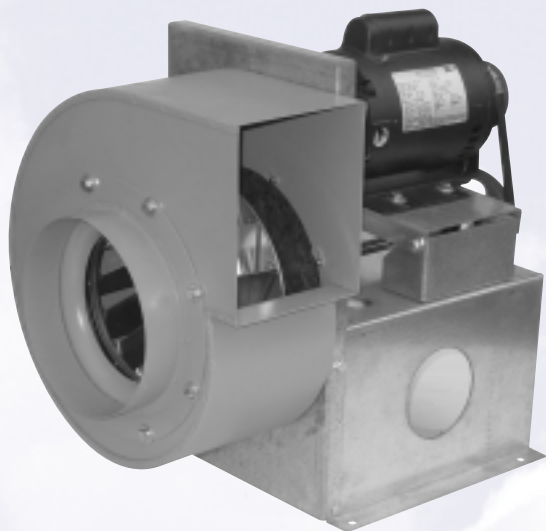
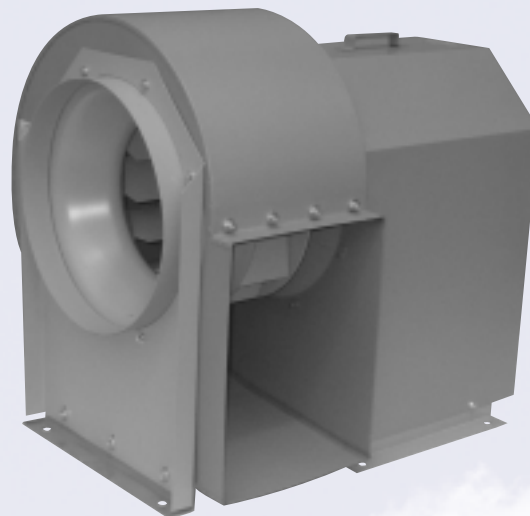


# Backward-Inclined **BLOWERS**

BELT-DRIVEN ▲ SWSI ▲ NON-OVERLOADING



**9 & 10-BI**



**12 thru 27-BI**



**30 thru 36**

(Shown with optional discharge flange)

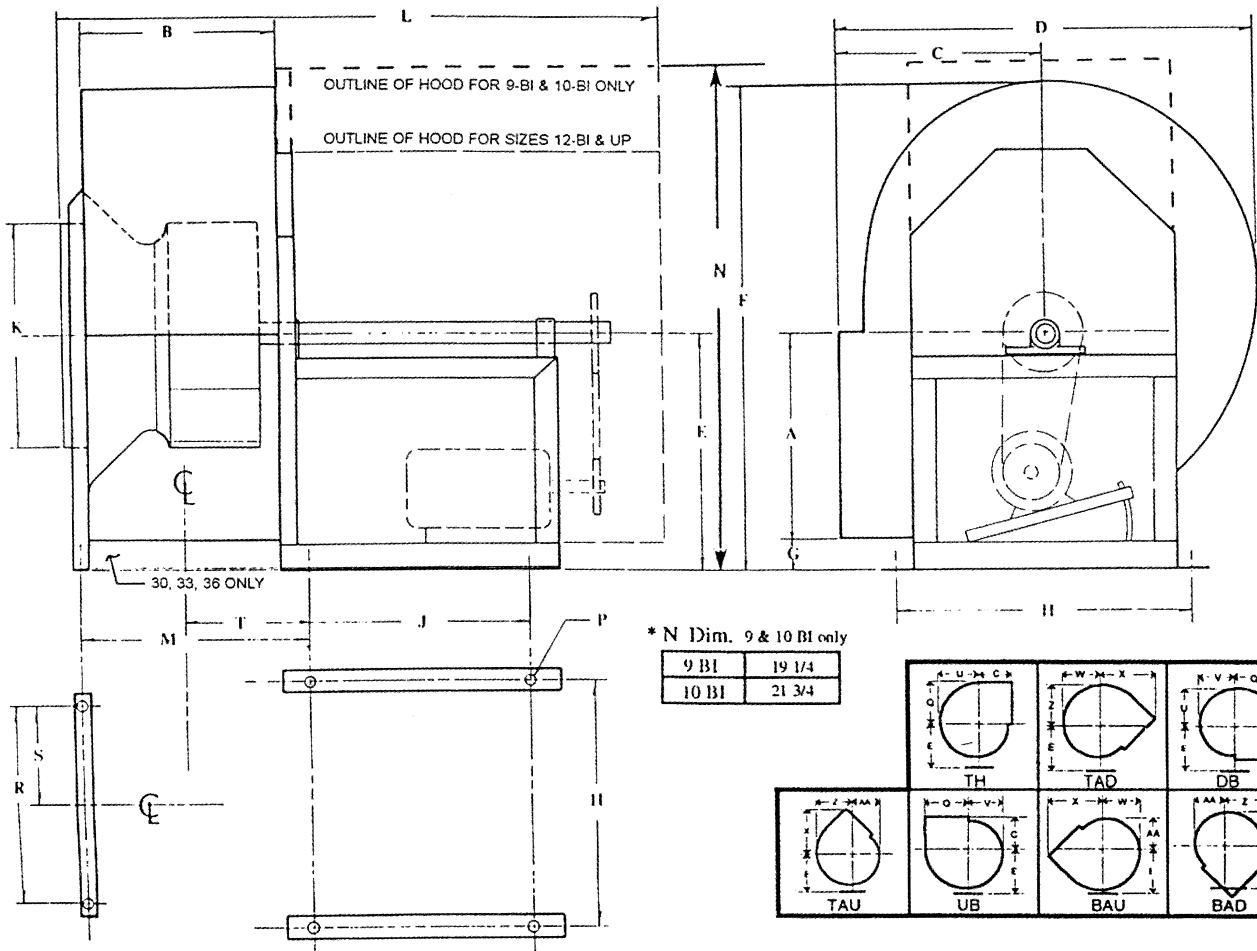


9120  
Central Type BI  
Centrifugal Blowers  
are available as  
U.L. Listed for  
Grease Removal  
(UL762)

## **CENTRAL BLOWER COMPANY**

211 S. 7th Ave. • City of Industry, CA 91746 (626) 330-3182 Fax (626) 330-9406  
[www.centralblower.com](http://www.centralblower.com)

**SEPTEMBER 2003  
CATALOG BI-2003**



**DIMENSIONS**

MODEL	WHEEL DIA.	A	B	C	D	E	F	G	H	J	K	L	M	P	R	S	T	SHAFT
9 BI	9-3/16	7-1/2	6-11/32	6-3/4	14-7/16	9-3/8	16-1/8	3/4	11-3/8	10-1/2	7-7/8	23		3/8			4-7/16	5/8
10 BI	10-5/8	8-3/16	8-3/16	7-15/16	16-5/8	10-1/4	17-3/4	9/16	13	11	8-7/8	26-1/2		3/8			5-3/4	3/4
12 BI	12-1/4	13-1/8	9-13/16	9-7/16	20-3/8	14-5/8	24-1/8	1-1/2	16	11-1/2	13	29	11-3/4	7/16	11	5-1/2	6-3/16	1
15 BI	15	16-1/8	12	11-1/2	24-7/8	17-5/8	29-1/8	1-1/2	19	12-1/2	15-7/8	32	14-1/8	9/16	14	7	7-1/4	1
18 BI	18-1/4	19-9/16	14-5/8	14	30-1/4	21-1/2	35-9/16	1-15/16	22-5/8	15-5/16	19-5/16	38-1/8	16-7/8	9/16	18	9	8-9/16	1-3/16
20 BI	20	21-7/16	15-15/16	15-11/32	33-1/8	23-1/2	38-15/16	2-1/16	22-5/8	15-5/16	21-3/16	39-7/16	18-3/16	9/16	22-5/8	11-5/16	9-1/4	1-3/16
22 BI	22-1/4	23-13/16	17-13/16	17	36-13/16	25-7/8	43	2-1/16	26-1/8	16-1/2	23-1/2	43-15/16	20-1/8	9/16	20	10	10-3/16	1-3/16
24 BI	24-1/2	26-3/16	19-5/8	18-11/16	40-7/16	27-7/8	47-5/8	1-11/16	26-1/8	16-1/2	25-7/8	45-1/16	21-15/16	9/16	26-1/8	13-1/16	11-1/16	1-3/16
27 BI	27	29	21-5/8	20-3/4	44-3/4	31-1/4	52-1/16	2-1/4	30-3/8	18-3/8	28-9/16	49-1/8	24-1/4	9/16	24	12	12-1/16	1-7/16
30 BI	30	32-3/16	24	23	49-3/4	36-1/4	59-1/2	4	39	20-11/16	31-1/2	58	26-15/16	9/16	39	19-1/2	13-1/8	1-11/16
36 BI	36-1/2	39-1/8	29-3/16	27-1/2	60	43-7/8	71-15/16	4-3/4	47	22-7/8	38-5/8	70	31-9/16	9/16	47	23-1/2	15-11/16	1-15/16

