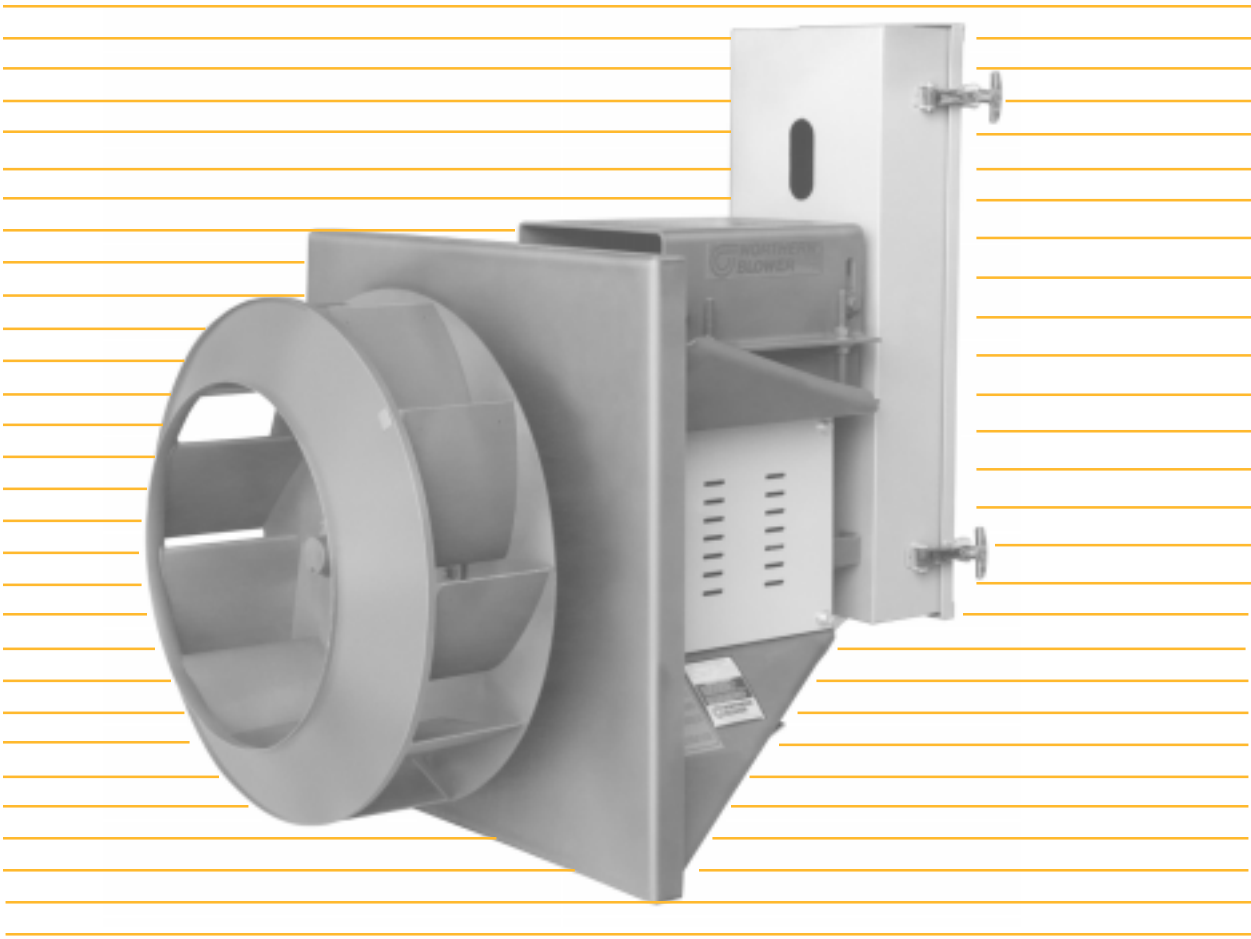
Bulletin 8300-1
April 2000

Series 8300
Centrifugal Gusset Plug Fans

Design 8310 Airfoil • Class II & IIX With Housing
Design 8314 Airfoil • Class II & IIX W/O Housing
Design 8320 BI • Class II & IIX With Housing
Design 8324 BI • Class II & IIX W/O Housing



NORTHERN BLOWER®

CML Northern Blower Inc. is one of the largest industrial fan companies in North America. In all that we do we are committed to the construction of an excellent product and the provision of outstanding customer service.

