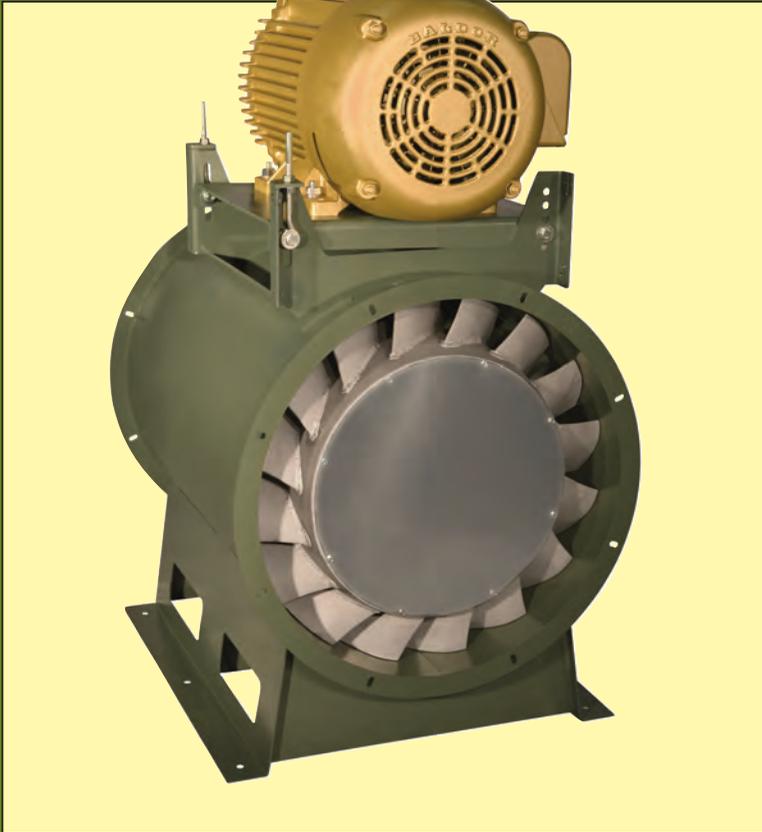


# BELT DRIVE VANEAXIAL FIXED PITCH FANS

BULLETIN 673  
JANUARY, 2018



- Capacities to 100,000 CFM
- Static pressures to 9"WG
- Temperatures to 200°F.



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# VANEAXIAL FANS

Vaneaxial Fixed Pitch Fans are designed and constructed for high pressure ventilating and industrial process applications requiring the compactness of an axial fan.

## DESIGN FEATURES

- **Capacities** – to 100,000 CFM.
- **Pressures** – to 9" WG.
- **Fifteen belt-drive sizes** – 12" through 60" wheel diameters.
- **Multiple hub ratios are available** – for increased selection flexibility.
- **Choice of belt-drive configurations** – belt drive in five mounting positions.
- **Precision rolled tube** – for minimum tip clearance and maximum efficiency.

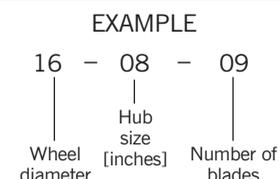


## CONSTRUCTION FEATURES

- **Cast aluminum wheel** – airfoil blades provide highly efficient, quiet operation for clean-air applications.
- **Heavy-gauge welded components** – provide structural strength, durability, and minimal leakage.
- **Bearings** – selected to provide long service life... 50,000 hours average minimum L-10. External lubrication fittings are standard.
- **Industrial finish** – nyb green industrial grade coating.
- **Straightening vanes** – aerodynamically designed vanes convert velocity pressure to static pressure for maximum efficiency.
- **Flanged connections** – Welded flanges with slotted holes.
- **Lubrication** – extended lubrication lines with external fittings provided on all belt-drive Vaneaxial Fixed Pitch Fans.
- **Adjustable motor mount** – positive screw adjustment for easy belt-tensioning.
- **Shafting** – straightened to close tolerance to minimize “run out” and ensure smooth operation.
- **Balance** – all wheels are precision-balanced prior to assembly. Fans with motors and drives mounted by nyb are checked at the specified running speed.
- **Inner-tube construction** – Structurally supports bearings and drive in airstream. Removable end cover allows access to bearings and drive.
- **Tapered hub with split taper bushing** – for ease in wheel removal.
- **Non-belt well design** – for improved fan efficiencies throughout operating range. Includes sealed belt guard minimizing airstream leakage.

## SIZING NOMENCLATURE

6-digit model number designates the wheel diameter, hub size, and number of blades.



# MOUNTING ARRANGEMENTS

Arrangement 9-M with motor and V-belt drive. Fork openings allow for easy maneuvering during installation.



Arrangement 9-D with access door, motor, V-belt drive, and belt guard.



<p>ARRANGEMENT</p> <p><b>9-M</b></p> <p>WITH MOUNTING LEGS</p>		<p>Fabricated mounting legs facilitate fan mounting on the floor, ceiling, or in a vertical position on a wall. Flange connections are standard.</p>	<p><b>9-M Mounting Positions</b> viewed from discharge end</p>
<p>ARRANGEMENT</p> <p><b>9-V</b></p> <p>FOR VERTICAL MOUNTING</p>		<p>Fans are equipped with four mounting brackets suitable for floor, platform, or ceiling mounting. Motor is located on centerline between two of the four brackets. Flange connections are standard.</p>	<p><b>9-V Mounting Positions</b></p>
<p>ARRANGEMENT</p> <p><b>9-S</b></p> <p>FOR SUSPENDED MOUNTING</p>		<p>Fans for suspended mounting are equipped with side supports suitable for attachment to rods hung from the ceiling structure. Flange connections are standard.</p>	<p><b>9-S Mounting Positions</b></p>
<p>ARRANGEMENT</p> <p><b>9-D</b></p> <p>FOR DUCT MOUNTING</p>		<p>Units feature flanges on inlet and discharge for mounting to the duct work.</p>	
<p>ARRANGEMENT</p> <p><b>9-R</b></p> <p>FOR ROOF MOUNTING</p>		<p>Roof-mounted fans are furnished with curb caps and collars extending below the curb cap for easy connection. Stackhoods and weather covers are optional.</p>	

# ACCESSORIES AND MODIFICATIONS

Arrangement 9-M with inlet bell with guard, weather cover, motor, and V-belt drive.



Arrangement 9-R with stack hood, curb cap, access door, motor, V-belt drive, and belt guard.

## 1. INLET BELL WITH GUARD

Inlet bell minimizes losses associated with non-ducted inlet applications. Includes wire guard.

## 2. VIBRATION ISOLATION –not shown

Rubber-in-shear or spring-type isolation mounts reduce the transmission of vibration to the mounting structure.

## 3. SAFETY EQUIPMENT/WEATHER COVER

Belt guards are included as standard. Inlet and outlet guards, and louvered weather covers are available. Selection of appropriate safety accessories is the responsibility of the system designer familiar with the specific installation.

## 4. COMPANION FLANGES –not shown

Fit flush with fan inlet and outlet flanges, provided with matching hole pattern.

## 5. STACK HOOD

Stack hood with built-in back-draft damper for vertical outdoor exhaust applications.

## 6. CURB CAP

Gusseted cover with nailer holes on perimeter includes flange for vertical fan mounting.

## 7. DRAINS –not shown

For horizontal mounted fans...drain located at the lowest point of the housing tube.

## 8. ACCESS DOOR

Gasketed, latch-type door swings open on hinges after turning cam levers...bolt-on door also available...provides visual access to wheel...available in all sizes.

## 9. SHAFT SEAL –not shown \*Requires belt well.

Ceramic-felt seal elements encased between metal backing plate and retaining disc...elements can be easily split for field installation and maintenance...lubricated lip seals with extended lines are also available.

## 10. MOTORS AND DRIVES

A wide-array of motor and drive components are available factory-mounted by **nyb**.

## 11. DAMPERS –not shown

Bolt-on vortex damper assembly provides volume control...for modulating systems...electric and pneumatic damper operators also available.

## 12. SPARK-RESISTANT CONSTRUCTION –not shown

AMCA B [wheel type] SRC and AMCA C [buffer type] SRC construction available on Sizes 16-60. SRC construction not available with inlet damper or inlet guard. \*Requires belt well.

## 13. BELT WELL –not shown

Minimizes belt and bearing exposure to gas stream contaminants. Includes belt guard as standard.

Protective coatings and special alloys are available to combat corrosion problems.

## HOUSINGS AND STRUCTURALS

Special corrosion resistant paints and spray coatings are available under a variety of trade names. **nyb** works with experienced coating applicators who can apply coatings to meet a wide range of requirements.

# ACCESSORY PERFORMANCE

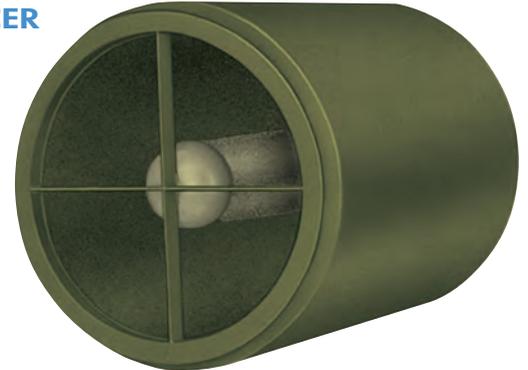
## INLET BELL

Catalog ratings shown in this bulletin are for Vaneaxial Fixed Pitch Fans with free inlet and ducted outlet. When no inlet duct is used, entrance loss must be added to the static pressure calculated for the system. For bare inlets, that loss is equal to the fan velocity pressure. **Example:** 4200 FPM velocity = 1.1"WG [see Chart I at right]. Inlet bells render such loss negligible and are available at nominal cost. Sizes 12 through 48 constructed of fiberglass reinforced plastic; Sizes 54 and 60 constructed of steel.

### CHART I VELOCITY PRESSURE

Velocity [FPM]	VP
1000	.062
1400	.122
1800	.202
2200	.301
2600	.421
3000	.560
3400	.719
3800	.899
4200	1.098
4800	1.317
5000	1.556
5200	1.686
5400	1.815
5600	1.955
5800	2.093
6000	2.244

## SILENCER



Available for all sizes of Vaneaxial Fixed Pitch Fans with matching standard flanges for either inlet or outlet applications. Silencers are available in two sizes to better match system cost as well as sound attenuation parameters. All silencers utilize heavy-welded steel construction filled with high-density acoustical absorption material. For more detailed application information and attenuation performance, refer to Engineering Supplement ES-673.