**CENTER DISTANCES**  
MOTOR FRAMES

MODEL	48	56	143/5T	182/4T	213/15T	254/6T	284T
9 & 10 BI	5.2	5.7	5.7				
12 BI	8.5	8.0	8.0				
15 BI	11.5	10.09	10.09				
18 BI	15.2	14.7	14.7				
20 BI	15.2	14.7	14.7				
22 BI		19.9	19.9	18.2			
24 BI		18.4	17.9	17.9	16.7		
27 BI		24.2	24.2	22.4	21.4		
30 BI		27.6	27.6	26.6	25.9	24.9	
36 BI		*35.3	36.3	34.3	33.5	32.5	31.8

**ANGULAR DIMENSIONS**

MODEL	U	V	W	X	Z	AA	Q
9 BI	7-3/4	6-9/16	7-1/16	10-5/8	8-3/8	6-5/16	8-3/4
10 BI	8-11/16	7-1/2	8-1/8	12-3/8	9-1/8	7-1/16	9-3/4
12 BI	10-15/16	9-15/32	10	16-3/16	11-15/16	9-1/16	13-1/8
15 BI	13-7/16	11-9/16	12-3/16	19-3/16	14-9/16	11-1/16	16-1/8
18 BI	16-1/4	14-1/8	14-13/16	24-1/16	17-11/16	13-7/16	19-9/16
20 BI	17-13/16	15-7/16	16-1/4	26-5/16	19-3/8	14-11/16	21-7/16
22 BI	19-13/16	17-1/8	18-1/16	29-5/16	21-1/2	16-3/16	23-13/16
24 BI	21-3/4	19-13/16	19-13/16	32-1/8	23-11/16	17-15/16	26-3/16
27 BI	24-11/16	20-13/16	21-7/8	35-9/16	26-1/8	19-3/4	29
30 BI	26-3/4	23-1/8	24-3/8	39-5/8	29-1/8	22	32-3/16
36 BI	32-1/2	28-1/8	29-9/16	47-3/4	35-3/8	26-3/4	39-1/8

# Engineering Data

## BI BLOWER SELECTION GUIDE

The basic information needed to properly size a Central blower is the volume of air, in cubic feet per minute (CFM) and the static pressure (SP) in the duct system. The CFM is normally determined by health codes or accepted industry standards. Usually the SP is specified by the engineer, based on the length and size of duct and number of elbows in the system.

The rating tables for Central blowers are easy to use. The first column shows the volume in CFM. The second column shows the corresponding outlet velocity in feet per minute. The remaining columns show the RPM and brake horsepower (BHP) at the corresponding SP. Use the following steps to determine the RPM and BHP at required SP:

1. Choose the desired CFM.
2. Move over to the column for the specified SP.
3. Read the required RPM and BHP.\*

Example: Find 800 CFM at 3/8 SP (See Fig. 2)

VOLUME CFM	O.V.FPM	SP, in. WG							
		1/4"		3/8"		1/2"		5/8"	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
700	2077	2130	0.19	2210	0.22	2290	0.24	2380	0.26
800	2374	2389	0.28	2455	0.30	2530	0.33	2610	0.35
900	2671	2620	0.37	2700	0.41	2770	0.44	2850	0.46
1000	2967	2850	0.48	2940	0.52	3010	0.56	3089	0.60

Fig. 2

\* After determining the required BHP it is necessary to pick the suitable size of motor. The BHP shown in the rating tables does not include belt losses so choose a motor rated at least 10 percent higher than shown in rating table.

Each blower size is capable of operating over a wide range of CFM and static pressure, therefore there will be two or three different sizes that could qualify for a given application. Select a size where the CFM and SP falls in the shaded area on the rating tables. This assures that the selected blower is operating in the optimum range.

If the point in the rating table falls below the shaded area, it would be advisable to consider using the next larger size of blower, and, if the point falls above the shaded area, one should definitely consider using a smaller size of blower. Operating the fan outside the optimum efficiency range is not necessarily unsatisfactory. Other considerations such as noise level, brake horsepower, space limitations and engineering specifications may be governing factors.

Figure 1 shows the typical performance for the Central BI blowers, along with the curve of mechanical efficiency. The shaded area in this figure corresponds with the shaded area in the rating tables. (FC curves are available on request.)

Frequently specifications call for a maximum outlet velocity and tip speed. Outlet velocity, for volumes not shown, can be calculated by dividing the CFM by the outlet area of the blower. Tip speeds are determined by multiplying the RPM by the tip speed factor shown above each table.

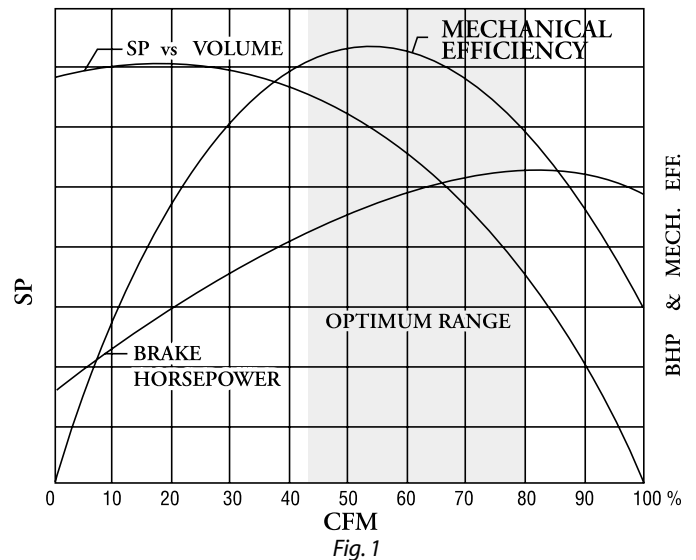


Fig. 1

AIR DENSITY CORRECTION FACTORS			
CORRECTION FACTORS FOR TEMPERATURE		CORRECTION FACTORS FOR ALTITUDE	
Temp, °F	Factor	Feet	Factor
0	0.87	0	1.00
40	0.94	500	1.02
70	1.00	1000	1.04
100	1.06	1500	1.06
140	1.13	2000	1.08
180	1.21	3000	1.12
200	1.25	4000	1.16
250	1.34	5000	1.20
300	1.43	6000	1.25
350	1.53	7000	1.30

## CALCULATION OF BLOWER PERFORMANCE AT NON-STANDARD TEMPERATURES AND ELEVATIONS

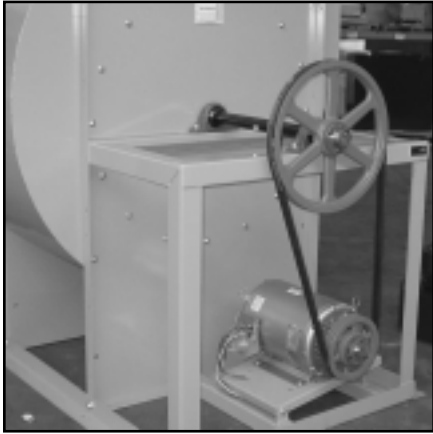
The performance tables in this catalog are based on handling air at 70° F and at sea level. These are considered to be standard conditions. For blowers operating at higher temperatures and elevations use the following procedure to determine correct CFM, static pressure and BHP.

1. Determine required CFM and static pressure at actual operating conditions.
2. Determine the combined correction factor by multiplying the temperature factor by the altitude factor for your application.
3. Multiply the static pressure by combined factor.
4. Select blower from the performance table for the required CFM and corrected static pressure.
5. Blower RPM remains as shown in table.
6. Divide the brake horsepower shown on table by the combined density factor to obtain the required brake horsepower at operating conditions.

Example:

1. Blower required to handle 5800 CFM @ 2"; SP @ 200° F and at 5000 feet elevation.
2. Combined factor = 1.25 x 1.20 = 1.50
3. SP: 2 x 1.5 = 3"
4. Select Central model # BI-22 at 5800 CFM @ 3"; SP = 1413 RPM and 4.35 BHP
5. BHP = 4.35/1.50 = 2.80 @ 200° F & 5000 ft.

# Standard Features



## BEARINGS

Self-aligning ball bearing pillow blocks are provided on all models. Eccentric collars securely lock the inner race to the shaft. Pre-lubricated and sealed to retain lubricant and exclude dust and moisture, provide extended long life.

