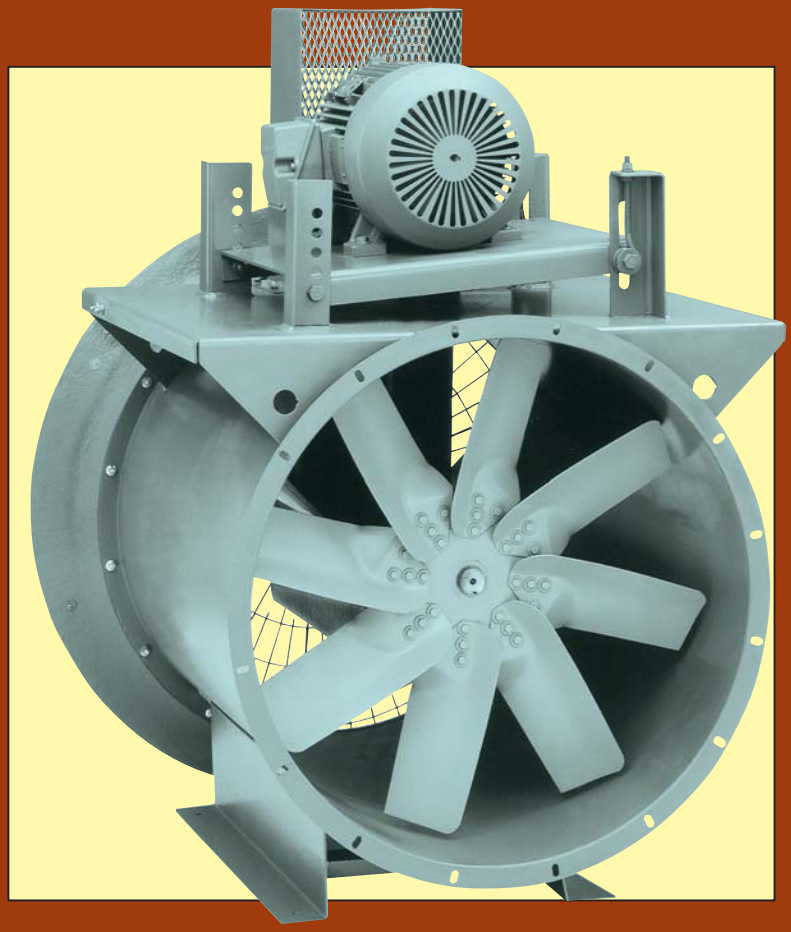
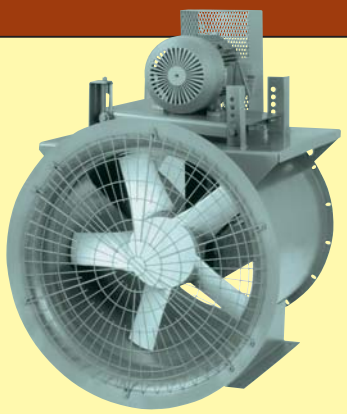
BULLETIN 651
JUNE, 2010

DUCT FANS

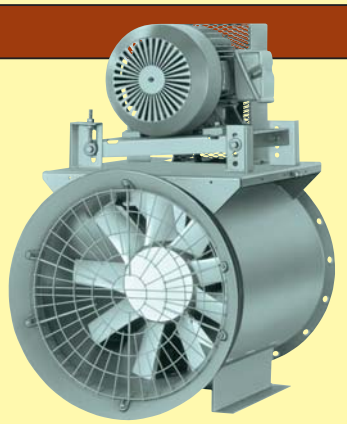


- Capacities to 60,000 CFM
- Static pressures to 2"WG
- Temperatures to 350°F.



TUBEAXIAL FANS

- Capacities to 86,000 CFM
- Static pressures to 3"WG



VANEAXIAL FANS

- Capacities to 100,000 CFM
- Static pressures to 5"WG

TUBULAR ACOUSTAFOIL®

- Capacities to 140,000 CFM
- Static pressures to 14"WG

THE NEW YORK BLOWER COMPANY
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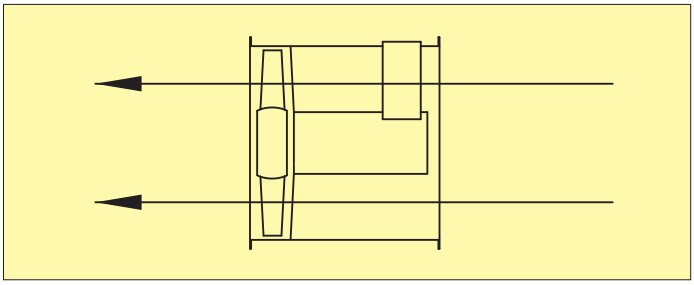
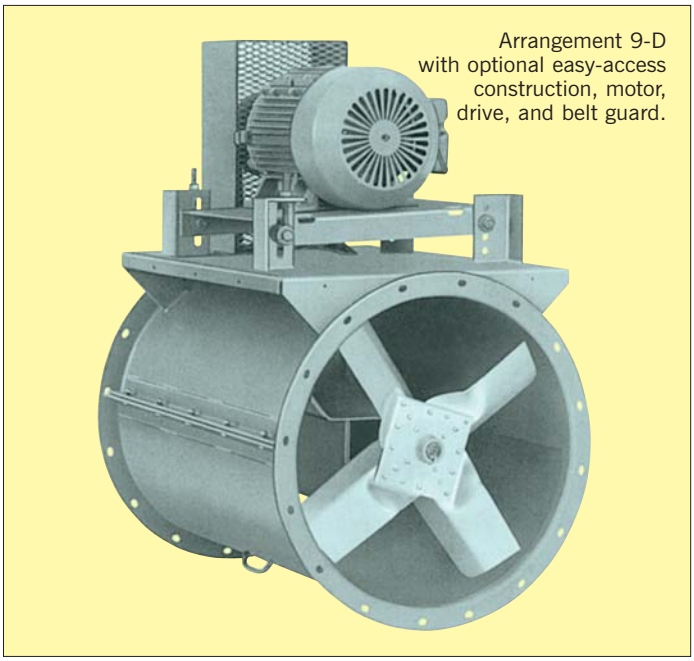


DUCT FANS

Duct Fans are designed and constructed for low pressure ventilating and industrial exhaust applications requiring the compactness of an axial fan.

DESIGN FEATURES

- **Capacities**–to 60,000 CFM.
- **Pressures**–to 2″WG.
- **Thirteen sizes**–12″ through 60″ wheel diameters.
- **Choice of arrangements**–direct-drive or belt-drive in five mounting positions [see page 6].
- **Precision rolled tube**–for minimum tip clearance...maximum efficiency.



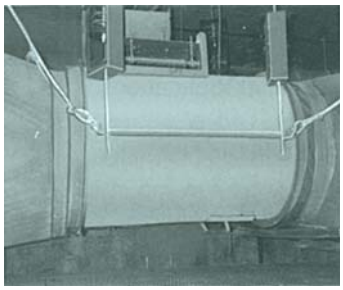
Arrangement 9-D with optional easy-access construction, motor, drive, and belt guard.

amca CERTIFIED RATINGS AIR PERFORMANCE AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC. ®

The New York Blower Company certifies that the Arrangement 9 Duct Fans shown on pages 9 through 13 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.

CONSTRUCTION FEATURES

- **Steel wheel**–curved blades assure efficient operation.
- **Heavy-gauge welded components**–provide structural strength, durability, and minimal leakage.
- **Bearings**–selected to provide long service ...average minimum L-10 Life in excess of 50,000 hours.
- **Industrial finish**–medium-green enamel.
- **Flanged connections**–Sizes 127 to 367 integral to housing, Sizes 427 to 607 welded bar...all flanges standard with holes.
- **Lifting eyes**–located for balanced handling.
- **Lubrication**–extended lubrication lines with external fittings provided on all belt-drive Duct 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.
- **Shaft and bearing cover**–isolates bearings and drive from airstream, for less maintenance and longer life.
- **Taper lock hub**–for ease in wheel removal...Sizes 277 and larger.



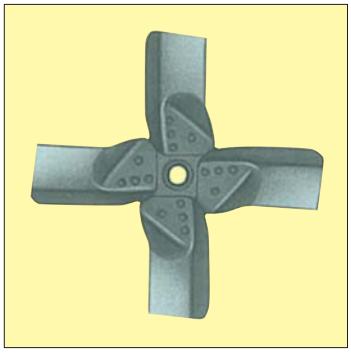
Application Advantages

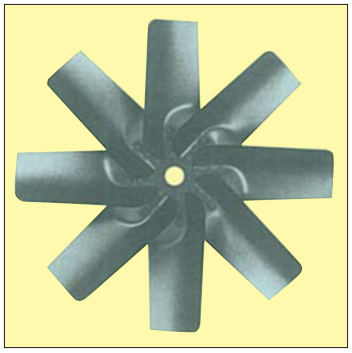
New York Blower's Duct Fans are designed for low-pressure ventilation and industrial-process applications. Uses include heat, smoke, and fume removal; process drying with ambient or preheated air; comfort and process cooling and general ventilation. All applications can be handled in either supply or exhaust configurations. Numerous modifications and accessories make the Duct Fan suitable for a wide range of systems.

In applications where equipment space is at a premium, the compact flow-through design of the Duct Fan can reduce system space requirements by more than 50% over conventional centrifugal fans. The straight, in-line design eliminates the need for costly, space-consuming transitions, elbows, and inlet boxes.

Additional application advantages and installed cost savings are provided by the Duct Fan's five predesigned mounting arrangements [see page 6]. Duct Fans also utilize the same housing and flange dimensions as the Tubeaxial and Vaneaxial Fan lines allowing interchangeability due to system redesign or process modification.