## SAFETY EQUIPMENT

Safe operation of air-moving equipment is dependent on proper installation and maintenance. This includes selection and use of appropriate safety accessories for the specific installation. Such safety accessories are available from **nyb**. However, selection of the appropriate devices is the responsibility of the system designer who must be aware of the fan location, fan accessibility in the particular installation, and adjacent equipment. Neither **nyb** nor its sales representatives are in a position to make such a determination. The system designer

must consider providing guards for all exposed moving parts as well as protection from access to high velocity airstreams. Improper application, installation, maintenance, or safety guard selection can create danger to life and limb of personnel. Users and/or installers should read "Recommended Safety Practices for Air Moving Devices" as published by the Air Movement and Control Association, 30 West University Drive, Arlington Heights, Illinois 60004.

## FAN TO SIZE AND DRAWINGS ON DEMAND

Fan to Size online allows customers to select fans without the need to download software on their computers or tablets. Fans can be selected by product categories, types or applications. Additionally, drawings are generated to supplement fan selections.



### FAN TO SIZE SELECTION BENEFITS

- Compare multiple product lines.
- Metric or English units.
- Add silencers.
- Add accessories.
- Save data for future use.
- Calculate density based on rarefaction, compression, and molecular weight.

### DRAWINGS ON DEMAND BENEFITS

- Generate drawing package specifically tailored to the user's application requirements.
- Fan-performance curves.
- Select fan's rotation, discharge position, motor frame size and u-base.
- Add accessories (dampers, silencers, stack hoods, curb caps)
- Installation and Maintenance Manuals.

# How to Use Capacity Tables

For a given fan size, CFM, and static pressure, capacity tables can be used to obtain outlet velocity, fan RPM, and BHP. If capacities are at conditions other than 70°F, sea level, or standard density [.075 lb./cu. ft.], correction factors must be applied to static pressure and BHP.

PROCEDURES	STEPS	EXAMPLE: A belt-drive fan is required for 18000 CFM at 3"WG at 100°F and 6000 feet above sea level.
If conditions other than standard are involved, correct static pressure for actual altitude and temperature using Chart IV.	1	Chart IV gives a 1.33 factor for 100°F and 6000 feet. Corrected SP is 3"WG x 1.33 = 4"WG at 70°F and sea level. Select fan from capacity tables for 18000 CFM at 4"WG.
Select size, RPM, and BHP of fan from capacity table.	2	A Size 27-12-09 is selected for 18000 CFM at 4"WG at 2859 RPM and 23.9 BHP.
Check maximum safe speed of fan at operating temperatures as shown in Charts II or III.	3	From Chart II and III, the maximum safe speed for a Size 27-12-09 fan at 100°F and 2906 RPM (2965 x .98). Fan is satisfactory for operation at 100°F.
Determine actual performance at operating conditions by correcting SP and BHP.	4	Actual performance: 18000 CFM at 3"WG (4" ÷ 1.33) at 2859 RPM at 18.0 BHP (22.7 ÷ 1.33) at 100°F and 6000 feet above sea level.

## MAXIMUM SAFE SPEED INFORMATION

Chart II details maximum safe speed of standard wheels at 70°F. When temperatures are involved, multiply the appropriate safe operating speed shown in Chart II by the factor shown in Chart III. Maximum operating temperature for standard fans is 120°F. For temperatures above 120°F, as indicated by tinted areas in Charts III and IV select drive for a minimum of 2.0 service factor.

## CHART II

### MAXIMUM FAN STRUCTURE OPERATING SPEEDS FOR TEMPERATURES TO 200°F

Maximum operating speeds apply only to wheels operated at or below stated temperature and free of material build-up, corrosion, or wear.

Size	RPM	Size	RPM
12-06-06	4500	29-12-09	2760
14-06-06	4500	29-16-12	2760
14-08-08	4500	29-20-16	2760
16-08-09	4500	32-16-09	2380
16-12-12	4300	32-20-12	2380
18-08-09	4500	36-16-09	2130
18-12-12	4200	36-20-12	2130
21-08-09	3500	36-26-15	2130
21-12-12	3900	38-16-09	2020
21-16-16	3550	38-20-12	1750
24-12-09	3600	38-26-15	2020
24-16-12	3170	42-20-09	1770
27-12-09	2965	42-26-12	1770
27-16-12	2965	48-20-09	1600
27-20-16	2965	48-26-12	1600
		54-26-09	1385
		60-26-09	1200

## CHART III

### TEMPERATURE CORRECTION FACTORS FOR WHEEL SAFE SPEEDS

Temp. °F	Aluminum Wheel
-50	1.00
70	1.00
100	.98
200	.98

\* nyb recommends low temperature grease for applications below -20°F

## CHART IV CORRECTION FACTORS FOR TEMPERATURE AND ALTITUDE

Temperature °F	Altitude—feet above sea level												
	0	500	1000	1500	2000	3000	4000	5000	6000	7000	8000	9000	10000
-50	.77	.79	.80	.82	.83	.86	.89	.92	.96	1.00	1.04	1.08	1.12
-25	.82	.84	.85	.87	.89	.92	.95	.98	1.03	1.07	1.11	1.15	1.19
0	.87	.89	.91	.92	.94	.97	1.01	1.04	1.09	1.13	1.18	1.22	1.26
20	.91	.93	.95	.97	.98	1.02	1.06	1.09	1.14	1.18	1.23	1.27	1.32
40	.94	.96	.98	1.00	1.02	1.05	1.09	1.13	1.18	1.22	1.27	1.32	1.36
60	.98	1.00	1.02	1.04	1.06	1.10	1.14	1.18	1.23	1.27	1.32	1.37	1.42
70	1.00	1.02	1.04	1.06	1.08	1.12	1.16	1.20	1.25	1.30	1.35	1.40	1.45
80	1.02	1.04	1.06	1.08	1.10	1.14	1.18	1.22	1.28	1.33	1.38	1.43	1.48
100	1.06	1.08	1.10	1.12	1.15	1.19	1.23	1.27	1.33	1.38	1.43	1.48	1.54
120	1.09	1.11	1.13	1.16	1.18	1.22	1.26	1.31	1.36	1.42	1.47	1.53	1.58
140	1.13	1.15	1.18	1.20	1.22	1.27	1.31	1.36	1.41	1.47	1.53	1.58	1.64
160	1.17	1.19	1.22	1.24	1.26	1.31	1.36	1.40	1.46	1.52	1.58	1.64	1.70
180	1.21	1.23	1.26	1.28	1.31	1.36	1.40	1.45	1.51	1.57	1.63	1.69	1.75
200	1.25	1.28	1.30	1.33	1.35	1.40	1.45	1.50	1.56	1.63	1.69	1.75	1.81

# BELT-DRIVE VANEAXIAL FIXED PITCH FANS

Belt-drive Vaneaxial Fixed Pitch Fans are available in Sizes 12 through 60. Standard Design is provided less a belt well for improved airflow performance and efficiencies. For applications requiring sealed drives, spark-resistant construction, or temperatures in the range of 120 to 200 degree F, fans can be furnished with an optional belt well to isolate the bearings and drive components from airborne moisture and contaminants. In the event that system pressures or flow requirements change, belt-drive Vaneaxial fans offer inherent performance flexibility. New performance is easily achieved by modifying readily accessible drives.



SIZE <b>12</b> 06-06 40° Angle	CFM	OV	1/4"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP		1 3/4"SP		2"SP		2 1/4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			1500	1852	2250	0.39	2450	0.52	2662	0.68	2974	0.95	3322	1.32	3642	1.74				
1800	2222	2616	0.60	2799	0.75	2960	0.91	3136	1.10	3442	1.43	3590	1.65	3748	1.89	3932	2.19	4206	2.68	
2100	2592	2990	0.88	3156	1.07	3306	1.25	3442	1.43	3590	1.65	3748	1.89	3932	2.19	4206	2.68	4458	3.20	
2400	2963	3371	1.25	3520	1.46	3658	1.67	3786	1.88	3908	2.09	4032	2.33	4168	2.59	4303	2.86			
2600	3209	3632	1.55	3762	1.77	3898	2.01	4022	2.23	4134	2.45	4246	2.69	4365	2.95	4486	3.22			
2900	3580	4022	2.10	4139	2.34	4260	2.59	4380	2.85	4490	3.11									
3100	3827	4283	2.53	4394	2.79															
3200	3950	4414	2.76																	

SIZE <b>14</b> 06-06 40° Angle	CFM	OV	1/4"SP		1/2"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP		1 3/4"SP		2"SP		2 1/2"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			2500	2277	2255	0.57	2430	0.75	2598	0.94	2774	1.17	2985	1.46						
2800	2551	2486	0.75	2642	0.95	2799	1.16	2945	1.37	3105	1.63	3265	1.91							
3100	2824	2722	0.97	2859	1.18	3005	1.41	3140	1.64	3276	1.89	3417	2.18	3554	2.47	3772	2.95			
3400	3097	2960	1.24	3085	1.46	3214	1.70	3342	1.95	3466	2.21	3590	2.49	3720	2.80	3848	3.12			
3700	3370	3200	1.55	3311	1.79	3432	2.05	3550	2.31	3670	2.60	3782	2.88	3898	3.19	4014	3.51	4246	4.20	
4000	3644	3437	1.91	3545	2.17	3656	2.45	3766	2.74	3873	3.02	3984	3.33	4086	3.63	4192	3.96	4410	4.68	
4300	3917	3680	2.33	3782	2.61	3882	2.90	3984	3.20	4086	3.51	4190	3.84	4288	4.15	4385	4.48			
4600	4190	3926	2.82	4018	3.11	4110	3.41	4206	3.73	4303	4.06	4400	4.40	4492	4.73					

SIZE <b>14</b> 08-08 40° Angle	CFM	OV	1/4"SP		1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		3 3/4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			2400	2186	2375	0.66	2486	0.79	2698	1.07	2925	1.40	3165	1.85						
2800	2551	2733	0.98	2834	1.14	3020	1.46	3194	1.81	3397	2.19	3570	2.64							
3200	2915	3100	1.42	3185	1.59	3351	1.95	3506	2.32	3662	2.74	3844	3.17	4000	3.65	4190	4.30	4336	4.76	
3400	3097	3285	1.69	3366	1.87	3522	2.24	3672	2.62	3820	3.04	3970	3.51	4139	3.97	4283	4.51	4354	4.80	
3600	3279	3466	1.97	3545	2.17	3694	2.56	3840	2.97	3975	3.40	4110	3.86	4272	4.35	4422	4.86	4490	5.15	
3800	3461	3652	2.30	3724	2.50	3868	2.92	4004	3.34	4134	3.79	4272	4.25	4400	4.78					
4100	3735	3926	2.85	3994	3.06	4128	3.51	4258	3.97	4385	4.43	4500	4.92							
4300	3917	4114	3.27	4178	3.49	4303	3.95	4432	4.45											