## MOTOR BASE

Heavy gauge galvanized steel base, pivoted at one end and supported at the other by threaded rod for easy belt adjustment. Hinge type construction insures that the motor shaft will remain parallel with the blower shaft when adjusting belt tension.

## MOTORS & DRIVES

Standard motors are NEMA open-drip proof, available to match all requirements for H.P., RPM and electrical power. TEFC, 2-speed and explosion proof motors also available.

All Central BI blowers with motors up through 10 H.P. are equipped with adjustable pitch motor pulleys. 15 H.P. and larger are normally equipped with constant speed drives. V-Belts supplied are rated to transmit 150% of motor horsepower and are oil resistant and static dissipating. Factory installed motors and drives are carefully checked for smooth operation, and compliance with specifications for RPM and amperage.

## SHAFT

Accurately machined from turned, ground and polished steel shafting. Closely checked for diameter and straightness.

## FRAME

Heavy gauge, galvanized steel, all welded construction provides rigid support for housing, motor, shaft and bearings.

## WHEEL

Designed to efficiently force air through the blower housing with backward inclined blades set at the proper angle to prevent overloading of the motor. All sizes 12-BI through 36-BI are equipped with steel wheels as standard equipment and with aluminum wheels as optional equipment when AMCA type B spark resistant construction is specified. Sizes 9-BI and 10-BI are equipped with aluminum wheels as standard equipment. Wheels are dynamically balanced and are available in CW and CCW rotation.

## HOUSING

Constructed of heavy gauge steel. Available in eight discharge positions. When ordered from factory, blower will be assembled in discharge position specified.

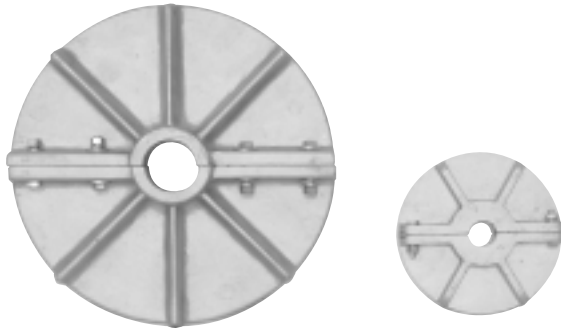
## INLET CONE

Spun steel construction, smoothly contoured to guide air into wheel with minimum turbulence. Unobstructed inlet to provide quiet operation.

## WEATHER COVER

Rust resistant galvanized steel construction protects the shaft, bearings, motor and drives from the weather. Also serves as a OSHA approved belt guard.

# Optional Features



## HEAT SLINGER

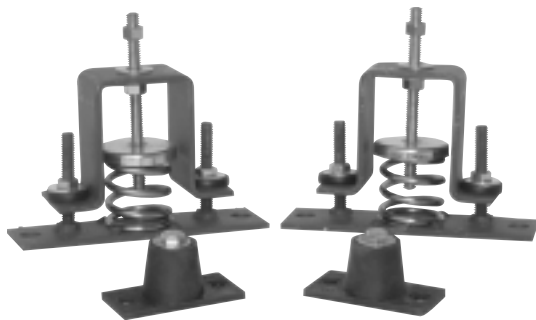
Designed to prevent over-heating of bearing for blowers handling air at temperatures over 250°F. Consists of an aluminum disk mounted on the blower shaft between the blower housing and bearing to dissipate the heat from the shaft.

## DRAIN FITTING

3/4" NPT coupling welded to low point of housing. Recommended where condensation or rain water might accumulate inside the housing. Plastic pipe plug supplied.

## DISCONNECT SWITCH

Available to match HP and power characteristics of the motor supplied



## VIBRATION ISOLATORS

**Rubber In-Shear Pads:** Available for units up to 18-BI size. Suitable only for non-critical applications.

**Individual Spring Mounts:** Provide approximately 1" vertical deflection. Designed for critical applications.

**Spring Rails:** Consists of spring isolators attached to rails to provide more even distribution of weight. Both individual or rail type provide seismic restraint.

## SPARK RESISTANT CONSTRUCTION

Conforms to AMCA Type "B". Requires non-ferrous wheel. AMCA Type "A" available. Consult factory.

## INLET & OUTLET FLANGES

Available on special orders. Allow extra delivery time.

## ACID RESISTANT COATINGS

Electrostatically applied epoxy recommended for most fume hood or similar applications. Other coatings are available for more extreme conditions.

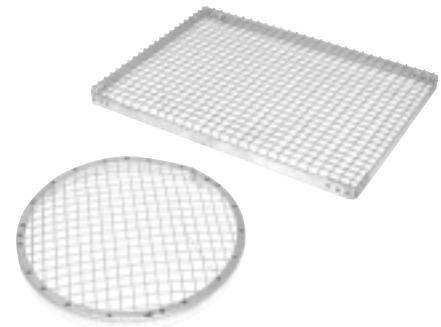


## AUTOMATIC BACKDRAFT DAMPERS

Designed to prevent reverse flow of air when blower is not operating. Made to fit blower discharge. Also available with built-in bird screen.

## CLEANOUT DOOR

Provides access for cleaning or inspection of the interiors of the housing. Cover plate bolted with steel fasteners and fully gasketed.



## INLET & OUTLET SCREENS

Prevent entrance of birds or debris and provide protection of personnel.

# 9-BI

9 3/16-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) .33

TIP SPEED (FPM) = 2.41 x RPM  
MAX. BHP = .0205 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG													
		1/4" RPM BHP	3/8" RPM BHP	1/2" RPM BHP	5/8" RPM BHP	3/4" RPM BHP	1.0" RPM BHP	1-1/4" RPM BHP	1-1/2" RPM BHP	1-3/4" RPM BHP	2.0" RPM BHP	2-1/2" RPM BHP	3.0" RPM BHP	3-1/2" RPM BHP	
100	297	875 0.01	1054 0.01	1206 0.02	1343 0.03	1467 0.04	1690 0.05	1887 0.07	2067 0.09	2233 0.11	2388 0.14	2672 0.19	2930 0.24	3167 0.30	
200	593	1012 0.02	1172 0.02	1307 0.03	1429 0.04	1543 0.05	1750 0.07	1937 0.09	2107 0.12	2265 0.14	2413 0.17	2685 0.22	2934 0.28	3164 0.35	
300	890	1200 0.03	1333 0.04	1459 0.05	1575 0.06	1683 0.07	1874 0.09	2044 0.12	2202 0.15	2350 0.18	2491 0.21	2753 0.27	2993 0.34	3215 0.41	
400	1187	1429 0.05	1541 0.07	1645 0.08	1745 0.09	1842 0.10	2024 0.13	2190 0.16	2345 0.19	2484 0.22	2615 0.25	2859 0.32	3085 0.40	3298 0.48	
500	1481	1673 0.08	1774 0.10	1866 0.12	1953 0.13	2036 0.15	2196 0.18	2349 0.21	2495 0.25	2632 0.28	2762 0.32	3002 0.40	3217 0.48	3418 0.56	
600	1781	1929 0.13	2018 0.15	2102 0.17	2183 0.19	2257 0.21	2399 0.24	2535 0.28	2666 0.31	2794 0.36	2919 0.40	3149 0.48	3365 0.57	3565 0.66	
700	2077	2193 0.18	2272 0.21	2348 0.23	2421 0.26	2492 0.29	2623 0.33	2746 0.37	2865 0.40	2980 0.45	3092 0.49	3311 0.59	3517 .069	3711 0.79	
800	2374	2462 0.26	2533 0.29	2602 .0.31	2668 0.34	2733 0.37	2858 0.43	2973 0.48	3082 0.52	3187 0.57	3291 0.61	3490 0.71	3683 0.82	3871 0.93	
900	2671	2735 0.36	2800 0.38	2862 0.41	2923 0.44	2983 0.48	3098 0.54	3208 0.61	3312 0.67	3410 0.72	3506 0.76	3691 0.86	3869 0.97	4042 1.09	
1000	2967	3011 0.47	3070 0.50	3128 0.54	3184 0.57	3239 0.60	3345 0.68	3448 0.75	3548 0.82	3643 0.89	3732 0.95	3905 1.06	4072 1.16	4234 1.28	
1100	3264	3289 0.62	3344 0.65	3397 0.68	3449 0.72	3500 0.76	3599 0.83	3695 0.91	3789 0.99	3879 1.08	3968 1.15	4131 1.28	4288 1.40	4441 1.52	

