571	60.4	598	66.9
28000	3046	279	14.3	330	20.3	374	26.4	413	32.6	450	39.0	484	45.4	517	52.0	547	58.8	576	65.6	603	72.4
30000	3264	291	16.7	340	23.0	383	29.6	422	36.2	457	42.9	491	49.8	522	56.6	552	63.7	581	71.0	608	78.3
32000	3482	304	19.4	351	26.0	393	32.9	431	40.1	465	47.1	498	54.3	529	61.7	558	69.0	587	76.6	614	84.3
34000	3699	317	22.4	361	29.3	402	36.6	440	44.2	474	51.7	505	59.1	536	66.9	565	74.7	592	82.5	619	90.5
36000	3917	331	25.7	373	32.9	413	40.7	449	48.5	483	56.5	513	64.4	543	72.4	572	80.7	599	89.0	625	97.2
38000	4134	344	29.4	385	37.0	423	45.1	458	53.2	492	61.7	522	70.1	551	78.4	579	86.9	606	95.7	632	104
40000	4352	358	33.4	397	41.4	434	49.8	469	58.4	501	67.1	531	76.0	560	84.8	586	93.6	613	103	638	112

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	1632	582	42.3	610	47.5	637	52.8	662	58.3	687	63.9	711	69.6	734	75.4	756	81.4				
18000	1958	584	47.7	611	53.0	638	58.6	664	64.5	688	70.6	712	76.8	735	83.1	758	89.5	780	96.0	801	103
21000	2285	588	54.3	616	60.1	642	66.0	667	72.0	691	78.1	714	84.3	737	90.7	759	97.6	781	105	802	112
24000	2611	594	61.6	620	67.6	646	74.0	671	80.6	695	87.2	718	94.0	741	101	762	108	784	115	804	122
27000	2937	601	69.7	627	76.4	652	83.2	676	90.0	700	96.8	723	104	745	111	767	119	788	126	808	134
30000	3264	608	78.3	634	85.6	659	93.0	683	100	706	108	729	116	751	123	772	131	792	138	813	147
33000	3590	616	87.4	642	95.4	667	103	690	111	713	120	736	128	757	136	778	144	799	153	819	161
36000	3917	625	97.2	650	106	675	114	698	123	721	132	743	141	764	149	785	158	805	167	825	176
39000	4243	635	108	660	117	683	126	706	135	729	145	751	154	772	163	793	173	813	182	832	192
42000	4570	645	120	670	129	693	139	716	148	738	158	759	168	780	178	801	188	821	198	840	209
45000	4896	657	132	680	142	703	152	726	163	748	173	769	183	789	194	809	204	829	215	848	226
48000	5223	670	146	692	156	714	167	736	178	758	189	779	200	799	211	819	222	838	233	857	244
51000	5549	683	160	705	172	727	183	747	194	768	205	789	217	809	229	829	241	848	252	866	264
54000	5875	697	176	719	188	740	200	761	212	780	223	799	235	819	248	839	260	858	272	876	285
57000	6202	711	192	733	205	754	218	774	230	794	243	813	255	831	268	849	280	868	293	887	307
60000	6528	725	210	746	223	767	237	788	250	807	263	826	276	844	290	862	303	879	316	897	329

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	2176	802	109	822	116	842	123	862	130	881	137	900	145	936	160	971	175	1005	191		
24000	2611	804	122	824	129	844	136	864	144	883	152	902	160	938	176	973	193	1007	210	1040	228
28000	3046	810	138	830	146	849	154	868	162	887	170	905	178	941	194	975	211	1009	229	1041	248
32000	3482	816	156	836	164	855	172	874	181	893	190	911	199	946	217	980	235	1013	253	1045	272
36000	3917	825	176	845	185	864	194	882	203	900	212	918	221	952	240	986	260	1019	279	1051	299
40000	4352	835	197	854	207	873	217	891	227	909	237	927	247	961	267	994	287	1026	307	1056	328
44000	4787	846	220	865	231	883	241	901	252	919	263	936	274	970	295	1003	317	1034	339	1065	361
48000	5223	857	244	875	256	894	267	912	279	929	290	947	302	980	325	1012	349	1043	372		
52000	5658	870	271	888	283	905	294	923	306	940	319	957	331	991	357	1023	382	1054	407		
56000	6093	883	299	901	312	919	325	936	338	953	350	969	363	1002	389	1034	416	1065	443		
60000	6528	897	329	915	343	932	357	949	371	966	384	983	398	1015	426	1045	453				
64000	6964	914	363	930	377	946	391	963	405	980	420	996	435	1028	464	1059	493				
68000	7399	932	398	948	413	964	428	980	443	995	458	1010	473	1042	504						
72000	7834	950	436	966	452	982	468	997	484	1013	500	1027	516	1057	547						
76000	8269	968	477	984	494	1000	510	1015	527	1030	544	1045	561								
80000	8705	987	519	1003	537	1018	555	1034	573	1049	591	1063	608								

Performance certified is for model IPO arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 127)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
225	100	98	88	81	77	72	66	62	57	80
	70	90	81	75	71	67	62	56	48	74
	40	83	75	71	69	65	58	51	43	70
	20	81	74	70	69	64	57	51	44	70
	0	83	76	72	70	65	57	51	44	71
300	100	105	96	90	86	81	76	73	70	89
	70	97	88	82	78	73	69	66	62	81
	40	91	82	76	73	69	65	60	54	75
	20	89	79	73	70	67	63	59	55	73
	0	97	82	75	71	68	64	61	58	76
450	100	115	107	102	98	93	88	85	81	100
	70	109	100	94	91	85	80	77	75	93
	40	103	94	87	83	79	75	72	70	87
	20	100	92	84	80	77	73	70	67	84
	0	104	95	86	81	77	74	71	69	86
600	100	118	114	110	107	102	98	95	92	109
	70	111	107	103	99	94	90	87	85	101
	40	105	102	97	92	88	83	80	78	95
	20	103	102	94	89	84	80	78	76	92
	0	107	103	96	90	85	81	79	78	94
800	100	126	123	117	114	110	106	103	100	117
	70	121	116	110	107	103	98	95	92	109
	40	116	110	105	100	96	91	88	85	103
	20	113	109	104	97	93	88	85	83	101
	0	116	112	105	98	94	89	86	85	103
1072	100	133	131	125	122	118	114	110	107	125
	70	130	124	118	115	111	106	102	100	118
	40	127	118	113	109	104	99	95	92	111
	20	123	116	114	105	101	96	92	90	109
	0	125	120	115	107	102	97	93	92	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
225	100	106	98	87	79	74	67	62	56	86
	70	95	87	79	73	68	61	55	48	77
	40	90	83	75	71	66	59	53	47	74
	20	90	82	75	70	66	59	53	46	73
	0	90	82	74	70	65	59	53	46	73
300	100	114	105	95	89	82	77	73	69	94
	70	104	96	86	80	74	69	64	60	85
	40	99	90	79	74	69	64	59	54	79
	20	100	89	77	72	67	62	57	52	78
	0	100	89	78	72	67	61	56	51	79
450	100	123	116	107	101	95	89	85	81	106
	70	117	108	99	93	87	82	77	73	98
	40	111	102	92	86	81	76	73	71	92
	20	110	102	90	82	77	72	68	66	90
	0	110	102	90	82	77	72	68	65	90
600	100	129	123	115	110	105	100	97	95	114
	70	121	116	107	103	98	93	89	86	106
	40	115	113	101	96	91	87	83	79	101
	20	114	111	99	93	88	83	80	77	99
	0	115	110	98	91	85	79	74	69	98
800	100	135	133	125	118	113	108	105	102	123
	70	131	125	117	110	106	101	97	94	115
	40	124	120	113	103	99	95	91	87	110
	20	124	119	111	100	96	91	87	84	108
	0	123	120	110	99	94	87	82	78	107
1072	100	142	142	134	127	122	116	112	109	131
	70	140	134	127	119	115	109	105	102	124
	40	134	128	124	112	108	103	99	95	119
	20	133	127	123	109	105	99	95	92	117
	0	131	128	121	108	103	96	91	86	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

5 IPW

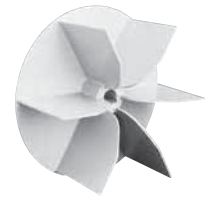
Wheel Diameter = 8¾ in.

Outlet Area = 0.12 ft²

Tip Speed = 2.29 x RPM

Minimum Starting HP = ¼

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
5000	2	145T	145T

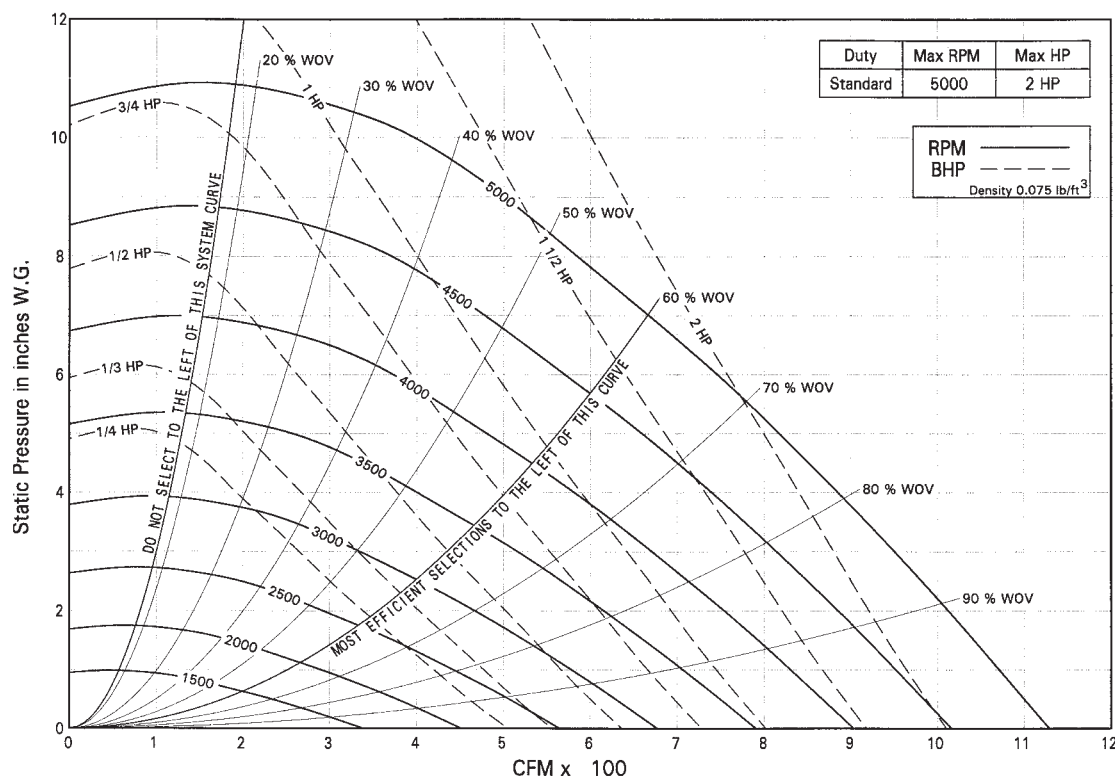


CFM	OV	Static Pressure in Inches wg																			
		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00		2.25		2.50	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
50	359	773	0.01	1076	0.01																
75	539	815	0.01	1099	0.01	1328	0.02	1524	0.03	1700	0.04	1860	0.04								
100	719	875	0.01	1141	0.02	1356	0.02	1547	0.03	1718	0.04	1873	0.05	2016	0.06	2153	0.07	2281	0.08	2402	0.10
125	899	942	0.01	1196	0.02	1402	0.03	1582	0.04	1746	0.05	1898	0.06	2038	0.07	2171	0.08	2296	0.10	2415	0.11
150	1079	1013	0.02	1259	0.03	1458	0.04	1630	0.05	1788	0.06	1932	0.07	2068	0.08	2198	0.10	2320	0.11	2437	0.12
175	1258	1093	0.02	1327	0.03	1520	0.04	1688	0.06	1837	0.07	1980	0.08	2111	0.10	2234	0.11	2351	0.12	2467	0.14
200	1438	1176	0.03	1398	0.04	1586	0.05	1750	0.07	1898	0.08	2032	0.10	2159	0.11	2282	0.13	2397	0.14	2506	0.16
225	1618	1263	0.04	1474	0.05	1656	0.07	1815	0.08	1961	0.10	2094	0.11	2217	0.13	2332	0.14	2445	0.16	2554	0.18
250	1798	1354	0.05	1554	0.06	1727	0.08	1884	0.09	2026	0.11	2157	0.13	2279	0.15	2393	0.16	2501	0.18	2603	0.20
275	1978	1447	0.06	1637	0.08	1803	0.09	1955	0.11	2094	0.13	2222	0.15	2342	0.17	2456	0.19	2563	0.20	2664	0.22
300	2158	1541	0.07	1722	0.09	1884	0.11	2027	0.13	2164	0.15	2291	0.17	2408	0.19	2519	0.21	2626	0.23	2727	0.25
325	2338	1637	0.09	1811	0.11	1966	0.13	2106	0.15	2236	0.17	2361	0.19	2477	0.21	2586	0.24	2690	0.26	2790	0.28
350	2517	1736	0.11	1902	0.13	2049	0.15	2187	0.17	2312	0.19	2432	0.22	2547	0.24	2655	0.26	2758	0.29	2855	0.31
375	2697	1837	0.13	1995	0.15	2136	0.17	2269	0.20	2392	0.22	2506	0.25	2618	0.27	2725	0.30	2827	0.32	2923	0.35
400	2877	1938	0.15	2088	0.18	2226	0.20	2353	0.23	2473	0.25	2586	0.28	2691	0.30	2796	0.33	2897	0.36	2993	0.38
425	3057	2040	0.18	2183	0.20	2316	0.23	2438	0.26	2556	0.28	2666	0.31	2770	0.34	2869	0.37	2968	0.39	3063	0.42

CFM	OV	Static Pressure in Inches wg																			
		2.75		3.00		3.25		3.50		3.75		4.00		4.25		4.50		4.75		5.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
100	719	2518	0.11																		
130	935	2531	0.12	2639	0.14	2745	0.15	2847	0.17	2945	0.18	3040	0.20	3132	0.22	3222	0.23	3309	0.25	3394	0.27
160	1151	2558	0.14	2666	0.16	2769	0.17	2868	0.19	2963	0.20	3056	0.22	3146	0.24	3233	0.25	3320	0.27	3405	0.29
190	1366	2595	0.16	2700	0.18	2801	0.20	2898	0.21	2991	0.23	3083	0.25	3173	0.27	3260	0.28	3344	0.30	3427	0.32
220	1582	2648	0.19	2747	0.21	2842	0.22	2935	0.24	3028	0.26	3119	0.28	3206	0.30	3291	0.32	3374	0.34	3455	0.36
250	1798	2706	0.22	2805	0.24	2899	0.25	2991	0.27	3079	0.29	3164	0.31	3247	0.33	3328	0.35	3411	0.37	3492	0.39
280	2014	2774	0.25	2867	0.27	2957	0.29	3049	0.31	3137	0.33	3222	0.35	3304	0.37	3385	0.39	3463	0.42	3539	0.44
310	2230	2848	0.28	2940	0.30	3029	0.33	3115	0.35	3197	0.37	3280	0.39	3362	0.41	3442	0.44	3520	0.46	3596	0.49
340	2446	2924	0.32	3016	0.34	3104	0.37	3189	0.39	3271	0.41	3351	0.44	3428	0.46	3504	0.49	3578	0.51	3654	0.54
370	2661	3002	0.36	3092	0.39	3180	0.41	3264	0.44	3346	0.46	3425	0.49	3502	0.51	3577	0.54	3650	0.57	3722	0.59
400	2877	3085	0.41	3173	0.44	3258	0.46	3341	0.49	3422	0.52	3501	0.54	3578	0.57	3652	0.60	3725	0.63	3796	0.65
430	3093	3168	0.46	3256	0.49	3340	0.52	3422	0.55	3501	0.57	3578	0.60	3654	0.63	3728	0.66	3800	0.69	3871	0.72
460	3309	3253	0.51	3340	0.54	3423	0.58	3504	0.61	3583	0.64	3659	0.67	3733	0.70	3805	0.73	3877	0.76	3947	0.79
490	3525	3339	0.57	3425	0.61	3508	0.64	3588	0.67	3666	0.70	3741	0.74	3815	0.77	3886	0.80	3956	0.83	4025	0.87
520	3741	3432	0.64	3512	0.67	3594	0.71	3673	0.74	3750	0.78	3825	0.81	3898	0.84	3969	0.88	4038	0.91	4106	0.95
550	3956	3528	0.71	3607	0.74	3683	0.78	3759	0.82	3836	0.85	3910	0.89	3982	0.93	4053	0.96	4122	1.00	4189	1.03

CFM	OV	Static Pressure in Inches wg																			
		5.50		6.00		6.50		7.00		7.50		8.00		8.50		9.00		9.50		10.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
150	1079	3564	0.32	3720	0.36	3870	0.40														
190	1366	3586	0.36	3738	0.39	3885	0.44	4029	0.48	4168	0.52	4302	0.57	4432	0.62	4559	0.67	4682	0.72	4802	0.77
230	1654	3623	0.41	3774	0.45	3919	0.49	4059	0.54	4195	0.58	4325	0.63	4452	0.67	4575	0.72	4697	0.77	4816	0.82
270	1942	3672	0.47	3820	0.51	3963	0.56	4100	0.61	4232	0.65	4361	0.70	4488	0.75	4611	0.80	4731	0.85	4847	0.91
310	2230	3743	0.53	3883	0.58	4018	0.63	4149	0.68	4281	0.73	4409	0.79	4533	0.84	4654	0.89	4771	0.95	4885	1.00
350	2517	3820	0.61	3960	0.66	4094	0.71	4223	0.77	4348	0.82	4469	0.88	4586	0.93	4703	0.99	4820	1.05	4934	1.11
390	2805	3908	0.69	4040	0.74	4171	0.80	4300	0.86	4424	0.92	4545	0.98	4662	1.04	4775	1.10	4886	1.16	4994	1.22
430	3093	4007	0.78	4138	0.84	4263	0.90	4385	0.96	4502	1.02	4622	1.08	4739	1.15	4852	1.21	4962	1.28		
470	3381	4108	0.88	4238	0.94	4363	1.01	4483	1.07	4600	1.14	4713	1.20	4822	1.27	4930	1.34				
510	3669	4211	0.99	4339	1.06	4463	1.13	4583	1.20	4699	1.27	4811	1.34	4921	1.41						
550	3956	4319	1.11	4445	1.18	4566	1.25	4685	1.33	4800	1.40	4912	1.48								
590	4244	4430	1.24	4554	1.32	4674	1.39	4790	1.47	4903	1.55										
630	4532	4542	1.38	4665	1.46	4784	1.55	4899	1.63												
670	4820	4657	1.53	4779	1.62	4896	1.71														
710	5107	4774	1.69	4893	1.79																
750	5395	4901	1.87																		

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.225)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1200	100	99	101	82	66	58	52	45	39	86
	70	90	93	74	60	51	46	40	36	78
	40	87	88	69	57	47	44	39	35	73
	20	86	87	66	55	47	44	39	35	72
	0	87	89	69	56	46	44	39	35	74
1600	100	90	97	87	73	66	60	54	49	84
	70	90	93	79	67	58	52	46	41	78
	40	91	88	75	64	54	49	43	38	75
	20	86	84	73	63	52	47	41	37	70
	0	91	88	74	64	55	49	42	37	74
2100	100	94	97	95	91	76	68	62	58	91
	70	94	96	89	77	66	60	54	49	84
	40	96	95	85	69	59	55	49	45	82
	20	92	87	80	67	56	53	47	43	75
	0	99	90	85	71	61	56	49	44	80
2800	100	105	104	106	90	84	77	70	66	98
	70	99	100	96	81	73	67	61	57	90
	40	98	101	85	74	66	61	56	53	86
	20	94	91	81	70	63	59	52	50	78
	0	103	94	87	74	66	62	55	52	83
3800	100	104	108	104	100	89	84	79	75	100
	70	102	104	97	91	81	76	70	66	94
	40	103	103	92	81	74	69	64	61	90
	20	100	98	88	78	70	65	60	58	85
	0	108	98	93	81	74	68	62	60	89
5000	100	109	112	111	104	100	92	87	83	107
	70	107	109	106	96	91	84	78	74	101
	40	108	109	103	86	83	77	72	68	97
	20	105	105	98	83	80	73	68	65	93
	0	113	108	101	85	83	77	71	66	97

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1200	100	99	101	86	74	64	55	46	40	86
	70	90	91	72	63	54	48	41	36	76
	40	85	85	64	57	48	43	37	33	70
	20	80	81	59	52	44	39	33	30	66
	0	76	76	54	48	41	35	29	27	62
1600	100	96	98	94	83	72	62	55	49	88
	70	96	89	79	71	62	53	46	40	77
	40	94	87	76	68	58	50	44	38	75
	20	91	88	78	68	58	50	44	38	75
	0	89	89	80	69	57	50	43	37	76
2100	100	108	101	100	94	81	70	64	58	95
	70	103	96	91	80	70	61	54	49	86
	40	94	87	82	74	62	56	51	44	78
	20	92	88	84	76	63	57	51	44	79
	0	90	88	86	77	65	58	51	44	80
2800	100	110	102	109	101	90	80	73	68	102
	70	106	100	99	89	79	69	62	57	93
	40	105	96	90	86	72	63	59	54	88
	20	102	93	92	88	73	63	58	52	88
	0	99	90	95	89	73	62	57	51	90
3800	100	122	115	117	118	103	91	85	79	116
	70	107	104	107	105	90	80	73	68	104
	40	108	104	101	92	83	73	67	63	96
	20	112	102	102	96	83	72	66	62	98
	0	116	100	104	101	84	71	65	60	100
5000	100	127	124	122	123	116	101	93	87	122
	70	112	112	111	110	102	90	82	76	109
	40	113	112	108	97	93	83	75	71	103
	20	117	113	108	101	95	82	74	69	104
	0	121	113	108	106	97	82	73	68	106

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

7 IPW

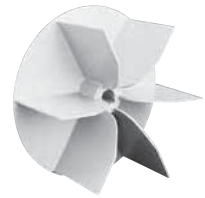
Wheel Diameter = 12¹/₈ in.

Outlet Area = 0.26 ft²

Tip Speed = 3.17 x RPM

Minimum Starting HP = ¼

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
5000	10	215T	184T

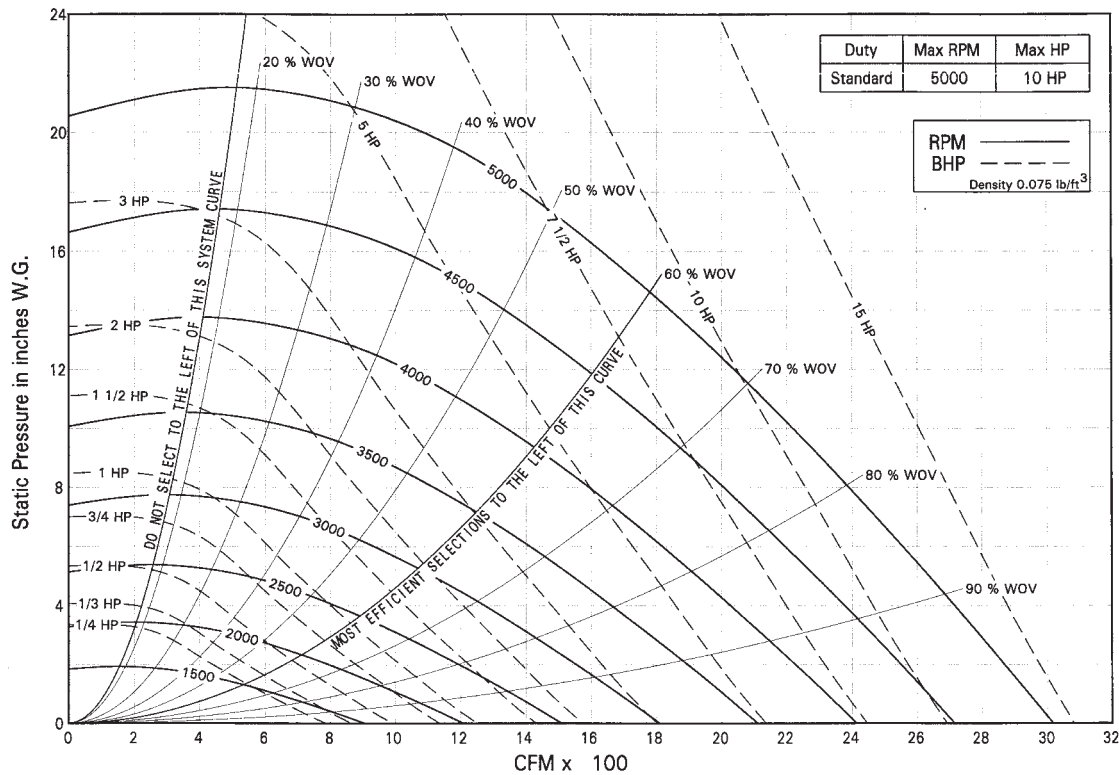


CFM	OV	Static Pressure in Inches wg																			
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
150	551	780	0.02	1084	0.05	1323	0.08														
200	735	808	0.03	1098	0.06	1330	0.09	1532	0.13	1709	0.17	1870	0.22								
250	919	848	0.04	1123	0.07	1347	0.10	1542	0.14	1716	0.19	1876	0.24	2024	0.29	2162	0.35	2291	0.41	2414	0.48
300	1102	895	0.05	1156	0.08	1373	0.12	1560	0.16	1731	0.21	1887	0.26	2031	0.31	2168	0.37	2298	0.43	2420	0.50
350	1286	947	0.06	1196	0.10	1402	0.15	1587	0.19	1751	0.24	1904	0.29	2047	0.34	2180	0.40	2305	0.46	2426	0.53
400	1470	1002	0.08	1243	0.12	1442	0.17	1616	0.22	1779	0.27	1928	0.33	2064	0.38	2197	0.44	2322	0.50	2440	0.57
450	1654	1061	0.10	1291	0.15	1485	0.20	1655	0.26	1809	0.31	1956	0.37	2092	0.43	2219	0.49	2340	0.55	2458	0.62
500	1838	1124	0.12	1345	0.18	1532	0.24	1697	0.30	1848	0.36	1987	0.42	2120	0.48	2247	0.55	2367	0.61	2480	0.68
550	2022	1188	0.15	1400	0.21	1580	0.27	1743	0.34	1889	0.40	2027	0.47	2154	0.54	2276	0.61	2395	0.68	2508	0.75
600	2205	1254	0.18	1457	0.25	1633	0.32	1791	0.39	1935	0.46	2067	0.53	2194	0.60	2312	0.68	2424	0.75	2536	0.83
650	2389	1321	0.22	1517	0.29	1688	0.36	1840	0.44	1983	0.51	2113	0.59	2234	0.67	2352	0.75	2463	0.83	2569	0.91
700	2573	1391	0.26	1580	0.34	1744	0.42	1894	0.50	2031	0.58	2160	0.66	2281	0.74	2393	0.82	2503	0.91	2608	1.00
750	2757	1462	0.30	1644	0.39	1801	0.47	1949	0.56	2082	0.64	2208	0.73	2328	0.82	2440	0.91	2545	1.00	2648	1.09
800	2941	1533	0.36	1709	0.45	1863	0.54	2005	0.63	2136	0.72	2257	0.81	2375	0.91	2487	1.00	2592	1.09	2692	1.19
850	3124	1606	0.42	1775	0.51	1926	0.61	2062	0.70	2192	0.80	2312	0.90	2424	1.00	2535	1.10	2639	1.20	2738	1.30
900	3308	1680	0.48	1842	0.58	1990	0.68	2122	0.78	2248	0.89	2367	0.99	2477	1.09	2583	1.20	2687	1.30	2786	1.41

CFM	OV	Static Pressure in Inches wg																			
		5.5		6.0		6.5		7.0		7.5		8.0		8.5		9.0		9.5		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
275	1011	2533	0.56	2644	0.63																
350	1286	2542	0.60	2653	0.67	2760	0.75	2863	0.83	2962	0.91	3057	0.99	3150	1.08	3240	1.16	3328	1.25	3413	1.35
425	1562	2561	0.66	2669	0.73	2771	0.80	2872	0.88	2971	0.96	3067	1.05	3159	1.14	3249	1.23	3337	1.32	3422	1.42
500	1838	2587	0.75	2695	0.82	2798	0.90	2897	0.98	2992	1.06	3085	1.14	3174	1.22	3261	1.31	3346	1.39	3432	1.49
575	2113	2629	0.87	2732	0.94	2830	1.02	2925	1.10	3018	1.18	3111	1.27	3200	1.35	3287	1.44	3372	1.54	3454	1.63
650	2389	2671	0.99	2774	1.08	2872	1.16	2967	1.25	3058	1.33	3146	1.42	3232	1.51	3315	1.59	3398	1.68	3480	1.78
725	2665	2729	1.13	2824	1.22	2917	1.31	3009	1.41	3100	1.50	3188	1.59	3274	1.69	3357	1.79	3438	1.88	3517	1.98
800	2941	2788	1.28	2884	1.38	2976	1.48	3064	1.58	3150	1.68	3232	1.78	3316	1.88	3399	1.99	3480	2.09	3559	2.20
875	3216	2857	1.45	2947	1.56	3036	1.66	3124	1.77	3209	1.88	3291	1.99	3371	2.09	3449	2.20	3525	2.31	3601	2.43
950	3492	2927	1.64	3018	1.75	3104	1.87	3188	1.98	3269	2.09	3351	2.20	3431	2.32	3508	2.44	3584	2.56	3658	2.68
1025	3768	2999	1.84	3089	1.97	3175	2.09	3258	2.21	3339	2.33	3417	2.45	3493	2.57	3568	2.69	3644	2.82	3717	2.94
1100	4044	3075	2.07	3161	2.19	3247	2.32	3330	2.45	3410	2.58	3487	2.71	3563	2.84	3636	2.97	3708	3.10	3778	3.23
1175	4319	3156	2.31	3240	2.44	3320	2.58	3402	2.72	3481	2.85	3559	2.99	3634	3.13	3707	3.27	3778	3.41	3848	3.55
1250	4595	3239	2.57	3322	2.72	3402	2.86	3479	3.00	3554	3.14	3631	3.29	3705	3.44	3778	3.59	3849	3.73	3918	3.88
1325	4871	3323	2.86	3405	3.01	3484	3.16	3560	3.31	3635	3.47	3707	3.62	3778	3.77	3850	3.92	3921	4.08	3989	4.24
1400	5147	3409	3.16	3489	3.33	3567	3.49	3643	3.65	3717	3.81	3788	3.97	3858	4.13	3926	4.29	3993	4.45	4062	4.61

CFM	OV	Static Pressure in Inches wg																			
		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0		20.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
400	1470	3584	1.59	3741	1.79	3892	1.99														
500	1838	3596	1.69	3753	1.90	3904	2.12	4049	2.34	4189	2.57	4324	2.81	4456	3.05	4583	3.30	4707	3.55	4828	3.81
600	2205	3622	1.87	3774	2.07	3919	2.27	4062	2.48	4202	2.72	4337	2.97	4468	3.22	4596	3.48	4719	3.74	4840	4.01
700	2573	3657	2.10	3809	2.31	3954	2.53	4094	2.75	4229	2.98	4360	3.20	4487	3.44	4610	3.67	4732	3.93	4853	4.21
800	2941	3711	2.41	3856	2.62	3995	2.83	4129	3.05	4264	3.29	4395	3.54	4522	3.78	4645	4.04	4764	4.29	4881	4.55
900	3308	3767	2.74	3912	2.97	4051	3.21	4185	3.45	4314	3.68	4439	3.92	4560	4.17	4680	4.41	4799	4.69	4916	4.96
1000	3676	3839	3.10	3975	3.35	4108	3.60	4241	3.86	4370	4.13	4495	4.39	4616	4.65	4734	4.92	4848	5.18	4960	5.45
1100	4044	3918	3.50	4054	3.77	4184	4.04	4309	4.32	4430	4.59	4552	4.87	4673	5.16	4790	5.45	4904	5.74		
1200	4411	4005	3.94	4134	4.22	4263	4.51	4388	4.81	4508	5.11	4625	5.41	4739	5.71	4849	6.01	4961	6.32		
1300	4779	4099	4.42	4227	4.73	4350	5.03	4469	5.34	4588	5.66	4705	5.98	4817	6.30	4927	6.62				
1400	5147	4194	4.94	4321	5.27	4444	5.60	4562	5.93	4676	6.26	4787	6.59	4897	6.93						
1500	5514	4291	5.50	4417	5.86	4539	6.21	4656	6.57	4770	6.92	4880	7.27	4987	7.62						
1600	5882	4397	6.12	4515	6.49	4635	6.86	4751	7.24	4864	7.62	4974	8.00								
1700	6249	4506	6.80	4624	7.18	4737	7.57	4848	7.96	4961	8.36										
1800	6617	4617	7.52	4734	7.93	4846	8.34	4955	8.75												
1900	6985	4730	8.29	4845	8.73	4956	9.17														

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.603)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1200	100	105	109	96	78	69	63	57	54	94
	70	100	96	84	71	64	59	54	51	83
	40	97	87	77	68	62	59	54	51	76
	20	97	85	78	69	62	59	54	52	76
	0	99	92	83	71	63	59	55	52	80
1600	100	106	101	96	87	77	71	65	62	92
	70	107	101	89	76	68	63	59	57	88
	40	106	97	81	72	65	61	57	56	85
	20	105	94	77	69	64	61	57	56	83
	0	108	102	80	70	65	62	58	56	88
2100	100	111	107	103	95	85	78	74	70	98
	70	110	105	98	85	76	69	64	63	94
	40	108	102	92	79	70	64	60	60	90
	20	105	97	88	77	68	63	59	60	85
	0	110	99	87	74	69	64	60	60	88
2800	100	122	116	112	100	91	86	82	78	106
	70	121	114	104	91	83	77	72	70	102
	40	121	112	94	85	77	71	67	66	99
	20	123	109	91	81	73	68	65	66	99
	0	122	109	92	84	77	71	66	66	99
3800	100	121	117	110	107	100	95	91	88	109
	70	121	114	107	101	92	86	82	78	104
	40	121	113	103	96	87	80	76	73	101
	20	121	110	96	91	86	78	75	73	99
	0	123	113	98	95	91	80	73	71	102
5000	100	126	126	119	115	109	103	98	95	117
	70	125	124	115	112	101	94	89	85	114
	40	126	124	112	107	96	89	83	80	111
	20	126	122	107	99	94	88	81	80	109
	0	128	125	109	101	99	92	81	77	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1200	100	102	97	98	85	74	66	59	55	91
	70	101	87	84	76	66	61	56	52	80
	40	95	80	80	75	65	60	56	52	77
	20	92	80	80	75	65	61	56	52	76
	0	88	81	81	76	65	61	56	52	76
1600	100	110	110	106	93	82	74	67	63	100
	70	108	99	93	82	72	66	60	57	89
	40	104	94	87	77	67	62	58	56	84
	20	100	95	88	77	67	63	58	56	84
	0	95	97	90	78	67	63	58	55	85
2100	100	113	109	108	100	90	82	76	71	103
	70	111	105	102	91	80	72	65	62	96
	40	108	100	95	88	74	65	60	60	91
	20	102	97	95	87	73	65	59	59	90
	0	100	97	96	88	73	65	60	59	90
2800	100	120	112	120	111	98	91	85	81	114
	70	117	110	112	100	90	82	75	71	105
	40	117	107	104	92	82	73	67	66	99
	20	107	99	108	93	80	70	64	63	100
	0	104	97	106	92	81	71	65	64	98
3800	100	121	116	119	117	107	100	95	91	117
	70	118	115	116	110	99	90	84	79	111
	40	117	114	114	106	95	86	78	75	109
	20	116	111	112	105	93	82	74	72	106
	0	115	105	107	103	94	82	73	70	103
5000	100	126	125	122	128	116	108	103	99	126
	70	122	123	120	125	108	100	92	87	122
	40	121	122	119	122	103	95	87	82	120
	20	120	120	116	120	102	93	82	78	118
	0	120	117	109	116	102	93	81	77	114

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

9 IPW

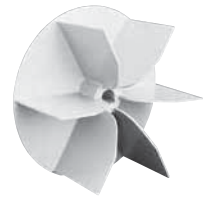
Wheel Diameter = 15⁵/₈ in.

Outlet Area = 0.44 ft²

Tip Speed = 4.09 x RPM

Minimum Starting HP = 1/3

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
4156	20	256T	215T

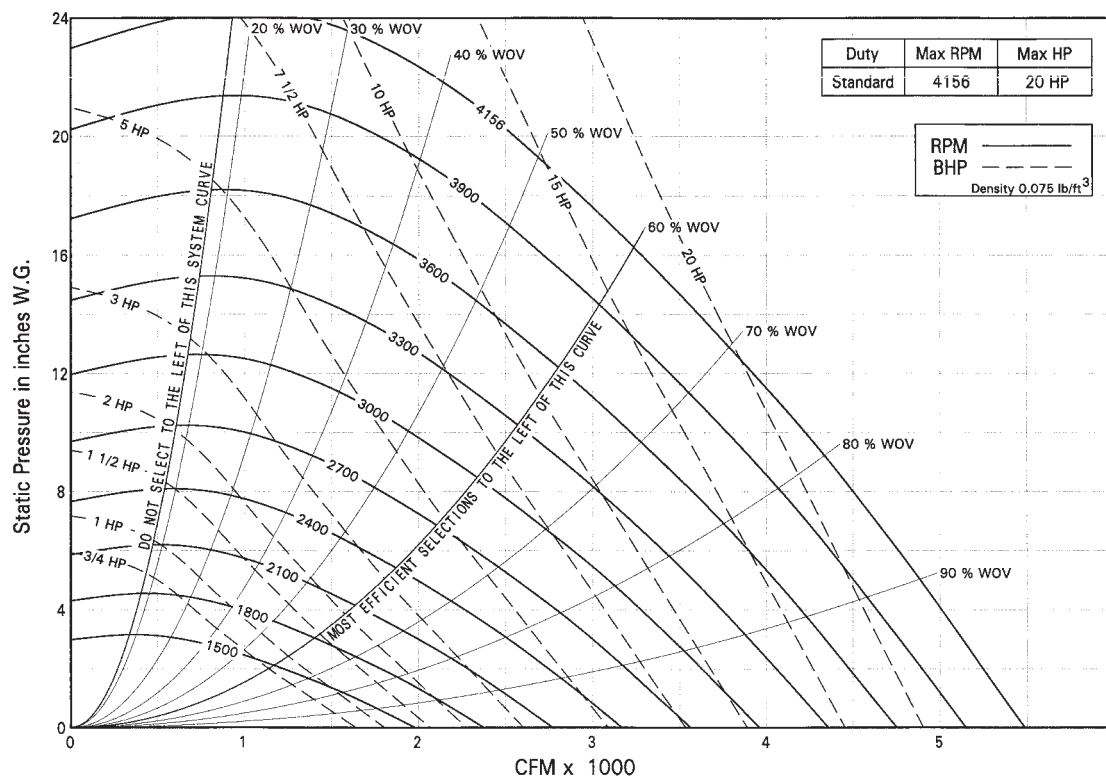


CFM	OV	Static Pressure in Inches wg																			
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
250	564	609	0.03	847	0.07	1033	0.12														
350	790	638	0.05	861	0.09	1041	0.14	1197	0.20	1335	0.27	1462	0.34								
450	1015	676	0.07	889	0.12	1059	0.18	1208	0.24	1344	0.31	1468	0.38	1583	0.46	1690	0.54	1790	0.63	1888	0.72
550	1241	720	0.09	921	0.15	1088	0.22	1230	0.29	1360	0.36	1479	0.44	1592	0.52	1698	0.61	1799	0.70	1893	0.80
650	1467	769	0.12	962	0.19	1120	0.27	1261	0.35	1386	0.43	1500	0.51	1610	0.60	1711	0.69	1807	0.78	1902	0.89
750	1693	820	0.15	1006	0.24	1159	0.32	1293	0.41	1417	0.50	1531	0.60	1635	0.69	1732	0.79	1828	0.89	1918	1.00
850	1918	875	0.20	1053	0.29	1201	0.39	1332	0.48	1449	0.58	1562	0.69	1666	0.79	1762	0.90	1854	1.01	1940	1.12
950	2144	932	0.25	1103	0.35	1246	0.46	1374	0.56	1489	0.67	1595	0.78	1697	0.90	1793	1.02	1884	1.14	1970	1.26
1050	2370	993	0.31	1155	0.42	1294	0.54	1418	0.66	1531	0.78	1635	0.90	1732	1.02	1825	1.14	1916	1.27	2001	1.41
1150	2595	1055	0.38	1209	0.50	1345	0.63	1464	0.76	1575	0.89	1677	1.02	1773	1.15	1863	1.29	1948	1.42	2033	1.56
1250	2821	1119	0.46	1265	0.60	1396	0.74	1514	0.88	1620	1.02	1721	1.16	1814	1.30	1904	1.44	1988	1.59	2069	1.73
1350	3047	1184	0.56	1323	0.70	1449	0.85	1564	1.00	1669	1.16	1766	1.31	1858	1.46	1945	1.61	2029	1.77	2109	1.92
1450	3273	1250	0.67	1383	0.83	1504	0.98	1615	1.14	1719	1.31	1814	1.47	1904	1.63	1990	1.79	2071	1.96	2150	2.12
1550	3498	1317	0.80	1445	0.96	1561	1.13	1668	1.30	1769	1.47	1863	1.65	1951	1.82	2035	1.99	2116	2.17	2193	2.34
1650	3724	1386	0.94	1508	1.11	1618	1.29	1723	1.47	1821	1.65	1914	1.84	2001	2.02	2082	2.21	2161	2.39	2238	2.58
1750	3950	1455	1.10	1572	1.28	1678	1.47	1780	1.66	1874	1.85	1965	2.05	2051	2.24	2132	2.44	2209	2.64	2283	2.83

CFM	OV	Static Pressure in Inches wg																			
		5.5		6.0		6.5		7.0		7.5		8.0		9.0		10.0		11.0		12.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
500	1128	1979	0.85	2067	0.95	2154	1.06														
650	1467	1992	0.99	2078	1.10	2161	1.21	2240	1.32	2317	1.44	2391	1.55	2533	1.79	2668	2.05	2802	2.34		
800	1805	2015	1.17	2097	1.28	2176	1.39	2253	1.51	2330	1.64	2404	1.76	2546	2.03	2680	2.30	2807	2.58	2929	2.86
950	2144	2052	1.38	2131	1.50	2207	1.63	2283	1.75	2356	1.88	2427	2.02	2562	2.28	2692	2.56	2820	2.87	2942	3.18
1100	2483	2099	1.62	2177	1.76	2252	1.90	2324	2.04	2394	2.18	2461	2.32	2594	2.61	2721	2.91	2843	3.21	2959	3.52
1250	2821	2146	1.88	2224	2.03	2299	2.19	2371	2.34	2440	2.50	2507	2.66	2636	2.97	2758	3.29	2874	3.62	2991	3.96
1400	3160	2206	2.18	2279	2.34	2349	2.51	2418	2.67	2487	2.85	2554	3.02	2683	3.37	2804	3.72	2920	4.08	3031	4.43
1550	3498	2268	2.52	2340	2.70	2409	2.88	2476	3.05	2541	3.23	2604	3.41	2730	3.79	2851	4.17	2967	4.56	3077	4.95
1700	3837	2333	2.89	2403	3.08	2471	3.27	2538	3.47	2603	3.67	2665	3.86	2785	4.26	2898	4.65	3014	5.07	3124	5.50
1850	4176	2401	3.31	2471	3.52	2537	3.72	2602	3.93	2665	4.13	2727	4.35	2846	4.78	2959	5.21	3067	5.64	3171	6.07
2000	4514	2474	3.77	2540	3.99	2605	4.21	2669	4.44	2731	4.66	2792	4.88	2908	5.33	3020	5.80	3128	6.26	3231	6.72
2150	4853	2549	4.27	2614	4.51	2678	4.75	2739	4.99	2799	5.23	2859	5.47	2974	5.95	3083	6.43	3190	6.92	3292	7.42
2300	5191	2625	4.81	2690	5.07	2752	5.33	2813	5.59	2871	5.84	2929	6.10	3042	6.61	3150	7.13	3253	7.64	3354	8.16
2450	5530	2703	5.40	2766	5.68	2828	5.96	2888	6.23	2946	6.51	3003	6.78	3111	7.33	3218	7.88	3321	8.43	3419	8.97
2600	5869	2783	6.05	2844	6.34	2905	6.64	2964	6.93	3022	7.23	3078	7.52	3185	8.10	3288	8.68	3389	9.26	3487	9.85
2750	6207	2866	6.77	2925	7.07	2983	7.37	3042	7.68	3099	7.99	3154	8.31	3261	8.93	3362	9.54	3460	10.2	3555	10.8

CFM	OV	Static Pressure in Inches wg																			
		13.0		14.0		15.0		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
700	1580	3047	3.01																		
875	1975	3052	3.33	3165	3.64	3273	3.95	3378	4.28	3480	4.60	3580	4.95	3681	5.34	3779	5.74	3875	6.15		
1050	2370	3067	3.72	3180	4.06	3288	4.41	3393	4.76	3495	5.12	3593	5.48	3689	5.85	3783	6.22	3874	6.60	3963	6.98
1225	2765	3097	4.22	3204	4.56	3307	4.91	3408	5.26	3510	5.64	3608	6.03	3704	6.43	3798	6.83	3889	7.24	3978	7.65
1400	3160	3137	4.79	3241	5.16	3344	5.54	3444	5.92	3541	6.31	3635	6.70	3727	7.09	3816	7.48	3904	7.89	3993	8.33
1575	3555	3191	5.44	3293	5.83	3392	6.24	3487	6.64	3580	7.05	3672	7.46	3764	7.89	3853	8.32	3940	8.76	4025	9.19
1750	3950	3245	6.12	3347	6.55	3446	6.99	3541	7.43	3633	7.88	3723	8.32	3810	8.77	3895	9.22	3979	9.67	4062	10.1
1925	4345	3300	6.84	3402	7.32	3500	7.79	3595	8.27	3687	8.75	3777	9.24	3864	9.72	3949	10.2	4032	10.7	4113	11.2
2100	4740	3370	7.67	3465	8.16	3557	8.65	3650	9.15	3742	9.67	3832	10.2	3919	10.7	4003	11.2	4086	11.8		
2275	5135	3442	8.56	3536	9.09	3628	9.62	3717	10.1	3803	10.7	3887	11.2	3974	11.8	4058	12.3	4141	12.9		
2450	5530	3515	9.52	3609	10.1	3700	10.7	3788	11.2	3874	11.8	3957	12.4	4038	12.9	4118	13.5				
2625	5925	3593	10.6	3684	11.2	3772	11.8	3860	12.4	3945	13.0	4029	13.6	4109	14.2						
2800	6320	3672	11.7	3762	12.3	3850	13.0	3936	13.6	4018	14.2	4101	14.9								
2975	6715	3755	12.9	3842	13.6	3929	14.3	4014	14.9	4096	15.6										
3150	7110	3841	14.3	3927	15.0	4011	15.7	4093	16.4												
3325	7505	3929	15.7	4014	16.4	4097	17.2														

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 1.32)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1000	100	103	91	86	74	71	65	59	55	82
	70	102	86	78	68	62	57	53	49	79
	40	96	84	74	64	58	54	51	46	74
	20	93	85	76	65	57	54	51	45	73
	0	97	91	76	64	60	55	51	45	77
1300	100	107	96	94	84	78	73	67	62	89
	70	107	92	87	78	70	64	60	56	85
	40	100	90	83	73	66	61	58	53	80
	20	98	90	85	75	66	61	58	53	80
	0	101	96	87	74	67	62	58	53	84
1800	100	116	111	103	96	89	82	77	73	100
	70	111	106	96	86	79	73	68	64	94
	40	110	101	90	80	73	67	63	60	89
	20	104	97	88	78	71	65	62	59	85
	0	104	101	90	79	73	67	63	59	88
2400	100	120	112	121	109	96	90	86	83	113
	70	115	109	110	98	87	81	76	73	103
	40	112	105	94	88	80	74	69	66	93
	20	109	104	87	85	77	70	66	63	91
	0	112	107	99	89	81	73	68	65	95
3200	100	122	117	112	108	103	98	94	91	110
	70	121	116	107	101	94	89	85	81	105
	40	117	113	103	95	88	82	78	75	101
	20	115	110	101	92	86	79	74	72	98
	0	117	114	105	96	89	82	75	72	102
4156	100	127	127	118	116	110	105	101	98	118
	70	125	126	115	110	102	97	92	88	114
	40	121	122	113	104	96	91	85	81	110
	20	120	120	110	102	93	88	81	78	107
	0	121	122	115	106	96	91	82	79	111

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1000	100	104	106	99	82	73	68	61	57	94
	70	101	93	83	72	63	57	54	50	81
	40	94	83	81	65	58	54	52	48	75
	20	90	86	82	64	57	54	52	47	76
	0	87	90	82	63	57	53	51	46	77
1300	100	108	111	107	94	82	75	69	64	101
	70	106	99	93	82	72	65	61	57	88
	40	98	89	87	77	66	61	59	55	82
	20	95	91	89	77	66	61	58	54	83
	0	92	94	91	76	65	61	58	54	84
1800	100	113	115	111	102	92	85	80	74	106
	70	112	109	102	91	82	75	69	65	98
	40	109	104	96	86	76	69	65	62	93
	20	104	103	97	85	75	68	64	60	92
	0	99	101	97	84	74	67	63	59	91
2400	100	120	121	127	112	101	94	88	84	119
	70	117	116	116	102	92	84	77	73	109
	40	114	113	108	97	88	79	73	70	103
	20	113	111	102	94	86	77	72	69	99
	0	105	105	109	96	84	74	69	67	102
3200	100	123	124	126	120	110	103	97	93	121
	70	119	122	119	109	100	92	86	81	113
	40	117	118	113	104	96	87	81	77	108
	20	117	118	112	104	95	87	80	78	107
	0	109	109	108	103	94	84	76	72	104
4156	100	128	130	130	131	119	110	105	100	129
	70	124	127	127	119	108	101	93	88	121
	40	122	124	122	113	104	97	88	84	116
	20	122	124	121	113	104	96	87	84	116
	0	114	116	114	113	103	93	84	79	112

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

11 IPW

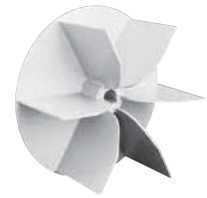
Wheel Diameter = 19 1/8 in.