Wheels Designed to Maximize Performance



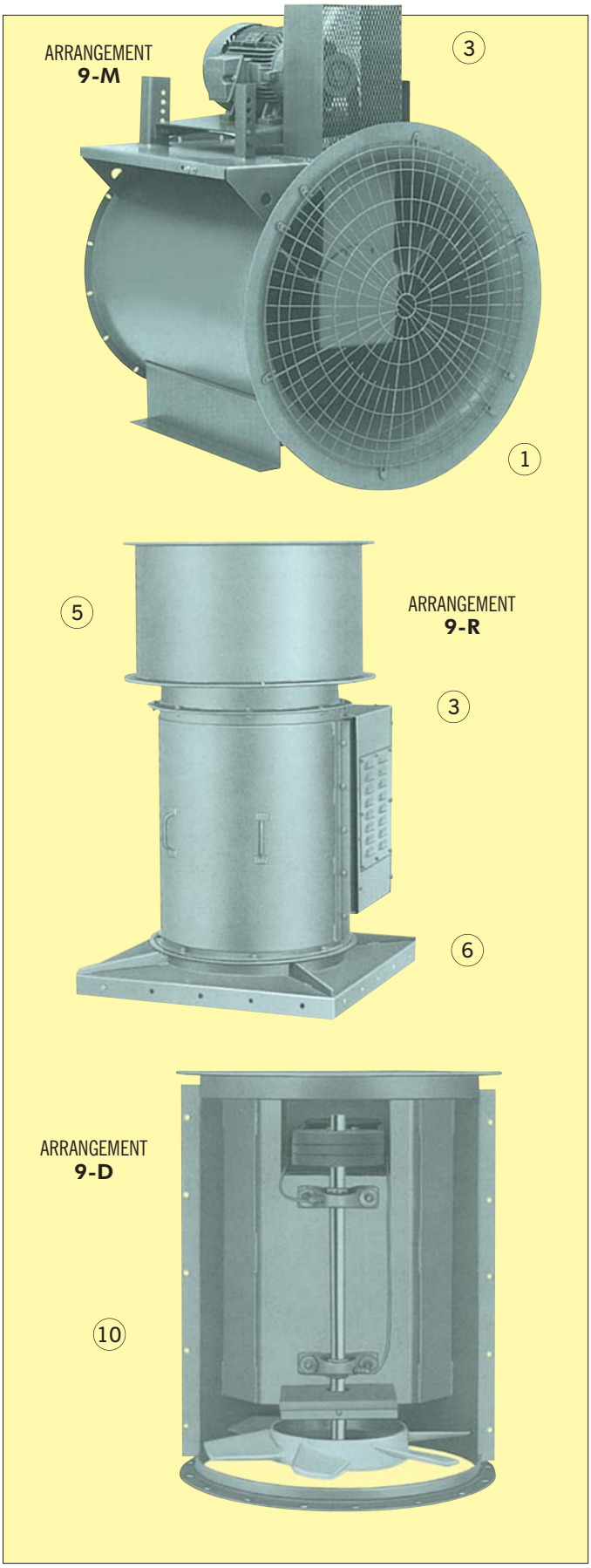


New York Blower's Duct Fans offer steel wheels in all sizes. Each wheel is designed to maximize fan performance by optimizing the shape, number and pitch of blades with hub diameters.

Two distinct wheel concepts are used to meet specific volume and pressure requirements across the entire line of 13 sizes. Each wheel is designed to provide smooth airflow performance, minimizing the characteristic stall region typically exhibited in axial designs.

New York Blower's Duct Fans provide relatively large volumes of air at low static pressures. For higher pressure requirements, see the Tubeaxial or Vaneaxial Fan bulletins.

Accessories and Modifications



1. **INLET BELL WITH GUARD**–see page 5
   Inlet bell minimizes losses associated with non-ducted inlet applications. Includes wire guard.
2. **VIBRATION ISOLATION**–see page 6
   Rubber-in-shear or spring-type isolation mounts reduce the transmission of vibration to the mounting structure.
3. **SAFETY EQUIPMENT/WEATHER COVER**
   Belt guards, inlet and outlet guards, and 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 dampers for outdoor exhaust applications.
6. **CURB CAP**
   Gussetted cover with nailer holes on perimeter includes flange for fan mounting.
7. **DRAINS**–not shown
   For horizontal mounted fans...drain located at the lowest point of the housing tube.
8. **ACCESS DOOR**–not shown
   Gasketed, latch-type door swings open on hinges after turning cam levers...provides access to wheel...available in Sizes 247 and larger...inspection port available on smaller sizes.
9. **SHAFT SEAL**–not shown
   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 are also available.
10. **EASY-ACCESS CONSTRUCTION**
    Provides access to internal parts for cleaning and maintenance...Sizes 127-217 single-hinged door. Sizes 247 and larger double-hinged doors...available on Arrangements 9-V, 9-S, 9-D, 9-R, and all Arrangement 4 fans.
11. **SPARK-RESISTANT CONSTRUCTION**–not shown
    AMCA B [wheel] SRC available on Sizes 167-607. AMCA C [buffer] SRC available on Sizes 127-607. SRC construction not available with inlet damper, inlet guard, or easy-access construction.

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

HOUSINGS AND STRUCTURALS

Thin film coatings [5 to 10 mil thickness]–special 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.

WHEELS, HOUSINGS AND STRUCTURALS

Alternate material construction–Duct Fans can be constructed of aluminum or stainless steel.

ACCESSORY PERFORMANCE

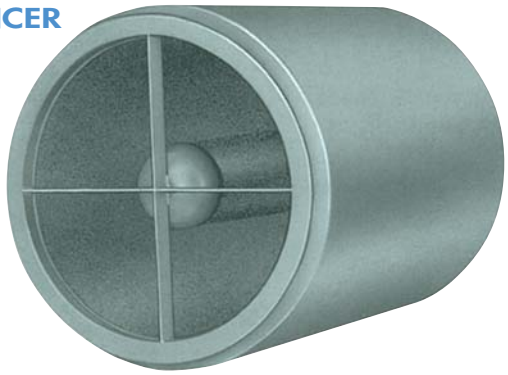
INLET BELL

Catalog ratings shown in this bulletin are for Duct 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 127 through 487 constructed of fiberglass reinforced plastic; Sizes 547 and 607 constructed of steel.

CHART I
VELOCITY PRESSURE

Velocity [FPM]	VP
1000	.063
1400	.122
1800	.202
2200	.302
2600	.422
3000	.560
3400	.721
3800	.900
4200	1.100
4800	1.436
5000	1.560

SILENCER



Available for all sizes of Duct 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.

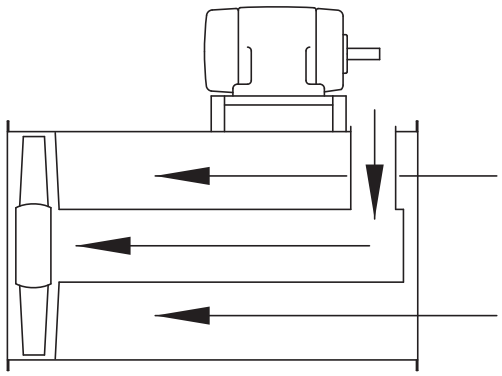
SAFETY EQUIPMENT

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.

HEAT FAN ENGINEERING

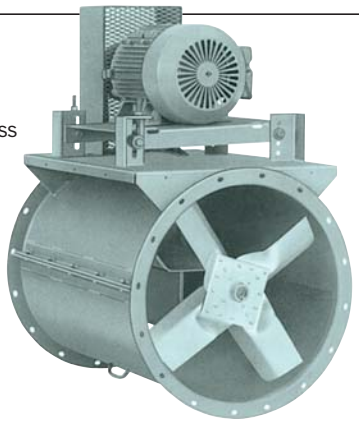
New York Blower Duct Fans, with heat-fan construction, are ideal for industrial oven and dryer exhaust systems where pressure requirements are minimal and compact, light-weight designs are advantageous. With heat-fan construction, Duct Fans are capable of handling airstream temperatures to 350°F in ambient environments up to 120°F.

For higher temperature applications, the Duct Fan, with heat-fan construction, induces a flow of cooler, ambient air through the belt well and inner tube, cooling the fan's internal components. Depending on temperature requirements, modifications include high-temperature fan wheel, special drive components, and modifications to provide internal ambient air cooling.

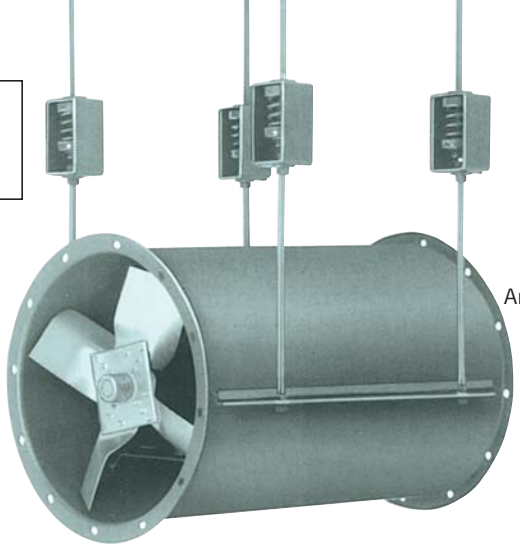


Fans handling hot airstreams must have sufficient airflow and be kept in operation until airstream temperatures cool below 120°F to prevent damage to the fan unit. The Duct Fan's ambient air cooling system is only effective while the fan is operating.

Mounting Arrangements



Arrangement 9-D with optional easy-access construction, motor, drive, and belt guard.

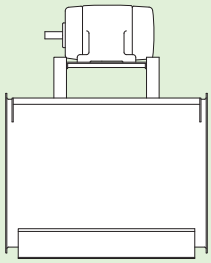


Arrangement 4-S with optional spring isolation.

ARRANGEMENTS

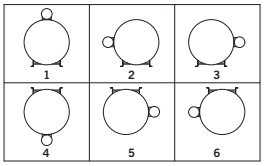
4-M AND 9-M

WITH MOUNTING LEGS



Fabricated mounting legs facilitate fan mounting on the floor, ceiling, or in a vertical position on a wall. Flange connections are standard.

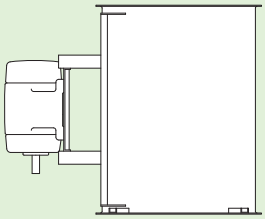
9-M Mounting Positions viewed from discharge end



ARRANGEMENTS

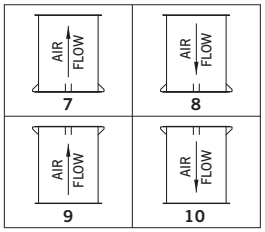
4-V AND 9-V

FOR VERTICAL MOUNTING



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 on Arrangement 9. Flange connections are standard.

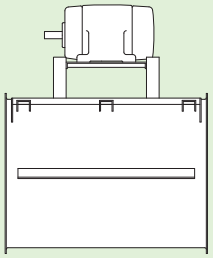
Mounting Positions



ARRANGEMENTS

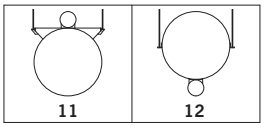
4-S AND 9-S

FOR SUSPENDED MOUNTING



Fans for suspended mounting are equipped with side supports suitable for attachment to rods hung from the ceiling structure. Flange connections are standard.