SIZE <b>16</b> 08-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			4000	2777	2521	1.36	2616	1.55	2708	1.75	2876	2.21	3070	2.72						
4400	3055	2733	1.72	2824	1.93	2910	2.15	3070	2.62	3225	3.14									
4800	3333	2950	2.15	3034	2.38	3114	2.61	3265	3.09	3412	3.64	3560	4.22	3720	4.86	3944	5.85			
5200	3611	3170	2.65	3245	2.89	3322	3.14	3468	3.65	3598	4.20	3729	4.80	3882	5.47	4026	6.16	4216	7.15	
5600	3888	3391	3.23	3462	3.49	3534	3.76	3672	4.30	3802	4.86	3926	5.48	4042	6.16	4186	6.86	4322	7.61	
6000	4166	3616	3.91	3680	4.17	3748	4.45	3878	5.03	4000	5.61	4114	6.25	4236	6.91	4342	7.65	4478	8.39	
6400	4444	3836	4.65	3902	4.95	3964	5.24	4086	5.84	4206	6.47	4322	7.11	4422	7.80					
6800	4722	4062	5.50	4119	5.79	4182	6.12	4298	6.76	4410	7.41									

Performance certified is for installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

# PERFORMANCE FOR VANEAXIAL FIXED PITCH FANS

SIZE <b>16</b> 12-12 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		3"SP		4"SP		5"SP		6"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			2100	1458	1828	0.72	1903	0.84	1978	0.96	2140	1.24	2315	1.56								
2400	1666	2050	1.00	2115	1.13	2180	1.26	2315	1.55	2456	1.87	2774	2.66									
2700	1875	2275	1.34	2335	1.49	2395	1.65	2510	1.95	2627	2.27	2885	3.03	3205	4.10							
3000	2083	2506	1.78	2556	1.93	2607	2.09	2713	2.43	2819	2.78	3045	3.56	3285	4.46	3580	5.71					
3400	2361	2814	2.49	2859	2.66	2905	2.84	2996	3.21	3090	3.60	3276	4.40	3477	5.30	3690	6.33	3922	7.51			
3800	2639	3125	3.38	3165	3.56	3205	3.76	3285	4.16	3371	4.59	3536	5.46	3709	6.41	3888	7.42	4076	8.54			
4200	2916	3432	4.45	3472	4.66	3508	4.87	3580	5.30	3656	5.77	3811	6.74	3955	7.69	4114	8.75	4283	9.91			
4600	3194	3748	5.79	3782	5.99	3816	6.21	3882	6.68	3950	7.18	4090	8.21	4226	9.26							

SIZE <b>18</b> 08-09 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		4 1/2"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			4800	2642	2195	1.51	2395	2.10	2602	2.74												
5500	3028	2456	2.08	2638	2.72	2810	3.42	2990	4.16	3190	5.07											
6200	3413	2724	2.79	2885	3.47	3045	4.26	3200	5.06	3360	5.90	3512	6.77									
6900	3798	2996	3.67	3145	4.43	3291	5.26	3428	6.13	3565	7.00	3709	7.93	3850	8.91	4037	10.3					
7600	4184	3274	4.74	3408	5.57	3540	6.42	3666	7.34	3791	8.31	3922	9.32	4052	10.3	4178	11.4	4240	11.9			
8300	4569	3550	5.99	3672	6.89	3796	7.81	3916	8.78	4032	9.82	4148	10.9	4264	12.0	4385	13.1	4442	13.6			
9000	4954	3830	7.48	3940	8.42	4057	9.43	4168	10.4	4278	11.5	4385	12.7	4490	13.8							
9800	5395	4150	9.46	4254	10.5	4360	11.6	4462	12.7													

SIZE <b>18</b> 12-12 40° Angle	CFM	OV	1/2"SP		1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			4500	2477	2135	1.80	2240	2.27	2441	3.24	2642	4.31	2865	5.60	3116	7.17						
5100	2807	2395	2.50	2490	3.02	2668	4.10	2844	5.22	3025	6.49	3216	7.92	3412	9.41							
5700	3138	2653	3.36	2742	3.92	2900	5.09	3060	6.33	3216	7.60	3380	9.06	3550	10.6	3729	12.3					
6200	3413	2865	4.18	2954	4.81	3105	6.10	3250	7.42	3391	8.74	3540	10.2	3690	11.8	3848	13.6	4014	15.4			
6700	3688	3085	5.18	3165	5.84	3306	7.19	3442	8.61	3576	10.1	3709	11.5	3844	13.1	3986	14.9	4130	16.7			
7200	3963	3302	6.31	3380	7.04	3516	8.50	3642	10.0	3766	11.5	3893	13.1	4014	14.7	4139	16.4					
7700	4239	3522	7.63	3594	8.38	3724	9.92	3844	11.5	3960	13.1	4076	14.8	4192	16.5							
8200	4514	3740	9.09	3811	9.92	3936	11.5	4048	13.2	4158	14.9											

SIZE <b>21</b> 08-09 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		4 1/2"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			6000	2451	1883	1.44	2104	2.15	2320	2.96	2516	3.82	2865	5.63	3030	6.69						
7000	2859	2120	1.99	2324	2.80	2506	3.66	2693	4.63	2965	6.47	3194	7.78									
8000	3267	2366	2.70	2552	3.61	2713	4.52	2880	5.57	3045	6.67	3194	7.78	3340	8.94	3486	10.2					
9000	3676	2622	3.60	2784	4.60	2945	5.63	3080	6.65	3230	7.85	3380	9.10	3512	10.3	3647	11.6	3776	12.9			
10000	4084	2880	4.70	3025	5.79	3170	6.89	3306	8.03	3432	9.22	3565	10.5	3704	11.9	3826	13.3					
11000	4493	3145	6.05	3270	7.17	3402	8.39	3536	9.65	3656	10.9	3768	12.2	3888	13.6							
12000	4901	3406	7.60	3522	8.83	3642	10.1	3766	11.5	3888	12.9											
13000	5310	3672	9.46	3780	10.77	3888	12.1															

SIZE <b>21</b> 12-12 40° Angle	CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			6000	2451	1712	2.01	1964	3.32														
7200	2941	1969	2.88	2166	4.32	2380	5.93															
8400	3431	2230	4.01	2404	5.59	2582	7.34	2764	9.27	2940	11.3											
9600	3921	2496	5.42	2658	7.21	2810	9.09	2965	11.1	3125	13.3	3274	15.6									
10900	4452	2794	7.42	2936	9.35	3074	11.4	3205	13.6	3342	15.9	3492	18.4	3618	20.9	3754	23.6	3898	26.44			
12000	4901	3045	9.42	3180	11.6	3306	13.8	3426	16.2	3545	18.5	3672	21.1	3811	23.8							
13200	5391	3326	12.12	3448	14.4	3565	16.8	3680	19.3	3786	21.9	3898	24.6									
14400	5881	3608	15.29	3720	17.8	3830	20.4															

SIZE <b>21</b> 16-16 40° Angle	CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP			
			RPM	BHP	RPM	BHP	RPM	BHP														
			3000	1225	1325	1.06																
4000	1634	1591	1.67	1814	2.77	2035	3.94															
5000	2042	1898	2.61	2066	3.81	2246	5.24	2430	6.70	2602	8.23											
6000	2451	2215	3.96	2355	5.28	2501	6.80	2647	8.48	2799	10.2	2950	12.0	3094	13.8							
7000	2859	2536	5.72	2662	7.22	2779	8.85	2905	10.6	3030	12.5	3160	14.6	3291	16.6	3422	18.7	3545	20.8			
8000	3267	2865	8.03	2976	9.75	3085	11.5	3185	13.4	3296	15.4	3406	17.5	3516	19.8							
9000	3676	3194	10.9	3296	12.9	3391	14.7	3486	16.7													
10000	4084	3526	14.5																			

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# PERFORMANCE FOR VANEAXIAL FIXED PITCH FANS

SIZE <b>24</b> 12-09 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		4 1/2"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	9000	2777	1600	2.74	1737	3.75	1883	4.90	2020	6.10												
	10500	3240	1823	3.91	1940	5.11	2064	6.33			2306	9.03										
	12000	3703	2050	5.39	2155	6.78	2255	8.13	2366	9.54	2476	11.1	2582	12.7	2684	14.3						
	13500	4166	2284	7.32	2375	8.81	2466	10.4	2558	11.9	2653	13.4	2753	15.2	2850	17.0	2940	18.7			3034	20.7
	15000	4629	2521	9.71	2598	11.3	2684	13.0	2764	14.7	2848	16.5	2936	18.2	3025	20.1	3114	22.1				
	16500	5092	2753	12.5	2828	14.3	2905	16.2	2980	18.1	3054	20.0										
	18000	5555	2994	15.9	3060	17.8	3130	19.8														
	19000	5863	3150	18.4																		

SIZE <b>24</b> 16-12 40° Angle	CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		
			RPM	BHP	RPM																
	8000	2469	1600	3.57	1757	5.20	1924	7.14	2100	9.39											
	9200	2839	1797	4.89	1929	6.61	2070	8.64	2220	11.0	2375	13.6									
	10400	3209	1998	6.52	2115	8.42	2235	10.5	2364	13.0	2492	15.5	2627	18.3	2759	21.3					
	11600	3580	2204	8.57	2306	10.6	2415	12.9	2526	15.4	2638	18.0	2753	20.8	2876	24.0	3000	27.4			
	12200	3765	2306	9.73	2404	11.9	2510	14.3	2612	16.7	2718	19.4	2828	22.4	2940	25.5	3054	28.8	3170	32.3	
	14000	4320	2616	13.9	2704	16.3	2794	19.0	2885	21.7	2974	24.5	3065	27.6	3156	30.7					
	15200	4691	2824	17.4	2910	20.0	2985	22.6	3070	25.5	3154	28.6									
	16400	5061	3034	21.4	3116	24.2															

SIZE <b>27</b> 12-09 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		4"SP		5"SP		5 1/2"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	10000	2447	1305	2.07	1465	3.23	1620	4.50	1766	5.88												
	12000	2936	1500	3.08	1636	4.27	1777	5.78	1903	7.26	2030	8.88										
	14000	3425	1697	4.37	1832	5.74	1940	7.24	2060	8.99	2175	10.8	2280	12.6								
	17000	4159	2009	7.07	2124	8.75	2230	10.4	2320	12.2	2410	14.2	2512	16.3	2693	20.6	2874	25.2			2956	27.5
	18000	4404	2115	8.20	2220	9.91	2326	11.7	2415	13.5	2501	15.6	2592	17.8	2774	22.2	2940	27.0				
	20000	4893	2324	10.8	2420	12.67	2521	14.7	2612	16.6	2688	18.6	2764	20.9	2930	25.8						
	23000	5627	2647	15.7	2728	17.8	2814	20.1	2900	22.4												
	25000	6117	2859	19.7	2940	22.0																