Outlet Area = 0.66 ft²

Tip Speed = 5.01 x RPM

Minimum Starting HP = 1/2

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	3395	30	256T	254T
Heavy	3994	50	256T	NA

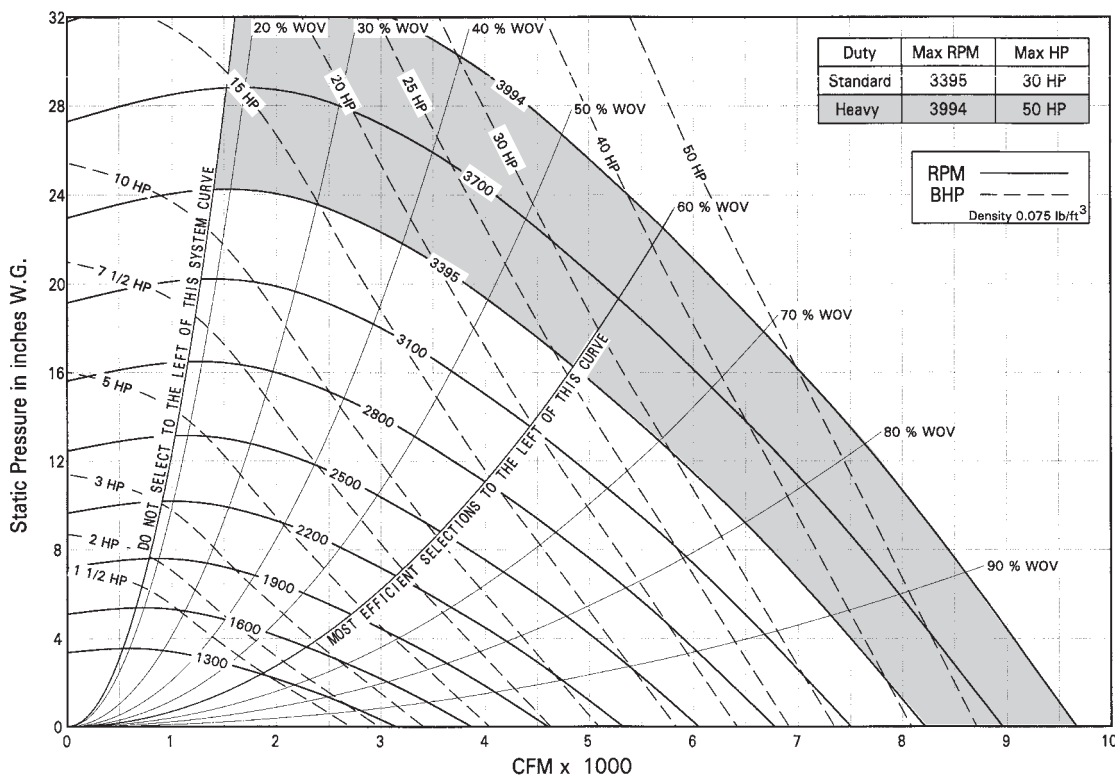


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
475	719	697	0.13	976	0.29																
650	984	722	0.17	984	0.35	1199	0.56	1379	0.80	1544	1.07										
825	1250	753	0.23	1005	0.43	1209	0.66	1387	0.92	1547	1.20	1691	1.49	1823	1.80	1953	2.18				
1000	1515	792	0.30	1035	0.54	1230	0.79	1401	1.06	1555	1.35	1699	1.68	1831	2.02	1955	2.37	2071	2.73	2180	3.10
1175	1780	834	0.38	1067	0.65	1259	0.94	1423	1.24	1573	1.55	1710	1.88	1839	2.23	1963	2.61	2079	3.00	2188	3.41
1350	2045	881	0.48	1105	0.78	1289	1.10	1453	1.44	1598	1.78	1730	2.13	1857	2.50	1974	2.88	2087	3.28	2196	3.71
1525	2310	930	0.60	1147	0.94	1325	1.29	1483	1.65	1627	2.03	1758	2.42	1878	2.81	1994	3.22	2105	3.64	2209	4.06
1700	2575	981	0.74	1190	1.12	1365	1.50	1517	1.89	1657	2.30	1787	2.73	1907	3.15	2020	3.59	2125	4.02	2229	4.49
1875	2840	1034	0.90	1237	1.32	1406	1.74	1556	2.16	1690	2.60	1817	3.05	1937	3.52	2049	3.99	2154	4.46	2254	4.94
2050	3106	1089	1.09	1285	1.54	1449	2.00	1596	2.46	1729	2.93	1851	3.41	1967	3.90	2079	4.41	2184	4.92	2283	5.44
2225	3371	1147	1.31	1335	1.79	1496	2.29	1638	2.79	1769	3.29	1890	3.80	2002	4.32	2109	4.85	2213	5.40	2313	5.96
2400	3636	1207	1.56	1386	2.07	1544	2.61	1682	3.15	1810	3.69	1929	4.23	2040	4.79	2145	5.34	2243	5.90	2342	6.50
2575	3901	1268	1.84	1439	2.39	1592	2.97	1729	3.54	1854	4.12	1970	4.69	2080	5.28	2183	5.88	2281	6.47	2374	7.07
2750	4166	1329	2.16	1494	2.74	1642	3.35	1777	3.97	1898	4.58	2013	5.20	2120	5.81	2223	6.44	2320	7.08	2412	7.72
2925	4431	1391	2.51	1549	3.13	1693	3.77	1825	4.43	1945	5.09	2056	5.74	2163	6.40	2263	7.05	2359	7.72	2451	8.39
3100	4696	1454	2.91	1607	3.57	1746	4.24	1874	4.93	1993	5.63	2103	6.32	2206	7.02	2306	7.71	2400	8.40	2491	9.11

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	1515	2180	3.10	2288	3.53	2392	3.99														
1250	1893	2192	3.54	2296	3.96	2395	4.40	2491	4.85	2583	5.30	2671	5.77	2757	6.24	2844	6.79	2928	7.36	3011	7.94
1500	2272	2206	4.00	2307	4.45	2407	4.92	2502	5.41	2594	5.91	2683	6.42	2769	6.93	2852	7.45	2932	7.99	3011	8.53
1750	2651	2235	4.61	2334	5.09	2429	5.57	2520	6.06	2608	6.55	2694	7.08	2780	7.63	2863	8.20	2944	8.77	3022	9.35
2000	3030	2275	5.29	2369	5.80	2460	6.32	2549	6.85	2636	7.39	2721	7.94	2803	8.49	2882	9.05	2959	9.62	3034	10.2
2250	3409	2317	6.03	2411	6.59	2502	7.16	2588	7.73	2672	8.31	2753	8.89	2831	9.47	2911	10.1	2987	10.7	3062	11.3
2500	3787	2360	6.82	2454	7.44	2544	8.06	2631	8.68	2714	9.31	2794	9.94	2872	10.6	2948	11.2	3021	11.9	3093	12.5
2750	4166	2412	7.72	2501	8.35	2587	9.00	2673	9.69	2756	10.4	2837	11.1	2914	11.7	2990	12.4	3063	13.1	3134	13.8
3000	4545	2468	8.70	2556	9.39	2640	10.1	2721	10.8	2799	11.5	2879	12.2	2957	13.0	3032	13.7	3105	14.5	3176	15.2
3250	4924	2526	9.76	2612	10.5	2696	11.3	2776	12.0	2854	12.8	2929	13.5	3001	14.3	3075	15.1	3148	15.9	3219	16.7
3500	5303	2587	10.9	2671	11.7	2752	12.5	2832	13.3	2909	14.1	2984	14.9	3056	15.7	3127	16.6	3195	17.4	3262	18.2
3750	5681	2648	12.2	2732	13.1	2813	13.9	2890	14.7	2966	15.6	3040	16.4	3112	17.3	3182	18.2	3250	19.0	3317	19.9
4000	6060	2714	13.6	2795	14.5	2874	15.4	2951	16.3	3026	17.2	3098	18.1	3169	19.0	3238	19.9	3306	20.8	3372	21.7
4250	6439	2782	15.1	2862	16.0	2938	17.0	3013	17.9	3087	18.9	3159	19.8	3228	20.8	3296	21.7	3363	22.7	3428	23.7
4500	6818	2851	16.7	2930	17.7	3006	18.7	3079	19.7	3150	20.7	3221	21.7	3290	22.7	3357	23.7	3422	24.7	3486	25.7
4750	7196	2921	18.4	2999	19.5	3074	20.5	3146	21.6	3217	22.7	3285	23.7	3352	24.8	3419	25.8	3484	26.9	3547	28.0

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	2272	3011	8.53	3087	9.07	3162	9.6	3235	10.2	3306	10.8	3378	11.4	3520	12.8						
1780	2696	3024	9.45	3100	10.1	3175	10.7	3247	11.3	3319	11.9	3388	12.5	3523	13.8	3653	15.1	3779	16.4	3900	17.7
2060	3121	3040	10.5	3113	11.0	3188	11.7	3260	12.3	3331	13.0	3401	13.7	3536	15.0	3666	16.4	3791	17.8	3913	19.3
2340	3545	3073	11.7	3145	12.4	3216	13.0	3286	13.7	3354	14.3	3420	15.0	3549	16.3	3679	17.8	3804	19.3	3926	20.8
2620	3969	3113	13.1	3182	13.8	3250	14.5	3318	15.2	3386	15.9	3452	16.6	3581	18.0	3705	19.5	3824	21.0	3940	22.4
2900	4393	3160	14.7	3229	15.4	3279	16.1	3363	16.9	3428	17.6	3491	18.3	3614	19.8	3737	21.4	3856	23.0	3972	24.6
3180	4818	3207	16.3	3276	17.0	3344	17.8	3410	18.6	3475	19.4	3538	20.2	3661	21.9	3779	23.5	3893	25.1		
3460	5242	3255	17.9	3324	18.8	3392	19.7	3458	20.5	3522	21.4	3585	22.2	3708	24.0	3826	25.7	3939	27.5		
3740	5666	3314	19.8	3379	20.7	3442	21.6	3506	22.5	3570	23.4	3633	24.3	3755	26.2	3873	28.0	3987	29.9		
4020	6090	3377	21.9	3441	22.8	3504	23.8	3566	24.7	3628	25.6	3685	26.6	3803	28.5	3921	30.5				
4300	6515	3440	24.1	3504	25.1	3566	26.1	3628	27.1	3688	28.1	3746	29.0	3861	31.0	3971	33.0				
4580	6939	3506	26.4	3568	27.4	3630	28.5	3691	29.6	3750	30.6	3809	31.7	3923	33.8						
4860	7363	3574	29.0	3636	30.1	3697	31.2	3756	32.2	3814	33.3	3872	34.4	3985	36.7						
5140	7787	3644	31.7	3705	32.9	3765	34.0	3824	35.1	3882	36.3	3938	37.4								
5420	8212	3717	34.6	3776	35.8	3835	37.0	3893	38.2	3950	39.4										
5700	8636	3792	37.7	3851	39.0	3908	40.2	3964	41.5												

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 2.42)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
800	100	125	100	87	77	71	65	59	54	100
	70	115	93	82	73	65	59	55	51	89
	40	103	89	80	71	62	58	54	50	80
	20	103	88	79	70	62	58	54	50	80
	0	109	90	78	68	62	58	55	51	84
1100	100	110	98	95	84	80	74	68	64	91
	70	110	94	88	78	71	66	62	58	87
	40	104	92	83	74	67	63	60	55	82
	20	101	92	85	75	66	63	60	54	82
	0	104	99	86	74	68	64	60	54	86
1500	100	119	110	103	97	89	83	78	75	101
	70	114	106	94	86	80	74	69	66	94
	40	113	99	89	79	73	68	65	61	90
	20	107	96	87	78	72	66	64	60	86
	0	107	101	88	79	73	67	64	60	88
2100	100	123	113	125	109	97	92	89	85	117
	70	119	110	114	98	89	83	79	76	106
	40	116	106	98	89	82	76	72	69	96
	20	113	106	91	88	79	72	68	66	93
	0	115	108	103	89	83	75	70	68	98
2900	100	127	120	116	111	106	101	98	94	114
	70	125	118	111	104	98	92	88	85	108
	40	121	116	106	98	92	86	81	78	104
	20	120	113	104	95	89	82	78	76	101
	0	121	117	108	98	93	85	78	76	105
3994	100	132	132	124	121	115	110	106	103	123
	70	131	130	120	115	107	102	97	93	118
	40	127	127	118	109	101	95	90	86	115
	20	125	125	114	106	98	93	86	83	112
	0	127	127	119	110	101	96	88	84	116

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
800	100	118	104	94	82	72	67	61	56	94
	70	103	90	83	71	63	59	56	52	81
	40	99	87	80	68	61	58	55	52	78
	20	101	87	79	67	60	58	55	51	78
	0	102	87	78	66	60	58	55	51	78
1100	100	112	114	108	92	82	77	70	66	103
	70	109	101	93	81	73	66	62	59	90
	40	102	91	90	75	67	63	61	57	84
	20	98	94	91	75	66	62	60	56	84
	0	95	97	92	74	66	62	60	55	86
1500	100	116	117	111	102	92	86	80	75	106
	70	115	110	101	91	83	75	69	66	98
	40	112	104	96	85	76	70	66	63	93
	20	107	104	96	84	75	68	65	61	92
	0	102	103	96	83	74	67	64	60	91
2100	100	124	124	130	112	103	96	91	86	122
	70	121	118	119	102	94	86	79	76	112
	40	118	115	112	97	90	81	76	73	106
	20	117	113	106	95	88	79	74	72	102
	0	109	108	113	95	86	76	71	70	105
2900	100	128	128	130	123	112	106	101	96	124
	70	124	126	122	111	103	95	89	84	116
	40	122	122	115	106	99	90	84	81	111
	20	121	121	115	107	98	89	84	82	111
	0	114	113	113	106	96	86	79	76	107
3994	100	133	135	135	135	124	115	110	105	134
	70	129	132	132	124	113	106	98	93	126
	40	127	129	127	118	109	101	93	89	121
	20	127	129	126	118	109	101	93	89	121
	0	119	121	119	117	107	98	89	84	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

13 IPW

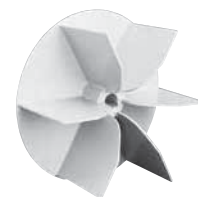
Wheel Diameter = 22⁵/₈ in.

Outlet Area = 0.92 ft²

Tip Speed = 5.92 x RPM

Minimum Starting HP = 1/2

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	2870	50	286T	284T
Heavy	3377	75	286T	NA

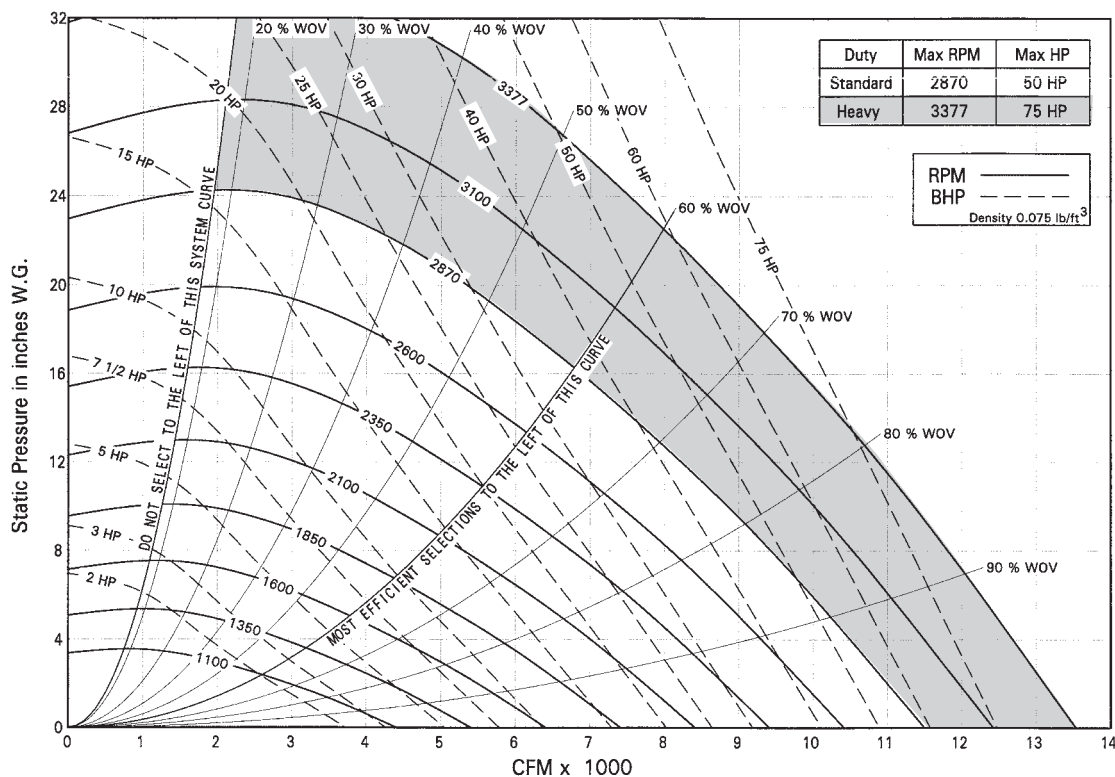


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	852	599	0.21	829	0.45	1010	0.73	1167	1.07												
1040	1108	623	0.28	841	0.55	1017	0.86	1170	1.21	1304	1.58	1428	1.99								
1280	1364	653	0.37	862	0.68	1030	1.01	1176	1.37	1311	1.79	1433	2.22	1545	2.68	1649	3.15	1749	3.66	1846	4.25
1520	1620	687	0.47	887	0.82	1052	1.21	1193	1.60	1321	2.02	1439	2.47	1551	2.97	1656	3.48	1753	4.01	1846	4.55
1760	1876	724	0.60	917	1.00	1076	1.42	1215	1.86	1338	2.32	1454	2.80	1560	3.29	1662	3.82	1760	4.38	1853	4.97
2000	2132	763	0.74	950	1.19	1102	1.65	1239	2.15	1361	2.65	1472	3.16	1577	3.69	1676	4.24	1770	4.80	1859	5.39
2240	2388	804	0.92	985	1.42	1134	1.93	1264	2.45	1386	3.00	1496	3.57	1598	4.14	1693	4.71	1786	5.32	1875	5.94
2480	2643	847	1.12	1022	1.67	1167	2.23	1296	2.80	1411	3.38	1521	4.00	1623	4.62	1717	5.25	1806	5.88	1891	6.53
2720	2899	892	1.36	1061	1.96	1203	2.57	1328	3.18	1442	3.81	1546	4.45	1647	5.13	1742	5.81	1831	6.49	1915	7.18
2960	3155	939	1.63	1102	2.28	1239	2.95	1362	3.61	1474	4.28	1577	4.97	1672	5.66	1766	6.39	1855	7.13	1939	7.87
3200	3411	987	1.95	1143	2.64	1278	3.36	1398	4.08	1507	4.79	1609	5.53	1703	6.27	1792	7.01	1880	7.80	1964	8.60
3440	3667	1037	2.30	1186	3.05	1318	3.82	1435	4.59	1542	5.36	1642	6.13	1736	6.92	1824	7.72	1906	8.52	1988	9.35
3680	3923	1088	2.71	1231	3.50	1359	4.31	1474	5.14	1578	5.96	1677	6.78	1768	7.61	1856	8.46	1938	9.32	2017	10.2
3920	4179	1139	3.16	1276	3.99	1400	4.85	1514	5.74	1616	6.62	1712	7.49	1803	8.37	1889	9.25	1971	10.2	2049	11.1
4160	4434	1190	3.66	1322	4.54	1443	5.46	1554	6.39	1655	7.32	1749	8.25	1838	9.18	1923	10.1	2003	11.1	2081	12.0
4400	4690	1243	4.22	1371	5.16	1488	6.11	1595	7.08	1695	8.08	1788	9.06	1874	10.0	1958	11.0	2038	12.0	2114	13.0

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	1705	1848	4.69	1936	5.26	2021	5.85	2101	6.45	2181	7.11	2259	7.84	2335	8.58						
1950	2078	1858	5.30	1946	5.93	2030	6.58	2111	7.23	2189	7.91	2264	8.59	2336	9.29	2406	9.99	2474	10.7	2541	11.5
2300	2452	1879	6.08	1963	6.72	2043	7.37	2121	8.03	2198	8.76	2273	9.51	2346	10.3	2416	11.0	2484	11.8	2550	12.6
2650	2825	1908	6.99	1988	7.67	2067	8.38	2144	9.10	2218	9.84	2290	10.6	2359	11.3	2426	12.1	2494	12.9	2560	13.8
3000	3198	1943	7.99	2023	8.75	2100	9.51	2173	10.3	2244	11.1	2314	11.9	2383	12.7	2450	13.5	2515	14.3	2578	15.2
3350	3571	1979	9.06	2059	9.90	2135	10.7	2208	11.6	2279	12.4	2347	13.3	2413	14.1	2477	15.0	2539	15.9	2602	16.8
3700	3944	2019	10.2	2095	11.1	2171	12.0	2244	12.9	2315	13.9	2383	14.8	2448	15.7	2512	16.7	2574	17.6	2634	18.5
4050	4317	2066	11.6	2141	12.5	2212	13.5	2280	14.4	2351	15.4	2418	16.4	2484	17.4	2548	18.4	2610	19.4	2670	20.5
4400	4690	2114	13.0	2188	14.0	2259	15.0	2327	16.1	2392	17.1	2456	18.1	2520	19.2	2584	20.3	2646	21.4	2706	22.4
4750	5063	2164	14.6	2236	15.7	2306	16.7	2374	17.8	2439	18.9	2502	20.0	2564	21.1	2623	22.2	2682	23.4	2742	24.5
5100	5437	2216	16.3	2288	17.5	2356	18.6	2422	19.7	2487	20.9	2550	22.1	2611	23.3	2670	24.5	2728	25.6	2784	26.8
5450	5810	2270	18.2	2340	19.4	2408	20.6	2473	21.8	2536	23.1	2598	24.3	2658	25.5	2717	26.8	2775	28.1	2830	29.3
5800	6183	2327	20.2	2395	21.5	2460	22.8	2525	24.1	2588	25.4	2648	26.7	2707	28.0	2765	29.3	2822	30.6	2878	32.0
6150	6556	2385	22.4	2452	23.8	2516	25.1	2578	26.5	2640	27.9	2700	29.3	2759	30.6	2816	32.0	2871	33.4	2926	34.7
6500	6929	2444	24.7	2510	26.2	2574	27.6	2635	29.1	2695	30.5	2753	32.0	2811	33.4	2868	34.9	2923	36.3	2977	37.8
6850	7302	2504	27.2	2569	28.7	2632	30.3	2693	31.8	2752	33.4	2809	34.9	2865	36.4	2920	37.9	2975	39.5	3028	41.0

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	2132	2542	11.6	2607	12.4	2670	13.1	2734	14.0	2797	14.9	2859	15.8								
2400	2558	2553	12.9	2618	13.7	2681	14.6	2742	15.4	2803	16.3	2861	17.1	2976	18.9	3085	20.6	3191	22.4	3298	24.5
2800	2985	2564	14.3	2629	15.1	2692	16.0	2754	16.9	2814	17.9	2873	18.8	2987	20.7	3097	22.6	3202	24.5	3305	26.5
3200	3411	2592	16.1	2654	17.0	2714	17.8	2772	18.7	2830	19.6	2886	20.5	2998	22.5	3108	24.5	3214	26.6	3316	28.7
3600	3837	2624	18.0	2683	18.9	2741	19.9	2800	20.9	2857	21.8	2913	22.8	3022	24.8	3127	26.8	3228	28.9	3327	31.0
4000	4264	2665	20.2	2723	21.2	2781	22.2	2837	23.2	2891	24.2	2945	25.3	3050	27.4	3155	29.5	3256	31.7	3353	33.9
4400	4690	2706	22.4	2764	23.5	2821	24.7	2877	25.8	2932	26.9	2985	28.0	3089	30.2	3189	32.5	3286	34.7		
4800	5117	2747	24.8	2805	26.0	2862	27.2	2918	28.4	2973	29.6	3026	30.8	3130	33.2	3229	35.6	3326	38.1		
5200	5543	2797	27.5	2852	28.7	2905	29.9	2960	31.2	3014	32.5	3067	33.8	3171	36.4	3270	39.0	3366	41.6		
5600	5970	2851	30.4	2905	31.7	2958	33.0	3010	34.3	3061	35.6	3111	36.9	3212	39.6	3311	42.4				
6000	6396	2905	33.5	2959	34.9	3012	36.3	3064	37.7	3115	39.1	3164	40.5	3261	43.3	3354	46.1				
6400	6823	2962	36.9	3015	38.3	3067	39.8	3118	41.3	3169	42.8	3218	44.2	3314	47.2						
6800	7249	3021	40.6	3073	42.1	3124	43.6	3174	45.1	3224	46.6	3273	48.2	3369	51.3						
7200	7675	3081	44.4	3133	46.0	3184	47.7	3233	49.3	3282	50.9	3330	52.5								
7600	8102	3144	48.6	3194	50.3	3244	52.0	3293	53.7	3341	55.4										
8000	8528	3209	53.0	3259	54.8	3307	56.6	3354	58.3												

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 4.01)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
700	100	128	94	88	77	73	66	60	56	103
	70	117	89	83	74	65	60	57	52	92
	40	106	87	81	72	63	59	56	52	82
	20	106	86	81	70	63	59	56	52	81
	0	112	86	79	69	64	60	56	52	87
1000	100	114	102	98	85	82	76	71	66	94
	70	113	97	90	79	73	68	64	60	90
	40	107	95	85	75	70	65	62	57	85
	20	105	96	87	76	68	65	62	56	85
	0	108	102	87	76	71	66	63	57	89
1300	100	120	112	103	98	89	84	79	76	101
	70	115	107	94	87	80	75	70	67	95
	40	113	99	88	80	74	69	66	62	90
	20	108	98	87	78	72	67	65	61	87
	0	109	102	88	80	74	68	66	61	89
1800	100	124	117	124	108	98	93	89	86	116
	70	120	112	113	97	89	84	80	77	106
	40	116	106	99	89	82	77	73	70	96
	20	114	104	92	88	79	73	69	67	93
	0	116	108	103	89	83	75	71	69	98
2500	100	129	120	118	112	107	102	99	95	115
	70	128	117	111	104	99	93	89	86	109
	40	124	116	106	98	92	86	82	80	105
	20	122	112	104	95	91	82	79	78	102
	0	124	117	108	98	94	84	79	78	106
3377	100	135	131	125	121	115	111	107	103	123
	70	133	129	120	114	107	102	97	94	118
	40	129	126	117	108	101	95	90	87	114
	20	128	124	114	105	99	93	87	85	111
	0	129	127	119	109	102	95	88	85	115

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
700	100	121	102	95	82	73	68	62	57	96
	70	105	89	84	71	64	61	58	54	82
	40	102	86	81	68	62	60	57	53	79
	20	103	85	80	66	62	60	57	53	80
	0	104	84	79	65	61	60	57	53	80
1000	100	115	117	111	93	84	79	73	68	105
	70	112	105	94	83	75	69	65	62	93
	40	105	94	92	76	69	65	63	59	86
	20	102	97	93	75	69	65	63	58	87
	0	98	101	94	75	68	65	62	58	89
1300	100	119	119	111	102	92	87	81	76	107
	70	117	112	101	91	83	76	70	67	99
	40	114	105	96	85	77	71	67	64	94
	20	109	106	96	84	76	69	66	63	93
	0	104	106	96	82	74	68	65	61	93
1800	100	126	127	129	111	103	96	91	87	121
	70	122	120	118	101	94	86	80	77	111
	40	119	116	112	97	90	81	77	74	106
	20	118	113	106	95	88	79	75	74	102
	0	111	111	112	95	86	76	72	71	105
2500	100	130	129	133	122	112	106	102	97	126
	70	126	128	122	110	104	95	89	85	117
	40	124	124	115	106	99	90	85	83	112
	20	124	123	115	107	98	89	85	84	111
	0	116	114	115	105	96	86	80	77	109
3377	100	135	136	138	134	123	115	110	106	134
	70	131	134	131	122	113	106	98	94	126
	40	129	131	126	117	109	101	94	90	121
	20	129	130	125	117	109	100	93	91	120
	0	122	122	121	116	107	97	89	85	117

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

15 IPW

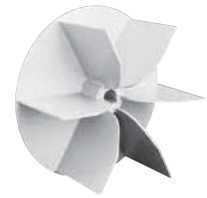
Wheel Diameter = 26 $\frac{1}{8}$ in.

Outlet Area = 1.23 ft²

Tip Speed = 6.84 x RPM

Minimum Starting HP = $\frac{3}{4}$

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	2486	60	286T	284T
Heavy	2924	100	286T	NA

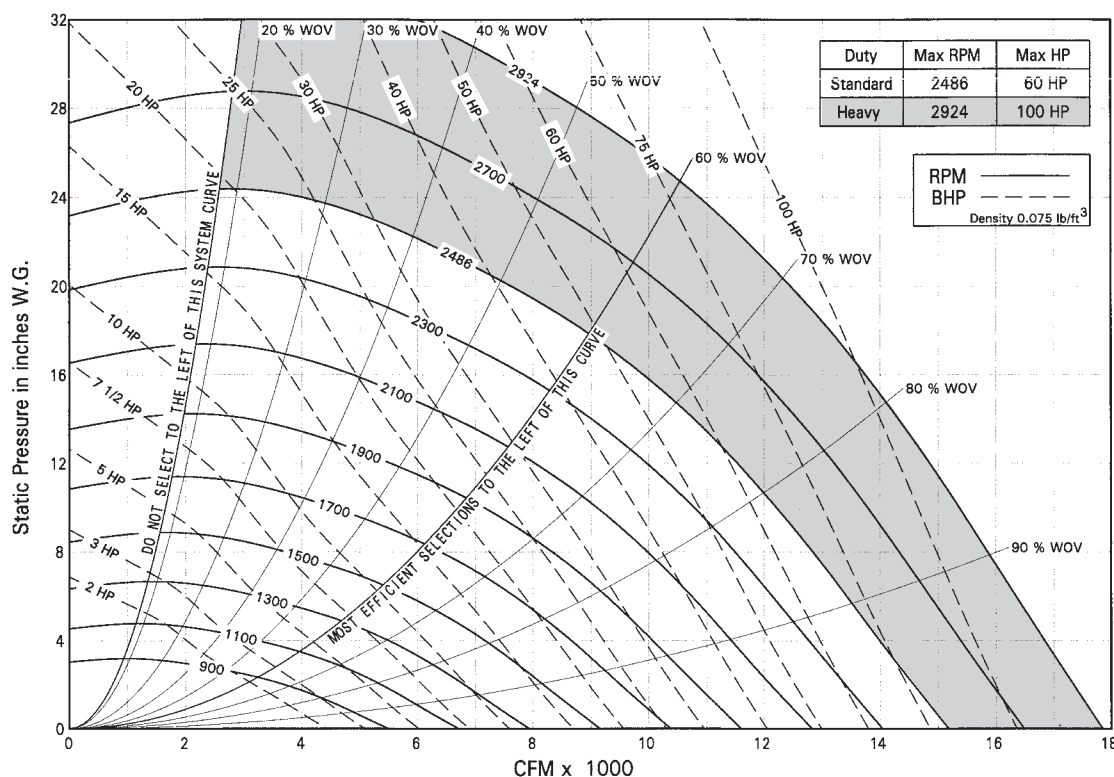


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1100	887	519	0.27	716	0.56	873	0.91	1006	1.31												
1425	1149	537	0.37	728	0.71	879	1.07	1010	1.49	1127	1.96	1233	2.47	1332	3.01						
1750	1411	559	0.48	744	0.89	892	1.30	1019	1.74	1133	2.22	1237	2.74	1335	3.32	1426	3.92	1511	4.54	1592	5.18
2075	1673	585	0.62	763	1.09	908	1.57	1032	2.06	1143	2.56	1246	3.12	1340	3.68	1429	4.28	1515	4.95	1595	5.64
2400	1935	614	0.79	785	1.31	926	1.86	1048	2.42	1158	2.99	1258	3.57	1350	4.16	1439	4.80	1521	5.45	1599	6.12
2725	2197	648	0.99	809	1.57	947	2.18	1067	2.81	1174	3.45	1274	4.09	1365	4.74	1450	5.39	1531	6.08	1610	6.80
3050	2459	684	1.23	838	1.87	970	2.54	1087	3.23	1193	3.93	1290	4.64	1381	5.36	1466	6.09	1546	6.82	1622	7.55
3375	2721	724	1.53	867	2.21	994	2.93	1110	3.69	1213	4.46	1309	5.23	1397	6.01	1482	6.81	1562	7.61	1637	8.41
3700	2983	766	1.87	900	2.60	1023	3.39	1133	4.18	1236	5.02	1329	5.86	1417	6.72	1499	7.57	1578	8.43	1653	9.31
4025	3245	809	2.27	935	3.05	1052	3.89	1159	4.75	1258	5.63	1352	6.54	1438	7.46	1520	8.38	1597	9.31	1669	10.2
4350	3508	853	2.72	971	3.55	1083	4.44	1188	5.37	1283	6.29	1374	7.26	1460	8.25	1540	9.24	1617	10.2	1690	11.2
4675	3770	898	3.24	1012	4.13	1117	5.07	1217	6.04	1312	7.05	1398	8.03	1483	9.09	1563	10.2	1638	11.2	1710	12.3
5000	4032	945	3.83	1054	4.79	1153	5.75	1248	6.78	1340	7.85	1426	8.92	1506	9.97	1586	11.1	1660	12.3	1731	13.4
5325	4294	992	4.49	1096	5.51	1189	6.51	1282	7.61	1369	8.71	1455	9.86	1534	11.0	1609	12.1	1683	13.3	1754	14.5
5650	4556	1040	5.23	1139	6.30	1230	7.38	1318	8.50	1402	9.66	1484	10.9	1562	12.1	1636	13.3	1706	14.5	1777	15.8
5975	4818	1088	6.05	1182	7.18	1272	8.33	1353	9.46	1436	10.7	1513	11.9	1591	13.2	1665	14.5	1734	15.8	1800	17.0

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1612	1594	5.53	1671	6.23	1744	6.95	1815	7.69	1885	8.49										
2400	1935	1599	6.12	1676	6.85	1749	7.63	1819	8.42	1887	9.23	1952	10.1	2015	10.9	2077	11.8	2136	12.7	2194	13.6
2800	2258	1612	6.96	1686	7.71	1758	8.47	1826	9.24	1891	10.0	1957	10.9	2020	11.8	2081	12.7	2141	13.7	2198	14.6
3200	2580	1629	7.94	1701	8.71	1770	9.50	1838	10.3	1904	11.2	1967	12.1	2028	12.9	2088	13.8	2145	14.7	2203	15.7
3600	2903	1648	9.03	1720	9.89	1789	10.7	1855	11.6	1918	12.5	1980	13.4	2041	14.3	2100	15.3	2158	16.2	2214	17.2
4000	3225	1668	10.2	1740	11.1	1809	12.1	1874	13.0	1938	14.0	1999	14.9	2058	15.9	2116	16.8	2171	17.8	2227	18.8
4400	3548	1693	11.4	1762	12.4	1828	13.4	1894	14.5	1957	15.5	2019	16.6	2078	17.6	2135	18.6	2191	19.7	2245	20.7
4800	3870	1718	12.7	1787	13.8	1853	14.9	1917	16.0	1978	17.1	2038	18.2	2097	19.4	2155	20.5	2210	21.7	2264	22.8
5200	4193	1745	14.1	1813	15.3	1878	16.5	1942	17.7	2003	18.9	2062	20.0	2119	21.2	2174	22.5	2230	23.7	2284	24.9
5600	4516	1773	15.6	1841	16.8	1905	18.1	1967	19.4	2028	20.7	2086	21.9	2143	23.2	2199	24.5	2252	25.8	2305	27.1
6000	4838	1802	17.1	1869	18.5	1933	19.9	1995	21.2	2054	22.6	2112	23.9	2168	25.3	2224	26.7	2277	28.1	2329	29.5
6400	5161	1837	18.9	1899	20.3	1962	21.7	2023	23.1	2082	24.6	2140	26.1	2195	27.5	2249	29.0	2302	30.4	2354	31.9
6800	5483	1872	20.8	1934	22.3	1994	23.7	2052	25.2	2111	26.7	2168	28.3	2223	29.8	2277	31.4	2329	32.9	2380	34.4
7200	5806	1907	22.9	1969	24.4	2028	26.0	2086	27.5	2141	29.0	2196	30.6	2252	32.2	2305	33.9	2357	35.5	2408	37.1
7600	6129	1943	25.0	2005	26.7	2064	28.3	2121	29.9	2176	31.5	2229	33.1	2280	34.7	2334	36.5	2386	38.2	2436	39.9
8000	6451	1983	27.4	2041	29.0	2099	30.8	2156	32.5	2211	34.2	2264	35.9	2315	37.6	2365	39.3	2414	41.0	2465	42.8

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2600	2096	2196	14.1	2252	15.0	2307	16.0	2361	16.9	2415	18.0	2468	19.0								
3125	2520	2202	15.5	2258	16.5	2313	17.5	2367	18.5	2419	19.6	2471	20.7	2570	22.8	2666	25.1	2758	27.3	2847	29.7
3650	2943	2216	17.4	2270	18.4	2323	19.4	2375	20.4	2426	21.4	2476	22.4	2576	24.8	2672	27.1	2764	29.5	2853	32.0
4175	3366	2234	19.6	2287	20.6	2340	21.7	2392	22.8	2443	23.9	2493	25.1	2589	27.3	2682	29.6	2771	31.9	2859	34.4
4700	3790	2260	22.3	2312	23.4	2364	24.5	2414	25.6	2463	26.8	2511	27.9	2606	30.2	2698	32.7	2788	35.2	2874	37.8
5225	4213	2285	25.0	2338	26.3	2389	27.5	2440	28.8	2489	30.0	2537	31.3	2630	33.8	2720	36.3	2806	38.8	2891	41.4
5750	4637	2314	28.0	2365	29.3	2415	30.6	2465	32.0	2514	33.4	2562	34.7	2656	37.5	2745	40.2	2832	42.9	2915	45.7
6275	5060	2347	31.1	2397	32.6	2447	34.0	2495	35.5	2543	36.9	2589	38.4	2681	41.3	2771	44.3	2857	47.3		
6800	5483	2380	34.4	2430	36.0	2480	37.5	2528	39.1	2575	40.7	2622	42.2	2711	45.4	2798	48.5	2883	51.7		
7325	5907	2417	38.0	2466	39.6	2515	41.3	2562	43.0	2608	44.6	2654	46.3	2744	49.7	2830	53.1	2914	56.4		
7850	6330	2454	41.7	2503	43.5	2551	45.3	2598	47.1	2645	48.8	2690	50.6	2777	54.2	2863	57.8				
8375	6754	2493	45.7	2541	47.6	2589	49.5	2636	51.4	2681	53.3	2726	55.2	2814	59.0	2898	62.8				
8900	7177	2539	50.3	2584	52.2	2629	54.0	2673	55.9	2719	57.9	2764	59.9	2851	64.0						
9425	7600	2585	55.1	2630	57.1	2675	59.1	2719	61.1	2761	63.1	2803	65.1	2888	69.2						
9950	8024	2631	60.2	2677	62.3	2721	64.4	2764	66.6	2807	68.7	2849	70.8								
10475	8447	2678	65.5	2723	67.8	2768	70.1	2811	72.3	2853	74.6	2895	76.8								

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 6.11)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
600	100	100	98	84	78	75	67	61	57	85
	70	100	91	76	72	69	63	55	52	80
	40	97	85	74	68	65	62	52	44	75
	20	93	84	73	66	62	58	51	44	73
	0	97	84	76	65	61	57	51	48	75
850	100	106	106	98	88	84	79	71	67	95
	70	106	103	91	81	78	74	67	61	90
	40	103	99	87	79	74	71	64	56	86
	20	99	96	86	77	72	68	62	55	84
	0	103	98	88	78	71	67	62	57	86
1200	100	120	122	110	98	92	88	82	77	108
	70	114	116	100	88	85	80	74	69	102
	40	108	110	93	83	78	74	68	65	95
	20	109	110	94	81	75	72	68	65	96
	0	114	116	97	83	77	74	70	67	101
1600	100	120	116	110	104	99	97	93	88	108
	70	118	113	103	95	91	89	83	78	102
	40	115	106	97	89	85	81	75	73	96
	20	115	102	95	86	81	76	72	71	93
	0	113	101	97	90	84	79	75	72	94
2200	100	124	120	124	115	107	105	103	98	118
	70	120	116	114	104	99	99	93	88	109
	40	118	113	112	100	93	91	85	82	106
	20	119	108	116	99	90	85	81	79	108
	0	119	109	114	101	93	87	83	81	107
2924	100	129	129	128	126	117	112	110	106	126
	70	125	124	120	115	106	105	102	97	117
	40	123	122	118	112	101	98	94	89	114
	20	123	119	118	113	99	93	88	86	114
	0	124	120	117	113	102	96	91	88	114

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
600	100	109	100	89	77	76	68	61	58	88
	70	99	92	80	71	69	61	54	50	80
	40	91	86	76	66	63	58	50	46	74
	20	91	85	75	64	62	57	48	44	73
	0	92	85	75	63	61	55	46	43	73
850	100	116	112	102	91	84	80	72	67	99
	70	105	103	94	83	77	72	65	59	91
	40	97	96	88	78	72	69	62	56	84
	20	97	96	88	77	71	67	60	54	84
	0	98	96	87	77	69	65	58	52	84
1200	100	132	134	116	100	93	90	83	78	119
	70	118	121	105	93	87	81	74	70	106
	40	105	108	100	89	81	75	70	67	96
	20	112	114	103	87	75	71	67	64	100
	0	112	114	101	87	77	72	65	60	100
1600	100	122	124	120	109	102	99	94	90	115
	70	120	119	110	101	95	91	84	80	107
	40	117	115	108	97	91	85	80	76	104
	20	112	112	108	93	85	79	75	72	102
	0	111	112	109	94	85	79	73	68	102
2200	100	129	126	125	118	112	108	105	101	121
	70	127	126	126	112	105	101	97	92	119
	40	124	125	125	109	101	96	90	87	118
	20	121	122	125	105	97	91	86	84	117
	0	118	118	126	106	96	90	84	79	118
2924	100	134	134	131	128	120	116	113	109	129
	70	132	133	132	125	113	109	105	100	127
	40	129	131	131	123	109	104	99	94	125
	20	125	128	130	121	105	99	94	91	124
	0	122	124	129	122	105	98	92	87	123

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

17 IPW

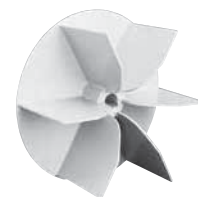
Wheel Diameter = 29⁵/₈ in.

Outlet Area = 1.56 ft²

Tip Speed = 7.76 x RPM

Minimum Starting HP = 1

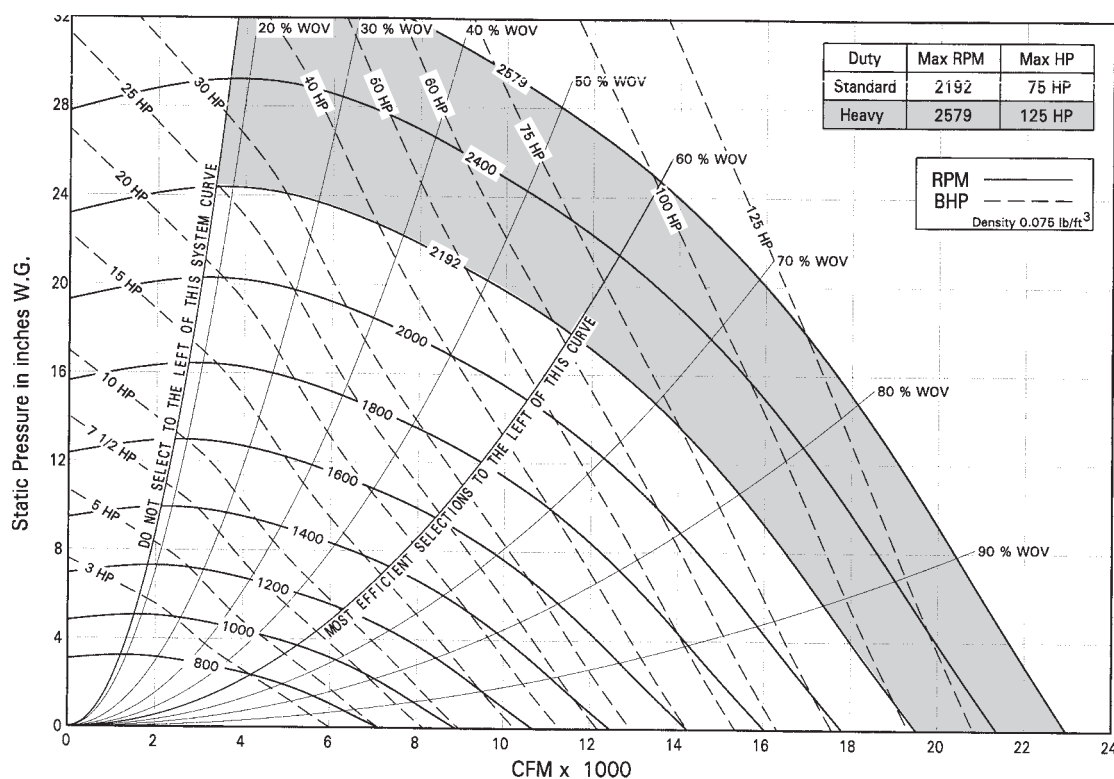
	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	2192	75	326T	324T
Heavy	2579	125	326T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1700	1069	468	0.44	637	0.84	772	1.30	890	1.84	993	2.43	1088	3.07								
2075	1305	484	0.56	650	1.04	781	1.54	894	2.09	996	2.70	1090	3.38	1176	4.09	1256	4.84	1332	5.64		
2450	1540	503	0.70	664	1.26	793	1.84	903	2.42	1003	3.06	1094	3.73	1178	4.46	1259	5.26	1334	6.09	1405	6.94
2825	1776	525	0.88	680	1.50	806	2.15	916	2.82	1013	3.50	1102	4.21	1185	4.96	1263	5.74	1337	6.56	1408	7.47
3200	2012	549	1.08	698	1.78	822	2.50	928	3.25	1025	4.00	1113	4.77	1194	5.54	1271	6.37	1344	7.23	1413	8.10
3575	2248	576	1.33	718	2.08	839	2.88	944	3.70	1038	4.53	1125	5.38	1206	6.23	1281	7.09	1352	7.96	1421	8.90
3950	2484	605	1.61	740	2.44	857	3.30	960	4.19	1053	5.10	1138	6.02	1219	6.95	1294	7.89	1364	8.83	1431	9.78
4325	2720	638	1.95	763	2.83	876	3.75	978	4.72	1069	5.70	1154	6.70	1231	7.70	1306	8.72	1377	9.75	1443	10.8
4700	2955	671	2.34	789	3.27	898	4.27	996	5.29	1087	6.35	1170	7.42	1247	8.51	1320	9.59	1389	10.7	1456	11.8
5075	3191	704	2.79	817	3.78	921	4.84	1016	5.92	1105	7.05	1187	8.20	1263	9.35	1336	10.5	1404	11.7	1469	12.9
5450	3427	739	3.29	845	4.33	944	5.45	1039	6.62	1123	7.78	1205	9.01	1281	10.3	1352	11.5	1420	12.8	1484	14.0
5825	3663	774	3.85	876	4.97	972	6.15	1062	7.38	1145	8.62	1223	9.88	1299	11.2	1369	12.5	1436	13.8	1500	15.2
6200	3899	811	4.49	909	5.68	999	6.90	1085	8.18	1168	9.52	1244	10.8	1317	12.2	1387	13.6	1453	15.0	1516	16.4
6575	4135	848	5.21	942	6.47	1027	7.72	1111	9.08	1191	10.5	1266	11.9	1337	13.3	1405	14.7	1471	16.2	1534	17.7
6950	4371	885	6.00	976	7.32	1058	8.64	1138	10.1	1214	11.5	1289	13.0	1359	14.5	1424	15.9	1489	17.5	1552	19.1
7325	4606	923	6.87	1010	8.26	1090	9.66	1166	11.1	1240	12.6	1312	14.2	1381	15.7	1446	17.3	1508	18.8	1570	20.5

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	1572	1405	7.01	1473	7.90	1538	8.82	1601	9.80												
3050	1918	1410	7.79	1477	8.75	1542	9.74	1604	10.8	1664	11.8	1721	12.9	1777	13.9	1831	15.1	1883	16.2	1935	17.4
3600	2264	1422	8.95	1487	9.92	1550	10.9	1610	11.9	1668	12.9	1725	14.0	1781	15.2	1835	16.4	1888	17.6	1939	18.8
4150	2610	1438	10.3	1501	11.3	1562	12.3	1622	13.4	1680	14.5	1736	15.6	1789	16.7	1842	17.9	1893	19.0	1943	20.3
4700	2955	1456	11.8	1519	12.9	1580	14.0	1638	15.2	1694	16.3	1748	17.4	1801	18.6	1854	19.9	1905	21.1	1954	22.4
5250	3301	1475	13.4	1538	14.6	1598	15.9	1657	17.1	1712	18.4	1766	19.6	1819	20.9	1869	22.1	1918	23.4	1966	24.7
5800	3647	1499	15.1	1560	16.4	1618	17.8	1675	19.1	1731	20.5	1785	21.9	1837	23.3	1888	24.6	1937	26.0	1984	27.4
6350	3993	1523	16.9	1583	18.4	1642	19.8	1698	21.3	1752	22.8	1804	24.2	1856	25.7	1906	27.2	1955	28.7	2003	30.3
6900	4339	1549	18.9	1609	20.5	1666	22.0	1721	23.6	1775	25.2	1827	26.8	1877	28.4	1926	30.0	1974	31.6	2021	33.2
7450	4685	1576	21.0	1635	22.7	1692	24.4	1746	26.0	1799	27.7	1851	29.4	1901	31.2	1949	32.9	1997	34.6	2043	36.3
8000	5031	1606	23.3	1662	25.0	1719	26.8	1773	28.6	1825	30.5	1876	32.3	1925	34.1	1973	35.9	2020	37.7	2066	39.6
8550	5377	1639	25.9	1694	27.7	1747	29.5	1800	31.4	1852	33.3	1902	35.3	1951	37.2	1999	39.1	2045	41.1	2090	43.0
9100	5723	1672	28.6	1727	30.5	1779	32.5	1830	34.4	1879	36.3	1929	38.4	1978	40.5	2025	42.5	2071	44.6	2116	46.7
9650	6069	1706	31.5	1760	33.6	1812	35.7	1863	37.7	1911	39.8	1958	41.8	2005	43.9	2052	46.1	2098	48.3	2142	50.5
10200	6415	1743	34.7	1794	36.8	1846	39.0	1896	41.2	1944	43.4	1991	45.6	2036	47.7	2080	49.9	2125	52.1	2169	54.4
10750	6761	1783	38.2	1831	40.4	1880	42.6	1929	44.9	1978	47.2	2024	49.5	2069	51.8	2113	54.1	2156	56.4	2197	58.7

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3300	2075	1936	18.0	1986	19.2	2034	20.4	2082	21.7	2130	23.0	2177	24.4								
3980	2503	1941	19.8	1991	21.1	2040	22.4	2087	23.7	2133	25.1	2178	26.4	2266	29.2	2350	32.1	2432	35.0	2511	38.0
4660	2930	1953	22.2	2001	23.5	2048	24.8	2094	26.0	2139	27.3	2183	28.7	2271	31.7	2356	34.7	2437	37.8	2516	41.0
5340	3358	1969	25.1	2016	26.4	2063	27.8	2109	29.2	2154	30.6	2197	32.1	2282	35.0	2364	37.9	2443	40.8	2521	44.1
6020	3786	1992	28.5	2038	30.0	2084	31.4	2128	32.9	2171	34.3	2214	35.7	2297	38.7	2379	41.9	2458	45.1	2534	48.4
6700	4213	2015	32.1	2061	33.7	2106	35.3	2151	36.9	2194	38.5	2236	40.1	2319	43.3	2398	46.5	2474	49.7	2549	53.1
7380	4641	2040	35.9	2085	37.6	2129	39.3	2174	41.1	2217	42.8	2259	44.6	2341	48.1	2420	51.6	2479	55.1	2571	58.6
8060	5069	2069	40.0	2114	41.8	2157	43.7	2200	45.5	2242	47.4	2283	49.3	2364	53.1	2443	56.9	2520	60.7		
8740	5496	2099	44.2	2143	46.2	2186	48.2	2229	50.3	2271	52.3	2312	54.3	2391	58.3	2467	62.4	2542	66.5		
9420	5924	2131	48.8	2175	51.0	2217	53.1	2259	55.2	2300	57.4	2341	59.6	2420	63.9	2496	68.2	2570	72.6		
10100	6352	2164	53.7	2208	56.0	2250	58.3	2292	60.6	2332	62.9	2372	65.1	2449	69.7	2525	74.4				
10780	6779	2199	58.9	2241	61.2	2283	63.7	2325	66.2	2365	68.6	2405	71.0	2482	75.9	2556	80.8				
11460	7207	2240	64.8	2280	67.2	2320	69.6	2358	72.0	2398	74.6	2438	77.2	2515	82.4						
12140	7635	2281	71.0	2321	73.6	2360	76.2	2399	78.8	2436	81.3	2473	83.9	2548	89.2						
12820	8062	2322	77.6	2362	80.4	2401	83.1	2439	85.9	2477	88.6	2514	91.3								
13500	8490	2364	84.6	2404	87.5	2442	90.4	2481	93.3	2518	96.2	2554	99.1								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 8.90)$$

Sound Power [dB Ref 10⁻¹² watts]

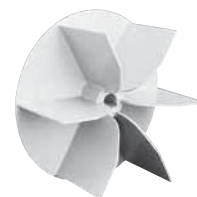
Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
550	100	115	103	85	79	75	68	61	60	92
	70	98	92	78	73	69	62	56	51	80
	40	91	87	78	73	71	64	56	48	77
	20	90	86	77	71	69	62	55	48	76
	0	89	86	76	70	67	61	55	49	75
750	100	107	106	96	88	84	78	71	67	94
	70	108	102	89	81	78	73	66	61	90
	40	104	97	86	78	74	71	63	55	85
	20	100	95	85	77	71	67	61	54	83
	0	104	97	87	77	71	67	61	57	85
1000	100	120	119	105	94	91	86	80	75	105
	70	115	111	95	85	85	77	72	68	98
	40	108	102	89	79	78	71	67	63	90
	20	109	104	90	77	74	70	67	63	91
	0	114	109	92	80	76	72	69	65	95
1400	100	121	116	109	103	99	97	92	87	107
	70	119	112	101	94	91	90	82	78	101
	40	116	104	96	88	85	81	75	74	95
	20	116	99	94	85	80	75	72	71	93
	0	114	99	96	89	83	78	75	72	94
1900	100	125	120	124	113	107	105	102	97	118
	70	120	115	113	102	98	98	92	88	108
	40	118	112	112	97	93	90	84	82	105
	20	118	107	115	96	89	84	80	79	107
	0	119	108	113	98	92	86	83	81	106
2579	100	130	128	130	124	116	112	110	106	126
	70	126	124	120	113	106	105	102	96	116
	40	124	121	118	110	101	98	93	89	113
	20	125	118	121	110	98	93	88	86	114
	0	125	118	119	111	101	96	91	88	114

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
550	100	112	105	90	81	75	69	62	60	92
	70	103	98	86	78	74	67	60	55	86
	40	105	95	77	68	64	58	52	48	83
	20	108	98	79	69	65	59	52	51	85
	0	110	100	80	70	66	59	52	54	88
750	100	117	111	101	89	84	79	72	67	99
	70	106	102	92	82	78	72	64	59	90
	40	98	96	87	77	72	68	61	56	84
	20	98	95	87	76	71	66	59	54	83
	0	99	95	86	75	70	65	57	52	83
1000	100	132	129	110	96	92	88	81	76	114
	70	119	117	100	89	85	78	72	68	102
	40	106	105	98	85	79	73	69	66	93
	20	112	111	99	81	73	69	65	62	97
	0	112	111	96	82	75	70	63	58	97
1400	100	123	125	119	107	102	99	94	90	114
	70	121	119	108	100	94	91	83	80	107
	40	118	115	106	96	90	85	79	76	103
	20	113	112	107	91	84	78	74	72	101
	0	112	113	108	91	84	78	72	68	102
1900	100	129	126	125	116	111	108	105	101	120
	70	127	126	125	109	104	100	96	91	118
	40	125	125	124	106	100	95	89	86	117
	20	121	122	124	102	95	90	86	84	116
	0	118	119	125	102	95	89	83	78	117
2579	100	135	134	131	127	120	116	113	109	128
	70	133	133	132	122	113	109	104	100	126
	40	130	132	131	120	109	104	98	94	125
	20	127	128	131	117	105	99	94	91	124
	0	124	125	132	118	104	98	92	87	124

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

Wheel Diameter = 33 in.
 Outlet Area = 1.94 ft²
 Tip Speed = 8.64 x RPM
 Minimum Starting HP = 2

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1968	100	365T	326T
Heavy	2315	150	365T	NA

