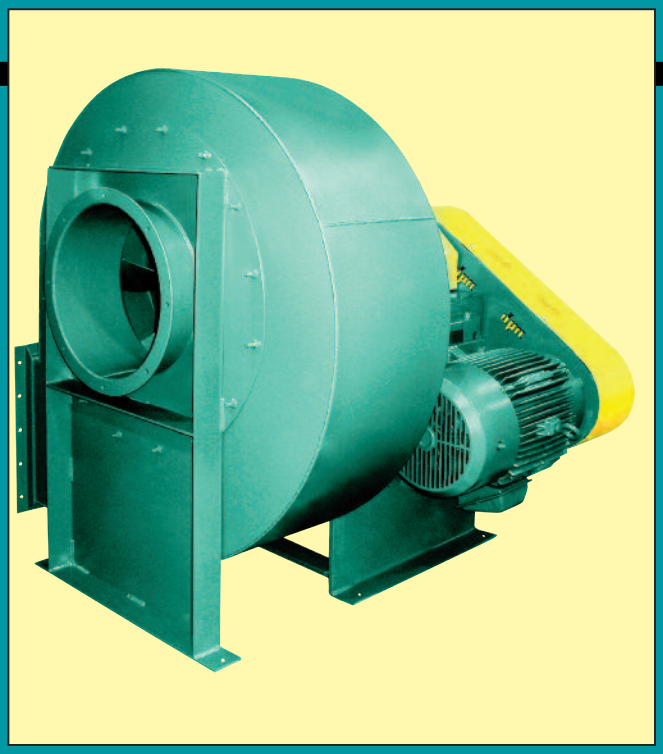
BULLETIN 251
JUNE, 2014

SERIES 20 AND SERIES 30 GI FANS

WITH RUGGED RADIAL-BLADE WHEELS



- Capacities to 77,000 CFM
- Static pressures to 22"WG
- Temperatures to 1000°F.

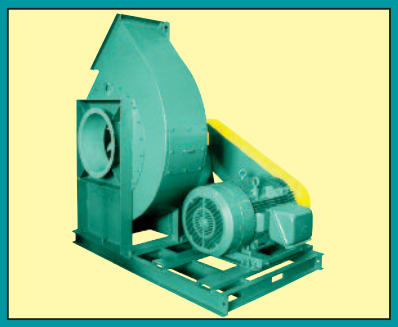
- Capacities to 95,000 CFM
- Static pressures to 32"WG
- Temperatures to 1000°F.

COMPACT GI FANS

- Capacities to 2,200 CFM
- Static pressures to 14"WG

SERIES 45 GI FANS

- Capacities to 100,000 CFM
- Static pressures to 46"WG



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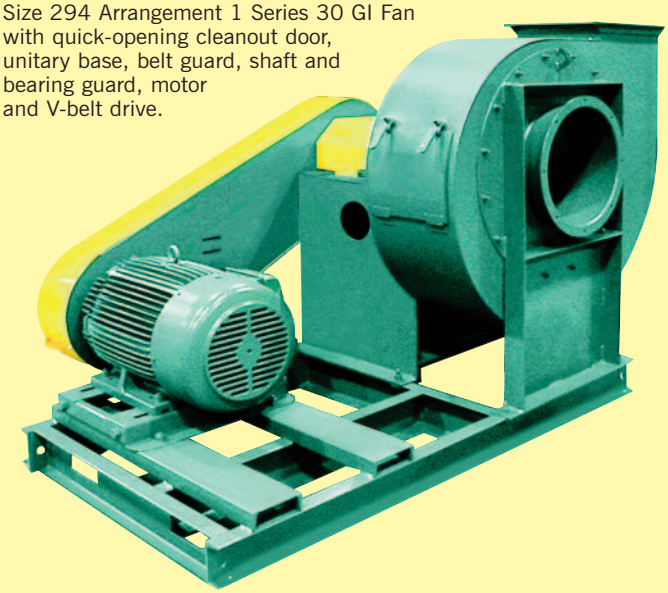
Size 294 Arrangement 1 Series 30 GI Fan with quick-opening cleanout door, unitary base, belt guard, shaft and bearing guard, motor and V-belt drive.



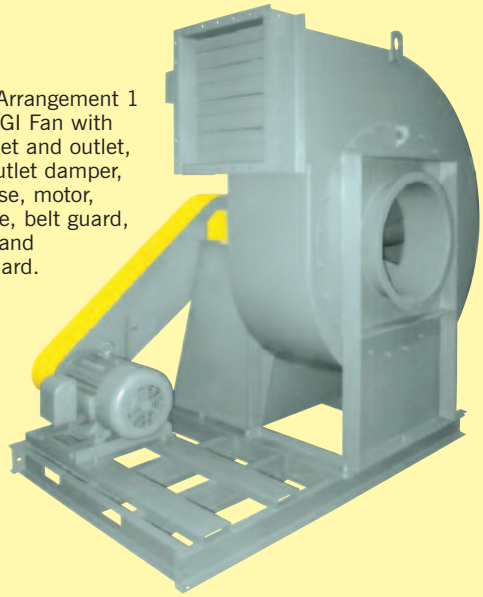
INDUSTRIAL AIR-MOVING APPLICATIONS

- Dust collection
- Pneumatic conveying
- Moisture blow-off
- Oven and dryer exhaust
- Combustion air
- Heat recovery
- Incinerators
- Scrubber exhaust

TYPICAL USER INDUSTRIES

- Chemical industry
- Pulp and paper
- Forest products
- Petrochemical
- Food processing
- Pharmaceutical
- Primary metals
- Printing

Size 504 Arrangement 1 Series 20 GI Fan with flanged inlet and outlet, external outlet damper, unitary base, motor, V-belt drive, belt guard, and shaft and bearing guard.



AMCA SEAL

The New York Blower Company certifies that the Series 20 GI Fans shown herein are licensed to bear the AMCA Seal. Series 30 Fans are not AMCA Certified. 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.

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SERIES 20/30 GI FANS

...centrifugal fans designed for industrial process air and material-handling applications

This bulletin covers the Series 20 and Series 30 GI Fans, two of four **nyb** radial-blade fan lines which cover a wide range of performance and application requirements. The design parameters and standard features of Series 20 and Series 30 GI Fans are listed below.

- 14″ through 85″ wheel diameters
- 9″ through 49″ inlet diameters
- Up to 22″ SP, 77,000 CFM for Series 20
- Up to 32″ SP, 95,000 CFM for Series 30
- Temperatures to 1000°F.

STANDARD FEATURES

Welded construction–provides rigidity for rugged industrial applications. In smaller sizes, welded housings and bases are bolted together so that housings can be unbolted and rotated to other discharge positions in the field.

Rotatable and reversible–Series 20 GI Fans with LS wheels, Sizes 144 through 364, and Series 30 GI Fans with LS wheels, Sizes 194 through 294, can be rotated and reversed in the field to obtain clockwise or counterclockwise rotation and any of the available discharge positions...Series 20 GI Fans with DH wheels, Sizes 194 through 364, and Series 30 GI Fans with DH, BP, or RD wheels, Sizes 144 through 294, can be rotate to various discharge positions but cannot be reversed to obtain opposite wheel rotation in the field.

Lifting eyes–on all sizes for ease of handling.

Flanged inlets and flanged outlets–with holes on all fans...see page 23 for standard hole locations. Series 20 fans come standard with slip inlets and outlets (drilled flanges are optional). Series 30 fans come standard with drilled flanged inlets and outlets...slip connection available as an option.

Bearings–ball or spherical roller bearings selected for extended service life over full catalog range [See pages 19 and 20 for size and type].

Shafting–turned, ground, and polished shafting is straightened to close tolerance to minimize "run out" and ensure smooth operation.

Precision balancing–Series 20 and Series 30 GI Fan wheels are dynamically balanced before final assembly. After assembly, all fans are test-run at as-ordered operating speed.

Choice of Wheel Designs

LS WHEEL

RIM WHEEL

LS wheel–Sizes 144 through 854 for Series 20 fans, Sizes 194 through 364 for Series 30 fans.

RIM wheel–Sizes 404 through 854 for Series 30 fans.

Flat radial-blade design best for material-conveying applications with airstreams containing coarse material or heavy dust and particulate matter. As with the DH wheel, the LS and RIM wheels provide stable airflow performance over the entire pressure range, from wide-open to completely closed-off.

DH WHEEL

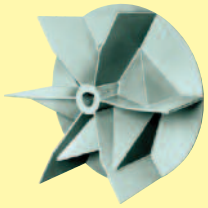
Available in Sizes 194 through 854.

Unique, high-efficiency [up to 74% ME] radial wheel utilizes curved blades and a tapered frontplate to minimize turbulence and control flow through the wheel. Can be used for airstreams with moderate dust loads that do not contain large particles or wet, sticky materials. Performance is stable from wide-open to completely closed-off.

AH/AM WHEEL

Available in sizes 144 through 364 for Series 20 fans, Sizes 194 through 364 for Series 30.

High efficiency shrouded wheels. AH is idealy suited for light to moderate dust loads. AM can accommodate heavier loads. Performance is stable from wide-open to completely closed off.



BP/RD WHEEL

BP wheel–available for Series 30 fans in Sizes 144 through 854. Backplate wheel designed for material-handling applications involving paper or plastic scrap and trim, granular material, and low-density bulk materials. Support gussets used on Sizes 454 through 854. For static pressures to 30"WG.

RD wheel–available for Series 30 fans Sizes 174 through 404. Rugged-duty version of BP wheel for high-density bulk material such as wood chips, corrugated paper trim, and metal scrap or trim. Constructed for static pressures to 20"WG.

Arrangements

For applications requiring temperatures from 801°F.-1000°F., stainless steel wheel and alloy shaft are required.

ARRANGEMENT 1

Arrangement 1 fans can be utilized in direct drive or belt drive installations. Fan and motor can be field-mounted or can be mounted on any **nyb**-supplied unitary base. For approximate unitary base dimensions, see Page 22.

Maximum temperatures–standard fan: 300°F., heat fan: 1000°F.

ARRANGEMENT 4

Traditional arrangement utilizing fan pedestal and foot-mounted motor. Seven discharge positions are available to meet requirements. Arrangement 4V available on application.

Maximum temperatures–standard fan: 180°F.

ARRANGEMENT 8

Arrangement 8 fan construction includes driver sub-base integrated with fan bearing pedestal providing a unitary package in which driver is direct-coupled to the fan shaft with a flexible coupling.

Maximum temperatures–standard fan: 300°F., heat fan: 1000°F.

ARRANGEMENT 9, 9E

Packaged arrangement with motor slide base mounted on fan pedestal. Motor can be mounted on the left or right side of fan pedestal. Refer to chart on page 7 for maximum motor size limits.

Maximum temperatures–standard fan: 300°F., heat fan: 600°F.

NOTE: Motors weighing more than 600 pounds require special construction…consult **nyb**.

ARRANGEMENT 9F

Available in sizes 404 through 574 for Series 20 and sizes 334-454 for Series 30 fans. Integral motor platform provides packaged convenience for larger motor horsepowers than standard Arrangement 9. Motor platform can be on the left or right side of fan pedestal.

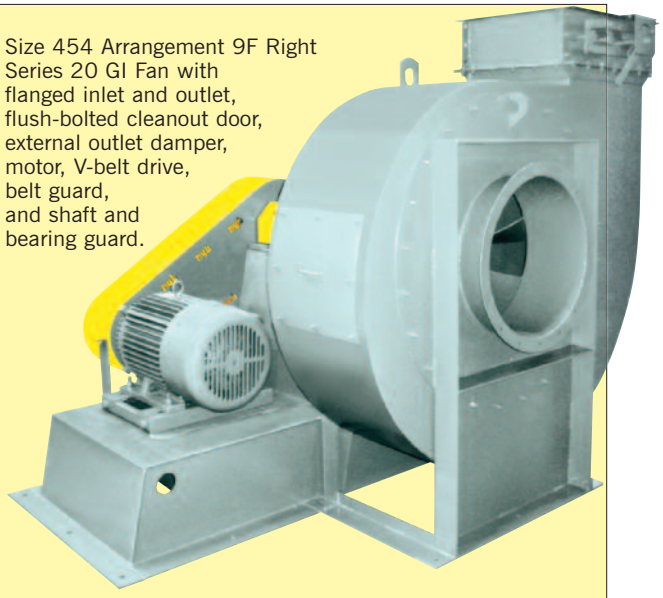
Maximum temperatures–standard fan: 300°F., heat fan: 600°F.

ARRANGEMENT 10

Series 20 Arrangement 10 fans provide a compact package with good access to the motor, drive and bearings for easy installation and maintenance.

Sizes 144 and 174 are available only with LS wheels. Sizes 194 through 364 are available with LS or DH wheels.

Maximum temperatures – standard fan: 200°F., heat fan: 600°F.



Size 454 Arrangement 9F Right Series 20 GI Fan with flanged inlet and outlet, flush-bolted cleanout door, external outlet damper, motor, V-belt drive, belt guard, and shaft and bearing guard.

Size 364 Arrangement 8 Series 30 GI Fan with flush-bolted cleanout door, split housing, external outlet damper, coupling guard, shaft and bearing guard, and motor.

SAFETY EQUIPMENT

Safety accessories are available from **nyb**, but selection of the appropriate devices is the responsibility of the system-designer who is familiar with the particular installation, or application, and can provide for guards for all exposed moving parts as well as protection from access to high-velocity airstreams. Neither **nyb** nor its sales representatives is in a position to make such determination. Users and/or installers should read "Recommended Safety Practices for Air Moving Devices" as published by the Air Movement and Control Association International, Arlington Heights, Illinois.

ACCESSORIES

- **FLANGES**

  Outlet flange angles welded flush with fan outlet and provided with holes... inlet flange bar welded to inlet collar and provided with holes... companion flanges with matching hole patterns also available. Optional on Series 20. Standard on Series 30.

- **DRAIN**

  Threaded tank flange located at the lowest point of scroll.

- **CLEANOUT DOORS**–Three types available.

  Quick-opening–gasketed…after turning cam levers, door swings open on hinges.

  Bolted–gasketed…closely spaced steel studs keep door secured.

  Raised bolted–gasketed…allows space for insulation when desired …door raised 2″ from fan housing.

  Cleanout doors are located at approximately 3 o'clock or 9 o'clock positions on the housing scroll opposite fan discharge…if specific location is required, provide detailed information.

- **INLET BOX**

  Available in Sizes 224 through 854. Minimizes entry losses normally associated with 90° turns at or near the fan inlet…makes such losses predictable. See separate **nyb** Catalog Sheet for details. **Caution:** Use of inlet boxes in material-handling applications is not recommended as inlet box may act as a settling chamber.

  NOTE: Optional flanged inlet required on Series 20 fan.

- **PARALLEL-BLADE INLET BOX DAMPER**

  Spins air in direction of rotation at reduced damper settings, providing horsepower savings greater than with outlet dampers. See separate **nyb** Catalog Sheet for details and **nyb** Engineering Letter for damper selection information. Available in sizes 224 through 854.

- **SHAFT SEAL**

  Ceramic-felt seal elements compressed between metal backing and retaining plates…elements can be easily split for field replacement.

- **OUTLET DAMPERS**

  Outlet dampers are available for use with all GI Fans. Outlet dampers are available with parallel or opposed-blade construction.

  Standard outlet-damper construction includes removable linkage and casing side to allow for replacement of bushings, bearings and vanes. Optional flanged ball bearing or stuffing-box construction allows damper selection to suit the application. Optional flanged outlet required on Series 20 fans.

  See separate **nyb** Catalog Sheet for complete damper details and **nyb** Engineering Letter for damper selection information.

- **EXTERNAL INLET-VANE DAMPER**

  External-vane construction for flange mounting to fan inlet…available for Sizes 294 and larger. The vanes spin the air in direction of rotation, providing greater power savings at reduced loads than with outlet dampers. Recommended for use with DH wheel with relatively clean airstreams. Maximum temperature: 800°F. Optional flanged inlet required on Series 20 fans.

  See separate **nyb** Engineering Letter for damper selection information.

- **UNITARY BASE**

  Structural steel base provides common support for fan, motor and drive components…also available with spring-type or rubber-in-shear isolators…flexible duct connections are necessary for use with isolation bases. (See Page 22 for approximate dimensions.)

- **BELL MOUTH INLET**

  Available in Sizes 194 through 854.

  Catalog ratings are for GI Fans with inlet and outlet ducts…when no inlet duct is used as in a combustion air-supply application, entrance loss must be added to static pressure calculated for the system…for bare inlets, that loss is approximately equal to the fan velocity pressure. Example: 4000 FPM velocity=1-inch static pressure…screened bell mouth inlets render such losses negligible.

MODIFICATIONS

ABRASION-RESISTANT CONSTRUCTION

The following modifications are available to increase service life when fan is subjected to abrasion or erosion from air-borne contaminants.

ASTM A-514 blades–wheel blades fabricated to alloy steel with 321 minimum Brinell hardness. (Available on LS/RIM, BP, and RD wheels).

Checkerplate blades–wheel blades fabricated of four-way floor plate. ([Available on Series 30 LS/RIM, BP and RD wheels).

Scroll liners–removable liners of ASTM A-514 alloy are bolted to housing interior…split housing required. (Available on Series 30 fans).

HANDLING CORROSIVES

Industrial exhaust and process applications are sometimes made more difficult due to the presence of corrosive fumes or particulate. Alternate alloy construction or special paint systems can usually provide some degree of longer life.

GI Fans can be constructed with airstream parts of aluminum, 304, or 316 stainless steel. 316 generally provides the best corrosion resistance of the three types available. However, the effectiveness of any particular alloy can only be judged by the user's experience in his or similar applications.

A separate **nyb** Engineering Letter provides basic information regarding the different types of coatings that are available for fan equipment. That information may assist the user in determining the specific coating that may serve his purposes. However, **nyb** cannot guarantee the suitability of a coating for a particular application. **nyb** can only warrant that the surface preparation will be in accordance with the appropriate Steel Structures Painting Council Standard Practice and that the coatings will be applied according to the coating manufacturer's instructions.

SPARK-RESISTANT CONSTRUCTION [SRC]

There is no method of construction that can guarantee against the potential of producing sparks in fans. We can only use spark-resistant materials and manufacturing techniques that tend to minimize the potential of two or more components making contact which may produce sparks. Refer to **nyb** Engineering Letter for additional information and limitations of SRC. The following types of construction are available:

AMCA A [AIRSTREAM] SRC

To include all airstream parts constructed of a spark-resistant alloy…maximum temperature: 200°F.

AMCA B [WHEEL] SRC

To include the fan wheel constructed of a spark-resistant alloy and a buffer plate around the housing shaft-hole opening…maximum temperature: 200°F.

AMCA C [BUFFER] SRC

To include buffer rings adjacent to the wheel front and back, and a buffer plate around the housing shaft-hole opening…maximum temperature: 800°F. (with heat fan construction).

ALL TYPES SRC

Fan must be constructed so that no bearings, drive components, or electrical apparatus are located in the airstream. User must electrically ground all fan and system components. Refer to Engineering Letter 15 for the full meaning and limits of spark-resistant construction.

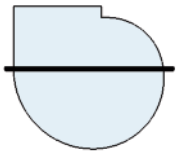
Note: SRC not available on Series 30 GI Fans with BP or RD wheels.

SPLIT-HOUSING CONSTRUCTION

Sizes 404 and larger for Series 20, and Sizes 334 and larger for Series 30 are available with split housings…bars are welded to housing to permit bolting sections together. Inlet and outlet connections do not have to be removed except as noted.

TYPE A

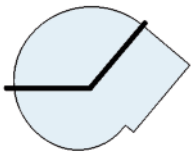
Bottom Horizontal
Up Blast (shown)
Down Blast



Horizontal split allows removal of top section without disturbing inlet connection…outlet connection must be broken on Up Blast fans only.

TYPE B

Top Horizontal
Top Angular Down (shown)
Bottom Angular Up
Top Angular Up



Split allows removal of pie-shaped section without disturbing inlet or outlet connections.

HEAT-FAN CONSTRUCTION

Successful operation of fans at elevated temperatures requires consideration of two main factors.

1. Effect of temperature on wheel maximum safe speeds [see page 7].
2. Effect of air density on aerodynamic performance [see page 6].

Heat fan modifications include shaft coolers and shaft-cooler guards on all arrangements and motor heat shields for Arrangements 9, 9E, 9F, and 10.

Aluminum shaft coolers are designed to move ambient air over the inboard bearing and dissipate heat transferred through the shaft.

Arrangements 1 and 8 GI Fans can be modified for 801°F.-1000°F. operation. In this temperature range, stainless steel wheel and shafting are required.

950X/960X alloy wheels are also available to maintain standard safe speed limits at 500°F.-800°F. temperatures when required.

Note: When temperature exceeds 300°F., high-temperature paint is furnished.

Selection of Series 20 and 30 GI Fans

The selection of a General Industrial Fan involves consideration of a number of factors. Initially, the type of wheel must be selected. For airstreams with moderate dust loads, the AH and DH wheel are often chosen because of their higher operating efficiency. The AM/LS/RIM wheel are more suited for airstreams containing material and particulate, but it is not as efficient as the DH wheel. If the airstream contains stringy material such as paper trim, a BP or RD wheel should be chosen.

Once a wheel type has been determined, a fan size must be selected. For any given performance requirement [CFM and static pressure], two, three or more fan sizes may be capable of that duty. As with the choice of wheel types, several factors can influence what fan size is chosen. In a material-conveying application, a minimum conveying velocity may be required and the fan size should be selected to give the required velocity. For more details on material handling, refer to **nyb** Engineering Letter on pneumatic conveying. There may be some size constraints and the smallest size fan may be selected. Consider an application requiring 13,920 CFM at 26″SP at 70°F. at sea level. The following fans could be chosen:

364 DH –1968 RPM, 82.9 BHP, 5824 OV
364 LS –1981 RPM, 97.6 BHP, 5824 OV

404 DH –1704 RPM, 81.2 BHP, 4800 OV
404 RIM–1726 RPM, 88.7 BHP, 4800 OV

454 DH –1483 RPM, 83.6 BHP, 3772 OV
454 RIM–1501 RPM, 89.6 BHP, 3772 OV

Comparing the BHP requirements of the DH and the LS/RIM designs illustrates the energy savings that the DH wheel provides. If the DH design is suitable for the application and the criteria is to choose the most efficient fan, the Size 404 DH would be chosen. If the application requires a minimum outlet velocity [OV] of 5000 FPM for conveying material, the Size 364 LS would be chosen. The requirements and limitations of the specific installation will determine the best choice.

If sound is a factor, generally the most efficient fan will be the quietest selection. Full sound power ratings are available on all GI fans in **nyb's** Fan Selection Program [Fan-to-Size].

CORRECTIONS FOR AIRSTREAMS OTHER THAN STANDARD DENSITY [.075 lb./cu. ft.]

The capacity tables on pages 8 through 18 gives fan performance based on air at 70°F. at sea level at a density of .075 lb./cu. ft. If the airstream density is other than .075 lb./cu. ft., corrections must be made to static pressure and brake horsepower requirements [see page 8].

SP AND BHP CORRECTION FACTORS FOR TEMPERATURE [°F.]