SIZE <b>27</b> 16-12 40° Angle	CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP			
			RPM	BHP	RPM	BHP	RPM	BHP														
	11000	2691	1385	3.80	1560	5.99	1717	8.45														
	12300	3009	1510	4.78	1662	7.09	1812	9.71	1958	12.6												
	14600	3572	1742	7.02	1868	9.57	1998	12.4	2126	15.5	2244	18.8										
	16900	4135	1974	9.87	2090	12.8	2200	15.8	2310	19.2	2426	22.8	2521	26.4	2627	30.3						
	18900	4624	2180	13.0	2286	16.2	2386	19.5	2486	22.9	2582	26.8	2693	31.0	2779	35.0	2865	39.0			2965	43.5
	21500	5260	2456	18.3	2547	21.7	2636	25.4	2724	29.2	2810	33.0	2894	37.3								
	23800	5823	2698	23.9	2784	27.8	2865	31.7	2945	35.9												
	25000	6117	2824	27.2	2905	31.2																

SIZE <b>27</b> 20-16 40° Angle	CFM	OV	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		8"SP		10"SP		11"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP												
	8000	1957	1334	3.10	1480	4.89	1626	6.93	1762	9.18												
	9600	2349	1545	4.53	1671	6.54	1792	8.74	1918	11.2	2030	13.8	2140	16.5								
	11200	2740	1762	6.37	1872	8.59	1974	11.1	2084	13.7	2190	16.5	2290	19.4	2481	25.7						
	12800	3132	1984	8.83	2080	11.3	2175	13.8	2264	16.8	2355	19.7	2456	22.9	2627	29.4	2799	36.7			2885	40.6
	14400	3523	2204	11.8	2295	14.5	2380	17.4	2466	20.3	2541	23.6	2622	26.9	2799	34.2	2950	41.6				
	16000	3915	2426	15.5	2516	18.5	2592	21.7	2668	24.8	2744	28.1	2814	31.9	2960	39.2						
	17600	4306	2653	20.1	2733	23.2	2808	26.6	2874	30.1	2945	33.5										
	19200	4697	2876	25.3	2954	28.8																

SIZE <b>29</b> 12-09 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		4 1/2"SP			
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	14000	3013	1580	3.85	1717	5.26	1848	6.90	1978	8.79	2095	10.6	2215	12.5	2330	14.6						
	15000	3228	1676	4.54	1797	5.98	1929	7.67	2046	9.59	2164	11.6	2275	13.5	2384	15.6	2492	17.8				
	16000	3444	1772	5.29	1883	6.82	2015	8.61	2124	10.5	2235	12.6	2344	14.7	2446	16.8	2547	19.0			2642	21.2
	17000	3659	1868	6.12	1974	7.78	2095	9.58	2204	11.5	2304	13.7	2410	15.9	2510	18.1	2607	20.4			2702	22.7
	18000	3874	1969	7.12	2064	8.77	2175	10.7	2286	12.6	2380	14.8	2481	17.2	2578	19.5	2673	21.9				
	19000	4089	2066	8.14	2160	9.94	2255	11.8	2366	13.9	2461	16.0	2552	18.4	2647	21.0	2742	23.5				
	20000	4304	2164	9.27	2255	11.2	2344	13.1	2446	15.2	2547	17.5	2632	19.9	2718	22.4						
	21000	4520	2264	10.6	2346	12.4	2435	14.6	2526	16.7	2627	19.0	2713	21.4								

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# PERFORMANCE FOR VANEAXIAL FIXED PITCH FANS

SIZE <b>29</b> 16-12 40° Angle	CFM	OV	1/2"SP		1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
17000	3659		1580	6.64	1642	7.95	1768	11.0	1894	14.3	2015	18.0	2124	21.6	2244	25.8				
18000	3874		1666	7.73	1726	9.12	1843	12.1	1964	15.6	2080	19.3	2186	23.3	2295	27.4				
19000	4089		1752	8.92	1808	10.4	1920	13.5	2040	17.1	2146	20.9	2250	25.0	2350	29.2	2452	33.5		
20000	4304		1838	10.2	1892	11.8	1998	15.0	2106	18.8	2215	22.7	2315	26.7	2410	31.1	2506	35.6	2607	40.4
21000	4520		1924	11.7	1974	13.2	2075	16.6	2180	20.5	2286	24.5	2384	28.7	2476	33.2	2567	37.9	2658	42.6
22000	4735		2009	13.2	2060	14.9	2155	18.3	2255	22.2	2360	26.5	2450	30.9	2541	35.2	2627	40.0	2718	45.1
23000	4950		2095	14.9	2144	16.7	2235	20.2	2330	24.3	2426	28.7	2521	33.2	2612	37.8	2693	42.5		
24000	5165		2184	16.9	2230	18.7	2320	22.4	2406	26.4	2501	31.2	2596	35.6	2673	40.1				

SIZE <b>29</b> 20-16 40° Angle	CFM	OV	1/2"SP		1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	2583		1350	3.86	1414	4.95	1530	7.20	1651	9.94	1766	12.8	1883	15.9						
14000	3013		1556	5.73	1611	6.97	1717	9.52	1818	12.4	1918	15.5	2009	18.7			2215	26.0		
15000	3228		1660	6.88	1712	8.18	1812	10.9	1903	13.8	2000	17.0	2090	20.5	2180	24.0	2284	28.0	2370	31.8
16000	3444		1762	8.12	1812	9.50	1903	12.3	1994	15.4	2084	18.7	2175	22.4	2255	26.0	2344	30.0	2441	34.1
18000	3874		1969	11.1	2015	12.7	2095	15.7	2184	19.2	2255	22.5	2340	26.4	2420	30.4	2492	34.4	2562	38.5
20000	4304		2180	15.0	2220	16.6	2295	20.0	2375	23.8	2446	27.4	2512	31.2	2587	35.4	2662	39.9	2728	44.3
22000	4735		2390	19.5	2430	21.5	2501	25.2	2562	28.8	2636	33.0	2702	37.2	2759	41.2				
24000	5165		2602	25.1	2636	27.0	2702	31.0												

SIZE <b>32</b> 16-09 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		4 1/2"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	3124		1260	5.56	1365	7.50	1454	9.46	1556	11.7	1646	14.0								
21000	3645		1440	8.04	1525	10.3	1611	12.4	1691	14.9	1777	17.3	1858	20.0	1940	22.9				
24000	4166		1626	11.3	1697	13.8	1777	16.4	1848	18.8	1914	21.5	1989	24.3	2066	27.3	2135	30.4	2204	33.6
26000	4513		1748	13.9	1814	16.5	1883	19.3	1958	22.1	2020	24.8	2084	27.8	2150	30.7	2224	34.0	2290	37.4
28000	4860		1872	16.9	1934	19.7	1998	22.7	2066	25.7	2130	28.6	2190	31.7	2246	34.8	2310	38.0	2375	41.4
30000	5207		1998	20.4	2055	23.3	2115	26.6	2175	29.7	2240	32.9	2300	36.2	2350	39.3				
32000	5555		2124	24.4	2175	27.3	2230	30.6	2286	34.1	2346	37.5								
34000	5902		2250	28.8	2300	32.0	2350	35.4												

SIZE <b>32</b> 20-12 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		4"SP		5"SP		6"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	2430		1176	3.99	1234	5.19	1290	6.39	1354	7.82	1416	9.33	1476	10.9	1622	14.8				
16000	2777		1330	5.65	1380	6.86	1430	8.26	1480	9.72	1534	11.3	1591	13.0	1697	16.7	1818	20.8		
18000	3124		1480	7.61	1530	9.01	1574	10.6	1616	12.0	1662	13.7	1712	15.6	1808	19.3	1903	23.5	2009	28.0
20000	3472		1636	10.2	1680	11.6	1717	13.0	1757	14.9	1797	16.5	1843	18.6	1929	22.6	2015	26.8	2095	31.1
22000	3819		1788	13.1	1832	14.8	1868	16.4	1903	18.1	1940	20.2	1978	22.1	2055	26.4	2135	30.8	2210	35.3
24000	4166		1944	16.7	1984	18.5	2020	20.3	2055	22.2	2086	24.2	2120	26.4	2186	30.4	2255	35.1	2330	40.0
26000	4513		2100	21.0	2135	22.8	2170	24.7	2204	26.8	2235	28.9	2264	31.1	2324	35.5				
28000	4860		2255	25.8	2290	27.9	2324	30.0	2355	32.1	2380	33.9								

SIZE <b>36</b> 16-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
17000	2340		947	3.60	1013	4.56	1079	5.60	1200	7.83										
20000	2752		1070	4.99	1124	6.06	1180	7.19	1296	9.77	1394	12.3	1494	15.2						
23000	3165		1194	6.77	1250	8.07	1296	9.31	1394	11.9	1494	15.0	1580	17.9	1666	20.9	1748	24.1		
26000	3578		1320	8.94	1374	10.5	1420	11.9	1500	14.7	1591	17.8	1680	21.3	1757	24.6	1832	27.9	1909	31.5
28000	3853		1410	10.8	1456	12.3	1500	13.8	1580	16.9	1656	19.9	1742	23.4	1823	27.2	1892	30.7	1964	34.3
32000	4404		1585	15.0	1626	16.7	1666	18.4	1746	22.1	1812	25.6	1878	29.0	1954	32.9	2026	37.1	2095	41.4
36000	4954		1766	20.5	1803	22.4	1834	24.1	1909	28.2	1974	32.1	2035	36.2	2095	40.1				
40000	5505		1944	26.9	1978	29.1	2009	31.1	2075	35.5										

SIZE <b>36</b> 20-12 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
17000	2340		947	3.65	1018	5.16	1099	6.81	1170	8.69	1340	13.1								
20000	2752		1084	5.21	1154	7.00	1214	8.88	1285	10.9	1410	15.4	1550	20.5						
22000	3028		1176	6.46	1245	8.51	1300	10.6	1356	12.6	1476	17.1	1600	22.7	1732	28.3				
24000	3303		1270	7.96	1334	10.2	1390	12.3	1440	14.6	1554	19.3	1656	24.7	1772	30.9	1898	37.1		
26000	3578		1365	9.71	1425	12.1	1480	14.4	1525	16.8	1626	22.0	1726	27.1	1823	33.2	1929	39.8	2050	46.9
28000	3853		1465	11.9	1516	14.2	1570	16.8	1620	19.5	1706	24.8	1808	30.3	1888	36.0	1989	43.3	2084	50.2
32000	4404		1660	17.0	1706	19.6	1752	22.4	1797	25.3	1878	31.4	1954	37.3	2046	43.7	2120	50.1		
36000	4954		1854	23.3	1898	26.4	1938	29.4	1980	32.6	2060	39.3	2124	46.0						

Performance certified is for installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