# 10-BI

10 5/8-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) .452

TIP SPEED (FPM) = 2.78 x RPM  
MAX. BHP = .0283 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG													
		1/4" RPM BHP	3/8" RPM BHP	1/2" RPM BHP	5/8" RPM BHP	3/4" RPM BHP	1.0" RPM BHP	1-1/4" RPM BHP	1-1/2" RPM BHP	1-3/4" RPM BHP	2.0" RPM BHP	2-1/2" RPM BHP	3.0" RPM BHP	3-1/2" RPM BHP	
200	442	812 0.02	965 0.03	1098 0.04	1212 0.05	1322 0.06	1521 0.09	1698 0.12	1857 0.15	2002 0.19	2140 0.23	2389 0.31	2611 0.40	2820 0.50	
300	664	901 0.02	1041 0.04	1161 0.05	1269 0.06	1373 0.08	1561 0.11	1725 0.14	1873 0.18	2019 0.22	2153 0.26	2403 0.35	2629 0.45	2833 0.55	
400	885	1000 0.03	1134 0.05	1251 0.06	1357 0.08	1450 0.09	1623 0.13	1779 0.17	1929 0.21	2067 0.25	2193 0.30	2425 0.39	2642 0.50	2850 0.61	
500	1106	1121 0.05	1233 0.07	1345 0.08	1449 0.10	1541 0.12	1710 0.16	1859 0.20	1995 0.24	2123 0.29	2248 0.34	2481 0.44	2692 0.55	2885 0.67	
600	1327	1259 0.07	1358 0.09	1451 0.11	1546 0.13	1636 0.15	1801 0.19	1950 0.23	2082 0.28	2207 0.33	2321 0.38	2540 0.49	2746 0.61	2941 0.73	
700	1548	1404 0.10	1491 0.12	1577 0.14	1659 0.16	1739 0.18	1896 0.23	2041 0.28	2173 0.33	2298 0.38	2411 0.44	2621 0.55	2817 0.68	2998 0.81	
800	1720	1559 0.14	1634 0.16	1710 0.18	1785 0.21	1859 0.23	2000 0.28	2136 0.33	2268 0.38	2388 0.44	2502 0.50	2711 0.62	2901 0.75	3075 0.89	
900	1991	1715 0.19	1785 0.21	1852 0.24	1920 0.26	1986 0.28	2118 0.34	2240 0.39	2362 0.45	2482 0.51	2596 0.57	2801 0.70	2993 0.84	3167 0.98	
1000	2212	1876 0.25	1940 0.27	2001 0.30	2061 0.32	2123 0.35	2241 0.40	2358 0.46	2469 0.53	2582 0.59	2690 0.66	2895 0.79	3083 0.94	3259 1.09	
1200	2654	2203 0.40	2259 0.43	2309 0.46	2364 0.49	2412 0.52	2516 0.58	2613 0.65	2713 0.72	2811 0.79	2903 0.86	3092 1.01	3272 1.17	3442 1.34	
1400	3097	2539 0.61	2583 0.65	2630 0.68	2675 0.71	2721 0.75	2809 0.82	2898 0.89	2983 0.97	3069 1.04	3152 1.13	3318 1.29	3478 1.47	3639 1.64	
1600	3539	2874 0.89	2916 0.93	2955 0.97	2998 1.01	3039 1.04	3118 1.12	3192 1.20	3269 1.29	3348 1.37	3420 1.46	3570 1.64	3718 1.83	3858 2.02	

# 12-BI

12 1/4-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) .855

TIP SPEED (FPM) = 3.21 x RPM  
MAX. BHP = .079 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG													
		1/4" RPM BHP	3/8" RPM BHP	1/2" RPM BHP	5/8" RPM BHP	3/4" RPM BHP	1.0" RPM BHP	1-1/4" RPM BHP	1-1/2" RPM BHP	1-3/4" RPM BHP	2.0" RPM BHP	2-1/2" RPM BHP	3.0" RPM BHP	3-1/2" RPM BHP	
800	936	904 0.06	993 0.08	1077 0.10	1159 0.13	1240 0.16	1401 0.21	1548 0.27	1721 0.39	1840 0.46	1955 0.53				
1000	1170	1055 0.10	1120 0.12	1190 0.14	1261 0.17	1329 0.20	1459 0.25	1593 0.32	1721 0.39	1840 0.46	1955 0.53				
1200	1404	1194 0.14	1260 0.16	1329 0.20	1389 0.23	1445 0.26	1560 0.32	1669 0.41	1775 0.46	1890 0.54	1999 0.62	2200 0.79	2389 0.97		
1400	1637	1352 0.20	1410 0.23	1469 0.27	1521 0.30	1578 0.33	1679 0.40	1779 0.48	1870 0.55	1965 0.63	2055 0.71	2249 0.89	2433 1.09	2600 1.30	
1600	1871	1519 0.28	1566 0.31	1618 0.35	1667 0.39	1713 0.43	1809 0.52	1889 0.58	1989 0.67	2070 0.75	2150 0.84	2313 1.02	2482 1.23	2648 1.44	
1800	2105	1680 0.39	1728 0.42	1770 0.45	1812 0.50	1860 0.54	1948 0.62	2030 0.71	2110 0.80	2190 0.89	2268 1.00	2410 1.18	2559 1.39	2700 1.60	
2000	2339	1850 0.48	1890 0.54	1930 0.59	1970 0.63	2010 0.67	2090 0.77	2169 0.86	2240 0.96	2315 1.06	2386 1.17	2529 1.38	2659 1.58	2789 1.80	
2200	2573	2021 0.62	2059 0.70	2091 0.74	2130 0.79	2165 0.83	2239 0.94	2310 1.03	2380 1.14	2450 1.25	2518 1.36	2641 1.58	2771 1.83	2890 2.05	
2400	2807	2195 0.84	2225 0.85	2260 0.93	2290 0.97	2323 1.03	2390 1.13	2458 1.23	2520 1.34	2588 1.46	2650 1.58	2771 1.83	2890 2.06	3019 2.33	
2600	3041	2369 1.08	2395 1.01	2425 1.15	2459 1.18	2485 1.24	2549 1.35	2610 1.46	2670 1.59	2730 1.70	2790 1.83	2909 2.09	3020 2.36	3128 2.61	
2800	3275	2540 1.34	2569 1.32	2590 1.32	2620 1.46	2650 1.48	2709 1.62	2761 1.73	2820 1.86	2878 2.00	2930 2.12	3041 2.39	3151 2.67	3258 2.95	
3000	3509	2711 1.58	2740 1.65	2761 1.55	2790 1.73	2818 1.79	2870 1.91	2920 2.04	2973 2.16	3029 2.30	3080 2.45	3181 2.70	3290 3.08	3389 3.32	

Performance shown is for 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.



Central Blower Co. certified that the Backward Inclined Blowers shown here-in are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