Temp. °F.	Factor	Temp. °F.	Factor
–50°	.77	200°	1.25
–25°	.82	250°	1.34
0°	.87	300°	1.43
20°	.91	350°	1.53
40°	.94	400°	1.62
60°	.98	450°	1.72
70°	1.00	500°	1.81
80°	1.02	550°	1.91
100°	1.06	600°	2.00
120°	1.09	700°	2.19
140°	1.13	800°	2.38
160°	1.17	900°	2.56
180°	1.21	1000°	2.76

NOTE: If correction factor for both temperature and altitude is required, multiply factors from Charts V and VI together: 600°F. and 3000′ – 2.00 x 1.12=2.24 [combined factor]

SP AND BHP CORRECTION FACTORS FOR ALTITUDE [ft. above sea level]

Temp. °F.	Factor
0	1.00
500	1.02
1000	1.04
1500	1.06
2000	1.08
2500	1.10
3000	1.12
3500	1.14
4000	1.16
4500	1.18
5000	1.20
5500	1.22
6000	1.25
6500	1.27
7000	1.30
7500	1.32
8000	1.35
9000	1.40
10000	1.45

CORRECTION FACTORS FOR RAREFICATION [NEGATIVE INLET PRESSURE]

SP [in W.G.]	Factor
5	1.01
10	1.03
15	1.04
20	1.05
25	1.07
30	1.08
35	1.09
40	1.11

Temperature Correction Factors for Wheel Maximum Safe Speed

Factors to be Applied to Maximum Safe Speeds Shown in Capacity Tables

TEMPERATURE CORRECTION FACTORS FOR MAXIMUM SAFE SPEEDS FOR ALL SERIES 20 & 30 LS/RIM AND DH WHEELS, AND SERIES 30 BP AND RD WHEELS SIZES 144-404

Temp. [°F]	Materials of construction					
	Mild steel	950X/ 960X*	Aluminum	304 SST	316 SST	347 SST
70°	1.0	1.0	1.0	1.0	0.95	1.00
200°	1.0	1.0	0.97	0.89	0.92	1.00
300°	1.0	1.0	–	0.82	0.88	0.99
400°	1.0	1.0	–	0.78	0.86	0.97
500°	0.97	1.0	–	0.75	0.83	0.97
600°	0.94	1.0	–	0.73	0.80	0.97
700°	0.91	1.0	–	0.71	0.78	0.96
800°	0.82	1.0	–	0.70	0.77	0.96
900°	–	–	–	0.68	0.76	0.95
1000°	–	–	–	–	0.75	0.94

*Material type at **nyb** option. Not available for sizes 144 - 294 LS wheels. BP, RD, and DH wheels are constructed of a combination of mild steel and alloy components.

TEMPERATURE CORRECTION FACTORS FOR MAXIMUM SAFE SPEEDS FOR SERIES 20 AND 30 AH WHEELS SIZES 144-364

Temp. [°F]	Materials of construction				
	950X/ 960X*	Aluminum [AM Only]	304 SST	316 SST	347 SST
70°	1.0	1.0	0.62	0.64	0.63
200°	0.97	1.0	0.59	0.61	0.61
300°	0.94	–	0.55	0.58	0.59
400°	0.91	–	0.53	0.56	0.57
500°	0.88	–	0.50	0.54	0.56
600°	0.85	–	0.49	0.53	0.55
700°	0.81	–	0.48	0.52	0.54
800°	0.77	–	0.47	0.51	0.53
900°	–	–	0.46	0.50	0.52
1000°	–	–	–	0.49	0.52

SERIES 20 MOTOR LIMITATIONS - ARR. 9 AND 9E

MAXIMUM MOTOR SIZE LIMITS

Size	Maximum motor case length* [C-NW]				Max. BL†
	Arrangement 9		Arrangement 9E		
	300°F.	600°F.	300°F.	600°F.	
144	10¼	8¾	15¾	14¼	11½
174	13¼	11¾	18	16½	12⅞
194	16	14½	18	16½	16⅛
224	17	15½	22	20½	20⅜
264	20	18½	25	23½	22¼
294	22½	21	25	23½	26⅝
334	24	22½	27	25½	27⅞
364	27	25½	—	—	31⅛
404	24	22½	—	—	34⅞
454	26	24½	—	—	39⅜
504	28½	27	—	—	44⅞
574	29¼	27¾	—	—	51⅞
644	32	30½	—	—	38
714	35	33½	—	—	44
784	39	37½	—	—	46
854	43	41½	—	—	51

ARRANGEMENT 9F

AVAILABLE MOTOR SIZE LIMITS

Size	Maximum motor case length* [C-NW]		Minimum motor frame size
	300°F.	600°F.	
404	27¼	25¾	286T
454	28½	27	324T
504	30¼	28¾	364T
574	30¼	28¾	364T

TEMPERATURE CORRECTION FACTORS FOR MAXIMUM SAFE SPEEDS FOR SERIES 30 BP WHEELS SIZES 454-854 AND SERIES 20 AND 30 AM WHEELS SIZES 144-364

Temp. [°F]	Materials of construction				
	950X/ 960X*	Aluminum [AM Only]	304 SST	316 SST	347 SST
70°	1.0	1.0	0.74	0.76	0.75
200°	0.96	1.0	0.70	0.72	0.72
300°	0.94	–	0.66	0.69	0.70
400°	0.93	–	0.63	0.67	0.68
500°	0.92	–	0.60	0.64	0.67
600°	0.92	–	0.58	0.63	0.66
700°	0.86	–	0.57	0.62	0.64
800°	0.80	–	0.56	0.61	0.63
900°	–	–	0.55	0.60	0.62
1000°	–	–	–	0.59	0.61

ARRANGEMENT 10

MAXIMUM MOTOR SIZE LIMITS

Size	Maximum motor frame		Maximum motor case length* [C-NW]
	Open	TE	
144	184T	184T	14½
174	215T	215T	16⅝
194	215T	215T	16⅝
224	256T	254T	18⅝
264	256T	254T	18⅝
294	284T	256T	19½
334	284T	284T	22½
364	284T	284T	22½

SERIES 30 MOTOR LIMITATIONS ARRANGEMENT 9

MAXIMUM MOTOR SIZE LIMITS

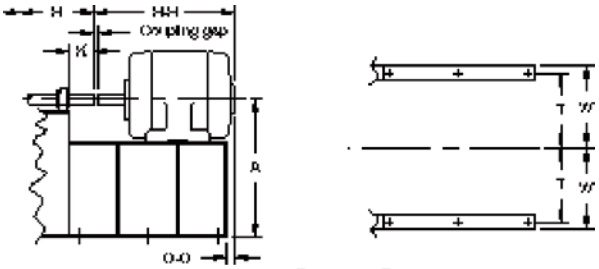
Size	Maximum motor case length* [C-NW]		Maximum BL†
	300°F.	600°F.	
144	10¼	8¾	11½
174	13¼	11¾	12⅞
194	21½	20	16½
224	24	22½	20¾
264	26	24½	22⅛
294	26	24½	26½
334	21½	20	26⅜
364	21	19½	30⅝
404	23½	21½	33⅞
454	25½	23½	38⅞
504	28	26½	—
574	28¾	27¼	—
644	31½	30	—
714	34½	33	—
784	38½	37	—
854	42½	41	—

ARRANGEMENT 9F

AVAILABLE MOTOR SIZE LIMITS

Size	Maximum motor case length* [C-NW]		Minimum motor frame size
	300°F.	600°F.	
334	28½	27	254T
364	28¼	26¾	254T
404	30¼	28¾	286T
454	30¼	28¾	324T

Direct-Drive Arrangements



ARRANGEMENT 8 MOTOR PEDESTAL DIMENSIONS

These approximate dimensions can be used to estimate the overall size of Arrangement 8 fans. Add the appropriate dimensions from the right to the Arrangement 1 fan dimensions on page 21 or 22.

Note: Coupling gap is based on the FALK STEELFLEX coupling sizes shown. As the gap will vary with other coupling sizes or types, so will the Arrangement 8 motor pedestal dimensions.

DIMENSIONS [inches]

Motor frame size	Coupling		O-O*		H-H*			
					Open		TE	
	Size	Gap	Min	Max	Min	Max	Min	Max
143 -145T	30T	1/8	3/4	3 1/8	10 7/8	12 1/2	11 9/8	13 1/8
182 -184T	40T	1/8	3/4	3 5/8	12 7/8	14 3/4	14 5/8	16 3/4
213 -215T	50T	1/8	1 3/8	5 1/2	16 7/8	17 3/8	17 1/8	20
254 -256T	60T	1/8	1	5 7/8	20 5/8	22 1/2	22 1/2	25 1/2
284 -286T	70T	1/8	1 1/2	6 3/8	23 1/2	25 1/8	25 3/8	28 3/8
284TS-286TS	70T	1/8	1 1/2	6 1/2	22 1/8	23 3/4	24 1/8	27 1/8
324 -326T	80T	1/8	1	6 3/4	26 1/8	27 3/4	28 1/4	31 7/8
324TS-326TS	80T	1/8	1	6 3/4	24 5/8	26 1/8	26 3/4	30 3/8
364 -365T	90T	1/8	1 1/8	7	28 1/4	29 7/8	32 1/2	34 1/8
364TS-365TS	90T	1/8	1 5/8	7	26 5/8	27 5/8	30 3/8	32
404 -405T	90T	1/8	2 3/8	8 3/4	32 5/8	34 1/4	37 3/8	39
404TS-405TS	90T	1/8	2 3/8	8 3/4	29 5/8	31 1/4	34 3/8	36
444 -445T	100T	3/16	1 5/8	9 3/8	37 3/8	40	42	45 1/8
444TS-445TS	100T	3/16	2 1/8	9 3/8	34 1/8	36 1/4	38 3/8	41 3/8

*H-H and O-O based on several major motor manufacturers—consult mfr for exact dimensions. Dimensions not to be used for construction unless certified.

Using Capacity Tables

For a given fan size, wheel design, CFM and static pressure, capacity tables can be used to obtain outlet velocity, wheel 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.

1. If conditions other than standard density [.075 lb./cu. ft.] are involved, correct static pressure for air density. Refer to Page 6.
2. Select size, wheel type, RPM, and BHP of fan from capacity table.
3. Check maximum safe speed of fan at operating temperatures as shown on Page 7.
4. Determine actual performance at operating conditions by correcting static pressure and brake horsepower.

EXAMPLE: A fan is required for 7800 CFM at 5000 OV at 12" SP at 600°F. for light dust handling.

1. Page 6 gives a 2.00 factor for 600°F. Corrected static pressure is 12"SP x 2.00=24"SP at 70°F. Select fan from capacity tables for 7800 CFM at 24"SP.
2. A Size 294 with DH wheel is selected for 7800 CFM at 24"SP at 2285 RPM and 42.9 brake horsepower.
3. On Page 7, the maximum safe speed of a Size 294 Series 30 GI Fan at 600°F. is 2453 RPM [2610 x .94]. Fan is satisfactory for operation at 600°F.
4. Actual performance: 7800 CFM at 12"SP [24" ÷ 2.00] at 2285 RPM at 21.5 BHP [42.9 ÷ 2] at 600°F.

Series 20 & 30 LS & RIM Wheels

Series 30 performance shaded in blue

144 LS

Max. safe speeds
Ser. 20 LS=4605 RPM

CFM	OV	2"SP		4"SP		6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		22"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
500	1166	1419	0.28	1937	0.58	2347	0.93	2693	1.31	2996	1.72	3279	2.17	3547	2.66	3792	3.17	4012	3.68	4240	4.26	4439	4.82
750	1748	1533	0.47	2029	0.86	2413	1.27	2755	1.73	3055	2.21	3329	2.73	3578	3.26	3812	3.82	4038	4.42	4249	5.03	4458	5.69
1000	2331	1664	0.71	2140	1.22	2519	1.73	2839	2.26	3128	2.82	3389	3.39	3639	4.01	3874	4.65	4098	5.33	4299	5.99	4503	6.71
1250	2914	1808	1.03	2264	1.67	2632	2.3	2943	2.92	3223	3.57	3487	4.25	3723	4.92	3960	5.67	4159	6.35	4379	7.16	4566	7.90
1500	3497	1964	1.44	2406	2.23	2759	2.98	3065	3.73	3337	4.47	3592	5.24	3826	6.02	4058	6.85	4260	7.64	4462	8.48		
1750	4079	2130	1.94	2548	2.88	2892	3.77	3196	4.66	3464	5.53	3709	6.39	3949	7.32	4163	8.20	4367	9.10	4557	10.0		
2000	4662	2305	2.57	2702	3.65	3037	4.70	3334	5.74	3591	6.72	3838	7.73	4062	8.72	4273	9.71	4479	10.7				
2250	5245	2487	3.33	2863	4.56	3180	5.74	3472	6.93	3729	8.07	3969	9.21	4188	10.3	4399	11.4						
2500	5828	2681	4.28	3028	5.60	3336	6.94	3618	8.28	3874	9.60	4100	10.8	4325	12.1	4535	13.4						

174 LS

Max. safe speeds
Ser. 20 LS=3930 RPM

CFM	OV	2"SP		4"SP		6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		22"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	1580	1227	0.59	1641	1.13	1964	1.70	2245	2.34	2501	3.04	2724	3.76	2928	4.51	3128	5.33	3317	6.19	3486	7.03	3660	7.98
1325	2093	1312	0.87	1715	1.55	2031	2.24	2306	2.99	2541	3.74	2766	4.57	2974	5.44	3163	6.31	3346	7.25	3519	8.21	3693	9.26
1650	2607	1409	1.22	1793	2.05	2108	2.90	2367	3.74	2611	4.66	2826	5.57	3021	6.50	3213	7.50	3395	8.53	3558	9.54	3723	10.6
1975	3120	1515	1.64	1885	2.66	2183	3.65	2444	4.65	2675	5.66	2897	6.74	3093	7.80	3281	8.91	3453	10.0	3622	11.2	3783	12.4
2300	3633	1631	2.16	1984	3.37	2274	4.53	2532	5.71	2757	6.86	2963	8.01	3160	9.22	3337	10.4	3518	11.7	3681	12.9	3839	14.2
2625	4147	1754	2.79	2089	4.18	2371	5.54	2614	6.84	2843	8.19	3049	9.52	3236	10.8	3420	12.2	3595	13.6	3755	15.0	3912	16.4
2950	4660	1881	3.55	2201	5.13	2467	6.64	2713	8.18	2932	9.67	3129	11.1	3319	12.6	3497	14.1	3667	15.6	3824	17.1		
3275	5174	2011	4.44	2317	6.20	2576	7.91	2813	9.64	3024	11.3	3223	13.0	3408	14.6	3581	16.2	3748	17.9	3903	19.5		
3600	5687	2147	5.50	2435	7.42	2690	9.35	2915	11.2	3120	13.1	3313	14.9	3502	16.8	3672	18.6	3836	20.4				

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

Series 20 & 30 LS & RIM Wheels

Series 30 performance shaded in blue

194 LS

Max. safe speeds
Ser. 20 LS=3425 RPM
Ser. 30 LS=3985 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400	2121	1467	1.6	2005	3.24	2437	5.12	2789	7.09	3120	9.34	3260	10.4	3412	11.7	3541	12.8	3680	14.1	3808	15.4	3933	16.7
1675	2538	1509	1.97	2038	3.83	2448	5.82	2808	8.02	3138	10.5	3279	11.6	3418	12.9	3555	14.2	3685	15.5	3826	17.0	3939	18.3
1950	2955	1557	2.38	2070	4.45	2479	6.67	2832	9.04	3150	11.6	3302	13.0	3445	14.3	3574	15.7	3699	17.0	3832	18.5	3959	20.1
2225	3371	1615	2.88	2111	5.16	2510	7.57	2858	10.1	3167	12.8	3318	14.3	3463	15.8	3597	17.3	3717	18.6	3845	20.2	3969	21.8
2500	3788	1672	3.42	2157	5.95	2553	8.61	2887	11.3	3205	14.3	3339	15.7	3485	17.3	3612	18.8	3750	20.5	3863	22.0	3983	23.7
2775	4205	1739	4.05	2209	6.82	2595	9.70	2930	12.7	3229	15.7	3379	17.4	3509	19.0	3632	20.5	3764	22.3	3884	23.9		
3050	4621	1809	4.78	2258	7.74	2636	10.8	2972	14.1	3268	17.4	3404	19.0	3537	20.7	3663	22.4	3799	24.4	3918	26.1		
3325	5038	1883	5.59	2318	8.80	2686	12.1	3013	15.6	3308	19.1	3445	20.9	3580	22.8	3710	24.7	3835	26.5	3951	28.4		
3600	5455	1962	6.52	2381	9.96	2741	13.5	3064	17.2	3347	20.9	3485	22.8	3609	24.7	3743	26.7	3856	28.6	3977	30.6		

224 LS

Max. safe speeds
Ser. 20 LS=2900 RPM
Ser. 30 LS=3440 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	1720	1214	1.69	1680	3.51	2039	5.57	2352	7.93	2625	10.5	2742	11.7	2871	13.2	2991	14.7	3098	16.1	3202	17.6		
2050	2204	1243	2.19	1703	4.33	2066	6.71	2372	9.28	2640	12.00	2757	13.4	2884	15.00	2992	16.4	3108	18.00	3215	19.6	3310	21.2
2500	2688	1283	2.78	1727	5.25	2088	7.95	2388	10.8	2661	13.8	2778	15.3	2905	17.00	3018	18.6	3126	20.3	3227	21.9	3335	23.8
2950	3172	1330	3.46	1759	6.29	2112	9.32	2416	12.5	2677	15.7	2802	17.4	2919	19.2	3034	21.00	3136	22.6	3245	24.5	3348	26.4
3400	3656	1389	4.26	1797	7.45	2138	10.8	2438	14.3	2698	17.8	2821	19.7	2938	21.6	3056	23.5	3163	25.5	3267	27.4	3379	29.6
3850	4140	1456	5.21	1845	8.77	2174	12.5	2464	16.3	2734	20.3	2857	22.4	2961	24.2	3080	26.4	3192	28.5	3292	30.6	3400	32.9
4300	4624	1528	6.30	1896	10.2	2217	14.3	2506	18.6	2759	22.8	2881	25.00	3000	27.3	3099	29.3	3214	31.7	3320	34.00	3424	36.4
4750	5108	1606	7.58	1954	11.8	2258	16.2	2538	20.8	2787	25.4	2907	27.8	3026	30.3	3142	32.8	3239	35.00	3341	37.4		
5200	5591	1689	9.09	2019	13.6	2312	18.4	2579	23.3	2825	28.3	2946	30.9	3055	33.4	3172	36.2	3272	38.7	3379	41.4		

264 LS

Max. safe speeds
Ser. 20 LS=2510 RPM
Ser. 30 LS=2980 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	1452	1039	1.92	1448	4.17	1762	6.76	2031	9.72	2264	12.9	2379	14.7	2485	16.5	2580	18.3	2682	20.3	2779	22.3		
2500	2016	1065	2.64	1466	5.32	1780	8.33	2040	11.5	2276	15.1	2389	17.1	2485	18.8	2589	20.9	2686	22.9	2780	25.1	2863	27.1
3200	2581	1103	3.53	1494	6.74	1798	10.1	2061	13.8	2295	17.8	2402	19.8	2509	22.0	2602	24.0	2701	26.3	2795	28.6	2880	30.8
3900	3145	1150	4.56	1524	8.34	1825	12.3	2084	16.4	2318	20.8	2430	23.2	2527	25.4	2631	27.9	2722	30.2	2809	32.5	2902	35.1
4600	3710	1207	5.79	1564	10.2	1860	14.7	2110	19.3	2344	24.2	2452	26.8	2556	29.4	2652	31.9	2738	34.3	2830	37.0	2928	40.0
5300	4274	1277	7.31	1606	12.2	1893	17.3	2146	22.6	2371	28.0	2477	30.7	2580	33.6	2677	36.4	2766	39.1	2862	42.1	2946	45.0
6000	4839	1352	9.12	1665	14.5	1933	20.1	2182	26.1	2400	31.9	2504	34.9	2606	38.1	2704	41.2	2796	44.3	2880	47.2	2969	50.5
6700	5403	1434	11.3	1723	17.1	1983	23.3	2225	29.9	2439	36.4	2543	39.7	2635	42.8	2733	46.3	2827	49.8	2915	53.2		
7400	5968	1520	13.9	1795	20.2	2042	27.0	2266	33.8	2478	41.0	2581	44.7	2674	48.2	2764	51.7	2859	55.6	2950	59.4		

294 LS

Max. safe speeds
Ser. 20 LS=2195 RPM
Ser. 30 LS=2610 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	1509	911	2.53	1274	5.49	1555	8.91	1787	12.6	2002	16.9	2101	19.2	2185	21.3	2275	23.7	2363	26.3	2448	28.9	2526	31.4
3300	2075	933	3.42	1281	6.91	1562	10.9	1796	15.2	2002	19.7	2100	22.2	2196	24.7	2287	27.4	2372	30.0	2448	32.5	2528	35.3
4200	2642	963	4.46	1307	8.70	1575	13.2	1810	18.1	2016	23.2	2110	25.8	2203	28.6	2294	31.5	2371	34.1	2453	37.0	2540	40.3
5100	3208	1008	5.76	1330	10.6	1596	15.8	1828	21.3	2027	26.9	2125	29.9	2209	32.7	2299	35.9	2389	39.2	2465	42.2	2547	45.6
6000	3774	1057	7.28	1367	12.8	1620	18.6	1847	24.8	2042	30.9	2137	34.2	2227	37.5	2311	40.8	2401	44.5	2482	48.0	2560	51.5
6900	4340	1115	9.14	1410	15.4	1653	21.8	1868	28.4	2065	35.4	2158	39.0	2248	42.7	2333	46.4	2411	49.9	2495	53.8	2569	57.5
7800	4906	1180	11.4	1458	18.2	1691	25.3	1905	32.8	2098	40.5	2190	44.5	2270	48.1	2357	52.3	2438	56.3	2511	60.1	2590	64.4
8700	5472	1249	14.1	1509	21.4	1737	29.2	1940	37.3	2130	45.7	2213	49.7	2304	54.3	2381	58.4	2464	62.9	2542	67.4		
9600	6038	1321	17.2	1569	25.2	1785	33.6	1986	42.5	2161	51.2	2253	56.0	2336	60.7	2416	65.3	2492	69.9	2573	74.9		

334 LS

Max. safe speeds
Ser. 20 LS=2035 RPM
Ser. 30 LS=2360 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1523	829	3.21	1151	6.93	1402	11.2	1617	16.1	1805	21.4	1890	24.1	1975	27.1	2051	30.0	2126	32.9	2206	36.3	2273	39.3
4050	2056	855	4.36	1168	8.72	1415	13.6	1625	19.0	1813	24.8	1898	27.9	1982	31.1	2061	34.3	2134	37.5	2213	41.1	2282	44.5
5100	2589	886	5.70	1190	10.8	1430	16.3	1637	22.3	1825	28.8	1908	32.0	1990	35.5	2071	39.1	2148	42.7	2220	46.3	2286	49.8
6150	3122	927	7.35	1218	13.3	1456	19.6	1662	26.3	1840	33.2	1922	36.7	2003	40.5	2085	44.4	2156	48.1	2233	52.3	2296	55.9
7200	3655	972	9.28	1255	16.1	1481	23.1	1681	30.5	1857	38.1	1943	42.2	2025	46.3	2101	50.3	2176	54.6	2249	58.9	2318	63.2
8250	4188	1022	11.6	1291	19.3	1516	27.2	1708	35.3	1889	44.0	1965	48.0	2047	52.5	2125	57.1	2197	61.5	2267	66.0	2341	71.0
9300	4721	1079	14.3	1336	22.9	1554	31.8	1741	40.6	1919	50.2	1996	54.7	2070	59.2	2149	64.3	2224	69.3	2292	74.1		
10350	5254	1139	17.6	1381	26.9	1593	36.7	1778	46.5	1948	56.7	2026	61.7	2101	66.7	2173	71.8	2250	77.5	2322	83.0		
11400	5787	1200	21.3	1433	31.5	1635	42.1	1818	53.0	1983	63.9	2062	69.5	2132	74.6	2206	80.4	2277	86.1	2343	91.6		

364 LS

Max. safe speeds
Ser. 20 LS=1840 RPM
Ser. 30 LS=2135 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3600	1494	748	3.86	1039	8.35	1265	13.6	1455	19.3	1629	25.9	1706	29.2	1785	32.9	1856	36.5	1925	40.2	1991	44.0	2062	48.3
4900	2033	772	5.27	1054	10.5	1276	16.5	1468	23.1	1633	30.0	1711	33.7	1788	37.6	1860	41.5	1927	45.5	1999	49.9	2064	54.2
6200	2573	800	6.92	1076	13.2	1292	19.9	1483	27.3	1649	35.1	1725	39.1	1801	43.3	1866	47.2	1936	51.7	2002	56.1	2073	61.2
7500	3112	836	8.93	1102	16.2	1315	23.9	1502	32.1	1660	40.4	1740	45.0	1816	49.7	1883	54.1	1949	58.7	2019	63.9	2085	69.0
8800	3651	879	11.3	1134	19.7	1341	28.4	1525	37.6	1683	46.8	1757	51.5	1832	56.6	1901	61.7	1963	66.4	2030	71.7	2093	77.0
10100	4191	925	14.2	1169	23.7	1371	33.4	1546	43.3	1705	53.6	1783	59.2	1849	64.1	1920	69.8	1985	75.2	2055	81.3	2117	87.0
11400	4730	976	17.6	1208	28.1	1403	38.8	1573	49.7	1730	61.0	1808	67.2	1875	72.8	1943	78.8	2007	84.5	2069	90.5	2135	97.0
12700	5270	1032	21.6	1251	33.1	1441	45.1	1610	57.3	1760	69.4	1832	75.6	1901	81.9	1967	88.2	2037	95.3	2094	101		
14000	5809	1088	26.2	1296	38.7	1481	51.9	1645	65.1	1796	78.7	1862	85.0	1933	92.2	1993	98.5	2058	106	2118	112		

Performance shown is installation Type B: Free inlet, Ducted outlet. Power rating (BHP) does not include drive losses.
Performance ratings do not include the effects of appurtenances in the airstream.