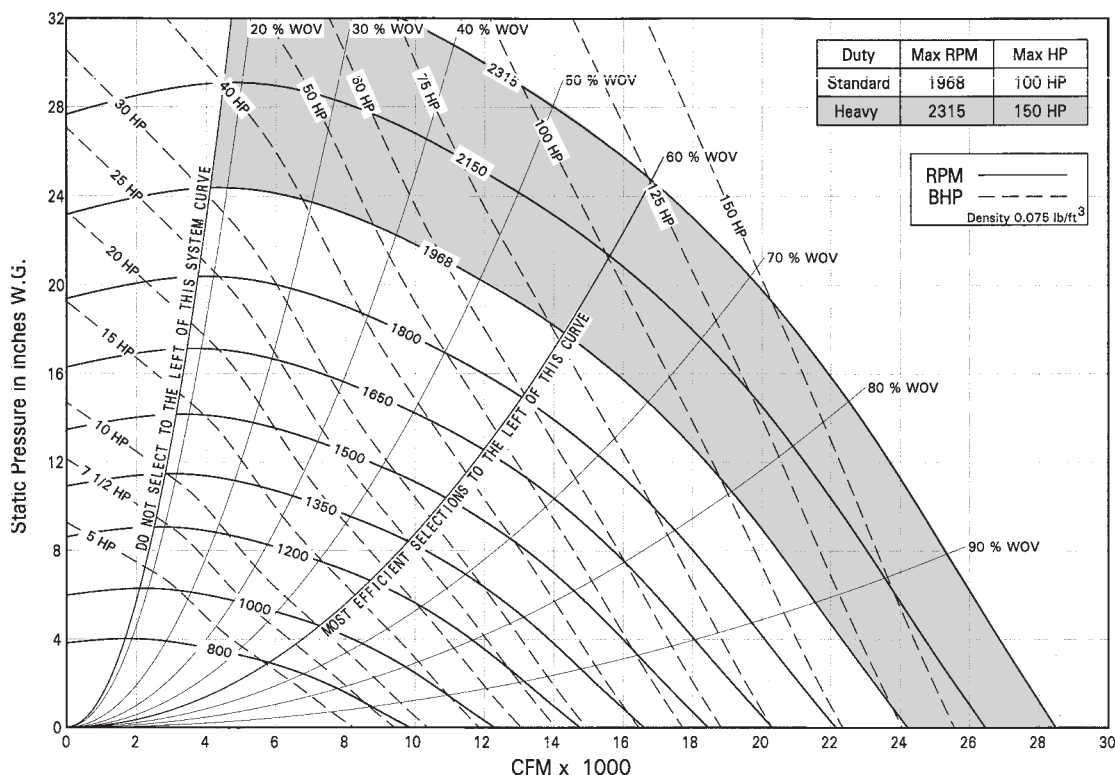


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1010	417	0.51	570	0.99	692	1.56	798	2.22	891	2.94										
2500	1262	432	0.67	582	1.25	700	1.86	802	2.53	894	3.29	978	4.13	1055	5.00	1127	5.92				
3000	1515	450	0.85	595	1.54	711	2.25	810	2.97	900	3.76	981	4.58	1058	5.50	1130	6.48	1197	7.50	1261	8.56
3500	1767	471	1.09	610	1.86	723	2.67	822	3.50	909	4.33	989	5.21	1064	6.15	1134	7.11	1200	8.14	1264	9.26
4000	2020	494	1.36	628	2.22	738	3.14	834	4.06	921	5.01	1000	5.96	1072	6.92	1141	7.96	1207	9.03	1269	10.1
4500	2272	521	1.69	647	2.64	755	3.65	849	4.68	933	5.71	1012	6.78	1084	7.85	1152	8.93	1215	10.0	1277	11.2
5000	2525	549	2.08	669	3.12	772	4.20	865	5.34	948	6.48	1024	7.64	1096	8.82	1164	10.0	1227	11.2	1287	12.4
5500	2777	581	2.55	691	3.66	792	4.84	882	6.06	964	7.30	1040	8.57	1109	9.84	1176	11.1	1239	12.4	1299	13.7
6000	3030	613	3.10	717	4.28	814	5.55	900	6.83	981	8.19	1055	9.55	1125	10.9	1190	12.3	1251	13.7	1311	15.1
6500	3282	646	3.72	744	4.98	836	6.33	921	7.72	999	9.13	1073	10.6	1141	12.1	1205	13.6	1266	15.1	1324	16.6
7000	3535	679	4.43	773	5.76	860	7.19	943	8.69	1018	10.2	1090	11.7	1158	13.3	1221	14.9	1282	16.5	1339	18.1
7500	3787	714	5.23	804	6.67	887	8.17	965	9.73	1040	11.3	1108	12.9	1175	14.6	1238	16.3	1298	18.0	1355	19.7
8000	4040	750	6.15	836	7.68	914	9.23	989	10.9	1062	12.6	1130	14.3	1193	16.0	1256	17.8	1315	19.6	1371	21.4
8500	4292	786	7.17	868	8.80	942	10.4	1015	12.2	1084	13.9	1152	15.7	1214	17.6	1274	19.4	1333	21.3	1389	23.2
9000	4545	822	8.31	901	10.0	973	11.7	1042	13.5	1109	15.4	1174	17.3	1236	19.2	1295	21.1	1350	23.0	1406	25.1
9500	4797	859	9.57	934	11.4	1005	13.2	1069	15.0	1135	17.0	1196	18.9	1258	21.0	1316	23.0	1371	25.0	1424	27.0

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1515	1261	8.56	1322	9.65	1381	10.8														
3750	1893	1265	9.62	1326	10.8	1384	12.0	1440	13.3	1493	14.6	1545	15.9	1595	17.2	1643	18.6	1690	20.0	1738	21.5
4500	2272	1277	11.2	1336	12.4	1392	13.6	1446	14.8	1498	16.1	1549	17.5	1599	18.9	1648	20.4	1695	21.9	1740	23.4
5250	2651	1293	13.1	1350	14.3	1404	15.6	1458	16.9	1509	18.3	1560	19.7	1608	21.1	1655	22.5	1701	24.0	1745	25.4
6000	3030	1311	15.1	1368	16.5	1422	18.0	1475	19.4	1525	20.8	1573	22.3	1620	23.7	1667	25.3	1712	26.9	1757	28.5
6750	3409	1332	17.3	1386	18.9	1441	20.5	1493	22.1	1543	23.7	1591	25.3	1638	26.9	1684	28.5	1728	30.1	1771	31.7
7500	3787	1355	19.7	1410	21.5	1462	23.2	1512	24.9	1561	26.7	1610	28.4	1656	30.2	1702	32.0	1746	33.8	1789	35.6
8250	4166	1380	22.3	1433	24.2	1485	26.1	1535	28.0	1584	29.9	1630	31.8	1676	33.7	1720	35.6	1764	37.5	1807	39.5
9000	4545	1406	25.1	1459	27.1	1510	29.2	1559	31.2	1607	33.3	1654	35.3	1699	37.4	1742	39.5	1785	41.6	1826	43.6
9750	4924	1434	28.1	1486	30.3	1537	32.5	1585	34.7	1632	36.9	1678	39.1	1722	41.3	1766	43.6	1808	45.8	1849	48.1
10500	5303	1466	31.6	1516	33.8	1563	36.0	1612	38.4	1659	40.8	1704	43.1	1748	45.5	1790	47.9	1832	50.3	1873	52.7
11250	5681	1499	35.3	1548	37.7	1595	40.1	1641	42.4	1685	44.8	1730	47.4	1774	50.0	1816	52.5	1858	55.1	1898	57.6
12000	6060	1532	39.2	1581	41.8	1628	44.4	1673	47.0	1717	49.5	1759	52.0	1801	54.6	1843	57.3	1884	60.1	1924	62.8
12750	6439	1569	43.6	1615	46.2	1661	49.0	1706	51.8	1749	54.5	1791	57.2	1832	59.9	1872	62.6	1911	65.3	1951	68.2
13500	6818	1609	48.4	1653	51.2	1695	53.9	1739	56.9	1782	59.8	1824	62.7	1864	65.6	1904	68.4	1942	71.3	1980	74.1
14250	7196	1649	53.6	1692	56.5	1734	59.4	1774	62.3	1816	65.4	1857	68.5	1897	71.5	1936	74.6	1975	77.6	2012	80.7

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	2020	1738	22.1	1782	23.5	1826	25.1	1870	26.7	1913	28.3										
4860	2454	1742	24.4	1787	25.9	1830	27.6	1873	29.2	1914	30.9	1955	32.5	2034	36.0	2110	39.5	2183	43.1	2255	46.9
5720	2888	1752	27.3	1796	28.9	1838	30.5	1879	32.0	1919	33.6	1960	35.4	2039	39.1	2114	42.9	2187	46.7	2258	50.6
6580	3323	1767	30.9	1809	32.6	1851	34.3	1892	36.0	1933	37.8	1972	39.6	2048	43.1	2122	46.7	2193	50.4	2263	54.5
7440	3757	1787	35.2	1829	37.0	1870	38.8	1910	40.6	1949	42.4	1987	44.2	2062	47.9	2135	51.8	2206	55.8	2275	59.8
8300	4191	1808	39.8	1850	41.7	1891	43.7	1930	45.7	1969	47.7	2007	49.6	2081	53.6	2152	57.6	2221	61.6	2288	65.7
9160	4626	1831	44.6	1872	46.7	1912	48.8	1951	51.0	1990	53.1	2028	55.3	2102	59.7	2173	64.0	2241	68.4	2308	72.8
10020	5060	1858	49.7	1898	52.0	1937	54.3	1976	56.6	2013	58.9	2050	61.2	2123	66.0	2194	70.7	2262	75.5		
10880	5494	1885	55.1	1925	57.6	1964	60.1	2002	62.6	2040	65.1	2076	67.6	2147	72.6	2216	77.7	2283	82.8		
11740	5929	1915	61.0	1954	63.6	1992	66.3	2030	68.9	2066	71.6	2103	74.3	2174	79.7	2242	85.1	2308	90.5		
12600	6363	1945	67.1	1984	70.0	2022	72.8	2060	75.7	2096	78.6	2132	81.4	2201	87.1	2269	92.9				
13460	6797	1978	73.8	2015	76.7	2053	79.7	2090	82.8	2126	85.9	2162	88.9	2231	95.0	2297	101				
14320	7232	2015	81.3	2051	84.3	2087	87.3	2121	90.4	2156	93.5	2192	96.8	2261	103						
15180	7666	2052	89.2	2088	92.5	2124	95.7	2158	98.9	2192	102	2225	105	2291	112						
16040	8101	2090	97.6	2126	101	2161	105	2196	108	2229	111	2262	115								
16900	8535	2129	106	2164	110	2199	114	2233	117	2267	121	2300	125								

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 12.3)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
500	100	117	101	85	81	76	68	63	61	93
	70	100	91	79	75	70	62	57	53	80
	40	93	88	78	74	72	64	56	49	78
	20	92	87	77	73	70	63	56	49	77
	0	91	86	76	71	68	61	56	49	76
700	100	110	109	97	90	86	79	73	69	96
	70	110	104	89	83	80	75	67	63	91
	40	107	98	87	80	76	73	64	56	87
	20	103	96	86	78	73	69	63	56	85
	0	107	98	88	78	72	69	63	59	87
950	100	123	121	107	96	94	88	82	77	107
	70	117	113	96	87	88	79	74	70	99
	40	111	103	91	81	81	73	69	65	91
	20	112	105	91	79	76	72	69	66	92
	0	117	110	93	82	79	75	71	68	97
1300	100	123	118	111	105	101	99	94	89	109
	70	120	114	102	95	93	91	84	80	103
	40	117	106	97	89	87	82	77	76	96
	20	116	102	95	87	82	77	74	73	94
	0	115	101	98	91	85	80	77	74	95
1700	100	125	122	123	114	108	106	103	98	118
	70	121	116	113	103	100	99	93	88	109
	40	118	113	111	98	94	91	85	83	105
	20	117	111	113	96	89	85	82	81	105
	0	118	111	112	99	93	87	84	82	105
2315	100	132	129	132	124	116	114	111	107	127
	70	128	124	122	113	107	107	102	97	117
	40	126	121	120	109	102	99	94	91	114
	20	126	117	124	109	99	93	89	88	116
	0	127	118	122	110	102	96	92	90	115

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
500	100	115	104	90	82	76	69	63	62	92
	70	106	99	86	79	75	68	61	56	86
	40	108	94	76	69	66	59	53	50	84
	20	110	96	78	70	67	59	53	53	86
	0	112	99	80	71	68	60	54	57	88
700	100	119	112	102	90	86	80	73	69	100
	70	109	104	93	84	80	73	66	61	91
	40	100	97	88	78	74	70	62	57	86
	20	101	97	88	77	73	68	60	56	85
	0	101	97	88	76	72	66	58	54	85
950	100	135	130	111	98	94	90	83	78	116
	70	121	118	102	91	88	80	75	71	104
	40	108	107	100	87	81	75	71	68	95
	20	115	113	101	82	75	72	67	65	99
	0	115	113	97	84	77	72	65	61	99
1300	100	126	128	119	108	104	101	96	92	116
	70	123	122	109	102	96	92	85	82	109
	40	120	117	107	97	92	86	81	78	105
	20	115	115	108	92	85	80	76	74	103
	0	114	115	109	93	86	80	74	69	103
1700	100	130	127	125	117	112	109	106	101	121
	70	129	127	124	110	105	101	96	91	118
	40	126	126	122	106	100	95	90	87	116
	20	123	125	122	102	96	90	87	85	115
	0	119	122	122	102	95	89	83	79	115
2315	100	137	135	133	127	121	117	114	110	129
	70	135	135	134	121	114	109	105	100	127
	40	132	133	133	118	109	104	99	95	126
	20	128	130	133	115	105	99	95	92	125
	0	125	126	134	116	105	98	92	87	126

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

21 IPW

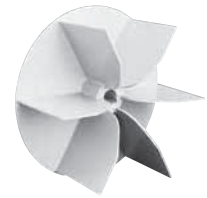
Wheel Diameter = 36½ in.

Outlet Area = 2.34 ft²

Tip Speed = 9.56 x RPM

Minimum Starting HP = 2

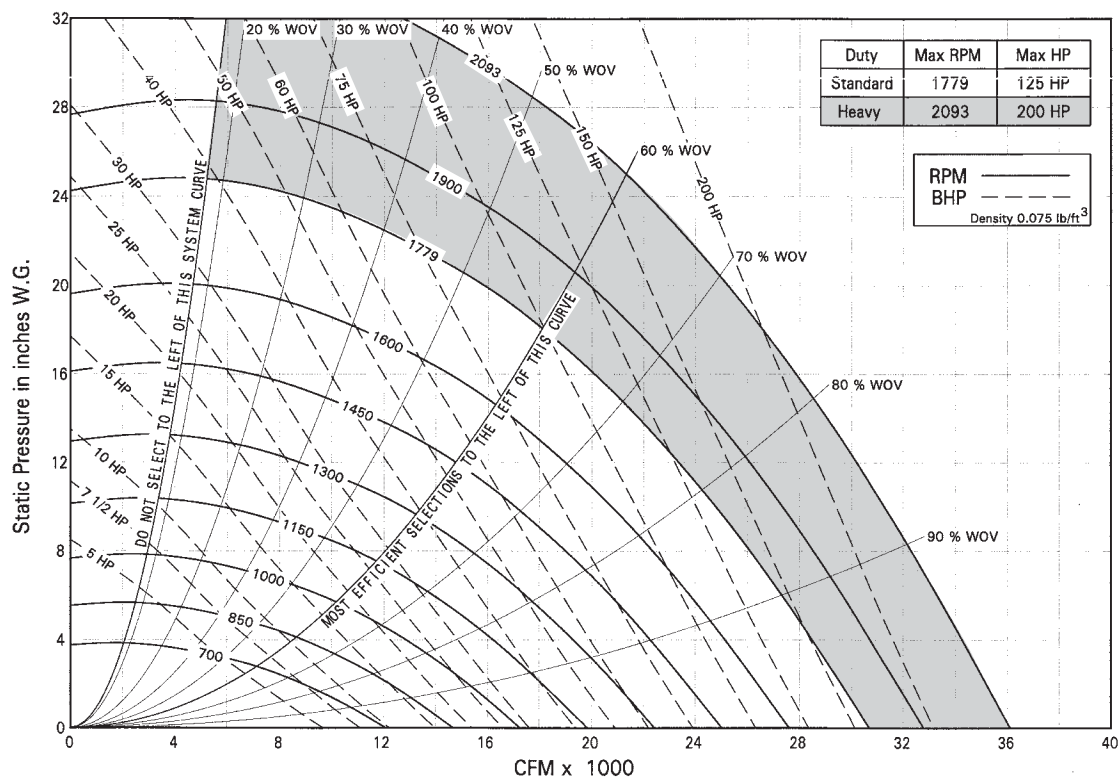
	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1779	125	365T	NA
Heavy	2093	200	365T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2700	1120	379	0.69	515	1.34	625	2.08	718	2.89	801	3.80	876	4.75								
3300	1369	392	0.89	526	1.66	631	2.46	723	3.35	804	4.28	879	5.31	948	6.40	1013	7.54	1073	8.72		
3900	1618	408	1.13	537	2.01	642	2.93	730	3.87	811	4.91	884	5.98	952	7.08	1016	8.28	1076	9.55	1133	10.9
4500	1867	427	1.43	550	2.40	653	3.44	741	4.51	819	5.59	891	6.74	959	7.96	1021	9.20	1080	10.5	1136	11.8
5100	2116	447	1.77	565	2.84	664	3.98	752	5.18	830	6.40	900	7.62	965	8.86	1028	10.2	1087	11.6	1143	13.0
5700	2365	470	2.18	583	3.37	679	4.61	763	5.90	841	7.24	911	8.60	976	9.96	1036	11.3	1094	12.8	1149	14.3
6300	2614	495	2.66	602	3.97	693	5.29	777	6.70	852	8.13	922	9.62	987	11.1	1047	12.6	1104	14.1	1157	15.6
6900	2863	521	3.21	622	4.63	711	6.07	791	7.57	865	9.11	933	10.7	998	12.3	1058	14.0	1115	15.6	1168	17.2
7500	3112	547	3.84	643	5.35	731	6.95	806	8.50	880	10.2	946	11.9	1009	13.6	1069	15.3	1126	17.1	1179	18.9
8100	3360	575	4.57	667	6.21	751	7.90	826	9.60	894	11.3	961	13.1	1022	14.9	1080	16.8	1137	18.7	1190	20.6
8700	3609	604	5.40	692	7.16	771	8.94	845	10.8	912	12.6	975	14.5	1037	16.4	1094	18.4	1148	20.3	1201	22.4
9300	3858	633	6.34	717	8.21	792	10.1	865	12.1	931	14.0	991	15.9	1051	18.0	1108	20.1	1162	22.1	1213	24.2
9900	4107	663	7.38	743	9.36	816	11.4	885	13.4	951	15.5	1010	17.6	1066	19.6	1123	21.8	1176	24.1	1227	26.3
10500	4356	693	8.54	769	10.6	841	12.8	906	14.9	971	17.1	1030	19.3	1085	21.5	1137	23.7	1191	26.1	1242	28.4
11100	4605	724	9.82	796	12.0	866	14.3	929	16.5	991	18.8	1050	21.2	1105	23.5	1156	25.8	1205	28.1	1256	30.6
11700	4854	754	11.2	825	13.6	892	16.0	954	18.3	1011	20.7	1070	23.2	1124	25.7	1176	28.1	1224	30.5	1271	32.9

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	1659	1134	11.0	1188	12.4	1240	13.8	1290	15.2	1338	16.7										
4875	2022	1140	12.5	1193	13.9	1245	15.4	1295	17.0	1343	18.6	1389	20.2	1434	21.8	1477	23.5	1519	25.2	1560	27.0
5750	2385	1150	14.4	1203	15.9	1254	17.5	1302	19.1	1349	20.7	1394	22.3	1438	24.0	1481	25.8	1523	27.7	1564	29.5
6625	2748	1163	16.5	1214	18.1	1263	19.7	1312	21.5	1359	23.3	1404	25.1	1447	26.9	1490	28.7	1531	30.6	1571	32.5
7500	3112	1179	18.9	1230	20.7	1279	22.5	1325	24.3	1370	26.1	1414	27.9	1457	29.9	1500	31.9	1541	33.9	1581	35.9
8375	3475	1195	21.4	1246	23.4	1295	25.4	1341	27.4	1386	29.4	1429	31.4	1471	33.4	1512	35.4	1551	37.4	1590	39.5
9250	3838	1212	24.0	1262	26.2	1311	28.4	1357	30.6	1402	32.8	1445	35.0	1487	37.2	1528	39.4	1567	41.6	1606	43.8
10125	4201	1233	27.1	1281	29.3	1327	31.6	1374	33.9	1418	36.3	1462	38.7	1503	41.1	1544	43.5	1583	45.9	1622	48.3
11000	4564	1254	30.2	1302	32.7	1348	35.2	1392	37.6	1435	40.1	1478	42.6	1520	45.2	1560	47.8	1599	50.4	1638	53.0
11875	4927	1276	33.7	1323	36.3	1369	39.0	1413	41.6	1456	44.3	1497	46.9	1537	49.6	1577	52.3	1616	55.1	1654	57.9
12750	5290	1304	37.7	1347	40.3	1390	43.0	1434	45.9	1477	48.7	1518	51.6	1558	54.4	1597	57.3	1634	60.1	1671	63.0
13625	5653	1332	42.0	1376	44.8	1417	47.6	1457	50.4	1498	53.4	1539	56.4	1579	59.5	1617	62.6	1655	65.6	1691	68.6
14500	6016	1361	46.5	1404	49.6	1445	52.6	1485	55.6	1524	58.6	1561	61.6	1600	64.8	1638	68.1	1676	71.3	1712	74.6
15375	6379	1390	51.4	1433	54.7	1474	57.9	1514	61.1	1552	64.3	1589	67.5	1625	70.7	1660	73.8	1697	77.3	1733	80.7
16250	6742	1420	56.6	1463	60.1	1503	63.6	1543	67.0	1581	70.4	1617	73.8	1653	77.2	1688	80.5	1722	83.9	1755	87.2
17125	7105	1452	62.3	1492	65.9	1533	69.6	1572	73.2	1610	76.8	1646	80.4	1682	84.0	1716	87.6	1750	91.1	1783	94.7

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	2074	1561	27.3	1601	29.1	1640	30.9	1678	32.8												
6050	2510	1566	30.4	1606	32.4	1645	34.3	1683	36.3	1720	38.4	1756	40.4	1827	44.6	1895	48.8	1960	53.2	2023	57.6
7100	2946	1576	34.3	1615	36.3	1653	38.3	1690	40.3	1726	42.3	1762	44.4	1832	48.8	1900	53.4	1965	58.0	2029	62.8
8150	3381	1588	38.6	1627	40.7	1665	42.9	1702	45.1	1738	47.4	1773	49.6	1842	54.1	1908	58.7	1972	63.3	2034	68.0
9200	3817	1605	43.6	1642	45.8	1679	48.0	1714	50.2	1750	52.5	1785	55.0	1584	59.9	1920	64.9	1984	69.9	2045	75.0
10250	4253	1624	49.0	1661	51.4	1698	53.9	1733	56.3	1768	58.8	1802	61.3	1868	66.2	1932	71.2	1995	76.6	2057	82.1
11300	4688	1643	54.7	1681	57.4	1717	60.0	1752	62.7	1787	65.4	1821	68.1	1887	73.5	1951	78.9	2012	84.3	2071	89.8
12350	5124	1663	60.6	1700	63.5	1736	66.4	1772	69.4	1807	72.3	1840	75.2	1906	81.1	1970	86.9	2031	92.8	2090	98.7
13400	5560	1686	67.2	1722	70.1	1756	73.1	1791	76.3	1826	79.4	1860	82.6	1926	88.9	1989	95.3	2050	102		
14450	5995	1711	74.2	1746	77.5	1781	80.7	1815	83.9	1848	87.1	1880	90.3	1945	97.0	2009	104	2070	111		
15500	6431	1736	81.6	1772	85.1	1806	88.6	1840	92.1	1873	95.6	1905	99.0	1968	106	2029	113	2089	120		
16550	6867	1764	89.7	1797	93.2	1832	96.9	1865	101	1898	104	1931	108	1993	116	2054	123				
17600	7302	1798	98.9	1830	103	1861	106	1892	110	1924	114	1956	118	2018	126	2079	133				
18650	7738	1832	109	1864	113	1895	116	1925	120	1955	124	1984	128	2044	136						
19700	8174	1867	119	1898	123	1929	127	1960	131	1989	135	2018	139	2075	148						
20750	8609	1902	130	1933	134	1964	139	1994	143	2023	147	2052	152								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 17.3)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
450	100	107	96	83	82	76	69	64	61	86
	70	99	82	75	75	66	60	55	53	77
	40	88	77	69	64	59	55	50	44	68
	20	90	75	66	60	56	54	49	43	67
	0	107	77	69	61	58	53	48	43	82
600	100	112	107	94	89	85	78	72	68	95
	70	104	95	84	81	76	69	63	60	85
	40	93	88	79	73	67	63	58	53	77
	20	95	88	76	69	64	61	57	51	76
	0	112	96	79	71	65	61	56	51	88
850	100	110	107	101	97	94	89	84	79	100
	70	106	102	93	91	88	80	74	71	93
	40	99	95	87	83	79	73	68	65	86
	20	96	94	86	79	74	69	65	63	83
	0	102	101	94	82	74	69	64	60	89
1150	100	114	111	108	104	102	98	93	90	107
	70	114	105	99	96	95	89	84	81	100
	40	109	101	95	91	88	82	77	75	94
	20	105	97	94	89	83	78	74	73	91
	0	107	101	99	92	85	79	75	74	95
1550	100	119	119	117	112	109	106	102	98	115
	70	119	116	109	103	102	99	93	88	108
	40	114	111	105	99	95	91	86	82	103
	20	110	108	103	98	92	86	82	79	100
	0	112	111	107	102	94	88	83	81	104
2093	100	124	127	125	121	116	114	111	106	123
	70	124	127	119	111	109	108	102	96	117
	40	120	123	114	107	103	100	95	90	112
	20	116	119	111	107	101	95	91	86	109
	0	118	121	114	112	104	97	92	88	113

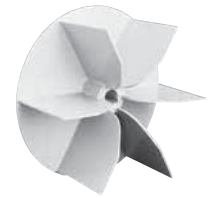
Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
450	100	109	103	90	82	78	70	64	60	90
	70	99	90	80	73	66	60	54	50	79
	40	93	88	75	66	61	56	51	47	75
	20	92	87	72	62	59	53	47	42	74
	0	93	87	75	63	61	54	48	42	74
600	100	114	112	102	92	86	79	73	68	99
	70	104	100	91	82	75	69	63	58	88
	40	98	96	87	76	69	64	59	55	84
	20	97	96	84	72	67	62	56	50	82
	0	98	96	86	74	68	63	57	50	83
850	100	121	117	111	101	96	91	85	79	107
	70	114	111	102	94	88	82	75	70	99
	40	108	106	97	86	79	75	70	66	94
	20	106	105	97	84	76	72	66	62	92
	0	107	106	98	84	76	71	65	59	94
1150	100	123	125	122	110	105	101	96	92	116
	70	123	116	110	100	96	92	86	82	106
	40	118	110	108	95	89	85	81	77	102
	20	114	111	109	93	84	80	75	72	103
	0	114	111	109	94	86	79	73	68	102
1550	100	128	130	130	123	112	109	105	100	125
	70	128	126	120	111	104	100	95	90	116
	40	123	120	116	108	97	93	89	85	111
	20	120	119	117	108	93	88	84	80	111
	0	120	119	117	108	94	88	82	77	111
2093	100	133	136	138	135	121	117	113	109	134
	70	133	136	129	122	112	109	104	98	125
	40	128	131	124	120	106	102	97	93	121
	20	125	128	124	122	103	97	92	88	121
	0	125	128	125	121	104	98	91	85	121

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

23 IPW

Wheel Diameter = 40 in.
 Outlet Area = 2.8 ft²
 Tip Speed = 10.47 x RPM
 Minimum Starting HP = 3

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1623	150	365T	NA
Heavy	1910	200	365T	NA

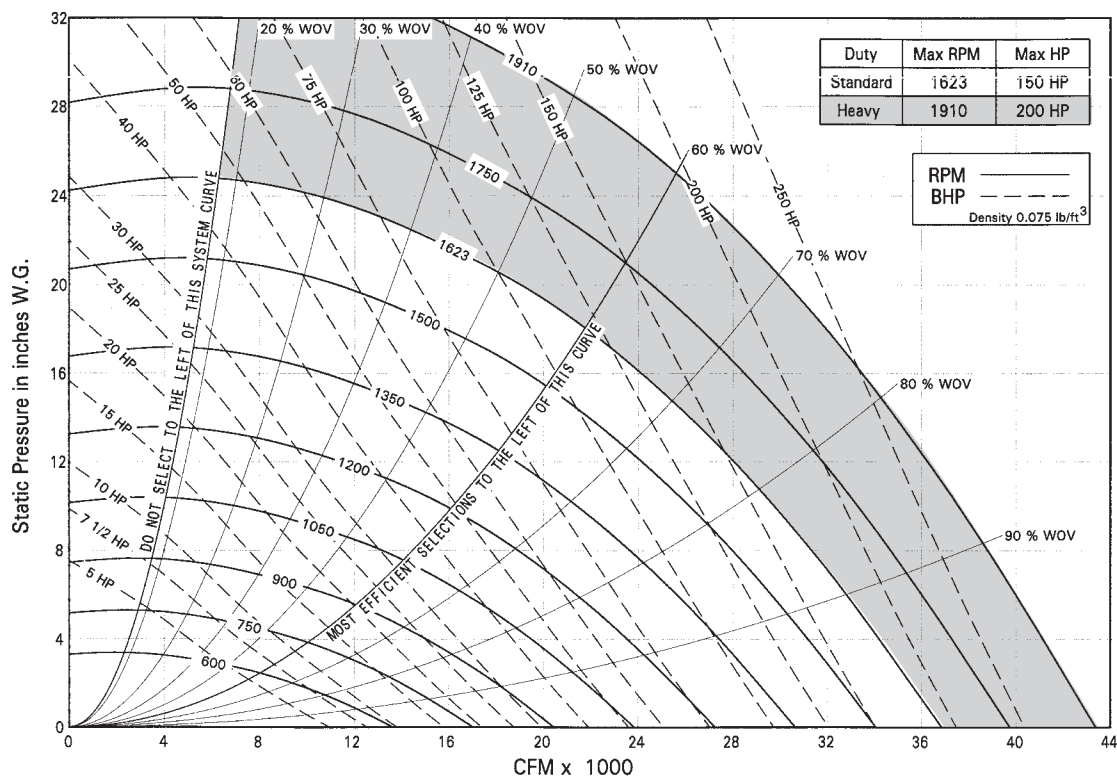


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0	10.0		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1027	342	0.76	468	1.51	568	2.35	654	3.32	730	4.37										
3675	1258	352	0.97	476	1.84	574	2.77	658	3.79	733	4.89	801	6.11	864	7.38	923	8.70				
4350	1489	365	1.21	485	2.21	581	3.25	663	4.35	737	5.54	804	6.77	867	8.11	926	9.53	981	11.0	1033	12.5
5025	1720	380	1.52	495	2.62	590	3.80	671	5.01	743	6.26	810	7.61	871	9.00	929	10.4	983	12.0	1036	13.6
5700	1952	397	1.87	507	3.10	600	4.39	680	5.74	751	7.11	816	8.48	877	10.0	934	11.6	988	13.1	1039	14.7
6375	2183	415	2.28	520	3.61	611	5.04	690	6.52	761	8.03	825	9.55	884	11.1	940	12.7	994	14.4	1045	16.1
7050	2414	436	2.77	537	4.24	623	5.76	700	7.34	770	8.99	834	10.7	893	12.4	948	14.0	1000	15.7	1051	17.6
7725	2645	457	3.33	554	4.93	635	6.53	712	8.27	780	10.0	844	11.8	903	13.7	958	15.5	1009	17.4	1058	19.2
8400	2876	479	3.97	571	5.69	652	7.45	724	9.26	792	11.1	853	13.0	912	15.0	967	17.0	1019	19.0	1068	21.0
9075	3107	501	4.69	589	6.52	668	8.45	737	10.3	804	12.4	865	14.4	922	16.4	977	18.6	1028	20.7	1077	22.9
9750	3339	525	5.52	609	7.50	685	9.53	754	11.6	816	13.6	877	15.8	933	18.0	986	20.2	1038	22.5	1086	24.8
10425	3570	550	6.45	631	8.56	703	10.7	771	12.9	831	15.1	889	17.3	946	19.7	998	22.0	1047	24.3	1096	26.8
11100	3801	575	7.50	652	9.74	721	12.0	787	14.3	848	16.7	903	18.9	958	21.4	1010	23.9	1059	26.4	1106	28.8
11775	4032	601	8.66	674	11.0	741	13.4	805	15.8	865	18.3	919	20.8	970	23.2	1022	25.9	1071	28.5	1118	31.1
12450	4263	626	9.94	696	12.4	762	15.0	822	17.5	882	20.1	936	22.7	986	25.3	1035	27.9	1084	30.7	1130	33.5
13125	4494	652	11.3	719	13.9	784	16.6	842	19.3	899	22.0	953	24.8	1003	27.6	1050	30.3	1096	33.1	1142	36.0

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1712	1035	13.5	1085	15.2	1133	16.9	1178	18.7	1222	20.4	1264	22.3								
5925	2029	1041	15.2	1089	16.9	1136	18.6	1181	20.5	1225	22.4	1268	24.4	1308	26.4	1348	28.4	1386	30.5	1424	32.6
6850	2345	1049	17.2	1097	19.0	1143	20.9	1188	22.8	1230	24.7	1272	26.7	1312	28.7	1351	30.9	1390	33.1	1427	35.3
7775	2662	1059	19.3	1105	21.2	1151	23.2	1196	25.3	1238	27.4	1279	29.6	1319	31.7	1358	33.9	1395	36.1	1432	38.3
8700	2979	1072	21.8	1118	23.9	1163	26.0	1205	28.1	1246	30.2	1287	32.5	1327	34.8	1366	37.2	1403	39.5	1440	41.9
9625	3296	1085	24.4	1131	26.7	1175	29.0	1218	31.3	1259	33.6	1298	35.9	1337	38.3	1374	40.6	1411	43.1	1447	45.7
10550	3613	1098	27.2	1144	29.7	1188	32.1	1231	34.7	1272	37.2	1311	39.7	1349	42.2	1386	44.7	1422	47.3	1457	49.8
11475	3929	1112	30.1	1157	32.7	1201	35.4	1244	38.1	1285	40.8	1324	43.6	1362	46.3	1399	49.0	1435	51.8	1470	54.5
12400	4246	1129	33.4	1173	36.1	1216	38.9	1257	41.7	1298	44.6	1337	47.6	1375	50.5	1412	53.4	1448	56.4	1483	59.3
13325	4563	1146	36.8	1190	39.8	1232	42.7	1273	45.7	1312	48.7	1350	51.7	1388	54.9	1425	58.0	1461	61.2	1496	64.3
14250	4880	1164	40.4	1207	43.6	1249	46.8	1289	50.0	1328	53.1	1366	56.3	1402	59.5	1438	62.7	1474	66.1	1509	69.5
15175	5196	1186	44.6	1226	47.7	1266	51.0	1306	54.4	1345	57.8	1383	61.2	1419	64.6	1454	68.0	1489	71.4	1522	74.8
16100	5513	1209	49.1	1249	52.4	1287	55.7	1323	59.0	1362	62.7	1400	66.3	1436	69.9	1471	73.5	1505	77.1	1539	80.7
17025	5830	1232	53.8	1272	57.4	1309	60.9	1346	64.4	1381	67.9	1417	71.6	1453	75.4	1488	79.3	1522	83.1	1555	86.9
17950	6147	1256	58.8	1295	62.6	1332	66.4	1369	70.1	1403	73.8	1437	77.5	1470	81.2	1505	85.2	1539	89.3	1572	93.3
18875	6464	1279	64.1	1318	68.2	1355	72.2	1391	76.1	1426	80.1	1460	84.0	1493	87.9	1525	91.7	1556	95.7	1589	100

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0	32.0		
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	2054	1424	32.8	1460	35.0	1496	37.2	1531	39.4												
7175	2457	1429	36.3	1465	38.6	1500	41.0	1535	43.3	1569	45.8	1602	48.2	1667	53.2	1728	58.3	1788	63.5	1846	68.8
8350	2859	1437	40.5	1472	42.9	1507	45.2	1541	47.6	1574	50.0	1607	52.6	1671	57.9	1733	63.3	1793	68.9	1850	74.5
9525	3261	1447	45.3	1482	47.8	1517	50.4	1551	53.0	1584	55.6	1616	58.3	1679	63.6	1739	69.0	1797	74.4	1855	80.4
10700	3664	1460	50.6	1494	53.1	1527	55.7	1560	58.5	1594	61.4	1626	64.2	1689	70.0	1749	75.8	1807	81.7	1863	87.7
11875	4066	1476	56.6	1510	59.4	1543	62.2	1576	65.1	1607	68.0	1638	70.8	1699	76.6	1759	82.8	1817	89.2	1873	95.6
13050	4469	1492	62.8	1526	65.9	1559	69.0	1592	72.1	1624	75.2	1655	78.4	1715	84.6	1773	90.9	1829	97.2	1883	104
14225	4871	1509	69.3	1543	72.7	1576	76.1	1608	79.4	1640	82.8	1671	86.2	1731	92.9	1789	99.7	1845	107	1899	113
15400	5273	1526	76.2	1559	79.7	1593	83.4	1625	87.0	1656	90.6	1687	94.3	1748	102	1805	109	1861	116		
16575	5676	1547	83.9	1580	87.6	1611	91.2	1642	94.9	1673	98.7	1704	103	1764	111	1822	118	1878	126		
17750	6078	1569	91.9	1601	95.9	1632	99.8	1663	104	1694	108	1723	112	1781	120	1839	128	1894	136		
18925	6481	1590	100	1622	105	1654	109	1685	113	1715	117	1744	122	1802	130	1857	138				
20100	6883	1615	110	1645	114	1676	118	1706	123	1736	127	1766	132	1823	141	1878	150				
21275	7285	1644	120	1673	124	1702	129	1730	133	1758	138	1787	142	1844	152	1899	162				
22450	7688	1673	131	1702	136	1730	140	1758	145	1785	150	1812	154	1866	164						
23625	8090	1703	142	1731	147	1760	152	1787	157	1814	162	1841	167	1892	177						

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 22.7)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wA}
400	100	97	93	84	80	74	68	63	60	83
	70	89	83	76	71	65	61	57	51	74
	40	81	78	71	66	61	58	53	46	69
	20	79	76	69	64	61	58	53	45	68
	0	82	78	71	66	62	57	52	44	69
550	100	113	106	94	89	85	78	72	69	95
	70	105	94	84	82	76	69	64	61	85
	40	94	87	78	73	68	63	58	53	77
	20	96	87	76	69	65	62	57	52	76
	0	113	93	78	70	66	61	57	51	88
750	100	111	106	100	97	94	88	83	79	100
	70	106	100	92	91	87	79	73	70	93
	40	100	94	86	83	78	72	67	65	85
	20	96	93	84	79	73	69	64	62	82
	0	102	101	92	80	73	68	63	59	88
1050	100	115	113	109	104	102	99	93	90	108
	70	115	107	99	97	95	89	84	81	100
	40	110	102	95	91	88	82	77	76	94
	20	106	98	95	89	83	78	74	74	91
	0	108	102	100	92	85	79	75	75	95
1400	100	120	119	117	112	109	106	102	98	115
	70	120	114	109	104	102	98	92	89	108
	40	115	110	104	99	96	91	86	83	102
	20	111	106	103	97	91	86	82	80	100
	0	113	110	107	102	94	88	83	81	103
1910	100	126	128	125	121	117	115	111	106	124
	70	125	127	119	111	109	108	102	96	117
	40	121	123	114	107	104	100	95	90	112
	20	117	119	111	107	101	95	91	87	109
	0	119	121	115	112	104	97	92	88	113

Outlet Sound Power, L_{W_o}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{W_oA}
400	100	105	101	92	83	76	69	63	59	89
	70	96	92	84	76	70	64	57	50	81
	40	92	88	80	72	68	62	55	48	77
	20	91	88	78	71	68	62	55	48	76
	0	88	86	77	70	68	62	54	47	75
550	100	116	112	101	92	86	79	73	68	99
	70	105	100	90	82	75	69	63	58	88
	40	99	96	86	76	70	65	59	55	84
	20	99	96	83	72	67	62	56	51	82
	0	100	96	85	74	69	63	57	51	83
750	100	121	116	110	99	96	90	83	79	106
	70	115	109	101	92	87	80	74	69	98
	40	109	105	95	84	78	74	69	66	92
	20	106	104	95	82	75	71	65	61	91
	0	107	105	96	82	76	70	64	58	92
1050	100	124	126	122	109	105	101	96	92	116
	70	124	117	110	100	97	92	86	82	107
	40	119	112	108	94	89	85	81	77	102
	20	116	112	110	91	85	80	75	73	103
	0	116	113	109	92	86	79	73	68	102
1400	100	129	131	130	121	113	109	105	100	124
	70	129	125	119	110	104	100	95	90	115
	40	124	119	116	106	97	93	89	85	111
	20	121	119	117	106	93	88	83	80	111
	0	121	119	117	106	94	88	82	77	111
1910	100	134	137	139	134	121	118	113	109	134
	70	135	137	130	122	112	109	104	99	126
	40	129	131	124	120	106	102	97	93	121
	20	126	129	125	121	102	97	92	88	121
	0	126	128	125	120	103	98	91	85	121

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

26 IPW

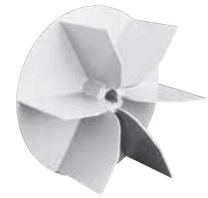
Wheel Diameter = 45 $\frac{1}{8}$ in.

Outlet Area = 3.58 ft²

Tip Speed = 11.81 x RPM

Minimum Starting HP = 7 $\frac{1}{2}$

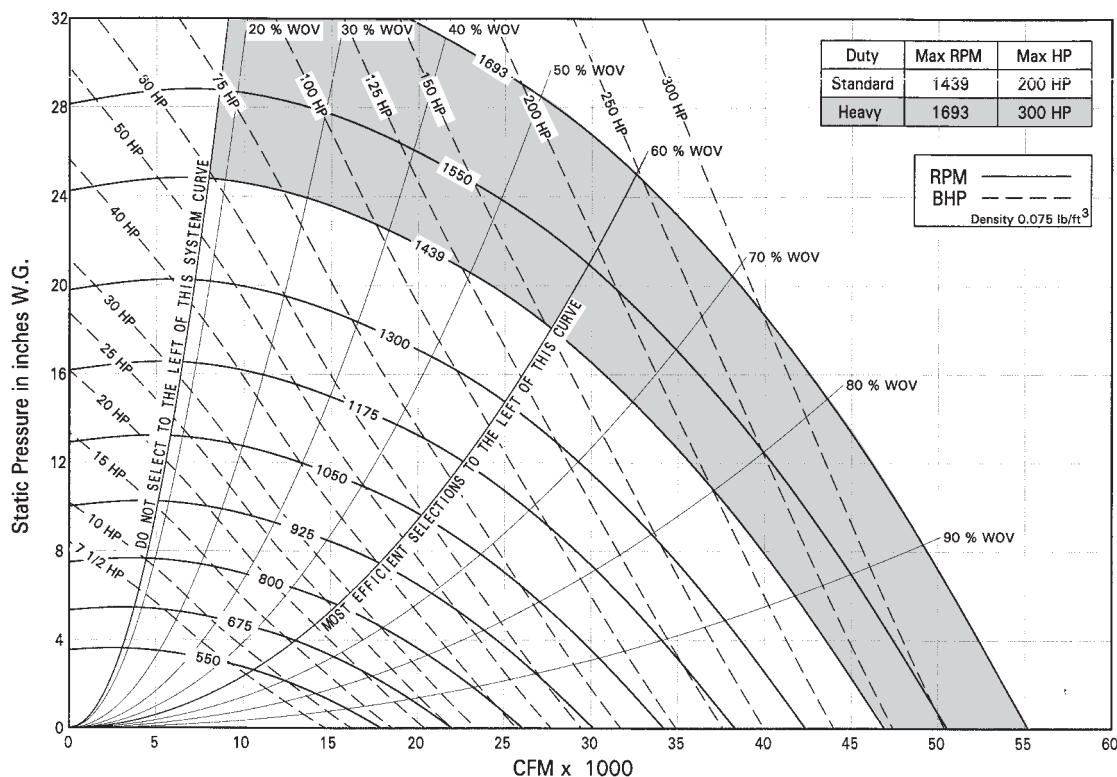
Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1439	200	405T	NA
Heavy	1693	300	405T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	1078	305	1.02	416	2.00	504	3.10	580	4.34	648	5.70	708	7.14								
4825	1300	314	1.28	423	2.42	509	3.62	584	4.94	650	6.34	711	7.91	766	9.55	819	11.3	867	13.0		
5650	1522	325	1.59	431	2.88	516	4.23	589	5.64	654	7.17	713	8.76	769	10.4	821	12.3	870	14.2	916	16.1
6475	1745	338	1.97	440	3.39	524	4.91	595	6.46	659	8.05	718	9.79	773	11.6	824	13.4	872	15.3	918	17.4
7300	1967	353	2.41	450	3.97	532	5.63	605	7.36	666	9.10	723	10.9	778	12.8	829	14.8	876	16.8	921	18.9
8125	2190	368	2.91	461	4.61	541	6.43	612	8.31	674	10.2	731	12.2	784	14.1	833	16.2	881	18.4	926	20.6
8950	2412	386	3.51	475	5.38	552	7.31	620	9.31	682	11.4	739	13.5	792	15.7	840	17.8	886	20.0	931	22.3
9775	2634	404	4.19	490	6.22	562	8.25	630	10.4	691	12.7	747	15.0	800	17.3	848	19.6	894	21.9	937	24.3
10600	2857	422	4.96	504	7.13	576	9.36	641	11.7	700	14.0	756	16.4	808	18.9	856	21.4	902	24.0	945	26.5
11425	3079	441	5.83	519	8.13	590	10.6	651	12.9	711	15.5	765	18.0	816	20.7	864	23.4	910	26.1	953	28.8
12250	3301	462	6.82	537	9.30	605	11.9	665	14.4	721	17.0	775	19.8	825	22.5	873	25.3	918	28.2	961	31.1
13075	3524	483	7.94	555	10.6	619	13.3	680	16.0	733	18.7	786	21.6	836	24.5	882	27.5	926	30.4	969	33.5
13900	3746	504	9.18	573	12.0	634	14.8	694	17.7	747	20.6	797	23.5	846	26.6	892	29.8	936	32.9	978	36.0
14725	3969	526	10.6	592	13.5	651	16.5	709	19.6	762	22.7	810	25.7	857	28.8	903	32.2	946	35.5	987	38.7
15550	4191	547	12.1	610	15.2	669	18.3	723	21.5	776	24.8	824	28.1	869	31.3	913	34.6	957	38.1	998	41.6
16375	4413	569	13.7	629	17.0	687	20.3	739	23.6	791	27.1	839	30.6	883	34.0	925	37.3	967	40.9	1008	44.6

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	1617	917	16.7	961	18.7	1003	20.8	1043	23.0	1082	25.2										
7125	1920	920	18.5	964	20.6	1006	22.9	1046	25.3	1085	27.7	1122	30.1	1159	32.6	1194	35.1	1228	37.7	1261	40.3
8250	2223	927	20.8	970	23.1	1011	25.4	1050	27.7	1088	30.1	1125	32.7	1162	35.4	1197	38.1	1231	40.8	1264	43.6
9375	2526	934	23.2	976	25.7	1017	28.2	1057	30.8	1095	33.4	1131	36.0	1166	38.6	1201	41.3	1234	44.0	1267	46.9
10500	2830	944	26.2	986	28.7	1025	31.3	1063	33.9	1101	36.7	1138	39.5	1173	42.4	1207	45.3	1240	48.2	1273	51.1
11625	3133	955	29.3	996	32.1	1036	34.9	1073	37.7	1110	40.5	1145	43.3	1180	46.2	1214	49.3	1247	52.4	1279	55.6
12750	3436	966	32.6	1007	35.6	1047	38.6	1084	41.6	1121	44.7	1156	47.7	1190	50.8	1222	53.9	1254	56.9	1286	60.1
13875	3739	977	35.9	1018	39.2	1058	42.5	1095	45.8	1132	49.1	1167	52.4	1200	55.7	1233	59.0	1265	62.3	1296	65.6
15000	4043	991	39.7	1030	43.0	1069	46.5	1106	50.0	1143	53.6	1178	57.1	1211	60.7	1244	64.3	1276	67.8	1307	71.4
16125	4346	1005	43.7	1044	47.3	1082	50.9	1118	54.5	1154	58.3	1189	62.1	1222	65.9	1255	69.7	1287	73.5	1318	77.3
17250	4649	1020	47.9	1059	51.8	1096	55.6	1132	59.5	1166	63.3	1200	67.2	1233	71.2	1266	75.3	1298	79.4	1329	83.5
18375	4952	1035	52.5	1073	56.4	1110	60.6	1146	64.7	1180	68.8	1214	72.9	1246	77.0	1277	81.1	1309	85.4	1340	89.8
19500	5256	1055	57.6	1090	61.7	1125	65.8	1160	70.2	1195	74.5	1228	78.9	1260	83.3	1291	87.6	1322	92.0	1351	96.3
20625	5559	1074	63.1	1109	67.4	1143	71.7	1175	75.9	1209	80.5	1242	85.1	1274	89.8	1306	94.4	1336	99.0	1365	104
21750	5862	1094	68.9	1128	73.5	1162	78.0	1194	82.5	1225	87.0	1257	91.6	1289	96.5	1320	101	1350	106	1380	111
22875	6165	1113	75.0	1148	79.9	1181	84.7	1214	89.4	1245	94.2	1275	98.9	1304	104	1334	109	1365	114	1394	119

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	2156	1263	42.8	1296	45.6	1327	48.5	1358	51.3	1388	54.2	1417	57.2								
9500	2560	1267	47.3	1299	50.3	1331	53.3	1362	56.4	1392	59.5	1421	62.7	1478	69.2	1533	75.7	1586	82.4	1637	89.3
11000	2964	1276	53.1	1307	56.1	1338	59.2	1368	62.3	1397	65.4	1426	68.6	1482	75.2	1537	82.2	1590	89.4	1641	96.7
12500	3369	1284	59.1	1316	62.5	1347	65.8	1377	69.2	1406	72.6	1435	76.0	1490	83.0	1544	90.0	1595	97.1	1645	104
14000	3773	1297	66.3	1328	69.6	1357	73.0	1386	76.4	1415	80.0	1443	83.7	1499	91.2	1552	98.8	1604	106	1654	114
15500	4177	1312	74.0	1342	77.7	1371	81.4	1400	85.1	1428	88.8	1456	92.6	1509	100	1561	108	1613	116	1663	124
17000	4582	1326	82.1	1357	86.1	1386	90.2	1415	94.2	1443	98.2	1470	102	1524	110	1575	119	1625	127	1673	135
18500	4986	1341	90.5	1371	94.9	1401	99.2	1429	104	1457	108	1485	112	1538	121	1590	130	1639	139	1687	148
20000	5390	1358	99.5	1386	104	1416	109	1444	113	1472	118	1500	123	1553	132	1604	142	1654	151		
21500	5795	1376	109	1405	114	1433	119	1461	124	1487	129	1514	134	1568	144	1619	154	1668	164		
23000	6199	1396	120	1424	125	1452	130	1479	135	1506	140	1532	146	1583	156	1634	166	1683	177		
24500	6603	1415	131	1443	136	1471	142	1499	147	1525	153	1551	158	1602	169	1651	180				
26000	7008	1439	143	1465	149	1491	154	1518	160	1544	166	1570	171	1621	183	1670	195				
27500	7412	1465	157	1490	162	1516	168	1540	174	1564	179	1590	185	1640	198	1689	210				
29000	7816	1490	171	1516	177	1541	183	1566	189	1590	195	1613	201	1660	213						
30500	8221	1517	186	1542	192	1567	199	1592	205	1616	211	1639	218	1685	230						



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 32.6)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
350	100	99	91	84	80	73	68	63	61	82
	70	90	82	76	71	65	61	57	50	74
	40	82	77	71	66	61	58	53	45	69
	20	81	75	69	64	61	58	52	44	68
	0	84	77	71	65	62	57	51	44	69
500	100	115	106	94	91	85	78	73	70	95
	70	107	93	85	84	76	70	65	62	86
	40	96	87	79	74	68	64	59	54	78
	20	98	86	76	70	66	63	58	52	77
	0	115	91	79	71	67	62	58	52	90
700	100	113	108	102	99	96	90	84	80	101
	70	109	101	93	93	88	80	75	72	94
	40	102	95	87	85	79	74	69	67	87
	20	99	94	85	80	75	70	66	64	84
	0	105	103	93	81	75	69	64	61	90
950	100	116	114	109	105	103	99	94	91	109
	70	116	108	100	98	96	90	85	83	101
	40	111	103	95	92	89	83	78	77	95
	20	107	100	95	89	83	79	75	75	92
	0	109	104	100	93	85	80	77	76	96
1250	100	122	119	117	113	110	107	102	98	116
	70	122	113	109	105	103	98	93	89	108
	40	117	109	104	99	96	91	86	84	103
	20	113	105	103	98	92	87	83	81	100
	0	115	109	108	102	94	88	84	82	104
1693	100	127	128	126	121	117	115	111	106	124
	70	127	126	119	112	110	108	102	97	117
	40	122	121	114	107	104	100	95	91	112
	20	118	118	112	107	101	95	91	88	109
	0	120	120	116	112	104	97	92	89	113

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
350	100	106	100	91	82	76	68	62	59	89
	70	97	91	84	75	70	63	56	50	81
	40	93	87	79	71	68	61	54	47	77
	20	93	87	77	70	68	61	54	48	76
	0	90	85	76	70	69	61	53	47	75
500	100	118	113	101	92	87	80	74	69	100
	70	107	100	91	83	76	69	64	59	89
	40	101	97	86	76	71	65	60	57	84
	20	101	97	83	72	69	63	57	51	83
	0	102	97	85	74	70	64	57	51	84
700	100	124	117	112	100	98	92	85	80	107
	70	117	110	102	93	89	82	76	71	99
	40	111	106	97	85	80	76	71	68	94
	20	109	106	96	82	77	72	67	63	93
	0	110	107	97	82	77	71	65	60	94
950	100	126	127	122	109	106	102	97	93	117
	70	125	118	110	100	98	92	87	83	107
	40	120	113	108	94	90	86	82	78	103
	20	117	114	110	91	85	81	76	74	103
	0	117	114	109	92	86	79	74	69	103
1250	100	130	132	131	120	113	110	105	101	125
	70	131	124	119	110	105	100	95	90	115
	40	125	118	116	105	98	94	89	85	111
	20	122	119	118	103	93	88	84	81	111
	0	122	119	117	104	95	88	82	77	111
1693	100	136	138	139	133	121	118	114	109	134
	70	136	136	129	121	112	109	104	99	125
	40	131	130	125	118	106	102	98	94	121
	20	128	128	126	119	102	97	92	89	121
	0	128	128	126	118	103	98	91	86	120

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

29 IPW

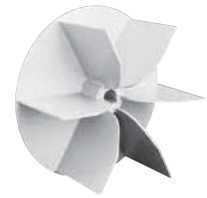
Wheel Diameter = 50½ in.