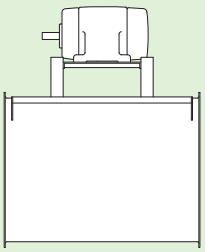
9-S Mounting Positions



ARRANGEMENTS

4-D AND 9-D

FOR DUCT MOUNTING

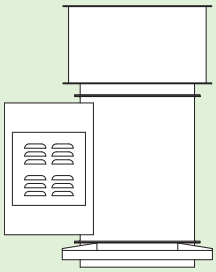


Units feature flanges on inlet and discharge for mounting to the duct work.

ARRANGEMENTS

4-R AND 9-R

FOR ROOF MOUNTING



Duct Fans are available packaged with stack hoods and curb caps for outdoor exhaust applications. Arrangement 9 units also feature weather covers. Roof-mounted units have round collars extending below the curb caps for easy connection to the duct system.

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 with standard steel wheel is required for 8200 CFM at .75"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 .75"WG x 1.33 = 1"WG at 70°F and sea level. Select fan from capacity tables for 8200 CFM at 1"WG.
Select size, RPM, and BHP of fan from capacity table.	2	A Size 247 is selected for 8200 CFM at 1"WG at 2009 RPM and 3.28 BHP.
Check maximum safe speed of fan as shown in Charts II or III.	3	From Chart II, the maximum safe speed is a Size 247 fan at 100°F and 2160 RPM. Fan is satisfactory for operation at 100°F.
Determine actual performance at operating conditions by correcting SP and BHP.	4	Actual performance: 8200 CFM at .75"WG (1.0 ÷ 1.33) at 2009 RPM at 2.47 BHP (3.28 ÷ 1.33) at 100°F and 6000 feet above sea level.

Maximum Safe Speed Information

Maximum operating temperature for standard Arrangement 4 fans is 105°F and for standard Arrangement 9 fans is 120°F. For temperatures above 120°F, as indicated by the tinted area in Chart IV, select heat-fan construction.

Chart II

MAXIMUM SAFE SPEEDS FOR STANDARD STEEL WHEELS AT TEMPERATURES TO 350°F

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

Size	RPM
127	3600
147	3600
167	3600
187	2800
217	2800
247	2160
277	2000
327	1950
367	1440
427	1250
487	1175
547	925
607	700

Chart III

MAXIMUM SAFE SPEEDS FOR ALUMINUM WHEELS [FOR AMCA B OR AMCA C SRC]

Maximum operating temperature for aluminum wheels is 200°F.

Size	RPM
127	2700
147	2700
167	2700
187	2100
217	2100
247	1620
277	1500
327	1450
367	1080
427	940
487	880
547	700
607	525

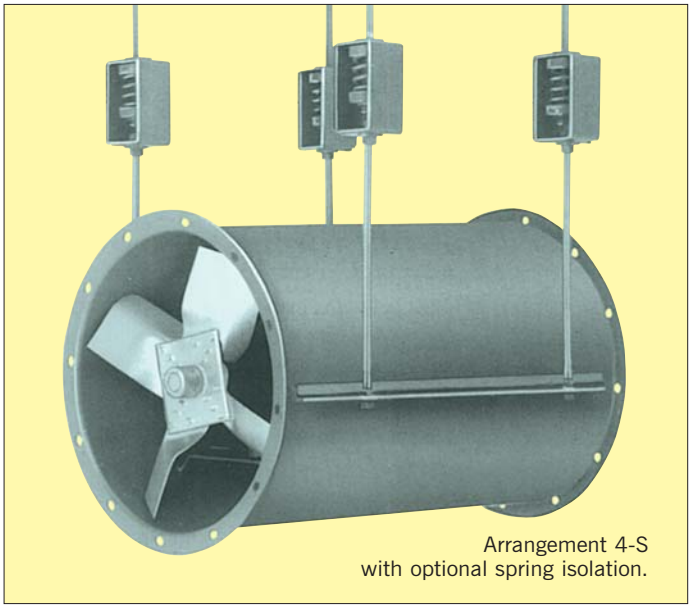
Chart IV CORRECTION FACTORS FOR TEMPERATURE AND ALTITUDE

Termperature °F	Altitude–feet above sea level												
	0	500	1000	1500	2000	3000	4000	5000	6000	7000	8000	9000	10000
-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
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
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
300	1.43	1.46	1.49	1.52	1.55	1.61	1.67	1.74	1.79	1.86	1.93	2.00	2.07
350	1.53	1.56	1.59	1.62	1.65	1.72	1.78	1.85	1.91	1.99	2.06	2.14	2.21

Direct-Drive Duct Fans

Available in Sizes 127 through 547, the direct-drive Duct Fan is ideally suited for relatively clean-air applications at temperatures to 105°F. Elimination of external motor mounting structure permits installation in extremely tight locations and reduction in overall unit weight. The Arrangement 4 configuration virtually eliminates all regularly scheduled maintenance.

External inlet vane dampers and variable frequency motor controllers are available to modulate airflow in process or commercial air-conditioning systems. Contact your New York Blower sales representative for assistance.



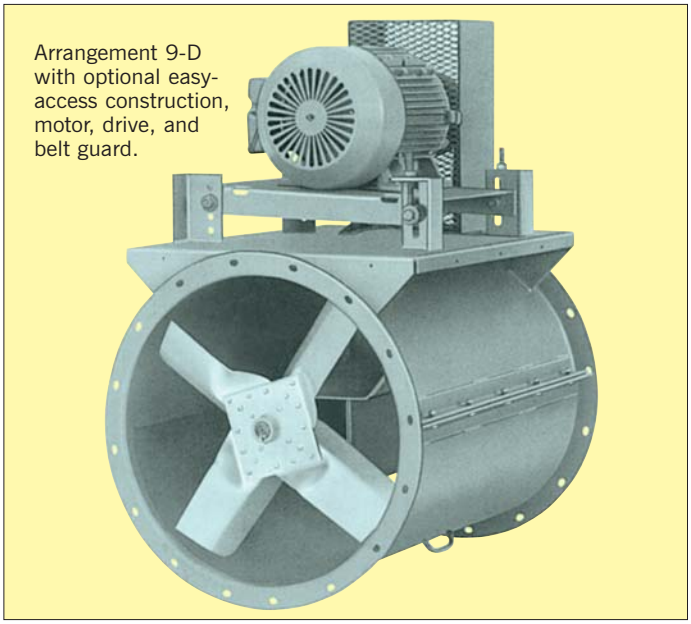
Arrangement 4-S
with optional spring isolation.

Size	RPM	1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP		1 1/8"SP		1 1/4"SP		1 1/2"SP	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
127	1725	899	0.15	403	0.15	207	0.17	67	0.19	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3500	2278	1.20	2133	1.30	2031	1.30	1873	1.30	1113	1.10	1005	1.10	915	1.20	837	1.20	754	1.30	657	1.30	451	1.40
147	1725	1636	0.26	893	0.24	676	0.27	423	0.30	206	0.34	–	–	–	–	–	–	–	–	–	–	–	–
	3500	3707	2.10	3549	2.10	3440	2.20	3333	2.20	3196	2.20	2955	2.20	1968	2.00	1840	2.00	1723	2.10	1607	2.10	1403	2.20
167	1725	2555	0.29	2395	0.31	2050	0.33	1125	0.32	815	0.35	605	0.36	375	0.39	–	–	–	–	–	–	–	–
	3500	5385	2.26	5320	2.31	5260	2.35	5195	2.39	5125	2.44	5055	2.49	4975	2.54	4890	2.59	4780	2.64	4650	2.70	4255	2.79
187	1150	2358	0.17	1207	0.17	528	0.22	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1725	3802	0.55	3589	0.58	3348	0.60	2753	0.59	1587	0.62	1147	0.69	659	0.75	119	0.80	–	–	–	–	–	–
217	1150	3008	0.27	1984	0.28	1290	0.34	627	0.37	179	0.41	–	–	–	–	–	–	–	–	–	–	–	–
	1725	4900	0.71	4602	0.75	4210	0.79	3670	0.82	2581	0.86	2233	0.94	1814	1.00	1345	1.10	941	1.10	638	1.20	33	1.30
247	1150	5540	0.63	5083	0.66	2875	0.60	1922	0.69	1105	0.75	522	0.81	–	–	–	–	–	–	–	–	–	–
	1750	8916	2.00	8531	2.00	8222	2.10	7932	2.10	7608	2.20	7186	2.20	–	–	3679	2.20	3076	2.30	2513	2.30	1500	2.50
277	1150	8626	1.20	7940	1.20	5806	1.20	3577	1.30	1692	1.40	833	1.60	–	–	–	–	–	–	–	–	–	–
	1750	13709	3.90	13256	4.00	12821	4.10	12384	4.20	11889	4.30	11202	4.30	8676	3.90	6513	4.10	5668	4.30	4515	4.60	2323	5.00
327	1150	10628	1.50	10111	1.60	9533	1.70	8727	1.80	7470	1.90	6265	2.10	5605	2.30	4210	2.50	3085	2.70	2403	2.80	1493	3.00
	1750	16400	4.80	16239	4.90	15893	5.20	15602	5.40	15271	5.50	14907	5.70	14485	5.90	13994	6.00	13437	6.20	12802	6.30	10909	6.70
367	850	14057	1.80	13173	1.90	11839	2.10	9008	2.10	6885	2.50	4361	2.80	2869	3.00	2148	3.20	1440	3.30	–	–	–	–
	1150	19718	4.30	18815	4.40	18275	4.60	17565	4.80	16590	5.10	15327	5.20	12888	5.10	11064	5.40	9574	6.00	7708	6.50	4563	7.10
427	875	22247	3.40	21404	3.70	20455	3.80	18869	4.00	17223	4.10	14214	4.10	11309	4.60	9434	4.80	7659	5.20	6693	5.40	4522	5.90
	1150	29818	7.60	28950	7.80	28441	8.10	27803	8.40	27050	8.60	25989	8.90	24687	9.20	23484	9.30	22022	9.40	19475	9.20	15023	10.3
487	875	32412	6.10	31045	6.40	29932	6.70	28590	7.00	26761	7.20	24556	7.20	21869	7.30	18687	7.50	14996	8.00	12056	8.40	9057	9.10
	1175	43310	14.5	42696	14.8	42204	15.1	41297	15.6	40508	16.0	39649	16.4	38631	16.7	37398	17.1	35960	17.3	34378	17.4	30685	17.6
547	875	48891	13.9	46817	14.2	45298	14.4	43661	14.7	41300	15.0	38943	15.2	37012	15.3	34569	15.4	31026	15.4	27783	15.6	22119	16.8

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).

Belt-Drive Duct Fans

Belt-drive Duct Fans are available in Sizes 127 through 607 for more aggressive airstreams or applications where temperatures may reach 350°F. Belt-drive arrangements include a shaft, bearings, and belt-well assembly that isolates bearings and drive components from airborne moisture and contaminants. In the event that system pressures or flow requirements change, belt-drive Duct Fans offer inherent performance flexibility. New performance is easily achieved by modifying readily accessible drives.