Series 20 & 30 LS & RIM Wheels

Series 30 performance shaded in blue

404 LS/RIM

Max. safe speeds
Ser. 20 LS=1640 RPM
Ser. 30 RIM=1905 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	1103	669	3.55	942	8.17	1151	13.6	1330	19.9	1487	26.7	1558	30.3	1628	34.1	1702	36.3	1763	39.8	1827	43.8	1891	48.0
4800	1655	681	4.91	947	10.5	1156	16.8	1330	23.7	1487	31.4	1556	35.2	1624	39.3	1686	41.6	1750	45.7	1813	50.0	1881	54.9
6400	2207	702	6.59	961	13.2	1164	20.5	1337	28.4	1491	36.8	1561	41.1	1630	45.7	1685	48.3	1752	53.1	1815	57.9	1870	62.3
8000	2759	731	8.64	979	16.3	1178	24.7	1351	33.7	1502	43.1	1570	47.8	1639	52.9	1691	55.9	1752	60.8	1809	65.5	1870	70.9
9600	3310	765	11.1	1003	19.9	1197	29.4	1360	39.1	1513	49.8	1581	55.0	1636	58.7	1701	64.1	1757	69.2	1818	74.8	1876	80.4
11200	3862	802	13.9	1031	24.1	1217	34.5	1385	45.9	1526	56.9	1598	63.2	1646	66.8	1712	72.9	1772	78.8	1830	84.7	1892	91.4
12800	4414	845	17.4	1063	28.7	1245	40.5	1408	53.0	1547	65.2	1619	72.1	1667	76.2	1729	82.7	1787	88.9	1848	95.8	1902	102
14400	4966	892	21.6	1098	34.0	1275	47.0	1429	60.2	1574	74.4	1639	81.3	1687	86.0	1751	93.3	1807	100	1866	107		
16000	5517	942	26.6	1140	40.2	1311	54.5	1459	68.8	1599	83.9	1652	89.6	1713	97.0	1772	104	1826	111	1884	119		

454 LS/RIM

Max. safe speeds
Ser. 20 LS=1460 RPM
Ser. 30 RIM=1690 RPM

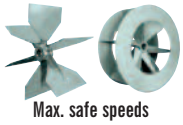
CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5600	1518	602	5.81	837	12.5	1025	20.4	1181	29.0	1317	38.3	1383	43.4	1445	48.6	1497	51.1	1554	56.2	1616	62.1	1667	67.4
7400	2005	616	7.57	846	15.4	1030	24.4	1184	33.9	1322	44.4	1384	49.6	1443	55.0	1495	58.4	1552	64.0	1608	69.8	1656	75.3
9200	2493	634	9.65	857	18.7	1036	28.6	1189	39.3	1326	50.9	1388	56.7	1449	62.8	1498	66.6	1551	72.3	1607	78.8	1659	85.1
11000	2981	659	12.1	875	22.5	1052	33.9	1199	45.5	1332	57.9	1394	64.3	1456	71.2	1497	74.7	1554	81.4	1608	88.2	1658	94.8
12800	3469	688	15.1	894	26.7	1066	39.3	1213	52.3	1344	65.8	1406	73.0	1451	77.4	1511	84.8	1565	91.9	1617	99.1	1667	106
14600	3957	719	18.5	920	31.7	1084	45.3	1229	59.6	1359	74.6	1418	82.0	1462	87.0	1519	94.8	1572	102	1622	110	1677	118
16400	4444	752	22.5	945	37.0	1104	51.9	1249	67.9	1373	83.6	1434	92.0	1481	98.0	1533	106	1588	114	1634	122	1687	131
18200	4932	788	27.2	974	43.1	1131	59.6	1265	76.0	1390	93.4	1449	102	1492	108	1550	118	1600	126	1654	136		
20000	5420	827	32.6	1003	49.7	1155	67.4	1290	85.7	1412	104	1460	112	1516	121	1563	129	1620	140	1665	149		

504 LS/RIM

Max. safe speeds
Ser. 20 LS=1305 RPM
Ser. 30 RIM=1505 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7200	1558	537	7.4	750	16.0	914	25.8	1053	36.6	1179	48.7	1233	54.6	1291	61.5	1338	64.8	1388	71.1	1441	78.4	1486	84.8
9300	2013	550	9.51	756	19.4	916	30.3	1058	42.7	1182	55.8	1237	62.4	1290	69.2	1338	73.5	1389	80.6	1434	87.3	1483	94.8
11400	2468	567	12.0	767	23.3	927	35.7	1062	48.9	1182	62.9	1243	71.0	1292	77.9	1337	82.7	1385	89.9	1437	98.2	1484	106
13500	2922	585	14.8	781	27.7	936	41.3	1070	56.0	1193	71.8	1245	79.3	1302	88.1	1340	92.6	1392	101	1435	109	1481	117
15600	3377	608	18.1	797	32.6	949	47.8	1082	63.8	1199	80.5	1253	89.0	1293	94.4	1349	104	1394	112	1442	121	1487	130
17700	3831	634	21.9	814	37.9	965	54.9	1092	71.9	1213	90.8	1264	99.7	1304	106	1353	115	1402	124	1449	134	1495	144
19800	4286	661	26.4	835	43.9	982	62.4	1107	81.1	1222	101	1275	111	1315	118	1367	128	1415	138	1457	148	1502	158
21900	4740	692	31.7	860	50.8	1001	70.7	1126	91.3	1237	112	1292	124	1332	131	1379	142	1423	152	1469	163		
24000	5195	723	37.6	884	58.2	1022	79.7	1143	102	1251	124	1295	133	1341	143	1391	155	1438	167	1481	178		

574 LS/RIM



Max. safe speeds
Ser. 20 LS=1145 RPM
Ser. 30 RIM=1325 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1669	474	10.2	658	21.7	803	34.8	925	49.2	1034	65.0	1085	73.4	1133	82.1	1175	86.6	1220	95.3	1264	104	1306	113
13000	2170	487	13.3	667	26.8	810	41.9	930	58.0	1036	75.1	1087	84.4	1136	94.0	1171	98.6	1220	109	1261	118	1304	128
16000	2671	505	17.1	678	32.6	816	49.4	936	67.5	1042	86.7	1093	96.9	1138	107	1177	113	1216	122	1258	133	1303	144
19000	3172	526	21.5	692	39.2	827	57.9	945	78.1	1049	98.9	1099	110	1136	117	1179	128	1222	138	1262	149	1305	161
22000	3673	549	26.7	711	46.8	843	67.8	956	89.7	1058	112	1106	124	1141	132	1187	144	1228	155	1271	168	1308	180
25000	4174	576	32.9	730	55.1	860	78.6	969	102	1073	128	1119	140	1151	148	1198	162	1242	175	1280	188	1322	202
28000	4674	604	40.1	752	64.5	875	89.6	986	116	1087	144	1131	157	1166	167	1209	181	1248	194	1289	208		
31000	5175	632	48.2	776	75.1	895	102	1002	131	1099	160	1144	175	1180	186	1224	202	1260	215	1305	232		
34000	5676	665	58.1	802	87.1	919	117	1024	148	1120	180	1154	191	1198	207	1239	223	1278	239	1313	253		

644 LS/RIM

Max. safe speeds
Ser. 20 LS=1025 RPM
Ser. 30 RIM=1185 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	2130	434	16.4	595	33.1	723	51.8	829	71.5	925	93.1	972	105	1011	116	1049	123	1087	134	1128	147	1164	159
19000	2530	446	20.0	603	38.7	729	59.4	833	80.9	930	104	973	116	1015	129	1047	136	1089	149	1126	162	1165	176
22000	2929	460	24.2	614	45.3	736	67.8	840	91.4	934	116	979	130	1020	143	1051	151	1092	165	1126	177	1163	191
25000	3329	476	28.9	623	51.9	743	76.3	847	102	941	130	985	144	1025	157	1055	166	1095	181	1130	195	1167	209
28000	3728	492	34.1	636	59.6	752	85.9	855	114	948	143	990	158	1023	168	1063	184	1099	198	1138	214	1171	229
31000	4128	511	40.3	650	68.0	764	96.6	867	127	957	159	998	174	1028	184	1070	202	1103	216	1142	233	1175	249
34000	4527	531	47.2	665	77.0	778	108	877	141	966	174	1006	190	1038	202	1078	220	1114	237	1149	254	1184	271
37000	4927	552	55.1	683	87.5	790	120	887	155	978	191	1016	208	1048	221	1084	238	1124	258	1160	276		
40000	5326	574	64.2	699	98.2	807	134	900	170	989	209	1020	222	1057	240	1096	260	1133	280	1166	298		

714 LS/RIM

Max. safe speeds
Ser. 20 LS=925 RPM
Ser. 30 RIM=1070 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1957	389	18.4	535	37.7	651	59.5	749	83.1	835	108	876	122	914	136	947	144	981	157	1018	172	1051	186
22500	2446	400	23.5	544	46.1	656	70.3	753	97.0	840	125	881	140	917	154	945	163	985	180	1017	194	1052	210
27000	2935	415	29.5	553	55.3	664	82.8	760	112	845	143	883	159	920	174	952	186	985	201	1021	219	1054	236
31500	3424	433	36.8	566	65.9	673	96.1	769	129	850	162	891	181	918	191	955	208	990	227	1021	243	1057	263
36000	3913	453	45.4	581	77.9	686	112	776	147	860	184	899	203	926	215	961	234	995	253	1029	272	1061	292
40500	4402	475	55.3	596	90.8	698	128	787	166	869	206	906	226	936	241	970	261	1003	282	1036	303	1068	324
45000	4891	497	66.6	614	105	714	147	803	189	883	233	917	253	947	269	980	291	1011	311	1044	334		
49500	5380	521	80.1	635	123	731	167	814	211	895	259	924	276	957	298	992	323	1026	347	1056	370		
54000	5870	547	95.7	654	141	749	189	831	237	907	286	935	305	970	330	1003	355	1034	379	1067	406		

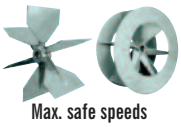
Performance certified is for installation Type D: Ducted inlet, Ducted outlet. Power rating (BHP) does not include transmission losses.
Performance ratings do not include the effects fo appurtenances (accessories).

784 LS/RIM

Max. safe speeds
Ser. 20 LS=845 RPM
Ser. 30 RIM=975 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
22000	1982	354	22.4	487	45.9	594	72.7	682	101	760	132	796	148	831	164	864	175	895	191	928	209	957	226
27500	2477	365	28.8	495	56.2	598	85.9	686	118	765	152	801	170	837	189	864	199	895	217	926	236	954	253
33000	2973	380	36.4	505	67.8	605	101	692	137	769	174	806	194	839	213	865	225	899	246	927	264	956	285
38500	3468	396	45.4	515	80.3	614	118	700	157	775	198	813	220	837	233	870	254	902	276	930	296	963	321
44000	3964	414	55.7	530	95.3	625	137	710	180	784	225	819	248	844	262	875	285	909	310	937	332	966	355
49500	4459	434	68.1	545	111	637	157	721	205	793	253	827	278	852	294	885	320	916	345	943	368	972	394
55000	4955	455	82.5	563	131	652	180	731	231	805	285	836	309	863	330	894	356	922	380	951	408		
60500	5450	478	99.4	581	151	668	205	744	259	814	315	840	336	874	366	902	392	932	421	964	453		
66000	5946	501	118	599	174	685	233	760	291	829	352	855	375	883	403	913	433	946	467	971	494		

854 LS/RIM



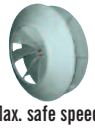
Max. safe speeds
Ser. 20 LS=770 RPM
Ser. 30 RIM=890 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
28000	2126	328	28.7	449	57.8	546	90.8	627	126	699	163	733	183	767	205	793	216	822	236	850	257	878	278
34000	2582	338	36.0	456	69.3	550	106	630	144	702	186	734	206	766	228	791	242	823	265	848	285	880	311
40000	3037	350	44.4	464	81.8	556	122	635	165	706	210	739	233	769	256	794	272	825	296	854	321	881	345
46000	3493	365	54.4	474	96.2	565	141	641	187	712	237	746	263	768	277	800	305	827	328	855	355	882	381
52000	3948	379	65.6	487	113	575	162	650	212	718	264	753	294	774	310	803	337	832	364	860	393	887	421
58000	4404	397	79.1	499	130	583	183	659	239	726	296	758	325	780	344	811	374	839	404	865	432		
64000	4860	414	94.4	512	150	595	207	670	269	734	328	767	361	789	382	818	412	846	444	872	475		
70000	5315	432	112	528	172	608	234	682	300	745	363	770	389	798	420	828	456	854	488	882	524		
76000	5771	453	132	543	196	622	263	692	331	757	403	779	427	809	463	837	500	864	535	888	568		

Series 20 & 30 DH Wheels

Series 30 performance shaded in red

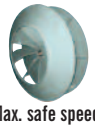
194 DH



Max. safe speeds
Ser. 20 DH=3425 RPM
Ser. 30 DH=3985 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400	2121	1482	1.47	2024	3.05	2452	4.79	2819	6.69	3136	8.67	3300	9.82	3447	10.9	3570	11.9	3703	13.1	3846	14.4	3955	15.4
1675	2538	1527	1.78	2049	3.53	2477	5.51	2840	7.60	3156	9.78	3303	10.9	3450	12.1	3580	13.2	3721	14.6	3856	15.9	3982	17.2
1950	2955	1583	2.13	2084	4.06	2493	6.18	2858	8.51	3181	10.9	3327	12.2	3463	13.4	3598	14.7	3730	16.0	3857	17.3	3978	18.7
2225	3371	1653	2.57	2135	4.69	2536	7.02	2881	9.45	3191	12.0	3344	13.4	3482	14.7	3620	16.2	3757	17.6	3880	19.0		
2500	3788	1725	3.07	2190	5.37	2569	7.81	2920	10.5	3224	13.3	3367	14.7	3505	16.1	3636	17.6	3776	19.2	3895	20.7		
2775	4205	1804	3.65	2248	6.12	2620	8.76	2948	11.6	3257	14.6	3400	16.1	3539	17.7	3673	19.3	3799	20.9	3914	22.4		
3050	4621	1887	4.32	2311	6.94	2670	9.74	2999	12.8	3293	15.9	3435	17.6	3575	19.3	3696	20.9	3825	22.6	3945	24.3		
3325	5038	1978	5.11	2382	7.88	2735	10.9	3049	14.1	3341	17.4	3471	19.1	3611	20.9	3735	22.6	3853	24.3	3978	26.2		
3600	5455	2069	5.99	2456	8.92	2797	12.1	3108	15.5	3388	19.0	3519	20.8	3649	22.6	3775	24.5	3897	26.3				

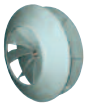
224 DH



Max. safe speeds
Ser. 20 DH=2900 RPM
Ser. 30 DH=3440 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	1720	1222	1.52	1701	3.23	2077	5.12	2397	7.17	2682	9.36	2816	10.5	2944	11.7	3064	12.9	3183	14.2	3300	15.5	3412	16.8
2050	2204	1260	1.95	1713	3.93	2090	6.17	2405	8.53	2690	11.1	2818	12.3	2945	13.7	3067	15.0	3183	16.4	3290	17.8	3404	19.3
2500	2688	1311	2.47	1748	4.75	2097	7.18	2414	9.89	2687	12.6	2821	14.1	2946	15.6	3056	17.0	3175	18.6	3288	20.2	3395	21.7
2950	3172	1373	3.08	1788	5.64	2132	8.41	2423	11.3	2704	14.4	2825	16.0	2947	17.6	3070	19.3	3180	20.9	3286	22.6	3399	24.4
3400	3656	1442	3.82	1839	6.65	2167	9.67	2451	12.8	2719	16.2	2845	18.0	2967	19.8	3080	21.5	3193	23.4	3304	25.3	3412	27.2
3850	4140	1517	4.69	1897	7.81	2209	11.1	2491	14.5	2752	18.2	2869	20.1	2983	21.9	3105	24.0	3204	25.8	3318	27.9	3421	29.9
4300	4624	1596	5.71	1958	9.08	2266	12.7	2540	16.5	2786	20.3	2903	22.3	3017	24.4	3126	26.4	3243	28.7	3337	30.6	3436	32.7
4750	5108	1681	6.92	2030	10.6	2326	14.5	2587	18.4	2831	22.6	2948	24.8	3052	26.9	3163	29.1	3268	31.4	3367	33.6		
5200	5591	1769	8.31	2103	12.3	2390	16.4	2641	20.6	2885	25.2	2993	27.4	3098	29.7	3200	32.0	3309	34.5	3411	37.0		

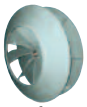
264 DH



Max. safe speeds
Ser. 20 DH=2510 RPM
Ser. 30 DH=2980 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	1935	1073	2.28	1477	4.71	1805	7.47	2078	10.4	2320	13.4	2436	15.0	2549	16.8	2657	18.5	2758	20.2	2847	21.9	2943	23.7
3050	2460	1113	2.95	1497	5.79	1812	8.93	2085	12.3	2323	15.8	2443	17.7	2553	19.6	2648	21.4	2750	23.4	2847	25.3	2935	27.2
3700	2984	1167	3.77	1532	7.02	1836	10.6	2099	14.4	2336	18.3	2450	20.4	2556	22.5	2653	24.5	2757	26.8	2846	28.8	2941	31.1
4350	3508	1230	4.77	1573	8.38	1865	12.4	2118	16.5	2354	20.9	2464	23.2	2569	25.6	2666	27.8	2762	30.1	2855	32.5	2945	34.9
5000	4032	1299	5.97	1627	9.99	1909	14.4	2149	18.9	2376	23.7	2483	26.2	2586	28.7	2684	31.2	2775	33.7	2871	36.4	2957	38.9
5650	4556	1374	7.42	1690	11.9	1956	16.6	2189	21.5	2410	26.7	2516	29.5	2608	32.0	2706	34.8	2799	37.6	2884	40.2	2974	43.1
6300	5081	1453	9.14	1754	14.0	2007	19.1	2242	24.5	2453	30.1	2549	32.9	2642	35.7	2743	38.8	2826	41.6	2914	44.6		
6950	5605	1533	11.1	1826	16.5	2073	22.0	2293	27.7	2496	33.6	2592	36.7	2687	39.8	2779	43.0	2865	46.1	2958	49.5		
7600	6129	1618	13.5	1899	19.2	2135	25.1	2355	31.4	2545	37.5	2643	40.9	2731	44.0	2825	47.6	2905	50.7				

294 DH



Max. safe speeds
Ser. 20 DH=2195 RPM
Ser. 30 DH=2610 RPM

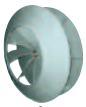
CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2600	1635	924	2.47	1285	5.33	1567	8.55	1804	12.0	2023	15.9	2116	17.7	2210	19.8	2304	21.9	2386	24	2475	26.3	2560	28.6
3500	2201	956	3.27	1303	6.71	1574	10.4	1810	14.5	2025	18.9	2119	21.1	2211	23.3	2298	25.6	2392	28.2	2478	30.7	2556	33.1
4400	2767	1001	4.25	1332	8.25	1596	12.5	1823	17.1	2036	22.1	2127	24.5	2226	27.3	2305	29.6	2400	32.6	2479	35.3	2564	38.2
5300	3333	1055	5.44	1369	9.98	1626	14.9	1851	20.1	2052	25.5	2148	28.4	2238	31.2	2318	33.9	2405	37.0	2489	40.1	2569	43.1
6200	3899	1116	6.91	1413	11.9	1665	17.5	1877	23.1	2076	29.1	2164	32.1	2253	35.2	2343	38.6	2425	41.8	2504	45.1	2589	48.7
7100	4465	1179	8.63	1466	14.2	1707	20.3	1920	26.7	2111	33.2	2194	36.3	2283	39.9	2368	43.4	2446	46.8	2529	50.5	2603	54.0
8000	5031	1248	10.7	1522	16.9	1757	23.5	1959	30.3	2148	37.5	2233	41.0	2313	44.6	2400	48.5	2481	52.4	2556	56.2		
8900	5597	1320	13.2	1587	20.0	1810	27.1	2010	34.6	2193	42.3	2270	45.8	2353	49.8	2442	54.3	2516	58.2	2594	62.5		
9800	6164	1394	16.1	1651	23.5	1869	31.2	2058	39.0	2235	47.2	2322	51.6	2399	55.7	2481	60.2	2549	64.1				