Outlet Area = 4.54 ft²

Tip Speed = 13.22 x RPM

Minimum Starting HP = 15

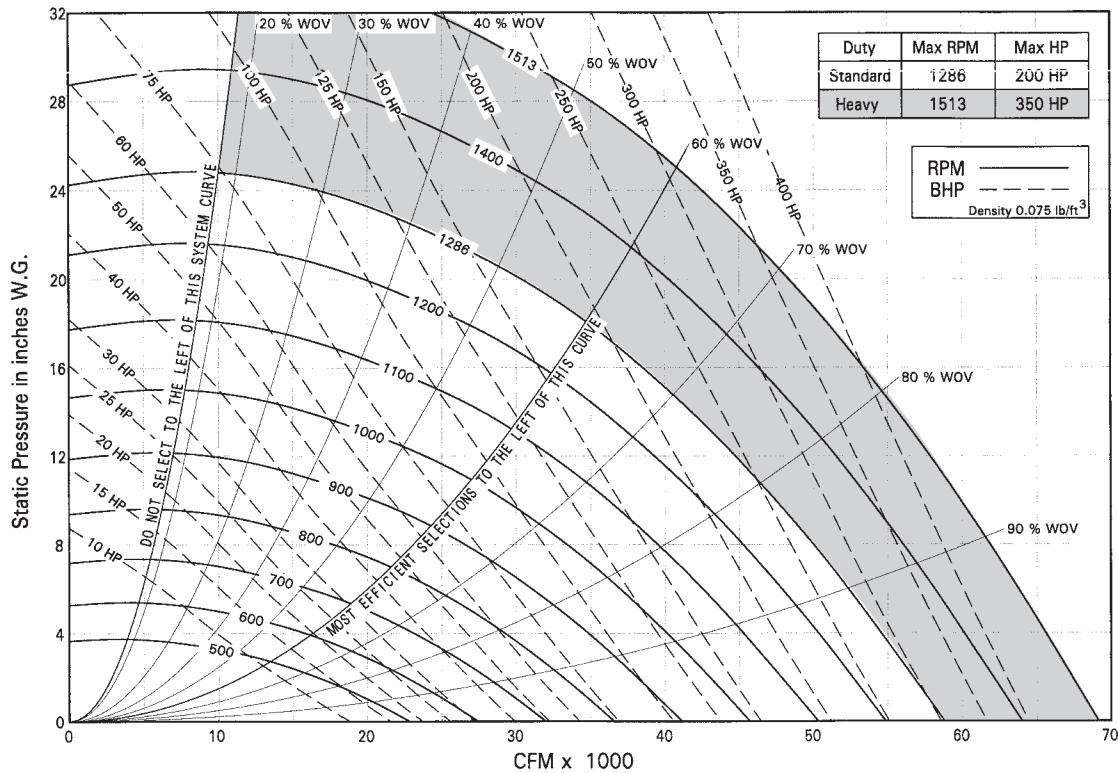
Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1286	200	405T	NA
Heavy	1513	350	405T	NA



CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1086	272	1.27	372	2.50	451	3.87	518	5.43	579	7.14	633	8.94								
5875	1277	279	1.55	377	2.93	454	4.42	521	6.05	580	7.81	635	9.75	685	11.8	731	13.9				
6750	1467	287	1.87	383	3.42	459	5.03	525	6.78	583	8.64	636	10.6	686	12.7	733	15.0	776	17.3	818	19.7
7625	1657	296	2.24	389	3.93	465	5.74	529	7.57	587	9.56	640	11.7	689	13.8	734	16.1	778	18.5	819	21.0
8500	1847	307	2.67	397	4.51	471	6.48	535	8.51	591	10.6	644	12.8	692	15.1	738	17.4	780	19.8	821	22.4
9375	2038	318	3.15	404	5.15	477	7.26	541	9.48	597	11.7	648	14.0	696	16.4	741	18.9	784	21.5	824	24.1
10250	2228	330	3.69	413	5.84	484	8.13	547	10.5	603	12.9	654	15.4	701	17.8	745	20.4	788	23.1	828	25.9
11125	2418	343	4.33	424	6.65	492	9.06	553	11.6	609	14.2	660	16.8	707	19.5	750	22.1	791	24.8	832	27.8
12000	2608	357	5.04	434	7.53	500	10.1	561	12.7	615	15.5	666	18.3	713	21.2	756	24.0	797	26.9	836	29.8
12875	2798	371	5.83	445	8.48	510	11.2	569	14.0	622	16.9	672	19.9	719	22.9	762	26.0	803	29.0	842	32.1
13750	2989	385	6.70	457	9.50	520	12.4	577	15.3	630	18.4	679	21.5	725	24.7	768	27.9	809	31.2	848	34.5
14625	3179	400	7.66	469	10.6	531	13.7	586	16.8	638	20.0	686	23.3	731	26.5	775	30.0	815	33.4	854	36.9
15500	3369	415	8.74	482	11.9	542	15.1	596	18.4	646	21.6	694	25.1	739	28.6	781	32.1	822	35.8	860	39.4
16375	3559	431	9.94	496	13.3	553	16.6	607	20.1	655	23.5	702	27.1	747	30.7	788	34.4	828	38.1	866	42.0
17250	3750	447	11.2	509	14.7	565	18.2	618	21.9	666	25.5	710	29.1	755	33.0	796	36.8	835	40.7	872	44.6
18125	3940	464	12.7	523	16.3	577	20.0	629	23.8	677	27.6	720	31.3	763	35.3	804	39.3	843	43.4	879	47.4

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000	1521	818	20.1	858	22.6	895	25.2														
8425	1831	821	22.3	860	25.0	898	27.8	934	30.6	969	33.6	1002	36.5	1034	39.6	1066	42.7				
9850	2141	826	25.1	865	27.8	901	30.6	937	33.5	971	36.7	1005	39.8	1037	43.1	1068	46.4	1099	49.7	1128	53.2
11275	2451	832	28.1	870	31.1	907	34.2	942	37.3	976	40.4	1009	43.6	1040	46.8	1071	50.2	1101	53.7	1131	57.4
12700	2760	841	31.6	878	34.7	913	37.8	948	41.2	982	44.6	1015	48.1	1046	51.6	1077	55.1	1106	58.6	1135	62.2
14125	3070	851	35.5	887	38.9	922	42.3	956	45.7	989	49.1	1021	52.6	1052	56.4	1083	60.2	1112	64.0	1141	67.9
15550	3380	860	39.6	897	43.2	932	46.9	966	50.6	998	54.4	1030	58.1	1060	61.8	1089	65.6	1118	69.5	1147	73.6
16975	3690	870	43.8	907	47.8	942	51.8	976	55.8	1008	59.9	1040	63.9	1070	68.0	1099	72.0	1128	76.1	1155	80.2
18400	4000	882	48.4	917	52.5	952	56.8	986	61.2	1018	65.5	1049	69.9	1080	74.3	1109	78.6	1137	83.0	1165	87.4
19825	4309	895	53.4	930	57.8	963	62.2	996	66.7	1028	71.4	1059	76.1	1090	80.8	1119	85.5	1147	90.2	1175	94.9
21250	4619	908	58.6	943	63.4	976	68.2	1008	72.9	1039	77.6	1069	82.5	1100	87.5	1129	92.5	1157	97.6	1185	103
22675	4929	921	64.2	956	69.3	989	74.4	1021	79.4	1052	84.5	1082	89.6	1110	94.6	1139	99.8	1167	105	1195	111
24100	5239	938	70.7	970	75.6	1002	80.8	1034	86.3	1065	91.7	1094	97.1	1123	103	1151	108	1178	113	1205	119
25525	5548	956	77.5	987	82.8	1017	88.1	1047	93.4	1078	99.2	1107	105	1136	111	1164	116	1191	122	1217	128
26950	5858	974	84.8	1005	90.4	1035	96.0	1064	102	1091	107	1120	113	1149	119	1177	125	1204	131	1230	137
28375	6168	991	92.5	1022	98.5	1052	104	1081	110	1109	116	1136	122	1162	128	1190	134	1217	141	1243	147

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	2173	1129	53.6	1158	57.1	1186	60.6	1213	64.2	1240	67.8	1266	71.5								
12000	2608	1132	59.5	1161	63.3	1189	67.1	1217	71.0	1244	74.9	1270	78.9	1321	87.0	1370	95.3	1417	104	1463	112
14000	3043	1141	67.4	1169	71.2	1196	75.1	1223	79.0	1249	83.0	1275	87.0	1325	95.1	1374	104	1421	113	1467	122
16000	3478	1149	75.5	1177	79.7	1205	84.0	1232	88.3	1258	92.6	1283	97.0	1333	106	1381	115	1427	124	1472	133
18000	3913	1162	85.4	1189	89.7	1216	94.0	1242	98.4	1267	103	1292	107	1341	117	1389	127	1435	136	1480	146
20000	4347	1176	95.8	1203	101	1230	105	1255	110	1280	115	1305	120	1353	129	1399	139	1444	149	1488	160
22000	4782	1190	107	1217	112	1243	117	1269	122	1294	128	1319	133	1366	143	1412	154	1457	164	1499	175
24000	5217	1204	118	1231	124	1257	129	1283	135	1308	141	1333	146	1380	158	1426	169	1470	181		
26000	5652	1222	131	1247	137	1272	142	1297	148	1322	154	1347	161	1394	173	1440	185	1484	197		
28000	6086	1240	144	1265	151	1290	157	1315	163	1339	169	1362	176	1408	188	1454	202	1498	215		
30000	6521	1258	159	1283	165	1308	172	1333	179	1357	186	1380	192	1425	206	1469	219	1512	233		
32000	6956	1279	174	1302	181	1327	188	1351	195	1375	203	1398	210	1443	224	1487	238				
34000	7391	1303	192	1326	199	1349	206	1371	213	1393	220	1416	228	1462	243	1505	258				
36000	7826	1328	211	1351	218	1373	226	1395	233	1417	241	1438	248	1480	263						
38000	8260	1353	231	1376	239	1398	247	1420	255	1441	262	1462	270	1503	286						
40000	8695	1378	252	1401	260	1423	269	1445	277	1466	285	1487	294								



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 45.7)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
300	100	99	89	83	79	72	66	62	61	81
	70	91	79	76	70	64	60	56	49	73
	40	83	75	70	65	60	57	52	43	68
	20	81	74	68	63	61	57	51	42	67
	0	84	76	70	64	61	56	50	42	68
400	100	112	101	90	88	82	75	71	68	92
	70	103	88	83	81	73	66	62	60	83
	40	93	83	76	71	65	61	56	51	74
	20	95	81	72	67	63	60	55	49	73
	0	109	83	75	68	64	59	54	49	84
600	100	113	107	101	98	95	88	83	80	100
	70	109	99	93	93	87	79	74	72	93
	40	102	93	86	85	78	73	68	66	86
	20	99	93	84	79	74	70	66	64	83
	0	105	101	90	79	74	68	64	60	88
800	100	115	113	108	104	102	98	93	90	107
	70	112	105	99	97	94	88	84	82	100
	40	107	101	94	91	87	82	78	76	94
	20	103	99	94	88	82	78	75	75	91
	0	106	103	98	90	84	79	76	76	94
1100	100	123	120	117	113	110	107	102	98	116
	70	123	115	108	105	103	98	92	90	108
	40	118	110	103	100	96	91	86	84	103
	20	114	106	103	97	91	87	83	82	100
	0	116	110	108	101	93	88	84	83	103
1513	100	129	128	126	121	118	116	111	107	124
	70	128	125	118	113	111	108	102	98	117
	40	124	120	114	108	105	101	95	92	112
	20	120	116	112	107	101	96	91	89	109
	0	122	120	116	111	104	97	92	90	113

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
300	100	107	99	89	81	75	67	61	59	87
	70	98	89	82	73	69	61	55	49	79
	40	94	85	78	69	68	59	53	46	76
	20	93	85	75	69	69	59	53	46	75
	0	91	84	74	68	70	59	52	45	74
400	100	116	108	96	89	84	76	71	67	96
	70	104	96	86	79	72	66	61	56	85
	40	99	93	81	73	68	62	57	54	81
	20	99	92	77	69	66	59	53	48	79
	0	100	92	80	70	67	60	54	48	80
600	100	124	115	110	99	97	90	84	79	106
	70	117	108	100	92	88	80	75	70	98
	40	111	104	94	84	79	75	70	67	92
	20	109	104	94	80	76	71	66	62	91
	0	110	105	94	80	76	70	64	59	92
800	100	126	126	119	108	105	100	96	92	115
	70	122	116	107	99	96	91	86	81	105
	40	116	112	104	93	89	85	81	77	100
	20	115	113	104	89	84	79	76	73	100
	0	115	113	104	90	84	78	72	68	100
1100	100	132	134	131	118	113	109	105	101	125
	70	132	125	119	108	105	100	95	90	115
	40	127	119	116	103	98	93	89	85	111
	20	124	120	118	100	93	88	84	81	111
	0	123	120	117	101	94	87	82	77	111
1513	100	137	140	139	131	122	118	114	109	134
	70	138	135	129	120	113	110	104	99	125
	40	132	129	125	117	106	102	98	94	120
	20	129	128	126	117	102	97	93	89	120
	0	129	128	126	116	104	97	91	86	120

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

33 IPW

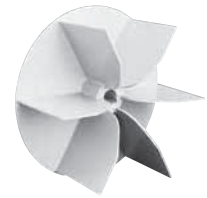
Wheel Diameter = 57½ in.

Outlet Area = 5.87 ft²

Tip Speed = 15.05 x RPM

Minimum Starting HP = 25

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1129	300	405T	NA
Heavy	1329	450	405T	NA

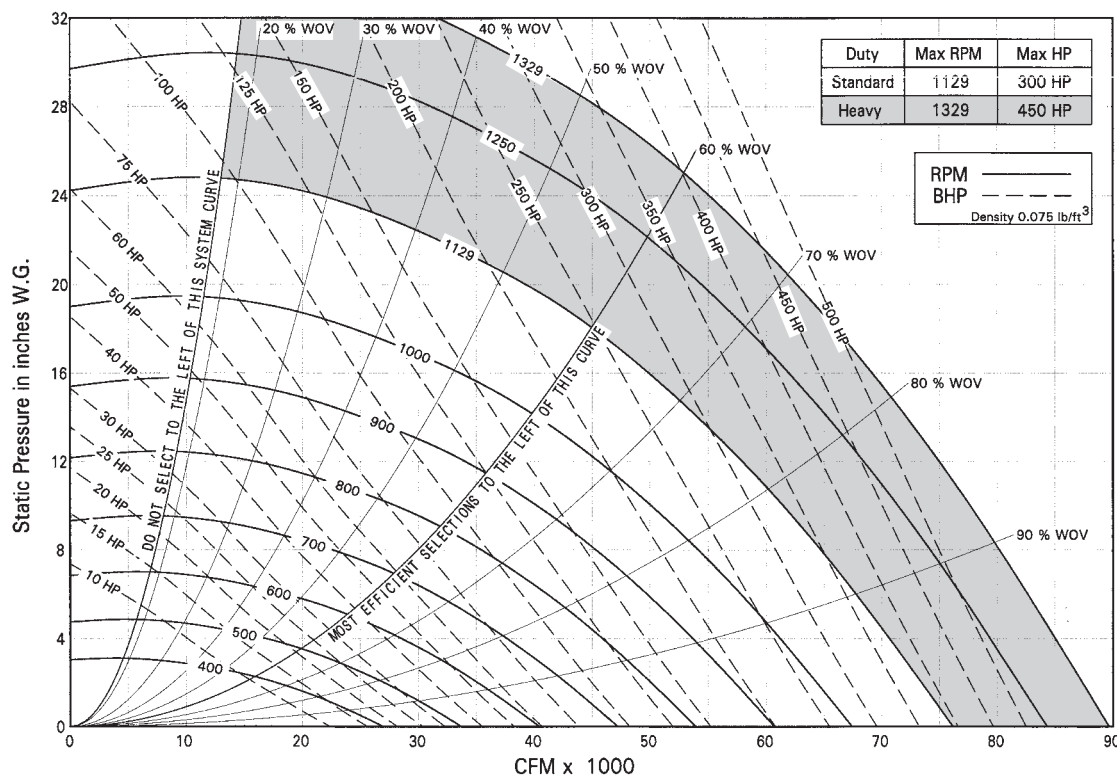


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	1001	237	1.51	325	3.03	395	4.75	455	6.74	507	8.88										
7250	1210	243	1.88	329	3.61	398	5.50	456	7.54	509	9.84	557	12.3	601	14.9						
8500	1419	250	2.32	335	4.29	402	6.33	460	8.58	511	10.9	558	13.5	602	16.2	643	19.1	682	22.1	718	25.1
9750	1627	259	2.84	341	5.02	408	7.33	464	9.68	515	12.3	561	14.9	604	17.7	645	20.7	683	23.8	719	27.1
11000	1836	270	3.45	348	5.84	413	8.39	469	11.0	519	13.7	565	16.5	608	19.5	648	22.6	685	25.7	721	29.0
12250	2045	280	4.14	356	6.75	419	9.50	475	12.4	525	15.3	569	18.3	611	21.4	651	24.7	689	28.0	724	31.4
13500	2253	292	4.93	364	7.76	427	10.8	481	13.9	531	17.1	575	20.3	616	23.5	655	26.8	692	30.4	728	34.0
14750	2462	305	5.87	375	8.94	434	12.1	488	15.4	537	18.9	581	22.4	622	25.9	660	29.4	696	33.0	731	36.7
16000	2671	318	6.92	385	10.2	442	13.6	495	17.1	542	20.7	587	24.5	628	28.3	666	32.1	702	35.9	736	39.8
17250	2879	332	8.09	396	11.6	452	15.3	503	19.0	550	22.8	593	26.7	634	30.8	672	34.9	708	39.0	742	43.1
18500	3088	346	9.41	407	13.1	463	17.1	511	20.9	557	25.1	600	29.2	640	33.4	678	37.8	714	42.2	748	46.6
19750	3297	360	10.9	420	14.9	473	19.0	521	23.2	565	27.4	608	31.8	647	36.2	684	40.8	720	45.4	754	50.1
21000	3505	376	12.6	433	16.8	484	21.1	531	25.6	574	29.9	615	34.6	654	39.3	691	43.9	726	48.8	760	53.7
22250	3714	391	14.4	446	18.9	495	23.4	542	28.1	584	32.8	623	37.4	662	42.4	698	47.4	732	52.4	766	57.5
23500	3923	407	16.4	460	21.2	507	25.9	552	30.8	594	35.8	632	40.6	670	45.7	706	51.0	740	56.3	772	61.5
24750	4131	423	18.7	473	23.6	520	28.6	563	33.7	605	39.0	643	44.1	678	49.2	714	54.7	748	60.3	780	65.8

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9000	1502	718	25.9	753	29.1																
11050	1844	721	29.1	756	32.6	789	36.3	820	40.0	851	43.8	880	47.7	908	51.6	936	55.6	963	59.7		
13100	2186	726	33.2	760	36.8	792	40.5	823	44.3	853	48.2	883	52.4	911	56.7	939	61.0	965	65.4	991	69.9
15150	2529	732	37.6	766	41.6	798	45.7	829	49.8	859	54.0	887	58.2	915	62.5	942	66.8	968	71.2	994	75.9
17200	2871	742	43.0	774	47.1	805	51.3	835	55.5	864	60.1	893	64.7	921	69.3	948	74.0	974	78.8	999	83.5
19250	3213	751	48.7	784	53.2	814	57.8	844	62.4	873	67.1	900	71.7	927	76.4	954	81.4	980	86.6	1005	91.7
21300	3555	761	54.6	793	59.7	824	64.7	854	69.8	882	74.8	910	79.9	936	85.0	962	90.1	987	95.3	1011	100
23350	3898	771	61.0	803	66.4	834	71.9	863	77.4	892	82.9	919	88.5	946	94.0	972	99.6	997	105	1021	111
25400	4240	784	68.1	815	73.8	844	79.4	873	85.3	901	91.3	929	97.3	955	103	981	109	1006	115	1030	121
27450	4582	797	75.6	827	81.8	856	87.9	885	94.1	912	100	939	107	965	113	991	120	1016	126	1040	132
29500	4924	810	83.7	840	90.2	869	96.9	897	104	924	110	950	117	976	123	1001	130	1026	137	1050	144
31550	5267	827	93.1	854	99.5	882	106	910	113	937	120	963	128	988	135	1013	142	1037	149	1060	156
33600	5609	844	103	871	110	898	117	923	124	950	131	976	139	1001	146	1025	154	1049	161	1072	169
35650	5951	861	114	888	121	915	129	940	136	964	143	988	151	1013	159	1038	167	1062	175	1085	183
37700	6293	879	125	906	133	932	141	957	149	981	157	1005	164	1028	172	1051	180	1074	189	1097	197
39750	6636	896	137	923	146	949	154	974	162	998	171	1022	179	1044	187	1066	195	1088	203	1110	212

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	2003	990	66.7	1015	71.0	1040	75.5														
14650	2445	993	74.5	1019	79.2	1043	84.1	1068	89.0	1091	93.9	1114	98.9	1159	109	1202	120	1244	130		
17300	2888	999	83.9	1024	88.8	1048	93.7	1072	98.6	1095	104	1118	109	1162	120	1205	131	1247	143	1287	154
19950	3330	1007	94.6	1032	99.9	1056	105	1079	111	1102	116	1125	122	1168	133	1210	144	1251	155	1290	167
22600	3772	1017	107	1041	112	1064	118	1087	123	1110	129	1132	135	1176	147	1218	160	1258	172	1298	184
25250	4215	1030	121	1053	127	1077	133	1099	139	1121	145	1143	151	1185	163	1225	175	1266	189	1305	202
27900	4657	1042	135	1066	142	1089	148	1112	155	1134	161	1155	168	1197	181	1237	195	1276	208	1314	222
30550	5100	1055	150	1079	157	1102	164	1124	171	1146	179	1168	186	1209	200	1250	215	1289	230	1326	244
33200	5542	1070	166	1092	174	1114	181	1137	189	1159	197	1180	205	1222	220	1262	236	1301	252		
35850	5984	1086	184	1108	192	1130	200	1152	208	1173	216	1193	224	1235	241	1275	258	1314	275		
38500	6427	1102	203	1125	212	1147	220	1168	229	1189	237	1209	246	1249	263	1288	280	1326	298		
41150	6869	1120	223	1141	232	1163	241	1184	250	1205	260	1226	269	1265	287	1304	306				
43800	7312	1142	247	1162	256	1182	265	1202	274	1222	283	1242	293	1282	313	1320	332				
46450	7754	1164	271	1184	281	1204	291	1223	300	1242	310	1261	319	1298	339						
49100	8196	1187	297	1207	308	1226	318	1245	328	1264	338	1283	349	1319	369						
51750	8639	1209	325	1229	336	1249	347	1268	358	1286	369	1305	380								

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 67.5)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
300	100	103	93	87	83	76	70	66	65	85
	70	95	83	79	74	68	64	59	53	77
	40	87	79	74	68	64	61	56	47	72
	20	85	78	72	67	64	61	55	46	71
	0	88	79	73	68	65	60	54	46	72
400	100	116	105	94	92	86	79	75	72	96
	70	107	92	87	85	77	70	66	63	87
	40	97	87	80	75	69	65	60	55	78
	20	99	85	76	71	67	64	59	53	77
	0	113	87	79	72	68	63	58	53	88
550	100	114	108	103	100	96	90	85	81	102
	70	109	100	95	94	88	80	76	74	95
	40	103	94	88	86	79	74	70	68	87
	20	100	94	85	81	75	71	68	66	84
	0	107	102	91	80	75	70	65	62	89
750	100	117	115	110	107	104	100	95	92	110
	70	113	107	101	100	96	90	86	84	102
	40	108	103	96	94	89	84	80	79	96
	20	105	101	96	90	84	80	77	77	93
	0	108	105	100	92	86	81	79	78	96
1000	100	125	123	118	114	112	108	103	100	117
	70	125	117	108	106	105	99	94	91	110
	40	121	112	104	101	98	92	87	86	104
	20	117	109	104	98	92	88	84	83	101
	0	119	112	110	102	94	89	85	85	105
1329	100	130	128	126	122	119	116	111	107	125
	70	130	123	118	113	112	108	102	98	117
	40	126	119	113	108	105	101	95	92	112
	20	122	115	112	107	101	96	92	90	109
	0	124	119	117	111	103	97	93	91	113

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
300	100	111	102	93	85	79	71	65	63	91
	70	102	93	86	77	73	65	59	52	83
	40	98	89	82	73	72	63	57	50	80
	20	97	89	79	73	72	63	57	50	79
	0	94	88	78	72	74	63	56	49	78
400	100	119	112	100	93	88	80	75	71	100
	70	108	100	90	83	76	70	65	60	89
	40	103	97	85	76	72	66	61	58	85
	20	103	96	81	73	70	63	57	52	83
	0	104	96	84	74	71	64	58	52	84
550	100	125	117	110	101	98	91	85	81	107
	70	118	109	101	94	89	81	76	72	99
	40	112	105	95	85	81	76	72	69	93
	20	110	105	94	82	78	73	67	64	92
	0	112	106	95	82	78	71	65	60	93
750	100	128	128	120	110	107	103	98	94	117
	70	123	118	109	102	98	93	88	83	107
	40	118	114	105	95	91	87	83	79	102
	20	117	115	105	91	86	81	78	75	102
	0	117	115	105	92	86	80	75	70	102
1000	100	134	136	132	118	115	111	106	102	126
	70	134	127	119	109	107	101	96	91	117
	40	129	122	118	103	99	95	91	87	112
	20	126	122	120	99	94	89	85	82	113
	0	126	123	118	101	95	88	83	78	112
1329	100	139	141	140	130	122	119	114	110	134
	70	139	134	129	119	114	110	104	99	124
	40	134	128	125	115	107	103	98	94	120
	20	131	128	127	114	102	98	93	90	120
	0	131	129	126	114	104	97	91	86	120

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

37 IPW

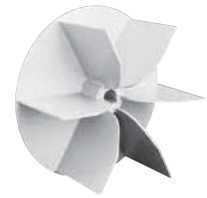
Wheel Diameter = 64³/₈ in.

Outlet Area = 7.36 ft²

Tip Speed = 16.85 x RPM

Minimum Starting HP = 40

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1009	350	405T	NA
Heavy	1187	550	405T	NA

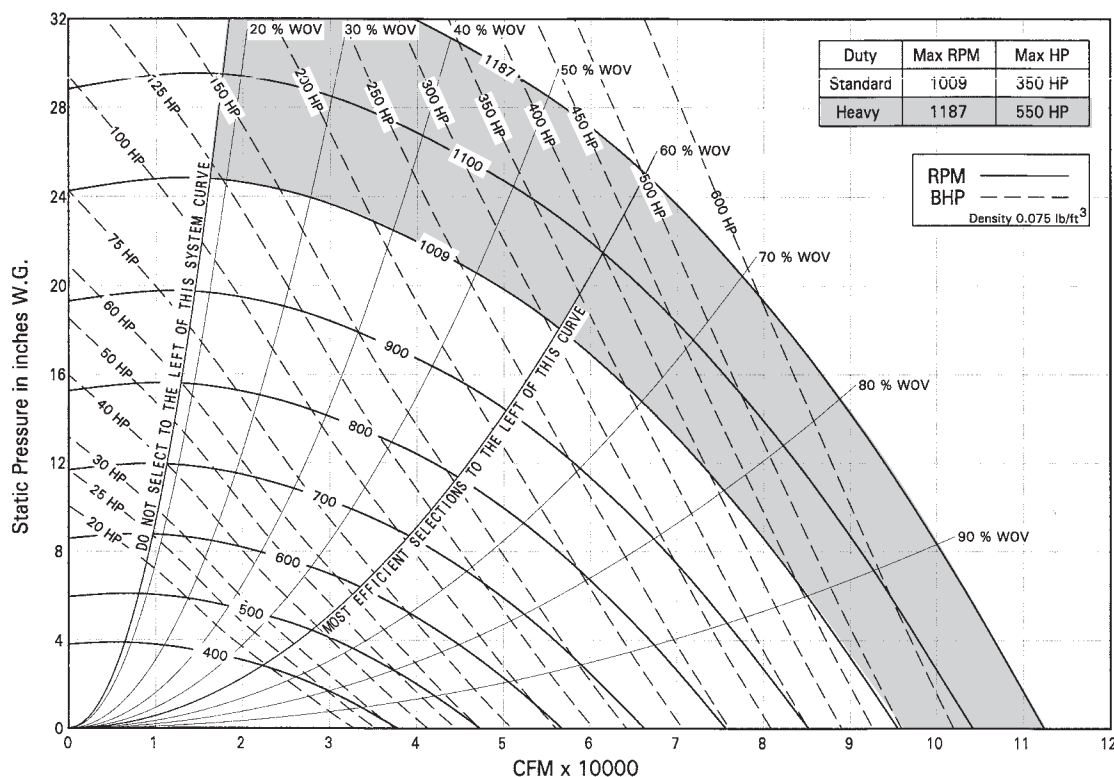


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1065	213	2.04	291	4.00	353	6.22	406	8.75	454	11.5	496	14.4								
9450	1258	218	2.48	295	4.72	356	7.13	408	9.75	455	12.6	498	15.8	537	19.0	573	22.5				
10900	1451	225	3.01	300	5.52	360	8.13	411	11.0	457	14.0	499	17.1	538	20.6	575	24.2	609	28.0	641	31.9
12350	1644	232	3.62	305	6.37	364	9.30	415	12.3	460	15.5	502	18.9	540	22.4	576	26.0	610	30.0	643	34.1
13800	1837	241	4.33	311	7.33	369	10.5	419	13.8	464	17.1	505	20.7	543	24.5	578	28.3	612	32.2	644	36.4
15250	2030	250	5.13	317	8.38	374	11.8	424	15.4	468	19.1	508	22.7	546	26.6	581	30.7	615	34.9	646	39.2
16700	2223	259	6.03	324	9.53	380	13.3	429	17.1	473	21.1	513	25.0	550	29.1	584	33.2	618	37.7	649	42.2
18150	2416	270	7.09	333	10.9	386	14.8	434	18.9	478	23.1	518	27.4	555	31.8	589	36.1	621	40.5	652	45.3
19600	2609	281	8.27	341	12.3	393	16.5	440	20.8	483	25.3	523	29.9	559	34.6	594	39.2	626	43.9	656	48.7
21050	2802	292	9.59	350	13.9	401	18.3	447	22.9	489	27.6	528	32.5	564	37.5	598	42.5	630	47.5	661	52.5
22500	2996	303	11.0	359	15.6	409	20.4	453	25.1	495	30.2	533	35.2	569	40.4	603	45.8	635	51.1	666	56.5
23950	3189	315	12.7	369	17.5	418	22.6	461	27.5	501	32.8	539	38.2	574	43.5	608	49.2	640	54.8	670	60.5
25400	3382	328	14.5	380	19.6	427	24.9	469	30.3	508	35.6	545	41.3	580	47.0	613	52.7	645	58.7	675	64.7
26850	3575	340	16.5	391	21.9	436	27.4	478	33.1	515	38.7	552	44.5	587	50.5	619	56.5	650	62.6	680	68.9
28300	3768	353	18.7	402	24.4	445	30.1	486	36.1	524	42.0	558	47.9	593	54.3	625	60.6	656	66.9	685	73.3
29750	3961	366	21.1	413	27.1	455	33.1	495	39.3	533	45.6	567	51.8	599	58.1	632	64.8	662	71.4	691	78.1

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	1597	642	33.6	673	37.7	703	42.0	731	46.4												
14525	1934	645	37.7	675	42.1	705	46.7	733	51.5	760	56.3	787	61.3	812	66.3	837	71.5	861	76.7	884	82.0
17050	2270	650	42.9	680	47.6	709	52.4	736	57.2	763	62.0	789	67.2	814	72.6	839	78.1	863	83.7	886	89.4
19575	2606	656	48.6	685	53.5	714	58.7	742	64.0	768	69.4	794	74.8	818	80.2	842	85.7	866	91.3	888	96.9
22100	2942	664	55.4	693	60.6	721	66.0	747	71.3	773	76.9	799	82.8	824	88.7	847	94.7	871	101	893	107
24625	3278	673	62.4	702	68.3	729	74.1	756	80.0	781	85.9	806	91.8	829	97.8	853	104	876	110	899	117
27150	3615	681	69.8	710	76.2	738	82.7	764	89.1	789	95.6	814	102	838	109	861	115	883	122	905	128
29675	3951	691	77.8	719	84.5	746	91.5	772	98.6	798	106	822	113	846	120	869	127	891	134	913	141
32200	4287	702	86.7	729	93.9	755	101	781	108	806	116	831	124	855	131	878	139	900	147	922	154
34725	4623	713	96.0	740	104	766	112	792	119	816	127	839	135	863	143	886	151	908	160	930	168
37250	4960	725	106	751	114	777	123	803	131	827	139	850	148	873	156	895	164	917	173	939	182
39775	5296	740	118	764	126	789	134	814	143	838	152	861	161	884	170	905	179	927	188	947	197
42300	5632	755	130	779	139	803	148	826	156	849	166	872	175	895	185	916	194	938	204	958	213
44825	5968	770	143	794	153	818	162	840	171	862	181	883	190	906	200	928	210	949	220	969	230
47350	6304	785	157	809	167	833	177	855	187	877	197	898	207	918	216	939	226	960	237	980	248
49875	6641	801	172	825	183	848	193	870	204	892	214	913	225	933	235	953	245	972	255	992	266

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	2130	885	86.4	908	92.0	930	97.7	951	104	972	109	993	115								
19250	2563	888	95.9	911	102	933	108	954	115	975	121	996	127	1036	140	1074	154	1111	167	1147	181
22500	2996	894	108	916	115	938	121	959	127	979	134	999	140	1039	154	1077	168	1114	182	1150	197
25750	3428	901	122	923	128	944	135	965	142	986	149	1006	156	1045	171	1082	185	1119	199	1154	214
29000	3861	911	137	932	144	953	151	973	158	993	165	1013	173	1052	188	1089	204	1125	220	1160	236
32250	4294	922	154	943	162	964	170	984	177	1003	185	1023	193	1060	208	1096	224	1132	241	1167	258
35500	4727	933	172	954	180	974	189	995	197	1014	206	1034	214	1071	231	1107	248	1142	265	1175	282
38750	5159	944	190	965	200	985	209	1006	218	1025	227	1044	236	1082	255	1118	273	1152	292	1186	310
42000	5592	957	211	977	220	997	230	1017	239	1036	249	1055	259	1093	279	1129	299	1163	319		
45250	6025	971	233	991	243	1011	253	1030	263	1049	273	1067	283	1104	304	1140	326	1174	347		
48500	6458	986	256	1006	267	1025	278	1044	289	1063	300	1081	310	1117	332	1151	354	1185	376		
51750	6890	1002	281	1020	292	1040	304	1059	315	1077	327	1096	339	1131	362	1165	385				
55000	7323	1021	310	1039	321	1057	333	1074	344	1092	356	1110	368	1145	393	1179	418				
58250	7756	1040	340	1058	352	1076	364	1093	376	1110	388	1126	400	1160	425						
61500	8189	1060	372	1078	385	1095	398	1112	411	1129	424	1145	436	1177	462						
64750	8621	1079	406	1097	420	1115	434	1132	447	1148	461	1165	474								

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 94.7)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
250	100	100	91	85	81	74	69	65	64	83
	70	91	82	77	72	66	62	57	51	75
	40	84	77	72	67	63	59	53	44	70
	20	83	76	70	66	63	59	52	43	69
	0	85	77	72	67	63	58	51	43	70
350	100	115	103	94	92	85	79	75	72	95
	70	104	91	87	84	76	70	66	63	86
	40	95	86	79	74	69	65	60	54	78
	20	96	84	76	71	67	64	58	52	76
	0	108	86	78	72	68	63	58	53	83
500	100	115	108	104	101	97	91	86	82	103
	70	109	101	96	95	88	81	77	75	95
	40	103	94	89	86	80	75	71	69	88
	20	101	94	86	81	76	72	69	67	85
	0	108	102	90	81	76	71	66	63	89
650	100	116	114	109	107	104	99	95	92	109
	70	111	106	101	100	95	90	86	84	101
	40	106	101	96	93	88	83	80	79	95
	20	102	100	95	89	84	80	78	77	92
	0	106	105	99	91	85	81	79	78	95
900	100	126	123	119	115	113	109	104	100	118
	70	124	117	109	107	105	99	94	92	110
	40	120	112	105	102	98	92	88	86	104
	20	116	109	105	98	93	89	85	85	102
	0	118	113	109	102	94	90	86	86	105
1187	100	132	129	126	122	120	116	112	108	125
	70	131	123	118	114	113	108	102	99	118
	40	127	118	113	109	106	101	95	93	112
	20	123	115	113	107	101	96	92	91	109
	0	125	119	117	111	103	97	93	92	113

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
250	100	108	99	90	83	76	69	64	62	88
	70	99	91	83	76	71	63	57	50	81
	40	95	87	79	73	69	61	54	47	77
	20	95	86	77	72	69	61	54	48	76
	0	92	85	76	72	70	60	54	47	76
350	100	119	110	99	93	87	79	74	70	99
	70	107	98	90	82	76	70	64	60	88
	40	103	95	84	76	71	66	61	58	83
	20	102	93	80	73	69	63	57	52	81
	0	103	94	82	74	70	64	57	51	83
500	100	125	118	110	102	99	92	86	82	107
	70	118	110	101	95	89	82	77	73	100
	40	113	105	95	86	81	77	73	70	94
	20	111	105	93	83	78	73	68	64	92
	0	112	106	94	83	78	72	66	61	93
650	100	129	128	117	110	106	102	98	94	116
	70	121	117	107	102	97	92	87	83	106
	40	115	113	103	95	90	86	82	78	101
	20	116	115	101	90	85	81	78	75	101
	0	116	114	102	92	85	79	74	69	101
900	100	135	137	131	119	115	111	107	103	126
	70	134	127	119	110	107	102	96	92	116
	40	128	122	117	104	100	95	91	87	112
	20	126	123	118	100	95	90	86	83	112
	0	126	123	117	101	95	88	83	79	112
1187	100	140	142	140	129	123	119	114	110	134
	70	141	134	128	119	114	110	104	100	124
	40	135	128	126	114	107	103	99	95	120
	20	132	129	128	112	103	98	93	90	121
	0	132	129	127	112	104	97	91	86	120

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

41 IPW

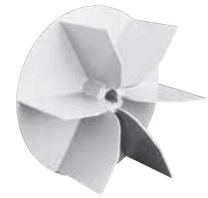
Wheel Diameter = 71¼ in.

Outlet Area = 9.09 ft²

Tip Speed = 18.65 x RPM

Minimum Starting HP = 50

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	911	400	405T	NA
Heavy	1072	700	405T	NA

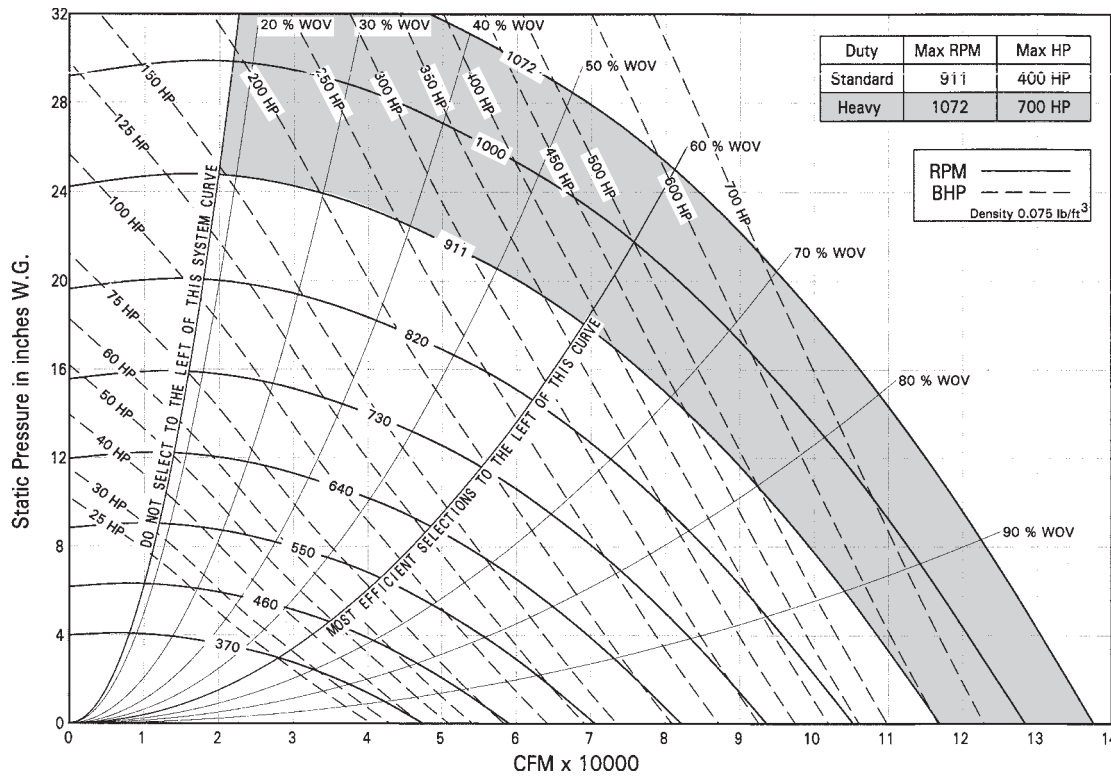


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1088	193	2.55	263	4.99	319	7.74	367	10.8	410	14.2	448	17.8								
12000	1305	199	3.19	268	6.01	322	9.00	369	12.3	411	15.8	450	19.7	485	23.8	518	28.0	549	32.4		
14000	1523	205	3.93	273	7.13	326	10.5	372	14.0	414	17.8	452	21.7	487	25.9	520	30.5	551	35.2	580	40.1
16000	1741	214	4.85	278	8.35	331	12.1	377	15.9	417	19.9	455	24.2	489	28.6	521	33.2	552	38.0	581	43.2
18000	1958	222	5.90	284	9.76	336	13.9	382	18.1	421	22.4	458	26.8	492	31.6	524	36.5	554	41.5	583	46.6
20000	2176	232	7.08	291	11.3	342	15.8	386	20.4	426	25.2	462	29.9	496	34.8	527	39.9	557	45.3	586	50.7
22000	2393	242	8.50	299	13.1	348	17.9	392	22.8	431	28.0	467	33.2	500	38.5	531	43.8	560	49.1	589	55.0
24000	2611	253	10.1	308	15.1	355	20.1	398	25.5	436	31.0	472	36.6	505	42.3	536	48.1	565	53.8	593	59.6
26000	2829	265	12.0	317	17.3	363	22.7	404	28.4	442	34.2	477	40.2	510	46.3	541	52.5	570	58.7	597	64.9
28000	3046	276	14.0	326	19.7	372	25.6	411	31.4	448	37.7	483	44.0	515	50.5	546	57.1	575	63.7	602	70.4
30000	3264	289	16.3	337	22.4	380	28.7	419	35.0	455	41.4	489	48.2	521	54.9	551	61.8	580	68.9	607	76.0
32000	3482	302	18.9	348	25.4	389	32.0	428	38.8	462	45.4	496	52.5	527	59.7	557	66.8	585	74.2	612	81.8
34000	3699	315	21.9	359	28.7	399	35.6	436	42.8	470	49.9	502	57.1	534	64.7	563	72.3	590	79.9	617	87.8
36000	3917	328	25.1	370	32.3	409	39.6	445	47.2	479	54.7	510	62.2	540	70.0	569	78.1	597	86.1	623	94.1
38000	4134	341	28.6	382	36.2	420	43.9	454	51.8	488	59.8	519	67.8	547	75.6	576	84.0	603	92.6	629	101
40000	4352	355	32.5	394	40.5	431	48.7	464	56.7	497	65.2	527	73.7	556	81.9	582	90.2	610	99.2	636	108

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	1632	580	41.6	608	46.8	635	52.0	661	57.4	685	63.0										
18000	1958	583	46.6	610	51.9	637	57.6	663	63.5	687	69.5	711	75.6	734	81.8	756	88.1	778	94.6	799	101
21000	2285	587	52.8	615	58.6	641	64.4	665	70.3	689	76.3	713	82.6	736	89.2	758	96.0	780	103	801	110
24000	2611	593	59.6	619	65.6	645	72.0	670	78.5	694	85.0	717	91.7	739	98.3	761	105	782	112	803	119
27000	2937	600	67.6	626	74.1	651	80.6	675	87.1	698	94.0	722	101	744	108	766	116	787	123	807	131
30000	3264	607	76.0	633	83.1	658	90.3	682	97.4	705	105	727	112	749	119	770	127	791	135	812	143
33000	3590	615	84.8	641	92.6	666	100	690	108	713	116	735	124	756	132	777	140	797	148	817	156
36000	3917	623	94.1	648	102	673	111	697	119	720	128	742	136	764	145	784	154	805	162	824	171
39000	4243	633	105	657	113	681	122	705	131	727	140	750	149	771	159	792	168	812	177	832	186
42000	4570	642	116	667	125	691	134	713	144	735	153	757	163	778	173	799	183	819	193	839	203
45000	4896	652	127	677	137	700	147	723	158	745	168	766	178	786	188	807	198	827	209	846	219
48000	5223	665	141	687	151	710	161	733	172	755	183	776	193	796	204	816	215	835	226	854	236
51000	5549	678	155	700	166	722	176	743	187	764	198	785	210	806	221	825	233	845	244	863	256
54000	5875	691	171	714	182	735	193	755	204	775	215	795	227	815	239	835	251	854	263	873	276
57000	6202	705	187	727	199	748	211	768	223	788	235	807	246	825	258	845	271	864	284	883	296
60000	6528	718	204	740	217	761	230	781	242	801	255	820	267	838	280	856	292	874	304	892	318

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		26.0		28.0		30.0		32.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	2176	800	107	820	114	840	121	860	128	879	135	897	143								
24000	2611	803	119	823	126	843	134	862	142	881	150	900	158	936	174	971	190	1005	207	1037	224
28000	3046	809	135	828	142	848	150	867	158	885	166	904	174	939	190	974	208	1007	226	1040	244
32000	3482	815	151	834	159	854	168	873	176	891	185	910	194	945	211	979	229	1011	247	1043	265
36000	3917	824	171	843	179	862	188	880	197	898	205	916	214	951	233	985	253	1017	272	1049	292
40000	4352	834	192	853	201	872	211	890	220	908	230	925	239	959	259	992	278	1023	298	1055	319
44000	4787	844	214	863	224	882	234	900	245	918	255	935	266	969	287	1001	308	1033	329	1063	350
48000	5223	854	236	873	248	892	259	910	270	928	282	945	293	979	316	1011	339	1043	361		
52000	5658	866	262	885	274	902	285	920	297	938	309	955	321	989	346	1021	371	1052	395		
56000	6093	879	289	897	302	915	314	933	327	949	339	966	352	999	377	1031	404	1062	430		
60000	6528	892	318	910	331	928	345	945	358	962	372	979	385	1011	412	1042	439				
64000	6964	908	350	924	363	941	377	958	391	975	406	992	420	1024	449	1055	478				
68000	7399	925	385	941	399	957	413	973	427	988	441	1005	457	1037	487	1068	518				
72000	7834	942	423	959	438	975	453	990	468	1005	483	1020	497	1050	527						
76000	8269	960	463	976	479	992	495	1008	511	1023	526	1038	542	1067	573						
80000	8705	978	505	994	522	1010	539	1025	556	1040	573	1055	589								

Performance certified is for model IPW arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 128)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
225	100	99	91	85	80	74	69	66	65	83
	70	90	82	77	72	66	63	57	50	75
	40	84	77	72	67	63	59	52	43	70
	20	82	75	70	66	63	59	52	43	69
	0	85	77	72	67	63	58	51	43	70
300	100	112	100	94	90	83	77	74	71	93
	70	100	90	87	82	74	69	65	63	84
	40	93	84	78	73	68	63	58	53	76
	20	93	82	74	70	66	62	57	51	74
	0	101	84	76	71	66	62	56	51	78
450	100	114	108	104	101	96	91	86	82	103
	70	109	100	97	95	88	81	78	75	95
	40	102	94	90	86	80	75	71	70	88
	20	101	93	86	81	76	72	69	68	85
	0	108	101	89	81	76	71	66	63	89
600	100	117	115	110	108	105	100	96	93	110
	70	112	106	102	101	96	90	87	85	102
	40	107	102	97	94	89	84	81	80	96
	20	103	101	95	89	85	80	79	79	93
	0	107	106	99	92	86	82	80	80	96
800	100	125	123	118	115	112	108	104	100	118
	70	122	116	109	108	105	99	94	92	110
	40	118	111	105	102	98	92	88	87	104
	20	114	109	104	98	93	88	85	85	101
	0	117	113	109	101	94	89	87	86	104
1072	100	133	130	127	122	120	117	112	108	126
	70	133	125	117	115	113	108	102	100	118
	40	128	120	113	109	106	101	96	94	112
	20	124	116	113	107	101	97	92	92	110
	0	126	120	118	110	103	98	93	93	113

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
225	100	108	99	90	82	75	69	65	62	88
	70	99	91	83	76	70	63	57	50	80
	40	94	86	78	73	69	61	54	47	77
	20	94	85	77	73	69	61	54	48	76
	0	92	84	76	73	69	60	54	47	76
300	100	117	107	97	91	85	78	73	69	97
	70	105	96	88	81	74	68	63	58	86
	40	101	92	81	75	70	64	60	57	81
	20	101	90	77	72	67	61	56	51	79
	0	101	91	79	73	68	62	56	50	80
450	100	124	118	109	103	98	92	86	82	107
	70	118	109	101	95	89	82	77	73	99
	40	113	104	94	86	82	77	73	70	93
	20	111	104	92	83	78	73	69	65	92
	0	113	105	92	83	78	72	66	61	93
600	100	131	129	117	111	107	103	99	95	117
	70	122	117	107	103	98	93	88	84	106
	40	116	114	102	96	91	87	83	79	102
	20	117	116	100	91	86	82	79	76	102
	0	117	115	101	92	85	80	75	70	101
800	100	136	136	129	119	115	111	106	103	125
	70	132	126	118	110	107	101	96	92	116
	40	127	122	115	103	99	95	91	87	111
	20	125	123	115	99	94	90	86	83	111
	0	126	123	114	101	95	88	83	78	111
1072	100	142	144	140	127	123	119	114	111	135
	70	142	135	128	118	115	110	104	100	125
	40	137	129	126	112	107	103	99	95	120
	20	134	130	128	110	103	98	94	91	121
	0	133	130	127	111	104	97	91	87	121

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

5 IPA

Wheel Diameter = 8³/₄ in.