Arrangement 9-D with optional easy-access construction, motor, drive, and belt guard.

Size 127 Belt-drive

Wheel diameter: 12" | **Inlet and outlet area: 0.81 sq. ft.**

CFM	OV	1/16"SP		1/8"SP		3/16"SP		1/4"SP		5/16"SP		3/8"SP		7/16"SP		1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1100	1358	1799	0.21	1927	0.25	2109	0.30	2315	0.37	2542	0.45						
1200	1481	1933	0.25	2059	0.29	2192	0.33	2397	0.41	2569	0.48						
1300	1605	2065	0.29	2194	0.34	2303	0.38	2460	0.44	2645	0.53	2804	0.60	3015	0.69		
1400	1728	2198	0.33	2330	0.39	2429	0.43	2544	0.48	2719	0.57	2875	0.65	3026	0.73	3219	0.83
1500	1852	2333	0.38	2468	0.45	2563	0.49	2658	0.54	2781	0.61	2955	0.71	3098	0.79	3244	0.87
1600	1975	2471	0.44	2603	0.51	2698	0.56	2785	0.61	2882	0.67	3017	0.75	3181	0.85	3308	0.94
1700	2099	2610	0.51	2737	0.58	2834	0.64	2915	0.69	2998	0.74	3099	0.81	3235	0.90	3384	1.01
1800	2222	2751	0.58	2870	0.65	2972	0.72	3050	0.77	3128	0.83	3210	0.89	3311	0.96	3451	1.07
1850	2284	2822	0.62	2936	0.69	3039	0.76	3118	0.82	3190	0.87	3272	0.93	3366	1.01	3485	1.10
1900	2346	2893	0.66	3002	0.73	3108	0.81	3187	0.87	3260	0.92	3333	0.98	3417	1.05	3520	1.13
1950	2407	2965	0.70	3069	0.77	3176	0.86	3255	0.92	3325	0.97	3397	1.03	3477	1.10	3564	1.17
2000	2469	3035	0.74	3136	0.82	3242	0.90	3322	0.97	3394	1.03	3462	1.08	3536	1.15		
2050	2531	3107	0.79	3203	0.87	3312	0.96	3391	1.02	3463	1.08	3529	1.14	3598	1.20		
2100	2593	3179	0.84	3270	0.91	3378	1.01	3460	1.08	3531	1.14	3592	1.20				
2150	2654	3251	0.89	3338	0.96	3443	1.06	3528	1.14	3598	1.20						
2200	2716	3322	0.94	3406	1.02	3509	1.11	3596	1.19								

Size 147 Belt-drive

Wheel diameter: 14" | **Inlet and outlet area: 1.1 sq. ft.**

CFM	OV	1/8"SP		1/4"SP		3/8"SP		1/2"SP		9/16"SP		5/8"SP		11/16"SP		3/4"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1364	1618	0.23	1949	0.35	2408	0.56	2660	0.73								
1700	1545	1778	0.29	2017	0.39	2359	0.56	2785	0.82								
1900	1727	1948	0.36	2130	0.45	2403	0.60	2725	0.81								
2100	1909	2120	0.44	2271	0.54	2477	0.67	2749	0.86	2897	0.97						
2300	2091	2297	0.54	2430	0.64	2592	0.76	2812	0.93	2936	1.03	3061	1.14	3197	1.27		
2400	2182	2385	0.60	2512	0.70	2657	0.82	2850	0.97	2969	1.08	3088	1.18	3206	1.30	3346	1.44
2500	2273	2475	0.66	2595	0.77	2728	0.88	2905	1.03	3003	1.12	3116	1.23	3239	1.35	3349	1.46
2600	2364	2564	0.72	2680	0.83	2803	0.95	2961	1.09	3046	1.17	3156	1.28	3264	1.39	3379	1.52
2700	2455	2653	0.78	2765	0.91	2881	1.02	3020	1.16	3104	1.24	3197	1.34	3300	1.45	3400	1.56
2800	2545	2743	0.85	2852	0.98	2962	1.10	3088	1.24	3161	1.31	3247	1.40	3338	1.50	3434	1.61
2900	2636	2833	0.93	2939	1.06	3044	1.19	3159	1.32	3231	1.40	3306	1.48	3386	1.57	3478	1.68
3000	2727	2923	1.01	3026	1.15	3125	1.27	3237	1.41	3300	1.49	3366	1.57	3443	1.66	3523	1.76
3100	2818	3014	1.10	3113	1.24	3212	1.37	3315	1.51	3369	1.58	3433	1.66	3500	1.74	3578	1.84
3200	2909	3105	1.19	3202	1.33	3295	1.47	3393	1.61	3446	1.68	3501	1.75	3566	1.84		
3300	3000	3195	1.28	3290	1.43	3380	1.57	3473	1.71	3526	1.79	3576	1.86				
3400	3091	3287	1.38	3378	1.54	3467	1.69	3557	1.83								

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).

Size 167 Belt-drive

Wheel diameter: 16" | **Inlet and outlet area: 1.42 sq. ft.**

CFM	OV	1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		1"SP		1 1/4"SP		1 1/2"SP		1 3/4"SP		2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400	986	1074	0.08	1347	0.15	1640	0.26	1841	0.37	1990	0.47	2122	0.59	2353	0.84	2552	1.09	2739	1.37	2908	1.66	3056	1.94
1700	1197	1221	0.11	1416	0.18	1648	0.28	1900	0.40	2098	0.53	2249	0.67	2487	0.94	2692	1.23	2873	1.53	3039	1.84	3203	2.18
2000	1408	1391	0.16	1529	0.23	1710	0.33	1905	0.44	2128	0.58	2316	0.72	2612	1.04	2823	1.35	3006	1.68	3177	2.02	3329	2.37
2300	1620	1569	0.22	1672	0.29	1814	0.39	1971	0.50	2139	0.62	2328	0.77	2675	1.11	2941	1.48	3144	1.84	3310	2.20	3470	2.58
2600	1831	1751	0.30	1836	0.37	1941	0.46	2074	0.58	2213	0.71	2354	0.84	2685	1.17	2997	1.57	3243	1.98	3440	2.39		
2900	2042	1936	0.40	2009	0.47	2091	0.56	2194	0.67	2312	0.80	2438	0.94	2699	1.25	3004	1.64	3290	2.08	3524	2.53		
3200	2254	2121	0.52	2187	0.60	2258	0.68	2338	0.79	2434	0.91	2547	1.07	2766	1.38	3017	1.74	3289	2.16	3552	2.64		
3400	2394	2246	0.61	2308	0.69	2372	0.78	2442	0.88	2527	1.01	2621	1.15	2832	1.48	3048	1.83	3299	2.24	3552	2.70		
3600	2535	2371	0.72	2430	0.80	2489	0.89	2552	0.99	2625	1.11	2710	1.25	2902	1.59	3103	1.94	3316	2.33	3561	2.79		
3800	2676	2497	0.84	2552	0.92	2608	1.02	2667	1.12	2733	1.24	2806	1.37	2980	1.70	3168	2.07	3360	2.46	3565	2.87		
4000	2817	2623	0.97	2675	1.06	2727	1.15	2781	1.25	2840	1.37	2908	1.51	3063	1.83	3235	2.20	3417	2.60	3599	3.00		
4200	2958	2749	1.11	2799	1.20	2849	1.30	2900	1.41	2952	1.52	3013	1.65	3149	1.96	3311	2.34	3476	2.74				
4400	3099	2875	1.26	2922	1.36	2970	1.47	3019	1.58	3068	1.69	3120	1.81	3242	2.11	3387	2.48	3554	2.91				
4600	3239	3002	1.44	3047	1.54	3092	1.65	3138	1.76	3186	1.88	3235	2.00	3347	2.30	3480	2.66						
4800	3380	3128	1.62	3171	1.73	3215	1.84	3259	1.95	3304	2.08	3350	2.20	3451	2.49	3572	2.85						
5000	3521	3255	1.82	3296	1.93	3338	2.05	3380	2.17	3422	2.29	3468	2.42	3562	2.71								

Size 187 Belt-drive

Wheel diameter: 18" | **Inlet and outlet area: 1.82 sq. ft.**

CFM	OV	1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP		1 1/8"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1700	934	926	0.12	1202	0.22	1465	0.37	1625	0.51	1758	0.66	1881	0.82	1994	0.99	2101	1.17	2198	1.35	2292	1.54	2462	1.94
2000	1099	1018	0.15	1228	0.25	1476	0.37	1693	0.55	1843	0.71	1962	0.87	2076	1.05	2180	1.23	2281	1.43	2375	1.63	2550	2.06
2300	1264	1128	0.19	1283	0.28	1486	0.40	1700	0.54	1901	0.75	2047	0.94	2163	1.13	2267	1.32	2363	1.51	2458	1.72	2627	2.15
2600	1429	1244	0.25	1365	0.33	1530	0.45	1710	0.58	1908	0.74	2087	0.96	2231	1.19	2349	1.40	2455	1.62	2543	1.82	2707	2.25
2900	1593	1363	0.31	1465	0.39	1591	0.51	1748	0.65	1913	0.79	2089	0.97	2257	1.19	2411	1.46	2531	1.71	2629	1.94		
3200	1758	1484	0.39	1576	0.47	1677	0.58	1804	0.72	1949	0.88	2100	1.03	2253	1.21	2406	1.43	2559	1.71	2686	2.00		
3500	1923	1606	0.47	1691	0.57	1776	0.67	1879	0.80	2002	0.96	2134	1.13	2264	1.29	2411	1.48	2553	1.70	2698	1.98		
3800	2088	1730	0.58	1809	0.68	1885	0.78	1971	0.90	2069	1.05	2186	1.23	2308	1.42	2433	1.60	2562	1.79	2692	2.01		
4100	2253	1854	0.69	1927	0.80	2000	0.91	2074	1.03	2157	1.17	2254	1.34	2361	1.54	2470	1.73	2588	1.93	2708	2.13		
4400	2418	1979	0.83	2048	0.94	2114	1.06	2184	1.18	2252	1.31	2333	1.47	2424	1.66	2527	1.87	2629	2.07	2729	2.27		
4700	2582	2104	0.98	2169	1.10	2233	1.22	2295	1.35	2360	1.48	2429	1.63	2506	1.81	2592	2.01	2685	2.23	2784	2.45		
5000	2747	2231	1.15	2292	1.28	2352	1.41	2411	1.54	2469	1.67	2530	1.82	2598	1.99	2670	2.17	2751	2.38				
5200	2857	2315	1.27	2374	1.41	2432	1.54	2488	1.67	2546	1.82	2603	1.96	2663	2.12	2730	2.30						
5400	2967	2400	1.41	2456	1.54	2513	1.68	2567	1.82	2622	1.97	2675	2.11	2735	2.28	2793	2.44						
5600	3077	2484	1.55	2540	1.69	2593	1.84	2646	1.98	2699	2.13	2750	2.28										
5800	3187	2569	1.70	2623	1.85	2675	2.00	2726	2.15	2777	2.30												