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

Series 20 & 30 DH Wheels

Series 30 performance shaded in red

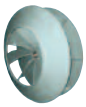
334 DH



Max. safe speeds
Ser. 20 DH=2035 RPM
Ser. 30 DH=2360 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	1624	830	3.05	1153	6.57	1405	10.5	1621	14.8	1811	19.5	1900	21.9	1984	24.4	2068	27.1	2142	29.6	2221	32.4	2297	35.3
4200	2132	855	3.93	1166	8.08	1414	12.7	1626	17.6	1815	22.9	1901	25.6	1985	28.4	2065	31.2	2145	34.3	2218	37.2	2289	40.1
5200	2640	889	4.97	1189	9.77	1430	15.0	1638	20.6	1824	26.5	1909	29.5	1993	32.7	2076	36.0	2145	38.9	2219	42.2	2298	45.8
6200	3147	929	6.2	1214	11.6	1446	17.3	1653	23.6	1836	30.2	1920	33.5	1998	36.8	2082	40.5	2156	44.0	2226	47.4	2301	51.3
7200	3655	977	7.73	1252	13.7	1476	20.1	1677	27.1	1851	34.0	1940	38.0	2013	41.4	2092	45.2	2169	49.2	2237	52.9	2310	57.0
8200	4162	1026	9.47	1289	16.1	1509	23.2	1703	30.7	1876	38.3	1955	42.2	2041	46.6	2110	50.4	2185	54.6	2258	59.0	2329	63.4
9200	4670	1080	11.6	1335	18.8	1545	26.4	1736	34.6	1900	42.7	1980	47.0	2057	51.4	2135	56.0	2207	60.5	2279	65.1	2342	69.4
10200	5178	1137	14.0	1382	21.9	1589	30.3	1766	38.7	1939	48.0	2013	52.4	2093	57.3	2159	61.7	2230	66.5	2306	71.8		
11200	5685	1193	16.8	1432	25.4	1630	34.2	1807	43.5	1969	53.0	2044	57.9	2118	62.8	2197	68.4	2262	73.2	2332	78.6		

364 DH



Max. safe speeds
Ser. 20 DH=1840 RPM
Ser. 30 DH=2135 RPM

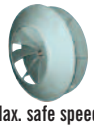
CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3800	1577	747	3.62	1041	7.87	1267	12.6	1467	17.9	1637	23.4	1715	26.3	1795	29.5	1867	32.5	1936	35.7	2012	39.3	2074	42.5
5200	2158	774	4.86	1054	9.95	1279	15.6	1471	21.7	1642	28.3	1721	31.6	1798	35.1	1870	38.6	1938	42.1	2010	46.0	2074	49.7
6600	2739	811	6.37	1077	12.3	1295	18.9	1480	25.7	1650	33.2	1725	36.9	1799	40.7	1872	44.8	1942	48.8	2007	52.8	2078	57.3
8000	3320	854	8.19	1110	15.0	1318	22.4	1500	30.3	1666	38.6	1740	42.7	1813	47.0	1887	51.6	1952	55.9	2021	60.6	2087	65.4
9400	3900	903	10.4	1148	18.1	1351	26.5	1527	35.2	1688	44.4	1761	49.0	1829	53.5	1897	58.2	1971	63.6	2037	68.7	2093	73.2
10800	4481	959	13.2	1189	21.6	1383	30.7	1559	40.6	1709	50.2	1786	55.6	1851	60.4	1921	65.8	1985	71.1	2054	76.9	2115	82.3
12200	5062	1015	16.4	1241	25.9	1427	35.9	1594	46.4	1744	57.2	1814	62.7	1881	68.2	1953	74.4	2011	79.6	2072	85.3		
13600	5643	1075	20.3	1291	30.7	1472	41.5	1633	52.8	1777	64.3	1848	70.5	1917	76.7	1983	83.0	2045	89.1	2100	94.8		
15000	6224	1137	24.8	1344	36.1	1521	47.9	1674	59.8	1821	72.7	1888	79.0	1952	85.4	2012	91.7	2077	98.7				

404 DH

Max. safe speeds
Ser. 20 DH=1640 RPM
Ser. 30 RIM=1905 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4400	1517	666	4.05	928	8.53	1131	13.4	1305	18.7	1459	24.4	1530	27.4	1600	30.5	1663	33.6	1723	36.6	1787	40.1	1848	43.6
6100	2103	686	5.55	941	11.3	1142	17.4	1309	23.7	1459	30.3	1534	34.0	1598	37.3	1668	41.2	1727	44.7	1790	48.7	1846	52.3
7800	2690	717	7.34	958	14.2	1153	21.4	1320	29.0	1471	37.0	1543	41.2	1607	45.1	1669	49.2	1736	53.7	1789	57.6	1847	61.9
9500	3276	756	9.56	987	17.5	1174	25.9	1339	34.8	1483	43.8	1553	48.5	1618	53.1	1682	57.9	1743	62.8	1802	67.7	1857	72.4
11200	3862	799	12.2	1019	21.2	1201	30.9	1361	40.9	1505	51.3	1570	56.4	1631	61.3	1695	66.9	1754	72.1	1816	78.0	1869	83.2
12900	4448	847	15.4	1057	25.6	1232	36.3	1387	47.5	1522	58.5	1591	64.6	1653	70.4	1715	76.4	1776	82.7	1831	88.5	1889	94.9
14600	5034	896	19.3	1098	30.4	1265	42.1	1417	54.5	1552	67.1	1619	73.7	1674	79.5	1734	86.0	1798	93.3	1851	99.7		
16300	5621	948	23.9	1141	36.0	1307	49.1	1450	62.1	1580	75.6	1647	83.2	1706	90.0	1764	97.1	1818	104	1876	112		
18000	6207	1002	29.3	1190	42.6	1346	56.3	1490	71.0	1618	85.8	1681	93.6	1735	101	1793	108	1846	116	1903	124		

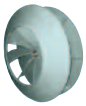
454 DH



Max. safe speeds
Ser. 20 DH=1460 RPM
Ser. 30 RIM=1690 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	1734	596	5.83	825	12.1	1005	18.9	1155	26.0	1295	33.9	1358	37.9	1418	42.0	1472	45.9	1530	50.5	1581	54.6	1634	59.2
8700	2358	620	8.03	840	15.9	1013	24.1	1163	33.0	1300	42.4	1360	46.9	1418	51.6	1477	56.7	1533	61.7	1588	66.9	1637	71.8
11000	2981	652	10.7	861	20.1	1030	30.0	1177	40.4	1308	51.2	1372	57.0	1429	62.5	1486	68.2	1539	73.9	1590	79.4	1644	85.7
13300	3604	691	13.9	889	24.8	1051	36.3	1196	48.5	1326	61.1	1384	67.1	1441	73.5	1498	80.2	1549	86.4	1603	93.2	1654	100
15600	4228	733	18.0	923	30.3	1081	43.4	1220	57.1	1346	71.3	1400	77.8	1458	85.2	1512	92.4	1564	99.8	1616	107	1665	115
17900	4851	781	22.9	962	36.7	1111	51.0	1246	66.3	1368	82.0	1426	90.0	1478	97.5	1533	106	1584	114	1634	122	1687	131
20200	5474	829	28.8	1001	43.9	1149	60.1	1280	76.9	1394	93.5	1450	102	1503	111	1561	121	1607	129	1655	138		
22500	6098	879	35.8	1046	52.5	1187	70.0	1315	88.3	1426	106	1484	116	1533	125	1586	135	1635	145	1680	154		
24800	6721	932	44.1	1092	62.4	1230	81.3	1351	101	1461	120	1515	131	1567	141	1616	152	1662	162				

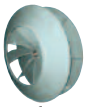
504 DH



Max. safe speeds
Ser. 20 DH=1305 RPM
Ser. 30 RIM=1505 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1732	531	7.26	738	15.1	899	23.7	1034	32.6	1156	42.2	1212	47.3	1266	52.4	1319	57.9	1366	63	1417	68.7	1465	74.6
10500	2273	552	9.69	749	19.2	906	29.5	1038	40.0	1159	51.4	1214	57.1	1268	63.1	1320	69.1	1367	75.0	1418	81.6	1463	87.8
13000	2814	576	12.5	764	23.7	916	35.5	1051	48.3	1166	61.1	1221	67.8	1276	74.8	1323	81.2	1374	88.5	1422	95.6	1466	102
15500	3355	603	15.7	785	28.7	935	42.5	1062	56.6	1179	71.5	1229	78.5	1284	86.6	1334	94.4	1383	102	1429	110	1472	118
18000	3896	635	19.7	809	34.2	951	49.4	1078	65.6	1193	82.4	1245	90.6	1293	98.6	1345	108	1391	116	1436	125	1484	134
20500	4437	669	24.4	836	40.5	973	57.3	1098	75.3	1207	93.2	1259	103	1309	112	1355	121	1405	131	1449	140	1496	151
23000	4978	706	30.1	865	47.5	1000	66.2	1120	85.8	1225	105	1279	116	1324	125	1373	136	1417	146	1465	157		
25500	5519	744	36.7	899	55.9	1028	75.9	1145	97.1	1247	118	1297	129	1345	140	1396	152	1437	163	1480	174		
28000	6061	783	44.3	932	65.1	1057	86.5	1171	109	1272	132	1324	145	1369	156	1417	169	1461	181	1502	193		

574 DH



Max. safe speeds
Ser. 20 DH=1145 RPM
Ser. 30 RIM=1325 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	2003	475	10.9	653	22.3	792	34.4	912	47.4	1016	60.6	1066	67.7	1110	74.3	1158	82.1	1202	89.6	1245	97.3	1281	104
15000	2504	491	13.9	664	27.4	799	41.6	916	56.4	1023	72.3	1067	79.7	1116	88.2	1161	96.3	1202	104	1243	113	1286	122
18000	3005	514	17.6	676	32.8	808	49.0	927	66.5	1027	83.8	1077	93.2	1123	102	1167	112	1210	121	1250	130	1292	140
21000	3506	537	21.7	696	39.2	825	57.6	936	76.5	1039	96.7	1082	106	1129	116	1172	127	1218	138	1257	148	1293	158
24000	4007	563	26.7	715	45.9	839	66.1	950	87.5	1050	110	1095	120	1140	132	1181	143	1221	154	1264	166	1301	177
27000	4508	591	32.5	737	53.5	858	75.8	964	98.8	1062	123	1109	135	1149	147	1197	161	1233	172	1276	185	1313	198
30000	5008	622	39.5	761	62.2	879	86.3	985	112	1079	138	1121	150	1167	165	1208	178	1247	191	1286	205	1324	218
33000	5509	652	47.4	788	72.1	904	98.5	1005	125	1096	153	1141	168	1184	182	1224	197	1261	210	1300	225		
36000	6010	684	56.4	815	82.9	926	111	1026	140	1117	170	1159	185	1199	200	1242	217	1279	232	1319	248		

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

644 DH

Max. safe speeds
Ser. 20 DH=1025 RPM
Ser. 30 RIM=1185 RPM

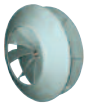
CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14000	1864	421	12.7	579	26.1	704	40.4	811	55.7	907	72.3	949	80.3	995	89.7	1034	98.2	1073	107	1110	116	1145	125
18000	2397	435	16.6	589	32.8	713	50.2	815	67.9	911	87.2	952	96.5	996	107	1037	117	1073	127	1111	137	1145	147
22000	2929	456	21.3	601	40.0	722	60.3	826	81.4	918	103	961	114	1002	126	1039	136	1078	148	1114	160	1153	173
26000	3462	478	26.7	619	48.4	734	71.0	835	94.8	925	119	968	132	1007	144	1046	157	1083	170	1123	184	1156	196
30000	3995	502	33.2	637	57.1	751	83.2	848	109	938	137	978	151	1015	164	1056	179	1092	193	1131	208	1164	222
34000	4527	530	41.2	659	67.5	768	95.7	863	125	948	154	990	170	1029	186	1065	201	1104	217	1139	233	1176	250
38000	5060	558	50.3	683	79.2	788	110	880	141	967	175	1005	191	1041	207	1080	225	1115	242	1153	261		
42000	5593	587	61.1	708	92.6	809	125	900	160	984	196	1022	214	1057	231	1093	249	1131	269	1166	288		
46000	6125	617	73.6	735	108	833	143	922	180	1003	219	1041	238	1076	257	1110	276	1145	296	1178	315		

714 DH

Max. safe speeds
Ser. 20 DH=925 RPM
Ser. 30 RIM=1070 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	1957	382	16.4	525	33.4	638	51.7	733	70.9	821	91.9	860	102	897	113	933	124	970	135	1001	146	1036	158
23000	2500	397	21.5	535	42.0	645	63.7	739	86.5	822	110	862	122	902	136	935	147	972	161	1005	174	1037	187
28000	3043	415	27.3	548	51.4	654	76.5	747	103	830	130	867	144	907	159	943	173	977	188	1009	202	1043	218
33000	3587	436	34.4	563	61.6	666	90	756	120	838	151	875	166	912	182	946	198	982	215	1013	231	1046	248
38000	4130	460	42.9	582	73.6	681	105	770	139	849	173	884	190	923	209	956	225	991	244	1021	262	1054	281
43000	4674	485	53.3	601	86.4	698	122	785	159	861	196	898	215	932	234	967	254	999	273	1032	294	1061	313
48000	5217	512	65.5	623	102	717	140	802	181	876	221	914	243	946	263	980	285	1011	306	1045	329		
53000	5761	539	79.5	647	119	737	160	820	204	893	248	928	271	962	294	994	317	1026	340	1056	363		
58000	6304	568	96.1	672	139	760	183	839	230	912	278	945	301	977	325	1011	351	1043	377				

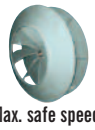
784 DH



Max. safe speeds
Ser. 20 DH=845 RPM
Ser. 30 RIM=975 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
22000	1982	348	20.0	478	40.6	583	63.4	668	86.4	746	111	782	124	817	138	850	151	882	165	914	179	944	193
28000	2523	362	26.2	488	51.1	588	77.6	672	105	749	134	785	149	821	164	853	179	883	194	915	211	944	226
34000	3063	379	33.2	499	62.3	596	92.7	681	125	756	158	792	175	824	192	856	209	886	226	919	245	950	264
40000	3604	398	41.9	512	74.4	607	109	688	145	764	183	797	202	831	221	864	241	894	260	925	281	951	299
46000	4144	420	52.2	530	89.0	622	128	702	168	773	209	807	231	840	252	872	274	900	294	931	317	961	340
52000	4685	443	64.7	547	104	637	148	713	191	785	238	818	261	850	284	881	308	909	330	940	355	966	378
58000	5225	466	79.0	568	123	653	169	729	218	800	268	830	292	863	319	894	345	922	370	950	396		
64000	5766	492	96.4	590	144	671	193	746	246	812	299	844	326	875	353	905	382	934	410	962	438		
70000	6306	517	116	613	168	692	221	765	277	830	335	860	363	889	391	920	423	948	454	974	482		

854 DH



Max. safe speeds
Ser. 20 DH=770 RPM
Ser. 30 RIM=890 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
26000	1974	320	23.7	440	48.3	532	74.3	614	103	686	132	718	147	751	163	781	179	811	195	840	212	865	228
32500	2468	332	30.3	446	59.2	538	90.0	618	123	688	156	722	174	751	191	784	210	810	226	840	246	867	265
39000	2961	344	37.7	456	71.3	544	106	624	144	692	182	724	201	755	221	785	241	814	262	841	282	870	304
45500	3455	361	46.7	467	84.2	554	124	630	166	699	209	731	231	760	252	790	274	818	297	844	319	873	344
52000	3948	378	57.2	480	99.0	565	143	640	190	706	237	737	261	768	286	797	310	824	335	851	359	879	387
58500	4442	397	69.7	496	116	577	164	649	214	715	266	747	294	777	321	805	348	830	372	857	399	885	429
65000	4935	417	84.5	512	135	591	187	662	242	726	298	756	326	785	356	813	385	841	414	865	442		
71500	5429	437	101	529	155	607	212	676	272	738	331	767	362	797	394	824	426	850	456	877	490		
78000	5923	457	120	547	179	622	239	689	301	751	368	781	401	808	435	834	467	862	503	888	537		

Series 20 & 30 AH Wheels

Series 30 performance shaded in green

144 AH

Max. safe speeds
Ser. 20 AH=4605 RPM

CFM	OV	2"SP		4"SP		6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		21"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	1865	1646	0.50	2086	0.88	2464	1.31	2806	1.79	3137	2.31	3431	2.83	3691	3.33								
950	2214	1783	0.66	2183	1.08	2536	1.56	2858	2.08	3159	2.64	3446	3.24	3713	3.84	3957	4.44	4187	5.04	4418	5.67	4529	5.99
1100	2564	1911	0.83	2302	1.34	2630	1.85	2933	2.42	3204	2.99	3474	3.63	3728	4.29	3967	4.96	4198	5.65	4434	6.40	4527	6.71
1250	2914	2049	1.05	2440	1.66	2733	2.19	3024	2.80	3286	3.43	3535	4.09	3783	4.81	4005	5.51	4220	6.23	4439	7.02	4558	7.46
1400	3263	2192	1.30	2569	1.98	2864	2.63	3126	3.23	3383	3.92	3619	4.62	3840	5.34	4062	6.11	4280	6.92	4473	7.68	4575	8.11
1550	3613	2335	1.59	2695	2.33	3000	3.10	3247	3.77	3485	4.46	3710	5.20	3932	5.99	4144	6.81	4340	7.61	4540	8.47		
1700	3963	2481	1.92	2832	2.74	3129	3.57	3383	4.40	3599	5.10	3825	5.89	4029	6.69	4234	7.56	4424	8.41	4604	9.26		
1850	4312	2635	2.31	2974	3.22	3258	4.10	3519	5.03	3738	5.89	3933	6.64	4131	7.46	4330	8.36	4525	9.32				
2000	4662	2785	2.74	3116	3.74	3394	4.69	3648	5.68	3876	6.69	4069	7.57	4255	8.40	4439	9.29						

174 AH

Max. safe speeds
Ser. 20 AH=3930 RPM

CFM	OV	2"SP		4"SP		6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		22"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1896	1336	0.66	1704	1.20	2021	1.76	2318	2.38	2579	3.02	2835	3.75	3064	4.48								
1500	2370	1473	0.93	1804	1.58	2097	2.26	2365	2.96	2603	3.67	2840	4.45	3060	5.25	3262	6.06	3462	6.94	3654	7.85	3831	8.76
1800	2844	1615	1.27	1931	2.03	2195	2.82	2441	3.64	2669	4.46	2877	5.28	3093	6.20	3285	7.08	3470	8.00	3658	9.00	3829	9.97
2100	3318	1758	1.67	2074	2.59	2320	3.48	2543	4.41	2753	5.34	2961	6.32	3147	7.26	3334	8.25	3516	9.29	3689	10.3	3846	11.3
2400	3791	1911	2.18	2214	3.25	2457	4.25	2665	5.27	2864	6.34	3051	7.40	3225	8.44	3409	9.60	3568	10.6	3742	11.8	3891	12.9
2700	4265	2069	2.80	2354	3.97	2601	5.17	2804	6.28	2989	7.44	3162	8.61	3337	9.85	3494	11.0	3656	12.2	3810	13.5		
3000	4739	2231	3.53	2501	4.82	2743	6.19	2946	7.46	3128	8.72	3289	9.95	3451	11.3	3603	12.6	3760	14.0	3900	15.3		
3300	5213	2401	4.41	2654	5.83	2884	7.29	3088	8.76	3273	10.2	3431	11.5	3583	12.9	3733	14.4	3869	15.8				
3600	5687	2574	5.44	2811	6.99	3024	8.51	3230	10.2	3410	11.7	3573	13.2	3722	14.7	3862	16.2						

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

Series 20 & 30 AH Wheels

Series 30 performance shaded in green

194 AH

Max. safe speeds
Ser. 20 AH=3425 RPM
Ser. 30 AH=3985 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	3030	1569	1.99	2052	3.73	2444	5.51	2801	7.46	3116	9.47	3258	10.5	3414	11.6	3548	12.7	3678	13.7	3805	14.8	3924	15.9
2250	3409	1630	2.36	2095	4.25	2486	6.27	2816	8.27	3123	10.4	3275	11.6	3421	12.8	3548	13.9	3685	15.1	3808	16.2	3938	17.5
2500	3788	1696	2.78	2143	4.81	2517	6.97	2847	9.20	3151	11.5	3295	12.7	3434	14.0	3566	15.2	3687	16.4	3817	17.7	3932	18.9
2750	4167	1766	3.24	2196	5.41	2566	7.80	2891	10.2	3180	12.7	3325	14.0	3450	15.2	3586	16.5	3713	17.9	3830	19.2	3955	20.6
3000	4545	1836	3.72	2258	6.12	2613	8.62	2933	11.3	3223	14.0	3356	15.3	3485	16.6	3609	18.0	3741	19.5	3847	20.7	3979	22.3
3250	4924	1911	4.27	2318	6.86	2667	9.52	2975	12.3	3265	15.3	3388	16.6	3520	18.1	3648	19.6	3770	21.1	3883	22.5		
3500	5303	1990	4.89	2387	7.71	2719	10.5	3025	13.4	3307	16.5	3432	18.0	3555	19.5	3687	21.2	3800	22.7	3919	24.3		
3750	5682	2071	5.57	2458	8.63	2784	11.6	3075	14.6	3348	17.8	3476	19.5	3603	21.1	3726	22.8	3844	24.5	3955	26.1		
4000	6061	2153	6.32	2527	9.56	2847	12.7	3131	15.9	3399	19.3	3530	21.1	3649	22.8	3764	24.5	3887	26.3				

224 AH

Max. safe speeds
Ser. 20 AH=2900 RPM
Ser. 30 AH=3440 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1613	1191	1.38	1657	2.91	2028	4.58	2351	6.38														
2000	2151	1226	1.80	1678	3.71	2037	5.76	2345	7.90	2616	10.1												
2500	2688	1281	2.31	1710	4.53	2054	6.91	2354	9.42	2621	12.0	2746	13.3	2904	15.5	3025	17.1	3143	18.8				
3000	3226	1352	2.95	1752	5.43	2087	8.15	2379	11.0	2645	14.0	2765	15.5	2909	17.6	3028	19.3	3145	21.1	3248	22.7	3358	24.6
3500	3763	1425	3.66	1811	6.50	2130	9.48	2413	12.7	2666	15.9	2790	17.7	2933	19.9	3041	21.6	3158	23.6	3255	25.3	3357	27.2
4000	4301	1506	4.48	1876	7.70	2179	10.9	2457	14.5	2703	18.0	2818	19.9	2946	22.2	3062	24.2	3170	26.2	3270	28.1	3376	30.2
4500	4839	1594	5.49	1947	9.03	2240	12.6	2501	16.3	2752	20.4	2867	22.4	2979	24.8	3081	26.7	3189	28.9	3291	31.1	3400	33.4
5000	5376	1688	6.67	2024	10.5	2311	14.5	2561	18.5	2799	22.8	2917	25.5	3025	27.7	3128	29.9	3226	32.1	3330	34.5	3428	36.8
5500	5914	1783	8.04	2106	12.2	2385	16.6	2634	21.0	2855	25.4	2972	28.5	3070	30.7	3175	33.1	3276	35.6	3371	38.0		

264 AH

Max. safe speeds
Ser. 20 AH=2510 RPM
Ser. 30 AH=2980 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2800	2258	1070	2.52	1459	5.17	1763	8.14	2035	11.5	2271	15.1	2381	16.9	2490	18.9								
3400	2742	1114	3.16	1483	6.12	1785	9.43	2044	13.0	2275	16.9	2383	18.9	2491	21.0	2620	23.2	2722	25.4	2819	27.6	2910	29.8
4000	3226	1170	3.93	1519	7.24	1807	10.8	2065	14.8	2286	18.8	2392	20.9	2499	23.3	2629	25.9	2724	28.1	2815	30.4	2912	32.9
4600	3710	1230	4.79	1560	8.48	1838	12.4	2091	16.7	2308	21.0	2413	23.3	2538	26.2	2628	28.4	2724	30.9	2828	33.7	2912	36.0
5200	4194	1290	5.74	1608	9.87	1881	14.2	2118	18.7	2336	23.4	2435	25.8	2542	28.7	2647	31.5	2747	34.3	2838	36.9	2919	39.4
5800	4677	1357	6.89	1668	11.5	1922	16.1	2154	21.0	2365	26.0	2470	28.7	2575	32.1	2670	34.8	2758	37.5	2853	40.4	2939	43.3
6400	5161	1430	8.25	1727	13.2	1973	18.3	2196	23.4	2408	29.0	2504	31.8	2597	35.2	2694	38.2	2785	41.2	2871	44.1	2961	47.3
7000	5645	1501	9.76	1787	15.1	2033	20.7	2250	26.4	2448	32.1	2548	35.9	2641	39.0	2729	42.0	2813	45.0	2903	48.3		
7600	6129	1576	11.5	1853	17.2	2089	23.2	2302	29.3	2496	35.5	2596	39.7	2682	42.8	2765	45.9	2852	49.3	2935	52.6		