Outlet Area = 0.12 ft²

Tip Speed = 2.29 x RPM

Minimum Starting HP = ¼

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
5000	2	145T	145T

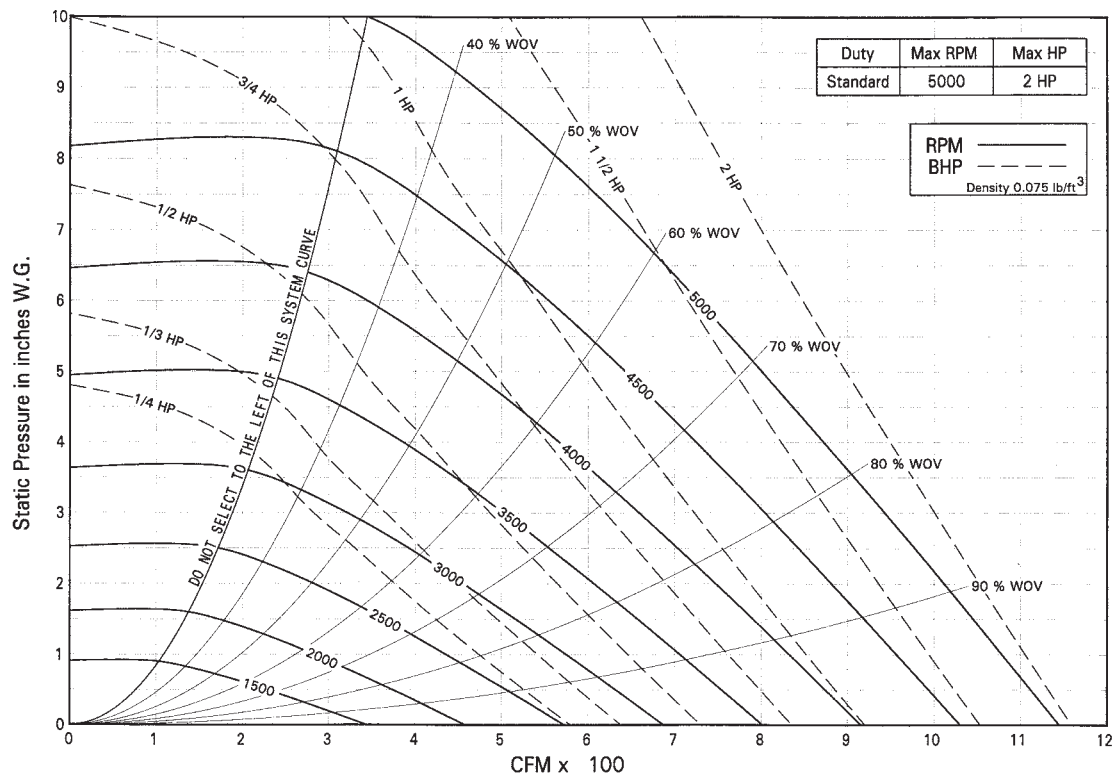


CFM	OV	Static Pressure in Inches wg																			
		0.25		0.50		0.75		1.00		1.25		1.50		1.75		2.00		2.25		2.50	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
100	719	884	0.01	1156	0.01	1377	0.02														
120	863	937	0.01	1199	0.02	1412	0.03	1595	0.04												
140	1007	995	0.01	1246	0.02	1453	0.03	1633	0.04	1794	0.05	1945	0.06								
160	1151	1057	0.01	1299	0.02	1499	0.04	1674	0.05	1832	0.06	1978	0.07	2113	0.08	2244	0.10				
180	1294	1121	0.02	1354	0.03	1549	0.04	1720	0.05	1874	0.07	2016	0.08	2150	0.09	2275	0.11	2393	0.12	2511	0.14
200	1438	1188	0.02	1414	0.03	1602	0.05	1768	0.06	1920	0.07	2060	0.09	2189	0.10	2313	0.12	2431	0.13	2542	0.15
220	1582	1256	0.03	1475	0.04	1657	0.05	1821	0.07	1967	0.08	2106	0.10	2234	0.11	2353	0.13	2469	0.15	2580	0.16
240	1726	1326	0.03	1538	0.05	1716	0.06	1875	0.08	2020	0.09	2152	0.11	2280	0.12	2399	0.14	2511	0.16	2618	0.18
260	1870	1398	0.04	1603	0.05	1777	0.07	1931	0.09	2074	0.10	2205	0.12	2327	0.14	2445	0.15	2557	0.17	2663	0.19
280	2014	1472	0.04	1670	0.06	1840	0.08	1991	0.10	2128	0.11	2258	0.13	2379	0.15	2493	0.17	2603	0.19	2709	0.21
300	2158	1547	0.05	1738	0.07	1903	0.09	2052	0.11	2186	0.13	2313	0.14	2433	0.16	2545	0.18	2652	0.20	2756	0.22
320	2302	1622	0.06	1807	0.08	1969	0.10	2114	0.12	2247	0.14	2369	0.16	2487	0.18	2599	0.20	2705	0.22	2805	0.24
340	2446	1699	0.07	1878	0.09	2036	0.11	2177	0.13	2308	0.15	2429	0.17	2542	0.19	2653	0.22	2758	0.24	2858	0.26
360	2589	1776	0.08	1950	0.10	2104	0.12	2242	0.15	2371	0.17	2490	0.19	2602	0.21	2708	0.23	2812	0.26	2912	0.28
380	2733	1855	0.09	2023	0.12	2172	0.14	2308	0.16	2434	0.18	2552	0.21	2663	0.23	2767	0.25	2867	0.28	2966	0.30
400	2877	1934	0.11	2097	0.13	2242	0.15	2376	0.18	2498	0.20	2615	0.23	2724	0.25	2828	0.27	2926	0.30	3021	0.32

CFM	OV	Static Pressure in Inches wg																			
		2.75		3.00		3.25		3.50		3.75		4.00		4.25		4.50		4.75		5.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	1438	2648	0.16	2754	0.18	2856	0.20														
225	1618	2695	0.18	2796	0.20	2892	0.22	2986	0.23	3081	0.25	3173	0.27	3262	0.29						
250	1798	2742	0.20	2843	0.22	2940	0.24	3033	0.26	3123	0.28	3210	0.30	3294	0.31	3379	0.34	3463	0.36	3545	0.38
275	1978	2798	0.22	2895	0.24	2988	0.26	3080	0.28	3170	0.30	3257	0.32	3341	0.34	3423	0.36	3503	0.39	3580	0.41
300	2158	2856	0.24	2952	0.27	3045	0.29	3134	0.31	3220	0.33	3305	0.35	3389	0.38	3470	0.40	3550	0.42	3627	0.44
325	2338	2914	0.27	3010	0.29	3102	0.31	3191	0.34	3277	0.36	3360	0.38	3441	0.41	3519	0.43	3597	0.45	3675	0.48
350	2517	2980	0.29	3072	0.32	3161	0.34	3249	0.36	3334	0.39	3417	0.41	3498	0.44	3576	0.46	3652	0.49	3726	0.51
375	2697	3047	0.32	3138	0.34	3225	0.37	3310	0.39	3393	0.42	3475	0.45	3555	0.47	3633	0.50	3709	0.53	3783	0.55
400	2877	3115	0.35	3205	0.38	3292	0.40	3376	0.43	3457	0.45	3536	0.48	3614	0.51	3691	0.54	3767	0.56	3841	0.59
425	3057	3184	0.38	3273	0.41	3359	0.44	3443	0.46	3524	0.49	3602	0.52	3678	0.55	3752	0.57	3825	0.60	3899	0.63
450	3237	3258	0.42	3343	0.44	3428	0.47	3511	0.50	3591	0.53	3669	0.56	3745	0.59	3818	0.62	3890	0.65	3961	0.68
475	3417	3334	0.45	3418	0.48	3500	0.51	3579	0.54	3659	0.57	3737	0.60	3812	0.63	3885	0.66	3957	0.69	4027	0.72
500	3597	3411	0.49	3494	0.52	3575	0.55	3653	0.58	3729	0.61	3805	0.65	3880	0.68	3953	0.71	4024	0.74	4094	0.77
525	3776	3488	0.53	3571	0.56	3651	0.60	3728	0.63	3803	0.66	3877	0.69	3949	0.73	4021	0.76	4092	0.79	4161	0.83
550	3956	3567	0.58	3648	0.61	3728	0.64	3804	0.68	3879	0.71	3952	0.74	4022	0.78	4091	0.81	4161	0.85	4229	0.88
575	4136	3646	0.62	3727	0.66	3805	0.69	3882	0.73	3955	0.76	4027	0.80	4098	0.83	4166	0.87	4233	0.90	4299	0.94

CFM	OV	Static Pressure in Inches wg																			
		5.25		5.50		6.00		6.50		7.00		7.50		8.00		8.50		9.00		9.50	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
275	1978	3656	0.43	3734	0.45	3885	0.50														
305	2194	3712	0.47	3786	0.49	3929	0.54	4067	0.59	4206	0.64	4341	0.70								
335	2410	3769	0.52	3843	0.54	3985	0.59	4122	0.64	4254	0.69	4381	0.74	4508	0.80	4634	0.86	4756	0.92		
365	2625	3833	0.56	3903	0.59	4043	0.64	4179	0.70	4311	0.75	4438	0.81	4561	0.86	4680	0.92	4796	0.97	4912	1.03
395	2841	3901	0.61	3972	0.64	4108	0.70	4240	0.76	4368	0.81	4495	0.87	4618	0.93	4737	0.99	4852	1.05	4965	1.11
425	3057	3971	0.66	4041	0.69	4177	0.75	4308	0.81	4434	0.88	4556	0.94	4675	1.00	4794	1.06	4909	1.13		
455	3273	4042	0.72	4111	0.75	4246	0.81	4377	0.87	4502	0.94	4624	1.00	4741	1.07	4856	1.14	4967	1.21		
485	3489	4122	0.78	4188	0.81	4318	0.87	4446	0.94	4572	1.01	4693	1.07	4810	1.14	4924	1.21				
515	3705	4202	0.84	4268	0.87	4397	0.94	4521	1.01	4642	1.08	4762	1.15	4879	1.22	4993	1.29				
545	3920	4283	0.90	4349	0.94	4477	1.01	4600	1.08	4719	1.15	4835	1.23	4949	1.30						
575	4136	4365	0.98	4431	1.01	4558	1.09	4681	1.16	4799	1.23	4914	1.31								
605	4352	4452	1.05	4514	1.09	4640	1.17	4762	1.24	4880	1.32	4994	1.40								
635	4568	4542	1.13	4604	1.17	4724	1.25	4844	1.33	4961	1.41										
665	4784	4633	1.22	4695	1.26	4814	1.34	4929	1.42												
695	5000	4725	1.31	4786	1.35	4905	1.43														
725	5215	4819	1.40	4879	1.45	4996	1.53														

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.228)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1200	100	89	87	75	67	61	52	43	38	74
	80	90	88	75	64	55	46	41	38	74
	60	90	87	75	61	50	44	41	38	74
	40	89	86	74	60	49	43	41	38	72
	30	90	85	74	60	49	43	41	38	72
1600	100	97	92	83	70	66	58	51	45	80
	80	97	92	83	69	62	53	47	41	80
	60	98	91	82	66	57	49	45	39	79
	40	99	91	82	65	54	47	45	39	79
	30	99	91	82	64	55	48	45	39	79
2100	100	92	91	81	76	71	66	59	53	80
	80	94	91	81	74	68	60	53	48	79
	60	95	90	81	72	64	55	50	45	78
	40	93	90	80	70	60	53	49	44	77
	30	94	89	81	70	61	53	49	44	77
2800	100	93	92	85	82	76	73	68	63	84
	80	94	92	82	79	74	67	61	56	82
	60	94	91	80	76	70	62	57	52	79
	40	91	89	79	75	67	59	54	51	78
	30	93	90	78	74	67	59	55	51	78
3800	100	108	102	90	90	83	79	78	72	92
	80	105	100	88	90	81	75	71	67	90
	60	105	99	87	85	77	71	66	61	88
	40	105	100	88	82	75	68	63	60	87
	30	107	100	87	82	75	67	63	60	88
5000	100	112	110	101	95	92	86	84	80	100
	80	110	108	99	95	91	83	78	74	98
	60	110	108	98	91	86	79	74	69	96
	40	110	108	99	90	84	77	71	67	96
	30	111	109	99	90	84	76	71	67	96

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1200	100	90	83	74	67	59	52	46	39	72
	80	88	84	74	63	53	47	44	39	71
	60	90	85	74	61	50	46	44	39	72
	40	90	83	72	61	50	46	44	39	71
	30	90	83	72	61	51	46	44	39	70
1600	100	94	87	82	73	65	60	53	45	77
	80	93	87	81	69	60	54	49	42	76
	60	93	84	78	66	56	50	48	41	74
	40	91	84	78	66	56	50	48	41	73
	30	90	84	78	65	56	51	48	41	73
2100	100	97	88	84	80	71	67	60	53	81
	80	100	89	83	76	67	61	54	48	80
	60	99	87	80	72	63	56	52	46	78
	40	98	86	79	71	61	56	52	45	77
	30	97	86	79	71	61	56	52	46	77
2800	100	95	88	90	86	78	75	68	61	87
	80	97	88	90	85	75	70	62	56	86
	60	95	86	87	82	72	66	58	53	83
	40	99	88	85	79	69	64	57	53	81
	30	97	87	85	79	69	64	57	53	81
3800	100	101	93	95	93	87	83	77	70	94
	80	100	92	95	95	86	80	72	65	94
	60	101	91	93	90	81	76	66	61	90
	40	102	92	94	88	79	73	64	60	89
	30	101	92	93	88	79	73	64	60	89
5000	100	106	103	100	100	96	91	85	79	101
	80	105	102	99	101	96	88	81	73	101
	60	106	101	97	97	91	84	76	69	97
	40	107	102	98	96	89	81	74	67	97
	30	105	102	98	96	89	81	74	67	96

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

7 IPA

Wheel Diameter = 12¹/₈ in.

Outlet Area = 0.26 ft²

Tip Speed = 3.17 x RPM

Minimum Starting HP = ¼

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
5000	10	215T	184T

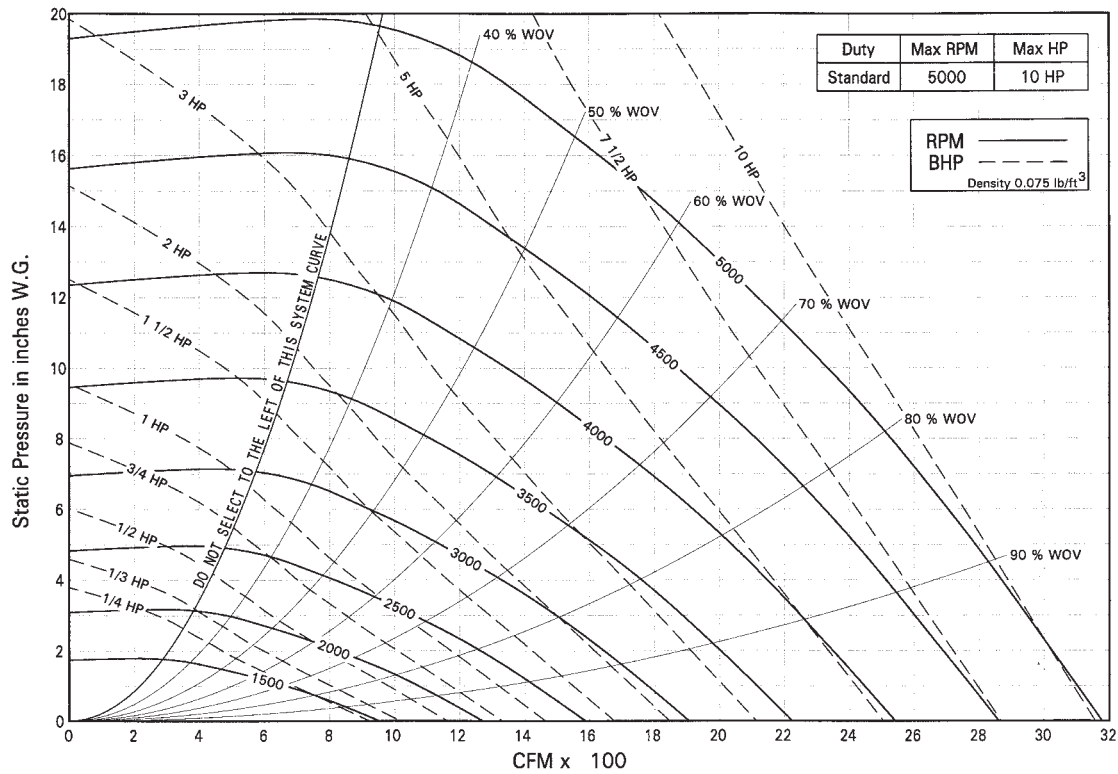


CFM	OV	Static Pressure in Inches wg																			
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
200	735	818	0.03																		
240	882	845	0.03	1136	0.06																
280	1029	877	0.04	1155	0.07	1388	0.11														
320	1176	910	0.05	1181	0.08	1403	0.13	1602	0.17												
360	1323	948	0.05	1211	0.10	1424	0.14	1615	0.19	1791	0.24										
400	1470	987	0.06	1244	0.11	1452	0.16	1636	0.21	1804	0.26	1964	0.32								
440	1617	1029	0.07	1277	0.12	1483	0.18	1661	0.23	1826	0.29	1978	0.35	2123	0.41	2262	0.48				
480	1764	1073	0.09	1314	0.14	1516	0.20	1690	0.26	1848	0.31	1999	0.38	2139	0.44	2273	0.51	2403	0.58		
520	1911	1117	0.10	1352	0.16	1549	0.22	1722	0.28	1878	0.34	2020	0.41	2160	0.48	2290	0.55	2414	0.62	2536	0.70
560	2058	1162	0.11	1391	0.18	1583	0.24	1755	0.31	1908	0.37	2050	0.44	2181	0.51	2311	0.59	2433	0.66	2549	0.74
600	2205	1211	0.13	1432	0.20	1621	0.26	1788	0.33	1941	0.41	2080	0.48	2210	0.55	2333	0.63	2455	0.71	2570	0.79
640	2352	1262	0.15	1475	0.22	1659	0.29	1821	0.36	1973	0.44	2112	0.52	2240	0.60	2362	0.67	2477	0.75	2591	0.84
680	2499	1313	0.17	1518	0.24	1698	0.32	1859	0.40	2007	0.48	2145	0.56	2272	0.64	2392	0.72	2506	0.81	2615	0.89
720	2647	1366	0.19	1563	0.27	1738	0.35	1897	0.43	2041	0.51	2177	0.60	2305	0.69	2423	0.77	2536	0.86	2644	0.95
760	2794	1418	0.22	1607	0.30	1780	0.38	1936	0.47	2078	0.55	2211	0.64	2337	0.73	2456	0.82	2568	0.92	2674	1.01
800	2941	1472	0.24	1653	0.33	1824	0.42	1975	0.51	2117	0.60	2246	0.69	2371	0.78	2489	0.88	2600	0.97	2706	1.07

CFM	OV	Static Pressure in Inches wg																			
		5.5		6.0		6.5		7.0		7.5		8.0		8.5		9.0		9.5		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
525	1930	2655	0.78																		
565	2077	2666	0.83	2777	0.91	2884	0.99														
605	2224	2683	0.88	2788	0.96	2895	1.05	2998	1.14	3098	1.23										
645	2371	2704	0.93	2809	1.02	2910	1.11	3009	1.20	3109	1.29	3205	1.39	3298	1.48						
685	2518	2725	0.98	2830	1.08	2931	1.17	3028	1.26	3122	1.36	3216	1.46	3309	1.56	3400	1.66	3488	1.76	3574	1.86
725	2665	2751	1.04	2851	1.14	2952	1.23	3049	1.33	3143	1.43	3233	1.53	3321	1.63	3411	1.74	3499	1.84	3584	1.95
765	2812	2781	1.11	2879	1.20	2974	1.30	3070	1.40	3164	1.50	3254	1.61	3342	1.71	3427	1.82	3510	1.92	3595	2.03
805	2959	2810	1.18	2909	1.28	3003	1.37	3094	1.47	3185	1.58	3276	1.68	3363	1.79	3448	1.90	3531	2.01	3612	2.13
845	3106	2842	1.25	2939	1.35	3033	1.45	3124	1.56	3211	1.66	3297	1.76	3384	1.88	3470	1.99	3552	2.11	3633	2.22
885	3253	2875	1.32	2971	1.43	3063	1.54	3153	1.64	3241	1.75	3326	1.86	3408	1.97	3491	2.08	3574	2.20	3654	2.32
925	3400	2907	1.39	3003	1.50	3095	1.62	3184	1.73	3271	1.84	3355	1.95	3438	2.07	3518	2.18	3595	2.29	3675	2.42
965	3547	2940	1.47	3036	1.58	3128	1.70	3216	1.82	3302	1.94	3385	2.05	3467	2.17	3547	2.29	3625	2.41	3700	2.52
1005	3694	2974	1.55	3069	1.67	3160	1.79	3249	1.91	3334	2.03	3417	2.15	3497	2.28	3577	2.40	3654	2.52	3730	2.64
1045	3841	3007	1.63	3102	1.75	3193	1.88	3281	2.00	3366	2.13	3449	2.25	3529	2.38	3607	2.51	3684	2.64	3760	2.77
1085	3988	3043	1.71	3135	1.84	3226	1.97	3314	2.10	3399	2.23	3482	2.36	3562	2.49	3639	2.62	3715	2.76	3789	2.89
1125	4136	3081	1.80	3170	1.93	3260	2.06	3347	2.20	3432	2.33	3514	2.47	3594	2.60	3672	2.74	3747	2.88	3821	3.01

CFM	OV	Static Pressure in Inches wg																			
		10.5		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	2941	3689	2.23	3770	2.34	3928	2.57	4080	2.81												
840	3088	3709	2.32	3786	2.44	3939	2.68	4091	2.92	4236	3.17	4377	3.42								
880	3235	3730	2.43	3807	2.55	3956	2.79	4102	3.04	4247	3.29	4388	3.55	4524	3.81						
920	3382	3751	2.53	3828	2.65	3977	2.90	4119	3.16	4258	3.42	4399	3.68	4535	3.95	4667	4.22	4795	4.50		
960	3529	3773	2.63	3850	2.76	3998	3.02	4141	3.28	4278	3.55	4410	3.81	4546	4.09	4678	4.37	4806	4.65	4930	4.94
1000	3676	3800	2.75	3872	2.87	4019	3.14	4162	3.41	4299	3.68	4431	3.96	4559	4.23	4689	4.52	4817	4.81	4941	5.10
1040	3823	3830	2.88	3902	3.00	4041	3.26	4183	3.53	4320	3.81	4452	4.10	4580	4.38	4705	4.67	4828	4.97	4952	5.27
1080	3970	3859	3.01	3931	3.14	4071	3.40	4204	3.66	4341	3.95	4474	4.24	4601	4.54	4726	4.83	4846	5.13	4963	5.44
1120	4117	3889	3.14	3961	3.27	4100	3.54	4234	3.82	4363	4.09	4495	4.39	4623	4.69	4747	5.00	4867	5.30	4984	5.61
1160	4264	3921	3.27	3992	3.41	4130	3.69	4263	3.97	4392	4.26	4516	4.54	4644	4.85	4768	5.16	4888	5.48		
1200	4411	3954	3.40	4024	3.55	4160	3.84	4293	4.13	4421	4.42	4546	4.72	4666	5.01	4789	5.33	4910	5.65		
1240	4558	3986	3.54	4056	3.69	4192	3.99	4323	4.30	4451	4.60	4575	4.90	4695	5.20	4812	5.50	4931	5.83		
1280	4705	4019	3.68	4089	3.83	4224	4.14	4355	4.46	4481	4.77	4605	5.08	4725	5.39	4841	5.70	4954	6.02		
1320	4852	4052	3.82	4122	3.98	4257	4.30	4387	4.62	4513	4.94	4635	5.27	4754	5.59	4870	5.91	4983	6.23		
1360	4999	4085	3.97	4155	4.13	4290	4.46	4419	4.79	4545	5.12	4666	5.45	4784	5.79	4900	6.12				
1400	5147	4118	4.12	4188	4.29	4322	4.62	4452	4.96	4577	5.30	4698	5.64	4815	5.99	4930	6.33				

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.635)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1200	100	96	91	79	72	66	65	63	57	79
	80	96	90	76	69	65	64	62	57	77
	60	96	90	75	69	64	63	62	57	77
	40	95	89	73	69	64	63	63	57	77
	30	95	89	73	69	64	63	63	57	77
1600	100	103	96	89	77	72	69	67	63	86
	80	103	96	87	75	69	67	65	60	84
	60	104	96	86	73	68	66	64	60	84
	40	103	94	84	73	67	66	64	60	83
	30	103	93	83	72	67	66	65	60	82
2100	100	109	101	95	85	77	74	73	70	91
	80	109	100	91	81	73	71	69	66	89
	60	110	101	88	79	71	69	66	64	89
	40	108	99	84	77	70	68	66	64	87
	30	108	98	84	77	70	68	66	64	86
2800	100	114	105	97	92	84	80	79	77	96
	80	114	104	95	90	80	77	75	72	94
	60	114	104	93	87	78	74	71	69	93
	40	114	103	91	85	76	71	68	67	92
	30	114	102	87	83	76	72	69	67	91
3800	100	113	108	102	104	94	87	86	86	103
	80	113	107	100	96	89	84	82	81	98
	60	113	106	98	94	86	81	78	75	97
	40	115	106	96	95	85	78	75	72	97
	30	115	106	96	95	85	78	75	72	97
5000	100	118	117	110	108	105	94	92	92	110
	80	118	117	108	104	99	91	89	87	107
	60	118	116	106	101	97	88	85	82	105
	40	119	117	105	100	97	86	82	79	105
	30	120	118	105	100	97	86	82	79	105

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1200	100	90	87	83	78	68	65	64	56	79
	80	90	87	80	75	66	65	64	55	77
	60	90	86	78	73	64	64	64	56	76
	40	89	86	78	74	64	64	64	56	76
	30	88	85	78	74	64	64	64	56	76
1600	100	99	97	94	81	73	70	67	61	88
	80	98	96	93	79	71	69	66	59	87
	60	97	95	91	78	69	68	66	59	85
	40	95	92	87	76	69	68	66	59	82
	30	95	92	87	76	69	68	66	59	82
2100	100	104	96	100	90	80	76	72	67	93
	80	101	94	96	87	77	74	69	65	90
	60	100	93	96	85	74	71	68	64	89
	40	101	92	90	79	70	69	67	63	85
	30	101	92	90	79	70	70	67	63	85
2800	100	107	100	102	99	88	83	78	74	99
	80	106	100	101	96	86	81	75	72	97
	60	106	98	99	94	83	78	72	69	95
	40	106	98	98	92	81	75	70	67	93
	30	109	97	95	90	78	73	70	67	91
3800	100	111	105	106	106	99	92	86	82	106
	80	110	105	106	102	95	89	84	80	103
	60	110	103	103	96	91	85	80	76	99
	40	108	102	102	98	89	82	77	76	99
	30	108	103	102	98	89	82	77	75	98
5000	100	116	115	110	113	109	100	94	90	113
	80	115	115	110	111	105	97	92	87	111
	60	115	113	107	106	100	93	88	83	107
	40	113	112	107	107	101	90	85	82	107
	30	113	112	107	107	100	90	84	81	107

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

9 IPA

Wheel Diameter = 15⁵/₈ in.

Outlet Area = 0.44 ft²

Tip Speed = 4.09 x RPM

Minimum Starting HP = 1/3

Maximum		Max. Motor Frame Size	
RPM	MHP	Arr. 9	Arr. 10
4156	20	256T	215T

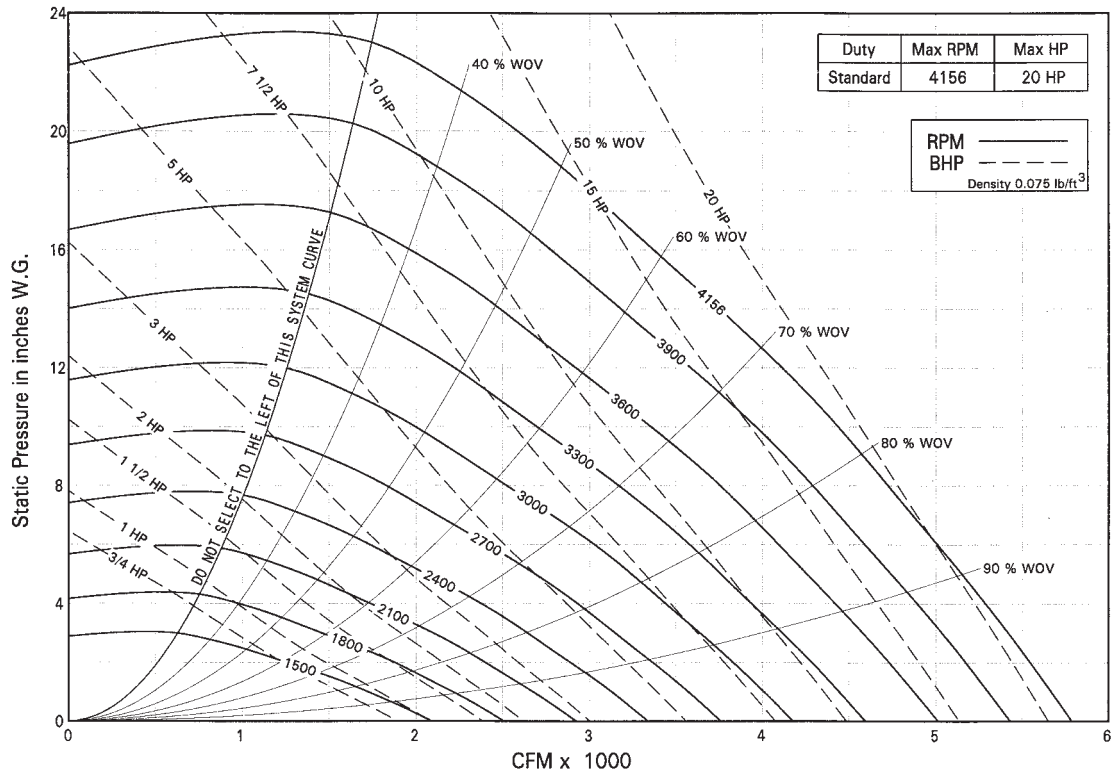


CFM	OV	Static Pressure in Inches wg																			
		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
300	677	623	0.04																		
400	902	654	0.05	875	0.10																
500	1128	693	0.07	903	0.13	1074	0.20														
600	1354	736	0.09	937	0.16	1102	0.23	1246	0.31	1375	0.40										
700	1580	782	0.11	977	0.19	1136	0.28	1275	0.36	1401	0.45	1517	0.55	1624	0.65						
800	1805	830	0.14	1020	0.23	1173	0.32	1309	0.42	1431	0.52	1544	0.62	1650	0.73	1750	0.84	1843	0.95		
900	2031	881	0.18	1064	0.28	1214	0.38	1345	0.48	1465	0.59	1576	0.70	1678	0.81	1776	0.93	1869	1.05	1958	1.18
1000	2257	933	0.21	1110	0.33	1258	0.44	1386	0.55	1501	0.67	1610	0.79	1711	0.91	1806	1.03	1896	1.16	1984	1.29
1100	2483	991	0.26	1159	0.38	1302	0.51	1428	0.63	1542	0.76	1646	0.88	1746	1.01	1840	1.15	1929	1.28	2014	1.42
1200	2708	1050	0.32	1209	0.45	1348	0.58	1472	0.72	1584	0.85	1687	0.99	1783	1.13	1874	1.27	1963	1.41	2047	1.56
1300	2934	1110	0.38	1259	0.52	1396	0.66	1517	0.81	1628	0.95	1729	1.10	1824	1.25	1913	1.40	1998	1.55	2081	1.71
1400	3160	1171	0.45	1312	0.60	1446	0.75	1564	0.91	1672	1.07	1773	1.22	1866	1.38	1954	1.54	2038	1.70	2118	1.87
1500	3386	1234	0.53	1370	0.69	1496	0.85	1612	1.02	1717	1.19	1817	1.36	1909	1.52	1996	1.69	2079	1.86	2158	2.04
1600	3611	1297	0.62	1428	0.79	1547	0.96	1661	1.14	1765	1.32	1861	1.50	1953	1.68	2040	1.86	2121	2.04	2199	2.22
1700	3837	1361	0.72	1487	0.90	1599	1.07	1711	1.27	1814	1.46	1908	1.65	1998	1.84	2083	2.03	2165	2.22	2242	2.41
1800	4063	1425	0.83	1547	1.02	1656	1.21	1762	1.40	1863	1.61	1956	1.81	2044	2.01	2128	2.22	2208	2.42	2285	2.62

CFM	OV	Static Pressure in Inches wg																			
		5.5		6.0		6.5		7.0		7.5		8.0		9.0		10.0		11.0		12.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	2257	2068	1.43	2148	1.57	2225	1.71	2299	1.85	2375	1.99										
1140	2573	2107	1.62	2186	1.76	2265	1.92	2336	2.07	2408	2.23	2477	2.38	2609	2.70						
1280	2889	2154	1.83	2231	1.99	2305	2.15	2375	2.31	2445	2.48	2514	2.65	2646	2.99	2771	3.34	2890	3.70	3005	4.07
1420	3205	2202	2.07	2279	2.24	2352	2.41	2422	2.58	2491	2.76	2557	2.94	2683	3.29	2808	3.67	2926	4.06	3040	4.45
1560	3521	2258	2.32	2330	2.51	2400	2.69	2470	2.88	2538	3.06	2604	3.26	2730	3.64	2849	4.03	2964	4.42	3077	4.84
1700	3837	2316	2.60	2388	2.80	2457	3.00	2523	3.19	2588	3.39	2652	3.59	2777	4.01	2896	4.42	3010	4.84	3118	5.27
1840	4153	2376	2.91	2446	3.12	2514	3.33	2581	3.54	2645	3.75	2707	3.96	2826	4.39	2944	4.84	3057	5.28	3165	5.74
1980	4469	2437	3.24	2507	3.46	2574	3.69	2639	3.91	2702	4.13	2764	4.36	2882	4.82	2995	5.28	3105	5.75	3213	6.23
2120	4785	2499	3.60	2569	3.83	2635	4.07	2700	4.31	2762	4.55	2823	4.79	2940	5.27	3052	5.76	3159	6.25	3261	6.74
2260	5101	2564	3.98	2631	4.23	2697	4.48	2761	4.74	2823	4.99	2883	5.24	2999	5.75	3110	6.26	3216	6.78	3318	7.31
2400	5417	2631	4.38	2697	4.65	2760	4.92	2824	5.19	2885	5.46	2945	5.73	3060	6.27	3169	6.81	3274	7.35	3375	7.90
2540	5733	2699	4.81	2764	5.10	2827	5.39	2888	5.68	2948	5.96	3007	6.25	3121	6.81	3230	7.38	3333	7.95	3433	8.53
2680	6049	2768	5.28	2833	5.58	2895	5.88	2955	6.18	3014	6.49	3071	6.79	3183	7.39	3291	7.99	3394	8.59	3493	9.19
2820	6365	2838	5.77	2902	6.09	2963	6.41	3023	6.73	3081	7.05	3137	7.36	3246	8.00	3353	8.63	3456	9.26	3554	9.90
2960	6681	2909	6.31	2972	6.64	3033	6.97	3092	7.30	3149	7.64	3205	7.97	3313	8.64	3416	9.31	3518	9.97	3616	10.6
3100	6997	2981	6.87	3043	7.22	3103	7.57	3161	7.92	3218	8.27	3273	8.62	3380	9.32	3483	10.0	3581	10.7	3678	11.4

CFM	OV	Static Pressure in Inches wg																			
		13.0		14.0		15.0		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400	3160	3144	4.78	3248	5.18																
1560	3521	3186	5.26	3290	5.69	3392	6.12	3489	6.55	3584	7.00	3680	7.45								
1720	3882	3229	5.77	3333	6.22	3434	6.68	3532	7.14	3626	7.61	3718	8.09	3808	8.57	3895	9.05	3980	9.54	4068	10.1
1880	4243	3283	6.34	3383	6.80	3480	7.28	3574	7.76	3669	8.26	3761	8.76	3850	9.27	3937	9.78	4022	10.3	4105	10.8
2040	4604	3337	6.94	3437	7.44	3533	7.94	3627	8.45	3717	8.96	3805	9.47	3893	10.0	3980	10.5	4064	11.1	4147	11.6
2200	4966	3392	7.58	3492	8.11	3588	8.64	3681	9.18	3771	9.72	3859	10.3	3944	10.8	4028	11.4	4109	11.9		
2360	5327	3456	8.27	3551	8.82	3643	9.38	3735	9.95	3826	10.5	3913	11.1	3998	11.7	4082	12.3				
2520	5688	3522	9.01	3616	9.59	3707	10.2	3795	10.8	3881	11.4	3968	12.0	4053	12.6	4136	13.2				
2680	6049	3589	9.80	3682	10.4	3772	11.0	3860	11.6	3945	12.3	4028	12.9	4109	13.5						
2840	6410	3658	10.6	3750	11.3	3839	11.9	3926	12.6	4010	13.2	4093	13.9								
3000	6772	3728	11.5	3819	12.2	3907	12.9	3993	13.5	4077	14.2										
3160	7133	3799	12.5	3889	13.2	3977	13.9	4062	14.6	4145	15.3										
3320	7494	3870	13.5	3960	14.2	4047	14.9	4132	15.7												
3480	7855	3945	14.5	4032	15.3	4119	16.0														
3640	8216	4021	15.6	4107	16.4																
3800	8577	4099	16.7																		

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 1.39)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
1000	100	91	81	77	69	65	63	56	51	74
	80	91	79	74	66	61	58	52	47	71
	60	92	78	74	62	57	54	50	42	71
	40	89	74	72	59	54	53	48	41	68
	30	89	74	72	59	54	53	48	41	68
1300	100	96	91	84	78	72	69	64	58	82
	80	96	89	82	75	69	65	60	55	79
	60	97	89	81	72	65	61	57	51	78
	40	94	86	79	70	62	59	56	49	75
	30	94	86	78	70	62	59	56	49	75
800	100	104	101	99	90	80	78	74	69	94
	80	102	98	92	85	77	74	69	64	88
	60	104	99	87	80	73	69	64	59	86
	40	102	96	81	77	69	65	61	56	83
	30	101	96	81	76	70	65	61	56	83
2400	100	107	102	98	93	87	84	83	78	95
	80	105	100	95	89	84	81	78	73	92
	60	106	99	91	86	80	76	72	67	90
	40	103	99	90	84	77	72	67	64	88
	30	103	100	90	84	77	72	67	64	88
3200	100	112	108	107	106	94	91	90	87	105
	80	110	106	102	100	91	88	85	81	100
	60	110	106	100	96	88	84	80	75	98
	40	108	106	99	95	86	81	76	73	97
	30	110	106	100	95	86	81	77	74	97
4156	100	116	117	111	116	102	97	96	94	114
	80	115	115	108	108	98	94	92	89	108
	60	114	115	107	104	95	90	87	82	105
	40	113	114	107	103	94	88	84	79	104
	30	114	115	108	104	94	88	84	81	105

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
1000	100	92	90	85	74	67	64	58	52	80
	80	89	86	81	71	63	59	55	49	76
	60	88	83	79	69	61	58	54	50	74
	40	87	82	78	68	61	58	54	49	73
	30	86	82	78	68	60	58	54	49	73
1300	100	95	96	91	80	74	70	64	59	86
	80	94	95	89	78	71	65	59	54	84
	60	93	92	86	76	69	64	58	54	82
	40	92	91	85	75	68	63	58	53	80
	30	91	91	85	74	67	63	58	52	80
1800	100	101	102	100	92	83	79	73	68	95
	80	100	100	98	90	82	76	69	64	93
	60	100	99	97	89	81	74	67	63	92
	40	100	99	92	85	79	72	66	61	89
	30	99	98	90	84	77	70	65	61	87
2400	100	105	106	106	99	91	86	83	78	101
	80	107	106	104	97	91	84	78	74	99
	60	106	105	103	96	89	83	76	72	98
	40	104	103	100	93	86	80	73	69	96
	30	102	101	98	90	83	76	71	68	93
3200	100	109	112	113	111	100	94	91	87	111
	80	112	113	111	108	98	93	87	82	108
	60	112	112	109	106	98	92	85	80	106
	40	111	111	108	105	95	89	83	79	105
	30	110	111	108	105	95	88	82	78	105
4156	100	114	117	118	121	108	102	97	94	119
	80	117	119	117	116	106	101	95	89	116
	60	116	119	116	114	105	100	93	87	114
	40	115	117	115	113	103	98	91	85	113
	30	115	117	115	114	103	97	90	85	113

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

11 IPA

Wheel Diameter = 19 1/8 in.

Outlet Area = 0.66 ft²

Tip Speed = 5.01 x RPM

Minimum Starting HP = 1/2

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	3395	30	256T	254T
Heavy	3994	50	256T	NA

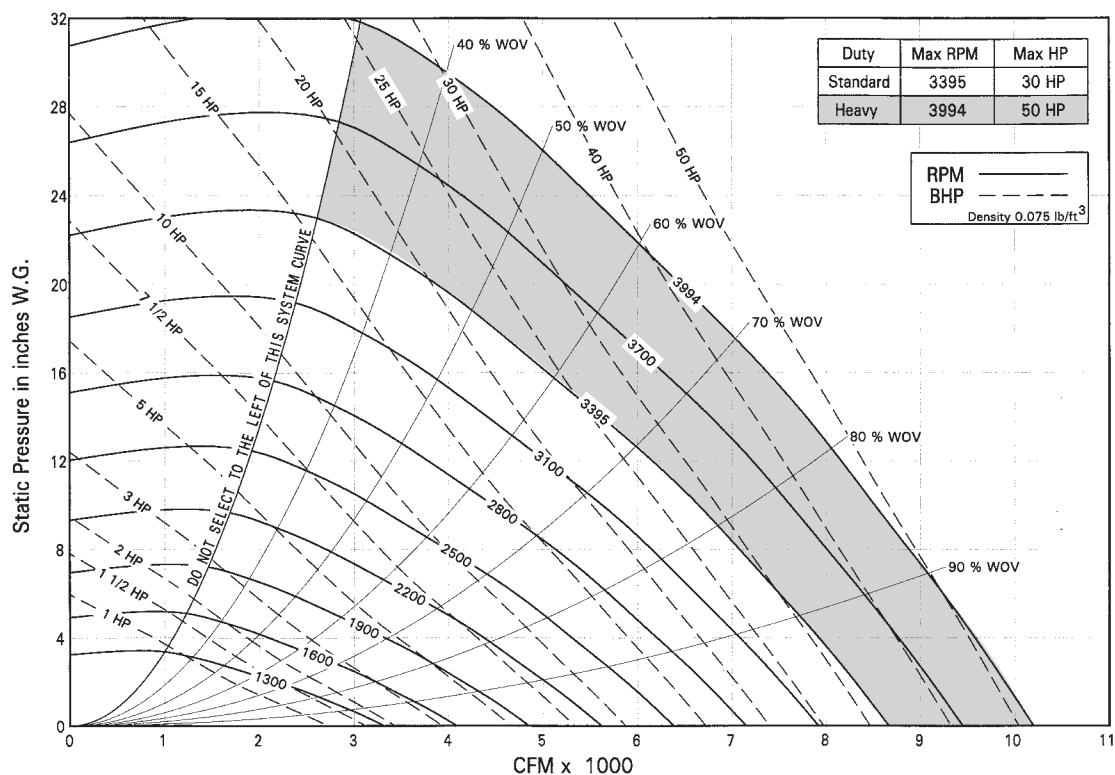


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
850	1287	756	0.22	1011	0.44																
1025	1553	793	0.28	1037	0.53	1236	0.81														
1200	1818	833	0.35	1069	0.63	1261	0.93	1430	1.26												
1375	2083	876	0.43	1105	0.74	1292	1.07	1455	1.42	1603	1.79	1738	2.18								
1550	2348	921	0.52	1144	0.87	1325	1.23	1485	1.61	1629	2.00	1763	2.42	1886	2.85	2004	3.29				
1725	2613	968	0.62	1185	1.01	1362	1.40	1518	1.81	1659	2.23	1788	2.67	1911	3.13	2026	3.60	2134	4.09	2240	4.59
1900	2878	1016	0.74	1228	1.17	1402	1.59	1553	2.03	1692	2.49	1820	2.95	1938	3.43	2051	3.93	2159	4.45	2261	4.97
2075	3143	1065	0.87	1272	1.34	1443	1.81	1592	2.28	1725	2.76	1852	3.26	1970	3.77	2079	4.29	2185	4.82	2286	5.38
2250	3409	1120	1.03	1318	1.53	1485	2.04	1632	2.54	1764	3.06	1885	3.58	2002	4.13	2111	4.68	2214	5.24	2312	5.80
2425	3674	1175	1.21	1365	1.74	1528	2.29	1673	2.83	1803	3.38	1923	3.94	2035	4.50	2144	5.09	2247	5.68	2344	6.28
2600	3939	1232	1.40	1413	1.97	1573	2.55	1715	3.14	1844	3.72	1963	4.31	2073	4.91	2177	5.52	2279	6.15	2376	6.78
2775	4204	1289	1.63	1461	2.22	1619	2.84	1758	3.47	1886	4.09	2003	4.72	2112	5.35	2215	5.99	2313	6.64	2409	7.30
2950	4469	1348	1.87	1511	2.50	1666	3.16	1803	3.82	1928	4.49	2044	5.15	2152	5.81	2255	6.49	2351	7.17	2443	7.85
3125	4734	1408	2.15	1566	2.81	1714	3.50	1849	4.20	1971	4.91	2086	5.61	2194	6.31	2294	7.01	2390	7.73	2482	8.45
3300	5000	1468	2.45	1621	3.14	1762	3.86	1895	4.60	2016	5.35	2129	6.09	2235	6.83	2335	7.57	2430	8.31	2521	9.07
3475	5265	1528	2.78	1677	3.51	1811	4.25	1943	5.03	2062	5.82	2172	6.61	2278	7.38	2377	8.16	2471	8.94	2561	9.72

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	3030	2276	5.20	2373	5.75	2465	6.31	2556	6.89												
2200	3333	2305	5.68	2401	6.27	2494	6.86	2583	7.47	2669	8.08	2751	8.70	2834	9.34						
2400	3636	2339	6.21	2432	6.81	2523	7.43	2612	8.08	2697	8.73	2780	9.38	2860	10.1	2937	10.7	3013	11.4	3089	12.1
2600	3939	2376	6.78	2469	7.42	2557	8.07	2643	8.72	2726	9.40	2809	10.1	2889	10.8	2966	11.5	3041	12.2	3114	12.9
2800	4242	2414	7.38	2506	8.06	2594	8.74	2679	9.44	2761	10.1	2840	10.8	2918	11.6	2995	12.3	3070	13.1	3143	13.8
3000	4545	2454	8.02	2543	8.73	2631	9.45	2716	10.2	2798	10.9	2876	11.7	2953	12.4	3027	13.2	3099	13.9	3172	14.7
3200	4848	2499	8.71	2586	9.45	2670	10.2	2753	11.0	2835	11.7	2913	12.5	2989	13.3	3063	14.1	3135	14.9	3205	15.7
3400	5151	2544	9.44	2631	10.2	2714	11.0	2794	11.8	2872	12.6	2951	13.4	3027	14.3	3100	15.1	3172	15.9	3242	16.8
3600	5454	2590	10.2	2676	11.0	2758	11.9	2838	12.7	2915	13.5	2990	14.4	3064	15.2	3138	16.1	3209	17.0	3279	17.8
3800	5757	2637	11.0	2722	11.9	2804	12.8	2883	13.6	2960	14.5	3034	15.4	3106	16.3	3176	17.2	3246	18.1	3316	19.0
4000	6060	2685	11.9	2770	12.8	2851	13.7	2929	14.6	3005	15.5	3079	16.4	3150	17.4	3220	18.3	3288	19.2	3354	20.2
4200	6363	2734	12.8	2817	13.8	2898	14.7	2976	15.6	3051	16.6	3124	17.5	3195	18.5	3264	19.5	3332	20.4	3398	21.4
4400	6666	2783	13.8	2866	14.8	2946	15.8	3023	16.7	3098	17.7	3170	18.7	3240	19.7	3309	20.7	3376	21.7	3442	22.7
4600	6969	2834	14.8	2915	15.8	2994	16.9	3071	17.9	3145	18.9	3217	19.9	3287	21.0	3355	22.0	3422	23.1	3487	24.1
4800	7272	2886	15.8	2966	16.9	3043	18.0	3120	19.1	3193	20.1	3265	21.2	3335	22.3	3402	23.4	3468	24.5	3532	25.5
5000	7575	2939	16.9	3018	18.1	3094	19.2	3169	20.3	3242	21.4	3313	22.6	3382	23.7	3450	24.8	3515	25.9	3579	27.0

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	3787	3100	12.5	3172	13.2	3246	14.0														
2730	4136	3133	13.5	3204	14.3	3274	15.0	3342	15.8	3408	16.6	3474	17.3	3542	18.1						
2960	4484	3166	14.5	3237	15.3	3307	16.1	3375	16.9	3441	17.8	3506	18.6	3569	19.4	3632	20.2	3753	21.9		
3190	4833	3203	15.6	3271	16.5	3340	17.3	3408	18.1	3474	19.0	3539	19.9	3602	20.7	3665	21.6	3786	23.4	3902	25.1
3420	5181	3245	16.9	3313	17.7	3380	18.6	3445	19.4	3508	20.3	3572	21.2	3636	22.1	3698	23.0	3819	24.9	3935	26.7
3650	5530	3288	18.1	3356	19.0	3422	19.9	3487	20.8	3550	21.7	3612	22.6	3673	23.6	3732	24.5	3852	26.4	3969	28.3
3880	5878	3331	19.4	3399	20.4	3465	21.3	3529	22.3	3592	23.2	3654	24.2	3715	25.1	3774	26.1	3890	28.1		
4110	6227	3378	20.8	3442	21.8	3508	22.8	3572	23.8	3635	24.8	3697	25.8	3757	26.8	3817	27.8	3932	29.8		
4340	6575	3429	22.3	3493	23.3	3555	24.4	3616	25.4	3678	26.4	3740	27.5	3800	28.5	3859	29.6	3975	31.7		
4570	6924	3480	23.9	3544	25.0	3606	26.0	3667	27.1	3727	28.1	3785	29.2	3843	30.3	3902	31.4				
4800	7272	3532	25.5	3596	26.6	3658	27.7	3718	28.8	3778	30.0	3836	31.1	3893	32.2	3950	33.3				
5030	7621	3586	27.3	3649	28.4	3710	29.5	3770	30.7	3829	31.9	3888	33.0	3945	34.2						
5260	7969	3641	29.1	3703	30.3	3764	31.5	3823	32.6	3881	33.8	3939	35.0								
5490	8318	3696	31.0	3758	32.2	3818	33.4	3877	34.7	3935	35.9	3992	37.2								
5720	8666	3751	33.0	3813	34.2	3873	35.5	3932	36.8	3990	38.1										
5950	9015	3807	35.0	3869	36.4	3928	37.7	3987	39.0												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 2.55)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
800	100	96	89	82	71	67	62	56	51	78
	80	96	84	77	69	63	59	54	47	75
	60	94	81	75	66	59	57	53	46	73
	40	91	79	73	63	57	56	52	46	70
	30	91	78	72	63	57	57	53	46	70
1100	100	99	91	86	79	74	71	65	60	83
	80	99	89	83	76	70	67	61	56	80
	60	100	88	83	72	66	63	58	51	79
	40	97	85	80	69	63	61	57	50	77
	30	97	85	80	69	63	61	57	50	76
1500	100	107	102	102	88	81	79	75	69	95
	80	105	98	95	84	78	75	70	65	90
	60	107	98	90	79	74	70	65	60	87
	40	105	95	84	77	70	66	62	57	84
	30	104	95	84	76	70	67	63	57	84
2100	100	111	103	101	95	89	87	86	80	98
	80	109	102	98	91	86	84	80	76	95
	60	110	100	93	88	82	79	74	70	92
	40	107	101	92	86	79	75	70	67	90
	30	107	102	91	86	79	75	70	67	90
2900	100	116	110	112	107	97	95	94	90	108
	80	114	109	106	102	94	91	89	85	103
	60	114	108	103	99	91	87	83	79	100
	40	113	109	102	97	89	84	79	76	99
	30	114	109	103	98	88	84	80	78	100
3994	100	122	122	116	121	107	102	101	99	119
	80	120	120	113	114	103	99	97	94	113
	60	120	120	112	110	100	96	92	87	111
	40	118	119	112	108	99	93	89	84	110
	30	120	120	112	109	99	93	89	86	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
800	100	94	91	83	71	68	63	57	51	80
	80	92	87	80	69	63	59	54	49	76
	60	90	84	78	67	61	58	54	49	74
	40	89	83	77	66	61	58	54	49	73
	30	89	83	76	66	61	58	54	48	72
1100	100	98	98	91	80	76	72	65	61	87
	80	98	97	88	78	73	66	61	56	85
	60	97	94	87	76	71	64	60	55	83
	40	95	93	85	74	70	64	59	54	81
	30	94	92	85	73	69	64	59	54	81
1500	100	103	105	103	90	84	80	74	69	97
	80	103	101	101	89	83	76	70	65	95
	60	103	101	100	88	82	74	68	65	94
	40	103	100	95	84	80	72	66	62	90
	30	102	99	93	83	78	71	66	62	89
2100	100	109	110	109	100	93	88	85	80	104
	80	110	108	107	99	93	86	80	76	102
	60	110	107	106	97	92	85	78	75	101
	40	108	105	103	94	89	81	76	72	98
	30	106	104	101	91	85	78	74	71	95
2900	100	114	116	118	113	103	98	94	90	113
	80	116	117	114	110	102	96	90	85	111
	60	116	116	112	108	101	95	88	84	109
	40	115	115	112	107	99	92	86	82	108
	30	115	114	112	107	98	92	85	82	108
3994	100	119	122	124	126	113	107	102	99	124
	80	122	124	122	122	111	106	100	94	121
	60	122	124	121	119	110	105	98	92	119
	40	121	123	120	119	108	102	96	91	118
	30	120	122	120	119	108	102	95	90	118

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

13 IPA

Wheel Diameter = 22⁵/₈ in.