Size 217 Belt-drive

Wheel diameter: 21" | **Inlet and outlet area: 2.46 sq. ft.**

CFM	OV	1/8"SP		1/4"SP		3/8"SP		1/2"SP		5/8"SP		3/4"SP		7/8"SP		1"SP		1 1/8"SP		1 1/4"SP		1 1/2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2500	1016	1014	0.18	1204	0.29	1415	0.45	1586	0.63	1705	0.80	1803	0.98	1888	1.15	1970	1.34	2051	1.53	2134	1.75	2280	2.17
2900	1179	1120	0.22	1280	0.34	1452	0.48	1635	0.67	1787	0.87	1907	1.08	2004	1.28	2084	1.48	2160	1.68	2229	1.88	2370	2.33
3300	1341	1235	0.28	1373	0.40	1517	0.54	1670	0.71	1832	0.92	1978	1.15	2097	1.39	2190	1.61	2275	1.84	2344	2.05	2478	2.51
3700	1504	1353	0.36	1476	0.48	1600	0.62	1731	0.78	1868	0.97	2018	1.21	2148	1.45	2269	1.72	2363	1.96	2449	2.22	2592	2.72
4100	1667	1476	0.45	1584	0.57	1697	0.72	1811	0.89	1929	1.07	2050	1.27	2187	1.52	2309	1.78	2431	2.08	2525	2.35	2696	2.93
4500	1829	1602	0.55	1697	0.68	1798	0.84	1904	1.01	2008	1.19	2114	1.39	2228	1.61	2350	1.87	2461	2.14	2578	2.45	2771	3.08
4800	1951	1698	0.65	1783	0.78	1878	0.94	1977	1.11	2075	1.30	2171	1.49	2276	1.71	2381	1.95	2486	2.21	2601	2.51		
5100	2073	1794	0.75	1874	0.89	1963	1.05	2051	1.22	2145	1.42	2234	1.61	2327	1.82	2424	2.06	2523	2.31	2632	2.60		
5400	2195	1890	0.87	1966	1.00	2046	1.16	2131	1.35	2220	1.55	2304	1.75	2391	1.97	2476	2.18	2571	2.44	2664	2.70		
5700	2317	1987	0.99	2057	1.13	2134	1.30	2212	1.48	2293	1.68	2377	1.90	2458	2.12	2540	2.34	2623	2.58	2707	2.83		
6000	2439	2084	1.14	2151	1.28	2220	1.44	2296	1.63	2373	1.84	2452	2.06	2527	2.28	2604	2.50	2684	2.75	2761	3.00		
6300	2561	2182	1.29	2246	1.44	2311	1.61	2382	1.80	2455	2.01	2529	2.23	2604	2.46	2675	2.69	2749	2.94				
6600	2683	2280	1.46	2341	1.61	2403	1.78	2468	1.97	2536	2.18	2606	2.41	2680	2.66	2749	2.90						
6900	2805	2378	1.64	2437	1.80	2495	1.98	2557	2.17	2620	2.38	2689	2.61	2754	2.85								
7200	2927	2476	1.84	2532	2.01	2588	2.18	2648	2.38	2706	2.59	2771	2.83										
7500	3049	2575	2.06	2629	2.23	2683	2.41	2737	2.61	2796	2.82												

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).

Size 247 Belt-drive

Wheel diameter: 24⅛" | **Inlet and outlet area: 3.24 sq. ft.**

CFM	OV	⅛"SP		¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		⅞"SP		1"SP		1⅛"SP		1 3/16"SP		1¼"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	1543	1055	0.47	1138	0.61	1226	0.77	1329	0.99	1448	1.25												
5800	1790	1198	0.66	1271	0.82	1341	0.98	1419	1.18	1508	1.42	1601	1.69	1711	2.02								
6400	1975	1306	0.84	1374	1.01	1438	1.19	1502	1.38	1577	1.61	1657	1.87	1741	2.16	1838	2.51						
6600	2037	1343	0.91	1410	1.09	1472	1.27	1535	1.46	1604	1.69	1679	1.95	1758	2.23	1845	2.55	1941	2.93				
6900	2130	1397	1.02	1462	1.20	1522	1.39	1580	1.58	1643	1.80	1714	2.06	1788	2.34	1865	2.65	1953	3.01	1998	3.20	2045	3.41
7100	2191	1434	1.09	1498	1.29	1556	1.48	1612	1.67	1672	1.88	1739	2.14	1809	2.42	1885	2.73	1958	3.05	2002	3.24	2047	3.44
7400	2284	1488	1.22	1550	1.42	1608	1.62	1661	1.81	1718	2.03	1779	2.28	1845	2.56	1916	2.87	1988	3.19	2022	3.35	2065	3.56
7600	2346	1525	1.30	1586	1.51	1641	1.71	1695	1.91	1749	2.13	1807	2.38	1869	2.65	1935	2.95	2002	3.26	2039	3.44	2078	3.63
7900	2438	1580	1.44	1640	1.66	1694	1.86	1746	2.08	1798	2.30	1849	2.53	1911	2.81	1969	3.09	2034	3.42	2071	3.61	2104	3.78
8200	2531	1636	1.59	1694	1.81	1747	2.03	1797	2.25	1846	2.47	1897	2.71	1952	2.98	2009	3.28	2066	3.58	2098	3.75	2131	3.93
8500	2623	1691	1.75	1748	1.98	1800	2.21	1848	2.43	1897	2.66	1945	2.90	1996	3.17	2049	3.46	2106	3.77	2133	3.93		
8800	2716	1746	1.91	1802	2.16	1852	2.39	1900	2.62	1947	2.86	1992	3.10	2039	3.36	2089	3.64	2145	3.96				
9100	2809	1803	2.10	1856	2.35	1905	2.59	1953	2.83	1996	3.06	2041	3.31	2085	3.57	2135	3.86						
9400	2901	1858	2.29	1910	2.54	1960	2.80	2005	3.05	2048	3.29	2090	3.54	2134	3.80								
9700	2994	1914	2.49	1965	2.76	2013	3.02	2058	3.28	2100	3.53	2142	3.79										
10000	3086	1970	2.70	2020	2.98	2067	3.25	2111	3.52	2153	3.78												

Size 277 Belt-drive

Wheel diameter: 27" | **Inlet and outlet area: 4.09 sq. ft.**

CFM	OV	⅛"SP		¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		⅞"SP		1"SP		1⅛"SP		1 3/16"SP		1¼"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6500	1589	909	0.63	1012	0.88	1168	1.28	1323	1.72	1451	2.21	1570	2.83	1669	3.46	1748	4.05	1821	4.67	1856	4.99	1893	5.34
7100	1736	977	0.77	1066	1.01	1183	1.37	1338	1.85	1471	2.33	1591	2.89	1697	3.54	1795	4.26	1871	4.91	1905	5.22	1940	5.55
7700	1883	1044	0.92	1126	1.18	1220	1.50	1353	1.98	1491	2.50	1606	3.00	1720	3.64	1822	4.35	1912	5.09	1950	5.44	1990	5.83
8300	2029	1113	1.09	1188	1.37	1268	1.67	1375	2.12	1504	2.66	1627	3.20	1738	3.78	1843	4.45	1938	5.20	1980	5.57		
8900	2176	1183	1.29	1254	1.59	1324	1.89	1410	2.29	1518	2.81	1648	3.43	1756	3.99	1859	4.61	1953	5.29	1998	5.65		
9500	2323	1253	1.52	1320	1.84	1386	2.15	1459	2.52	1545	2.99	1661	3.62	1779	4.27	1876	4.85	1975	5.51				
10100	2469	1324	1.77	1387	2.10	1449	2.43	1513	2.79	1587	3.24	1675	3.78	1786	4.46	1894	5.13	1996	5.82				
10700	2616	1395	2.04	1456	2.41	1513	2.75	1572	3.11	1637	3.53	1711	4.03	1802	4.67	1912	5.42						
11300	2763	1467	2.36	1524	2.74	1579	3.10	1634	3.47	1691	3.87	1758	4.36	1833	4.95	1923	5.64						
11900	2910	1539	2.69	1594	3.10	1646	3.49	1698	3.87	1751	4.27	1811	4.75	1875	5.28	1951	5.94						
12500	3056	1611	3.07	1663	3.49	1714	3.90	1764	4.32	1813	4.72	1865	5.16	1922	5.67	1986	6.26						
13000	3178	1671	3.41	1721	3.85	1771	4.28	1818	4.70	1866	5.12	1915	5.56	1968	6.06								
13500	3301	1731	3.77	1781	4.23	1828	4.68	1874	5.12	1920	5.55	1967	6.01										
14000	3423	1791	4.16	1840	4.64	1885	5.10	1930	5.56	1974	6.01												
14500	3545	1852	4.58	1898	5.07	1943	5.55	1987	6.04														
15000	3667	1913	5.02	1957	5.53																		

Size 327 Belt-drive

Wheel diameter: 32 3/16" | **Inlet and outlet area: 5.76 sq. ft.**

CFM	OV	¼"SP		½"SP		¾"SP		1"SP		1¼"SP		1⅜"SP		1½"SP		1⅝"SP		1¾"SP		1⅞"SP		2"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1389	958	1.00	1101	1.62	1253	2.47	1381	3.44	1479	4.41	1519	4.89	1557	5.37	1597	5.91	1633	6.43	1666	6.91	1706	7.52
9000	1562	1046	1.25	1169	1.88	1301	2.69	1434	3.70	1546	4.78	1593	5.32	1639	5.90	1677	6.44	1712	6.97	1748	7.56	1781	8.11
10000	1736	1141	1.57	1245	2.21	1362	3.01	1480	3.96	1600	5.12	1652	5.71	1704	6.35	1745	6.91	1788	7.55	1823	8.12	1860	8.75
10500	1823	1189	1.75	1286	2.39	1395	3.19	1507	4.13	1623	5.28	1679	5.90	1729	6.52	1778	7.18	1820	7.79	1859	8.41	1900	9.11
11000	1910	1237	1.95	1328	2.60	1431	3.41	1536	4.33	1647	5.44	1704	6.10	1753	6.70	1805	7.39	1850	8.05	1893	8.73	1933	9.41
11500	1997	1286	2.17	1371	2.82	1470	3.65	1568	4.56	1673	5.65	1725	6.25	1780	6.94	1831	7.62	1875	8.26	1922	8.99		
12000	2083	1335	2.40	1414	3.05	1507	3.89	1602	4.82	1702	5.90	1753	6.50	1799	7.09	1853	7.80	1900	8.48	1945	9.18		
12500	2170	1385	2.66	1459	3.32	1544	4.13	1638	5.10	1731	6.14	1781	6.75	1826	7.34	1874	7.99	1924	8.72				
13000	2257	1435	2.93	1506	3.60	1586	4.43	1674	5.39	1762	6.43	1808	7.00	1852	7.59	1899	8.24	1948	8.96				
13500	2344	1485	3.23	1552	3.90	1627	4.72	1712	5.71	1796	6.75	1841	7.34	1885	7.94	1927	8.55						
14000	2431	1535	3.54	1600	4.24	1671	5.06	1750	6.03	1833	7.12	1875	7.68	1918	8.30								
14500	2517	1585	3.87	1647	4.59	1715	5.41	1790	6.38	1870	7.48	1907	8.02	1950	8.65								
15000	2604	1636	4.23	1696	4.96	1759	5.78	1832	6.79	1905	7.84	1946	8.45										
15500	2691	1686	4.61	1744	5.36	1805	6.19	1871	7.15	1944	8.26												
16000	2778	1737	5.02	1793	5.79	1850	6.61	1916	7.61														
16500	2865	1788	5.45	1843	6.24	1897	7.07																

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).