# PERFORMANCE FOR VANEAXIAL FIXED PITCH FANS

SIZE <b>36</b> 26-15 40° Angle	CFM	OV	1/2"SP		1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		8"SP		9"SP		
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
17000	2340		1018	5.02	1070	6.61	1174	10.1	1280	14.0	1376	18.2	1465	22.6							
20000	2752		1180	7.50	1225	9.36	1314	13.2	1400	17.4	1494	22.2	1576	26.9	1656	32.2	1818	43.2			
22000	3028		1290	9.63	1330	11.5	1414	15.8	1490	20.2	1570	24.9	1656	30.3	1732	35.7	1872	47.0	1949	53.2	
24000	3303		1400	12.1	1440	14.3	1510	18.6	1585	23.3	1656	28.4	1732	33.7	1808	39.5	1949	51.9	2009	57.8	
26000	3578		1510	15.0	1545	17.2	1611	21.9	1682	26.8	1748	32.3	1818	38.0	1888	43.9	2020	56.1	2084	62.9	
28000	3853		1622	18.5	1656	20.9	1717	25.8	1782	31.1	1843	36.4	1903	42.4	1969	48.5	2100	61.7			
30000	4129		1732	22.3	1766	25.0	1823	30.2	1883	35.8	1944	41.5	2000	47.7	2055	53.9					
34000	4679		1954	31.5	1984	34.5	2040	40.7	2086	46.4											

SIZE <b>38</b> 16-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
20000	2539		1033	4.66	1094	5.76	1154	6.89	1256	9.29	1370	12.1	1474	14.9							
22000	2793		1114	5.71	1170	6.94	1225	8.15	1325	10.7	1420	13.5	1525	16.6	1616	19.7					
24000	3047		1196	6.92	1245	8.19	1296	9.52	1396	12.2	1485	15.3	1570	18.3	1666	21.7	1752	25.1			
26000	3301		1280	8.34	1325	9.69	1370	11.1	1465	14.0	1554	17.1	1631	20.3	1712	23.7	1803	27.5	1883	31.1	
28000	3555		1365	9.96	1405	11.3	1450	12.9	1536	16.0	1622	19.2	1697	22.5	1768	26.0	1848	29.8	1929	33.7	
30000	3809		1450	11.8	1490	13.3	1530	14.9	1611	18.2	1691	21.5	1768	25.0	1838	28.8	1903	32.4	1974	36.3	
32000	4063		1540	14.0	1574	15.5	1611	17.2	1686	20.6	1762	24.1	1838	27.8	1909	31.7	1969	35.4			
34000	4317		1626	16.3	1660	18.0	1697	19.8	1762	23.2	1838	27.2	1909	30.9	1978	34.8					

SIZE <b>38</b> 20-12 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		5"SP		
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
16000	2032		830	2.99	907	4.55	988	6.19	1068	8.05	1159	10.2									
19000	2412		953	4.23	1022	6.02	1088	7.90	1159	9.90	1225	12.1	1296	14.4	1370	16.8					
22000	2793		1084	6.00	1148	8.00	1200	9.94	1256	12.1	1325	14.6	1380	17.1	1436	19.5	1496	22.1	1646	28.4	
24000	3047		1170	7.35	1230	9.50	1280	11.6	1334	14.0	1385	16.3	1445	19.0	1496	21.7	1545	24.2	1660	30.2	
26000	3301		1260	9.06	1314	11.3	1365	13.6	1410	16.0	1456	18.5	1510	21.2	1565	24.1	1611	26.9	1708	32.9	
28000	3555		1350	11.0	1400	13.3	1445	15.6	1494	18.4	1534	20.9	1576	23.6	1631	26.7	1680	29.7			
30000	3809		1436	13.0	1485	15.6	1530	18.1	1576	20.9	1611	23.5	1656	26.5	1697	29.7	1742	32.5			
32000	4063		1525	15.4	1570	18.0	1616	20.9	1656	23.6	1697	26.6	1732	29.6							

SIZE <b>38</b> 26-15 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	2032		927	3.61	982	5.01	1038	6.64	1094	8.38	1200	12.0								
19000	2412		1079	5.36	1128	6.96	1174	8.70	1220	10.6	1314	14.7	1405	19.1	1500	24.1				
22000	2793		1230	7.58	1276	9.44	1320	11.5	1360	13.5	1440	18.0	1520	22.8	1600	27.9	1680	33.4		
24000	3047		1334	9.51	1380	11.6	1420	13.8	1456	15.9	1525	20.3	1602	25.5	1676	30.9	1748	36.4	1823	42.6
26000	3301		1440	11.8	1480	13.9	1516	16.1	1554	18.5	1620	23.3	1686	28.4	1757	34.2	1823	39.9	1892	46.1
28000	3555		1545	14.5	1585	16.8	1620	19.2	1651	21.4	1717	26.7	1777	32.0	1838	37.6	1903	43.8	1969	50.4
30000	3809		1646	17.2	1686	19.8	1717	22.1	1752	24.9	1812	30.2	1868	35.7	1929	42.0	1989	48.3		
32000	4063		1752	20.6	1788	23.3	1823	26.1	1852	28.7	1909	34.2	1964	40.1	2020	46.5				

SIZE <b>42</b> 20-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	2006		761	3.78	806	4.79	862	6.07	968	8.62										
23000	2307		847	4.94	887	6.11	932	7.44	1022	10.2										
27000	2709		962	6.90	1002	8.29	1038	9.75	1110	12.7	1190	16.1	1265	19.4	1354	23.4				
30000	3010		1048	8.71	1088	10.2	1124	11.9	1185	15.0	1256	18.6	1325	22.2	1394	26.0	1474	30.3		
35000	3511		1196	12.6	1234	14.4	1265	16.0	1325	19.8	1380	23.6	1440	27.7	1500	31.9	1556	36.0	1616	40.5
40000	4013		1350	17.7	1380	19.6	1414	21.7	1470	25.8	1520	30.1	1565	34.1	1616	38.7	1671	43.7	1722	48.4
44000	4414		1474	22.8	1500	24.7	1530	27.0	1585	31.3	1631	35.7	1676	40.5	1722	45.5	1766	50.3		
48000	4816		1600	28.9	1622	30.8	1651	33.4	1702	38.0	1748	42.7								

SIZE <b>42</b> 26-12 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		4"SP		5"SP		6"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
22000	2207		772	4.81	826	6.72	876	8.67	932	11.0	988	13.5								
26000	2608		896	7.13	938	9.24	984	11.5	1028	13.9	1074	16.5	1119	19.3	1220	25.7				
30000	3010		1022	10.3	1059	12.6	1094	14.9	1134	17.6	1174	20.5	1214	23.4	1294	29.8	1376	36.8		
34000	3411		1148	14.2	1185	17.0	1214	19.6	1245	22.2	1280	25.1	1314	28.2	1385	35.0	1456	42.3	1530	50.3
38000	3812		1276	19.1	1305	21.8	1336	25.1	1365	28.2	1394	31.2	1425	34.4	1485	41.3	1545	48.5	1611	56.9
42000	4214		1405	25.2	1430	28.0	1460	31.6	1485	35.0	1510	38.3	1536	41.5	1591	48.6	1646	56.5	1702	64.7
46000	4615		1530	32.0	1560	36.0	1585	39.5	1606	42.6	1631	46.7	1651	49.9	1706	58.1	1757	66.3		
50000	5016		1660	40.7	1686	44.7	1708	48.2	1732	52.3	1752	55.9								

Performance certified is for installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

# PERFORMANCE FOR VANEAXIAL FIXED PITCH FANS

SIZE <b>48</b> 20-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
26000	2006	735	4.76	786	6.28	836	7.83	942	11.3											
30000	2314	812	6.14	862	7.83	907	9.64	993	13.2	1088	17.4									
34000	2623	892	7.91	942	9.81	984	11.8	1064	16.0	1139	20.0	1225	24.8	1296	29.3					
38000	2932	973	10.0	1022	12.2	1064	14.3	1134	18.6	1205	23.3	1274	28.0	1350	33.2	1416	38.3			
42000	3240	1059	12.7	1099	14.8	1144	17.3	1214	22.0	1276	27.0	1340	32.2	1400	37.1	1470	42.9	1534	48.7	
46000	3549	1139	15.4	1180	17.9	1220	20.4	1294	25.9	1350	30.9	1410	36.6	1465	42.0	1525	47.9	1585	53.9	
50000	3857	1225	18.9	1265	21.7	1300	24.3	1370	29.9	1430	35.6	1485	41.6	1536	47.4	1591	53.8			
54000	4166	1314	23.1	1345	25.6	1385	28.9	1450	34.7	1510	40.8	1560	46.7							

SIZE <b>48</b> 26-12 40° Angle	CFM	OV	1/2"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP		5"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
40000	3086	876	11.4	927	14.5	973	18.2	1013	21.8	1070	26.3	1119	30.9							
45000	3472	973	15.3	1022	18.9	1064	22.5	1104	26.9	1139	31.0	1185	35.6	1234	41.0	1276	46.0			
50000	3857	1070	20.0	1114	24.0	1159	28.3	1194	32.3	1225	36.8	1260	41.7	1300	47.0	1345	52.4	1425	64.2	
55000	4243	1170	25.9	1210	30.2	1245	34.1	1285	39.0	1320	44.2	1345	48.5	1380	54.3	1410	59.7	1490	71.6	
58000	4475	1230	30.0	1265	34.0	1305	39.0	1340	43.6	1374	48.6	1400	53.5	1430	58.9	1460	64.7	1534	77.3	
62000	4783	1310	36.0	1345	41.0	1380	45.5	1414	50.4	1445	55.2	1476	60.7	1500	66.2	1530	72.2	1585	84.7	
65000	5015	1370	41.0	1405	46.0	1436	50.7	1470	56.1	1500	61.0	1530	66.5	1560	72.9	1585	79.1			
68000	5246	1430	46.5	1460	51.1	1494	56.7	1525	62.0	1556	67.4	1585	72.9							

SIZE <b>54</b> 26-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
50000	3030	772	13.6	806	16.1	841	18.7	892	23.9	953	30.1	1013	36.3							
54000	3273	821	16.1	856	19.1	887	21.6	942	27.3	988	33.2	1048	40.1	1099	46.3					
58000	3515	876	19.4	907	22.4	936	25.2	993	31.3	1033	37.0	1084	44.2	1139	51.5	1185	58.1	1265	70.7	
62000	3758	927	22.7	953	25.5	982	28.8	1042	35.5	1084	41.8	1124	48.6	1174	56.3	1220	63.2	1305	77.4	
66000	4000	982	26.8	1008	30.0	1033	33.2	1088	40.0	1134	46.8	1170	53.5	1210	61.1	1256	68.9			
70000	4243	1033	30.8	1059	34.4	1084	37.9	1134	44.9	1185	52.5	1220	59.3	1256	67.1	1296	75.3			
74000	4485	1088	35.8	1110	39.1	1134	42.9	1180	50.2	1230	58.0	1270	65.6	1305	73.7					
78000	4728	1144	41.4	1165	44.9	1185	48.4	1230	56.4	1276	64.3	1320	72.6							