# 15-BI

15-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 1.282

TIP SPEED (FPM) = 3.93 x RPM  
MAX. BHP = .217 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG													
		1/4" RPM BHP	3/8" RPM BHP	1/2" RPM BHP	5/8" RPM BHP	3/4" RPM BHP	1.0" RPM BHP	1-1/4" RPM BHP	1-1/2" RPM BHP	1-3/4" RPM BHP	2.0" RPM BHP	2-1/2" RPM BHP	3.0" RPM BHP	3-1/2" RPM BHP	
1000	780	730 0.08	809 0.11	872 0.13	934 0.16	996 0.19	1108 0.25	1217 0.32	1320 0.39	1418 0.47	1510 0.55	1682 0.72	1837 0.89	1980 1.07	
1100	858	767 0.10	847 0.13	912 0.15	969 0.18	1026 0.21	1131 0.27	1235 0.35	1334 0.42	1427 0.50	1519 0.58	1689 0.76	1843 0.94	1986 1.13	
1200	936	804 0.11	885 0.15	952 0.18	1007 0.21	1062 0.23	1160 0.30	1257 0.37	1351 0.45	1442 0.53	1529 0.62	1695 0.80	1848 1.00	1991 1.20	
1400	1092	879 0.14	959 0.19	1027 0.23	1086 0.27	1133 0.30	1229 0.37	1315 0.45	1401 0.52	1483 0.61	1564 0.70	1719 0.89	1865 1.10	2004 1.32	
1600	1248	960 0.19	1032 0.23	1101 0.28	1161 0.33	1210 0.38	1307 0.46	1386 0.54	1464 0.62	1539 0.71	1613 0.80	1756 1.00	1893 1.22	2025 1.44	
1800	1404	1046 0.24	1110 0.29	1174 0.34	1235 0.40	1285 0.46	1385 0.55	1466 0.64	1537 0.73	1607 0.82	1674 0.92	1806 1.12	1934 1.35	2057 1.59	
2000	1560	1136 0.31	1193 0.36	1251 0.42	1308 0.47	1360 0.52	1460 0.65	1543 0.76	1617 0.87	1683 0.96	1745 1.06	1867 1.28	1987 1.50	2101 1.74	
2200	1716	1227 0.39	1279 0.44	1332 0.50	1385 0.56	1435 0.62	1535 0.76	1619 0.89	1694 1.01	1763 1.13	1823 1.23	1938 1.45	2049 1.69	2158 1.93	
2400	1872	1319 0.48	1368 0.54	1417 0.60	1464 0.67	1511 0.74	1607 0.88	1693 1.02	1770 1.16	1839 1.29	1905 1.42	2015 1.56	2119 1.90	2221 2.15	
2600	2028	1413 0.58	1459 0.65	1503 0.72	1548 0.79	1592 0.86	1681 1.01	1767 1.17	1844 1.32	1915 1.47	1973 1.61	2096 1.89	2196 2.14	2292 2.40	
2800	2184	1508 0.71	1551 0.78	1593 0.85	1634 0.92	1675 0.99	1759 1.15	1839 1.32	1918 1.49	1989 1.66	2055 1.82	2172 2.12	2276 2.41	2368 2.69	
3000	2340	1603 0.85	1644 0.92	1684 1.00	1722 1.07	1760 1.14	1836 1.31	1915 1.67	1990 1.67	2063 1.85	2129 2.03	2248 2.37	2354 2.69	2448 3.00	
3200	2496	1699 1.00	1738 1.09	1776 1.17	1813 1.25	1849 1.33	1921 1.50	1993 1.68	2065 1.87	2135 2.06	2203 2.26	2323 2.63	2430 2.99	2527 3.33	
3400	2652	1796 1.18	1833 1.27	1869 1.36	1904 1.44	1938 1.52	2006 1.71	2070 1.89	2142 2.08	2209 2.29	2275 2.49	2397 2.90	2506 3.30	2603 3.66	
3600	2808	1892 1.38	1928 1.47	1962 1.57	1996 1.66	2028 1.75	2092 1.93	2157 2.12	2220 2.32	2285 2.53	2348 2.75	2471 3.19	2579 3.61	2680 4.03	
3800	2964	1990 1.60	2024 1.70	2056 1.80	2088 1.89	2119 1.98	2181 2.18	2242 2.38	2302 2.59	2362 2.80	2424 3.02	2543 3.48	2654 3.94	2753 4.38	
4000	3120	2087 1.84	2120 1.95	2151 2.05	2182 2.15	2211 2.25	2271 2.46	2328 2.66	2387 2.88	2442 3.09	2502 3.32	2616 3.80	2727 4.29	2828 4.76	
4200	3276	2185 2.11	2216 2.22	2247 2.33	2276 2.44	2304 2.55	2362 2.76	2416 2.97	2472 3.19	2527 3.42	2580 3.65	2692 4.14	2799 4.64	2902 5.16	

# 18-BI

18 1/4 -INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 1.898

TIP SPEED (FPM) = 4.78 x RPM  
MAX. BHP = .580 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG													
		1/4" RPM BHP	3/8" RPM BHP	1/2" RPM BHP	5/8" RPM BHP	3/4" RPM BHP	1.0" RPM BHP	1-1/4" RPM BHP	1-1/2" RPM BHP	1-3/4" RPM BHP	2.0" RPM BHP	2-1/2" RPM BHP	3.0" RPM BHP	3-1/2" RPM BHP	
1600	843	594 0.12	651 0.16	704 0.20	760 0.25	813 0.30	913 0.40	1000 0.51	1088 0.62	1169 0.74	1245 0.87	1387 1.14	1517 1.46	1637 1.80	
1800	948	641 0.15	692 0.19	742 0.24	789 0.28	840 0.34	935 0.45	1022 0.57	1100 0.68	1178 0.80	1254 0.94	1393 1.21	1520 1.51	1639 1.86	
2000	1054	690 0.19	737 0.23	783 0.28	827 0.33	869 0.38	959 0.50	1044 0.63	1123 0.75	1194 0.88	1263 1.01	1401 1.30	1527 1.61	1643 1.93	
2200	1159	739 0.23	784 0.28	826 0.33	868 0.38	907 0.43	987 0.55	1067 0.68	1144 0.83	1217 0.97	1284 1.11	1410 1.40	1535 1.72	1651 2.05	
2400	1264	789 0.28	833 0.33	872 0.38	911 0.44	948 0.49	1019 0.61	1095 0.75	1167 0.90	1238 1.05	1307 1.21	1428 1.51	1544 1.83	1659 2.18	
2600	1370	839 0.33	881 0.39	920 0.45	956 0.50	991 0.56	1060 0.69	1125 0.82	1195 0.97	1262 1.13	1327 1.30	1452 1.63	1561 1.96	1668 2.31	
2800	1475	890 0.39	931 0.46	969 0.52	1003 0.58	1036 0.64	1101 0.77	1163 0.91	1224 1.05	1290 1.22	1352 1.39	1474 1.75	1585 2.11	1685 2.47	
3000	1581	942 0.46	982 0.53	1017 0.60	1051 0.67	1082 0.73	1144 0.87	1204 1.01	1261 1.15	1318 1.31	1380 1.49	1494 1.86	1608 2.27	1709 2.64	
3200	1686	994 0.54	1032 0.61	1067 0.69	1100 0.76	1130 0.83	1189 0.97	1246 1.12	1301 1.27	1354 1.43	1408 1.60	1521 1.99	1626 2.39	1732 2.82	
3400	1791	1046 0.66	1083 0.71	1117 0.78	1149 0.86	1179 0.94	1235 1.09	1289 1.24	1342 1.40	1394 1.56	1433 1.73	1549 2.12	1652 2.54	1751 2.97	
3600	1897	1099 0.72	1134 0.81	1167 0.89	1198 0.97	1228 1.05	1282 1.21	1334 1.37	1385 1.54	1435 1.71	1483 1.88	1578 2.25	1679 2.69	1774 3.13	
3800	2002	1152 0.83	1186 0.92	1218 1.01	1248 1.09	1277 1.18	1331 1.35	1380 1.52	1429 1.69	1477 1.86	1524 2.04	1613 2.41	1708 2.85	1802 3.31	
4200	2213	1259 1.07	1291 1.17	1321 1.27	1350 1.37	1377 1.46	1428 1.66	1476 1.85	1521 2.03	1565 2.22	1608 2.41	1694 2.81	1774 3.21	1858 3.68	
4600	2424	1368 1.37	1397 1.47	1425 1.58	1452 1.69	1478 1.80	1527 2.01	1573 2.22	1617 2.43	1658 2.63	1698 2.83	1777 3.25	1856 3.69	1929 4.13	
5000	2634	1476 1.71	1504 1.83	1530 1.95	1556 2.06	1581 2.18	1628 2.41	1672 2.54	1714 2.87	1754 3.10	1792 3.31	1866 3.76	1939 4.22	2011 4.69	
5400	2845	1586 2.11	1612 2.24	1637 2.37	1661 2.49	1684 2.62	1729 2.88	1772 3.12	1812 3.37	1851 3.62	1888 3.86	1958 4.34	2027 4.82	2094 5.31	
5800	3056	1696 2.58	1720 2.71	1744 2.85	1767 2.98	1789 3.12	1832 3.40	1873 3.67	1912 3.93	1949 4.20	1986 4.48	2054 4.98	2117 5.49	2182 6.01	
6200	3267	1806 3.11	1829 3.25	1851 3.40	1873 3.54	1894 3.69	1936 3.98	1975 4.28	2013 4.56	2049 4.84	2084 5.13	2151 5.70	2213 6.24	2272 6.79	

Performance shown is for 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.