Size 367 Belt-Drive

Wheel diameter: 36" | **Inlet and outlet area: 7.27 sq. ft.**

CFM	OV	¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		⅞"SP		1"SP		1⅛"SP		1¼"SP		1⅜"SP		1½"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11000	1513	749	1.43	819	1.92	895	2.46	974	3.12	1040	3.83	1096	4.59	1148	5.44	1197	6.38	1241	7.32	1285	8.29	1327	9.28
11500	1582	771	1.54	837	2.04	907	2.57	987	3.25	1054	3.96	1112	4.71	1166	5.57	1214	6.48	1257	7.42	1300	8.40	1340	9.40
12000	1651	794	1.65	857	2.18	923	2.72	996	3.36	1065	4.07	1127	4.85	1180	5.65	1230	6.59	1273	7.50	1314	8.47	1358	9.59
12500	1719	817	1.78	877	2.32	939	2.87	1006	3.48	1078	4.22	1142	5.01	1193	5.77	1246	6.70	1292	7.66	1332	8.62	1371	9.62
13000	1788	841	1.91	898	2.47	956	3.02	1020	3.64	1088	4.35	1153	5.14	1210	5.96	1261	6.85	1306	7.75	1350	8.77	1392	9.87
13500	1857	867	2.06	918	2.61	975	3.20	1033	3.79	1097	4.48	1164	5.29	1222	6.12	1273	6.95	1324	7.94	1367	8.92	1408	10.0
14000	1926	892	2.22	940	2.76	995	3.38	1051	4.00	1109	4.65	1174	5.45	1234	6.30	1287	7.15	1337	8.09	1383	9.09	1424	10.1
14500	1994	918	2.40	963	2.93	1014	3.56	1068	4.20	1123	4.85	1184	5.62	1246	6.49	1301	7.37	1350	8.26	1395	9.20	1439	10.3
15000	2063	944	2.59	987	3.11	1036	3.76	1085	4.39	1140	5.07	1194	5.79	1258	6.69	1315	7.60	1363	8.46	1411	9.44		
15500	2132	971	2.79	1010	3.30	1057	3.95	1106	4.63	1156	5.29	1210	6.03	1266	6.85	1322	7.73	1375	8.68	1426	9.70		
16000	2201	997	3.00	1035	3.51	1079	4.16	1127	4.87	1174	5.54	1225	6.27	1280	7.10	1335	7.99	1388	8.92	1437	9.90		
16500	2270	1024	3.24	1059	3.73	1101	4.37	1147	5.10	1194	5.82	1239	6.51	1291	7.31	1345	8.19	1400	9.17				
17000	2338	1051	3.48	1085	3.97	1123	4.58	1167	5.32	1213	6.09	1259	6.82	1305	7.57	1354	8.40	1411	9.43				
18000	2476	1105	4.00	1136	4.49	1171	5.10	1211	5.83	1252	6.61	1297	7.44	1339	8.21	1385	9.03	1431	9.90				
19000	2613	1160	4.58	1189	5.08	1221	5.67	1256	6.38	1296	7.23	1336	8.06	1376	8.87	1415	9.66						
20000	2751	1215	5.23	1243	5.74	1272	6.33	1304	7.01	1339	7.83	1377	8.71	1413	9.56								

Size 427 Belt-Drive

Wheel diameter: 42" | **Inlet and outlet area: 9.97 sq. ft.**

CFM	OV	¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		⅞"SP		1"SP		1⅛"SP		1¼"SP		1⅜"SP		1½"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	1404	637	1.58	694	2.10	754	2.67	817	3.34	871	4.07	922	4.91	969	5.85	1014	6.89	1057	7.95	1095	8.97	1128	9.88
15200	1525	669	1.80	727	2.38	778	2.95	834	3.59	893	4.35	944	5.16	989	6.02	1032	6.98	1075	8.08	1115	9.19	1154	10.4
16400	1645	705	2.06	759	2.68	809	3.29	857	3.91	911	4.64	964	5.46	1010	6.30	1054	7.25	1093	8.19	1134	9.33	1175	10.6
17600	1765	744	2.37	792	2.99	840	3.64	885	4.32	932	5.01	983	5.82	1030	6.64	1075	7.57	1115	8.52	1155	9.59	1194	10.8
18800	1886	784	2.73	825	3.32	873	4.04	916	4.75	956	5.42	1001	6.20	1052	7.09	1095	7.97	1137	8.91	1175	9.90	1212	11.0
20000	2006	826	3.14	861	3.72	906	4.47	948	5.21	988	5.95	1026	6.68	1069	7.53	1114	8.43	1160	9.45	1197	10.4	1236	11.5
21000	2106	861	3.52	893	4.08	934	4.83	976	5.62	1013	6.38	1051	7.17	1089	7.98	1133	8.92	1175	9.86	1217	10.9		
22000	2207	897	3.94	926	4.50	962	5.22	1002	6.03	1042	6.88	1077	7.69	1113	8.51	1151	9.40	1189	10.3	1229	11.3		
23000	2307	933	4.40	959	4.95	992	5.65	1030	6.49	1069	7.39	1103	8.19	1138	9.08	1171	9.91	1208	10.9	1245	11.8		
24000	2407	969	4.88	994	5.46	1022	6.12	1057	6.94	1097	7.90	1132	8.81	1163	9.63	1195	10.5	1230	11.5				
25000	2508	1006	5.42	1030	6.01	1056	6.66	1087	7.46	1123	8.41	1159	9.37	1192	10.3	1222	11.2						
26000	2608	1042	5.99	1065	6.58	1089	7.25	1118	8.04	1151	8.97	1185	9.92	1218	10.9	1250	11.9						
27000	2708	1079	6.61	1101	7.22	1123	7.89	1149	8.66	1179	9.53	1212	10.5	1245	11.6								
28000	2808	1116	7.27	1137	7.90	1158	8.57	1182	9.31	1208	10.2	1239	11.2										
29000	2909	1153	7.98	1173	8.62	1193	9.30	1215	10.1	1240	10.9												
30000	3009	1190	8.74	1209	9.39	1229	10.1	1249	10.8														

Size 487 Belt-Drive

Wheel diameter: 48" | **Inlet and outlet area: 13 sq. ft.**

CFM	OV	¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		1"SP		1¼"SP		1⅜"SP		1½"SP		1⅝"SP		1¾"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
17000	1308	555	1.86	613	2.52	668	3.27	720	4.11	766	4.99	857	7.20	937	9.65	973	10.9	1006	12.2	1037	13.4	1068	14.8
19000	1462	593	2.23	647	2.95	698	3.70	746	4.53	794	5.48	879	7.57	960	10.1	996	11.4	1033	12.9	1064	14.2	1096	15.6
20500	1577	625	2.56	674	3.32	721	4.08	770	4.96	814	5.89	895	7.87	974	10.3	1012	11.7	1050	13.2	1083	14.7	1114	16.1
22000	1692	658	2.94	703	3.72	748	4.54	792	5.39	836	6.34	916	8.41	990	10.7	1026	12.0	1062	13.5	1097	15.0	1130	16.5
23500	1808	693	3.38	731	4.13	775	5.02	817	5.91	858	6.85	937	8.93	1010	11.3	1046	12.6	1077	13.8	1110	15.3	1146	16.9
25000	1923	728	3.87	763	4.63	803	5.53	843	6.47	882	7.40	958	9.53	1030	11.9	1064	13.2	1094	14.4	1130	15.9	1160	17.3
26500	2038	765	4.43	796	5.19	832	6.11	871	7.10	908	8.06	981	10.2	1051	12.6	1085	13.9	1117	15.2	1148	16.6		
28000	2154	802	5.04	830	5.81	863	6.72	898	7.73	935	8.78	1005	11.0	1072	13.3	1104	14.6	1138	16.0	1169	17.4		
29500	2269	839	5.72	866	6.51	895	7.41	928	8.44	962	9.54	1031	11.8	1094	14.1	1125	15.4	1159	16.8				
31000	2385	877	6.47	902	7.28	928	8.16	959	9.21	991	10.4	1055	12.6	1120	15.1	1148	16.3						
32500	2500	915	7.29	938	8.10	963	9.03	990	10.1	1019	11.2	1083	13.6	1142	16.0	1173	17.4						
34000	2615	953	8.18	975	9.04	998	9.96	1023	11.0	1051	12.1	1110	14.6	1169	17.2								
35500	2731	991	9.15	1012	10.0	1034	11.0	1057	12.0	1082	13.1	1139	15.7										
37000	2846	1030	10.2	1050	11.1	1070	12.1	1092	13.1	1116	14.2	1167	16.8										
38500	2962	1069	11.3	1087	12.2	1107	13.2	1128	14.3	1149	15.4												
40000	3077	1107	12.5	1125	13.5	1144	14.5	1164	15.6														

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).