294 AH

Max. safe speeds
Ser. 20 AH=2195 RPM
Ser. 30 AH=2610 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3800	2390	953	3.44	1289	6.91	1560	10.9	1794	15.4	2009	20.4	2102	22.9	2224	24.9								
4600	2893	997	4.35	1318	8.28	1579	12.6	1804	17.3	2012	22.7	2104	25.3	2223	28.0	2311	30.7	2397	33.5	2478	36.2	2566	39.4
5400	3396	1047	5.38	1349	9.78	1602	14.5	1822	19.6	2021	25.1	2118	28.1	2230	31.4	2319	34.3	2399	37.2	2485	40.3	2567	43.6
6200	3899	1103	6.58	1391	11.6	1632	16.7	1850	22.3	2045	28.1	2135	31.1	2235	34.8	2325	38.0	2407	41.2	2496	44.8	2575	48.1
7000	4403	1161	7.96	1439	13.5	1672	19.2	1884	25.3	2068	31.3	2158	34.6	2256	38.8	2335	42.0	2420	45.5	2498	48.9	2581	52.7
7800	4906	1227	9.63	1491	15.7	1715	21.9	1917	28.4	2100	35.0	2192	38.6	2278	43.0	2360	46.5	2436	50.0	2517	53.8	2591	57.5
8600	5409	1290	11.5	1548	18.1	1766	25.0	1962	32.0	2140	39.1	2224	43.7	2310	47.6	2385	51.2	2464	55.1	2538	58.9		
9400	5912	1359	13.7	1605	20.7	1818	28.2	2004	35.7	2177	43.3	2270	48.7	2342	52.4	2419	56.4	2502	60.9	2570	64.7		
10200	6415	1427	16.1	1666	23.7	1873	31.7	2056	39.9	2235	49.7	2313	53.9	2389	58.0	2461	62.2	2538	66.7				

334 AH

Max. safe speeds
Ser. 20 AH=2035 RPM
Ser. 30 AH=2360 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	2412	861	4.44	1162	8.71	1407	13.5	1621	18.7	1814	24.2	1903	27.0	1983	29.7								
5700	2864	898	5.53	1184	10.3	1419	15.6	1626	21.2	1816	27.3	1904	30.5	1985	33.5	2071	36.1	2150	39.3	2225	42.4	2306	45.9
6600	3317	940	6.80	1208	12.1	1439	17.9	1639	24.0	1823	30.6	1903	33.8	1991	37.4	2078	40.9	2153	44.2	2225	47.5	2302	51.2
7500	3769	986	8.24	1244	14.2	1464	20.5	1657	27.0	1837	34.1	1918	37.7	1995	41.2	2081	45.6	2159	49.5	2229	53.0	2304	56.9
8400	4221	1032	9.84	1284	16.5	1493	23.3	1678	30.3	1852	37.8	1933	41.7	2012	45.6	2093	50.7	2169	54.8	2244	59.0	2310	62.9
9300	4673	1081	11.7	1328	19.1	1531	26.6	1708	34.0	1875	41.9	1958	46.2	2030	50.2	2107	55.8	2181	60.2	2248	64.4	2319	68.9
10200	5126	1135	13.8	1373	22.0	1571	30.1	1743	38.2	1906	46.6	1982	50.9	2055	56.5	2127	61.1	2204	66.2	2265	70.4	2341	75.8
11100	5578	1189	16.1	1419	25.0	1613	33.8	1782	42.6	1935	51.4	2014	56.2	2081	61.7	2155	66.9	2218	71.4	2293	77.1	2353	81.8
12000	6030	1247	18.8	1465	28.3	1657	37.9	1824	47.5	1976	57.1	2033	61.5	2105	66.8	2183	72.7	2250	78.0	2311	83.0		

364 AH

Max. safe speeds
Ser. 20 AH=1840 RPM
Ser. 30 AH=2135 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6500	2686	798	6.18	1059	11.7	1274	17.7	1466	24.4	1634	31.4	1713	35.0	1792	38.9	1870	41.7						
7700	3182	838	7.79	1087	14.1	1295	20.9	1474	28.0	1645	35.9	1722	39.8	1795	43.8	1871	47.6	1943	51.7	2012	55.9	2078	60.0
8900	3678	879	9.59	1119	16.8	1315	24.1	1492	32.0	1657	40.5	1729	44.6	1801	49.0	1877	54.0	1951	58.8	2017	63.2	2080	67.6
10100	4174	926	11.7	1155	19.7	1345	27.9	1516	36.5	1670	45.4	1746	50.1	1820	55.0	1891	61.0	1955	65.6	2025	70.8	2087	75.5
11300	4669	975	14.1	1199	23.2	1381	32.2	1545	41.4	1692	50.8	1768	56.1	1834	60.9	1905	67.9	1973	73.4	2035	78.5	2101	84.2
12500	5165	1027	16.9	1242	26.9	1419	36.7	1577	46.8	1726	57.3	1789	62.2	1855	69.0	1921	74.7	1991	81.0	2048	86.2	2117	92.9
13700	5661	1081	20.1	1285	30.9	1462	41.9	1618	53.0	1758	64.0	1824	69.5	1884	76.2	1945	82.0	2010	88.4	2070	94.6	2134	101
14900	6157	1137	23.7	1332	35.3	1503	47.2	1656	59.3	1794	71.3	1846	76.8	1912	83.4	1976	90.0	2036	96.6	2100	104		
16100	6653	1194	27.8	1382	40.3	1549	53.3	1697	66.1	1834	79.2	1883	84.5	1945	91.3	2005	98.1	2062	105	2122	112		

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

Series 20 & 30 AM Wheels

Series 30 performance shaded in orange

144 AM

Max. safe speeds
Ser. 20 AM=4605 RPM

CFM	OV	4"SP		6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		22"SP		23"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
500	1166	1925	0.60	2333	0.96	2687	1.37	2990	1.78	3275	2.24	3532	2.71	3772	3.20	4004	3.73	4222	4.28	4413	4.80	4515	5.09
750	1748	2007	0.88	2399	1.32	2727	1.77	3032	2.29	3305	2.83	3561	3.39	3796	3.97	4029	4.60	4233	5.20	4437	5.85	4546	6.22
1000	2331	2147	1.28	2496	1.80	2811	2.33	3102	2.91	3369	3.51	3614	4.15	3851	4.83	4070	5.52	4286	6.26	4480	6.97	4575	7.34
1250	2914	2314	1.80	2645	2.43	2937	3.07	3202	3.71	3462	4.41	3687	5.07	3925	5.84	4135	6.58	4346	7.39	4531	8.16		
1500	3497	2496	2.45	2807	3.18	3088	3.94	3335	4.69	3578	5.48	3805	6.28	4017	7.07	4220	7.89	4410	8.7	4597	9.55		
1750	4079	2700	3.31	2989	4.12	3258	4.99	3496	5.86	3729	6.77	3938	7.65	4145	8.57	4332	9.45	4522	10.4				
2000	4662	2900	4.33	3189	5.29	3437	6.23	3669	7.21	3887	8.21	4102	9.27	4285	10.2	4472	11.3						
2250	5245	3090	5.48	3394	6.70	3631	7.73	3852	8.79	4067	9.92	4260	11.0	4453	12.2								
2500	5828	3291	6.85	3587	8.26	3845	9.58	4050	10.7	4247	11.9	4439	13.1										

174 AM

Max. safe speeds
Ser. 20 AM=3930 RPM

CFM	OV	4"SP		6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	1580	1614	1.01	1944	1.54	2232	2.10	2493	2.71	2736	3.35	2958	4.02	3154	4.67	3342	5.36						
1325	2093	1690	1.39	1997	2.02	2270	2.70	2512	3.39	2740	4.12	2950	4.87	3159	5.68	3346	6.48	3527	7.31	3696	8.15	3865	9.04
1650	2607	1790	1.89	2084	2.62	2333	3.37	2563	4.17	2786	5.04	2984	5.88	3174	6.76	3360	7.69	3534	8.61	3702	9.56	3872	10.6
1975	3120	1903	2.53	2178	3.36	2420	4.20	2647	5.12	2847	6.03	3039	6.99	3227	8.02	3397	9.01	3567	10.1	3724	11.1	3884	12.2
2300	3633	2029	3.33	2283	4.25	2523	5.24	2733	6.21	2929	7.22	3119	8.30	3295	9.39	3462	10.5	3615	11.6	3782	12.8	3927	14.0
2625	4147	2163	4.28	2410	5.38	2625	6.42	2832	7.52	3026	8.65	3206	9.80	3373	11.0	3545	12.2	3694	13.4	3840	14.6		
2950	4660	2297	5.38	2538	6.67	2747	7.86	2947	9.09	3125	10.3	3308	11.6	3469	12.8	3624	14.1	3781	15.5	3925	16.8		
3275	5174	2433	6.63	2670	8.14	2875	9.51	3062	10.8	3244	12.2	3413	13.6	3570	14.9	3722	16.3	3876	17.8				
3600	5687	2572	8.06	2806	9.80	3008	11.4	3193	12.9	3364	14.4	3529	15.9	3684	17.4	3834	18.9						

194 AM

Max. safe speeds
Ser. 20 AM=3425 RPM
Ser. 30 AM=3985 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		31"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	2727	1528	1.92	2042	3.63	2458	5.45	2822	7.47	3159	9.68	3312	10.8	3465	12.0	3602	13.1	3734	14.2	3875	15.5	3930	16.0
2050	3106	1569	2.23	2076	4.20	2481	6.18	2836	8.29	3166	10.7	3309	11.8	3466	13.1	3597	14.3	3738	15.6	3859	16.8	3923	17.5
2300	3485	1616	2.61	2120	4.83	2512	6.98	2854	9.21	3170	11.6	3325	12.9	3462	14.2	3599	15.5	3735	16.9	3868	18.3	3924	18.9
2550	3864	1674	3.07	2162	5.45	2547	7.85	2888	10.3	3196	12.8	3334	14.1	3475	15.4	3608	16.8	3739	18.2	3881	19.8	3930	20.4
2800	4242	1728	3.56	2203	6.06	2592	8.80	2922	11.4	3223	14.1	3364	15.5	3501	16.9	3630	18.3	3759	19.8	3875	21.1	3941	22.0
3050	4621	1791	4.13	2249	6.76	2635	9.73	2961	12.6	3250	15.5	3394	17.0	3527	18.4	3654	19.9	3780	21.4	3895	22.9	3955	23.7
3300	5000	1855	4.75	2299	7.55	2677	10.7	3000	13.8	3292	17.0	3425	18.5	3555	20.0	3695	21.8	3811	23.3	3935	24.9		
3550	5379	1925	5.47	2354	8.45	2719	11.6	3049	15.1	3333	18.5	3470	20.2	3604	21.9	3719	23.5	3842	25.2	3957	26.8		
3800	5758	1992	6.25	2412	9.45	2767	12.7	3086	16.3	3373	20.0	3513	21.9	3638	23.7	3759	25.4	3889	27.4				

224 AM

Max. safe speeds
Ser. 20 AM=2900 RPM
Ser. 30 AM=3440 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1613	1202	1.53	1665	3.36	2035	5.51	2339	7.84	2616	10.5	2750	11.9	2865	13.3	2990	14.9	3102	16.4	3207	17.9	3306	19.4
2000	2151	1240	1.99	1692	4.13	2051	6.57	2354	9.19	2619	12.0	2745	13.5	2869	15.0	2986	16.6	3094	18.2	3211	20.0	3315	21.8
2500	2688	1293	2.58	1723	4.96	2073	7.70	2375	10.7	2645	13.8	2768	15.5	2878	17.0	2997	18.8	3111	20.6	3218	22.4	3317	24.1
3000	3226	1353	3.28	1773	6.01	2109	8.98	2400	12.2	2664	15.7	2784	17.4	2906	19.3	3015	21.1	3121	23.0	3235	25.0	3329	26.9
3500	3763	1414	4.09	1824	7.20	2154	10.5	2440	14.0	2695	17.7	2814	19.6	2936	21.7	3038	23.6	3149	25.7	3256	27.8	3348	29.8
4000	4301	1483	5.10	1884	8.57	2205	12.2	2479	15.9	2734	19.9	2846	21.9	2967	24.2	3073	26.3	3178	28.5	3281	30.7	3381	33.0
4500	4839	1562	6.29	1945	10.1	2260	14.1	2527	18.1	2779	22.4	2892	24.6	3000	26.8	3116	29.3	3210	31.4	3309	33.7	3415	36.3
5000	5376	1646	7.63	2008	11.8	2320	16.2	2583	20.6	2822	25.1	2936	27.4	3046	29.8	3151	32.2	3250	34.6	3354	37.2		
5500	5914	1732	9.14	2077	13.8	2377	18.4	2644	23.3	2886	28.3	2990	30.7	3103	33.3	3200	35.7	3302	38.4	3398	41.0		

264 AM

Max. safe speeds
Ser. 20 AM=2510 RPM
Ser. 30 AM=2980 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	1452	1031	1.81	1436	3.98	1749	6.51	2018	9.39	2254	12.5	2365	14.2	2476	16.0	2576	17.8	2671	19.6	2774	21.7	2856	23.4
2500	2016	1064	2.47	1459	5.05	1768	7.96	2032	11.2	2269	14.7	2374	16.5	2475	18.3	2585	20.4	2669	22.2	2769	24.4	2856	26.4
3200	2581	1109	3.27	1485	6.30	1790	9.61	2051	13.2	2279	17.0	2392	19.1	2493	21.1	2590	23.2	2681	25.2	2778	27.6	2868	29.9
3900	3145	1161	4.20	1524	7.76	1817	11.5	2080	15.6	2304	19.7	2414	22.0	2505	24.0	2603	26.3	2699	28.7	2790	31.1	2887	33.7
4600	3710	1220	5.34	1578	9.49	1858	13.7	2103	18.1	2331	22.8	2438	25.2	2530	27.5	2631	30.0	2721	32.5	2817	35.2	2899	37.7
5300	4274	1282	6.74	1625	11.3	1903	16.1	2147	21.1	2364	26.2	2463	28.7	2565	31.4	2659	34.1	2753	36.9	2837	39.5	2925	42.3
6000	4839	1351	8.38	1684	13.4	1958	18.8	2188	24.2	2402	29.8	2502	32.6	2598	35.5	2689	38.3	2786	41.5	2874	44.5	2953	47.3
6700	5403	1428	10.2	1743	15.8	2010	21.7	2244	27.8	2449	33.8	2550	37.0	2637	40.0	2731	43.2	2818	46.3	2911	49.8		
7400	5968	1509	12.4	1802	18.6	2064	24.8	2296	31.5	2503	38.3	2596	41.6	2686	44.9	2772	48.2	2863	51.8	2948	55.3		

294 AM

Max. safe speeds
Ser. 20 AM=2195 RPM
Ser. 30 AM=2610 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	1509	911	2.42	1266	5.29	1540	8.53	1779	12.2	1980	16.0	2082	18.2	2177	20.4	2261	22.5	2352	24.9	2428	27.0	2509	29.5
3300	2075	942	3.27	1284	6.68	1556	10.5	1782	14.6	1995	19.2	2086	21.4	2178	23.8	2265	26.2	2352	28.8	2430	31.2	2513	34.0
4200	2642	984	4.33	1313	8.30	1579	12.7	1807	17.4	2005	22.3	2102	25.0	2189	27.5	2273	30.2	2363	33.1	2436	35.7	2513	38.5
5100	3208	1031	5.56	1351	10.2	1605	15.1	1825	20.3	2026	25.9	2121	28.8	2209	31.7	2295	34.7	2379	37.8	2459	40.9	2533	43.9
6000	3774	1079	7.00	1391	12.3	1645	18.0	1864	23.8	2054	29.8	2148	33.1	2230	36.1	2318	39.5	2398	42.7	2474	46.0	2554	49.6
6900	4340	1137	8.87	1440	14.8	1685	21.0	1899	27.5	2087	34.1	2175	37.5	2265	41.2	2342	44.5	2425	48.2	2499	51.7	2577	55.5
7800	4906	1198	11.0	1488	17.5	1727	24.4	1940	31.7	2123	38.8	2212	42.6	2298	46.5	2379	50.3	2453	53.9	2532	58.0	2601	61.7
8700	5472	1265	13.4	1541	20.7	1776	28.2	1978	35.9	2161	43.8	2252	48.1	2330	51.9	2414	56.2	2492	60.5	2564	64.5		
9600	6038	1337	16.3	1599	24.4	1826	32.4	2028	41.0	2206	49.5	2290	53.8	2371	58.1	2458	63.0	2530	67.3	2606	71.9		

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

334 AM

Max. safe speeds
Ser. 20 AM=2035 RPM
Ser. 30 AM=2360 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	1523	820	3.19	1146	6.75	1395	10.7	1609	15.2	1797	20.0	1885	22.6	1966	25.1	2053	28.1	2129	30.8	2200	33.5	2275	36.6
4000	2030	843	4.22	1155	8.53	1405	13.2	1616	18.2	1803	23.6	1890	26.4	1974	29.4	2052	32.3	2129	35.3	2204	38.5	2277	41.8
5000	2538	870	5.34	1176	10.6	1416	16.0	1626	21.7	1813	27.7	1900	30.8	1976	33.8	2058	37.2	2136	40.6	2208	43.9	2278	47.3
6000	3046	906	6.65	1200	12.7	1437	19.0	1644	25.6	1825	32.3	1904	35.5	1991	39.2	2069	42.7	2143	46.3	2212	49.7	2285	53.6
7000	3553	948	8.24	1229	14.9	1460	22.1	1656	29.4	1839	37.0	1926	41.1	2008	45.0	2081	48.8	2161	53.0	2229	56.7	2301	60.9
8000	4061	990	10.1	1265	17.5	1488	25.5	1682	33.6	1859	42.1	1941	46.3	2018	50.6	2096	55.0	2172	59.5	2238	63.6	2317	68.7
9000	4569	1039	12.3	1303	20.4	1520	29.1	1707	37.9	1883	47.3	1967	52.2	2042	56.8	2117	61.6	2185	66.1	2264	71.5	2327	76.1
10000	5076	1089	14.9	1342	23.6	1555	33.0	1741	42.7	1906	52.6	1987	57.8	2065	63.1	2138	68.2	2211	73.5	2277	78.5	2353	84.5
11000	5584	1144	17.9	1386	27.2	1593	37.3	1779	48.1	1941	58.7	2016	64.0	2097	70.0	2164	75.2	2236	81.0	2302	86.5		

364 AM

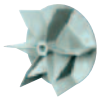
Max. safe speeds
Ser. 20 AM=1840 RPM
Ser. 30 AM=2135 RPM

CFM	OV	4"SP		8"SP		12"SP		16"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP		32"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4400	1826	752	4.63	1038	9.47	1263	14.8	1457	20.7	1627	27.0	1704	30.2	1783	33.7	1848	36.9	1919	40.5	1987	44.1	2052	47.8
5600	2324	773	5.90	1057	11.9	1278	18.1	1463	24.6	1633	31.6	1711	35.2	1787	39.0	1859	42.9	1925	46.6	1997	50.9	2060	54.9
6800	2822	805	7.41	1072	14.3	1292	21.6	1480	29.2	1646	37.0	1725	41.1	1795	45.0	1862	48.9	1935	53.4	2003	57.9	2066	62.2
8000	3320	839	9.16	1097	16.9	1309	25.2	1491	33.7	1659	42.7	1732	47.0	1805	51.5	1876	56.2	1946	60.9	2012	65.7	2074	70.4
9200	3817	876	11.2	1127	19.9	1332	29.1	1511	38.7	1672	48.5	1752	53.8	1822	58.7	1891	63.7	1958	68.9	2023	74.0	2085	79.1
10400	4315	918	13.7	1158	23.0	1358	33.3	1530	43.6	1695	55.0	1762	59.9	1834	65.5	1906	71.4	1972	77.0	2036	82.6	2104	88.9
11600	4813	961	16.5	1194	26.7	1390	37.9	1562	49.5	1713	61.0	1786	67.1	1856	73.1	1927	79.5	1991	85.6	2055	91.8	2116	98.1
12800	5311	1008	19.9	1234	31.0	1425	42.9	1591	55.3	1737	67.7	1809	74.2	1877	80.8	1942	87.2	2011	94.3	2074	101	2130	107
14000	5809	1057	23.7	1275	35.7	1457	48.1	1618	61.2	1768	75.1	1834	81.7	1906	89.2	1966	95.7	2030	103	2098	111		

Series 30 BP & RD Wheels

RD performance shaded in brown

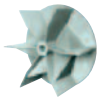
144 BP



Max. safe speeds
Ser. 30 BP=4405 RPM

CFM	OV	6"SP		7"SP		8"SP		9"SP		10"SP		11"SP		12"SP		14"SP		16"SP		18"SP		19"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1300	2889	2648	2.36	2816	2.70	2971	3.05	3119	3.40	3254	3.74	3401	4.13	3528	4.49	3775	5.24	3996	5.97	4219	6.78	4316	7.15
1425	3167	2711	2.67	2868	3.02	3032	3.42	3168	3.77	3317	4.18	3439	4.53	3569	4.93	3811	5.72	4048	6.56	4251	7.34	4361	7.79
1550	3444	2772	3.00	2936	3.40	3080	3.78	3227	4.19	3366	4.60	3503	5.03	3624	5.43	3862	6.27	4079	7.09	4303	8.01	4403	8.44
1675	3722	2830	3.35	2993	3.78	3146	4.21	3284	4.63	3424	5.08	3552	5.51	3677	5.95	3911	6.83	4144	7.78	4351	8.69		
1800	4000	2894	3.73	3056	4.20	3200	4.64	3349	5.12	3480	5.58	3611	6.05	3728	6.49	3972	7.47	4189	8.42	4397	9.39		
1925	4278	2964	4.16	3125	4.66	3270	5.14	3411	5.63	3535	6.09	3668	6.61	3789	7.09	4018	8.08	4233	9.07				
2050	4556	3031	4.61	3184	5.12	3330	5.64	3472	6.17	3598	6.66	3724	7.18	3848	7.72	4075	8.75	4289	9.81				
2175	4833	3109	5.13	3257	5.66	3403	6.21	3531	6.72	3668	7.30	3788	7.83	3915	8.41	4141	9.51	4356	10.6				
2300	5111	3179	5.65	3327	6.22	3468	6.79	3605	7.37	3727	7.92	3858	8.53	3970	9.08	4193	10.2						