Central Blower Co. certified that the Backward Inclined Blowers shown here-in are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

# 20-BI

20-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 2.280

TIP SPEED (FPM) = 5.24 x RPM  
MAX. BHP = .910 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG																											
		1/4"		3/8"		1/2"		5/8"		3/4"		1.0"		1-1/4"		1-1/2"		1-3/4"		2.0"		2-1/2"		3.0"		3-1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1900	833	517	0.13	582	0.18	637	0.23	689	0.28	736	0.34	825	0.45	904	0.57	983	0.73												
2200	965	541	0.16	621	0.23	672	0.31	720	0.34	766	0.40	850	0.52	928	0.65	1000	0.79	1066	0.93										
2500	1096	586	0.20	646	0.27	711	0.34	757	0.40	799	0.46	881	0.61	950	0.74	1024	0.89	1090	1.04	1152	1.20								
2800	1228	634	0.25	677	0.31	740	0.41	796	0.47	837	0.54	912	0.68	985	0.84	1052	1.00	1114	1.16	1176	1.33	1288	1.68	1390	2.05				
3100	1360	683	0.31	724	0.38	763	0.45	824	0.54	876	0.63	949	0.78	1017	0.95	1083	1.12	1144	1.29	1201	1.47	1312	1.84	1413	2.23	1507	2.64		
3400	1491	735	0.39	772	0.46	807	0.53	848	0.61	903	0.71	988	0.90	1053	1.07	1114	1.24	1175	1.43	1231	1.62	1336	2.01	1437	2.42	1531	2.85		
3700	1623	789	0.47	821	0.55	855	0.63	887	0.71	927	0.80	1026	1.02	1091	1.21	1150	1.39	1206	1.58	1260	1.79	1366	2.20	1462	2.63	1555	3.08		
4000	1754	843	0.57	871	0.65	903	0.73	934	0.82	963	0.90	1049	1.13	1131	1.36	1189	1.56	1243	1.76	1294	1.96	1397	2.40	1491	2.85	1579	3.32		
4300	1886	897	0.67	924	0.76	952	0.85	982	0.95	1010	1.04	1073	1.24	1159	1.50	1228	1.74	1281	1.95	1332	2.16	1429	2.61	1522	3.09	1609	3.58		
4600	2018	952	0.80	978	0.89	1002	0.99	1031	1.09	1058	1.18	1109	1.38	1183	1.64	1261	1.91	1320	2.15	1370	2.38	1463	2.85	1554	3.34	1639	3.84		
4900	2149	1008	0.94	1032	1.04	1056	1.14	1080	1.25	1106	1.35	1156	1.56	1207	1.78	1285	2.07	1357	2.37	1409	2.62	1501	3.11	1585	3.60	1671	4.14		
5200	2281	1064	1.10	1087	1.20	1109	1.31	1131	1.42	1155	1.53	1204	1.75	1249	1.97	1309	2.24	1380	2.55	1448	2.87	1539	3.38	1623	3.82	1702	4.44		
5800	2544	1176	1.46	1197	1.58	1218	1.70	1238	1.82	1257	1.94	1301	2.19	1344	2.43	1385	2.68	1428	2.95	1495	3.30	1618	4.00	1700	4.57	1776	5.14		
6400	2807	1289	1.91	1309	2.04	1328	2.17	1346	2.30	1364	2.43	1400	2.71	1440	2.97	1479	3.24	1517	3.52	1553	3.80	1665	4.53	1776	5.30	1853	5.94		
7000	3070	1403	2.44	1421	2.58	1438	2.72	1456	2.87	1473	3.01	1505	3.30	1539	3.60	1576	3.89	1612	4.19	1646	4.49	1712	5.10	1823	5.94	1925	6.79		
7600	3333	1517	3.07	1534	3.22	1550	3.37	1567	3.53	1582	3.68	1613	4.00	1643	4.32	1674	4.64	1709	4.96	1742	5.24	1836	6.23	1870	6.62	1972	7.54		

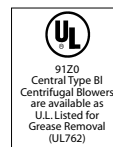
# 22-BI

22.25 -INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 2.821

TIP SPEED (FPM) = 5.83 x RPM  
MAX. BHP = 1.562 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG																											
		1/4"		3/8"		1/2"		5/8"		3/4"		1.0"		1-1/4"		1-1/2"		1-3/4"		2.0"		2-1/2"		3.0"		3-1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2200	780	466	0.16	514	0.21	564	0.27	611	0.34	658	0.42	737	0.55	815	0.71	888	0.87	955	1.05	1018	1.23	1136	1.66	1243	2.12	1341	2.61		
2500	886	503	0.20	547	0.26	589	0.32	633	0.39	675	0.47	757	0.63	827	0.79	895	0.95	963	1.14	1024	1.33	1138	1.73	1245	2.20	1343	2.71		
2800	993	542	0.25	583	0.31	622	0.39	659	0.44	698	0.52	774	0.70	846	0.88	910	1.06	975	1.24	1031	1.44	1145	1.86	1248	2.30	1346	2.81		
3100	1099	583	0.30	621	0.37	657	0.44	692	0.52	725	0.59	796	0.77	863	0.96	929	1.17	988	1.36	1042	1.56	1152	2.00	1255	2.46	1350	2.95		
3400	1205	624	0.37	661	0.45	694	0.52	727	0.60	759	0.68	820	0.85	885	1.06	945	1.27	1007	1.50	1061	1.71	1162	2.14	1262	2.63	1357	3.14		
3700	1312	665	0.44	701	0.53	733	0.61	760	0.69	793	0.78	851	0.96	908	1.16	968	1.38	1023	1.61	1080	1.86	1180	2.32	1272	2.80	1364	3.33		
4000	1418	707	0.53	741	0.62	773	0.71	801	0.80	830	0.89	885	1.08	936	1.27	991	1.50	1045	1.74	1097	1.99	1200	2.52	1289	3.02	1374	3.53		
4300	1524	750	0.63	783	0.73	813	0.83	841	0.92	867	1.02	919	1.21	970	1.42	1017	1.63	1069	1.88	1119	2.14	1216	2.68	1309	3.24	1391	3.78		
4600	1631	793	0.74	824	0.84	854	0.95	881	1.05	906	1.16	956	1.36	1004	1.57	1050	1.80	1095	2.03	1143	2.30	1236	2.86	1326	3.45	1411	4.05		
4900	1737	836	0.86	867	0.98	895	1.09	921	1.20	946	1.31	993	1.53	1039	1.75	1084	1.98	1122	2.22	1169	2.47	1259	3.05	1374	3.66	1429	4.30		
5200	1843	879	1.00	909	1.12	936	1.24	962	1.36	987	1.48	1032	1.71	1075	1.94	1118	2.1	1160	2.43	1200	2.68	1282	3.25	1366	3.88	1444	4.52		
5800	2056	967	1.32	995	1.45	1021	1.89	1045	1.72	1068	1.85	1112	2.12	1152	2.37	1191	2.63	1229	2.90	1267	3.17	1340	3.73	1413	4.35	1489	5.06		
6400	2269	1056	1.70	1082	1.85	1106	2.00	1129	2.16	1151	2.30	1193	2.59	1232	2.89	1268	3.17	1303	3.45	1339	3.74	1407	4.34	1473	4.95	1538	5.62		
7000	2481	1146	2.16	1170	2.33	1192	2.49	1214	2.66	1235	2.82	1275	3.14	1312	3.46	1348	3.78	1381	4.098	1413	4.40	1478	5.03	1540	5.69	1601	6.36		
7600	2694	1236	2.70	1258	2.88	1280	3.06	1300	3.24	1320	3.42	1358	3.77	1394	4.12	1429	4.47	1461	4.82	1492	5.15	1551	5.82	1610	6.51	1668	7.23		
8200	2907	1327	3.33	1348	3.53	1368	3.72	1387	3.91	1406	4.10	1443	4.50	1477	4.87	1510	5.24	1542	5.62	1572	5.99	1629	6.71	1684	7.44	1738	8.19		
8800	3119	1418	4.06	1438	4.26	1457	4.47	1475	4.68	1493	4.88	1528	5.30	1461	5.71	1593	6.11	1623	6.52	1653	6.92	1708	7.71	1760	8.48	1812	9.27		
9400	3332	1510	4.89	1528	5.10	1546	5.32	1564	5.54	1581	5.76	1614	6.21	1646	6.66	1677	7.09	1706	7.52	1734	7.95	1789	8.82	1839	9.64	1887	10.1		

Performance shown is for 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.



Central Blower Co. certified that the Backward Inclined Blowers shown here-in are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