Northern Blower quality is a tradition. From our first day we have devoted our best efforts to the production of high grade fan equipment. Every day we strive to improve.

Our sales representatives are located coast-to-coast across the continent. Backed by the factory sales team, Northern Blower representatives are ready to provide product information and application advice whenever you need it.

CML NORTHERN BLOWER

Gordon Christie
PRESIDENT/CEO

Series 8300
Centrifugal Gusset Plug Fans

The Design 8310 and 8314 Airfoil fan and the Design 8320 and 8324 BI fans are quiet, highly efficient, and stable operating fans suited primarily for oven and dryer recirculation.

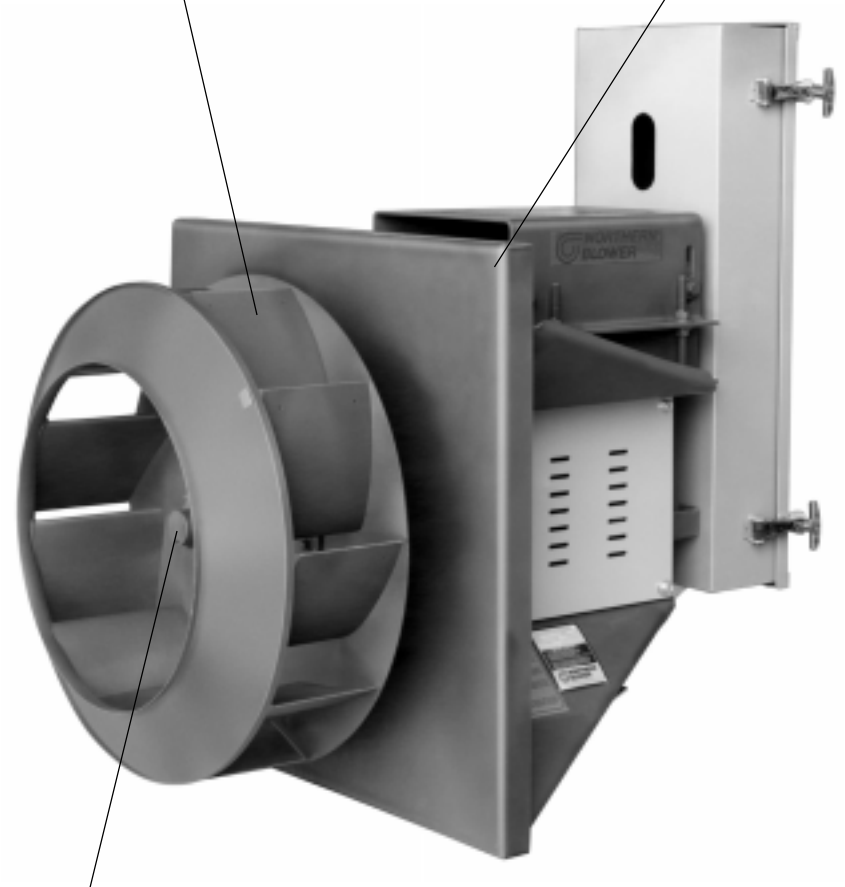
Industrial supply and exhaust ventilation:
Ovens
Dryers

Index

Wheel
Two designs are available. Design 8310 and 8314 Airfoil wheel, Design 8320 and 8324 single thickness Backward Inclined wheel.

Balancing
Wheels are dynamically balanced to ANSI S2.19-1989 specifications for smooth operation.

Square End Panel
Rugged heavy gauge all welded steel panel.



Bearings
Heavy duty precision ball or roller bearings sized for generous B-10 life.

Shaft Seal
All fans are supplied with a shaft seal as standard, consisting of an aluminum plate punched with a close tolerance shaft hole and mounted to the drive side of the panel. Reduces air leakage around the shaft but is NOT GAS TIGHT.

Shafts
Turned ground and polished or fully machined to close dimensional tolerance.

Design 8300

Series 8300 design numbers designate the use of wheel type and housing.