Outlet Area = 0.92 ft²

Tip Speed = 5.92 x RPM

Minimum Starting HP = 1/2

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	2870	50	286T	284T
Heavy	3377	75	286T	NA

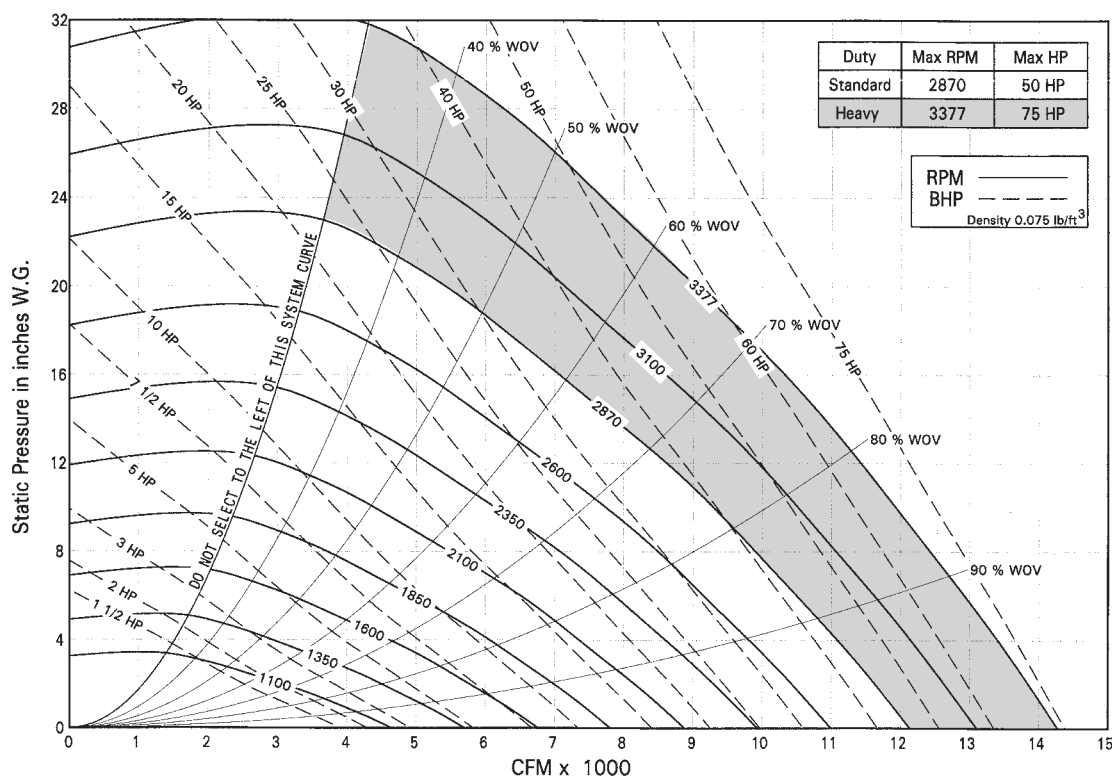


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1599	679	0.42	884	0.78	1050	1.17														
1700	1812	707	0.50	906	0.89	1068	1.32	1210	1.78												
1900	2025	736	0.59	930	1.02	1090	1.48	1228	1.96	1353	2.48	1468	3.02								
2100	2238	767	0.69	957	1.16	1112	1.65	1248	2.17	1370	2.72	1484	3.29	1588	3.88						
2300	2452	799	0.80	985	1.32	1136	1.84	1270	2.40	1390	2.97	1501	3.57	1606	4.20	1703	4.84	1796	5.50		
2500	2665	832	0.92	1014	1.49	1163	2.05	1293	2.64	1412	3.25	1520	3.87	1623	4.52	1720	5.20	1811	5.89	1898	6.60
2700	2878	865	1.06	1044	1.67	1190	2.28	1318	2.90	1434	3.54	1542	4.20	1642	4.88	1738	5.58	1829	6.31	1915	7.05
2900	3091	900	1.22	1074	1.87	1219	2.52	1345	3.18	1458	3.85	1565	4.55	1664	5.27	1757	5.99	1846	6.74	1932	7.52
3100	3304	937	1.40	1106	2.09	1248	2.78	1372	3.48	1484	4.19	1587	4.92	1687	5.67	1778	6.43	1866	7.21	1950	8.00
3300	3518	975	1.59	1138	2.32	1277	3.06	1401	3.80	1511	4.55	1613	5.31	1709	6.09	1802	6.89	1888	7.71	1971	8.53
3500	3731	1014	1.80	1171	2.57	1308	3.36	1429	4.14	1539	4.93	1640	5.73	1734	6.54	1824	7.38	1911	8.23	1993	9.09
3700	3944	1053	2.04	1204	2.84	1339	3.67	1459	4.51	1567	5.34	1667	6.17	1761	7.02	1848	7.88	1933	8.77	2015	9.67
3900	4157	1093	2.30	1238	3.13	1371	4.01	1488	4.89	1596	5.76	1695	6.64	1788	7.53	1875	8.43	1957	9.33	2038	10.3
4100	4371	1134	2.58	1272	3.44	1404	4.37	1519	5.29	1625	6.21	1724	7.13	1815	8.05	1902	8.99	1984	9.94	2061	10.9
4300	4584	1175	2.89	1310	3.79	1436	4.75	1551	5.72	1655	6.69	1753	7.65	1844	8.61	1929	9.58	2011	10.6	2088	11.6
4500	4797	1216	3.22	1348	4.17	1470	5.15	1583	6.16	1685	7.18	1782	8.19	1872	9.20	1957	10.2	2038	11.2	2115	12.3

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2700	2878	1914	7.05	1997	7.81	2076	8.58														
2950	3144	1937	7.63	2019	8.44	2097	9.25	2172	10.1	2245	10.9	2319	11.8								
3200	3411	1960	8.26	2040	9.09	2119	9.95	2194	10.8	2266	11.7	2336	12.6	2404	13.5	2471	14.4				
3450	3678	1988	8.94	2066	9.80	2141	10.7	2216	11.6	2288	12.5	2358	13.5	2425	14.4	2491	15.4	2554	16.3	2616	17.3
3700	3944	2015	9.67	2094	10.6	2168	11.5	2240	12.4	2310	13.4	2380	14.3	2447	15.3	2512	16.3	2576	17.4	2638	18.4
3950	4211	2044	10.4	2122	11.4	2196	12.3	2268	13.3	2337	14.3	2404	15.3	2469	16.3	2534	17.3	2598	18.4	2660	19.5
4200	4477	2075	11.2	2150	12.2	2224	13.2	2296	14.3	2365	15.3	2431	16.3	2496	17.4	2559	18.4	2620	19.5	2681	20.6
4450	4744	2108	12.1	2182	13.1	2253	14.2	2324	15.2	2393	16.3	2459	17.4	2524	18.5	2586	19.6	2647	20.7	2706	21.8
4700	5010	2142	13.0	2216	14.1	2286	15.2	2354	16.3	2421	17.4	2487	18.5	2552	19.7	2614	20.8	2675	22.0	2734	23.1
4950	5277	2177	13.9	2249	15.1	2320	16.2	2387	17.4	2452	18.5	2516	19.7	2580	20.9	2642	22.1	2703	23.3	2761	24.5
5200	5543	2212	15.0	2284	16.1	2354	17.3	2421	18.5	2486	19.7	2549	20.9	2610	22.1	2670	23.4	2731	24.6	2789	25.9
5450	5810	2248	16.0	2320	17.2	2388	18.5	2455	19.7	2520	21.0	2582	22.2	2643	23.5	2702	24.7	2759	26.0	2818	27.3
5700	6076	2285	17.1	2356	18.4	2424	19.7	2490	21.0	2554	22.2	2616	23.6	2676	24.9	2735	26.2	2792	27.5	2848	28.8
5950	6343	2321	18.3	2392	19.6	2460	20.9	2525	22.3	2589	23.6	2650	25.0	2710	26.3	2769	27.7	2826	29.1	2881	30.4
6200	6609	2358	19.5	2429	20.9	2496	22.3	2561	23.7	2624	25.0	2686	26.4	2745	27.8	2803	29.3	2860	30.7	2915	32.1
6450	6876	2397	20.8	2466	22.2	2533	23.7	2598	25.1	2660	26.5	2721	28.0	2780	29.4	2838	30.9	2894	32.3	2949	33.8

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3700	3944	2638	18.4	2698	19.4	2757	20.4	2814	21.5	2873	22.6										
4000	4264	2664	19.7	2724	20.8	2783	21.9	2840	23.0	2896	24.1	2951	25.2	3005	26.4	3057	27.5				
4300	4584	2690	21.1	2750	22.2	2809	23.4	2866	24.5	2922	25.7	2977	26.9	3031	28.0	3083	29.2	3186	31.7	3285	34.1
4600	4904	2723	22.6	2780	23.8	2836	24.9	2892	26.1	2948	27.3	3003	28.6	3057	29.8	3109	31.0	3212	33.6	3310	36.1
4900	5223	2756	24.2	2813	25.4	2869	26.6	2924	27.9	2978	29.1	3030	30.3	3083	31.6	3136	32.9	3238	35.5	3336	38.2
5200	5543	2789	25.9	2847	27.1	2903	28.4	2957	29.7	3011	31.0	3063	32.3	3115	33.6	3165	34.9	3264	37.6	3363	40.3
5500	5863	2823	27.6	2881	28.9	2936	30.3	2991	31.6	3044	33.0	3097	34.3	3148	35.7	3198	37.0	3296	39.8		
5800	6183	2861	29.5	2916	30.8	2970	32.2	3025	33.6	3078	35.0	3130	36.4	3181	37.8	3231	39.3	3329	42.1		
6100	6503	2902	31.4	2956	32.8	3009	34.3	3060	35.7	3112	37.1	3164	38.6	3215	40.1	3265	41.6	3363	44.5		
6400	6823	2942	33.5	2996	35.0	3049	36.4	3100	37.9	3151	39.4	3200	40.9	3249	42.4	3299	43.9				
6700	7142	2983	35.6	3037	37.1	3089	38.7	3141	40.2	3191	41.8	3240	43.3	3289	44.9	3336	46.4				
7000	7462	3026	37.9	3079	39.4	3130	41.0	3181	42.6	3232	44.2	3281	45.9	3329	47.5	3376	49.1				
7300	7782	3069	40.2	3121	41.9	3173	43.5	3223	45.1	3272	46.8	3321	48.5	3369	50.2						
7600	8102	3112	42.7	3164	44.4	3215	46.1	3265	47.8	3315	49.5	3363	51.2								
7900	8422	3156	45.2	3208	47.0	3259	48.8	3308	50.5	3357	52.3										
8200	8742	3200	47.9	3251	49.7	3302	51.5	3352	53.4												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 4.23)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
700	100	99	91	83	71	68	64	57	52	80
	80	99	87	78	69	64	61	55	48	77
	60	97	84	76	66	60	59	54	47	75
	40	94	82	74	63	58	59	54	47	72
	30	94	81	73	63	59	59	54	47	72
1000	100	102	93	88	81	76	74	67	62	85
	80	103	90	85	78	73	70	64	58	83
	60	103	89	85	73	68	66	61	53	82
	40	100	86	83	71	65	64	60	52	79
	30	100	86	83	71	65	64	60	52	79
1300	100	109	103	103	87	82	81	76	70	96
	80	107	99	96	84	79	76	71	67	91
	60	108	98	91	79	75	71	66	61	88
	40	106	94	86	77	71	67	63	58	85
	30	105	94	85	77	71	68	63	58	84
1800	100	112	104	103	95	90	89	87	80	99
	80	110	103	99	92	87	85	81	77	96
	60	110	100	95	88	83	80	75	71	92
	40	108	101	93	86	80	76	71	68	91
	30	108	101	92	87	80	75	71	68	91
2500	100	119	110	115	105	98	96	96	91	109
	80	117	109	108	101	95	93	91	85	104
	60	117	108	104	98	92	89	84	80	101
	40	115	109	103	96	89	85	80	78	100
	30	117	110	104	97	89	85	82	79	100
3377	100	124	121	119	120	107	103	103	100	119
	80	122	120	115	113	104	100	98	94	114
	60	122	119	112	110	101	96	92	88	111
	40	120	119	112	108	99	93	89	85	110
	30	122	119	113	109	99	93	90	87	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
700	100	97	94	84	71	70	64	58	52	81
	80	94	90	80	69	65	61	56	50	78
	60	93	87	78	67	63	60	56	51	75
	40	92	86	77	66	62	60	55	50	75
	30	91	86	77	66	62	60	55	49	74
1000	100	102	101	93	81	79	74	67	63	90
	80	101	100	90	79	75	68	63	58	87
	60	100	97	89	77	73	67	62	57	85
	40	99	95	87	76	72	66	62	56	84
	30	98	95	87	75	72	66	61	56	83
1300	100	106	107	104	90	85	81	75	70	98
	80	105	103	102	89	84	77	70	66	96
	60	105	103	101	88	83	75	69	66	95
	40	105	101	96	85	80	72	67	63	91
	30	104	100	94	83	79	71	67	63	89
1800	100	111	111	110	100	94	89	86	80	105
	80	112	110	108	99	93	87	81	77	103
	60	112	109	107	98	92	85	79	76	102
	40	110	107	104	95	89	82	76	73	99
	30	108	105	102	91	85	79	75	72	96
2500	100	116	118	120	111	104	98	96	91	114
	80	119	118	116	108	102	97	91	86	111
	60	119	117	113	107	102	95	89	85	110
	40	118	116	113	105	100	93	87	83	109
	30	117	116	113	105	99	92	86	83	108
3377	100	122	124	126	125	113	107	103	100	124
	80	124	125	123	121	111	106	100	94	121
	60	124	125	122	119	110	105	98	93	119
	40	123	124	121	118	108	102	96	91	118
	30	122	123	121	118	108	101	95	91	118

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

15 IPA

Wheel Diameter = 26 $\frac{1}{8}$ in.

Outlet Area = 1.23 ft²

Tip Speed = 6.84 x RPM

Minimum Starting HP = $\frac{3}{4}$

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	2486	60	286T	284T
Heavy	2924	100	286T	NA

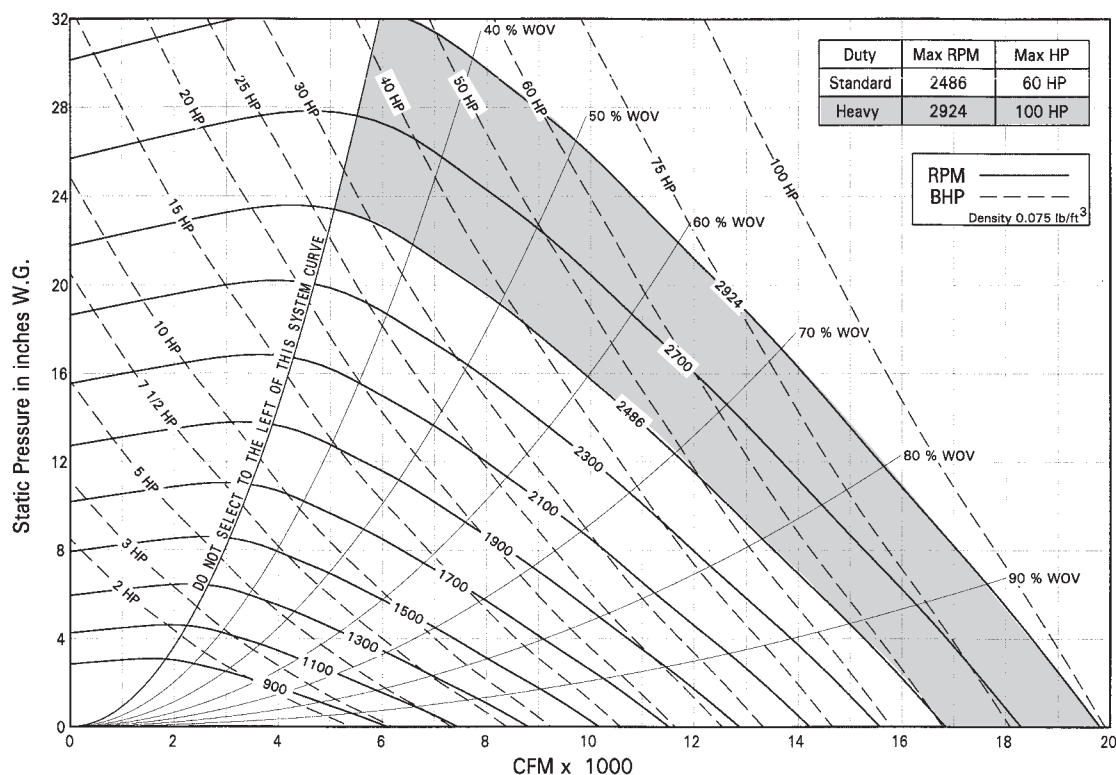


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1612	578	0.50	753	0.92	898	1.36														
2250	1814	600	0.59	771	1.06	909	1.54	1036	2.05												
2500	2016	624	0.69	790	1.20	926	1.73	1043	2.27	1158	2.84										
2750	2217	649	0.81	810	1.36	944	1.93	1060	2.52	1164	3.12	1268	3.75								
3000	2419	674	0.94	833	1.53	963	2.15	1078	2.78	1180	3.43	1275	4.09	1371	4.78	1460	5.47				
3250	2620	701	1.08	856	1.72	982	2.38	1096	3.06	1198	3.75	1291	4.45	1378	5.17	1467	5.91	1550	6.66		
3500	2822	728	1.24	880	1.93	1004	2.63	1115	3.35	1215	4.09	1308	4.84	1393	5.59	1474	6.36	1557	7.16	1636	7.97
3750	3024	756	1.42	904	2.15	1027	2.89	1134	3.66	1234	4.45	1325	5.24	1411	6.04	1490	6.85	1565	7.67	1643	8.52
4000	3225	785	1.62	929	2.39	1050	3.18	1156	3.99	1253	4.82	1344	5.66	1428	6.51	1507	7.36	1582	8.22	1653	9.09
4250	3427	814	1.84	954	2.65	1074	3.49	1178	4.34	1273	5.21	1363	6.10	1446	6.99	1525	7.89	1599	8.80	1670	9.72
4500	3629	844	2.07	981	2.94	1098	3.82	1201	4.71	1295	5.62	1382	6.56	1465	7.49	1543	8.44	1617	9.40	1687	10.4
4750	3830	874	2.33	1008	3.25	1123	4.17	1225	5.11	1317	6.06	1403	7.03	1484	8.02	1561	9.01	1634	10.0	1704	11.0
5000	4032	905	2.61	1035	3.59	1148	4.55	1249	5.54	1340	6.51	1425	7.54	1504	8.57	1580	9.61	1653	10.7	1722	11.7
5250	4233	935	2.91	1063	3.95	1173	4.95	1273	5.99	1364	7.02	1447	8.06	1526	9.14	1600	10.2	1672	11.3	1741	12.4
5500	4435	967	3.23	1092	4.33	1200	5.39	1298	6.46	1388	7.54	1470	8.62	1548	9.74	1621	10.9	1692	12.0	1760	13.2
5750	4637	998	3.58	1121	4.74	1227	5.85	1323	6.95	1412	8.09	1494	9.22	1571	10.4	1643	11.5	1712	12.7	1779	13.9

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	3225	1653	9.09	1725	9.99	1797	10.9	1866	11.8	1932	12.8										
4350	3508	1677	9.97	1744	10.9	1809	11.9	1876	12.8	1942	13.8	2006	14.9	2068	15.9	2128	16.9				
4700	3790	1701	10.9	1768	11.9	1833	12.9	1894	13.9	1954	15.0	2016	16.0	2077	17.1	2137	18.2	2196	19.3	2252	20.3
5050	4072	1726	11.9	1792	12.9	1857	14.0	1918	15.1	1978	16.2	2035	17.3	2091	18.4	2147	19.5	2205	20.7	2262	21.8
5400	4354	1753	12.9	1818	14.0	1881	15.1	1942	16.3	2002	17.4	2059	18.6	2114	19.8	2168	20.9	2220	22.1	2272	23.3
5750	4637	1779	13.9	1845	15.1	1907	16.3	1968	17.5	2026	18.8	2083	20.0	2138	21.2	2192	22.4	2244	23.7	2295	24.9
6100	4919	1808	15.0	1872	16.3	1934	17.6	1994	18.8	2052	20.1	2108	21.4	2162	22.7	2216	24.0	2268	25.3	2319	26.6
6450	5201	1839	16.2	1901	17.5	1961	18.9	2021	20.2	2078	21.6	2134	22.9	2188	24.3	2241	25.6	2292	27.0	2343	28.4
6800	5483	1871	17.4	1932	18.8	1991	20.2	2048	21.6	2105	23.0	2161	24.5	2215	25.9	2267	27.3	2318	28.7	2367	30.2
7150	5766	1903	18.7	1964	20.2	2022	21.6	2079	23.1	2134	24.6	2188	26.1	2241	27.6	2294	29.1	2344	30.6	2394	32.1
7500	6048	1936	20.2	1996	21.6	2054	23.1	2110	24.7	2165	26.2	2217	27.8	2268	29.3	2320	30.9	2371	32.4	2420	34.0
7850	6330	1970	21.6	2029	23.2	2086	24.7	2142	26.3	2196	27.9	2248	29.5	2299	31.1	2349	32.7	2398	34.4	2447	36.0
8200	6612	2004	23.2	2063	24.8	2119	26.4	2174	28.0	2227	29.7	2280	31.3	2330	33.0	2380	34.7	2428	36.4	2474	38.1
8550	6895	2038	24.8	2097	26.5	2153	28.2	2207	29.9	2260	31.5	2311	33.2	2362	35.0	2411	36.7	2459	38.5	2505	40.2
8900	7177	2073	26.5	2131	28.3	2187	30.1	2241	31.8	2293	33.5	2344	35.3	2393	37.0	2442	38.8	2490	40.7	2536	42.5
9250	7459	2108	28.3	2166	30.1	2221	32.0	2275	33.8	2327	35.6	2378	37.4	2427	39.2	2474	41.0	2521	42.9	2568	44.8

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	4032	2261	21.6	2316	22.8	2370	23.9	2422	25.1												
5425	4375	2273	23.4	2327	24.6	2381	25.9	2434	27.1	2485	28.4	2535	29.6	2585	30.9	2633	32.2				
5850	4717	2302	25.4	2351	26.7	2399	28.0	2447	29.2	2497	30.6	2547	31.9	2596	33.2	2645	34.6	2738	37.3	2829	40.0
6275	5060	2331	27.5	2380	28.8	2428	30.2	2475	31.5	2522	32.9	2567	34.3	2611	35.6	2656	37.0	2750	39.9	2841	42.8
6700	5403	2360	29.7	2409	31.1	2458	32.5	2505	33.9	2551	35.4	2596	36.8	2640	38.3	2683	39.7	2767	42.7	2852	45.6
7125	5745	2392	31.9	2440	33.4	2487	34.9	2534	36.4	2580	38.0	2625	39.5	2669	41.0	2712	42.5	2796	45.6	2877	48.7
7550	6088	2424	34.3	2472	35.9	2519	37.5	2565	39.0	2610	40.6	2654	42.2	2698	43.8	2741	45.5	2825	48.7	2906	51.9
7975	6431	2457	36.7	2505	38.4	2551	40.1	2597	41.7	2642	43.4	2686	45.1	2729	46.8	2771	48.5	2854	51.9		
8400	6774	2492	39.3	2538	41.1	2584	42.8	2630	44.6	2674	46.3	2718	48.1	2761	49.8	2803	51.6	2885	55.1		
8825	7116	2530	42.0	2575	43.8	2619	45.6	2663	47.5	2707	49.3	2750	51.1	2793	53.0	2835	54.8	2917	58.5		
9250	7459	2568	44.8	2613	46.7	2657	48.6	2700	50.5	2743	52.4	2784	54.3	2826	56.3	2868	58.2				
9675	7802	2606	47.7	2651	49.7	2695	51.7	2738	53.7	2780	55.7	2821	57.7	2862	59.7	2902	61.7				
10100	8145	2646	50.9	2690	52.9	2733	54.9	2776	57.0	2818	59.0	2859	61.1	2900	63.2						
10525	8487	2687	54.3	2730	56.3	2773	58.4	2815	60.4	2856	62.6	2897	64.7								
10950	8830	2728	57.8	2771	59.9	2814	62.1	2855	64.2	2896	66.3										
11375	9173	2769	61.4	2812	63.6	2855	65.9	2896	68.1												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
600	100	95	91	79	77	71	67	60	56	80
	80	94	88	78	74	69	64	57	51	77
	60	97	86	78	74	67	62	54	46	77
	40	96	85	79	72	69	63	55	44	77
	30	94	84	79	72	69	63	55	45	76
850	100	101	102	92	86	81	76	71	66	91
	80	100	101	90	84	79	74	68	62	89
	60	103	103	90	83	78	72	66	58	90
	40	102	102	89	83	78	74	67	57	89
	30	100	100	89	83	78	74	67	58	88
1200	100	110	107	99	91	86	84	81	76	96
	80	108	104	96	88	83	81	76	71	94
	60	108	102	92	83	77	73	69	64	90
	40	108	101	91	81	76	72	68	66	89
	30	108	101	91	81	76	72	68	66	89
1600	100	116	109	107	99	94	92	89	86	103
	80	114	107	102	95	91	89	85	80	99
	60	113	105	99	92	85	81	77	72	96
	40	112	106	98	89	83	78	74	71	95
	30	112	104	98	90	84	79	74	71	95
2200	100	114	113	113	105	101	100	97	96	109
	80	114	111	110	102	98	97	93	90	106
	60	115	109	106	98	93	90	85	82	102
	40	115	107	105	97	93	88	83	81	101
	30	114	107	105	97	92	88	83	81	101
2924	100	119	120	119	116	108	106	104	102	117
	80	119	119	117	112	105	103	101	97	114
	60	119	118	113	108	101	97	93	89	110
	40	120	117	112	108	100	96	91	88	109
	30	119	117	112	107	100	96	91	88	109

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
600	100	94	91	79	71	69	62	57	53	78
	80	91	88	78	71	67	59	54	48	77
	60	90	88	78	70	66	58	52	47	76
	40	89	86	76	68	65	57	50	46	74
	30	88	85	75	67	65	56	50	45	73
850	100	100	102	92	83	78	73	67	63	89
	80	97	99	91	82	77	71	64	59	87
	60	96	98	90	81	75	70	63	57	87
	40	95	96	89	79	74	68	61	56	85
	30	94	96	88	79	73	68	61	55	84
1200	100	107	107	101	92	87	82	77	73	97
	80	106	106	100	92	86	80	74	70	96
	60	105	105	99	91	84	78	72	68	95
	40	104	103	97	89	82	76	70	66	93
	30	103	102	96	88	82	75	69	65	92
1600	100	115	114	115	103	95	90	85	81	108
	80	114	113	110	100	94	88	83	77	104
	60	113	112	106	98	92	86	79	75	102
	40	112	112	110	97	91	84	78	74	104
	30	111	112	110	96	90	83	77	74	103
2200	100	118	118	119	110	104	100	97	92	114
	80	118	118	117	108	103	97	93	89	112
	60	119	117	115	106	102	96	90	86	110
	40	118	118	111	105	100	93	88	84	108
	30	118	118	111	104	99	93	87	84	108
2924	100	123	125	125	121	112	108	104	100	122
	80	123	124	124	119	110	106	101	97	120
	60	124	125	122	117	109	104	98	94	118
	40	123	124	120	114	108	102	96	92	116
	30	123	124	120	114	107	102	96	91	116

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

17 IPA

Wheel Diameter = 29⁵/₈ in.

Outlet Area = 1.56 ft²

Tip Speed = 7.76 x RPM

Minimum Starting HP = 1

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	2192	75	326T	324T
Heavy	2579	125	326T	NA

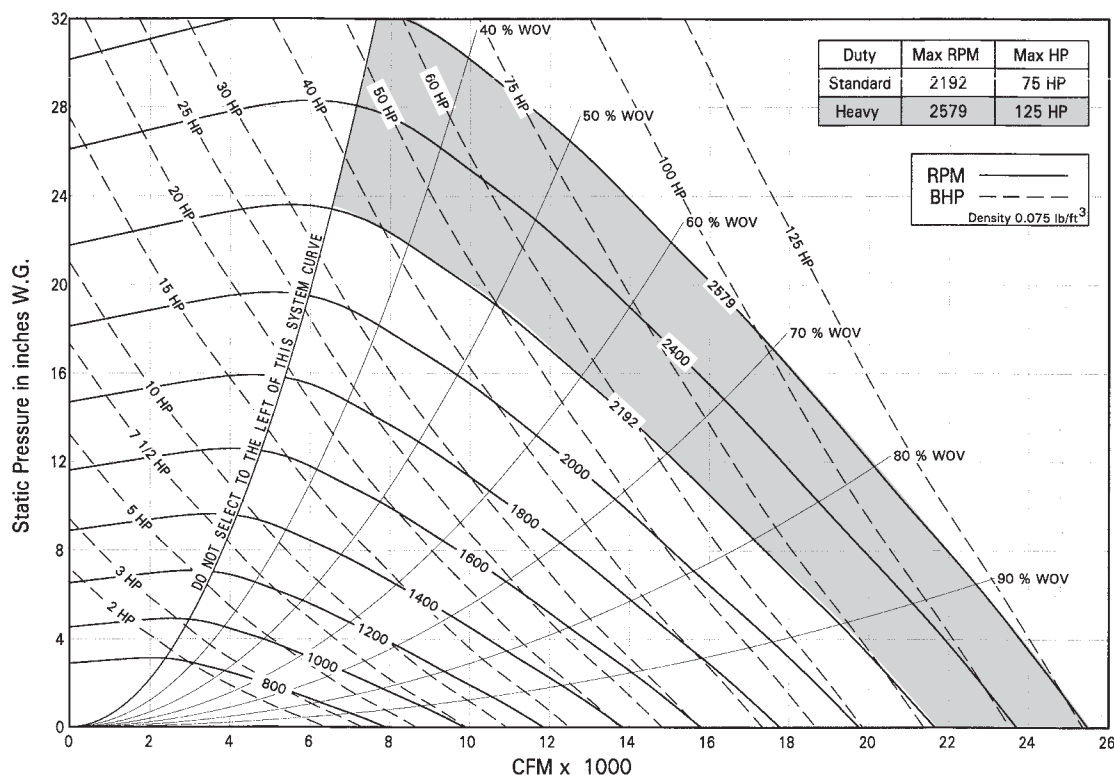


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1886	536	0.80	685	1.42	807	2.06	915	2.73												
3350	2106	559	0.95	704	1.63	823	2.33	926	3.05	1023	3.81	1115	4.58								
3700	2327	583	1.12	725	1.86	841	2.63	943	3.41	1034	4.21	1122	5.04	1206	5.90						
4050	2547	608	1.31	746	2.11	859	2.94	960	3.79	1050	4.65	1132	5.53	1213	6.44	1291	7.37	1365	8.32		
4400	2767	634	1.53	769	2.39	879	3.28	978	4.19	1067	5.12	1148	6.06	1224	7.01	1298	7.99	1371	9.00	1441	10.0
4750	2987	661	1.78	792	2.70	901	3.64	996	4.62	1084	5.61	1165	6.62	1240	7.63	1311	8.66	1378	9.71	1448	10.8
5100	3207	689	2.05	816	3.03	923	4.04	1017	5.07	1103	6.13	1183	7.20	1257	8.28	1327	9.37	1393	10.5	1456	11.6
5450	3427	717	2.35	840	3.40	946	4.47	1038	5.55	1122	6.68	1201	7.81	1274	8.96	1344	10.1	1410	11.3	1472	12.5
5800	3647	745	2.68	866	3.80	969	4.94	1060	6.07	1143	7.25	1219	8.46	1292	9.67	1361	10.9	1426	12.1	1488	13.4
6150	3867	774	3.04	892	4.24	993	5.43	1083	6.64	1164	7.86	1240	9.13	1311	10.4	1379	11.7	1443	13.0	1505	14.3
6500	4088	804	3.44	918	4.71	1017	5.96	1106	7.25	1186	8.52	1261	9.84	1330	11.2	1397	12.5	1462	13.9	1522	15.3
6850	4308	833	3.86	945	5.22	1042	6.53	1130	7.88	1209	9.23	1282	10.6	1351	12.0	1416	13.4	1480	14.8	1541	16.3
7200	4528	863	4.33	973	5.77	1068	7.16	1153	8.55	1232	9.98	1305	11.4	1373	12.8	1437	14.3	1498	15.8	1559	17.3
7550	4748	893	4.83	1001	6.36	1094	7.82	1177	9.27	1256	10.8	1328	12.3	1395	13.7	1459	15.3	1519	16.8	1577	18.4
7900	4968	924	5.38	1030	6.99	1120	8.53	1202	10.0	1279	11.6	1351	13.2	1417	14.7	1480	16.3	1541	17.9	1598	19.5
8250	5188	955	5.97	1058	7.67	1147	9.29	1228	10.9	1303	12.5	1374	14.1	1440	15.7	1502	17.3	1562	19.0	1619	20.7

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	3144	1452	11.4	1519	12.5	1582	13.7	1643	14.8												
5450	3427	1472	12.5	1532	13.6	1591	14.8	1651	16.1	1710	17.4	1766	18.6	1821	19.9						
5900	3710	1493	13.6	1553	14.9	1609	16.2	1664	17.4	1718	18.8	1775	20.1	1829	21.5	1882	22.8	1934	24.2	1984	25.6
6350	3993	1515	14.8	1574	16.2	1630	17.5	1685	18.9	1737	20.3	1788	21.7	1838	23.1	1891	24.5	1942	26.0	1992	27.4
6800	4276	1538	16.1	1596	17.5	1652	19.0	1706	20.4	1758	21.9	1809	23.4	1858	24.8	1905	26.3	1951	27.8	2000	29.3
7250	4559	1562	17.5	1619	19.0	1675	20.5	1728	22.0	1780	23.6	1830	25.1	1879	26.7	1926	28.2	1972	29.8	2017	31.4
7700	4842	1586	18.9	1643	20.5	1698	22.1	1751	23.7	1802	25.3	1851	26.9	1900	28.6	1947	30.2	1993	31.9	2038	33.5
8150	5125	1613	20.3	1668	22.0	1722	23.7	1774	25.4	1825	27.1	1875	28.8	1922	30.6	1969	32.3	2015	34.0	2059	35.8
8600	5408	1641	21.9	1695	23.7	1747	25.4	1798	27.2	1849	29.0	1898	30.8	1946	32.6	1992	34.4	2037	36.2	2081	38.1
9050	5691	1669	23.5	1723	25.4	1775	27.2	1825	29.1	1873	31.0	1922	32.9	1969	34.7	2015	36.6	2060	38.5	2103	40.4
9500	5974	1698	25.3	1751	27.2	1802	29.1	1852	31.1	1900	33.0	1947	35.0	1993	37.0	2039	38.9	2083	40.9	2127	42.9
9950	6257	1727	27.2	1780	29.2	1830	31.1	1880	33.1	1928	35.2	1974	37.2	2019	39.3	2063	41.3	2107	43.4	2150	45.5
10400	6540	1757	29.2	1809	31.2	1859	33.3	1908	35.3	1955	37.4	2001	39.5	2046	41.7	2090	43.8	2132	46.0	2174	48.1
10850	6823	1788	31.2	1839	33.4	1889	35.5	1937	37.6	1984	39.8	2029	41.9	2074	44.2	2117	46.4	2159	48.6	2200	50.9
11300	7106	1818	33.4	1869	35.6	1919	37.9	1967	40.1	2013	42.3	2058	44.5	2102	46.7	2145	49.1	2187	51.4	2228	53.7
11750	7389	1849	35.7	1900	38.0	1949	40.3	1997	42.6	2043	44.9	2087	47.2	2130	49.5	2173	51.8	2214	54.2	2255	56.6

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6500	4088	1995	28.1	2043	29.6	2091	31.1	2137	32.6	2183	34.1										
7050	4433	2008	30.4	2054	32.0	2101	33.6	2148	35.2	2193	36.9	2237	38.5	2281	40.1	2323	41.8				
7600	4779	2033	33.0	2077	34.7	2120	36.3	2161	38.0	2203	39.7	2248	41.4	2291	43.2	2333	44.9	2416	48.4	2496	51.9
8150	5125	2059	35.8	2103	37.5	2145	39.3	2187	41.0	2227	42.8	2267	44.5	2306	46.3	2344	48.1	2427	51.8	2506	55.6
8700	5471	2085	38.6	2129	40.4	2171	42.3	2213	44.1	2253	46.0	2293	47.9	2332	49.8	2370	51.6	2444	55.4	2517	59.3
9250	5817	2114	41.5	2156	43.5	2198	45.4	2239	47.4	2279	49.4	2319	51.3	2358	53.3	2396	55.3	2470	59.3	2541	63.3
9800	6163	2142	44.6	2185	46.7	2226	48.7	2267	50.8	2306	52.8	2345	54.9	2384	57.0	2422	59.1	2495	63.3	2567	67.5
10350	6509	2171	47.8	2214	50.0	2255	52.1	2295	54.3	2335	56.5	2373	58.6	2411	60.8	2449	63.0	2522	67.4		
10900	6855	2203	51.2	2244	53.4	2284	55.7	2324	58.0	2363	60.2	2402	62.5	2440	64.8	2477	67.1	2549	71.7		
11450	7201	2237	54.7	2277	57.0	2316	59.4	2354	61.8	2392	64.1	2431	66.5	2469	68.9	2506	71.3	2578	76.1		
12000	7547	2271	58.3	2311	60.8	2349	63.3	2388	65.7	2425	68.2	2461	70.7	2498	73.2	2535	75.7				
12550	7893	2305	62.2	2344	64.7	2383	67.3	2421	69.9	2458	72.4	2495	75.0	2530	77.6	2566	80.2				
13100	8238	2341	66.4	2379	68.9	2417	71.5	2455	74.2	2492	76.8	2528	79.5	2564	82.2						
13650	8584	2377	70.7	2415	73.4	2453	76.1	2490	78.7	2526	81.4	2562	84.2								
14200	8930	2414	75.3	2452	78.1	2489	80.9	2526	83.6	2562	86.4										
14750	9276	2450	80.0	2488	82.9	2526	85.9	2562	88.7												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 9.88)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
550	100	94	91	83	76	73	69	62	57	81
	80	92	89	82	74	71	66	59	52	79
	60	89	88	80	72	68	64	55	48	77
	40	91	89	81	72	70	65	57	48	78
	30	91	90	82	73	71	67	58	50	79
750	100	102	101	91	86	81	76	71	65	90
	80	101	99	89	83	79	74	68	61	88
	60	104	100	89	83	77	72	65	57	88
	40	104	99	89	83	78	73	66	56	88
	30	101	97	89	82	78	73	66	56	87
1000	100	110	105	96	88	85	83	79	74	94
	80	108	101	94	85	82	79	74	68	91
	60	108	97	89	80	76	72	67	62	88
	40	108	97	88	78	74	70	66	65	87
	30	108	97	88	78	74	70	66	65	87
1400	100	117	108	108	97	94	93	88	85	103
	80	115	106	103	94	91	89	84	80	99
	60	114	104	100	90	85	81	76	72	96
	40	113	105	99	87	83	78	73	70	95
	30	113	103	99	88	83	78	74	71	94
1900	100	114	113	113	104	101	99	96	95	109
	80	114	111	110	100	98	96	92	89	106
	60	115	108	106	96	93	89	85	81	101
	40	115	106	105	96	92	87	83	81	100
	30	114	106	105	95	91	87	83	81	100
2579	100	120	120	119	114	108	107	104	102	117
	80	120	119	117	111	105	104	100	97	114
	60	121	118	113	107	101	97	93	89	110
	40	121	116	112	106	100	96	91	88	109
	30	120	116	112	106	100	95	91	88	108

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
550	100	97	93	81	74	70	64	59	56	81
	80	96	90	79	73	68	61	55	49	78
	60	93	88	77	72	68	60	53	48	76
	40	90	85	75	70	66	59	52	47	74
	30	89	84	74	69	66	59	51	47	73
750	100	101	101	91	82	78	73	67	63	89
	80	98	98	90	81	77	70	64	58	87
	60	97	98	89	80	75	69	62	57	86
	40	96	96	87	79	74	67	61	55	84
	30	95	95	87	78	73	67	60	55	84
1000	100	107	106	97	90	85	80	75	72	95
	80	106	104	97	89	84	78	72	68	94
	60	105	103	96	88	82	76	70	66	93
	40	104	101	94	86	80	73	68	65	90
	30	104	101	94	86	80	73	67	64	90
1400	100	116	114	116	100	94	90	85	81	109
	80	115	113	111	98	94	87	82	76	105
	60	114	112	107	96	92	85	79	75	102
	40	113	112	111	94	90	83	77	74	104
	30	112	112	111	94	89	82	77	73	104
1900	100	119	118	120	108	103	99	96	91	113
	80	118	118	118	106	102	96	92	88	111
	60	119	117	114	105	101	94	89	85	109
	40	119	117	110	103	99	92	87	84	107
	30	118	117	110	103	98	92	87	83	107
2579	100	124	125	126	119	112	108	104	100	121
	80	124	125	124	117	110	105	101	97	120
	60	125	125	122	116	109	104	98	93	118
	40	124	125	120	113	108	102	96	92	116
	30	124	125	119	113	107	101	95	91	116

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

19 IPA

Wheel Diameter = 33 in.

Outlet Area = 1.94 ft²

Tip Speed = 8.64 x RPM

Minimum Starting HP = 2

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1968	100	365T	326T
Heavy	2315	150	365T	NA

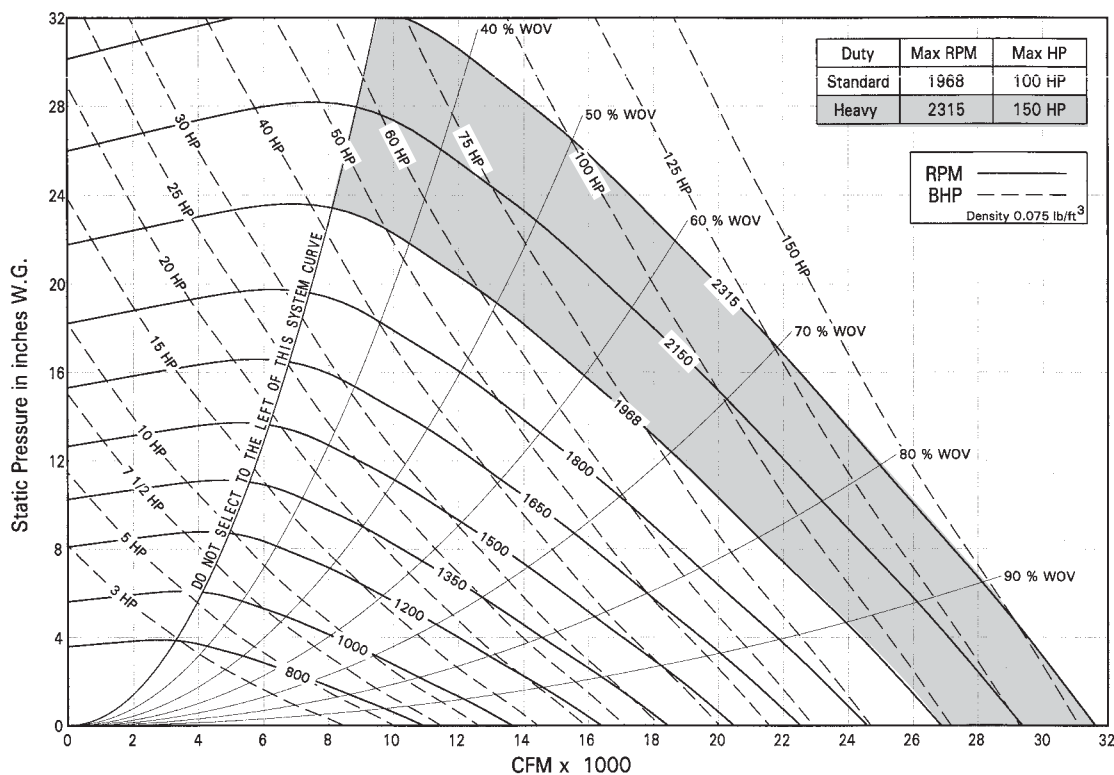


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	2020	495	1.11	626	1.92	734	2.77	826	3.64	917	4.55										
4400	2222	514	1.29	642	2.18	748	3.10	840	4.04	922	5.00	1004	6.01								
4800	2424	534	1.50	660	2.45	763	3.44	853	4.46	935	5.49	1010	6.54	1085	7.64	1156	8.76				
5200	2626	555	1.73	678	2.75	778	3.81	868	4.90	948	6.01	1022	7.13	1091	8.27	1161	9.46	1228	10.7		
5600	2828	577	2.00	697	3.09	796	4.21	883	5.37	962	6.55	1036	7.74	1104	8.95	1167	10.2	1233	11.5	1296	12.8
6000	3030	599	2.28	716	3.45	813	4.63	898	5.87	977	7.12	1049	8.39	1117	9.67	1180	11.0	1240	12.3	1301	13.6
6400	3232	622	2.60	736	3.83	832	5.09	916	6.39	992	7.72	1064	9.06	1131	10.4	1194	11.8	1253	13.2	1309	14.6
6800	3434	646	2.95	756	4.25	851	5.60	934	6.95	1008	8.35	1079	9.76	1145	11.2	1207	12.6	1267	14.1	1323	15.6
7200	3636	669	3.33	777	4.72	870	6.13	952	7.54	1026	9.01	1094	10.5	1160	12.0	1222	13.5	1280	15.0	1336	16.6
7600	3838	693	3.74	799	5.22	890	6.69	971	8.19	1044	9.70	1111	11.3	1175	12.8	1237	14.4	1295	16.0	1350	17.7
8000	4040	718	4.19	821	5.76	909	7.29	990	8.88	1062	10.4	1129	12.1	1191	13.7	1252	15.4	1310	17.1	1364	18.8
8400	4242	742	4.67	843	6.33	930	7.94	1009	9.59	1081	11.2	1147	12.9	1209	14.6	1267	16.4	1325	18.1	1379	19.9
8800	4444	767	5.19	866	6.95	951	8.64	1029	10.4	1100	12.1	1165	13.8	1226	15.6	1284	17.4	1340	19.2	1394	21.1
9200	4646	792	5.75	889	7.60	973	9.38	1048	11.2	1119	13.0	1184	14.8	1244	16.6	1302	18.5	1356	20.4	1409	22.3
9600	4848	817	6.35	912	8.31	994	10.2	1069	12.0	1138	13.9	1203	15.8	1263	17.7	1320	19.6	1374	21.6	1426	23.6
10000	5050	842	7.00	936	9.05	1016	11.0	1090	12.9	1158	14.9	1222	16.8	1282	18.8	1338	20.8	1392	22.8	1443	24.9

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6100	3080	1302	13.9	1362	15.3	1419	16.7	1473	18.1												
6650	3358	1318	15.2	1371	16.6	1426	18.1	1481	19.7	1533	21.2	1584	22.7								
7200	3636	1336	16.6	1390	18.1	1441	19.7	1490	21.3	1541	22.9	1592	24.5	1641	26.2	1688	27.9	1734	29.5		
7750	3914	1355	18.1	1408	19.7	1459	21.4	1508	23.0	1555	24.7	1601	26.4	1648	28.2	1695	29.9	1742	31.7	1786	33.5
8300	4191	1375	19.6	1427	21.4	1478	23.1	1527	24.9	1574	26.7	1619	28.5	1663	30.3	1706	32.1	1749	33.9	1794	35.8
8850	4469	1396	21.2	1448	23.1	1498	24.9	1546	26.8	1593	28.7	1638	30.6	1682	32.5	1724	34.4	1766	36.3	1806	38.2
9400	4747	1417	22.9	1469	24.9	1518	26.8	1566	28.8	1612	30.8	1657	32.8	1700	34.8	1743	36.8	1784	38.8	1824	40.9
9950	5025	1441	24.7	1490	26.8	1539	28.8	1587	30.9	1632	33.0	1677	35.1	1719	37.2	1762	39.3	1803	41.4	1843	43.6
10500	5303	1465	26.6	1514	28.7	1561	30.9	1608	33.1	1653	35.3	1697	37.5	1740	39.7	1781	41.9	1822	44.1	1862	46.3
11050	5580	1490	28.5	1538	30.8	1585	33.1	1630	35.3	1674	37.6	1718	39.9	1761	42.2	1802	44.6	1842	46.9	1882	49.2
11600	5858	1515	30.7	1563	33.0	1609	35.3	1654	37.7	1697	40.1	1739	42.5	1782	44.9	1823	47.3	1863	49.8	1902	52.2
12150	6136	1541	32.9	1589	35.3	1634	37.7	1679	40.2	1722	42.7	1763	45.2	1804	47.7	1844	50.2	1884	52.8	1923	55.3
12700	6414	1568	35.3	1615	37.8	1660	40.3	1703	42.8	1746	45.4	1788	48.0	1828	50.6	1867	53.2	1905	55.8	1944	58.5
13250	6691	1594	37.8	1641	40.4	1686	43.0	1729	45.6	1771	48.2	1812	50.9	1852	53.6	1891	56.3	1929	59.0	1966	61.8
13800	6969	1621	40.4	1667	43.1	1712	45.8	1755	48.5	1797	51.2	1837	53.9	1877	56.7	1915	59.5	1953	62.4	1990	65.2
14350	7247	1648	43.1	1694	45.9	1739	48.8	1781	51.6	1823	54.4	1863	57.2	1902	60.0	1940	62.9	1978	65.8	2014	68.8

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	4040	1790	34.6	1834	36.4	1876	38.3	1918	40.1												
8675	4381	1800	37.4	1843	39.4	1885	41.4	1927	43.4	1968	45.4	2007	47.4	2046	49.4	2085	51.4				
9350	4722	1823	40.6	1862	42.6	1900	44.7	1937	46.7	1977	48.8	2017	51.0	2056	53.1	2094	55.3	2168	59.6	2240	63.9
10025	5063	1846	43.9	1885	46.1	1923	48.2	1960	50.4	1997	52.6	2032	54.8	2067	57.0	2103	59.2	2177	63.8	2249	68.4
10700	5404	1869	47.4	1908	49.7	1946	51.9	1983	54.2	2019	56.5	2055	58.8	2090	61.1	2124	63.5	2191	68.1	2258	72.9
11375	5744	1894	51.0	1932	53.4	1969	55.8	2006	58.2	2042	60.6	2078	63.0	2113	65.5	2147	67.9	2214	72.8	2278	77.8
12050	6085	1919	54.7	1957	57.2	1994	59.8	2031	62.3	2066	64.9	2101	67.4	2136	70.0	2170	72.5	2236	77.7	2301	82.9
12725	6426	1945	58.6	1983	61.3	2020	63.9	2056	66.6	2091	69.3	2126	72.0	2160	74.6	2194	77.3	2260	82.7		
13400	6767	1973	62.7	2009	65.5	2045	68.3	2081	71.1	2117	73.9	2151	76.7	2185	79.5	2219	82.3	2284	87.9		
14075	7108	2002	67.0	2038	69.9	2073	72.8	2108	75.7	2143	78.6	2177	81.5	2211	84.5	2244	87.4	2309	93.3		
14750	7449	2032	71.4	2068	74.5	2103	77.5	2137	80.5	2171	83.6	2203	86.6	2237	89.7	2270	92.8				
15425	7790	2063	76.1	2098	79.2	2133	82.4	2167	85.6	2200	88.7	2233	91.9	2265	95.1	2297	98.3				
16100	8131	2094	81.2	2129	84.3	2163	87.5	2197	90.8	2230	94.1	2263	97.4	2295	101						
16775	8472	2126	86.5	2161	89.7	2194	93.0	2228	96.3	2260	99.7	2293	103								
17450	8813	2158	92.0	2193	95.4	2226	98.8	2259	102	2292	106										
18125	9154	2191	97.7	2225	101	2259	105	2291	108												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 13.7)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
500	100	96	92	83	77	74	69	62	58	82
	80	94	90	82	75	72	67	59	53	80
	60	91	89	81	72	70	64	56	48	78
	40	93	90	81	73	71	66	57	49	79
	30	93	91	82	74	73	67	59	51	80
700	100	105	103	92	88	82	78	72	67	92
	80	104	101	91	85	80	76	69	63	89
	60	107	101	90	85	79	74	66	58	89
	40	106	100	91	84	80	75	67	57	89
	30	103	98	90	84	80	75	68	58	88
950	100	113	107	98	90	88	86	81	76	96
	80	111	103	96	87	85	81	76	71	94
	60	111	99	91	82	78	74	69	64	90
	40	111	99	90	80	77	72	68	67	89
	30	111	99	90	80	77	72	69	67	89
1300	100	118	110	109	99	96	94	90	87	104
	80	116	107	104	96	93	91	86	81	101
	60	115	105	101	92	86	82	78	73	97
	40	114	106	100	89	85	80	75	72	96
	30	114	104	100	90	85	80	75	73	96
1700	100	115	114	113	104	102	100	98	97	110
	80	115	112	110	101	99	97	93	90	106
	60	115	109	106	97	93	90	86	82	102
	40	115	107	105	97	92	88	84	82	101
	30	114	107	105	96	92	87	84	82	100
2315	100	122	121	121	114	109	108	105	104	118
	80	122	120	118	111	106	105	101	98	115
	60	122	118	114	107	102	98	94	90	110
	40	123	116	113	106	101	97	92	90	109
	30	122	116	113	106	101	96	92	89	109

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
500	100	99	94	81	76	71	65	60	58	82
	80	98	90	79	74	69	62	56	50	79
	60	95	88	77	74	68	60	54	49	77
	40	93	85	75	72	67	59	53	48	75
	30	91	84	74	71	67	59	52	48	74
700	100	104	103	92	83	80	74	69	65	90
	80	101	100	91	83	79	72	66	60	88
	60	100	100	91	82	77	71	64	59	88
	40	98	98	89	80	76	69	62	57	86
	30	98	97	88	79	76	69	62	57	85
950	100	110	109	99	92	87	82	77	74	97
	80	109	107	99	91	86	80	74	70	96
	60	108	106	98	90	85	78	72	69	95
	40	107	103	96	88	82	75	70	67	93
	30	106	103	96	88	82	75	70	66	92
1300	100	118	116	117	101	96	91	87	83	110
	80	117	115	111	99	95	89	83	78	106
	60	116	113	108	98	94	86	80	77	103
	40	115	114	111	96	92	84	79	76	105
	30	115	114	111	95	91	84	79	75	105
1700	100	120	120	119	108	104	100	97	92	114
	80	120	119	117	106	102	97	93	89	112
	60	120	118	114	106	101	95	90	85	110
	40	120	118	111	104	99	93	88	85	108
	30	120	117	110	104	99	92	87	84	107
2315	100	126	126	127	119	112	108	105	101	122
	80	126	126	126	117	111	106	102	97	120
	60	127	126	123	115	110	104	99	94	119
	40	126	126	120	113	108	102	97	93	117
	30	126	126	120	113	108	102	96	92	116

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

21 IPA

Wheel Diameter = 36½ in.