# 24-BI

24.50-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 3.490

TIP SPEED (FPM) = 6.41 x RPM  
MAX. BHP = 2.420 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG																											
		1/4"		3/8"		1/2"		5/8"		3/4"		1.0"		1-1/4"		1-1/2"		1-3/4"		2.0"		2-1/2"		3.0"		3-1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2800	802	428	0.18	476	0.25	522	0.32	565	0.40	606	0.448	680	0.65	748	0.83	811	1.02	872	1.22	929	1.43	1034	1.86	1130	2.30	1217	2.77		
3200	917	457	0.23	504	0.31	547	0.38	587	0.46	626	0.55	698	0.74	763	0.93	824	1.13	881	1.34	936	1.56	1040	2.02	1135	2.51	1222	3.01		
3600	1032	491	0.28	534	0.37	575	0.45	613	0.54	649	0.63	718	0.83	781	1.03	840	1.25	895	1.47	948	1.70	1047	2.18	1141	2.71	1227	3.25		
4000	1146	525	0.35	567	0.44	605	0.53	641	0.63	676	0.73	740	0.93	801	1.15	859	1.38	912	1.62	963	1.86	1059	2.37	1148	2.90	1234	3.47		
4400	1261	561	0.43	600	0.52	637	0.62	670	0.72	703	0.83	766	1.05	824	1.27	879	1.51	931	1.77	981	2.03	1074	2.56	1161	3.12	1242	3.70		
4800	1375	598	0.51	634	0.62	670	0.72	702	0.83	733	0.94	792	1.18	848	1.42	901	1.67	952	1.93	1001	2.20	1091	2.77	1176	3.36	1256	3.97		
5200	1490	636	0.62	670	0.72	703	0.84	735	0.95	765	1.07	821	1.32	875	1.58	925	1.84	974	2.11	1021	2.39	1110	2.98	1193	3.60	1270	4.24		
5600	1605	674	0.73	707	0.85	738	0.97	768	1.09	797	1.22	851	1.48	902	1.75	952	2.03	998	2.30	1044	2.59	1130	3.21	1212	3.86	1288	4.53		
6000	1719	712	0.86	744	0.99	774	1.11	802	1.24	830	1.38	883	1.65	931	1.93	979	2.23	1025	2.53	1068	2.82	1152	3.46	1231	4.13	1306	4.83		
7000	2006	811	1.27	839	1.41	866	1.56	892	1.70	916	1.85	964	2.16	1010	2.48	1053	2.80	1095	3.14	1136	3.48	1213	4.18	1286	4.88	1358	5.64		
8000	2292	912	1.79	936	1.95	960	2.12	984	2.29	1007	2.45	1051	2.79	1093	3.14	1134	3.51	1172	3.87	1209	4.25	1282	5.02	1351	5.82	1417	6.60		
9000	2579	1014	2.44	1036	2.63	1057	2.82	1079	3.01	1101	3.19	1141	3.57	1179	3.95	1217	4.34	1254	4.75	1290	5.16	1356	5.99	1421	6.86	1484	7.76		
10000	2865	1117	3.25	1137	3.46	1157	3.67	1176	3.88	1196	4.09	1234	4.50	1270	4.92	1305	5.35	1338	5.77	1372	6.22	1437	7.13	1497	8.06	1555	9.01		
11000	3152	1221	4.23	1239	4.46	1258	4.69	1275	4.92	1295	5.16	1328	5.61	1363	6.07	1396	6.53	1427	6.99	1458	7.46	1519	8.44	1578	9.44	1633	10.5		
12000	3438	1325	5.40	1342	5.65	1359	5.90	1376	6.15	1392	6.41	1424	6.91	1457	7.41	1488	7.90	1518	8.41	1547	8.91	1603	9.93	1660	11.0	1714	12.1		

# 27-BI

27.00 -INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 4.260

TIP SPEED (FPM) = 7.07 x RPM  
MAX. BHP = 3.982 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG																											
		1/4"		3/8"		1/2"		5/8"		3/4"		1.0"		1-1/4"		1-1/2"		1-3/4"		2.0"		2-1/2"		3.0"		3-1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3400	798	390	0.21	430	0.630	467	0.34	502	0.45	538	0.55	604	0.79	669	0.99	730	1.22	785	1.45	838	1.69	930	2.20	1017	2.78	1095	3.33		
3800	892	414	0.27	452	0.36	488	0.42	520	0.52	552	0.63	615	0.87	680	1.10	738	1.32	790	1.58	840	1.82	935	2.33	1020	2.94	1098	3.55		
4200	985	442	0.34	482	0.44	512	0.52	545	0.60	572	0.73	630	0.95	691	1.20	745	1.43	795	1.72	845	1.95	940	2.50	1024	3.14	1100	3.78		
4600	1080	470	0.40	509	0.50	538	0.61	568	0.72	593	0.83	648	1.05	706	1.30	758	1.56	802	1.85	855	2.10	942	2.66	1029	3.33	1105	4.00		
5000	1174	504	0.44	540	0.58	566	0.70	592	0.83	622	0.96	667	1.17	722	1.42	771	1.70	812	2.00	866	2.28	950	2.84	1030	3.56	1110	4.22		
5400	1268	530	0.54	568	0.67	593	0.82	617	0.95	648	1.08	688	1.30	740	1.56	786	1.84	827	2.16	880	2.30	958	3.04	1038	3.75	1115	4.49		
5800	1362	560	0.65	597	0.80	620	0.94	645	1.09	673	1.22	710	1.42	760	1.56	804	2.00	842	2.31	892	2.60	967	3.23	1048	3.96	1122	4.70		
6200	1455	592	0.77	626	0.90	648	1.08	674	1.22	702	1.37	738	1.60	780	1.88	822	2.18	863	2.50	910	2.81	980	3.42	1059	4.20	1132	4.93		
6600	1549	623	0.92	655	1.05	675	1.22	702	1.38	728	1.52	777	1.76	803	2.06	843	2.38	886	2.69	928	3.03	996	3.68	1082	4.47	1141	5.23		
7000	1643	658	1.07	687	1.20	704	1.36	732	1.52	755	1.68	793	1.93	831	2.25	868	2.59	908	2.90	949	3.24	1014	3.95	1088	4.72	1152	5.51		
8000	1878	738	1.50	760	1.62	779	1.78	803	1.92	822	2.14	860	2.45	900	2.82	936	3.19	969	3.55	1006	3.88	1069	4.68	1130	5.48	1194	6.36		
9000	2113	816	2.00	834	2.14	854	2.31	876	2.45	890	2.73	929	3.12	970	3.41	1002	3.96	1032	4.35	1065	4.67	1127	5.60	1182	6.42	1240	7.28		
10000	2347	894	2.63	910	2.80	929	2.97	948	3.16	967	3.48	1000	3.90	1039	4.33	1070	4.88	1098	5.30	1129	5.95	1189	6.83	1240	7.70	1293	8.40		
11000	2582	972	3.41	988	3.60	1005	3.80	1022	3.98	1040	4.30	1074	4.81	1109	5.24	1138	5.85	1166	6.35	1193	6.80	1252	7.87	1302	8.85	1350	9.73		
12000	2817	1052	4.40	1067	4.52	1082	4.70	1102	4.93	1121	5.28	1150	5.85	1178	6.30	1213	6.88	1238	7.50	1264	8.00	1320	9.05	1365	10.3	1412	11.2		
13000	3052	1132	5.45	1145	5.60	1160	5.74	1180	6.00	1198	6.42	1229	7.02	1253	7.52	1282	8.15	1305	8.75	1332	9.25	1390	10.5	1430	11.8	1477	12.8		
14000	3286	1210	6.55	1222	6.73	1238	6.95	1256	7.29	1275	7.66	1307	8.35	1330	8.90	1355	9.58	1382	10.3	1405	10.8	1460	12.1	1495	13.5	1540	14.6		

Performance shown is for 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.



Central Blower Co. certified that the Backward Inclined Blowers shown here-in are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