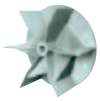
174 BP/RD



Max. safe speeds
Ser. 30 RD=3510 RPM
Ser. 30 BP=4350 RPM

CFM	OV	6"SP		8"SP		10"SP		12"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	2985	2204	3.68	2464	4.71	2708	5.82	2923	6.92	3119	8.02	3309	9.19	3493	10.4	3656	11.6	3811	12.8	3981	14.2	4125	15.4
2250	3358	2272	4.32	2534	5.50	2766	6.68	2971	7.83	3173	9.08	3357	10.3	3537	11.6	3700	12.9	3857	14.2	4007	15.5	4169	17.0
2500	3731	2342	5.04	2600	6.33	2822	7.58	3040	8.94	3230	10.2	3418	11.6	3581	12.9	3751	14.3	3902	15.7	4055	17.1	4200	18.6
2750	4104	2415	5.83	2663	7.20	2885	8.58	3095	10.0	3292	11.5	3476	13.0	3638	14.4	3801	15.9	3962	17.4	4120	19.0	4251	20.4
3000	4478	2490	6.72	2738	8.23	2954	9.70	3168	11.3	3351	12.8	3532	14.4	3707	16.0	3871	17.6	4020	19.2	4163	20.8	4318	22.6
3250	4851	2569	7.70	2810	9.31	3028	10.9	3229	12.6	3418	14.2	3597	15.9	3759	17.6	3924	19.3	4074	21.0	4221	22.8		
3500	5224	2655	8.83	2892	10.6	3100	12.3	3305	14.1	3483	15.8	3660	17.6	3834	19.5	3987	21.2	4140	23.1	4291	25.0		
3750	5597	2739	10.0	2966	11.9	3177	13.7	3371	15.6	3555	17.5	3731	19.4	3894	21.3	4048	23.2	4203	25.2	4343	27.1		
4000	5970	2831	11.4	3050	13.3	3258	15.3	3451	17.3	3625	19.2	3800	21.3	3963	23.3	4118	25.3	4263	27.3				

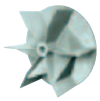
194 BP/RD



Max. safe speeds
Ser. 30 RD=3230 RPM
Ser. 30 BP=3985 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1900	2969	1858	3.32	2321	5.47	2710	7.87	2888	9.17	3052	10.5	3203	11.8	3347	13.2	3492	14.7	3622	16.1	3763	17.7	3883	19.2
2175	3398	1894	3.86	2359	6.27	2747	8.87	2916	10.2	3074	11.6	3232	13.0	3376	14.5	3512	15.9	3647	17.5	3781	19.1	3911	20.8
2450	3828	1942	4.50	2397	7.12	2772	9.86	2947	11.3	3101	12.7	3255	14.3	3407	15.9	3546	17.5	3675	19.0	3803	20.7	3941	22.6
2725	4258	1992	5.20	2435	8.04	2811	11.0	2980	12.6	3143	14.2	3296	15.8	3432	17.3	3580	19.1	3705	20.7	3838	22.5	3961	24.3
3000	4688	2051	5.99	2473	9.00	2841	12.2	3014	13.9	3173	15.6	3323	17.3	3474	19.1	3608	20.8	3736	22.5	3874	24.5	3984	26.2
3275	5117	2118	6.89	2526	10.1	2881	13.5	3049	15.3	3216	17.2	3353	18.8	3503	20.7	3638	22.6	3769	24.5	3893	26.3		
3550	5547	2190	7.91	2578	11.3	2931	15.0	3095	16.8	3249	18.7	3396	20.6	3533	22.5	3682	24.7	3803	26.5	3931	28.6		
3825	5977	2269	9.07	2641	12.7	2980	16.5	3141	18.5	3293	20.5	3439	22.5	3577	24.6	3715	26.7	3850	28.9	3969	30.9		
4100	6406	2350	10.3	2703	14.1	3036	18.2	3188	20.2	3338	22.4	3483	24.5	3621	26.7	3749	28.8	3885	31.1				

224 BP/RD



Max. safe speeds
Ser. 30 RD=2730 RPM
Ser. 30 BP=3440 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2700	2967	1576	4.59	1964	7.6	2296	11.0	2445	12.9	2582	14.7	2717	16.7	2838	18.6	2960	20.7	3081	22.9	3187	24.9	3301	27.3
3125	3434	1615	5.44	2004	8.79	2327	12.4	2468	14.3	2612	16.4	2744	18.5	2864	20.5	2986	22.8	3099	25.0	3211	27.2	3320	29.6
3550	3901	1666	6.48	2042	10.1	2354	13.9	2499	16.0	2638	18.1	2766	20.3	2892	22.6	3015	25.0	3122	27.2	3237	29.7	3332	31.9
3975	4368	1727	7.73	2079	11.5	2391	15.7	2531	17.8	2665	20.0	2791	22.3	2915	24.7	3038	27.2	3155	29.8	3258	32.2	3367	34.9
4400	4835	1788	9.13	2128	13.2	2429	17.5	2573	19.9	2705	22.3	2829	24.7	2953	27.3	3064	29.7	3182	32.4	3281	34.9	3387	37.6
4825	5302	1863	10.8	2181	15.0	2474	19.7	2606	22.0	2744	24.7	2867	27.2	2981	29.7	3092	32.3	3212	35.2	3314	37.9	3424	40.9
5250	5769	1937	12.7	2243	17.2	2525	22.1	2656	24.6	2784	27.3	2906	30.0	3020	32.6	3133	35.4	3242	38.3	3348	41.2		
5675	6236	2017	14.9	2313	19.7	2582	24.8	2704	27.4	2831	30.2	2954	33.1	3060	35.7	3174	38.7	3275	41.5	3383	44.6		
6100	6703	2102	17.3	2381	22.4	2637	27.7	2766	30.6	2879	33.3	3001	36.4	3109	39.2	3215	42.2	3319	45.2	3419	48.3		

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

Series 30 BP & RD Wheels

RD performance shaded in brown

264 BP/RD

Max. safe speeds
Ser. 30 RD=2365 RPM
Ser. 30 BP=2980 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3600	2975	1362	6.08	1705	10.2	1992	14.8	2113	17.0	2234	19.6	2355	22.3	2463	24.9	2562	27.5	2660	30.3	2766	33.4	2856	36.2
4150	3430	1401	7.25	1733	11.6	2014	16.5	2140	19.1	2259	21.7	2377	24.6	2477	27.2	2587	30.3	2689	33.3	2780	36.2	2878	39.5
4700	3884	1440	8.56	1763	13.3	2037	18.4	2163	21.2	2283	24.1	2393	26.9	2501	29.9	2605	33.0	2702	36.1	2798	39.3	2892	42.6
5250	4339	1489	10.1	1798	15.2	2069	20.7	2187	23.4	2309	26.6	2424	29.7	2526	32.8	2625	35.9	2725	39.3	2818	42.6	2910	46.0
5800	4793	1542	11.9	1838	17.3	2100	23.1	2223	26.2	2335	29.3	2449	32.6	2552	35.9	2653	39.3	2750	42.7	2840	46.1	2937	49.9
6350	5248	1603	14.1	1886	19.8	2137	25.8	2259	29.1	2370	32.4	2475	35.7	2579	39.2	2681	42.8	2769	46.1	2864	49.8	2951	53.5
6900	5702	1665	16.4	1932	22.4	2180	28.9	2294	32.2	2405	35.7	2510	39.3	2606	42.7	2710	46.6	2802	50.2	2900	54.3		
7450	6157	1734	19.2	1990	25.6	2227	32.3	2335	35.8	2439	39.3	2544	43.0	2643	46.8	2740	50.6	2834	54.6	2925	58.6		
8000	6612	1804	22.3	2046	28.9	2273	36.0	2381	39.7	2487	43.5	2587	47.3	2679	51.1	2778	55.3	2867	59.2	2961	63.6		

294 BP/RD

Max. safe speeds
Ser. 30 RD=2060 RPM
Ser. 30 BP=2610 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4700	3013	1188	7.58	1486	12.6	1735	18.1	1845	20.9	1951	23.9	2050	26.9	2151	30.2	2238	33.3	2332	36.9	2415	40.2	2494	43.5
5400	3462	1217	8.94	1506	14.3	1750	20.2	1860	23.3	1968	26.6	2065	29.8	2166	33.3	2255	36.7	2336	40.0	2424	43.8	2500	47.2
6100	3910	1256	10.6	1534	16.4	1774	22.7	1880	25.9	1991	29.6	2082	32.8	2182	36.6	2267	40.1	2359	44.1	2443	47.9	2519	51.6
6800	4359	1294	12.4	1566	18.7	1798	25.4	1909	29.0	2009	32.6	2109	36.4	2200	40.1	2287	43.9	2369	47.7	2457	52.0	2538	56.1
7500	4808	1340	14.5	1596	21.1	1827	28.4	1929	32.0	2035	36.1	2127	39.9	2219	43.9	2308	48.0	2393	52.2	2473	56.3	2559	61.0
8200	5256	1389	17.0	1639	24.1	1856	31.6	1963	35.7	2062	39.8	2155	43.9	2247	48.2	2329	52.3	2417	56.9	2501	61.5	2580	66.0
8900	5705	1445	19.8	1679	27.3	1895	35.4	1996	39.6	2088	43.7	2181	48.1	2267	52.4	2351	56.8	2442	61.8	2519	66.3	2602	71.4
9600	6154	1502	23.0	1726	30.9	1932	39.3	2028	43.6	2120	48.1	2215	52.8	2303	57.6	2382	62.0	2466	67.0	2539	71.4		
10300	6603	1559	26.5	1774	34.9	1973	43.7	2070	48.4	2158	53.0	2248	57.8	2331	62.6	2412	67.4	2492	72.4	2576	77.9		

334 BP/RD

Max. safe speeds
Ser. 30 RD=1850 RPM
Ser. 30 BP=2360 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5800	2974	1064	9.32	1331	15.5	1553	22.2	1658	25.9	1755	29.7	1838	33.2	1930	37.4	2009	41.2	2087	45.2	2162	49.4	2233	53.5
6700	3436	1093	11.1	1355	17.8	1577	25.3	1673	29.0	1771	33.2	1854	37.0	1945	41.4	2020	45.3	2100	49.8	2172	54.1	2249	58.9
7600	3897	1129	13.2	1376	20.4	1593	28.3	1689	32.3	1788	36.8	1871	40.9	1961	45.7	2038	50.1	2115	54.7	2191	59.5	2266	64.5
8500	4359	1164	15.6	1406	23.4	1615	31.7	1715	36.3	1805	40.8	1888	45.1	1978	50.3	2057	55.0	2131	59.8	2211	65.2	2278	69.9
9400	4821	1209	18.4	1438	26.7	1642	35.6	1734	40.2	1830	45.3	1913	50.1	1996	55.1	2076	60.3	2153	65.5	2226	70.8	2292	75.7
10300	5282	1254	21.6	1473	30.3	1674	40.0	1766	44.9	1854	50.1	1938	55.2	2014	60.2	2096	65.8	2166	70.9	2242	76.7	2312	82.3
11200	5744	1305	25.2	1517	34.8	1704	44.6	1795	49.9	1878	55.1	1963	60.6	2040	66.0	2116	71.6	2198	78.0	2268	83.7	2333	89.2
12100	6205	1359	29.4	1559	39.4	1742	49.9	1829	55.4	1913	61.1	1993	66.7	2072	72.7	2144	78.3	2220	84.6	2293	91.0	2354	96.4
13000	6667	1413	34.1	1607	44.7	1784	55.9	1862	61.2	1947	67.4	2022	73.1	2104	79.7	2171	85.3	2242	91.6	2319	98.6		

364 BP/RD

Max. safe speeds
Ser. 30 RD=1675 RPM
Ser. 30 BP=2135 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7100	2971	962	11.4	1204	18.9	1405	27.2	1500	31.7	1588	36.4	1664	40.7	1747	45.9	1818	50.6	1889	55.5	1957	60.6	2022	65.7
8200	3431	989	13.6	1222	21.7	1423	30.8	1513	35.5	1598	40.4	1678	45.3	1755	50.4	1828	55.6	1901	61.2	1967	66.4	2030	71.7
9300	3891	1019	16.1	1248	25.1	1439	34.6	1527	39.5	1617	45.1	1692	50.1	1770	55.7	1845	61.4	1909	66.6	1978	72.5	2046	78.6
10400	4351	1055	19.1	1271	28.6	1462	38.9	1547	44.2	1629	49.6	1711	55.5	1785	61.2	1857	67.1	1924	72.9	1997	79.5	2063	85.9
11500	4812	1093	22.5	1302	32.7	1488	43.8	1573	49.5	1654	55.4	1730	61.2	1805	67.4	1878	73.9	1944	79.9	2015	86.8	2075	93.0
12600	5272	1134	26.4	1334	37.2	1513	48.9	1597	55.0	1672	60.9	1748	67.2	1824	73.9	1892	80.2	1964	87.3	2024	93.5	2089	100
13700	5732	1180	30.9	1371	42.5	1542	54.6	1625	61.2	1702	67.7	1773	74.0	1850	81.3	1913	87.6	1980	94.6	2044	102	2112	109
14800	6192	1229	36.0	1410	48.2	1573	60.9	1653	67.7	1730	74.7	1802	81.7	1869	88.4	1941	96.1	2004	103	2071	111	2134	119
15900	6653	1279	41.7	1450	54.5	1612	68.2	1688	75.3	1757	82.0	1831	89.7	1900	97.2	1961	104	2027	112	2097	121		

404 BP/RD

Max. safe speeds
Ser. 30 RD=1525 RPM
Ser. 30 BP=1905 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8700	3000	881	14.0	1101	23.2	1285	33.2	1371	38.8	1446	44.0	1520	49.6	1590	55.4	1661	61.6	1725	67.5	1787	73.7	1846	79.8
9900	3414	904	16.5	1120	26.5	1301	37.3	1381	42.8	1455	48.4	1533	54.8	1600	60.6	1673	67.4	1735	73.6	1795	80.0	1853	86.5
11100	3828	927	19.1	1136	29.8	1316	41.5	1398	47.6	1472	53.6	1546	60.1	1615	66.6	1680	73.1	1745	80.0	1804	86.7	1868	94.2
12300	4241	956	22.3	1156	33.6	1330	45.9	1411	52.4	1488	59.1	1559	65.7	1629	72.8	1697	80.0	1761	87.2	1820	94.3	1877	101
13500	4655	988	26.0	1182	38.1	1349	50.9	1429	57.8	1500	64.5	1572	71.6	1643	79.2	1705	86.2	1772	94.2	1835	102	1892	110
14700	5069	1023	30.1	1206	42.8	1372	56.6	1447	63.5	1518	70.7	1591	78.5	1657	86.0	1722	93.7	1783	102	1850	110	1903	118
15900	5483	1061	34.9	1235	48.2	1393	62.4	1468	70.0	1541	77.8	1610	85.6	1678	93.8	1738	102	1803	110	1865	119		
17100	5897	1099	40.1	1266	54.1	1422	69.4	1494	77.1	1563	85.1	1628	92.9	1698	102	1761	111	1822	119	1880	128		
18300	6310	1140	46.0	1302	60.9	1450	76.6	1518	84.6	1589	93.3	1656	102	1717	110	1776	119	1840	129	1895	137		

454 BP

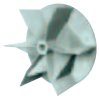
Max. safe speeds
Ser. 30 BP=1690 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11000	2981	776	17.8	969	29.5	1132	42.7	1205	49.7	1272	56.7	1342	64.7	1400	71.8	1463	80.1	1519	88.2	1575	96.5	1627	105
12500	3388	796	20.8	985	33.5	1143	47.3	1215	54.6	1284	62.4	1346	69.9	1410	78.2	1470	86.7	1530	95.7	1584	104	1637	113
14000	3794	818	24.2	999	37.6	1154	52.2	1227	60.2	1296	68.4	1359	76.5	1420	85.0	1478	93.6	1536	103	1589	112	1641	121
15500	4201	843	28.1	1020	42.6	1172	58.1	1244	66.6	1308	74.7	1371	83.4	1434	92.7	1490	102	1543	110	1600	120	1652	130
17000	4607	871	32.6	1039	47.7	1189	64.3	1255	72.7	1324	82.1	1383	90.6	1447	101	1503	110	1555	119	1611	129	1662	139
18500	5014	901	37.8	1062	53.7	1208	71.2	1275	80.3	1340	89.7	1400	99.1	1460	109	1518	119	1574	129	1626	140	1673	149
20000	5420	931	43.4	1088	60.4	1231	78.9	1294	88.2	1355	97.6	1417	108	1472	118	1533	129	1584	139	1640	150		
21500	5827	964	49.8	1114	67.7	1252	86.9	1316	97.0	1374	107	1438	118	1490	128	1547	139	1602	150	1654	161		
23000	6233	999	57.1	1142	75.7	1275	95.7	1337	106	1397	117	1457	128	1513	139	1567	150	1619	161	1668	173		

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

Series 30 BP Wheels

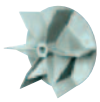
504 BP



Max. safe speeds
Ser. 30 BP=1505 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13700	2998	692	22.1	866	36.8	1013	53.4	1076	61.8	1139	71.2	1194	80.0	1255	90.4	1307	100	1359	110	1408	121	1456	131
15500	3392	710	25.7	877	41.3	1022	59.0	1084	67.8	1147	77.7	1203	87.1	1257	96.9	1316	108	1361	118	1410	129	1462	141
17300	3786	727	29.6	891	46.3	1031	64.8	1098	74.9	1155	84.4	1212	94.6	1267	105	1320	116	1369	127	1422	139	1469	151
19100	4179	749	34.3	906	52.0	1045	71.5	1105	81.4	1168	92.5	1226	104	1277	114	1332	126	1381	137	1429	149	1476	161
20900	4573	772	39.5	924	58.3	1057	78.5	1122	89.9	1181	101	1234	112	1287	123	1337	135	1392	148	1436	159	1483	172
22700	4967	797	45.5	943	65.2	1076	87.1	1133	97.8	1192	110	1247	121	1302	134	1349	145	1400	158	1448	171	1495	185
24500	5361	824	52.2	964	72.9	1094	95.9	1152	108	1208	120	1260	131	1316	145	1366	158	1414	171	1458	183		
26300	5755	851	59.6	988	81.7	1110	105	1170	118	1223	130	1276	143	1330	156	1377	169	1427	183	1469	196		
28100	6149	881	68.1	1011	91.0	1133	116	1186	128	1241	141	1292	154	1343	168	1392	182	1440	197	1486	211		

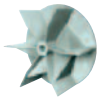
574 BP



Max. safe speeds
Ser. 30 BP=1325 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	3035	610	29.1	762	48.4	891	70.1	946	81.1	1002	93.3	1050	105	1099	117	1149	131	1194	144	1237	158	1279	172
20250	3415	625	33.7	773	54.2	897	76.6	954	88.7	1006	101	1059	114	1106	127	1154	141	1198	154	1241	168	1283	183
22500	3794	640	38.6	785	60.8	907	84.4	961	96.5	1016	110	1067	124	1116	138	1160	151	1207	166	1246	180	1287	195
24750	4174	657	44.4	797	67.5	916	92.3	974	106	1026	120	1075	134	1122	148	1168	163	1211	178	1254	193	1296	209
27000	4553	677	50.9	813	75.6	928	101	982	115	1034	130	1082	144	1131	160	1177	175	1223	192	1262	206	1304	223
29250	4933	699	58.4	827	83.9	943	112	994	126	1047	141	1096	157	1140	172	1188	189	1228	204	1270	221	1309	237
31500	5312	721	66.6	846	93.7	957	122	1009	138	1059	153	1105	169	1151	185	1195	202	1238	219	1281	236	1320	254
33750	5691	745	76.0	866	104	972	134	1026	151	1074	167	1118	182	1166	200	1208	217	1248	234	1291	253		
36000	6071	770	86.3	884	116	990	147	1038	163	1088	181	1134	198	1179	216	1220	233	1263	252	1304	271		

644 BP



Max. safe speeds
Ser. 30 BP=1185 RPM

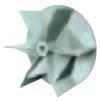
CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
22000	2941	542	35.4	679	59.4	794	86.1	845	100	890	114	938	129	983	146	1022	160	1063	177	1103	194	1141	212
25000	3342	555	41.3	687	66.6	801	95.0	850	110	899	125	947	142	990	158	1031	175	1067	191	1106	209	1144	227
28000	3743	571	48.0	700	75.5	811	105	860	121	906	137	952	154	996	172	1036	189	1075	206	1114	225	1152	244
31000	4144	588	55.7	712	84.6	820	116	869	133	915	150	962	168	1002	185	1041	203	1083	223	1121	242	1156	261
34000	4545	606	64.5	727	95.4	831	128	881	146	924	163	971	183	1013	202	1052	220	1093	241	1128	260	1166	281
37000	4947	625	74.1	741	107	845	142	891	160	935	178	979	198	1019	217	1061	238	1097	257	1135	279	1170	299
40000	5348	648	85.5	758	120	858	156	905	176	950	196	991	216	1033	236	1073	258	1111	280	1147	301	1180	321
43000	5749	670	98.0	777	134	872	172	917	192	960	212	1003	234	1042	254	1084	278	1120	300	1154	321		
46000	6150	694	112	796	150	889	190	932	210	976	232	1017	254	1054	275	1094	299	1133	323	1164	344		

714 BP

Max. safe speeds
Ser. 30 BP=1070 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27500	2999	491	44.3	615	74.2	716	106	763	124	806	142	848	161	888	180	925	200	962	220	997	241	1031	262
31000	3381	503	51.2	623	82.8	724	117	770	136	813	155	853	174	892	194	931	215	966	236	1001	258	1035	280
34500	3762	516	59.1	632	92.5	730	129	778	149	819	168	860	189	900	211	938	233	974	255	1005	276	1039	299
38000	4144	531	68.2	642	103	739	142	783	162	829	184	867	205	906	227	943	250	978	273	1013	297	1047	321
41500	4526	547	78.6	654	115	751	157	795	178	834	199	877	223	915	247	950	269	985	293	1019	318	1054	344
45000	4907	564	89.9	669	130	761	172	803	194	846	218	882	240	922	265	956	289	994	315	1028	342	1060	367
48500	5289	582	103	683	144	773	189	816	213	857	237	895	261	932	287	965	310	1000	336	1032	362	1067	391
52000	5671	601	117	700	161	787	208	828	232	867	257	903	281	942	309	977	336	1010	362	1040	387		
55500	6052	622	133	715	179	800	227	839	252	879	279	914	304	951	332	984	358	1019	388	1053	417		

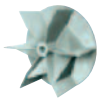
784 BP



Max. safe speeds
Ser. 30 BP=975 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
33000	2984	448	53.4	560	89.2	654	129	696	149	735	171	772	193	809	217	843	240	877	265	910	291	941	317
37500	3391	459	62.5	568	101	658	141	702	165	740	187	777	210	812	234	848	260	881	286	913	313	944	340
42000	3797	471	72.3	577	113	668	158	708	181	746	204	783	230	820	256	855	283	887	310	916	335	947	363
46500	4204	486	84.2	588	128	677	175	717	200	755	225	790	250	827	278	859	305	893	334	925	364	953	391
51000	4611	501	97.6	599	143	685	192	725	219	764	246	799	273	834	302	867	331	899	360	928	388	959	419
55500	5018	519	113	613	162	697	214	735	241	771	268	808	297	840	325	875	357	904	386	936	418	965	448
60000	5425	536	130	626	181	708	236	747	265	781	293	816	322	849	353	882	385	914	417	943	448	975	484
64500	5832	556	150	642	202	721	260	758	290	793	321	829	353	861	385	893	417	922	449	954	485		
69000	6239	576	171	660	228	735	287	771	318	805	349	839	382	873	417	902	449	934	486	961	517		