Outlet Area = 2.34 ft²

Tip Speed = 9.56 x RPM

Minimum Starting HP = 2

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1779	125	365T	NA
Heavy	2093	200	365T	NA

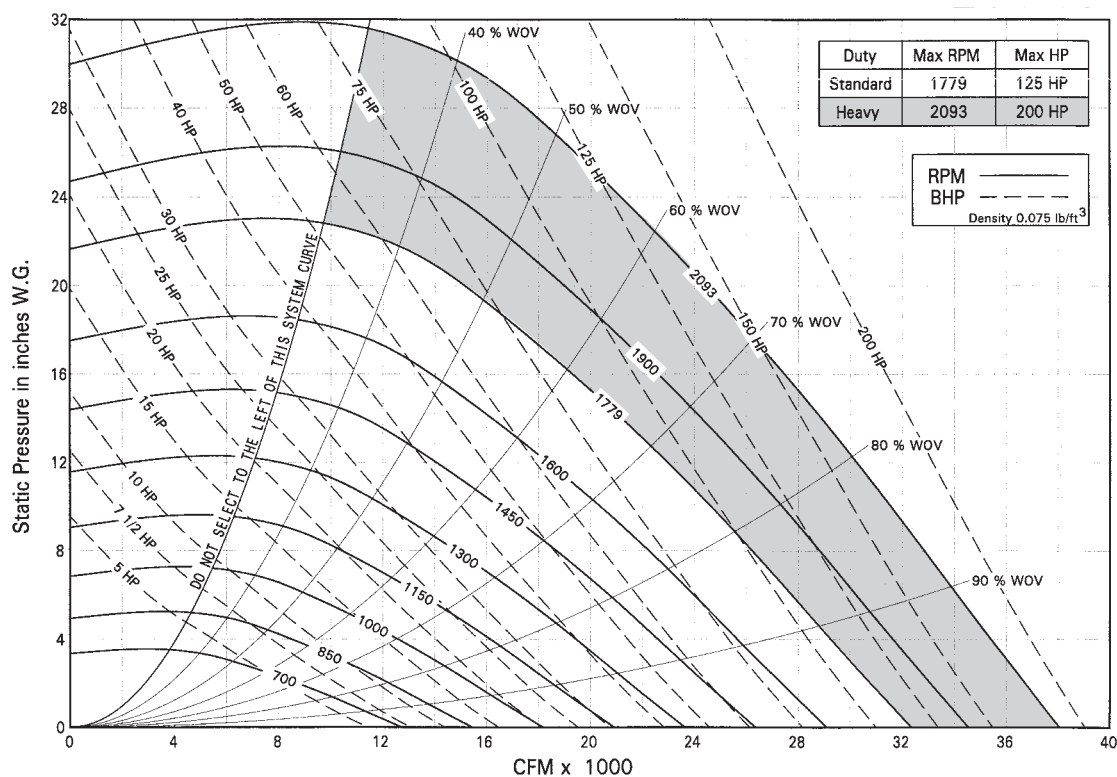


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	2074	451	1.37	569	2.37	666	3.42	755	4.55	837	5.78	912	7.05								
5450	2261	467	1.58	582	2.64	678	3.77	763	4.96	842	6.21	917	7.56	986	8.95						
5900	2448	484	1.81	597	2.95	691	4.15	772	5.39	850	6.71	922	8.08	991	9.55	1055	11.1				
6350	2634	503	2.07	612	3.28	703	4.55	785	5.87	858	7.23	929	8.67	996	10.2	1060	11.7	1120	13.3		
6800	2821	521	2.36	628	3.64	717	4.98	797	6.37	869	7.80	937	9.29	1003	10.8	1065	12.4	1125	14.1	1182	15.8
7250	3008	540	2.67	644	4.04	732	5.45	810	6.90	882	8.41	947	9.94	1011	11.6	1072	13.2	1130	14.9	1187	16.7
7700	3195	559	3.01	660	4.46	747	5.94	824	7.47	894	9.05	959	10.7	1019	12.3	1080	14.0	1137	15.8	1192	17.6
8150	3381	578	3.39	678	4.92	762	6.47	838	8.08	907	9.72	971	11.4	1031	13.1	1088	14.9	1145	16.7	1199	18.5
8600	3568	598	3.79	696	5.41	779	7.05	853	8.72	921	10.4	984	12.2	1044	14.0	1099	15.8	1153	17.6	1207	19.6
9050	3755	618	4.24	714	5.94	795	7.65	868	9.39	935	11.2	997	13.0	1056	14.9	1112	16.8	1164	18.7	1215	20.6
9500	3941	639	4.72	732	6.51	811	8.30	884	10.1	950	12.0	1011	13.9	1069	15.8	1124	17.8	1177	19.8	1226	21.8
9950	4128	660	5.25	751	7.12	829	8.99	900	10.9	965	12.8	1026	14.8	1082	16.8	1137	18.8	1189	20.9	1238	23.0
10400	4315	681	5.82	770	7.77	847	9.72	916	11.7	980	13.7	1041	15.7	1097	17.8	1150	19.9	1202	22.0	1251	24.2
10850	4502	703	6.43	789	8.46	865	10.5	933	12.5	996	14.6	1056	16.7	1111	18.9	1164	21.0	1214	23.2	1264	25.5
11300	4688	724	7.08	808	9.19	883	11.3	949	13.4	1012	15.6	1071	17.8	1126	20.0	1178	22.2	1227	24.5	1276	26.8
11750	4875	746	7.78	828	9.97	902	12.2	967	14.4	1029	16.6	1087	18.9	1141	21.2	1193	23.5	1242	25.8	1289	28.2

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	3319	1196	18.2	1249	20.1	1300	22.1	1350	24.1	1398	26.1	1444	28.2								
8600	3568	1207	19.6	1259	21.5	1308	23.5	1357	25.6	1404	27.7	1450	29.8	1495	32.0	1538	34.2				
9200	3817	1218	21.0	1269	23.0	1318	25.1	1366	27.2	1411	29.3	1457	31.6	1501	33.9	1544	36.2	1586	38.5	1627	40.8
9800	4066	1234	22.6	1281	24.6	1329	26.8	1376	29.0	1422	31.2	1466	33.4	1508	35.7	1551	38.1	1593	40.5	1634	43.0
10400	4315	1251	24.2	1298	26.4	1343	28.6	1387	30.8	1432	33.1	1476	35.5	1518	37.9	1560	40.2	1600	42.6	1640	45.2
11000	4564	1268	25.9	1315	28.2	1359	30.5	1403	32.8	1444	35.2	1487	37.6	1529	40.1	1570	42.5	1610	45.0	1649	47.6
11600	4813	1285	27.7	1331	30.1	1376	32.5	1419	34.9	1461	37.4	1501	39.8	1540	42.3	1581	44.9	1621	47.5	1659	50.1
12200	5062	1303	29.6	1348	32.1	1393	34.6	1436	37.1	1477	39.7	1517	42.2	1556	44.8	1594	47.4	1631	50.1	1670	52.8
12800	5311	1323	31.6	1367	34.2	1410	36.8	1453	39.4	1494	42.1	1534	44.7	1573	47.4	1610	50.1	1647	52.8	1682	55.5
13400	5560	1343	33.7	1387	36.4	1429	39.1	1470	41.8	1511	44.5	1551	47.3	1589	50.1	1627	52.9	1663	55.7	1699	58.5
14000	5809	1363	36.0	1406	38.7	1448	41.5	1489	44.3	1528	47.1	1568	50.0	1606	52.9	1643	55.8	1680	58.7	1715	61.6
14600	6058	1383	38.3	1426	41.1	1468	44.0	1508	46.9	1547	49.8	1585	52.7	1623	55.7	1660	58.7	1697	61.8	1732	64.8
15200	6307	1404	40.7	1446	43.7	1488	46.6	1528	49.7	1567	52.7	1605	55.7	1641	58.7	1677	61.8	1714	64.9	1749	68.1
15800	6556	1425	43.3	1467	46.3	1508	49.4	1548	52.5	1587	55.6	1624	58.8	1661	61.9	1696	65.0	1731	68.2	1766	71.5
16400	6804	1447	46.0	1489	49.1	1529	52.3	1568	55.5	1607	58.7	1644	61.9	1680	65.2	1715	68.4	1750	71.7	1783	75.0
17000	7053	1469	48.8	1511	52.1	1550	55.3	1589	58.6	1627	61.9	1664	65.2	1700	68.6	1735	72.0	1769	75.3	1803	78.7

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	4149	1636	43.7	1675	46.2	1714	48.7	1752	51.3	1789	53.9	1825	56.4								
10800	4481	1645	46.7	1684	49.3	1723	51.9	1761	54.6	1798	57.3	1834	60.0	1869	62.8	1904	65.5	1971	71.1		
11600	4813	1659	50.1	1697	52.8	1734	55.4	1770	58.1	1806	60.9	1842	63.7	1878	66.6	1912	69.5	1980	75.3	2045	81.2
12400	5145	1674	53.7	1711	56.5	1748	59.3	1784	62.1	1819	64.9	1854	67.7	1888	70.6	1921	73.5	1989	79.6	2054	85.8
13200	5477	1693	57.5	1728	60.3	1763	63.2	1798	66.1	1834	69.1	1868	72.1	1902	75.1	1935	78.1	1999	84.1	2063	90.4
14000	5809	1715	61.6	1750	64.6	1783	67.5	1816	70.5	1848	73.5	1882	76.6	1916	79.7	1949	82.8	2013	89.2	2075	95.6
14800	6141	1737	65.9	1772	69.0	1805	72.1	1838	75.2	1870	78.3	1902	81.4	1933	84.6	1963	87.7	2027	94.4	2089	101
15600	6473	1760	70.3	1794	73.6	1828	76.8	1861	80.0	1893	83.3	1924	86.6	1955	89.9	1985	93.2	2044	99.8		
16400	6804	1783	75.0	1817	78.3	1850	81.7	1883	85.1	1915	88.5	1946	91.9	1977	95.4	2007	98.8	2066	106		
17200	7136	1809	80.0	1842	83.4	1873	86.8	1906	90.4	1938	93.9	1969	97.5	1999	101	2029	105	2088	112		
18000	7468	1835	85.2	1868	88.8	1899	92.4	1930	95.9	1960	99.5	1991	113	2022	107	2052	111				
18800	7800	1862	90.7	1894	94.4	1925	98.1	1956	102	1986	106	2016	119	2045	113	2075	117				
19600	8132	1889	96.3	1921	100	1952	104	1983	108	2013	112	2042	116	2071	120						
20400	8464	1916	102	1947	106	1979	110	2009	114	2039	118	2068	122								
21200	8796	1944	109	1975	113	2005	117	2036	121	2066	125										
22000	9128	1973	115	2004	119	2034	124	2063	128												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 18.2)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
450	100	91	82	75	71	71	69	61	61	76
	80	88	78	71	68	66	61	56	55	72
	60	85	76	68	63	61	56	50	43	67
	40	87	75	66	62	59	54	47	41	67
	30	85	75	67	62	59	54	47	41	67
600	100	96	92	84	79	77	76	70	67	84
	80	93	89	80	76	73	69	64	61	80
	60	90	86	77	72	68	64	58	52	76
	40	92	86	76	70	66	62	56	50	75
	30	90	86	77	70	67	62	56	50	75
850	100	112	111	96	88	85	86	81	76	98
	80	108	108	92	85	82	80	74	71	94
	60	106	105	89	81	78	73	68	64	91
	40	102	101	86	79	75	71	65	62	87
	30	100	100	85	78	74	70	65	62	86
1150	100	108	114	103	95	93	92	93	86	103
	80	107	108	98	91	89	88	84	80	97
	60	107	104	95	88	86	82	76	72	93
	40	105	102	93	86	83	79	74	70	91
	30	105	102	94	87	83	79	74	70	92
1550	100	113	118	117	104	100	99	99	96	111
	80	113	114	111	100	96	95	92	88	106
	60	112	112	106	97	93	90	85	80	102
	40	110	110	104	95	91	88	82	78	100
	30	110	111	105	96	91	88	82	78	101
2093	100	119	122	128	114	107	106	105	106	121
	80	118	121	120	109	104	102	100	97	115
	60	117	120	116	106	100	98	94	88	111
	40	115	118	114	105	99	96	91	86	109
	30	115	118	115	105	99	96	91	86	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
450	100	96	93	83	76	73	69	62	57	82
	80	94	92	82	75	71	66	59	52	80
	60	91	89	80	73	69	64	56	49	78
	40	91	89	79	72	69	64	55	49	77
	30	91	89	79	72	69	64	55	49	77
600	100	104	99	88	83	80	76	69	66	88
	80	102	98	89	82	77	71	65	60	87
	60	99	94	86	78	72	66	60	54	83
	40	98	93	84	76	70	65	59	53	82
	30	97	93	83	75	70	64	58	53	81
850	100	118	117	101	92	87	85	79	75	103
	80	117	116	99	91	85	80	73	69	102
	60	113	112	96	88	82	77	72	68	98
	40	110	109	94	86	80	75	70	66	95
	30	109	108	93	85	80	75	70	65	94
1150	100	116	120	110	100	95	93	90	84	107
	80	118	115	106	99	94	90	85	80	104
	60	115	110	103	96	92	88	84	79	101
	40	116	114	102	93	89	85	82	78	101
	30	116	115	102	93	88	85	81	77	101
1550	100	121	125	123	110	103	100	98	93	117
	80	123	123	118	108	102	98	94	88	113
	60	120	120	113	105	100	96	92	88	110
	40	121	122	115	102	97	93	90	86	110
	30	121	122	116	102	97	93	89	85	111
2093	100	126	129	133	121	111	108	105	103	126
	80	128	131	127	117	111	106	103	97	122
	60	125	128	123	115	108	104	101	96	118
	40	126	129	126	112	105	101	98	94	120
	30	126	129	127	112	105	101	97	93	120

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

23 IPA

Wheel Diameter = 40 in.
 Outlet Area = 2.8 ft²
 Tip Speed = 10.47 x RPM
 Minimum Starting HP = 3

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1623	150	365T	NA
Heavy	1910	200	365T	NA

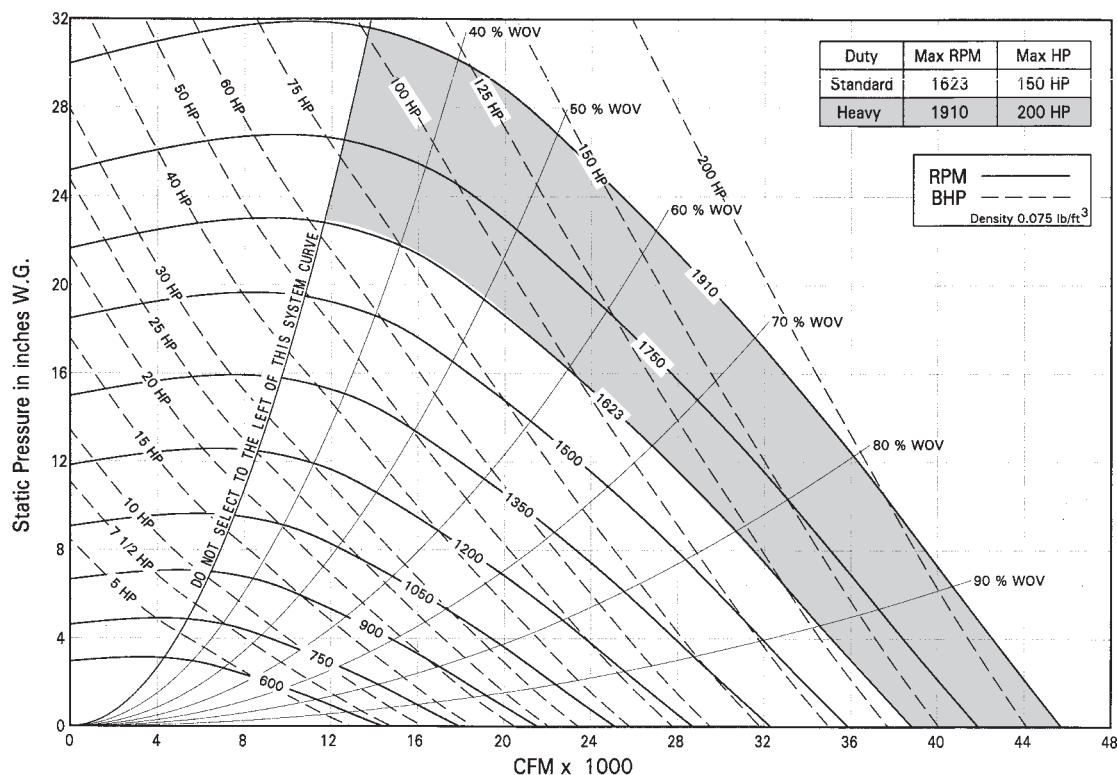


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	2054	411	1.64	519	2.84	608	4.10	689	5.46	764	6.93	832	8.47								
6600	2260	428	1.92	533	3.21	620	4.58	697	6.01	769	7.51	837	9.15	900	10.8						
7200	2465	445	2.24	548	3.63	633	5.08	707	6.59	777	8.19	842	9.84	905	11.6	963	13.4				
7800	2671	464	2.59	563	4.08	646	5.63	720	7.24	785	8.89	850	10.7	910	12.4	968	14.4	1023	16.3	1075	18.3
8400	2876	483	2.99	579	4.58	660	6.22	732	7.93	798	9.68	858	11.5	918	13.4	974	15.3	1028	17.4	1080	19.5
9000	3082	502	3.42	596	5.12	675	6.86	745	8.65	811	10.5	870	12.4	926	14.4	982	16.4	1034	18.4	1085	20.6
9600	3287	521	3.91	613	5.71	691	7.54	760	9.44	823	11.4	882	13.4	937	15.4	990	17.5	1042	19.7	1092	21.9
10200	3493	541	4.43	631	6.36	707	8.29	775	10.3	837	12.3	895	14.4	950	16.5	1000	18.7	1050	20.9	1100	23.2
10800	3698	562	5.02	649	7.06	723	9.10	790	11.2	852	13.3	908	15.5	962	17.7	1013	20.0	1061	22.3	1108	24.6
11400	3904	583	5.66	668	7.81	740	9.95	806	12.1	867	14.4	922	16.6	975	19.0	1026	21.3	1073	23.7	1118	26.1
12000	4109	604	6.37	687	8.62	758	10.9	822	13.2	882	15.5	937	17.9	988	20.2	1039	22.7	1086	25.2	1131	27.7
12600	4315	626	7.13	706	9.49	776	11.9	839	14.2	897	16.7	952	19.1	1003	21.6	1052	24.2	1099	26.8	1144	29.4
13200	4520	647	7.96	725	10.4	794	12.9	856	15.4	914	17.9	967	20.5	1018	23.1	1066	25.7	1112	28.4	1157	31.1
13800	4726	669	8.85	745	11.4	813	14.0	873	16.6	930	19.3	983	21.9	1033	24.6	1081	27.3	1126	30.1	1169	32.9
14400	4931	692	9.82	765	12.5	832	15.2	891	17.9	947	20.7	999	23.4	1049	26.2	1096	29.0	1140	31.9	1183	34.8
15000	5136	714	10.9	785	13.6	851	16.5	910	19.3	964	22.1	1016	25.0	1064	27.8	1111	30.8	1155	33.7	1198	36.7

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	3424	1097	22.7	1144	25.0	1190	27.4	1235	29.9	1279	32.4	1320	34.9	1361	37.5						
10725	3672	1107	24.4	1154	26.8	1199	29.3	1242	31.7	1285	34.3	1327	37.0	1367	39.7	1406	42.4	1445	45.1	1482	47.9
11450	3921	1120	26.2	1163	28.7	1208	31.3	1251	33.9	1293	36.5	1333	39.1	1373	41.9	1413	44.7	1451	47.6	1488	50.5
12175	4169	1135	28.2	1178	30.8	1219	33.3	1261	36.0	1303	38.8	1343	41.5	1381	44.3	1419	47.1	1457	50.1	1494	53.1
12900	4417	1150	30.2	1193	32.9	1234	35.6	1273	38.4	1312	41.2	1352	44.0	1391	47.0	1429	49.9	1465	52.8	1501	55.8
13625	4666	1166	32.4	1208	35.2	1249	38.0	1288	40.9	1326	43.7	1363	46.6	1401	49.7	1438	52.7	1475	55.8	1510	58.9
14350	4914	1182	34.6	1224	37.5	1265	40.5	1304	43.5	1342	46.5	1378	49.5	1413	52.5	1448	55.6	1484	58.8	1520	62.0
15075	5162	1200	37.0	1240	40.0	1280	43.1	1319	46.2	1357	49.3	1393	52.5	1429	55.6	1463	58.8	1496	62.0	1530	65.3
15800	5410	1218	39.5	1258	42.6	1297	45.8	1335	49.0	1372	52.3	1409	55.5	1444	58.8	1478	62.1	1511	65.5	1544	68.8
16525	5659	1236	42.1	1276	45.4	1314	48.7	1351	52.0	1388	55.3	1424	58.7	1459	62.1	1493	65.6	1527	69.0	1559	72.5
17250	5907	1254	44.8	1294	48.2	1333	51.7	1369	55.1	1405	58.5	1440	62.0	1475	65.6	1509	69.1	1542	72.7	1574	76.3
17975	6155	1273	47.7	1313	51.2	1351	54.8	1387	58.3	1423	61.9	1457	65.5	1491	69.1	1525	72.8	1558	76.5	1590	80.2
18700	6404	1293	50.8	1331	54.4	1369	58.0	1406	61.7	1441	65.4	1475	69.1	1508	72.9	1541	76.6	1573	80.4	1605	84.3
19425	6652	1313	54.0	1351	57.7	1388	61.4	1424	65.2	1459	69.1	1493	72.9	1526	76.8	1559	80.7	1590	84.5	1621	88.5
20150	6900	1333	57.4	1371	61.2	1407	65.1	1443	68.9	1478	72.9	1512	76.9	1545	80.8	1577	84.8	1608	88.8	1638	92.9
20875	7148	1353	60.9	1391	64.9	1427	68.8	1462	72.8	1496	76.8	1530	80.9	1563	85.0	1595	89.2	1626	93.3	1656	97.5

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	4109	1493	52.5	1529	55.5	1564	58.5	1598	61.5	1632	64.6	1665	67.7								
12925	4426	1501	55.9	1537	59.0	1572	62.2	1606	65.4	1640	68.6	1673	71.9	1705	75.2	1737	78.5	1798	85.2		
13850	4743	1513	59.9	1548	63.0	1581	66.2	1614	69.4	1648	72.7	1681	76.2	1713	79.6	1744	83.0	1806	90.0	1865	97.1
14775	5059	1526	63.9	1560	67.3	1594	70.6	1627	73.9	1659	77.3	1690	80.7	1721	84.1	1752	87.7	1814	95.0	1873	102
15700	5376	1542	68.3	1573	71.6	1606	75.1	1639	78.6	1671	82.2	1703	85.7	1733	89.3	1764	92.9	1822	100	1881	108
16625	5693	1561	73.0	1593	76.5	1623	80.0	1653	83.6	1684	87.1	1715	90.9	1746	94.6	1776	98.4	1835	106	1891	114
17550	6010	1581	77.9	1612	81.6	1643	85.2	1673	88.9	1702	92.6	1731	96.4	1759	100	1788	104	1847	112	1904	120
18475	6327	1600	83.0	1632	86.8	1662	90.7	1692	94.5	1721	98.4	1750	102	1778	106	1806	110	1859	118		
19400	6643	1620	88.3	1652	92.3	1682	96.3	1712	100	1741	104	1770	108	1798	113	1825	117	1879	125		
20325	6960	1643	94.0	1672	98.0	1702	102	1732	106	1761	111	1789	115	1817	119	1845	123	1898	132		
21250	7277	1665	99.9	1695	104	1724	108	1752	113	1781	117	1809	121	1837	126	1864	130				
22175	7594	1689	106	1718	110	1747	115	1775	119	1803	124	1830	128	1857	133	1884	137				
23100	7910	1712	113	1741	117	1770	122	1798	126	1825	131	1852	135	1879	140	1905	145				
24025	8227	1736	119	1765	124	1793	129	1821	133	1849	138	1875	143	1902	148						
24950	8544	1760	126	1788	131	1817	136	1845	141	1872	146	1899	151								
25875	8861	1785	134	1813	139	1841	144	1868	149	1895	154										

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 23.9)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
400	100	88	84	77	74	74	68	62	59	78
	80	85	81	74	72	72	65	56	50	76
	60	83	79	72	71	72	63	53	46	75
	40	82	79	71	71	73	63	53	46	75
	30	81	78	71	71	73	63	53	46	76
550	100	97	92	84	80	78	77	70	68	84
	80	94	88	80	76	74	70	64	62	80
	60	91	86	77	72	69	64	58	52	76
	40	94	85	76	70	67	62	56	50	75
	30	92	85	76	71	67	63	56	50	75
750	100	112	107	94	87	85	86	80	76	95
	80	109	104	90	84	82	79	73	71	92
	60	107	101	86	80	77	72	67	64	89
	40	102	97	84	78	74	70	65	62	85
	30	101	96	84	78	74	70	65	61	84
1050	100	109	116	101	95	94	93	94	85	103
	80	109	108	97	92	90	88	85	80	98
	60	108	104	94	88	86	82	76	73	94
	40	106	102	92	86	84	79	74	70	91
	30	106	103	93	87	84	79	74	71	92
1400	100	114	119	115	104	100	99	100	95	111
	80	114	115	109	100	97	95	92	88	106
	60	113	112	105	97	93	90	85	80	102
	40	111	110	103	95	91	87	82	78	100
	30	111	111	104	95	91	87	82	78	100
1910	100	120	123	129	113	107	107	106	107	122
	80	119	122	121	109	104	103	101	97	115
	60	118	121	117	106	101	99	95	88	112
	40	117	119	115	104	99	96	91	86	110
	30	117	119	115	105	99	97	91	86	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
400	100	97	91	81	76	73	68	62	56	81
	80	95	90	81	75	71	65	58	51	79
	60	92	88	79	72	69	63	55	48	77
	40	92	87	77	71	69	62	54	48	76
	30	92	87	77	71	69	62	55	48	76
550	100	105	98	88	83	80	76	69	66	88
	80	103	97	89	82	77	71	65	61	87
	60	100	94	85	78	72	66	60	54	83
	40	99	93	83	76	70	65	59	53	82
	30	98	92	83	75	70	65	59	53	81
750	100	118	113	99	90	87	85	78	74	100
	80	118	112	97	90	85	79	72	68	99
	60	113	108	94	87	82	76	71	67	95
	40	110	105	92	84	79	74	70	66	92
	30	109	104	92	84	79	74	69	65	92
1050	100	117	121	109	99	96	93	91	83	108
	80	119	115	105	99	94	91	85	80	104
	60	116	111	103	96	92	88	84	80	101
	40	117	114	100	93	89	86	82	78	101
	30	117	115	100	93	88	85	81	77	102
1400	100	122	126	121	109	103	100	98	93	116
	80	124	123	116	107	102	98	93	88	113
	60	121	119	113	105	100	96	92	88	109
	40	122	122	113	102	97	94	90	86	110
	30	122	122	114	102	97	93	89	85	110
1910	100	128	131	134	120	111	108	106	103	127
	80	129	132	128	117	111	107	103	97	123
	60	126	129	123	115	108	104	101	96	119
	40	127	130	127	112	105	102	98	95	120
	30	127	130	128	112	105	101	97	93	121

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

26 IPA

Wheel Diameter = 45¹/₈ in.

Outlet Area = 3.58 ft²

Tip Speed = 11.81 x RPM

Minimum Starting HP = 7¹/₂

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1439	200	405T	NA
Heavy	1693	300	405T	NA

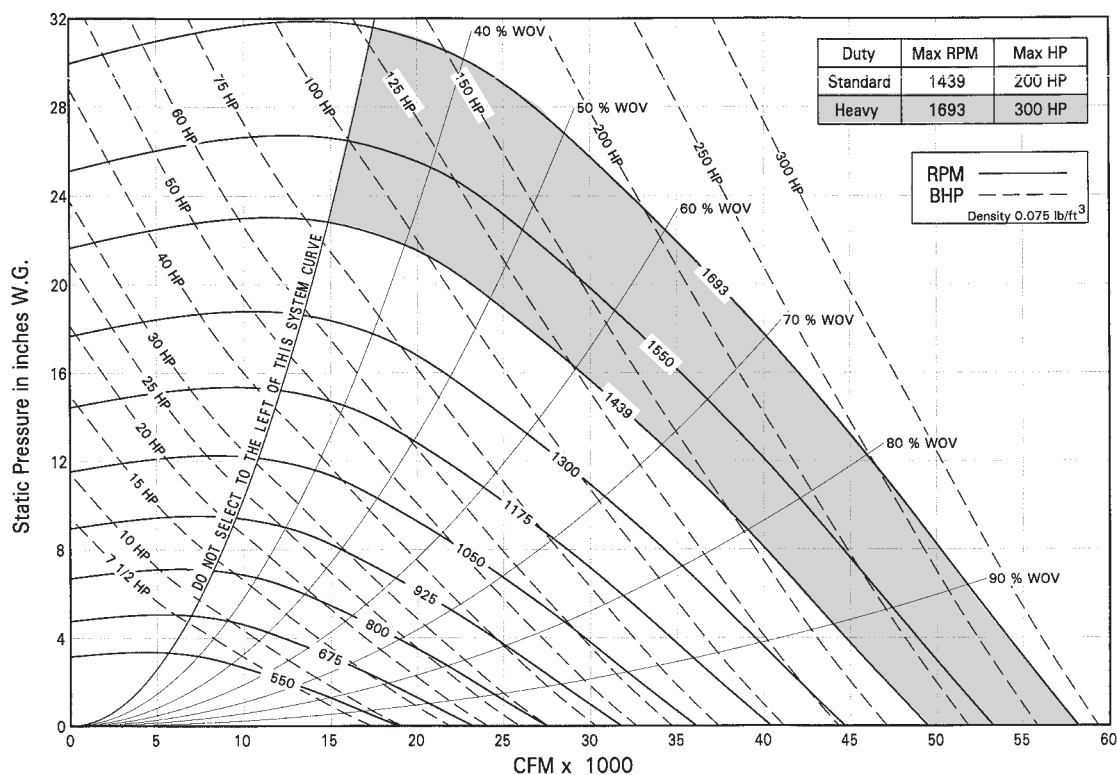


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	2156	371	2.26	465	3.83	544	5.50	614	7.28	679	9.17	740	11.2								
8800	2371	387	2.65	479	4.36	555	6.16	622	8.02	686	10.0	744	12.1	800	14.3	852	16.6				
9600	2587	404	3.10	493	4.94	567	6.86	633	8.86	693	10.9	751	13.1	805	15.4	856	17.8	905	20.2		
10400	2803	421	3.61	508	5.58	580	7.62	645	9.75	703	11.9	758	14.2	811	16.6	861	19.0	910	21.6	956	24.2
11200	3018	439	4.17	523	6.28	594	8.46	657	10.7	715	13.0	767	15.4	819	17.9	868	20.4	914	23.0	960	25.7
12000	3234	457	4.79	539	7.05	608	9.35	670	11.7	727	14.2	779	16.7	827	19.2	875	21.9	922	24.6	966	27.3
12800	3450	475	5.48	555	7.89	623	10.3	684	12.8	739	15.4	791	18.0	839	20.7	884	23.4	929	26.2	973	29.1
13600	3665	494	6.24	572	8.81	638	11.4	698	14.0	752	16.7	803	19.4	851	22.3	896	25.1	938	28.0	981	31.0
14400	3881	514	7.09	590	9.80	654	12.5	712	15.3	766	18.1	816	21.0	863	23.9	908	26.9	950	29.9	990	33.0
15200	4097	534	8.01	607	10.9	670	13.7	728	16.6	780	19.6	829	22.6	875	25.6	919	28.7	962	31.9	1002	35.1
16000	4312	554	9.03	625	12.0	687	15.0	743	18.1	795	21.1	843	24.3	889	27.4	931	30.7	973	34.0	1013	37.3
16800	4528	574	10.1	643	13.3	704	16.4	759	19.6	810	22.8	858	26.1	903	29.4	945	32.7	985	36.1	1025	39.6
17600	4743	594	11.3	661	14.6	721	17.9	775	21.2	825	24.6	872	27.9	917	31.4	959	34.9	998	38.4	1037	42.0
18400	4959	615	12.6	679	16.0	739	19.5	792	23.0	841	26.5	887	30.0	931	33.5	973	37.1	1012	40.8	1050	44.4
19200	5175	636	14.0	698	17.6	757	21.2	809	24.8	856	28.4	902	32.1	945	35.8	987	39.5	1026	43.3	1064	47.1
20000	5390	656	15.5	718	19.3	774	23.0	826	26.8	873	30.5	918	34.3	961	38.1	1001	42.0	1040	45.9	1077	49.9

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	3234	966	27.3	1009	30.2	1050	33.2	1090	36.2	1129	39.3										
13000	3504	975	29.6	1017	32.5	1056	35.5	1096	38.7	1135	41.9	1172	45.2	1208	48.5	1243	51.9				
14000	3773	984	31.9	1026	35.1	1066	38.2	1104	41.4	1141	44.6	1178	48.1	1214	51.5	1249	55.1	1283	58.6	1315	62.2
15000	4043	999	34.5	1037	37.7	1075	41.0	1113	44.4	1150	47.8	1186	51.2	1220	54.6	1255	58.3	1288	62.0	1321	65.8
16000	4312	1013	37.3	1051	40.6	1088	44.0	1123	47.4	1159	51.0	1195	54.6	1229	58.2	1262	61.9	1295	65.6	1327	69.4
17000	4582	1028	40.2	1066	43.7	1102	47.2	1137	50.8	1171	54.4	1204	58.1	1239	61.9	1272	65.8	1304	69.6	1335	73.5
18000	4851	1043	43.2	1081	46.9	1117	50.6	1152	54.4	1185	58.2	1218	62.0	1249	65.8	1281	69.7	1313	73.8	1345	77.8
19000	5121	1060	46.4	1096	50.2	1132	54.1	1167	58.1	1200	62.0	1232	66.0	1264	70.0	1294	74.0	1324	78.1	1354	82.3
20000	5390	1077	49.9	1113	53.8	1147	57.8	1181	61.9	1215	66.1	1247	70.2	1278	74.4	1309	78.6	1338	82.8	1367	87.0
21000	5660	1095	53.5	1130	57.6	1165	61.8	1197	66.0	1230	70.2	1262	74.6	1293	78.9	1323	83.3	1353	87.7	1381	92.1
22000	5929	1113	57.2	1148	61.6	1182	65.9	1215	70.3	1246	74.7	1277	79.1	1308	83.6	1338	88.2	1368	92.8	1396	97.3
23000	6199	1131	61.3	1166	65.7	1199	70.3	1232	74.8	1263	79.4	1294	83.9	1323	88.5	1353	93.3	1382	98.0	1411	103
24000	6469	1150	65.5	1184	70.1	1217	74.8	1250	79.5	1281	84.3	1311	89.0	1340	93.8	1369	98.6	1397	103	1426	108
25000	6738	1169	70.0	1203	74.8	1235	79.6	1267	84.4	1298	89.4	1329	94.3	1358	99.2	1386	104	1414	109	1441	114
26000	7008	1189	74.7	1222	79.7	1254	84.6	1285	89.6	1316	94.7	1346	99.8	1375	105	1404	110	1431	115	1458	120
27000	7277	1208	79.6	1241	84.8	1273	89.9	1304	95.1	1334	100	1364	106	1393	111	1421	116	1449	122	1475	127

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	4043	1321	65.8	1353	69.6	1385	73.4	1415	77.2	1445	81.1										
16200	4366	1328	70.2	1360	74.1	1392	78.2	1422	82.2	1452	86.3	1481	90.4	1510	94.5	1538	98.7				
17400	4690	1339	75.2	1370	79.2	1400	83.2	1429	87.3	1459	91.6	1488	95.9	1517	100	1545	105	1599	113	1652	122
18600	5013	1350	80.5	1381	84.7	1411	88.9	1440	93.1	1468	97.3	1496	102	1524	106	1552	111	1606	120	1659	129
19800	5336	1364	86.0	1392	90.3	1422	94.7	1451	99.2	1480	104	1507	108	1535	113	1561	117	1614	126	1666	136
21000	5660	1381	92.1	1409	96.5	1437	101	1463	106	1491	110	1519	115	1546	120	1573	124	1625	134	1675	143
22200	5983	1399	98.4	1427	103	1454	108	1481	112	1507	117	1532	122	1557	127	1584	132	1636	142	1686	152
23400	6307	1417	105	1445	110	1472	115	1498	120	1524	125	1550	129	1575	134	1599	139	1647	149		
24600	6630	1435	112	1462	117	1490	122	1516	127	1542	132	1567	137	1592	143	1617	148	1664	158		
25800	6954	1455	119	1481	124	1507	130	1534	135	1560	140	1585	146	1610	151	1634	156	1682	167		
27000	7277	1475	127	1502	132	1527	138	1552	143	1578	148	1603	154	1628	160	1652	165				
28200	7601	1496	135	1522	140	1548	146	1573	152	1597	157	1621	163	1646	169	1670	174				
29400	7924	1518	143	1543	149	1569	155	1594	161	1618	167	1642	172	1665	178	1688	184				
30600	8247	1539	152	1565	158	1590	164	1615	170	1639	176	1663	182	1686	188						
31800	8571	1561	161	1586	167	1611	174	1636	180	1660	186	1684	192								
33000	8894	1584	171	1609	177	1633	184	1657	190	1681	196										

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 34.4)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{Wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{WiA}
350	100	90	83	77	75	74	67	62	59	78
	80	86	80	74	73	73	63	56	49	76
	60	84	78	72	73	73	61	53	46	75
	40	83	78	71	73	74	61	53	46	76
	30	82	78	71	73	74	61	53	45	76
500	100	99	92	85	81	80	78	71	70	86
	80	96	88	81	77	75	70	65	63	81
	60	93	86	78	73	70	65	59	53	77
	40	96	85	76	71	68	63	57	51	76
	30	94	86	77	72	68	64	57	51	76
700	100	115	107	95	89	88	88	81	78	97
	80	111	104	91	86	84	81	74	73	93
	60	109	101	87	82	79	74	68	66	89
	40	105	97	85	79	76	72	66	63	86
	30	103	96	85	79	76	71	66	63	85
950	100	112	118	101	96	95	94	95	85	105
	80	110	110	97	93	91	89	86	81	99
	60	109	106	94	89	87	83	77	74	95
	40	108	103	93	87	85	80	75	71	93
	30	108	104	93	88	85	80	75	72	93
1250	100	116	121	113	104	101	100	101	95	111
	80	115	116	108	100	98	96	93	89	106
	60	115	113	104	97	94	91	85	81	102
	40	113	111	103	95	92	88	82	79	100
	30	113	111	103	96	92	88	82	79	101
1693	100	121	125	128	113	108	107	107	106	121
	80	121	123	121	109	105	104	101	97	115
	60	120	121	116	106	102	99	94	89	112
	40	118	119	114	104	99	97	91	87	110
	30	118	120	115	105	100	97	91	87	110

Outlet Sound Power, L_{Wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{WoA}
350	100	98	90	80	76	74	67	61	56	80
	80	96	89	80	74	71	64	57	50	79
	60	94	87	78	72	69	62	54	48	77
	40	93	86	76	71	70	61	54	48	76
	30	93	86	76	71	69	61	54	48	76
500	100	107	98	88	84	81	77	70	68	89
	80	105	98	89	83	78	72	65	62	87
	60	102	94	86	79	73	67	61	55	84
	40	101	93	84	76	71	65	60	54	82
	30	100	93	83	76	71	65	59	54	82
700	100	121	113	100	92	89	87	79	76	101
	80	120	112	98	91	86	81	74	70	100
	60	116	108	95	88	83	78	73	69	96
	40	113	105	93	86	81	76	71	68	93
	30	112	104	93	86	80	75	71	67	92
950	100	119	123	108	100	97	94	91	84	109
	80	120	117	105	99	95	91	85	81	105
	60	117	112	103	97	93	89	85	81	102
	40	118	115	100	94	90	87	83	79	102
	30	118	117	100	94	89	86	82	78	103
1250	100	124	128	120	109	104	101	99	93	116
	80	125	124	116	108	103	99	94	88	113
	60	122	119	112	105	100	97	92	88	109
	40	124	122	112	102	98	94	90	87	110
	30	124	123	112	102	97	93	89	86	110
1693	100	129	132	133	120	112	109	106	103	126
	80	131	132	127	117	111	107	103	97	122
	60	128	129	123	114	109	105	101	97	119
	40	129	130	125	112	106	102	99	95	120
	30	129	131	127	111	105	101	98	94	120

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

29 IPA

Wheel Diameter = 50½ in.

Outlet Area = 4.54 ft²

Tip Speed = 13.22 x RPM

Minimum Starting HP = 15

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	1286	200	405T	NA
Heavy	1513	350	405T	NA

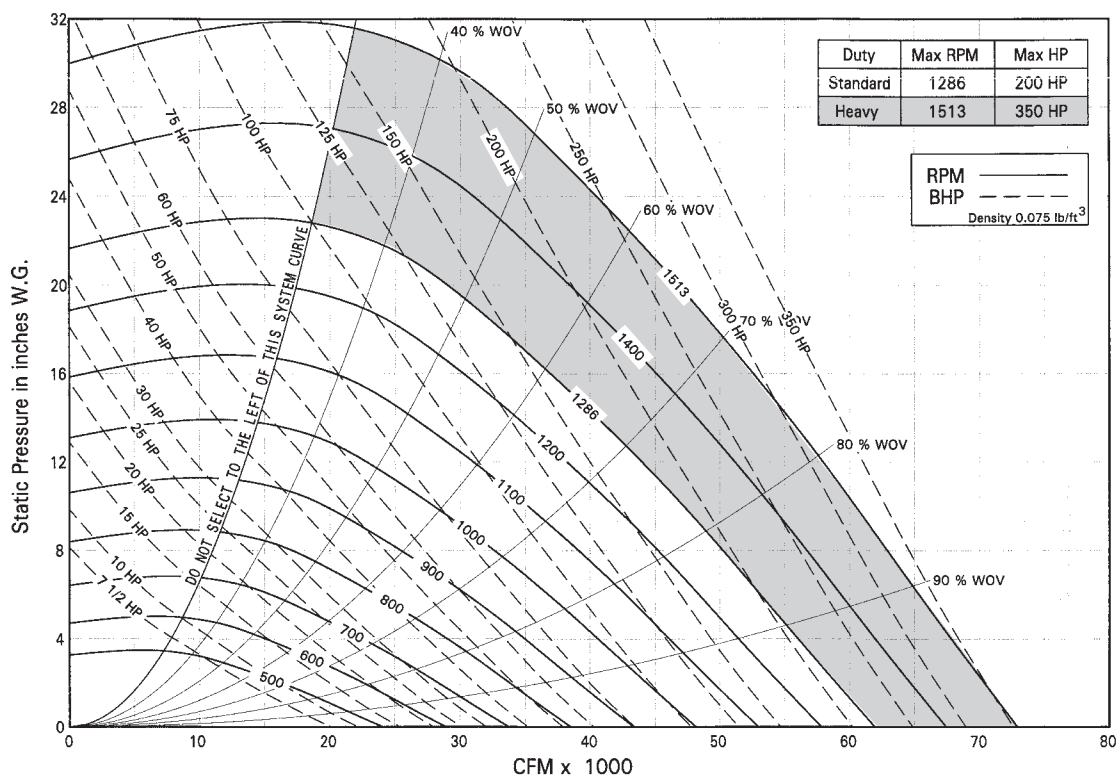


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	2173	331	2.82	416	4.79	485	6.88	549	9.10	607	11.5	661	14.0								
11000	2391	346	3.31	428	5.45	496	7.69	555	10.0	612	12.5	665	15.1	715	17.9						
12000	2608	361	3.87	440	6.17	507	8.57	565	11.1	619	13.7	671	16.4	719	19.2	765	22.2	809	25.3		
13000	2826	376	4.50	453	6.96	518	9.52	576	12.2	628	14.9	677	17.8	725	20.7	769	23.8	813	27.0	854	30.3
14000	3043	392	5.20	467	7.84	531	10.6	587	13.4	638	16.3	685	19.2	731	22.3	775	25.5	817	28.7	858	32.2
15000	3260	408	5.98	481	8.80	543	11.7	598	14.6	649	17.7	696	20.8	739	24.0	782	27.3	823	30.7	863	34.1
16000	3478	424	6.83	496	9.85	556	12.9	611	16.0	660	19.2	706	22.5	749	25.9	790	29.3	830	32.8	869	36.4
17000	3695	441	7.78	511	11.0	570	14.2	623	17.5	672	20.9	717	24.3	760	27.8	800	31.4	838	35.0	876	38.7
18000	3913	458	8.84	526	12.2	584	15.6	636	19.1	684	22.6	728	26.2	770	29.8	811	33.6	848	37.4	884	41.2
19000	4130	476	9.99	542	13.6	598	17.1	650	20.8	697	24.4	741	28.2	781	32.0	821	35.9	859	39.8	894	43.8
20000	4347	494	11.3	558	15.0	613	18.8	663	22.6	710	26.4	753	30.3	794	34.3	832	38.3	869	42.4	905	46.6
21000	4565	512	12.6	574	16.6	628	20.5	677	24.5	723	28.5	766	32.5	806	36.7	844	40.9	880	45.1	916	49.4
22000	4782	530	14.1	590	18.2	644	22.4	692	26.5	737	30.7	779	34.9	818	39.2	856	43.6	892	47.9	926	52.4
23000	5000	549	15.7	606	20.0	659	24.4	707	28.7	751	33.0	792	37.4	831	41.9	868	46.4	904	50.9	937	55.5
24000	5217	567	17.5	623	21.9	675	26.5	722	31.0	764	35.5	806	40.1	844	44.6	881	49.3	916	54.1	950	58.8
25000	5434	586	19.4	641	24.0	691	28.7	737	33.4	779	38.1	819	42.9	858	47.6	894	52.4	929	57.3	962	62.3

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	3260	863	34.1	901	37.8	938	41.5	974	45.3	1009	49.1										
16200	3521	871	36.9	908	40.5	943	44.3	979	48.3	1014	52.3	1047	56.4	1079	60.5	1110	64.7				
17400	3782	879	39.7	916	43.6	951	47.5	985	51.5	1019	55.5	1052	59.8	1084	64.1	1115	68.5	1145	72.9	1175	77.4
18600	4043	890	42.8	924	46.7	959	50.8	993	55.0	1026	59.2	1058	63.5	1089	67.8	1120	72.4	1150	77.0	1180	81.7
19800	4304	903	46.0	937	50.2	969	54.4	1002	58.7	1034	63.1	1066	67.6	1097	72.1	1126	76.6	1155	81.2	1185	86.1
21000	4565	916	49.4	949	53.8	982	58.2	1013	62.7	1043	67.1	1074	71.8	1105	76.5	1134	81.2	1163	86.0	1191	90.8
22200	4826	928	53.0	962	57.6	994	62.2	1026	66.9	1056	71.5	1085	76.2	1113	81.0	1142	85.9	1171	90.9	1199	96.0
23400	5086	942	56.8	975	61.6	1007	66.4	1038	71.2	1068	76.1	1097	81.0	1125	86.0	1152	90.9	1179	96.0	1207	101
24600	5347	957	60.9	989	65.8	1020	70.7	1051	75.8	1081	80.9	1110	86.0	1137	91.2	1165	96.3	1191	102	1217	107
25800	5608	972	65.1	1004	70.2	1034	75.4	1064	80.5	1094	85.8	1122	91.2	1150	96.5	1177	102	1203	107	1229	113
27000	5869	987	69.6	1019	74.9	1049	80.3	1078	85.6	1107	91.0	1135	96.5	1163	102	1190	108	1216	113	1242	119
28200	6130	1003	74.2	1034	79.8	1064	85.4	1093	90.9	1121	96.5	1149	102	1176	108	1203	114	1229	120	1254	125
29400	6391	1019	79.2	1049	84.9	1079	90.7	1108	96.5	1136	102	1163	108	1190	114	1215	120	1242	126	1267	132
30600	6652	1035	84.5	1065	90.3	1095	96.2	1123	102	1151	108	1178	114	1204	120	1230	127	1255	133	1280	139
31800	6913	1052	90.0	1082	96.0	1110	102	1139	108	1166	115	1193	121	1219	127	1245	133	1269	140	1294	146
33000	7173	1068	95.7	1098	102	1127	108	1155	115	1182	121	1208	127	1234	134	1260	141	1284	147	1308	154

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	3913	1177	79.5	1206	84.1	1234	88.8														
19600	4260	1184	85.3	1213	90.2	1241	95.1	1268	100	1295	105	1321	110	1346	115						
21200	4608	1193	91.6	1220	96.5	1247	102	1275	107	1301	112	1327	117	1353	123	1378	128	1427	139		
22800	4956	1203	98.6	1231	104	1257	109	1283	114	1309	119	1334	125	1360	130	1385	136	1433	147	1480	159
24400	5304	1215	106	1241	111	1268	117	1294	122	1319	128	1344	133	1369	139	1392	144	1440	156	1487	168
26000	5652	1231	114	1256	119	1281	125	1305	130	1330	136	1355	142	1379	148	1403	154	1450	166	1494	178
27600	6000	1248	122	1273	128	1297	134	1321	140	1344	145	1367	151	1390	157	1414	163	1460	176	1505	188
29200	6347	1265	131	1290	137	1314	143	1338	149	1361	155	1384	161	1406	168	1428	174	1471	186		
30800	6695	1282	140	1307	146	1331	153	1355	159	1378	166	1400	172	1423	178	1444	185	1487	198		
32400	7043	1301	150	1324	156	1348	163	1372	169	1395	176	1417	183	1439	190	1461	196	1503	210		
34000	7391	1321	160	1344	167	1367	174	1389	180	1412	187	1434	194	1456	201	1478	208				
35600	7739	1341	171	1364	178	1387	185	1409	192	1431	199	1452	206	1473	213	1495	221				
37200	8086	1361	182	1384	189	1407	197	1429	204	1451	212	1472	219	1493	226						
38800	8434	1381	194	1404	202	1427	209	1449	217	1470	224	1492	232	1512	240						
40400	8782	1403	207	1425	214	1447	222	1469	230	1491	238	1512	246								
42000	9130	1424	220	1447	228	1468	236	1490	244	1511	252										

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 48.2)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
300	100	90	81	76	74	75	65	62	58	78
	80	87	79	73	73	73	60	55	48	76
	60	85	77	71	73	73	57	52	44	76
	40	84	76	70	74	74	57	52	44	76
	30	83	76	69	74	75	57	52	44	77
400	100	97	88	82	79	78	75	68	68	83
	80	94	84	78	75	73	67	63	62	78
	60	90	82	74	70	67	62	56	49	74
	40	92	81	73	69	65	60	53	47	73
	30	91	81	73	69	66	60	53	47	73
600	100	116	103	93	88	88	88	80	77	96
	80	112	100	89	85	84	80	73	73	91
	60	110	97	86	81	79	73	68	65	88
	40	105	93	83	79	75	70	65	63	84
	30	104	93	83	78	75	70	65	63	84
800	100	113	113	100	95	94	94	92	82	103
	80	110	107	96	92	90	88	84	79	97
	60	108	103	93	89	86	81	76	73	93
	40	106	101	91	87	83	78	73	70	91
	30	106	101	91	87	83	78	74	71	91
1100	100	117	123	111	103	102	101	102	94	111
	80	116	117	106	100	98	96	93	88	106
	60	116	113	103	97	94	91	84	81	102
	40	114	110	101	95	92	87	82	79	100
	30	114	111	102	95	92	87	82	79	100
1513	100	123	127	126	113	109	108	108	105	120
	80	122	124	119	109	106	104	102	98	115
	60	121	122	115	106	102	99	94	89	112
	40	120	120	113	104	100	97	91	87	110
	30	120	120	114	105	100	97	92	87	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
300	100	99	88	78	75	73	66	60	55	80
	80	97	87	79	73	70	63	56	49	78
	60	94	85	76	71	69	60	53	46	76
	40	94	84	74	71	70	59	53	46	75
	30	94	84	74	71	69	59	53	46	75
400	100	104	93	85	82	79	73	67	66	86
	80	103	93	85	80	75	68	63	60	84
	60	99	90	82	75	70	64	57	51	80
	40	99	89	80	73	68	62	56	51	79
	30	98	88	79	73	68	62	56	51	78
600	100	121	109	98	91	89	86	78	76	100
	80	121	108	96	90	85	79	73	70	98
	60	117	104	93	87	82	77	72	68	94
	40	113	101	91	85	80	75	71	67	92
	30	112	101	91	84	79	74	70	66	91
800	100	120	119	106	99	96	93	89	82	106
	80	119	114	104	98	94	89	84	79	103
	60	115	109	101	96	92	88	83	79	100
	40	117	111	98	93	89	86	82	78	99
	30	118	112	98	92	88	85	81	77	100
1100	100	125	129	118	108	104	101	99	92	116
	80	127	124	114	107	103	99	93	88	112
	60	124	119	111	105	100	97	92	88	109
	40	125	122	109	102	98	94	90	87	109
	30	125	123	109	102	97	93	89	86	110
1513	100	131	134	132	119	112	109	107	102	126
	80	132	132	126	117	111	107	103	97	122
	60	129	129	122	114	109	105	101	97	119
	40	130	131	124	112	106	103	99	95	119
	30	130	131	125	111	106	102	98	94	102

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

33 IPA

Wheel Diameter = 57½ in.