# 30-BI

30.00-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 5.260

TIP SPEED (FPM) = 7.85 x RPM  
MAX. BHP = 6.743 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG																											
		1/4"		3/8"		1/2"		5/8"		3/4"		1.0"		1-1/4"		1-1/2"		1-3/4"		2.0"		2-1/2"		3.0"		3-1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	760	351	0.25	387	0.35	419	0.43	452	0.53	484	0.64	544	0.91	602	1.16	657	1.47	707	1.73	754	2.00	837	2.64	915	3.33	986	4.00		
4500	855	365	0.35	401	0.43	432	0.49	463	0.62	493	0.74	550	1.02	607	1.30	689	1.48	710	1.89	756	2.17	839	2.81	918	3.53	989	4.66		
5000	950	390	0.37	424	0.46	450	0.58	482	0.69	508	0.84	562	1.12	620	1.42	666	1.73	713	2.04	759	2.35	844	3.00	920	3.77	990	4.54		
5500	1045	416	0.43	450	0.57	477	0.70	504	0.84	527	0.99	576	1.23	630	1.57	678	1.86	720	2.22	766	2.52	847	3.21	924	4.01	993	4.81		
6000	1140	443	0.49	476	0.67	501	0.81	526	0.98	551	1.11	594	1.38	644	1.72	689	2.02	729	2.41	774	2.72	851	3.43	927	4.28	997	5.11		
6500	1239	468	0.62	502	0.78	526	0.98	547	1.12	576	1.28	612	1.53	661	1.85	702	2.22	731	2.59	787	2.95	857	3.65	932	4.54	1001	5.42		
7000	1331	495	0.74	529	0.90	551	1.11	572	1.28	599	1.46	632	1.72	679	2.16	717	2.39	754	2.79	800	3.14	867	3.90	940	4.81	1008	5.68		
8000	1521	553	1.06	581	1.23	600	1.44	624	1.62	648	1.81	682	2.10	7717	2.47	752	2.84	792	3.25	830	3.64	892	4.44	961	5.42	1024	6.35		
9000	1711	612	1.47	636	1.60	652	1.80	677	2.01	697	2.22	732	2.54	765	2.96	797	3.52	831	3.78	868	4.20	926	5.12	990	6.07	1049	7.22		
10000	1901	670	1.90	689	2.05	707	2.25	729	2.41	745	2.69	779	3.09	817	3.54	848	4.01	877	4.46	909	4.88	965	5.86	1020	6.77	1078	7.97		
11000	2091	728	2.42	746	2.59	763	2.79	783	2.98	797	3.31	830	3.77	867	4.26	896	4.81	923	5.28	953	5.68	1009	6.79	1059	7.80	1112	8.89		
12000	2281	785	3.04	801	3.21	817	3.42	835	3.64	851	4.05	883	4.57	918	5.06	945	5.70	971	6.21	1001	6.60	1055	7.72	1102	8.97	1150	9.97		
13000	2471	842	3.73	857	3.95	873	4.20	887	4.42	904	4.79	935	5.37	968	5.91	995	6.64	1019	7.22	1046	7.72	1099	8.91	1144	10.2	1191	11.2		
14000	2662	900	4.62	914	4.81	927	5.04	943	5.30	961	5.70	900	6.36	1017	6.89	1047	7.668	1071	8.31	1095	8.89	1146	10.1	1119	11.4	1236	12.6		
15000	2852	958	5.59	971	5.74	984	5.95	1003	6.26	1019	6.69	1028	7.41	1069	7.99	1102	8.70	1125	9.44	1147	10.1	1199	11.4	1238	12.9	1278	14.0		
16000	3042	1015	6.64	1028	6.84	1040	7.04	1060	7.35	1075	7.88	1103	8.60	1125	9.20	1151	9.97	1175	10.7	1197	11.4	1249	12.9	1285	14.4	1328	15.7		
17000	3232	1073	7.78	1085	7.96	1098	8.21	1115	8.59	1131	9.10	1159	9.91	1181	10.5	1204	11.3	1227	12.2	1249	12.9	1301	14.4	1334	16.0	1373	17.4		
18000	3422	1130	9.05	1143	9.31	1157	9.63	1175	10.0	1191	10.5	1206	11.4	1224	12.1	1260	12.9	1283	13.7	1307	14.5	1352	16.2	1384	17.9	1422	19.3		

# 36-BI

36.50-INCH WHEEL DIAMETER  
OUTLET AREA (SQ. FT.) 7.785

TIP SPEED (FPM) = 9.56 x RPM  
MAX. BHP = 17.977 x (RPM/1000)<sup>3</sup>

VOLUME CFM	O.V. FPM	SP, in. WG																											
		1/4"		3/8"		1/2"		5/8"		3/4"		1.0"		1-1/4"		1-1/2"		1-3/4"		2.0"		2-1/2"		3.0"		3-1/2"			
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	770	285	0.37	314	0.49	324	0.60	368	0.79	395	0.95	445	1.35	492	1.72	540	2.19	580	2.58	618	2.98	689	3.93	752	4.95	809	5.96		
7000	899	309	0.49	337	0.68	362	0.79	385	0.95	411	1.17	456	1.57	503	2.01	545	2.25	584	2.91	621	3.34	685	4.29	754	5.39	812	6.43		
8000	1027	337	0.60	365	0.82	389	0.99	411	1.19	429	1.43	471	1.81	516	2.25	556	2.70	591	3.23	629	3.66	695	4.70	759	5.87	815	7.05		
9000	1156	369	0.77	396	1.01	416	1.10	436	1.48	457	1.68	491	2.08	533	2.56	569	3.07	601	3.60	638	4.08	701	5.10	763	6.40	821	7.68		
10000	1284	396	1.02	423	1.28	442	1.55	460	1.79	482	2.03	510	2.41	551	2.89	583	3.42	614	4.00	652	4.48	709	5.61	769	6.93	826	8.26		
11000	1412	428	1.30	454	1.59	471	1.86	490	2.14	510	2.38	538	2.78	571	3.31	602	3.84	632	4.42	668	4.99	720	6.09	778	7.49	834	8.83		
12000	1541	462	1.64	484	1.88	500	2.19	519	2.47	539	2.74	566	3.18	594	3.73	623	4.29	653	4.83	684	5.48	735	6.67	791	8.08	844	9.50		
13000	1669	493	2.05	515	2.25	527	2.58	549	2.89	564	3.16	593	3.64	625	4.22	647	4.88	677	5.45	706	6.05	754	7.55	808	8.77	850	10.2		
14000	1798	592	2.49	542	2.67	556	2.98	575	3.27	529	3.62	619	4.13	653	4.79	675	5.45	701	6.05	729	6.65	777	8.08	832	9.50	874	11.0		
15000	1926	557	2.92	573	3.13	588	3.40	606	3.66	618	4.09	646	4.71	678	5.37	703	6.07	726	6.76	753	7.35	799	8.85	843	10.3	981	11.9		
16000	2055	588	3.42	604	3.66	617	3.98	634	4.22	645	4.68	675	5.37	704	6.07	729	6.85	752	7.57	777	8.13	823	9.78	865	11.2	908	12.8		
17000	2183	623	3.98	636	4.22	648	4.53	664	4.84	677	5.39	704	6.07	732	6.87	756	7.71	777	8.42	802	9.03	847	10.7	886	12.3	929	13.8		
18000	2312	652	4.61	666	4.90	686	5.19	685	5.54	706	6.12	732	6.89	761	7.68	784	8.16	805	9.36	827	9.96	872	11.7	911	13.4	951	14.9		
20000	2569	717	6.16	728	6.47	739	6.82	753	7.16	766	7.77	791	8.61	817	9.45	839	10.5	859	11.4	880	12.2	923	14.0	960	15.9	998	17.5		
22000	2825	783	8.08	793	8.33	803	8.64	817	9.08	823	9.72	854	10.7	874	11.5	892	12.6	919	13.7	936	14.7	980	16.6	1012	18.8	1051	20.5		
24000	3082	845	10.1	854	10.4	865	10.7	880	11.2	893	12.0	916	13.1	935	14.0	954	15.1	973	16.3	1058	17.4	1036	19.5	1064	21.8	1099	23.7		
26000	3339	911	12.5	919	12.8	932	13.3	945	13.8	957	14.6	982	15.9	998	16.8	1016	18.2	1036	19.3	1054	20.4	1093	22.8	1120	25.4	1151	27.4		

Performance shown is for 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.



Central Blower Co. certified that the Backward Inclined Blowers shown here-in are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



## **WARRANTY**

Central Blower Co. (the Company) warrants that each blower manufactured by the Company shall be free from defects in material and workmanship under normal use and service for a period of eighteen (18) months from the date of shipment or twelve (12) months from date of original installation, "whichever occurs first." If it appears within the warranty period that the blower does not meet the warranties specified above and the purchaser notifies the Company promptly, the Company agrees to remedy any such defect, at the Company's option, either by repairing any defective parts or by furnishing at the Company's factory a repair or replacement part.

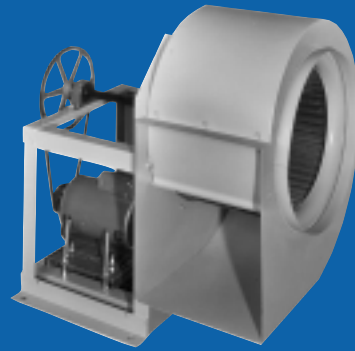
This warranty shall not apply to any equipment which has been repaired or altered in any way so as, in the Company's judgement, to affect its performance or reliability, nor which has been improperly installed or subject to misuse, negligence or accident. This warranty does not apply to electric motors, which however, carry warranty of the motor manufacturer. Warranty does not apply to drive belts.

This warranty is expressed in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on the Company's part. The Company neither assumes, nor authorizes any representative or other persons to assume for it, any other liability in connection with the sale of its equipment.

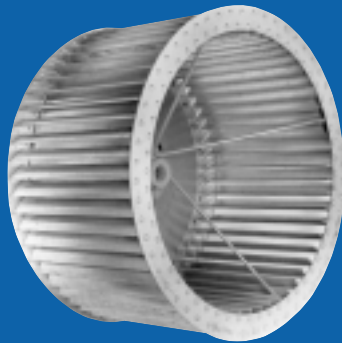
## Other Central Products



**Series FCD**  
Double Inlet Forward Curved Blowers  
Sizes: 18, 22, 26 and 30



**Series FC**  
Belt Drive Blowers  
Sizes 9 thru 30"



**Forward Curved and  
Backward Inclined Wheels**



**Coated Laboratory  
Exhaust Fans**



**CENTRAL BLOWER CO.**

211 S. 7th Ave. • City of Industry, CA 91746 (626) 330-3182 Fax (626) 330-9406  
[www.centralblower.com](http://www.centralblower.com)