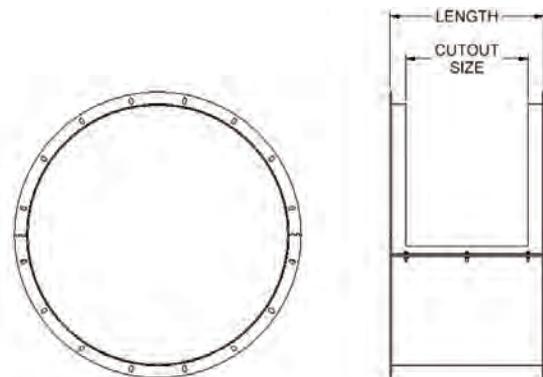
SIZE <b>60</b> 26-09 40° Angle	CFM	OV	1/2"SP		3/4"SP		1"SP		1 1/2"SP		2"SP		2 1/2"SP		3"SP		3 1/2"SP		3 3/4"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
55000	2710	675	12.4	710	15.5	741	18.3	812	25.0	872	31.7									
60000	2956	726	15.0	756	18.1	786	21.3	847	27.9	907	35.1	964	42.9							
65000	3203	776	17.9	806	21.4	836	25.1	887	31.6	947	39.4	1002	47.7	1053	56.0					
68000	3351	806	19.8	836	23.6	862	27.0	916	34.6	973	42.5	1024	50.5	1070	58.5	1119	67.3	1148	72.7	
71000	3498	841	22.5	867	26.0	892	29.6	942	37.2	993	44.8	1048	53.7	1094	62.1	1139	70.8	1165	75.9	
74000	3646	867	24.0	896	28.3	922	32.3	968	39.8	1018	48.0	1070	56.7	1119	66.0	1159	74.2	1185	79.7	
78000	3843	912	27.8	936	31.7	958	35.4	1008	44.3	1053	52.6	1099	60.9	1148	70.5	1190	79.6			
82000	4040	953	31.3	978	35.8	998	39.4	1044	48.3	1088	57.3	1130	65.7	1180	76.0					

Performance certified is for installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

## FAN ACCESS SECTION

Optional Fan Access Section can be mounted to the fan's inlet or outlet and allows access to the fan wheel, bearings, shaft and driven sheave. Panel behind removable door is partially cut and requires grinder to cut fixturing tabs before gaining access.

Size	Length	Cutout Size	Weight	Size	Length	Cutout Size	Weight
12-06-06	11 1/2	7 1/2	34	24-12-09	13	9	71
14-06-06	11 1/2	7 1/2	39	24-16-12	16	12	85
14-08-08	11 1/2	7 1/2	39	27-12-09	13	9	79
16-08-09	11 1/2	7 1/2	44	27-16-12	16	12	95
16-12-12	13	9	49	27-20-16	19 1/4	15 1/4	112
18-08-09	11 1/2	7 1/2	49	29-12-09	13	9	84
18-12-12	13	9	55	29-16-12	16	12	101
21-08-09	11 1/2	7 1/2	57	29-20-16	19 1/4	15 1/4	120
21-12-12	13	9	63	32-16-09	16	12	112
21-16-16	16	12	75	32-20-12	19 1/4	15 1/4	132



# MATERIAL SPECIFICATIONS

Dimensions in inches. Weights in pounds. WR<sup>2</sup> in lb.-ft.<sup>2</sup>. Tolerance: ±1/8"

Size	No. of blades	Wheel weight	Wheel WR <sup>2</sup>	Bushing type	Shaft diameter	Bearings	Approximate bare fan weight				Housing gauge
							9-D & 9-V	9-M	9-S	9-R†	
12-06-06	6	9.8	0.8	P1	1 <sup>3</sup> / <sub>16</sub>	A	120	135	130	185	10
14-06-06	6	10.3	1.0	P1	1 <sup>3</sup> / <sub>16</sub>	B	135	155	145	210	10
14-08-08	8	12.5	1.5	P1	1 <sup>7</sup> / <sub>16</sub>	C	170	190	180	245	10
16-08-09	9	13.5	2.0	P1	1 <sup>7</sup> / <sub>16</sub>	C	185	210	200	280	10
16-12-12	12	22.8	4.8	P1	1 <sup>7</sup> / <sub>16</sub>	C	230	255	240	320	10
18-08-09	9	14.0	2.3	P1	1 <sup>7</sup> / <sub>16</sub>	C	225	255	240	325	10
18-12-12	12	25.5	6.8	P1	1 <sup>11</sup> / <sub>16</sub>	C	265	295	280	365	10
21-08-09	9	15.0	3.0	P1	1 <sup>11</sup> / <sub>16</sub>	C	260	295	275	375	10
21-12-12	12	27.8	8.8	P1	1 <sup>11</sup> / <sub>16</sub>	C	300	340	320	415	10
21-16-16	16	57.0	24.5	Q1	1 <sup>11</sup> / <sub>16</sub>	C	325	365	345	440	10
24-12-09	9	28.3	10.0	P1	1 <sup>11</sup> / <sub>16</sub>	C	310	350	325	455	10
24-16-12	12	58.5	29.0	Q1	1 <sup>11</sup> / <sub>16</sub>	C	365	410	385	515	10
27-12-09	9	30.0	12.3	P1	1 <sup>11</sup> / <sub>16</sub>	C	330	380	345	495	10
27-16-12	12	65.0	37.8	Q1	1 <sup>15</sup> / <sub>16</sub>	C	410	460	425	570	10
27-20-16	16	91.0	68.0	Q1	1 <sup>15</sup> / <sub>16</sub>	C	435	490	455	600	10
29-12-09	9	31.3	13.5	P1	1 <sup>15</sup> / <sub>16</sub> *	C	365	425	385	545	10
29-16-12	12	66.5	42.5	Q1	2 <sup>3</sup> / <sub>16</sub>	C	465	525	485	640	10
29-20-16	16	94.5	75.0	Q1	2 <sup>3</sup> / <sub>16</sub>	C	495	555	510	670	10
32-16-09	9	68.5	47.5	Q1	2 <sup>3</sup> / <sub>16</sub>	C	485	550	500	700	10
32-20-12	12	106.5	90.0	Q1	2 <sup>3</sup> / <sub>16</sub>	C	575	640	590	790	10
36-16-09	9	74.5	61.0	Q1	2 <sup>3</sup> / <sub>16</sub>	C	530	600	545	790	10
36-20-12	12	116.0	115	Q1	2 <sup>3</sup> / <sub>16</sub>	C	655	735	680	920	10
36-26-15	15	232.5	268	R1	2 <sup>3</sup> / <sub>16</sub>	C	780	860	800	1040	10
38-16-09	9	70.0	62.0	Q1	2 <sup>3</sup> / <sub>16</sub>	C	630	740	650	920	7
38-20-12	12	120.0	123	Q1	2 <sup>7</sup> / <sub>16</sub>	C	810	935	835	1105	7
38-26-15	15	205.5	250	R1	2 <sup>7</sup> / <sub>16</sub>	C	900	1025	920	1190	7
42-20-09	9	131.0	141	Q1	2 <sup>11</sup> / <sub>16</sub>	C	900	1035	920	1235	7
42-26-12	12	245.5	324	R1	2 <sup>11</sup> / <sub>16</sub>	C	1125	1270	1150	1465	7
48-20-09	9	122.0	147	Q1	2 <sup>11</sup> / <sub>16</sub>	C	965	1135	990	1370	7
48-26-12	12	258.5	394	R1	2 <sup>11</sup> / <sub>16</sub>	C	1220	1395	1245	1625	7
54-26-09	9	245.5	399	R1	2 <sup>11</sup> / <sub>16</sub>	C	1310	1520	1360	1810	7
60-26-09	9	260.0	460	R1	2 <sup>11</sup> / <sub>16</sub>	C	1455	1715	1505	2035	7

\* Shaft diameter at bearings is 1<sup>15</sup>/<sub>16</sub>" with a 1<sup>11</sup>/<sub>16</sub>" turndown at the wheel for the P1 bushing.

Bearing types: A-Standard D-Lok B-Medium D-LOK C-Link-Belt 22400 Series. All Sizes: Flange bearings

Bearings: For fan sizes 12-06-06 through 21-08-09 both bearings are fixed. For fans sizes 21-12-12 through 60-26-09, the non-drive bearing is fixed and the drive bearing is expansion.

**nyb** reserves the right to substitute bearings of equal quality. Wheel weight includes bushing.

†9R weights are for fan and curb cap. Does not include weights for stack hood and weather cover.

# MATERIAL SPECIFICATIONS

Dimensions in inches. Tolerance:  $\pm 1/8"$

## MOTOR SIZE CAPABILITY

Size	Maximum C-[N-W]	Maximum frame size
12-06-06	16 <sup>3/8</sup>	213T
14-06-06	16 <sup>3/4</sup>	215T
14-08-08	19	256T
16-08-09	18 <sup>3/8</sup>	256T
16-12-12	22 <sup>1/8</sup>	324T
18-08-09	22 <sup>5/8</sup>	324T
18-12-12	24 <sup>1/8</sup>	364T
21-08-09	22 <sup>5/8</sup>	326T
21-12-12	24 <sup>1/8</sup>	364T
21-16-16	24 <sup>1/8</sup>	364T
24-12-09	22 <sup>5/8</sup>	324T
24-16-12	24 <sup>1/8</sup>	364T
27-12-09	22 <sup>5/8</sup>	326T
27-16-12	24 <sup>1/8</sup>	365T
27-20-16	25	365T
29-12-09	24 <sup>5/8</sup>	364T
29-16-12	27 <sup>5/8</sup>	405T
29-20-16	27 <sup>5/8</sup>	405T
32-16-09	25 <sup>1/4</sup>	364T
32-20-12	27 <sup>5/8</sup>	405T
36-16-09	25 <sup>1/4</sup>	365T
36-20-12	31 <sup>5/8</sup>	405T
36-26-15	32 <sup>7/8</sup>	405T
38-16-09	27 <sup>5/8</sup>	405T
38-20-12	36 <sup>1/8</sup>	445T
38-26-15	36 <sup>1/8</sup>	445T
42-20-09	34 <sup>7/8</sup>	405T
42-26-12	38 <sup>7/8</sup>	445T
48-20-09	34 <sup>3/8</sup>	445T
48-26-12	38 <sup>3/8</sup>	445T
54-26-09	41 <sup>7/8</sup>	445T
60-26-09	44 <sup>1/2</sup>	445T

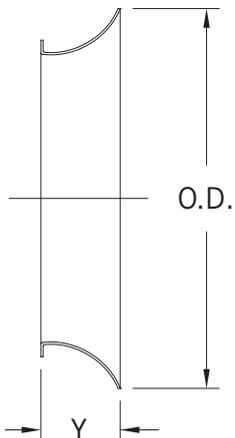
Maximum frame sizes are listed per size.