Outlet Area = 5.87 ft²

Tip Speed = 15.05 x RPM

Minimum Starting HP = 25

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1129	300	405T	NA
Heavy	1329	450	405T	NA

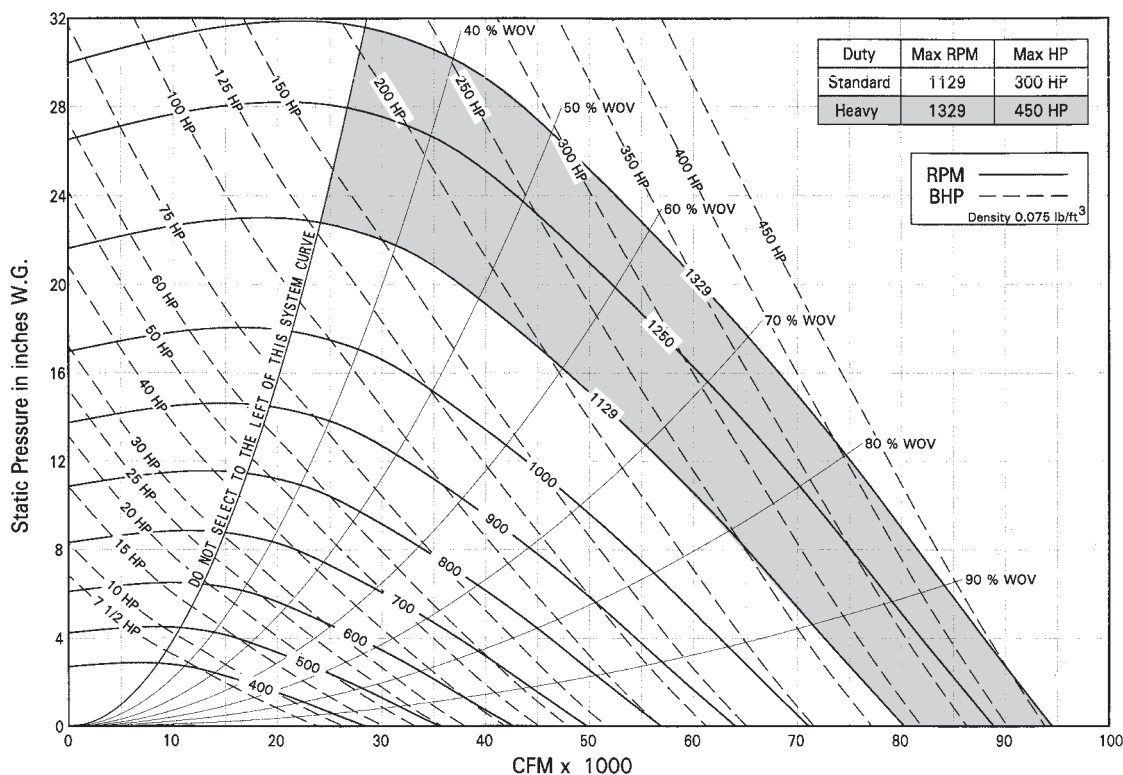


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13000	2170	291	3.67	365	6.23	427	8.94	482	11.8	533	14.9	580	18.2								
14250	2378	303	4.29	376	7.05	435	9.96	488	13.0	538	16.2	584	19.6	628	23.2						
15500	2587	316	4.99	386	7.95	444	11.1	496	14.3	543	17.7	589	21.2	631	24.8	672	28.7	710	32.7		
16750	2796	329	5.77	397	8.94	454	12.2	505	15.7	551	19.2	594	22.9	636	26.7	675	30.6	713	34.8	749	39.0
18000	3005	343	6.63	409	10.0	465	13.5	514	17.1	559	20.9	601	24.7	641	28.7	680	32.8	717	37.0	753	41.4
19250	3213	356	7.59	420	11.2	475	14.9	524	18.7	568	22.7	610	26.7	648	30.8	686	35.1	722	39.4	757	43.8
20500	3422	370	8.64	433	12.5	486	16.4	534	20.4	577	24.5	618	28.8	656	33.1	692	37.4	728	42.0	762	46.6
21750	3631	384	9.80	446	13.9	498	18.0	545	22.2	588	26.6	627	31.0	665	35.5	701	40.1	734	44.7	768	49.5
23000	3839	399	11.1	459	15.4	509	19.8	556	24.2	598	28.7	637	33.3	674	38.0	709	42.8	743	47.6	774	52.5
24250	4048	414	12.5	472	17.1	521	21.6	567	26.2	609	31.0	647	35.8	683	40.6	718	45.6	751	50.7	783	55.8
25500	4257	429	14.0	485	18.8	534	23.6	578	28.4	619	33.3	658	38.4	693	43.4	727	48.6	760	53.9	792	59.2
26750	4465	444	15.7	499	20.7	547	25.7	590	30.8	631	35.9	668	41.1	704	46.4	737	51.7	769	57.2	801	62.7
28000	4674	459	17.5	512	22.7	560	28.0	602	33.3	642	38.6	679	44.0	714	49.5	747	55.0	779	60.6	810	66.4
29250	4883	475	19.5	526	24.9	573	30.4	615	35.9	654	41.5	690	47.0	725	52.7	758	58.5	789	64.3	819	70.2
30500	5091	490	21.6	540	27.2	586	33.0	628	38.7	665	44.5	702	50.3	736	56.1	768	62.1	799	68.2	829	74.2
31750	5300	506	23.8	555	29.7	600	35.7	641	41.7	678	47.7	713	53.7	747	59.7	779	65.9	810	72.2	839	78.4

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19000	3171	756	43.3	790	48.0	823	52.8	854	57.6	885	62.5										
20650	3447	763	47.0	796	51.7	828	56.6	859	61.7	889	66.9	918	72.1	947	77.4						
22300	3722	770	50.8	803	55.8	834	60.9	864	66.0	894	71.3	923	76.8	951	82.4	979	88.0	1005	93.7	1031	99.4
23950	3998	781	55.0	811	60.1	842	65.4	872	70.8	901	76.3	928	81.8	956	87.5	983	93.4	1010	99.3	1036	105
25600	4273	792	59.5	822	64.9	851	70.3	879	75.8	908	81.6	936	87.4	963	93.2	989	99.0	1015	105	1040	111
27250	4549	804	64.2	834	69.8	862	75.6	890	81.3	916	87.1	943	93.1	970	99.2	996	105	1022	112	1046	118
28900	4824	816	69.1	846	75.1	874	81.1	901	87.1	928	93.2	953	99.3	978	106	1004	112	1029	118	1054	125
30550	5100	829	74.4	858	80.5	886	86.8	913	93.2	940	99.5	965	106	989	112	1013	119	1037	125	1061	132
32200	5375	843	80.0	871	86.4	898	92.8	925	99.5	951	106	977	113	1001	120	1025	126	1048	133	1071	140
33850	5651	857	85.9	885	92.6	912	99.3	938	106	963	113	988	120	1013	127	1037	134	1060	141	1082	148
35500	5926	871	92.1	899	99.1	926	106	951	113	976	120	1000	127	1025	135	1048	142	1072	150	1094	157
37150	6202	886	98.7	913	106	940	113	965	121	990	128	1014	135	1037	143	1060	150	1083	158	1106	166
38800	6477	901	106	928	113	954	121	979	128	1004	136	1027	144	1050	151	1073	159	1095	167	1118	175
40450	6752	916	113	943	121	968	128	993	136	1018	144	1041	152	1064	160	1087	168	1108	176	1130	185
42100	7028	932	121	958	129	983	137	1008	145	1032	153	1055	161	1078	170	1100	178	1122	186	1143	195
43750	7303	947	129	973	137	998	146	1023	154	1046	162	1069	171	1092	179	1114	188	1136	197	1157	205

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
25000	4173	1039	109	1064	115	1088	122	1112	128	1136	134	1159	141								
27000	4507	1045	117	1069	123	1094	130	1118	136	1141	143	1164	150	1187	157	1209	164	1251	178		
29000	4841	1054	125	1078	132	1102	139	1124	145	1147	152	1170	159	1192	166	1214	173	1257	188	1298	203
31000	5175	1063	134	1087	141	1111	148	1133	155	1156	162	1178	169	1199	176	1220	184	1263	199	1304	214
33000	5509	1076	144	1098	151	1120	158	1143	165	1165	173	1187	180	1208	188	1229	195	1270	210	1310	226
35000	5843	1090	154	1113	162	1134	169	1155	176	1175	184	1196	191	1217	199	1238	207	1279	223	1318	239
37000	6176	1105	165	1127	173	1148	180	1169	188	1189	196	1209	204	1229	212	1248	220	1288	236	1327	253
39000	6510	1119	176	1141	184	1162	192	1183	200	1203	209	1223	217	1243	225	1262	233	1299	250		
41000	6844	1134	188	1155	196	1177	205	1197	213	1218	222	1237	230	1257	239	1276	247	1313	265		
43000	7178	1151	200	1171	209	1192	218	1212	226	1232	235	1252	244	1271	253	1290	262	1327	280		
45000	7512	1168	214	1188	223	1208	232	1228	240	1247	249	1266	259	1286	268	1305	277				
47000	7846	1185	227	1205	237	1225	246	1244	255	1264	265	1282	274	1301	283	1319	293				
49000	8180	1202	242	1222	251	1242	261	1261	271	1280	280	1299	290	1317	300						
51000	8514	1219	257	1239	267	1259	277	1278	287	1297	297	1316	307								
53000	8848	1238	273	1257	283	1276	293	1295	303	1314	314										
55000	9181	1256	290	1275	300	1294	311	1313	321												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 71.1)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
300	100	94	85	80	78	78	69	66	62	82
	80	91	82	77	77	77	64	59	52	80
	60	89	80	75	77	77	61	56	48	79
	40	88	80	74	78	78	61	56	48	80
	30	87	80	73	78	79	61	55	48	80
400	100	101	92	86	83	82	79	72	72	87
	80	98	88	82	79	77	71	67	66	82
	60	94	86	78	74	71	66	60	53	78
	40	96	85	77	73	69	64	57	51	77
	30	95	85	77	73	70	64	57	51	77
550	100	118	104	94	90	89	82	79	79	97
	80	114	101	91	87	85	81	75	75	93
	60	112	98	87	83	80	74	69	67	90
	40	108	94	85	80	77	72	67	65	86
	30	106	94	85	80	77	72	67	65	85
750	100	116	114	102	98	97	97	94	84	104
	80	112	108	98	94	93	90	86	81	99
	60	110	104	95	91	88	83	78	75	95
	40	108	102	93	89	85	80	76	73	93
	30	108	103	93	89	85	80	76	73	93
1000	100	120	126	110	105	104	102	104	94	113
	80	119	118	106	101	100	98	94	90	107
	60	118	114	103	98	96	92	85	83	103
	40	116	112	102	96	94	89	83	80	101
	30	116	112	102	96	94	89	83	80	101
1329	100	125	130	124	113	110	109	110	105	120
	80	124	125	118	109	107	105	102	98	115
	60	123	122	114	106	103	100	94	90	112
	40	121	120	112	105	101	97	92	88	110
	30	121	120	113	105	101	97	92	88	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
300	100	103	91	82	79	77	70	64	59	84
	80	101	91	82	77	74	67	60	53	82
	60	98	89	80	75	73	64	57	50	80
	40	98	88	78	75	73	63	57	50	79
	30	98	88	78	75	73	63	57	50	79
400	100	108	97	89	86	83	77	71	70	90
	80	107	97	89	84	79	72	66	63	88
	60	103	94	86	79	73	68	61	55	84
	40	103	93	84	77	72	66	60	55	83
	30	102	92	83	77	72	66	60	55	82
550	100	124	110	99	92	90	87	80	78	101
	80	124	108	98	91	87	80	74	72	100
	60	119	105	95	89	84	78	74	70	96
	40	116	102	92	86	81	76	72	69	93
	30	115	102	92	86	81	76	71	67	93
750	100	123	120	108	101	98	96	91	83	108
	80	121	115	105	100	96	91	86	81	105
	60	117	111	103	98	94	90	86	81	102
	40	119	112	100	95	91	88	84	80	101
	30	120	113	100	95	90	87	83	79	101
1000	100	127	131	118	109	105	103	100	93	118
	80	129	125	114	108	104	100	94	90	113
	60	126	120	112	106	102	98	93	89	110
	40	127	124	109	103	99	96	92	88	111
	30	127	125	109	103	98	95	91	87	111
1329	100	132	136	130	119	113	110	108	102	125
	80	134	133	125	117	112	108	103	98	122
	60	131	129	122	114	109	106	102	97	119
	40	132	131	122	112	107	103	100	96	119
	30	132	132	122	111	106	102	98	95	119

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

37 IPA

Wheel Diameter = 64³/₈ in.

Outlet Area = 7.36 ft²

Tip Speed = 16.85 x RPM

Minimum Starting HP = 40

Duty	Maximum		Max. Motor Frame Size	
	RPM	MHP	Arr. 9	Arr. 10
Standard	1009	350	405T	NA
Heavy	1187	550	405T	NA

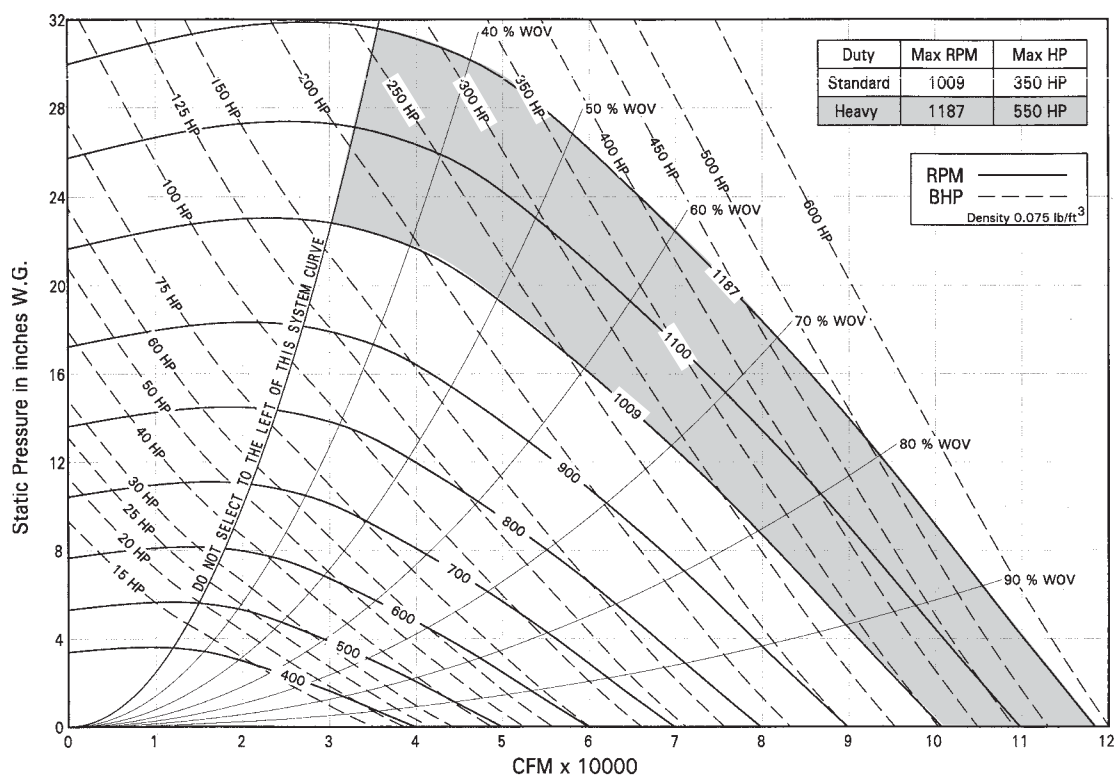


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	1997	252	4.03	320	7.04	376	10.3	427	13.7	473	17.4										
16650	2217	263	4.77	328	8.03	383	11.5	432	15.2	477	19.0	519	23.2								
18300	2436	274	5.61	338	9.15	391	12.9	437	16.7	482	20.8	523	25.1	561	29.6	598	34.3				
19950	2656	286	6.56	348	10.4	400	14.3	446	18.5	487	22.7	527	27.2	565	31.9	601	36.8	635	41.8		
21600	2876	299	7.63	359	11.7	409	16.0	454	20.4	495	24.9	533	29.5	570	34.4	604	39.4	638	44.7	671	50.1
23250	3095	311	8.82	369	13.2	419	17.7	463	22.3	503	27.1	540	32.0	575	37.1	610	42.3	642	47.6	674	53.2
24900	3315	324	10.1	381	14.8	429	19.6	472	24.5	512	29.5	548	34.7	582	40.0	615	45.4	647	51.0	678	56.7
26550	3535	337	11.6	393	16.6	440	21.7	482	26.8	521	32.1	557	37.5	591	43.1	622	48.7	653	54.4	684	60.4
28200	3754	351	13.2	405	18.6	451	23.9	492	29.3	530	34.9	565	40.5	599	46.3	630	52.2	660	58.2	689	64.3
29850	3974	365	15.0	417	20.7	462	26.3	503	32.0	540	37.8	575	43.7	607	49.8	639	55.9	668	62.2	696	68.5
31500	4194	379	17.0	430	22.9	474	28.8	514	34.8	550	40.9	585	47.1	616	53.4	647	59.8	677	66.3	705	72.9
33150	4414	393	19.2	442	25.4	486	31.6	525	37.9	561	44.2	595	50.7	626	57.2	656	63.8	685	70.7	713	77.5
34800	4633	407	21.5	455	28.0	498	34.6	536	41.1	572	47.7	605	54.4	636	61.3	666	68.2	694	75.2	722	82.3
36450	4853	422	24.0	468	30.8	510	37.7	548	44.6	582	51.5	615	58.4	646	65.5	676	72.7	703	80.0	730	87.3
38100	5073	437	26.8	481	33.9	523	41.1	560	48.2	593	55.4	626	62.7	656	70.0	686	77.5	713	85.0	740	92.6
39750	5292	451	29.8	495	37.2	535	44.7	572	52.2	605	59.6	637	67.2	667	74.7	696	82.4	723	90.3	749	98.2

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
25000	3328	679	56.9	708	62.7	737	68.9	765	75.1	792	81.5	818	87.9								
27000	3595	685	61.5	714	67.6	742	73.7	769	80.1	796	86.8	823	93.5	848	100	872	107	896	114		
29000	3861	692	66.2	721	72.6	749	79.2	775	85.8	801	92.4	827	99.3	852	107	876	114	900	121	923	128
31000	4127	702	71.6	729	78.1	755	84.8	782	91.7	808	98.7	832	106	856	113	880	120	904	128	927	136
33000	4394	712	77.1	739	84.0	764	91.0	789	98.0	814	105	839	113	863	120	886	128	909	135	931	143
35000	4660	723	82.9	749	90.2	775	97.5	799	105	823	112	845	120	869	128	893	135	915	143	937	151
37000	4926	733	89.0	759	96.6	785	104	809	112	833	120	855	128	877	135	899	143	922	152	944	160
39000	5193	745	95.6	770	103	795	111	819	119	843	128	865	136	887	144	909	152	929	160	950	169
41000	5459	757	103	782	111	806	119	830	127	853	136	876	144	897	153	919	161	939	170	959	179
43000	5725	769	110	794	118	818	127	841	135	863	144	886	153	908	162	929	171	949	180	969	189
45000	5992	781	117	806	126	830	135	853	144	875	153	896	162	918	171	939	181	960	190	980	199
47000	6258	794	125	818	135	842	144	865	153	887	162	908	172	929	181	949	191	970	200	990	210
49000	6524	807	134	831	143	854	153	877	163	899	172	920	182	940	192	960	202	980	211	1000	221
51000	6790	820	143	844	153	867	163	889	172	911	182	932	193	952	203	972	213	992	223	1011	233
53000	7057	834	152	857	163	880	173	901	183	923	193	944	204	964	214	984	225	1004	235	1023	246
55000	7323	847	162	870	173	893	183	915	194	936	204	956	215	977	226	996	237	1016	248	1034	258

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
30000	3994	925	132	947	140	969	147	991	155												
32650	4347	930	142	953	150	975	158	996	166	1017	174	1038	182	1058	191	1077	199				
35300	4700	938	153	960	161	981	169	1002	177	1022	186	1043	195	1063	203	1083	212	1121	230	1158	248
37950	5053	947	164	968	173	989	181	1009	190	1029	199	1049	207	1068	216	1088	225	1126	244	1163	263
40600	5406	957	177	977	185	998	194	1018	203	1038	212	1057	222	1077	231	1095	240	1132	259	1168	279
43250	5758	971	190	990	199	1009	208	1028	218	1047	227	1066	236	1085	246	1104	256	1140	275	1175	295
45900	6111	984	204	1004	214	1023	223	1041	233	1060	243	1077	252	1095	262	1112	272	1149	293	1184	313
48550	6464	998	219	1017	229	1036	239	1055	249	1073	259	1091	269	1108	280	1125	290	1159	311		
51200	6817	1012	234	1031	245	1050	255	1068	266	1087	277	1104	287	1122	298	1139	309	1172	330		
53850	7170	1028	251	1046	262	1064	273	1082	283	1100	295	1118	306	1135	317	1152	328	1185	350		
56500	7523	1043	268	1062	280	1080	291	1097	302	1114	313	1132	325	1149	337	1166	348				
59150	7876	1059	287	1078	298	1096	310	1113	322	1130	334	1147	345	1163	357	1180	369				
61800	8229	1076	306	1094	318	1112	330	1129	342	1146	355	1163	367	1179	379						
64450	8581	1092	326	1110	338	1128	351	1145	364	1162	376	1178	389								
67100	8934	1110	347	1127	360	1144	373	1161	386	1178	399										
69750	9287	1127	370	1145	383	1161	396	1178	410												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 99.8)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{wiA}
250	100	91	83	79	78	75	67	64	60	80
	80	88	81	77	77	73	62	57	49	78
	60	86	78	75	77	72	59	53	45	77
	40	85	78	74	77	73	59	53	45	77
	30	85	78	74	77	73	59	53	45	78
350	100	99	91	85	83	82	78	73	73	87
	80	96	87	82	79	76	71	67	66	82
	60	93	85	78	74	71	65	59	52	77
	40	94	84	77	73	69	63	57	50	76
	30	93	84	77	73	69	63	57	50	76
500	100	120	104	95	91	91	89	83	80	99
	80	116	101	92	88	86	81	77	76	94
	60	114	97	88	84	80	75	70	68	91
	40	110	94	85	81	77	72	68	66	87
	30	108	94	85	81	77	72	68	66	86
650	100	118	111	101	98	97	98	92	82	104
	80	113	106	97	95	93	90	86	81	99
	60	110	102	94	91	88	82	78	75	94
	40	108	100	92	89	85	79	75	72	92
	30	108	101	92	89	85	79	76	73	92
900	100	122	126	110	106	105	104	104	94	114
	80	120	119	107	102	101	99	95	90	108
	60	119	115	103	99	97	92	86	83	104
	40	117	112	102	97	94	89	84	81	102
	30	117	113	102	97	94	89	84	81	102
1187	100	126	132	122	113	111	110	111	104	121
	80	125	126	117	110	107	106	102	98	115
	60	124	122	113	106	104	100	94	91	112
	40	123	120	112	105	101	97	92	88	110
	30	123	120	112	105	101	97	92	88	110

Outlet Sound Power, L_{wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{woA}
250	100	99	89	81	78	75	68	62	57	81
	80	98	88	81	76	72	64	57	50	79
	60	95	86	78	74	70	61	55	48	77
	40	95	85	77	74	70	61	54	48	77
	30	95	85	76	74	70	61	55	48	77
350	100	107	96	89	86	82	77	71	71	89
	80	105	96	89	83	78	71	66	63	87
	60	102	93	85	79	73	67	61	55	83
	40	101	91	83	77	71	66	60	55	82
	30	100	91	83	76	71	65	60	54	81
500	100	126	110	99	93	92	87	81	79	102
	80	125	108	98	92	87	81	75	73	101
	60	121	105	95	89	84	79	74	71	97
	40	118	102	93	87	82	77	73	69	94
	30	117	102	93	87	81	76	72	68	94
650	100	124	118	106	101	98	95	90	82	107
	80	121	113	104	100	96	90	85	81	104
	60	116	110	102	97	93	89	85	81	101
	40	119	109	99	95	91	87	83	80	100
	30	120	110	99	94	90	86	82	79	100
900	100	129	132	117	109	106	104	100	93	118
	80	129	126	115	109	104	100	95	90	114
	60	126	121	112	106	102	99	94	90	111
	40	128	124	109	103	100	96	92	88	111
	30	128	125	109	103	99	95	91	88	112
1187	100	134	138	129	118	113	111	108	102	125
	80	135	133	124	117	112	108	103	98	122
	60	132	129	121	114	110	106	102	98	119
	40	134	132	120	111	107	104	100	96	119
	30	133	133	120	111	106	103	99	95	119

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

41 IPA

Wheel Diameter = 71¼ in.

Outlet Area = 9.09 ft²

Tip Speed = 18.65 x RPM

Minimum Starting HP = 50

	Maximum		Max. Motor Frame Size	
Duty	RPM	MHP	Arr. 9	Arr. 10
Standard	911	400	405T	NA
Heavy	1072	700	405T	NA

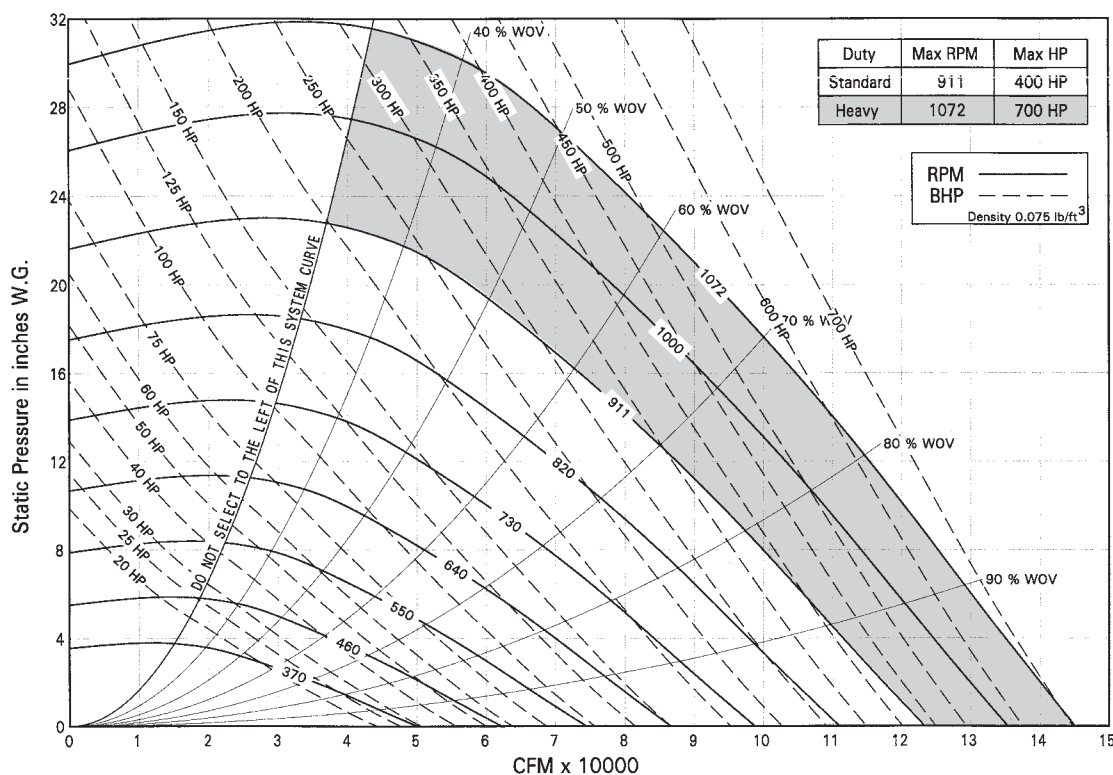


CFM	OV	Static Pressure in Inches wg																			
		1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19000	2067	230	5.20	291	8.98	341	13.0	387	17.3	429	22.0	467	26.8								
21000	2285	240	6.14	299	10.2	348	14.6	391	19.1	432	23.9	470	29.1	505	34.4						
23000	2502	251	7.20	308	11.6	356	16.3	397	21.1	437	26.2	473	31.4	508	37.1	541	42.9				
25000	2720	262	8.39	317	13.1	363	18.1	405	23.3	442	28.5	478	34.1	511	39.8	544	45.9	575	52.2	604	58.6
27000	2937	273	9.72	327	14.8	372	20.1	412	25.6	449	31.2	483	36.9	516	43.0	547	49.2	578	55.6	607	62.4
29000	3155	284	11.2	336	16.7	381	22.3	420	28.0	456	34.0	490	40.1	521	46.3	552	52.8	581	59.4	610	66.2
31000	3373	296	12.9	347	18.7	390	24.6	429	30.7	464	36.9	497	43.4	528	49.9	557	56.5	586	63.5	614	70.5
33000	3590	307	14.7	357	20.9	400	27.1	438	33.6	472	40.1	505	46.8	535	53.7	564	60.6	591	67.7	619	75.1
35000	3808	320	16.7	368	23.3	410	29.9	447	36.6	481	43.5	512	50.5	543	57.7	571	65.0	598	72.4	623	79.8
37000	4026	332	18.9	379	25.9	419	32.8	456	39.9	490	47.1	521	54.4	550	61.9	579	69.5	605	77.2	631	85.0
39000	4243	345	21.4	391	28.7	430	36.0	466	43.4	499	50.9	530	58.6	559	66.3	586	74.2	613	82.3	638	90.5
41000	4461	358	24.0	402	31.7	441	39.4	476	47.1	508	55.0	539	62.9	568	71.1	594	79.2	621	87.6	646	96.1
43000	4678	370	26.9	413	34.9	452	43.0	486	51.1	518	59.3	548	67.5	576	76.0	603	84.5	628	93.1	653	102
45000	4896	384	30.0	425	38.4	463	46.9	496	55.4	528	63.9	557	72.5	585	81.2	612	90.1	637	99.0	661	108
47000	5114	397	33.4	437	42.1	474	51.0	507	59.9	538	68.7	567	77.7	594	86.6	621	95.9	646	105	670	115
49000	5331	410	37.1	449	46.2	485	55.4	518	64.6	548	73.8	577	83.1	604	92.5	630	102	655	112	678	121

CFM	OV	Static Pressure in Inches wg																			
		10.0		11.0		12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
30000	3264	612	68.3	639	75.5	665	83.0	691	90.5	715	98.2	739	106								
32650	3552	618	74.3	644	81.7	669	89.2	695	97.1	719	105	742	113	765	122	787	130				
35300	3841	625	80.6	651	88.4	676	96.4	700	104	723	113	746	121	769	130	791	139	813	148	834	157
37950	4129	634	87.6	658	95.6	682	104	706	112	729	121	752	130	774	138	795	147	817	157	837	166
40600	4417	644	95.0	668	103	691	112	713	121	736	130	758	139	780	148	801	157	821	166	841	176
43250	4706	654	103	678	112	701	121	723	130	744	139	765	148	786	158	807	167	828	177	848	187
45900	4994	665	111	688	120	711	130	733	139	754	149	775	159	795	168	814	178	834	188	854	199
48550	5282	676	120	699	129	721	139	743	149	764	159	785	169	805	180	824	190	842	200	861	210
51200	5571	688	129	711	139	732	149	753	160	774	170	795	181	814	191	834	202	852	213	870	224
53850	5859	700	139	722	150	744	160	765	171	785	182	805	193	824	204	844	215	862	226	880	237
56500	6147	712	149	734	160	756	171	776	183	796	194	816	205	835	217	854	228	872	240	890	252
59150	6436	725	160	746	172	768	183	788	195	808	207	827	218	846	230	864	242	882	254	900	266
61800	6724	738	172	759	184	780	196	800	208	820	220	839	232	857	245	875	257	893	269	910	282
64450	7013	751	185	772	197	792	209	812	221	832	234	851	247	869	259	887	272	905	285	922	298
67100	7301	764	197	785	210	805	223	825	236	844	249	863	262	881	275	899	288	916	302	933	315
69750	7589	778	211	798	224	818	238	838	251	857	264	875	278	893	291	911	305	928	319	945	332

CFM	OV	Static Pressure in Inches wg																			
		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		28.0		30.0	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
37000	4026	836	163	856	172	876	181	896	191												
40125	4366	841	174	861	184	881	194	900	204	919	214	938	224	956	234	973	245				
43250	4706	848	187	867	197	886	207	905	217	924	228	942	238	960	249	978	260	1013	282	1046	304
46375	5046	855	201	874	211	893	222	912	232	930	243	947	253	965	264	983	276	1017	299	1051	322
49500	5386	864	215	882	226	901	237	919	248	937	259	955	270	972	282	989	293	1022	316	1055	340
52625	5726	876	231	893	242	911	253	928	264	945	276	962	288	980	299	996	311	1029	335	1061	359
55750	6066	887	248	905	259	922	271	939	283	956	294	972	306	987	318	1004	330	1037	355	1069	380
58875	6406	899	265	917	277	934	289	951	301	967	314	983	326	999	339	1015	351	1045	376		
62000	6746	911	283	929	296	946	308	962	321	979	334	995	347	1011	360	1026	373	1056	399		
65125	7086	925	302	941	315	958	328	974	342	991	355	1007	369	1022	382	1038	396	1068	423		
68250	7426	938	322	955	336	971	350	987	363	1003	377	1019	391	1034	405	1050	419				
71375	7766	952	344	969	358	985	372	1001	386	1016	400	1031	414	1046	429	1062	443				
74500	8106	966	366	983	380	999	395	1015	410	1030	425	1045	439	1060	454						
77625	8446	981	389	997	404	1013	419	1028	435	1044	450	1059	465								
80750	8786	996	414	1011	429	1027	445	1043	461	1058	477										
83875	9126	1011	440	1026	456	1042	472	1057	488												

Performance certified is for model IPA arrangement 1, installation type D - ducted inlet, ducted outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 135)$$

Sound Power [dB Ref 10⁻¹² watts]

Inlet Sound Power, L_{Wi}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{WiA}
225	100	91	83	79	79	75	68	64	60	80
	80	88	81	77	77	72	62	56	49	78
	60	85	78	76	77	71	59	53	45	77
	40	85	78	76	78	71	59	53	45	77
	30	84	78	75	78	71	59	52	45	78
300	100	97	89	84	83	81	76	72	72	86
	80	94	86	81	79	75	69	66	65	81
	60	91	83	77	74	69	64	57	51	76
	40	91	81	75	72	67	61	55	49	74
	30	91	82	76	72	68	62	55	49	75
450	100	119	103	95	92	92	88	83	80	98
	80	116	100	92	89	86	81	77	77	94
	60	114	96	88	85	80	75	71	68	91
	40	109	93	85	82	77	72	69	66	87
	30	108	93	85	81	77	72	69	66	86
600	100	120	110	101	99	98	99	92	82	105
	80	114	105	98	96	94	91	86	81	99
	60	110	102	95	92	88	83	79	76	95
	40	108	100	93	90	85	80	76	73	92
	30	109	101	93	90	85	80	77	74	93
800	100	123	124	110	106	105	105	103	93	113
	80	120	117	106	102	101	99	95	90	108
	60	118	113	103	99	96	92	86	83	103
	40	117	111	102	97	94	89	84	81	101
	30	117	112	102	97	94	89	84	81	101
1072	100	127	133	120	113	112	111	112	103	121
	80	126	126	116	110	108	106	103	98	116
	60	126	122	112	107	104	100	94	91	112
	40	124	120	111	105	102	97	92	89	110
	30	124	121	111	105	102	97	92	89	110

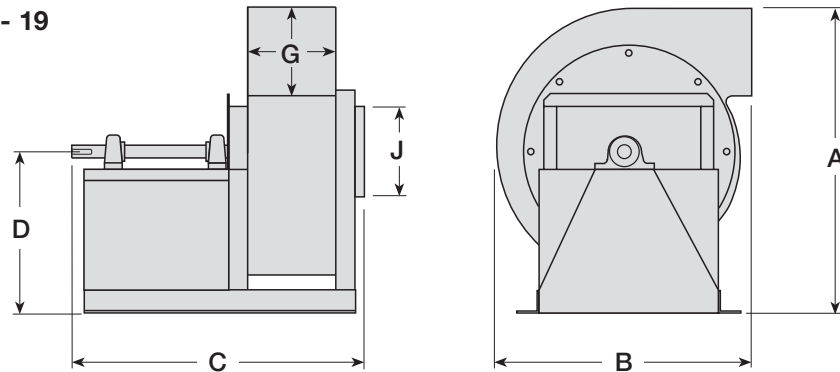
Outlet Sound Power, L_{Wo}										
RPM	% WOV	1	2	3	4	5	6	7	8	L_{WoA}
225	100	98	88	81	79	74	68	62	57	81
	80	97	88	81	76	71	64	57	50	79
	60	95	85	78	75	69	61	54	48	77
	40	94	84	77	74	69	61	54	48	77
	30	94	84	77	74	69	61	54	48	76
300	100	104	94	88	85	81	75	71	70	87
	80	103	94	87	82	76	70	66	63	85
	60	100	91	83	77	71	65	59	53	81
	40	99	89	81	75	70	64	58	53	80
	30	98	89	81	75	70	64	58	53	79
450	100	125	109	99	94	92	86	81	80	102
	80	125	107	98	92	87	80	76	73	101
	60	120	104	95	89	84	79	75	71	97
	40	117	101	93	87	82	77	73	70	94
	30	116	101	92	87	81	77	72	68	93
600	100	126	117	106	102	99	96	90	83	107
	80	121	113	105	100	97	91	86	82	104
	60	117	110	103	98	94	90	86	82	102
	40	120	109	100	95	92	88	84	80	100
	30	121	109	100	95	91	87	83	80	100
800	100	130	130	116	109	106	104	100	92	117
	80	129	124	114	108	104	100	94	90	113
	60	126	120	112	106	102	98	94	90	110
	40	128	122	109	103	100	96	92	88	110
	30	128	123	108	103	99	95	91	87	110
1072	100	135	139	127	118	114	111	109	102	126
	80	137	133	124	117	112	109	103	98	122
	60	134	129	121	114	110	107	102	98	119
	40	135	132	119	111	107	104	100	96	119
	30	135	133	119	111	107	103	99	95	120

The sound power level ratings shown are in decibels, referred to 10^{-12} watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The AMCA Certified Ratings Seal applies to air performance ratings only.

Dimensional Data

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Arrangement 1 Standard Duty Sizes 5 - 19 Heavy Duty Sizes 11 - 19

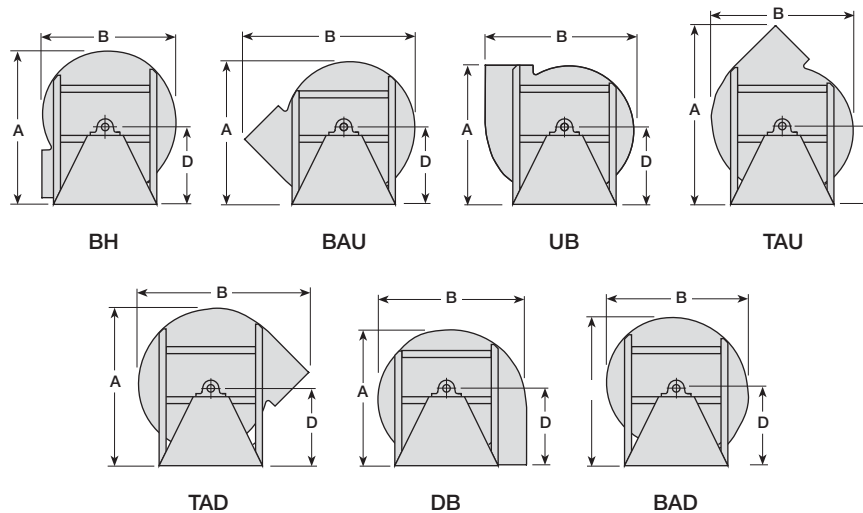


Clockwise Top Horizontal (TH) discharge shown above

Size	A								B				C	D	G Standard Duty	G Heavy Duty	J
	TH	BH	UB	DB	TAU	BAU	TAD	BAD	TH BH	UB DB	TAU BAD	BAU TAU					
5	19	17 ⁷ / ₈	19 ¹ / ₄	18 ¹ / ₂	22 ¹ / ₄	17 ¹ / ₂	18 ⁵ / ₈	18	14 ³ / ₄	13 ³ / ₈	13 ¹ / ₈	17 ¹ / ₄	18 ¹ / ₂	11 ¹ / ₂	4 ³ / ₄	NA	5 ¹ / ₄
7	24 ¹ / ₄	22 ⁷ / ₈	22 ³ / ₄	23 ⁵ / ₈	27 ¹ / ₂	22 ³ / ₈	24	23 ¹ / ₈	18 ⁵ / ₈	19 ¹ / ₈	18 ³ / ₈	22 ⁵ / ₈	23 ³ / ₄	14	6 ¹ / ₂	NA	7 ¹ / ₄
9	30 ⁷ / ₈	28 ⁷ / ₈	28 ¹ / ₄	29 ⁷ / ₈	34 ¹ / ₂	28 ³ / ₈	30 ³ / ₈	29 ³ / ₈	23 ¹ / ₈	24 ³ / ₄	23 ³ / ₄	28 ⁷ / ₈	28 ¹ / ₂	17 ¹ / ₂	8 ¹ / ₄	NA	9 ¹ / ₄
11	37 ¹ / ₄	34 ³ / ₄	33 ³ / ₄	36	41 ¹ / ₂	34 ⁵ / ₈	36 ³ / ₈	35 ⁵ / ₈	27 ³ / ₄	30	28 ³ / ₄	34 ⁷ / ₈	33 ³ / ₄	21	10	10 ⁵ / ₈	11 ¹ / ₄
13	48 ⁵ / ₈	45 ³ / ₄	44 ¹ / ₂	47 ¹ / ₄	53 ³ / ₄	44 ⁷ / ₈	48	46 ³ / ₈	32 ³ / ₄	35 ⁵ / ₈	33 ³ / ₈	41 ¹ / ₈	44 ¹ / ₄	29 ¹ / ₂	11 ⁷ / ₈	12	13 ³ / ₈
15	51 ³ / ₄	48 ¹ / ₄	46 ³ / ₄	50	57 ¹ / ₂	47 ³ / ₈	50 ⁷ / ₈	49	37 ³ / ₄	41	39 ¹ / ₄	47 ¹ / ₂	46 ¹ / ₂	29 ¹ / ₂	13 ⁵ / ₈	13 ³ / ₄	15 ³ / ₈
17	57 ³ / ₄	53 ³ / ₈	52 ¹ / ₄	55 ⁵ / ₈	64 ³ / ₈	52 ³ / ₄	56 ⁷ / ₈	54 ³ / ₄	43 ¹ / ₈	46 ⁵ / ₈	44 ⁵ / ₈	54 ⁵ / ₈	51 ³ / ₄	32 ¹ / ₂	15 ⁵ / ₈	15 ¹ / ₂	17 ³ / ₈
19	64 ⁵ / ₈	60 ⁵ / ₈	58 ¹ / ₄	62 ³ / ₈	71 ³ / ₄	59	63 ¹ / ₂	61 ¹ / ₄	47 ⁵ / ₈	51 ³ / ₄	49 ¹ / ₂	60	57 ⁵ / ₈	36 ¹ / ₂	17 ⁷ / ₈	17 ¹ / ₄	19 ⁵ / ₈

Due to Greenheck's policy of continuous product improvement, dimensions are subject to change.
For complete dimensional information refer to the applicable CAPS submittal drawing.

Angular Discharge Dimensions



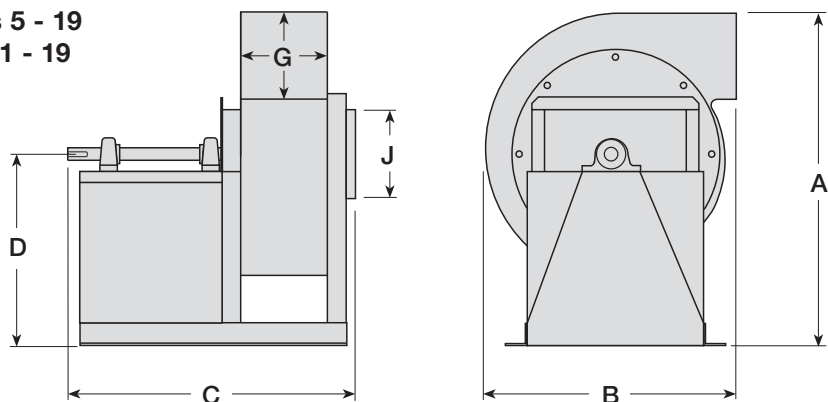
Dimensional Data

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Arrangement 9

Standard Duty Sizes 5 - 19

Heavy Duty Sizes 11 - 19

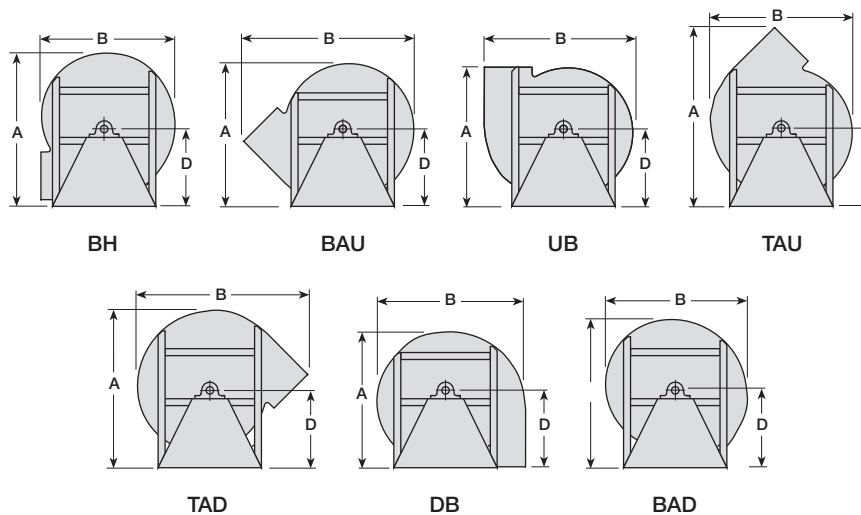


Clockwise Top Horizontal (TH) discharge shown above

Size	A								B				C	D	G Standard Duty	G Heavy Duty	J
	TH	BH	UB	DB	TAU	BAU	TAD	BAD	TH BH	UB DB	TAU BAD	TAU TAD					
5	23 $\frac{1}{2}$	22 $\frac{3}{8}$	23 $\frac{3}{4}$	23	26 $\frac{3}{4}$	22	23 $\frac{3}{8}$	22 $\frac{1}{2}$	14 $\frac{3}{4}$	13 $\frac{7}{8}$	13 $\frac{1}{8}$	17 $\frac{1}{4}$	24 $\frac{1}{2}$	16	4 $\frac{3}{4}$	NA	5 $\frac{1}{4}$
7	30 $\frac{1}{4}$	28 $\frac{3}{8}$	28 $\frac{3}{8}$	29 $\frac{5}{8}$	33 $\frac{1}{2}$	28 $\frac{3}{8}$	30	29 $\frac{5}{8}$	18 $\frac{3}{8}$	19 $\frac{5}{8}$	18 $\frac{3}{8}$	22 $\frac{5}{8}$	31 $\frac{1}{4}$	20	6 $\frac{1}{2}$	NA	7 $\frac{1}{4}$
9	36 $\frac{3}{8}$	34 $\frac{3}{8}$	33 $\frac{3}{4}$	35 $\frac{3}{8}$	40	33 $\frac{3}{8}$	35 $\frac{3}{8}$	34 $\frac{7}{8}$	23 $\frac{1}{8}$	24 $\frac{3}{4}$	23 $\frac{3}{4}$	28 $\frac{7}{8}$	39	23	8 $\frac{1}{4}$	NA	9 $\frac{1}{4}$
11	40 $\frac{3}{4}$	38 $\frac{1}{4}$	37 $\frac{1}{4}$	39 $\frac{1}{2}$	45	37 $\frac{3}{8}$	40 $\frac{5}{8}$	38 $\frac{3}{8}$	27 $\frac{3}{4}$	30	28 $\frac{3}{4}$	34 $\frac{7}{8}$	41 $\frac{1}{4}$	24 $\frac{1}{2}$	10	10 $\frac{5}{8}$	11 $\frac{1}{4}$
13	48 $\frac{5}{8}$	45 $\frac{3}{4}$	44 $\frac{1}{2}$	47 $\frac{1}{4}$	53 $\frac{3}{4}$	44 $\frac{7}{8}$	48	46 $\frac{3}{8}$	32 $\frac{3}{4}$	35 $\frac{3}{8}$	33 $\frac{3}{8}$	41 $\frac{1}{8}$	48 $\frac{1}{4}$	29 $\frac{1}{2}$	11 $\frac{7}{8}$	12	13 $\frac{3}{8}$
15	51 $\frac{1}{4}$	48 $\frac{1}{4}$	46 $\frac{3}{4}$	50	57 $\frac{1}{2}$	47 $\frac{3}{8}$	50 $\frac{3}{8}$	49	37 $\frac{3}{4}$	41	39 $\frac{1}{4}$	47 $\frac{1}{2}$	50 $\frac{1}{2}$	29 $\frac{1}{2}$	13 $\frac{5}{8}$	13 $\frac{3}{4}$	15 $\frac{3}{8}$
17	61 $\frac{1}{4}$	57 $\frac{3}{8}$	55 $\frac{3}{4}$	59 $\frac{3}{8}$	67 $\frac{3}{8}$	56 $\frac{1}{4}$	60 $\frac{3}{8}$	58 $\frac{1}{4}$	43 $\frac{3}{8}$	46 $\frac{3}{8}$	44 $\frac{3}{8}$	54 $\frac{1}{8}$	54 $\frac{3}{4}$	36	15 $\frac{3}{8}$	15 $\frac{1}{2}$	17 $\frac{3}{8}$
19	68 $\frac{3}{8}$	63 $\frac{3}{8}$	61 $\frac{3}{4}$	65 $\frac{3}{8}$	75 $\frac{1}{4}$	62 $\frac{1}{2}$	67	64 $\frac{3}{4}$	47 $\frac{5}{8}$	51 $\frac{1}{4}$	49 $\frac{1}{2}$	60	60 $\frac{3}{8}$	40	17 $\frac{1}{8}$	17 $\frac{1}{4}$	19 $\frac{3}{8}$

Due to Greenheck's policy of continuous product improvement, dimensions are subject to change. For complete dimensional information refer to the applicable CAPS submittal drawing.

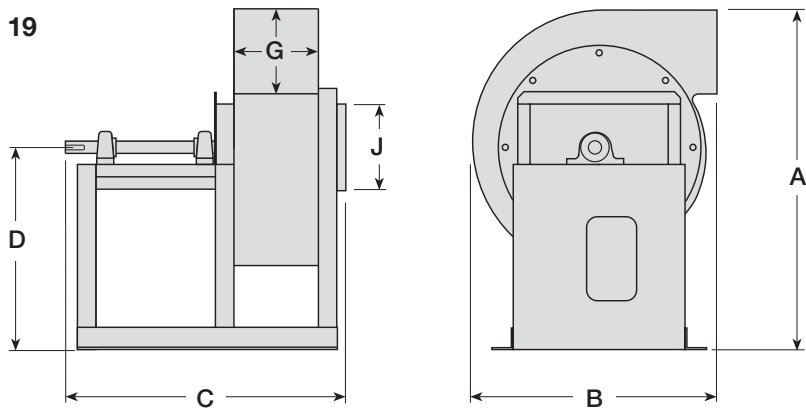
Angular Discharge Dimensions



Dimensional Data

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Arrangement 10 Standard Duty Sizes 5 - 19

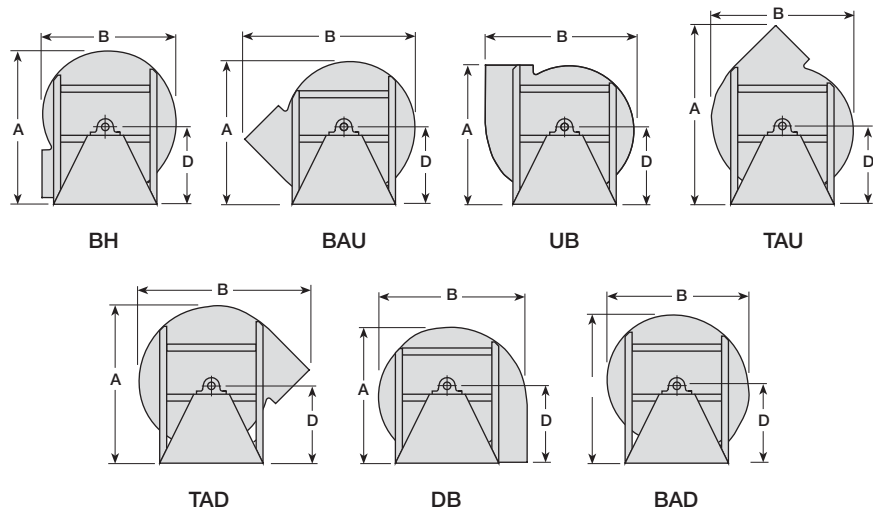


Clockwise Top Horizontal (TH) discharge shown above

Size	A								B				C	D	G	J
	TH	BH	UB	DB	TAU	BAU	TAD	BAD	TH BH	UB DB	TAU BAD	BAU TAD				
5	23½	22¾	23¾	23	26¾	22	23⅞	22½	14¾	13⅞	13⅞	17¼	25⅞	16	4¾	5¼
7	28¾	27⅞	27¼	28⅞	32	26⅞	28½	27⅞	18⅞	19⅞	18⅞	22⅞	29⅞	18½	6½	7¼
9	34¾	32¾	31¾	33¾	38	31⅞	33⅞	32⅞	23⅞	24¾	23¾	28⅞	34⅞	21	8¼	9¼
11	40¾	38¾	37¼	39½	45	37⅞	40⅞	38⅞	27¾	30	28¾	34⅞	39⅞	24½	10	11¼
13	48⅞	45¾	44½	47¼	53¾	44⅞	48	46⅞	32¾	35⅞	33⅞	41⅞	47⅞	29½	11⅞	13⅞
15	51¾	48¾	46¾	50	57½	47⅞	50⅞	49	37¾	41	39¼	47½	50⅞	29½	13⅞	15⅞
17	61¼	57⅞	55¾	59⅞	67⅞	56¼	60⅞	58¼	43⅞	46⅞	44⅞	54⅞	55	36	15⅞	17⅞
19	68⅞	63⅞	61¾	65⅞	75¼	62½	67	64¾	47⅞	51¼	49½	60	61¼	40	17⅞	19⅞

Due to Greenheck’s policy of continuous product improvement, dimensions are subject to change.
For complete dimensional information refer to the applicable CAPS submittal drawing.

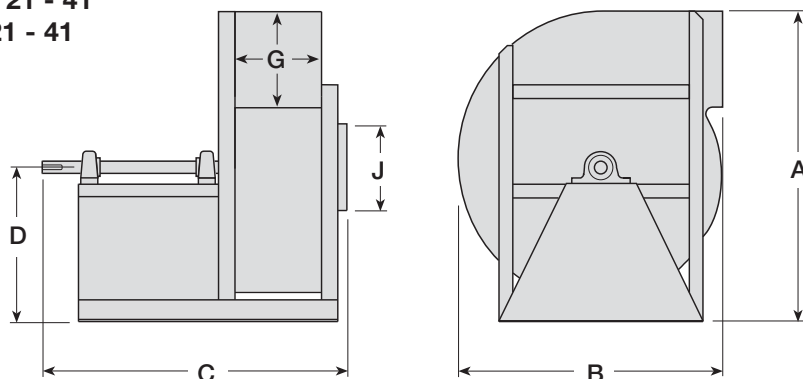
Angular Discharge Dimensions



Dimensional Data

Data shown on these pages is for general information only and should not be used for exact installation dimensions. All columns are rounded to the nearest 1/8 inch. For detailed dimensional data refer to the appropriate submittal drawing. All dimensional drawings represent clockwise rotation. Counterclockwise would be a mirror image and would not affect dimensions. Rotation is determined from the drive side of the unit.

Arrangement 1 and 9 Standard Duty Sizes 21 - 41 Heavy Duty Sizes 21 - 41

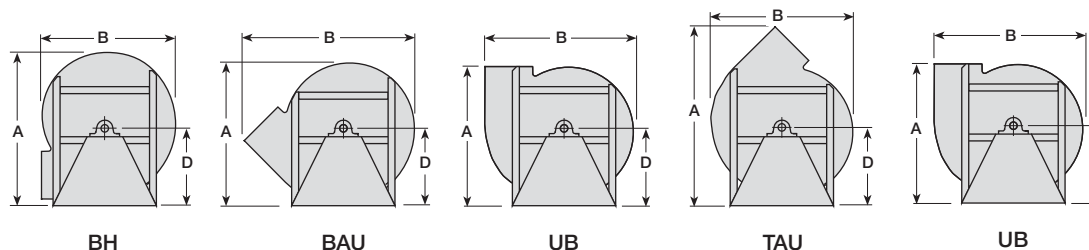


Clockwise Top Horizontal (TH) discharge shown above

Size	A						B				C	D			G Standard Duty	G Heavy Duty	J
	TH	BH	UB	DB	TAU	BAU	TH BH	UB DB	TAU	BAU		TH	BH BAU	UB, DB TAU			
21	67 ¹ / ₄	62 ¹ / ₄	60 ¹ / ₂	64 ³ / ₄	76 ³ / ₄	61	53 ³ / ₄	59 ³ / ₈	54 ⁷ / ₈	68 ¹ / ₄	63 ³ / ₈	36	36	36	18 ⁷ / ₈	19	21 ³ / ₈
23	70 ¹ / ₄	67 ³ / ₄	63	67 ¹ / ₂	80 ³ / ₄	66 ³ / ₈	58 ¹ / ₂	65	60 ¹ / ₄	74 ⁷ / ₈	65 ⁵ / ₈	36	39	36	20 ⁷ / ₈	21	23 ³ / ₈
26	77 ¹ / ₂	77	69	74 ¹ / ₂	89 ¹ / ₈	75 ¹ / ₂	65 ¹ / ₂	73 ³ / ₈	67 ⁷ / ₈	84 ¹ / ₈	72 ⁵ / ₈	39	44 ¹ / ₂	39	23 ¹ / ₂	23 ³ / ₈	26 ¹ / ₂
29	86 ³ / ₈	85 ⁵ / ₈	76 ¹ / ₄	82 ⁷ / ₈	98 ⁷ / ₈	83 ³ / ₈	73 ³ / ₈	82 ¹ / ₈	76 ¹ / ₈	94	75 ¹ / ₂	43	49	43	26 ¹ / ₈	26 ¹ / ₄	29 ¹ / ₂
33	93 ¹ / ₂	96 ¹ / ₂	86 ¹ / ₄	93 ¹ / ₂	111 ³ / ₄	94 ¹ / ₂	83 ³ / ₄	93 ³ / ₈	86 ⁷ / ₈	107 ¹ / ₄	80	44	55	48	29 ³ / ₄	29 ⁷ / ₈	33 ¹ / ₂
37	104 ¹ / ₄	108 ³ / ₄	95 ³ / ₄	104 ¹ / ₄	124 ¹ / ₂	106	93	104 ³ / ₈	96 ⁷ / ₈	119 ¹ / ₂	84 ³ / ₄	49	62	53 ¹ / ₂	33 ¹ / ₄	33 ³ / ₈	37 ¹ / ₂
41	115	119	106	115	137 ¹ / ₂	116 ¹ / ₂	103	114 ⁷ / ₈	106 ⁷ / ₈	131 ¹ / ₈	88 ¹ / ₄	54	68	59	36 ³ / ₄	36 ⁷ / ₈	41 ¹ / ₂

Due to Greenheck's policy of continuous product improvement, dimensions are subject to change. For complete dimensional information refer to the applicable CAPS submittal drawing.

Angular Discharge Dimensions



Our Commitment

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

Specific Greenheck product warranties are located on greenheck.com within the product area tabs and in the Library under Warranties.



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