Size 547 Belt-drive

Wheel diameter: 54" | **Inlet and outlet area: 16.5 sq. ft.**

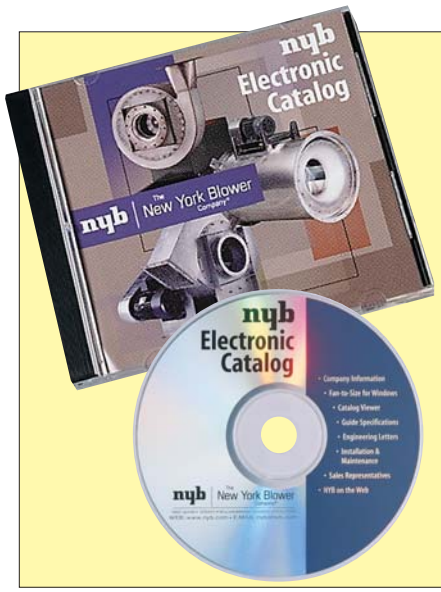
CFM	OV	¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		⅞"SP		1"SP		1⅛"SP		1¼"SP		1⅜"SP		1½"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	1212	470	2.39	525	3.34	577	4.42	622	5.57	664	6.89	703	8.30	738	9.75	767	11.1	795	12.6	822	14.1	848	15.6
22000	1333	498	2.82	544	3.70	595	4.84	642	6.08	683	7.37	722	8.81	758	10.3	791	11.9	820	13.4	848	15.0	873	16.6
24000	1455	526	3.27	570	4.23	614	5.30	660	6.58	701	7.92	739	9.32	776	10.9	807	12.4	839	14.1	870	15.9	897	17.6
26000	1576	552	3.75	597	4.84	637	5.91	679	7.15	721	8.55	759	10.0	794	11.6	828	13.2	858	14.8	888	16.5	916	18.3
28000	1697	578	4.29	625	5.51	661	6.58	699	7.83	738	9.20	778	10.7	812	12.2	846	13.9	878	15.7	907	17.4		
30000	1818	606	4.88	652	6.20	689	7.40	722	8.59	759	9.98	797	11.6	832	13.2	866	14.9	897	16.6	925	18.2		
32000	1939	636	5.61	678	6.91	717	8.29	749	9.53	782	10.9	815	12.4	852	14.1	885	15.8	915	17.5				
34000	2061	667	6.41	705	7.71	744	9.20	778	10.6	807	11.9	836	13.4	870	15.0	902	16.7						
35500	2152	691	7.08	725	8.35	765	9.94	798	11.4	828	12.8	855	14.2	885	15.8	916	17.5						
37000	2242	715	7.83	746	9.06	783	10.6	818	12.3	848	13.7	875	15.2	902	16.7								
38500	2333	739	8.61	768	9.84	802	11.4	839	13.2	869	14.8	895	16.2	922	17.8								
40000	2424	764	9.48	791	10.7	823	12.2	859	14.1	890	15.8	916	17.3										
41500	2515	789	10.4	815	11.7	844	13.1	877	14.9														
43000	2606	814	11.4	839	12.7	866	14.2	897	15.9														
44500	2697	839	12.4	863	13.7	888	15.2	917	16.9														
46000	2788	864	13.6	887	14.9	911	16.4																

Size 607 Belt-drive

Wheel diameter: 60" | **Inlet and outlet area: 20.3 sq. ft.**

CFM	OV	⅛"SP		¼"SP		⅜"SP		½"SP		⅝"SP		¾"SP		⅞"SP		1"SP		1⅛"SP		1³⁄₁₆"SP		1¼"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	985	281	1.18	364	2.31	424	3.72	466	5.12	503	6.54	538	8.17	571	9.91	601	11.7	631	13.8	645	14.9	660	16.0
22500	1108	302	1.45	365	2.41	439	4.03	485	5.61	523	7.20	556	8.79	588	10.5	616	12.3	647	14.4	660	15.4	674	16.5
25000	1232	323	1.77	373	2.67	448	4.29	501	6.01	541	7.75	576	9.56	605	11.3	634	13.1	662	15.1	676	16.2	689	17.2
27500	1355	345	2.12	392	3.14	447	4.39	513	6.41	557	8.26	594	10.3	625	12.2	653	14.1	681	16.2	693	17.1		
30000	1478	367	2.50	412	3.67	453	4.73	518	6.69	571	8.81	610	10.9	643	13.0	673	15.1	700	17.2				
32500	1601	389	2.95	433	4.24	470	5.39	517	6.84	577	9.15	622	11.4	659	13.7	691	16.0						
35000	1724	412	3.46	454	4.85	490	6.15	527	7.43	577	9.38	631	11.9	672	14.4								
37500	1847	436	4.07	476	5.54	511	6.98	542	8.25	581	9.82	631	12.2	682	15.0								
40000	1970	460	4.74	498	6.26	532	7.84	562	9.27	594	10.7	632	12.5	683	15.3								
42500	2094	485	5.52	520	7.06	553	8.77	583	10.4	611	11.8	642	13.4	682	15.6								
45000	2217	510	6.38	542	7.92	575	9.77	604	11.5	631	13.1	659	14.7	689	16.5								
47500	2340	535	7.34	564	8.90	596	10.8	625	12.7	651	14.4	677	16.1										
50000	2463	560	8.41	587	9.97	618	11.9	647	14.0	672	15.8	697	17.7										
52000	2562	580	9.34	607	10.9	636	12.9	664	15.0	689	17.0												
54000	2660	601	10.3	625	11.9	654	13.9	681	16.1														
56000	2759	621	11.4	645	13.0	671	15.0	699	17.3														

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).



Electronic Catalog

A complete New York Blower Catalog on one CD. No more manual calculations and bulky product catalogs. A critical tool for all system-designers and engineers who select and specify air-moving equipment.

SELECTION BENEFITS

- Fast, accurate fan selection.
- Automatic altitude, temperature, and density corrections.
- Sound levels by octave band.
- Fan-performance curves.
- Multiple model and size choices.
- Metric or English units.

CATALOG CONTENTS

- Fan-selection program.
- Complete product catalog in PDF including drawings, dimensions, and design specifications.
- Sample guide specifications.
- New York Blower Engineering Letters.
- Installation and Maintenance Manuals.
- Listing of New York Blower representatives.

To obtain your copy of New York Blower's Electronic Catalog contact your local New York Blower representative or go to www.nyb.com and click on *Selection Software*.

MATERIAL SPECIFICATIONS

Dimensions in inches. Weights in pounds. WR^2 in lb.-ft.^{2}. Tolerance: ±1/8"

Size	No. of blades	Wheel weight	Wheel WR^2	Bushing type	Shaft diameter	Bearings	Approximate bare fan weight						Housing gauge
							9-M	9-R	9-S, 9-V, 9-D	4-M	4-R	4-S, 4-V, 4-D	
127	4	3.2	0.2	—	1	A	121	241	111	62	182	52	10
147	4	3.5	0.3	—	1	A	130	252	119	73	196	62	10
167	4	3.6	0.4	—	1	A	165	283	145	103	221	83	10
187	4	4.1	0.6	—	1	A	176	302	156	117	243	97	10
217	4	8.0	1.1	—	1	A	212	351	189	142	282	120	10
247	4	9.0	1.6	—	1	A	296	477	266	190	371	160	10
277	4	17.3	3.4	H	1 7/16	A	329	531	294	219	422	185	10
327	8	26.3	10	P1	1 7/16	A	404	669	362	281	546	239	10
367	8	44.5	19	Q1	1 11/16	A	465	757	418	338	630	292	10
427	8	61.5	36	Q1	1 15/16	C	692	1092	624	464	864	396	10
487	8	68.5	52	Q1	1 15/16	C	748	1202	673	525	978	450	10
547	8	115.5	102	Q1	2 3/16	C	1070	1754	966	860	1544	756	7
607	8	125.5	153	Q1	2 3/16	C	1164	1927	1048	965	1728	849	7

Bearing types: A–Link-Belt 200 Series. C–Link-Belt P300 Series. Wheel weight includes bushing.
nyb reserves the right to substitute bearings of equal quality.

MOTOR SIZE CAPABILITY

Size	Arrangement 9		Arrangement 4	
	Maximum C-[N-W]	Maximum frame size	Maximum C-[N-W]	Maximum frame size
127	13.9	145T	15.7	145T
147	13.9	182T	15.7	145T
167	13.9	184T	23.2	145T
187	13.9	184T	23.2	145T
217	13.9	184T	23.2	145T
247	19.7	213T	29.5	184T
277	19.7	213T	29.6	184T
327	19.7	215T	30.0	215T
367	19.7	215T	29.3	256T
427	27.7	254T	29.8	286T
487	27.7	256T	29.8	286T
547	29.9	256T	33.1	326T
607	29.9	256T	N/A	N/A

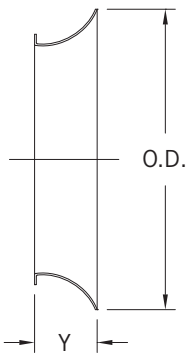
Arrangement 9 maximums are with or without weather cover.

FAN FLANGE DIMENSIONS

Size	Flange gauge	Fan ID	Bolting circle			Flange OD	Flange holes*	
			Min.	Center	Max.		No.	Size†
127	10	12 1/4	—	14	—	14 7/8	8	7/16
147	10	14 1/4	—	16	—	16 7/8	8	7/16
167	10	16 1/4	—	18	—	18 7/8	8	7/16
187	10	18 1/4	19 5/8	20	20 3/8	21 1/4	8	7/16 x 13/16
217	10	21 1/4	22 5/8	23	23 3/8	24 1/4	8	7/16 x 13/16
247	10	24 3/8	25 3/4	26 1/8	26 1/2	27 3/8	8	7/16 x 13/16
277	10	27 3/8	28 3/4	29 1/8	29 1/2	30 3/8	8	7/16 x 13/16
327	10	32 1/2	33 7/8	34 1/4	34 5/8	35 1/2	16	7/16 x 13/16
367	10	36 1/2	38	38 3/8	38 3/4	40 1/4	16	7/16 x 13/16
427	1/4	42 3/4	44 3/4	45	45 5/8	47 1/8	16	9/16 x 1
487	1/4	48 3/4	50 3/4	51	51 5/8	53 1/8	16	9/16 x 1
547	1/4	55	57	57 3/8	57 7/8	59 1/2	16	9/16 x 1
607	1/4	61	63	63 3/8	63 7/8	65 1/2	16	9/16 x 1

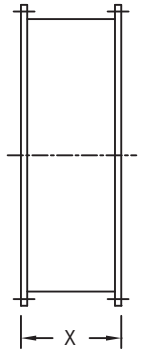
*Holes spaced equally, straddling centerline. †Sizes 18-60 have slotted holes.