854 BP



Max. safe speeds
Ser. 30 BP=890 RPM

CFM	OV	6"SP		10"SP		14"SP		16"SP		18"SP		20"SP		22"SP		24"SP		26"SP		28"SP		30"SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
39000	2970	411	63.2	513	105	599	151	637	176	673	202	709	229	741	255	773	284	804	313	834	344	863	375
44000	3351	420	72.9	520	118	605	167	643	193	677	219	714	249	744	275	778	307	808	337	838	369	864	398
49000	3732	431	84.2	529	132	610	183	648	211	683	239	718	269	752	300	782	330	812	362	842	395	868	426
54000	4113	442	96.4	537	148	618	202	656	231	691	262	724	291	755	322	789	357	816	388	846	422	872	455
59000	4494	456	111	547	165	627	223	663	253	699	285	732	318	761	348	793	382	823	417	850	450	879	488
64000	4874	470	127	558	183	636	245	672	277	706	309	737	341	771	378	800	413	828	447	858	485	885	522
69000	5255	485	145	569	204	646	269	680	301	715	337	747	372	776	406	807	444	837	482	865	520		
74000	5636	502	166	583	228	655	294	690	329	723	365	754	400	785	437	814	475	842	513	872	556		
79000	6017	519	189	596	253	668	324	702	360	734	397	763	433	795	474	823	512	850	551	879	593		

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

Series 20 Material Specifications

MAXIMUM SAFE SPEEDS, SHAFTS, AND BEARINGS FOR SERIES 20 LS, DH, AH, AND AM WHEELS AT 70°

Size	Wheel Max Safe Speed			Arr. 1, 8, 9, 9E, 9F		Arr. 10		LS Wheel			DH Wheel					AH Wheel		AM Wheel	
	Arr. 1, 8, 9, 9F	Arr. 9E	Arr. 10	Shaft Dia.	Bearing	Shaft Dia.	Bearing	Blades	Weight	WR²	Backplate	Frontplate	Blades	Weight	WR²	Weight	WR²	Weight	WR²
144	4605	3980	4605	1 3/16	B	1 7/16	A	10	15	1.5	–	–	–	–	–	25	3.8	20	2.0
174	3930	3930	3745	1 7/16	B	1 7/16	A	10	19	2.8	–	–	–	–	–	33	7.8	29	4.4
194	3425	3425	3115	1 11/16	C	1 11/16	A	7	34	5	7	10		49	11	55	15	46	12
224	2900	2900	2635	1 11/16	C	1 15/16	A	7	45	13	7	10		63	21	72	28	60	24
264	2510	2510	2280	2 3/16	C	1 15/16	A	7	77	20	7	10		78	36	91	49	74	41
294	2195	2195	1995	2 3/16	C	1 15/16	B	7	85	42	7		10	102	69	123	87	100	71
334	2035	2035	1790	2 3/16	D	2 3/16	B	7	103	63	1/4	7	10	157	119	189	167	162	134
364	1840	–	1620	2 7/16	D	2 3/16	B	7	115	86	1/4	7	10	184	178	229	251	195	200
404	1640	–	–	2 7/16	D	–	–	7	126	114	1/4		7	261	327	–	–	–	–
454	1460	–	–	2 11/16	D	–	–	1/4	256	294	1/4		7	349	515	–	–	–	–
504	1305	–	–	2 15/16	D	–	–	1/4	287	423	1/4		7	420	805	–	–	–	–
574	1145	–	–	2 15/16	D	–	–	1/4	338	630	1/4		7	651	1623	–	–	–	–
644	1025	–	–	3 7/16	D	–	–	1/4	552	1290	3/8	1/4		858	2738	–	–	–	–
714	925	–	–	3 15/16	D	–	–	1/4	609	1744	3/8	1/4		1116	4116	–	–	–	–
784	840	–	–	3 15/16	D	–	–	1/4	860	2970	3/8	1/4		1306	5970	–	–	–	–
854	770	–	–	4 7/16	E	–	–	1/4	927	3800	3/8	1/4		1518	7810	–	–	–	

NOTE: All weights in lbs.

Bearing Types:

- A Standard Duty Ball, Concentric Lock
- B Medium Duty Ball, Concentric Lock
- C Heavy Duty Ball, Concentric Lock
- D Spherical Roller, Set Screw Mount (2 Bolt Base)
- E Spherical Roller, Set Screw Mount (4 Bolt Base)

MATERIAL SPECIFICATIONS FOR STANDARD STEEL SERIES 20 FANS

Size	Housing					Bearing Pedestal Arr. 1, 9, 9E, 9F Motor Pedestal Arr. 9F (404-574)			Bearing Pedestal Arr. 10					Bare Fan Weights [lbs.]				
	Sides	Scroll	Plates		Inlet Collar				Bearing Pedestal			Motor Platform	Base Angles					
			Inlet	Drive		Top	Sides	Base Bars	Top	Sides	Ends			Arr. 1, 9	Arr. 9E	Arr. 9F	Arr. 10	Arr. 4
144	12		12	10	12	10			10	12		7	1 1/2 x 1 1/2 x 3/16	130	135	–	135	107
174	12		10		12	10			10	12		7	1 1/2 x 1 1/2 x 3/16	175	181	–	175	145
194	10		10		7	7			7	12		7	2 x 2 x 3/16	305	309	–	300	237
224	10		10		7	7			7	10		7	2 x 2 x 3/16	365	376	–	420	317
264	10		10		7	7			7	10		1/4	2 x 2 x 3/16	460	473	–	530	410
294	10		10		7	1/4			7	10	7	1/4	3 x 3 x 3/16	715	725	–	675	515
334	10		10		7	1/4			7	10	7	1/4	3 x 3 x 3/16	920	933	–	880	688
364	10		7		7	1/4			7	10	7	1/4	3 x 3 x 3/16	1170	–	–	1010	932
404	7		7	–	7	1/4		3/8	–	–	–	–	–	1340	–	1630	–	–
454	7		7	–	7	1/4		3/8	–	–	–	–	–	1830	–	2095	–	–
504	7		7	–	7	1/4		3/8	–	–	–	–	–	2205	–	2515	–	–
574	7		7	–	7	3/8	1/4	3/8	–	–	–	–	–	2955	–	3340	–	–
644	1/4	7	1/4	–	1/4	3/8			–	–	–	–	–	4665	–	–	–	–
714	1/4	7	1/4	–	1/4	3/8			–	–	–	–	–	5255	–	–	–	–
784	1/4	7	1/4	–	1/4	3/8			–	–	–	–	–	6440	–	–	–	–
854	1/4	7	1/4	–	1/4	3/8			–	–	–	–	–	8145	–	–	–	–

Series 30 Material Specifications

MAXIMUM SAFE SPEEDS, SHAFTS, AND BEARINGS FOR SERIES 30 BP, RD, LS/RIM, DH, AH, AND AM WHEELS AT 70°

Size	Wheel Max Safe Speed		Arr. 1, 8, 9, 9F							
			LS/RIM		DH, AH, AM		BP/RD			
							Shaft Dia.		Bearing Type	
	BP, DH, LS/RIM, AH, AM	RD	Shaft Dia.	Bearing Type	Shaft Dia.	Bearing Type	@ Wheel	@ Bearings	BP	RD
144	4405	–	–	–	–	–	1 7/16	1 7/16	B	–
174	4350	3510	–	–	–	–	1 11/16	1 11/16	C	B
194	3985	3230	1 11/16	C	1 11/16	C	1 11/16	1 11/16	C	
224	3440	2730	1 15/16	C	1 15/16	C	1 15/16	1 15/16	C	
264	2980	2365	2 3/16	C	2 3/16	C	2 3/16	2 3/16	C	
294	2610	2060	2 7/16	C	2 7/16	C	2 7/16	2 7/16	C	
334	2360	1850	2 11/16	C	2 7/16	D	2 11/16	2 11/16	C	
364	2135	1675	2 11/16	D	2 11/16	D	2 11/16	2 11/16	D	
404	1905	1525	3 7/16	D	2 11/16	D	2 15/16	2 15/16	D	
454	1690	–	3 7/16	D	2 15/16	D	2 15/16	3 7/16	D	–
504	1505	–	3 15/16	D	3 7/16	D	3 7/16	3 15/16	D	–
574	1325	–	3 15/16	D	3 7/16	D	3 7/16	3 15/16	D	–
644	1185	–	4 7/16	E	3 15/16	D	3 15/16	4 7/16	E	–
714	1070	–	4 15/16	F	4 7/16	E	4 7/16	4 15/16	F	–
784	975	–	5 7/16	F	4 7/16	E	4 7/16	5 7/16	F	–
854	890	–	5 7/16	F	4 15/16	F	4 15/16	5 7/16	F	–

Bearing Types:

- B Medium Duty Ball, Concentric Lock
- C Heavy Duty Ball, Concentric Lock
- D Spherical Roller, Set Screw Mount (2 Bolt Base)
- E Spherical Roller, Set Screw Mount (4 Bolt Base)
- F Split Housing Spherical Roller, Adapter Mount

MATERIAL SPECIFICATIONS FOR STANDARD STEEL SERIES 30 FANS

Size	Housing				Bearing Ped. Arr. 1, 9, 9F Motor Ped. Arr. 9F (334-454)		Bare Fan Weights [lbs]		
	Sides & Scroll	Plates		Inlet Collar					
		Inlet	Drive		Top & Sides	Base Bars	Arr. 1, 9	Arr. 9F	Arr. 4
144	12	12	10	10	10		139	–	–
174	12	10		10	10		210	–	–
194	7	10		7	1/4		400	–	279
224	7	10		7	1/4		530	–	376
264	7	10		7	1/4		755	–	581
294	7	10		7	1/4		900	–	711
334	7	10	–	7	1/4	3/8	1140	1430	1028
364	7	7	–	7	1/4	3/8	1360	1680	1215
404	7	7	–	7	1/4	3/8	1655	2030	–
454	7	7	–	7	1/4	3/8	2315	2690	–
504	1/4	7	–	7	3/8	1/2	3115	–	–
574	1/4	7	–	7	3/8	5/8	3790	–	–
644	1/4	1/4	–	1/4	3/8	5/8	4960	–	–
714	1/4	1/4	–	1/4	3/8	5/8	6300	–	–
784	1/4	1/4	–	1/4	3/8	5/8	7140	–	–
854	1/4	1/4	–	1/4	3/8	5/8	8665	–	–

Material Specifications For Series 30 Fans

U.S. STANDARD STEEL GAUGE TO 7 GAUGE – DIMENSIONS [INCHES]

Size	LS/RIM Wheel				DH Wheel				
	Blades	Rims	Weight [lbs.]	WR^2	Backplate	Frontplate	Blades	Weight [lbs.]	WR^2
144	–	–	–	–	–	–	–	–	–
174	–	–	–	–	–	–	–	–	–
194	1/4	–	36	7	7	10		49	11
224	1/4	–	53	16	7	10		63	21
264	1/4	–	89	37	7	10		79	37
294	1/4	–	101	54	1/4	7	10	104	70
334	1/4	–	132	87	1/4	7	10	158	120
364	1/4	–	148	111	1/4	7	10	186	180
404	1/4	1/4	272	369	1/4		7	263	330
454	3/8	1/4	481	911	1/4		7	352	520
504	3/8	1/4	563	1208	1/4		7	424	812
574	3/8	1/4	690	2373	3/8	1/4	7	657	1635
644	3/8	1/4	1112	3634	3/8	1/4		866	2765
714	3/8	1/4	1256	5044	3/8	1/4		1127	4152
784	3/8	1/4	1607	7853	3/8	1/4		1319	6032
854	3/8	1/4	1804	9795	3/8	1/4		1533	8504

Size	BP Wheel				RD Wheel				AH Wheel		AM Wheel	
	Backplate	Blades	Weight [lbs.]	WR^2	Backplate	Blades	Weight [lbs.]	WR^2	Weight [lbs.]	WR^2	Weight [lbs.]	WR^2
144	7		24	4.1	–	–	–	–	–	–	–	–
174	7		32	7.9	1/4		55	12	–	–	–	–
194	7		59	12	1/4		72	15	55	15	46	12
224	1/4		105	31	3/8		134	43	76	29	60	24
264	1/4		135	53	3/8		175	75	100	53	74	41
294	1/4		188	90	3/8		239	126	138	96	100	71
334	1/4		227	137	3/8		291	192	199	176	162	134
364	1/4		271	201	3/8		351	284	241	266	195	200
404	1/4		310	284	3/8		406	402	–	–	–	–
454	1/4	3/8	445	622	–	–	–	–	–	–	–	–
504	1/4	3/8	535	1026	–	–	–	–	–	–	–	–
574	3/8		790	1870	–	–	–	–	–	–	–	–
644	3/8		1000	3111	–	–	–	–	–	–	–	–
714	3/8		1240	4723	–	–	–	–	–	–	–	–
784	3/8		1480	6816	–	–	–	–	–	–	–	–
854	3/8		1730	9058	–	–	–	–	–	–	–	–

Housing Dimensions – Series 20 and 30 All Arrangements

Size	B	C	D	E	F	G	J		L [O.D.] Ser. 20		L [I.D.]	M	a	b†	c	d
							Slip	Flanged*	LS, DH	AH, AM	Ser. 30					
144	10½	11⅛	8 3/16	9⅜	12	10¼	1⅝		9	8	8¾	7⅞	10¾	16	11½	9¾
174	12⅝	13⅜	10 1/16	11⅛	14½	12¼	1⅝		11	9¾	10¾	9½	13⅛	19¼	13¾	11½
194	14	15 15/16	10⅛	11 15/16	17 15/16	13 15/16	3⅛	3⅜	11		10⅝	9¾	15	22⅝	17	13
224	16½	18 13/16	13	14 1/16	21 3/16	16 7/16	3⅛	3⅜	13		12⅝	10¾	17⅝	26⅝	20	15¼
264	18½	21 11/16	14 15/16	16 3/16	24 7/16	18 15/16	4⅛	4⅜	15		14⅝	12⅜	20¼	30⅜	23	17½
294	21	24 9/16	16⅞	18 5/16	27 11/16	21 7/16	4⅛	4⅜	17		16⅝	14	23	34⅜	26⅛	19⅞
334	23	27⅜	18¾	20⅜	30⅞	23⅞	4⅛	4⅜	19		18⅝	15⅝	25¾	38⅛	29¼	22⅜
364	25½	30¼	20 11/16	22½	34⅛	26⅜	5¼	5½	21		20⅝	17¼	28½	42⅛	32¼	24⅝
404	28	33 3/16	22 13/16	24 13/16	37⅜	29	5¼	5½	23	–	22⅝	19	31⅛	46¼	35⅜	27
454	31½	37 7/16	25 11/16	27 15/16	42 3/16	32 11/16	5¼	5½	26	–	25⅝	21⅜	35⅜	52¼	40	30⅝
504	34½	41⅞	28 11/16	31¼	47 3/16	36 9/16	6	6¼	29	–	28⅝	23⅞	39⅜	57¾	44⅝	34⅛
574	39	47 9/16	32⅝	35 9/16	53 9/16	41 9/16	7	7¼	33	–	32⅝	27⅛	44¾	65⅝	50¾	38¾
644	43	53 5/16	36½	39¾	60 1/16	46½	7¼	7½	37	–	36½	30½	50¼	72⅞	57	43½
714	47½	58 15/16	40 5/16	44 1/16	66⅜	51½	7¼	7½	41	–	40½	33⅝	55½	80⅝	62⅞	48
784	52	64¾	44¼	48⅜	72 15/16	56 9/16	7¼	7½	45	–	44½	36⅞	60⅞	88½	69	52¾
854	57	70½	48 3/16	52 9/16	79 7/16	61½	7¼	7½	49	–	48½	40⅛	66⅜	96⅝	75	57⅜

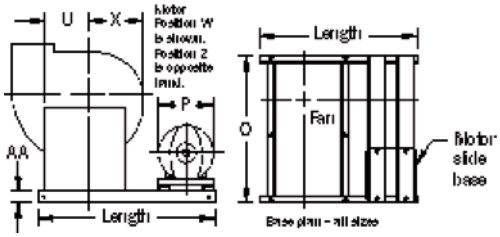
* Flanged inlet standard on Series 30. Dimensions are for drawings shown on pages 23 through 27.
† Maximum with outlet flange.

UNITARY BASE

Structural steel channel base provides factory-designed package of fan, motor, drive, and belt guard. Also available with rubber-in-shear or spring isolation. Built-in motor rails allow adjustment of belt tension.

Unitary base with isolation is also available for Arrangement 8, 9, and 9F fans.

NOTE: Down Blast discharge requires special construction. Also, some larger Series 20 GI Fans on unitary bases cannot be shipped as an assembled package.



Approximate base length = U + X + P + 16

U = from fan base dimension drawing on pages 18-19.

X = dimension from fan centerline to edge of scroll nearest motor. Dimension varies with discharge and motor position. Refer to dimensional drawings on pages 18-19.

P = diameter of motor from table shown.

16 = constant-allows for motor clearance.

NOTE: These dimensions are only approximate. Exact dimensions furnished after order is placed.

DIMENSIONS [INCHES]

Size	AA Unitary base with isolation	AA Standard Unitary Base	O
144	3*	3*	20½
174	3*	3*	25
194	3*	3*	28¾
224	3*	3*	30¾
264	4†	4†	35¾
294	4†	4†	39¾
334	4†	4†	42¾
364	6	6	47
404	6	6	52¾
454	6	6	57¼
504	6	6	62¼
574	8	6	68½
644	8	6	74½
714	8	6	80¾
784	8	6	88
854	8	6	95¼

*4" channel used for motors larger than 215T.
†6" channel used for motors larger than 286T.

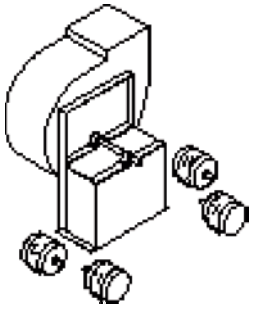
Motor frame	Typical P dim. TEFC motor
143T	7¾
145T	7¾
182T	9½
184T	9½
213T	12
215T	12
254T	14½
256T	14½
284T	15¼
286T	15¼
324T	17⅜
326T	17⅜
364T	19½
365T	19½
404T	21⅝
405T	21⅝
444T	24⅛
445T	24⅛
447T	24½
449T	24½

AMCA STANDARD MOTOR POSITIONS

Drawing below shows AMCA motor position designations for Arrangement 1 fans. These designations are required when ordering:

1. V-belt drives.
2. Vibration and unitary bases.
3. Belt guards.

Motor positions are independent of fan rotation and discharge positions and are determined by viewing fan from drive end and selecting W, X, Y, or Z.



DIMENSIONS

L, M, and D are outside dimensions.

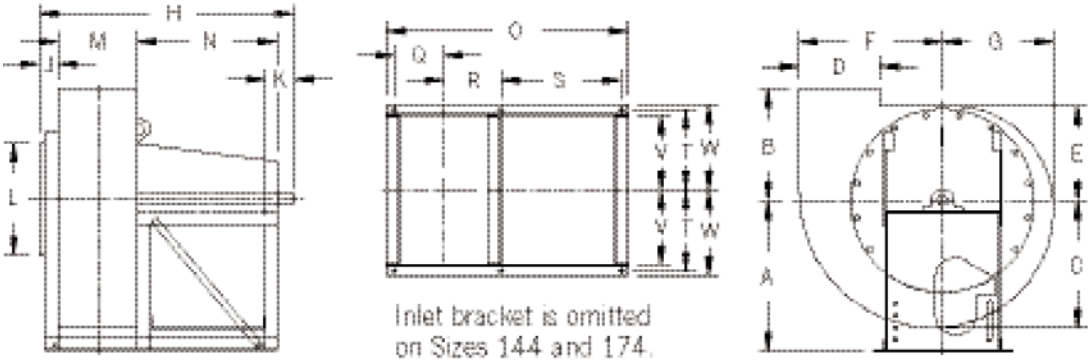
J is from housing side over inlet collar.

Tolerance: ±1/8″

Dimensions not to be used for construction unless certified.

Refer to page 7 for maximum motor size limits.

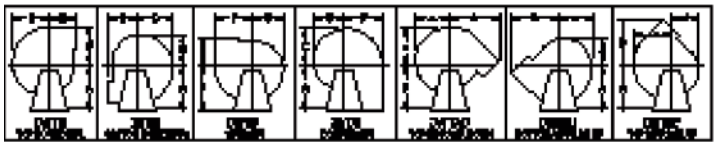
Series 20, Arrangement 10



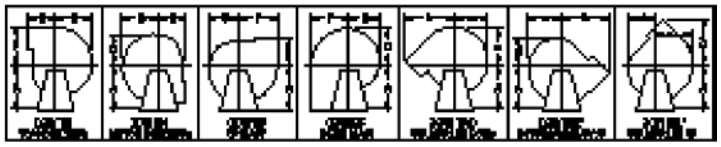
DIMENSIONS [INCHES]

Size	A	H	K	N	O	Q	R	S	T	V	W	Base Holes
144	15½	30	2½	20	19⅞	–	5⅞	16⅜	7⅜	6½	8	9/16
174	17½	34⅛	3	22	21⅞	–	6⅝	18⅜	8⅞	8	9½	9/16
194	21¼	36⅜	3½	22	33⅞	6	7¼	17⅜	9⅜	8¼	10¼	9/16
224	25½	41⅜	4	26	38⅞	6½	8¼	20⅜	10⅞	9¾	11¾	9/16
264	28	44½	4½	26	41½	7⅞	9⅜	19⅞	12¼	11	13	¾
294	32½	48	5½	26⅞	44	8⅝	10⅛	20¾	13⅝	11¾	14¾	¾
334	39½	53⅛	6	29⅞	48⅝	9⅜	11	23¾	16	14	17	¾
364	39½	56	6	30	50⅜	10¼	11⅞	23¾	16	14	17	¾

FAN DISCHARGES – VIEWED FROM DRIVE SIDE

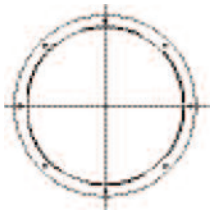


Clockwise—angular discharges at 45°



Counterclockwise—angular discharges at 45°

FLANGED INLET DETAILS



Furnished with holes starting on vertical centerline.

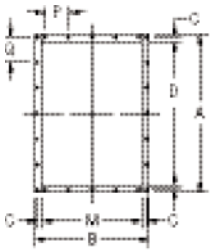
Inlet bar sizes:
Sizes 144-174
10 ga. x 1¼
Size 194
7 ga. x 1½
Sizes 224-364
¼ x 1½
Sizes 404-854
¼ x 2

DIMENSIONS [INCHES]

Size	I.D.*	B.C.	O.D.	Holes No.	Holes Dia.
144	8¾	10¼	11½	6	7/16
174	10¾	12¼	13½	6	7/16
194	10⅝	12½	14	8	7/16
224	12⅝	14½	16	8	7/16
264	14⅝	16½	18	8	7/16
294	16⅝	18½	20	8	7/16
334	18⅝	20½	22	16	7/16
364	20⅝	22½	24	16	7/16
404	22⅝	25	27	16	9/16
454	25⅝	28	30	16	9/16
504	28⅝	31	33	16	9/16
574	32⅝	35	37	16	9/16
644	36½	39	41	24	9/16
714	40½	43	45	24	9/16
784	44½	47	49	24	9/16
854	48½	51	53	24	9/16

*Dimension shown is I.D. of inlet collar.