Series 8300 Designs		
Design	Wheel	Housing
8310	Airfoil	Yes
8314	Airfoil	No
8320	BI	Yes
8324	BI	No

Capacities

8310 800 CFM to 75,000 CFM
8314 800 CFM to 75,000 CFM
8320 800 CFM to 75,000 CFM
8324 800 CFM to 75,000 CFM

Pressures

8310 to 12" S.P.
8314 to 12" S.P.
8320 to 10" S.P.
8324 to 10" S.P.

Temperatures

Operating Temperatures to 800° F

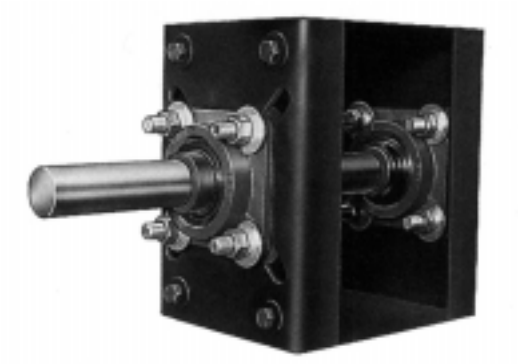
Shafts and Bearings

Shafts

Selected to have suitable strength and operate well below the first critical speed for each maximum class condition.

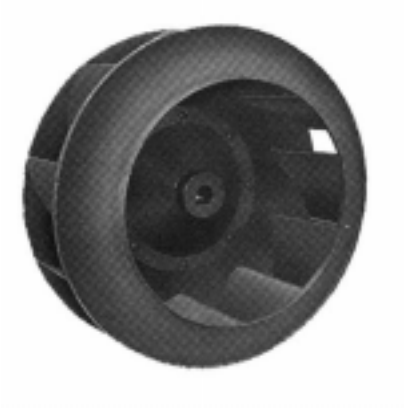
Bearings

Antifriction, grease lubricated, self aligning ball bearings, manufactured to internationally adopted standards by companies having worldwide acceptance and support services. Bearings are selected for continuous belt driven operation with a generous bearing life throughout each full range.



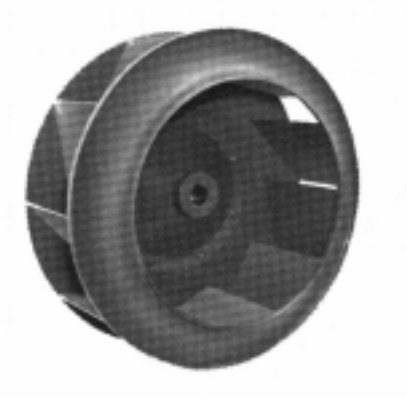
Design 8310 and 8314 Airfoil Wheel

The Northern Blower Airfoil wheel is designed for high operating efficiency. Blades are die formed hollow airfoil sections reinforced as required for class of duty. Continuously welded steel construction is standard. Available from 12 1/4" to 54 1/4" diameters.



Design 8320 and 8324 Centrifugal BI Wheel

The Northern Blower BI wheel is ruggedly designed for high operating efficiency. Blades are formed from heavy gauge single thickness sheets. Continuously welded steel construction is standard. Available from 12 1/4" to 54 1/4" diameters.



Belt Guard

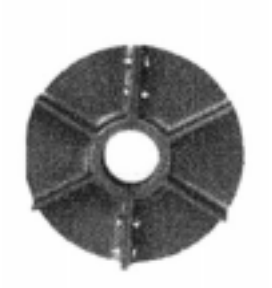
Belt guard is totally enclosed shoe box style with angle frame cover and mesh steel face. Cover is hinged on top and held closed with quick release latches. Tachometer Holes and safety colour coatings also available.

Insulated Plug

Available for both 4" and 6" gap. Comes with packed insulation covered with a steel or aluminized steel skin welded to front of drive panel. An insulated plug reduces heat transfer to the drive side.

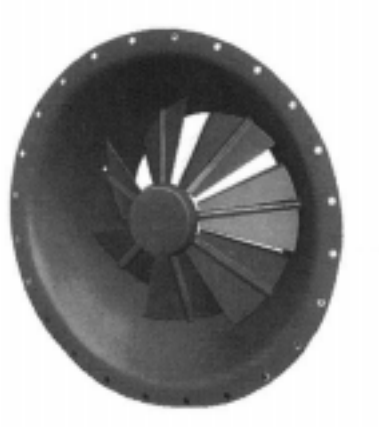
Cooling Wheel

Split aluminum wheel mounted between the inboard bearing and the fan housing. Protects the inboard bearing from shaft conveyed heat and housing radiated heat. Supplied with protective guard as standard. Cooling wheel is required for temperatures above 300°F. Temperature limit with cooling wheel & insulated panel wall is 800°F.