INLET BELL DIMENSIONS



Size	Y	O.D.
127	2 1/8	16 1/4
147	2 1/2	19
167	3	21 3/4
187	3 1/4	24 1/4
217	3 3/4	28 1/4
247	4 1/8	32 1/8
277	4 3/4	36 3/8
327	5 3/4	43 1/2
367	6 1/4	48 1/2
427	7 1/4	56 3/4
487	8 1/4	64 3/4
547	9 1/4	73
607	10 1/4	81

INLET VANE DAMPER DIMENSIONS

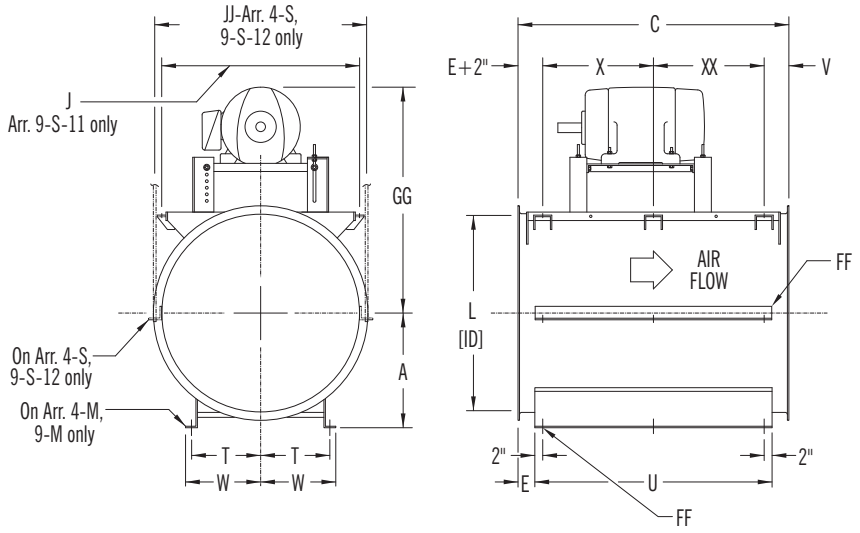


Size	X
127	9
147	9
167	9
187	10
217	10
247	10
277	10
327	10
367	10
427	11
487	11
547	11
607	12

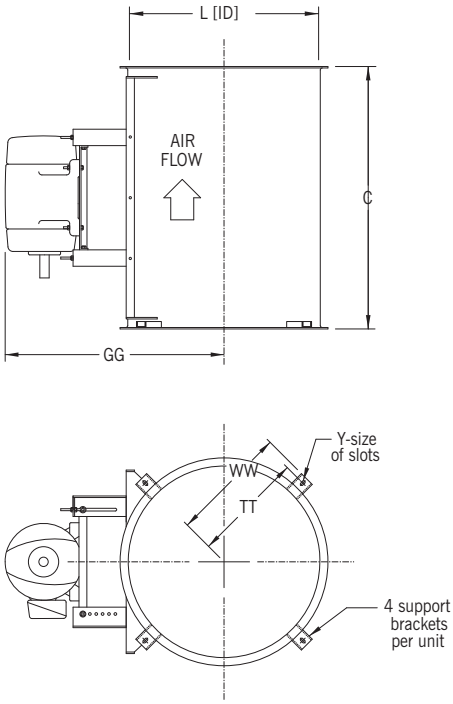
DIMENSIONS

Dimensions should not be used for construction unless certified. See page 6 for available mounting positions. Note motor size capability on page 14. Tolerance: ±1/8".

ARRANGEMENTS 4-M AND 9-M, 4-S AND 9-S, 4-D AND 9-D

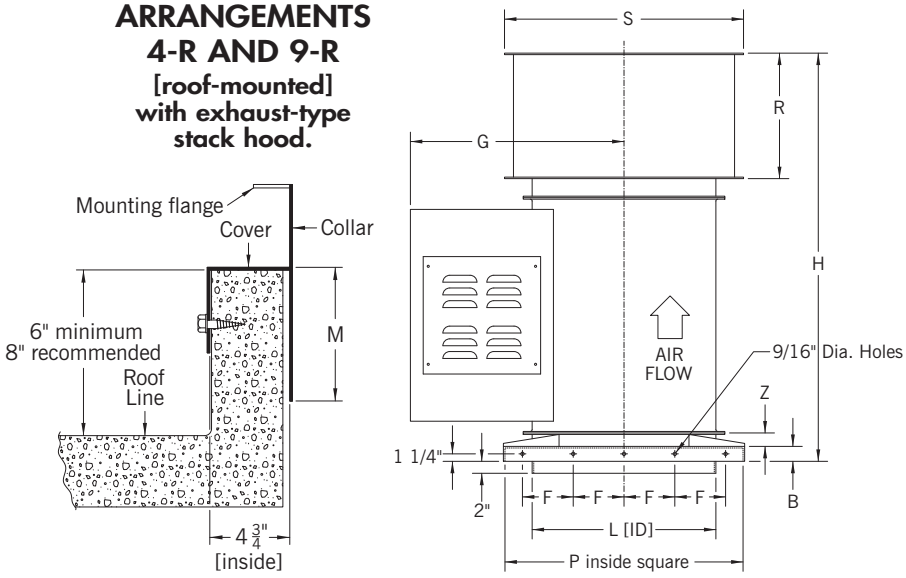


ARRANGEMENTS 4-V AND 9-V



ARRANGEMENTS 4-R AND 9-R

[roof-mounted] with exhaust-type stack hood.



DIMENSIONS [INCHES]

Size	A	B	C	E	F	FF*	G	GG [max.]	H	J	JJ	L	M	P	R	S	T	TT	U	V	W	WW	Y
127	8¾	2½	25	3¼	4½	9/16	25¼	23⅝	46¾	19⅝	14¼	12¼	4½	22	14	17¼	4½	9⅜	18½	4¼	5½	10⅝	9/16x1
147	9¾	2½	25	3¼	4½	9/16	26¼	26	47¾	19⅝	16¼	14¼	4½	24	15	19¼	5½	10⅜	18½	4¼	6½	11⅝	9/16x1
167	11¼	2½	32	3¼	5	9/16	27¼	27	55¾	19⅝	18¾	16¼	4½	26⅛	16	21¼	6¼	11⅜	25½	11¼	7½	12⅝	9/16x1
187	12½	2½	32	3¼	5½	9/16	28½	28	57¾	19⅝	20¾	18¼	4½	28⅛	18	23¼	6¾	12⅜	25½	11¼	8	13⅝	9/16x1
217	14½	2½	32	3¼	6	9/16	29¾	29½	60¾	19⅝	23¾	21¼	4½	31⅛	21	26¼	7⅞	13⅞	25½	11¼	9⅛	15⅛	9/16x1
247	16½	2½	38	3¼	7	9/16	37¾	36⅛	73¾	24⅞	28⅛	24⅜	4½	34¼	23	29⅜	9	15½	31½	9½	10¼	16¾	9/16x1
277	19	2½	38	3¼	8	9/16	39¼	37⅝	75¾	24⅞	31⅛	27⅜	4½	37¼	25	32⅜	10¼	17	31½	9½	11½	18¼	9/16x1
327	22¼	3	40	4¼	9	9/16	41¾	40¼	80¼	24⅞	36¼	32½	5	41¾	26	37¼	11¾	20⅜	31½	11½	13¼	21⅞	¾x1½
367	24¾	3	40	4¼	10½	9/16	43¾	42¼	85¼	24⅞	40¼	36½	5	46⅜	31	41½	13½	22⅜	31½	11½	15	23⅞	¾x1½
427	28¾	3	43	4¼	12	¾	51	47⅝	91¼	43	46½	42¾	5	52⅝	34	47¾	15	25½	34½	4½	16½	27	¾x1½
487	32¾	3	43	4¼	13	¾	54	50⅝	97¼	43	52½	48¾	5	58⅝	40	53¾	16¾	28½	34½	4½	18¼	30	¾x1½
547	37	3	47	4¼	14	¾	59¼	53¾	104¼	45¾	59⅞	55	5	64⅞	43	60	18¾	32¼	38½	5¼	20¼	33¾	1x2
607	41	3	47	4¼	14½	¾	62¼	56¾	108¼	45¾	65⅞	61	5	70⅞	47	66	20¾	35¼	38½	5¼	22¼	36¾	1x2

*FF: Mounting hole size; Sizes 127-487 use two holes per side; Sizes 547 and 607 use three holes per side.
Dimensions X and XX pertain to Sizes 547 and 607 only: X = 17¼", XX = 18¼". Z = 2" on Sizes 127-227, 3" on Sizes 327-607.

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

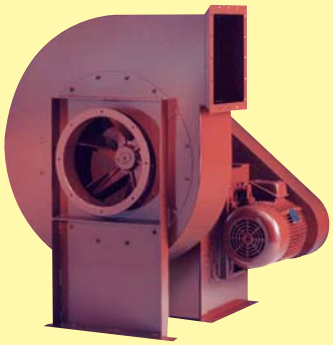
The New York Blower Company offers thousands of different types, models, and sizes of air-moving equipment. Contact your nyb representative for assistance in identifying the best fan for your application.

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.

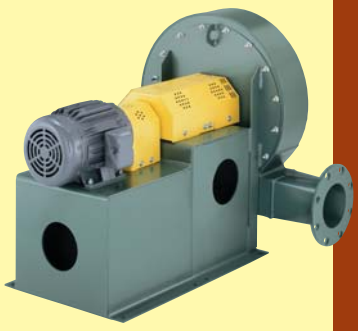
FIBERGLASS REINFORCED PLASTIC [FRP]

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



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.

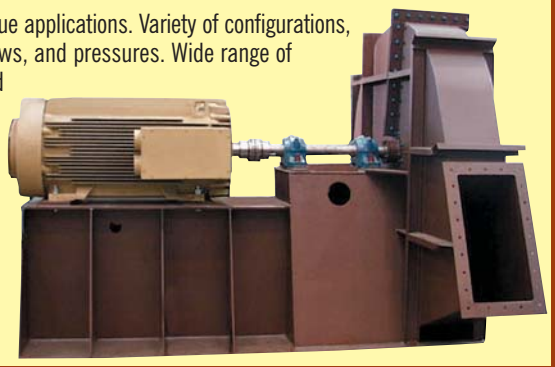


AIR-HANDLING [CENTRIFUGAL]

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

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

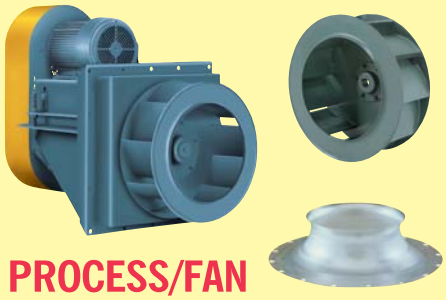
ROOF VENTILATORS

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

nyb

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.