## FAN FLANGE DIMENSIONS

Size	Flange gauge	Fan ID	Bolting circle	Flange OD	Flange Slots*	
					No.	Size
12-06-06	7	12 <sup>3/16</sup>	13 <sup>15/16</sup>	15 <sup>1/2</sup>	8	7/16 x 13/16
14-06-06	7	14 <sup>3/16</sup>	15 <sup>15/16</sup>	17 <sup>1/2</sup>	8	7/16 x 13/16
14-08-08	7	14 <sup>3/16</sup>	15 <sup>15/16</sup>	17 <sup>1/2</sup>	8	7/16 x 13/16
16-08-09	7	16 <sup>1/4</sup>	18	19 <sup>5/8</sup>	8	7/16 x 13/16
16-12-12	7	16 <sup>1/4</sup>	18	19 <sup>5/8</sup>	8	7/16 x 13/16
18-08-09	7	18 <sup>1/4</sup>	20	21 <sup>5/8</sup>	8	7/16 x 13/16
18-12-12	7	18 <sup>1/4</sup>	20	21 <sup>5/8</sup>	8	7/16 x 13/16
21-08-09	7	21 <sup>3/16</sup>	23	24 <sup>5/8</sup>	8	7/16 x 13/16
21-12-12	7	21 <sup>3/16</sup>	23	24 <sup>5/8</sup>	8	7/16 x 13/16
21-16-16	7	21 <sup>3/16</sup>	23	24 <sup>5/8</sup>	8	7/16 x 13/16
24-12-09	7	24 <sup>3/8</sup>	26 <sup>1/8</sup>	27 <sup>3/4</sup>	8	7/16 x 13/16
24-16-12	7	24 <sup>3/8</sup>	26 <sup>1/8</sup>	27 <sup>3/4</sup>	8	7/16 x 13/16
27-12-09	7	27 <sup>3/8</sup>	29 <sup>1/8</sup>	30 <sup>3/4</sup>	8	7/16 x 13/16
27-16-12	7	27 <sup>3/8</sup>	29 <sup>1/8</sup>	30 <sup>3/4</sup>	8	7/16 x 13/16
27-20-16	7	27 <sup>3/8</sup>	29 <sup>1/8</sup>	30 <sup>3/4</sup>	8	7/16 x 13/16
29-12-09	7	29 <sup>3/16</sup>	31	32 <sup>5/8</sup>	16	7/16 x 13/16
29-16-12	7	29 <sup>3/16</sup>	31	32 <sup>5/8</sup>	16	7/16 x 13/16
29-20-16	7	29 <sup>3/16</sup>	31	32 <sup>5/8</sup>	16	7/16 x 13/16
32-16-09	7	32 <sup>1/2</sup>	34 <sup>1/4</sup>	35 <sup>7/8</sup>	16	7/16 x 13/16
32-20-12	7	32 <sup>1/2</sup>	34 <sup>1/4</sup>	35 <sup>7/8</sup>	16	7/16 x 13/16
36-16-09	7	36 <sup>1/2</sup>	38 <sup>5/16</sup>	41	16	7/16 x 13/16
36-20-12	7	36 <sup>1/2</sup>	38 <sup>5/16</sup>	41	16	7/16 x 13/16
36-26-15	7	36 <sup>1/2</sup>	38 <sup>5/16</sup>	41	16	7/16 x 13/16
38-16-09	1/4"	38	40 <sup>1/4</sup>	42 <sup>1/2</sup>	16	9/16 x 1
38-20-12	1/4"	38	40 <sup>1/4</sup>	42 <sup>1/2</sup>	16	9/16 x 1
38-26-15	1/4"	38	40 <sup>1/4</sup>	42 <sup>1/2</sup>	16	9/16 x 1
42-20-09	1/4"	42 <sup>3/4</sup>	45	47 <sup>1/4</sup>	16	9/16 x 1
42-26-12	1/4"	42 <sup>3/4</sup>	45	47 <sup>1/4</sup>	16	9/16 x 1
48-20-09	1/4"	48 <sup>3/4</sup>	51	53 <sup>3/8</sup>	16	9/16 x 1
48-26-12	1/4"	48 <sup>3/4</sup>	51	53 <sup>3/8</sup>	16	9/16 x 1
54-26-09	1/4"	55	57 <sup>7/16</sup>	59 <sup>5/8</sup>	16	9/16 x 1
60-26-09	1/4"	61	63 <sup>7/16</sup>	65 <sup>5/8</sup>	16	9/16 x 1

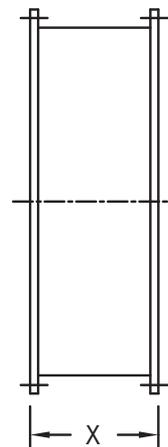
\*Slots spaced equally, straddling centerline.

### INLET BELL DIMENSIONS



Size	Y	O.D.
12	2 <sup>1/8</sup>	16 <sup>3/16</sup>
14	2 <sup>1/2</sup>	18 <sup>15/16</sup>
16	2 <sup>15/16</sup>	21 <sup>3/4</sup>
18	3 <sup>3/16</sup>	24 <sup>1/4</sup>
21	3 <sup>11/16</sup>	28 <sup>1/4</sup>
24	4 <sup>1/16</sup>	32 <sup>1/8</sup>
27	4 <sup>11/16</sup>	36 <sup>3/8</sup>
29	5	38 <sup>7/8</sup>
32	5 <sup>3/4</sup>	43 <sup>1/2</sup>
36	6 <sup>1/4</sup>	48 <sup>1/2</sup>
38	6 <sup>5/8</sup>	50 <sup>7/8</sup>
42	7 <sup>1/4</sup>	56 <sup>3/4</sup>
48	8 <sup>1/4</sup>	64 <sup>3/4</sup>
54	9 <sup>1/8</sup>	73
60	10 <sup>1/8</sup>	81

### INLET VANE DAMPER DIMENSIONS



Size	X	
	Type A	Type B
12	9	12
14	9	12
16	9	12
18	10	12
21	10	12
24	10	12
27	10	12
29	10	12
32	10	12
36	10	12
38	10	12
42	11	12
48	11	12
54	11	12
60	12	12

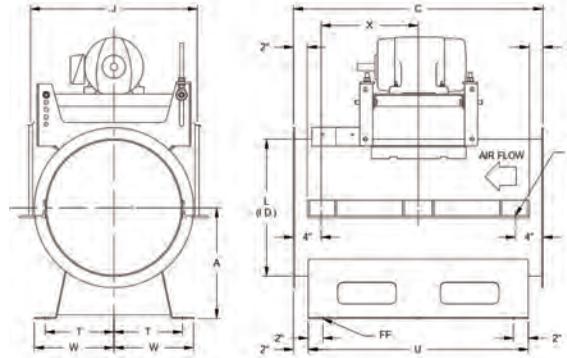
# DIMENSIONS

Dimensions should not be used for construction unless certified. See page 3 for available mounting positions.  
Note motor size capability on page 14. Tolerance:  $\pm 1/8''$ .

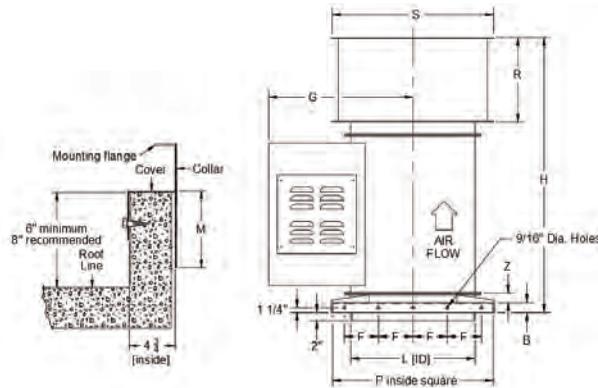
Size	C	G max*	H	U
12-06-06	26 $\frac{5}{8}$	27 $\frac{1}{4}$	48 $\frac{3}{8}$	22 $\frac{5}{8}$
14-06-06	27	28 $\frac{1}{4}$	49 $\frac{3}{4}$	23
14-08-08	29 $\frac{1}{4}$	28 $\frac{1}{4}$	52	25 $\frac{1}{4}$
16-08-09	29 $\frac{5}{8}$	29 $\frac{1}{4}$	53 $\frac{5}{8}$	25 $\frac{5}{8}$
16-12-12	33 $\frac{3}{8}$	33 $\frac{1}{4}$	57 $\frac{1}{8}$	29 $\frac{3}{8}$
18-08-09	33 $\frac{7}{8}$	34 $\frac{1}{4}$	59 $\frac{5}{8}$	29 $\frac{7}{8}$
18-12-12	35 $\frac{3}{8}$	38 $\frac{1}{4}$	61 $\frac{1}{8}$	31 $\frac{3}{8}$
21-08-09	33 $\frac{7}{8}$	35 $\frac{3}{4}$	62 $\frac{5}{8}$	29 $\frac{7}{8}$
21-12-12	36 $\frac{3}{8}$	39 $\frac{3}{4}$	65 $\frac{1}{8}$	32 $\frac{3}{8}$
21-16-16	36 $\frac{3}{8}$	39 $\frac{3}{4}$	65 $\frac{1}{8}$	32 $\frac{3}{8}$
24-12-09	34 $\frac{7}{8}$	37 $\frac{1}{2}$	70 $\frac{5}{8}$	30 $\frac{7}{8}$
24-16-12	36 $\frac{3}{8}$	41 $\frac{1}{2}$	72 $\frac{1}{8}$	32 $\frac{3}{8}$
27-12-09	34 $\frac{7}{8}$	39	72 $\frac{5}{8}$	30 $\frac{7}{8}$
27-16-12	37 $\frac{3}{8}$	43	75 $\frac{1}{8}$	33 $\frac{3}{8}$
27-20-16	38 $\frac{1}{4}$	43	76	34 $\frac{1}{4}$
29-12-09	36 $\frac{7}{8}$	43	75 $\frac{5}{8}$	32 $\frac{7}{8}$
29-16-12	40 $\frac{7}{8}$	43 $\frac{3}{4}$	79 $\frac{5}{8}$	36 $\frac{7}{8}$
29-20-16	40 $\frac{7}{8}$	46 $\frac{1}{2}$	79 $\frac{5}{8}$	36 $\frac{7}{8}$
32-16-09	38 $\frac{1}{2}$	45 $\frac{1}{2}$	78 $\frac{3}{4}$	34 $\frac{1}{2}$
32-20-12	40 $\frac{7}{8}$	48 $\frac{1}{4}$	81 $\frac{1}{8}$	36 $\frac{7}{8}$
36-16-09	38 $\frac{1}{2}$	47 $\frac{1}{2}$	83 $\frac{3}{4}$	34 $\frac{1}{2}$
36-20-12	44 $\frac{7}{8}$	50 $\frac{1}{4}$	90 $\frac{1}{8}$	40 $\frac{7}{8}$
36-26-15	46 $\frac{1}{8}$	50 $\frac{1}{4}$	91 $\frac{3}{8}$	42 $\frac{1}{8}$
38-16-09	40 $\frac{7}{8}$	51	87 $\frac{1}{8}$	36 $\frac{7}{8}$
38-20-12	49 $\frac{3}{8}$	54	95 $\frac{5}{8}$	45 $\frac{3}{8}$
38-26-15	49 $\frac{3}{8}$	54	95 $\frac{5}{8}$	45 $\frac{3}{8}$
42-20-09	49 $\frac{1}{8}$	53 $\frac{1}{2}$	97 $\frac{3}{8}$	45 $\frac{1}{8}$
42-26-12	54 $\frac{1}{8}$	56 $\frac{1}{2}$	102 $\frac{3}{8}$	50 $\frac{1}{8}$
48-20-09	48 $\frac{5}{8}$	59 $\frac{1}{2}$	102 $\frac{7}{8}$	44 $\frac{5}{8}$
48-26-12	53 $\frac{5}{8}$	59 $\frac{1}{2}$	107 $\frac{7}{8}$	49 $\frac{5}{8}$
54-26-09	57 $\frac{1}{8}$	62 $\frac{1}{2}$	114 $\frac{3}{8}$	53 $\frac{1}{8}$
60-26-09	59 $\frac{3}{4}$	65 $\frac{1}{2}$	121	56 $\frac{1}{8}$

\*G max: Weather cover and belt guard will not exceed maximum dimension.