FLANGED OUTLET DETAILS



1. Mounted flush with edge of housing outlet.
2. Holes furnished on 4″ centers on centerline.

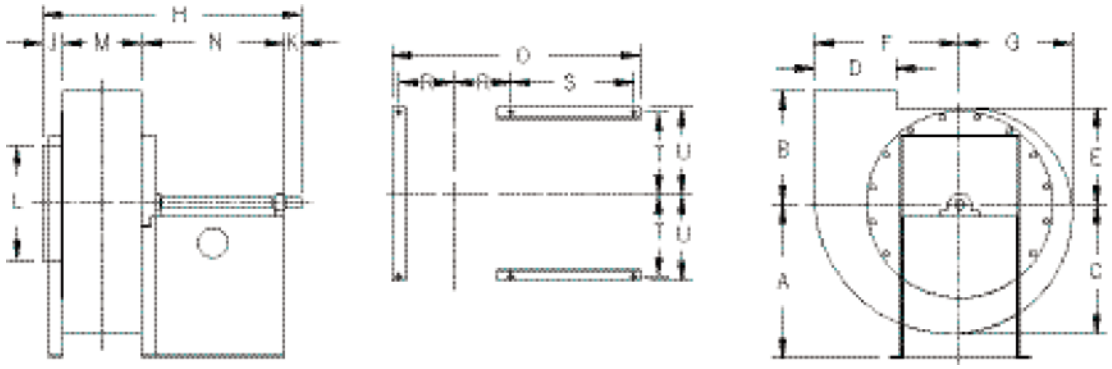
Outlet flange angles:
Sizes 144-174
1¼ x 1¼ x 3/16
Sizes 194-364
1½ x 1½ x 3/16
Sizes 404-854
2 x 2 x 3/16

DIMENSIONS [INCHES]

Size	A	B	C	D*	M*	P	Q	Holes No.	Holes Dia.
144	10¾	10⅜	¾	8¼	7⅞	2 7/16	–	12	7/16
174	12⅝	12	¾	10⅛	9½	–	–	12	7/16
194	13⅛	12¾	⅞	10⅛	9¾	–	–	12	7/16
224	16	13¾	⅞	13	10¾	–	3⅜	16	7/16
264	18	15⅜	⅞	15	12⅜	–	–	16	7/16
294	19⅞	17	⅞	16⅞	14	–	–	16	7/16
334	21¾	18⅝	⅞	18¾	15⅝	2 5/16	–	20	7/16
364	23¾	20¼	⅞	20¾	17¼	–	3 7/32	24	7/16
404	26⅞	23	1⅛	22⅞	19	–	–	24	9/16
454	29¾	25⅜	1⅛	25¾	21⅜	–	–	24	9/16
504	32¾	27⅞	1⅛	28¾	23⅞	2 7/16	3½	32	9/16
574	36⅝	31⅛	1⅛	32⅝	27⅛	–	–	32	9/16
644	40⅝	34½	1⅛	36⅝	30½	1¾	3 7/16	40	9/16
714	44⅜	37⅝	1⅛	40⅜	33⅝	3 5/16	–	40	9/16
784	48⅜	40⅞	1⅛	44⅜	36⅞	–	3 5/16	44	9/16
854	52¼	44⅛	1⅛	48¼	40⅛	2 9/16	–	48	9/16

*Dimension shown is inside flange, outside outlet. Deduct housing material thickness to determine inside dimension of discharge.

Series 20 Arrangements 1, 9, and 9E — Sizes 144-364
Series 30 Arrangements 1 and 9 — Sizes 144-294



DIMENSIONS

L, M, and D are outside dimensions.

J is from housing side over inlet collar.

Tolerance: ±1/8″

Dimensions not to be used for construction unless certified.

Refer to page 7 for Arrangement 9, 9E and 9F motor limits.

SERIES 20 ARR. 1, 9, AND 9E SIZES 144-364 – DIMENSIONS [INCHES]

Size	A	H		K	N		O		R	S		T	U	Base Holes
		Arr. 1, 9	Arr. 9E		Arr. 1, 9	Arr. 9E	Arr. 1, 9	Arr. 9E		Arr. 1, 9	Arr. 9E			
144	15½	24	29⅛	3½	11	16⅛	21	26⅛	5⅛	8¾	13⅞	8⅝	9½	9/16
174	17½	29⅛	33⅞	4	14	18¾	25⅝	30⅜	5⅞	11¾	16½	9⅜	10¼	9/16
194	21¼	34⅞	36⅞	4½	17½	19½	29⅜	31⅜	6	15¼	17¼	9⅜	10¼	9/16
224	25½	37⅜	42⅜	5	18½	23½	31⅜	36⅜	6½	16¼	21¼	10⅞	11¾	9/16
264	28	43½	48½	5½	21½	26½	37	42	7⅞	18¼	23¼	12¼	13⅛	¾
294	32½	48⅛	50⅝	6	24	26½	41⅛	43⅝	8⅝	20¾	23¼	13⅝	14½	¾
334	32¾	51¾	54¾	6½	25½	28½	44¼	47¼	9½	22¼	25¼	15⅜	16⅝	¾
364	36¼	58	–	7	28½	–	50	–	10⅞	24	–	16½	17¾	¾

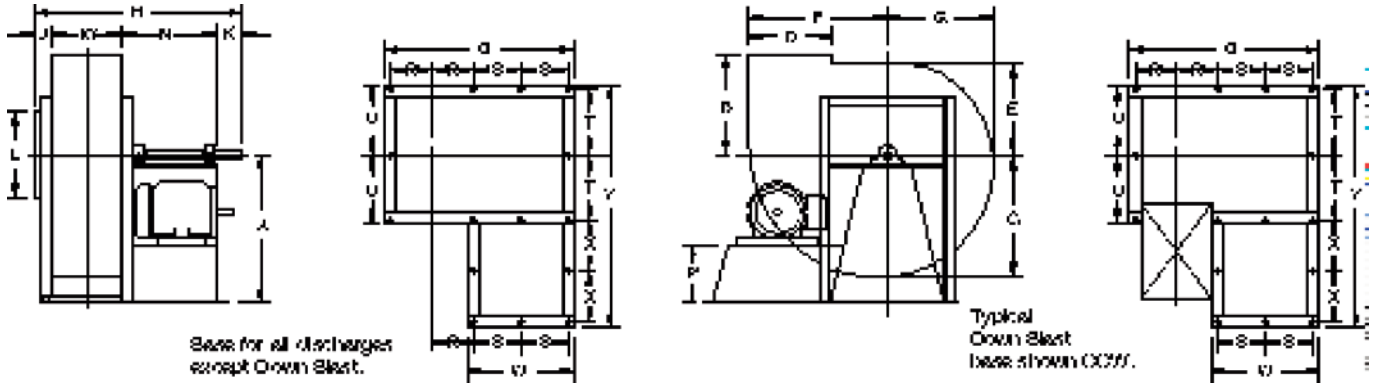
SERIES 30 ARR. 1 AND 9 SIZES 144-294 – DIMENSIONS [INCHES]

Size	A	H	K	N	O	R	S	T	U	Base Holes
144	15⅞	24	3½	11	21	5⅛	8¾	8⅝	9½	9/16
174	18	29⅛	4	14	25⅝	5⅞	11¾	9⅜	10⅜	9/16
194	21¼	40½	4½	23	34⅞	6	20⅞	9⅜	10¼	9/16
224	25½	44⅝	5	25½	39⅜	7	22⅜	10⅞	11¾	9/16
264	28	49¾	5½	27½	44	8⅜	23⅜	12¼	13⅛	¾
294	32½	51⅞	6	27½	45⅝	9⅛	23⅜	13⅝	14½	¾

* See Page 8 for Arrangement 8 motor pedestal dimensions.

Series 20 Arrangements 1, 9, and 9F — Sizes 404-574

Series 30 Arrangements 1, 9, and 9F — Sizes 334-454



SERIES 20 ARR. 1, 9, AND 9F SIZES 404-574 – DIMENSIONS [INCHES]

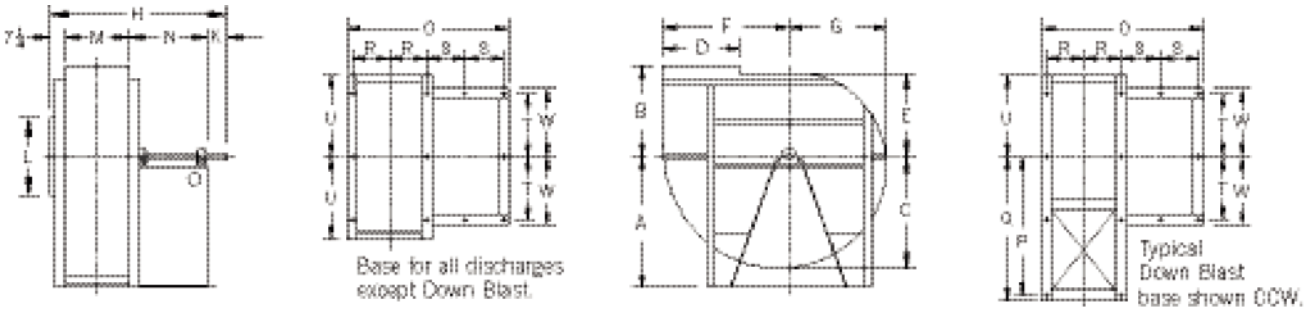
Size	A	H		K	N		O		P	R	S		T	U	Arr. 9F			Base Holes
		Arr. 1, 9	Arr. 9F		Arr. 1, 9	Arr. 9F	Arr. 1, 9	Arr. 9F	Arr. 9F		Arr. 1, 9	Arr. 9F			W	X	Y	
404	40	59¾	65	7¼	28¼	33 ½	55¼	60½	13½	11⅝	14	16⅝	18⅜	20⅝	37¼	17	75⅛	⅞
454	45	64⅝	68⅞	7¾	30¼	34 ½	59⅝	63⅞	15	12⅞	15	17⅛	20¼	22½	38¼	17	78⅞	⅞
504	50½	70⅞	74⅝	8½	32¾	36 ¾	64⅝	68⅜	17	14⅛	16¼	18⅛	22¼	23¾	40¼	18½	84½	1
574	57½	77⅜	80⅜	8¾	34½	37 ¾	71⅝	74⅝	19	16¼	17⅛	18⅝	25	27⅜	42¼	18½	91¾	1

SERIES 30 ARR. 1, 9, AND 9F SIZES 334-454 – DIMENSIONS [INCHES]

Size	A	H		K	N		O		P	R	S		T	U	Arr. 9F			Base Holes
		Arr. 1, 9	Arr. 9F		Arr. 1, 9	Arr. 9F	Arr. 1, 9	Arr. 9F	Arr. 9F		Arr. 1, 9	Arr. 9F			W	X	Y	
334	32¾	52½	61	6½	26	34½	49¾	58¼	11	9⅞	13	17¼	15⅞	17⅝	38½	17	69¼	¾
364	36¼	56¼	65	7	26½	35¼	54	62¾	12	11¼	13¼	17⅝	17½	19¾	40¼	17	73½	⅞
404	40	60½	69¼	7½	28½	37¼	57¾	66½	13½	12⅛	14¼	18⅝	19⅜	21⅝	42¼	18½	80⅛	⅞
454	45	65⅜	72⅛	8	30½	37¼	62⅛	68⅞	15	13⅜	15⅛	18½	21¼	23½	42¼	18½	83⅞	⅞

* See Page 8 for Arrangement 8 motor pedestal dimensions.

Series 20 Arrangements 1 and 9 — Sizes 644-854
Series 30 Arrangements 1 and 9 — Sizes 504-644



SERIES 20 ARR. 1 AND 9 SIZES 644-854 – DIMENSIONS [INCHES]

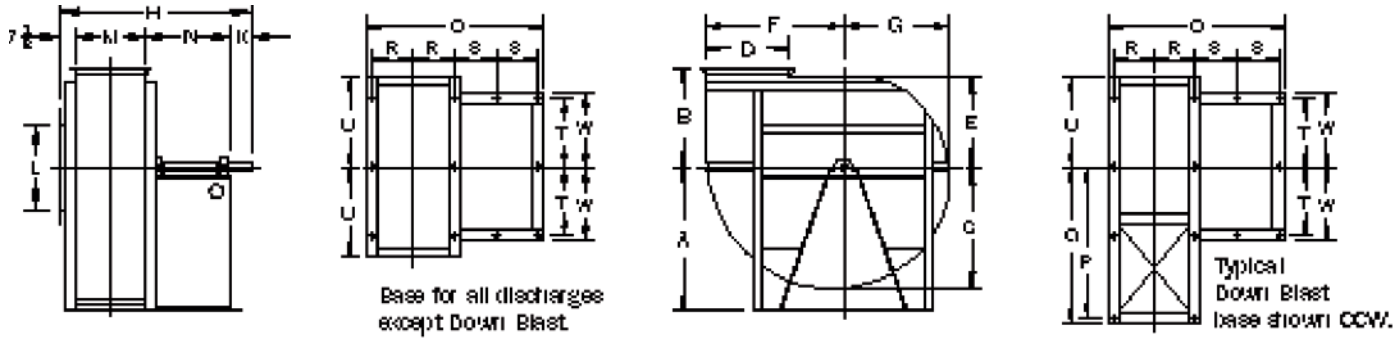
Size	A							H	K	N	O	P	Q	R	S	T	U	W	Base Holes
	TH	BH	UB	DB	TAD	BAU	TAU												
644	49	64½	55½	43	45	59	52	84¼	9⅛	37⅜	77⅛	62⅝	65⅛	17¾	18½	30	39⅛	32¼	1
714	54	71	61½	47½	50	65	57½	90⅞	9⅝	40⅜	83¼	68⅞	71⅜	19⅜	20	33½	43½	35¾	1
784	59	77	67	52	54¾	71	63	98⅝	10⅛	44⅜	90½	75½	78	21	22	36½	47	38¾	1
854	64	83	73	57	60	78½	69	106⅜	10⅝	48⅜	97¾	82	84½	22⅝	24	39½	50½	41¾	1

SERIES 30 ARR. 1 AND 9 SIZES 504-644 – DIMENSIONS [INCHES]

Size	A	H	K	N	O	P	Q	R	S	T	U	Base Holes
504	50½	71⅛	8½	32½	64⅜	49¼	51¼	14	16¼	22¼	31⅜	1
574	57½	77⅝	9	34¼	71⅜	56⅛	58⅝	16⅛	17⅛	25	35¾	1
644	64	84½	9½	37	77½	62⅝	65⅛	17¾	18½	30	39⅛	1

* See Page 8 for Arrangement 8 motor pedestal dimensions.

Series 30 Arrangements 1 and 9 — Sizes 714-854

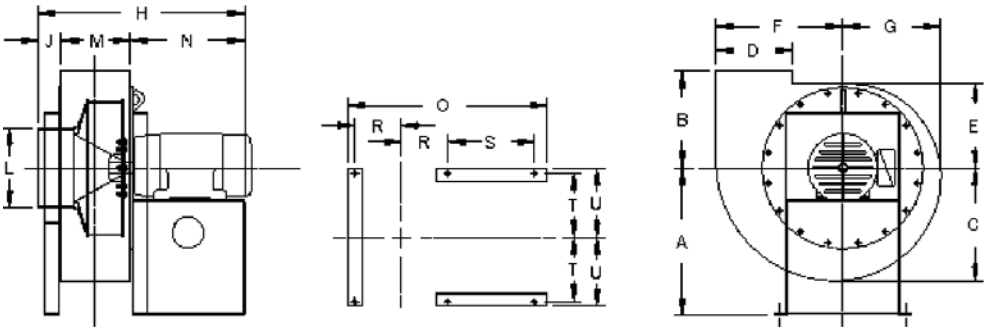


SERIES 30 ARR. 1 AND 9 SIZES 714-854 – DIMENSIONS [INCHES]

Size	A							H	K	N	O	P	Q	R	S	T	U	W	Base Holes
	TH	BH	UB	DB	TAD	BAU	TAU												
714	54	71	61½	47½	50	65	57½	91⅛	10	40	83¼	69	71½	19⅜	20	33½	43½	35¾	1
784	59	77	67	52	54¾	71	63	98⅞	10½	44	90½	75½	78	21	22	36½	47	38¾	1
854	64	83	73	57	60	78½	69	106⅝	11	48	97¾	82	84½	22⅝	24	39½	50½	41¾	1

* See Page 8 for Arrangement 8 motor pedestal dimensions.

Dimensions Arrangement 4



SERIES 20 SIZES 144-364 AND SERIES 30 SIZES 194-364 ARR. 4 – DIMENSIONS [INCHES]

Size	A	R		T		U		Base Holes
		Ser. 20	Ser. 30	Ser. 20	Ser. 30	Ser. 20	Ser. 30	
144	15 1/2	6 1/16	–	8 5/8	–	9 1/2	–	9/16
174	17 1/2	6 7/8	–	9 3/8	–	10 1/4	–	9/16
194	21 1/4	7		9 3/8		10 1/4		9/16
224	25 1/2	7 1/2		10 7/8		11 3/4		9/16
264	28	8 5/16		12 1/4		13 1/8		3/4
294	32 1/2	9 1/8		13 5/8		14 1/2		3/4
334	32 3/4	9 15/16		15 3/8	15 7/8	16 5/8	17 5/8	3/4
364	36 1/4	10 13/16	11 5/16	16 1/2	17 1/2	17 3/4	19 3/4	7/8

SERIES 20 SIZES 144-364 AND SERIES 30 SIZES 194-364 ARR. 4 – DIMENSIONS [INCHES]

Size	Motor Frame	H*		N		O		S	
		Ser. 20	Ser. 30	Ser. 20	Ser. 30	Ser. 20	Ser. 30	Ser. 20	Ser. 30
144	143/5	21	–	11 1/2	–	21 1/4	–	7 1/8	–
	182/4	22		12 1/2		22 1/4		8 1/8	
	213/5	24 1/4		14 3/4		24 1/2		10 3/8	
174	182/4	23 5/8	–	12 1/2	–	23 7/8	–	8 1/8	–
	213/5	25 7/8		14 3/4		26 1/8		10 3/8	
	254/6	29 5/8		18 1/2		29 7/8		14 1/8	
	284/6	31 1/8		20		31 3/8		15 5/8	
194	182/4	25 3/8	–	12 1/2	–	24 1/8	–	8 1/8	–
	213/5	27 5/8	27 7/8	14 3/4		26 3/8		10 3/8	
	254/6	31 3/8	31 5/8	18 1/2		30 1/8		14 1/8	
	284/6	32 7/8	33 1/8	20		31 5/8		15 5/8	
	324/6	34 3/8	34 5/8	21 1/2		33 1/8		17 1/8	
224	182/4	26 3/8	–	12 1/2	–	25 1/8	–	8 1/8	–
	213/5	28 5/8	28 7/8	14 3/4		27 3/8	28 3/8	10 3/8	
	254/6	32 3/8	32 5/8	18 1/2		31 1/8	32 1/8	14 1/8	
	284/6	33 7/8	34 1/8	20		32 5/8	33 5/8	15 5/8	
	324/6	35 3/8	35 5/8	21 1/2		34 1/8	35 1/8	17 1/8	
264	213/5	31 1/4	31 1/2	14 3/4		30	31	10 3/8	
	254/6	35	35 1/4	18 1/2		33 3/4	34 3/4	14 1/8	
	284/6	36 1/2	36 3/4	20		35 1/4	36 1/4	15 5/8	
	324/6	38	38 1/4	21 1/2		36 3/4	37 3/4	17 1/8	
	364/5	–	39 1/2	–	22 3/8	–	38 1/2	–	17 7/8
294	254/6	36 5/8	36 7/8	18 1/2		35 3/8	36 3/8	14 1/8	
	284/6	38 1/8	38 3/8	20		36 7/8	37 7/8	15 5/8	
	324/6	39 5/8	39 7/8	21 1/2		38 3/8	39 3/8	17 1/8	
	364/5	–	40 3/4	–	22 3/8	–	40 1/8	–	17 7/8
334	284	39 3/4	37 5/8	20	17 5/8	38 3/4	41 1/8	15 5/8	8 5/8
	286		39 1/8		19 1/8		42 5/8		9 3/8
	324	41 1/4	40 3/8	21 1/2	20 3/8	40 1/4	43 3/4	17 1/8	9 15/16
	326		41 7/8		21 7/8		45 1/4		10 11/16
	364	42 1/8	41 1/4	22 3/8	21 1/4	41 1/8	41	17 7/8	8 9/16
	365		42 1/4		22 1/4		42		9 1/16
	404	44 3/8	43 1/8	24 5/8	23 1/8	43 3/8	42 7/8	20 1/8	9 1/2
	405		44 5/8		24 5/8		44 3/8		10 1/4
364	284	42 9/16	40 3/8	20 1/16	17 5/8	41 1/2	44 3/4	15 5/8	8 9/16
	286		41 7/8		19 1/8		46 1/4		9 5/16
	324	44 1/16	43 1/8	21 9/16	20 3/8	43	47 3/8	17 1/8	9 7/8
	326		44 5/8		21 7/8		48 7/8		10 5/8
	364	44 15/16	44	22 7/16	21 1/4	43 7/8	43 11/16	17 7/8	8 1/32
	365		45		22 1/4		44 11/16		8 17/32
	404	47 3/16	45 7/8	24 11/16	23 1/8	46 1/8	45 9/16	20 1/8	8 31/32
	405		47 3/8		24 5/8		47 1/16		9 23/32

* H is with slip inlet for Series 20, and flanged inlet for Series 30

Complete Selection of Air-Moving Equipment

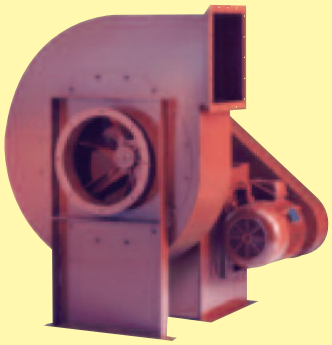
The New York Blower Company offers thousands of different types, models, and sizes of air-moving equipment. Contact your nyb representative for assistance in identifying the best fan for your application.

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.

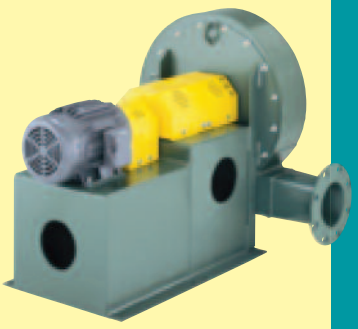
FIBERGLASS REINFORCED PLASTIC [FRP]

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.

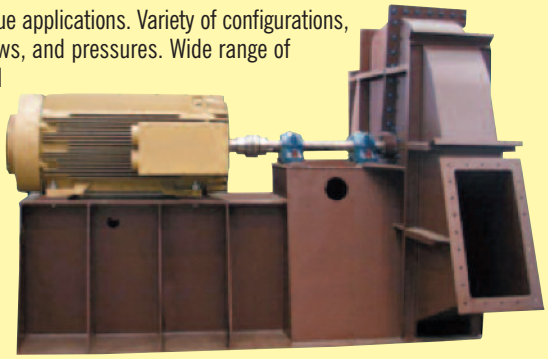


AIR-HANDLING [CENTRIFUGAL]

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.



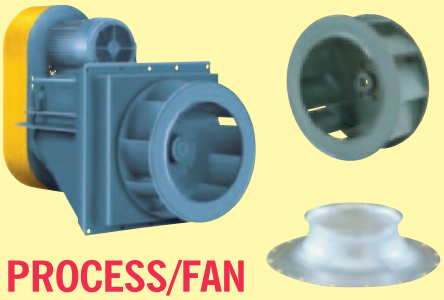
Leading the industry forward since 1889

ROOF VENTILATORS

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

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.