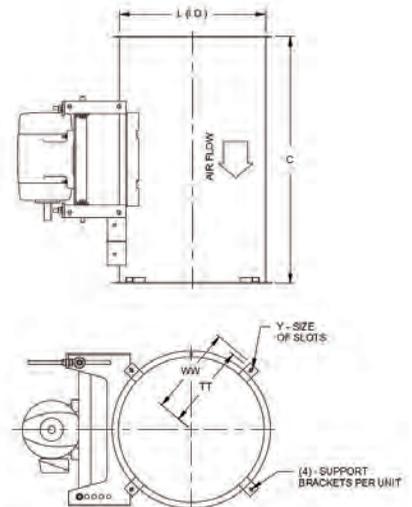
## ARRANGEMENTS 9-M, 9-S, AND 9-D



### ARRANGEMENT 9-R [roof-mounted] with optional exhaust-type stack hood.



### ARRANGEMENT 9-V



## DIMENSIONS [INCHES]

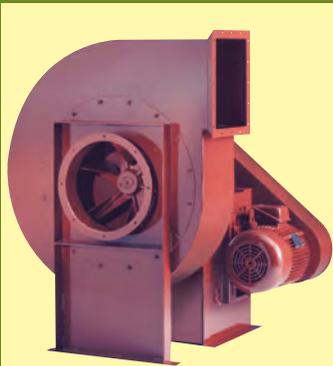
Size	A	B	E	F	FF*	J	L	M	P	R	S	T	TT	W	WW	X	Y	Z
12	11	2 $\frac{1}{2}$	2	4 $\frac{1}{2}$	$\frac{9}{16}$	16 $\frac{3}{16}$	12 $\frac{3}{16}$	4 $\frac{1}{2}$	22	14	19 $\frac{1}{8}$	6 $\frac{1}{4}$	9 $\frac{3}{8}$	7 $\frac{3}{4}$	10 $\frac{5}{8}$	—	9/16x1	2
14	12 $\frac{1}{2}$	2 $\frac{1}{2}$	2	4 $\frac{1}{2}$	$\frac{9}{16}$	18 $\frac{3}{16}$	14 $\frac{3}{16}$	4 $\frac{1}{2}$	24	15	7 $\frac{1}{4}$	14 $\frac{1}{2}$	10 $\frac{3}{8}$	8 $\frac{3}{4}$	11 $\frac{5}{8}$	—	9/16x1	2
16	13 $\frac{1}{2}$	2 $\frac{1}{2}$	2	5	$\frac{9}{16}$	20 $\frac{1}{4}$	16 $\frac{1}{4}$	4 $\frac{1}{2}$	26 $\frac{1}{8}$	16	8 $\frac{5}{16}$	16 $\frac{5}{8}$	11 $\frac{1}{2}$	9 $\frac{13}{16}$	12 $\frac{3}{4}$	—	9/16x1	2
18	15	2 $\frac{1}{2}$	2	5 $\frac{1}{2}$	$\frac{9}{16}$	22	18 $\frac{1}{4}$	4 $\frac{1}{2}$	28	18	9 $\frac{5}{16}$	18 $\frac{5}{8}$	12 $\frac{1}{2}$	10 $\frac{13}{16}$	13 $\frac{3}{4}$	—	9/16x1	2
21	16 $\frac{1}{2}$	2 $\frac{1}{2}$	2	6	$\frac{9}{16}$	24 $\frac{15}{16}$	21 $\frac{3}{16}$	4 $\frac{1}{2}$	31	21	10 $\frac{13}{16}$	21 $\frac{5}{8}$	13 $\frac{7}{8}$	12 $\frac{5}{16}$	15 $\frac{1}{8}$	—	9/16x1	2
24	18 $\frac{1}{2}$	2 $\frac{1}{2}$	2	7	$\frac{9}{16}$	28 $\frac{1}{8}$	24 $\frac{3}{8}$	4 $\frac{1}{2}$	34 $\frac{1}{8}$	23	12 $\frac{3}{8}$	24 $\frac{3}{4}$	15 $\frac{1}{2}$	13 $\frac{7}{8}$	16 $\frac{3}{4}$	—	9/16x1	2
27	20 $\frac{1}{2}$	2 $\frac{1}{2}$	2	8	$\frac{9}{16}$	31 $\frac{1}{8}$	27 $\frac{3}{8}$	4 $\frac{1}{2}$	37 $\frac{1}{8}$	25	13 $\frac{7}{8}$	27 $\frac{3}{4}$	17	15 $\frac{3}{8}$	18 $\frac{1}{4}$	—	9/16x1	2
29	22	2 $\frac{1}{2}$	2	8 $\frac{1}{2}$	$\frac{9}{16}$	32 $\frac{19}{16}$	29 $\frac{3}{16}$	4 $\frac{1}{2}$	39 $\frac{1}{2}$	26	14 $\frac{13}{16}$	29 $\frac{5}{8}$	18 $\frac{3}{4}$	16 $\frac{9}{16}$	20 $\frac{1}{4}$	—	3/4x1 $\frac{1}{2}$	2
32	23 $\frac{1}{2}$	3	2	9	$\frac{9}{16}$	36 $\frac{1}{4}$	32 $\frac{1}{2}$	5	41 $\frac{5}{8}$	26	16 $\frac{7}{16}$	32 $\frac{7}{8}$	20 $\frac{3}{8}$	17 $\frac{15}{16}$	21 $\frac{7}{8}$	—	3/4x1 $\frac{1}{2}$	3
36	26	3	2	10 $\frac{1}{2}$	$\frac{9}{16}$	40 $\frac{1}{4}$	36 $\frac{1}{2}$	5	46 $\frac{1}{4}$	31	19	38	22 $\frac{3}{8}$	20 $\frac{1}{2}$	23 $\frac{7}{8}$	—	3/4x1 $\frac{1}{2}$	3
38	27 $\frac{1}{2}$	3	2	11 $\frac{1}{4}$	$\frac{9}{16}$	41 $\frac{7}{8}$	38	5	49 $\frac{1}{2}$	32	19 $\frac{3}{4}$	39 $\frac{1}{2}$	23 $\frac{1}{8}$	21 $\frac{1}{4}$	24 $\frac{5}{8}$	—	3/4x1 $\frac{1}{2}$	3
42	30	3	2	12	$\frac{3}{4}$	46 $\frac{5}{8}$	42 $\frac{3}{4}$	5	52 $\frac{5}{8}$	34	22 $\frac{1}{8}$	44 $\frac{1}{4}$	25 $\frac{1}{2}$	23 $\frac{5}{8}$	27	—	3/4x1 $\frac{1}{2}$	3
48	33 $\frac{1}{2}$	3	2	13	$\frac{3}{4}$	52 $\frac{5}{8}$	48 $\frac{3}{4}$	5	58 $\frac{5}{8}$	40	25 $\frac{3}{16}$	50 $\frac{3}{8}$	28 $\frac{1}{2}$	26 $\frac{11}{16}$	30	—	3/4x1 $\frac{1}{2}$	3
54	37 $\frac{1}{2}$	3	2	14	$\frac{3}{4}$	59 $\frac{7}{8}$	55	5	64 $\frac{7}{8}$	43	28 $\frac{5}{16}$	56 $\frac{5}{8}$	32 $\frac{1}{4}$	29 $\frac{13}{16}$	33 $\frac{3}{4}$	24 $\frac{9}{16}$	1x2	3
60	41 $\frac{1}{2}$	3	2	14 $\frac{1}{2}$	$\frac{3}{4}$	65 $\frac{7}{8}$	61	5	70 $\frac{7}{8}$	47	31 $\frac{5}{16}$	62 $\frac{5}{8}$	35 $\frac{1}{4}$	32 $\frac{13}{16}$	36 $\frac{3}{4}$	25 $\frac{7}{8}$	1x2	3

\*FF: Mounting hole size; Sizes 12-48 use two holes per side; Sizes 54 and 60 use three holes per side.

The New York Blower Company has a policy of continual product improvement and reserves the right to change designs and specifications without notice.

# COMPLETE SELECTION OF AIR-MOVING EQUIPMENT

The New York Blower Company offers thousands of different types, models, and sizes of air-moving equipment. Contact your nyb representative for assistance in identifying the best fan for your application.



## DUST/MATERIAL HANDLING

Wide range of duty available with unique fan lines capable of handling light dust to heavy material. Typical applications include dust-collection and high-pressure process along with material-conveying.



## AIR-HANDLING [CENTRIFUGAL]

Designed for clean to moderately dirty gas streams. Commercial and industrial HVAC, process cooling, light material-conveying, heat removal, and dryer exhaust are just a few of the numerous sample applications.



## AIR-HANDLING [AXIAL]

For the ideal handling of clean to moderately dirty airstreams. Commercial and industrial HVAC, drying and cooling systems, fume extraction, and process-heat removal are typical applications.



## FIBERGLASS REINFORCED PLASTIC [FRP]

Choice of performance and duty for corrosive gas streams. Applications include chemical process, wastewater treatment, laboratory hood exhaust, and tank aeration.

## CUSTOM PRODUCTS

Designed for unique applications. Variety of configurations, temperatures, flows, and pressures. Wide range of modifications and accessories are available to meet the most demanding specifications.



# Leading the industry forward since 1889



## ROOF VENTILATORS

Including both hooded and upblast ventilators, propeller fans, and centrifugal roof exhausters. These units are ideal for industrial, commercial, and institutional applications.



## HEATING PRODUCTS

Industrial-duty steam unit heaters with steam heating coils are available for facility heating and process-heat transfer.



## PROCESS/FAN COMPONENTS

Plug fans, plenum fans, wheels, inlet cones, and housings for a wide variety of OEM applications. Process/fan components are used in air-handling units, ovens, dryers, freezer tunnels, and filtration systems.