Variable Inlet Vanes

Variable Inlet Vanes provide accurate volume control with minimal reduction in performance efficiency. Fan performance remains stable through fully open to fully closed positions. Available for both manual and automatic operation to temperatures of 300°F. Special design available for temperatures to 650°F.



Shaft and Bearing Guard

The shaft and bearing guard encloses the shaft and bearings from the drive panel to the outboard bearing. To be effective the guard must be installed with a belt guard. The guard includes accessible grease fittings for both bearings.

Additional Accessories

- Extended Grease Lines
- Slip Fit Inlet
- Housing (Scroll)
- Housing (Square)
- Motor and Drive Mounting
- Special Metals

Fan Selection at Elevated Temperature and Altitude

Fan Selection Tables

Ratings shown in the Performance Tables are based on standard air density of .075 pounds per cubic foot at the fan inlet. Standard air is dry air at 70°F and 29.92" Hg barometric pressure. When air density varies from standard, due to temperature or altitude changes, the Air Density Correction Factor from Table 2 is applied. Refer to the sample selection that follows.

Note that data in the selection tables does not include the effects of accessories such as variable inlet vanes, screens, or other components in the air stream.

Table 1

Safe Speed Deration Factors		
Temp °F	Steel Wheel	Steel Shaft
-50 to 150	1.0	1.0
200	.93	1.0
300	.89	1.0
400	.86	.99
500	.82	.97
600	.79	.96
700	.76	.95
800	.68	.94

Table 2

Air Density Correction Factor							
Air Temp °F	Elevation (feet) above Sea Level						
	0	500	1000	2000	3000	4000	5000
0	.87	.88	.90	.93	.97	1.00	1.04
70°	1.00	1.02	1.04	1.08	1.12	1.16	1.20
100	1.06	1.08	1.10	1.14	1.18	1.22	1.27
200	1.25	1.27	1.29	1.34	1.39	1.44	1.50
300	1.43	1.46	1.49	1.54	1.60	1.66	1.72
400	1.62	1.65	1.68	1.75	1.81	1.88	1.95
500	1.81	1.84	1.88	1.95	2.02	2.10	2.18
600	2.00	2.04	2.07	2.15	2.23	2.32	2.40
700	2.19	2.23	2.27	2.35	2.44	2.53	2.63
800	2.38	2.42	2.46	2.56	2.65	2.75	2.86

Sample Selection of a Belt Drive Fan with a Housing

Select a 8310 fan for the operating conditions of 6000 CFM at 2-1/2" SP, 500°F, 0' elevation, 4" plug gap, and a housing.

1) Multiply the Operating SP by the Air Density Correction Factor Table 1 to obtain Equivalent SP:

   Equivalent SP = Operating SP x Air Density Corr. Factor
   = 2-1/2" x 1.81 = 4-1/2"

2) From the Performance Tables, select the fan size. For 6000 CFM at 4-1/2" SP an efficient selection would be a size 2450 fan. From the Performance Table given on page 11, the selected fan performance is interpolated at 1504 RPM and 5.25 BHP at standard temperature and pressure.

3) Divide the Equivalent BHP by the Air Density Correction Factor, Table 2 to obtain the Operating BHP:

$$\text{Operating BHP} = \frac{\text{Equivalent BHP}}{\text{Air Density Correc. Factor}} = \frac{5.25}{1.81} = 2.90\ \text{BHP}$$

4) Max. Wheel Speed at 70°F obtained from Table 3 for a Size 2450 is 2477. The Safe Speed Deration Factor at 500°F from Table 1 is .82. Therefore the Max. Safe Wheel Speed is:

   Max Wheel Speed = 2477 x .82 = 2031
   which is satisfactory for the application.

   To select the correct class of shaft and bearings the Safe Speed at operating temperature is determined. The Safe Speed Deration Factor at 300°F for steel shafts from Table 1 is .97 and the Open Wheel Operating RPM is 1504. The correct speed is:

$$\text{Operating RPM} = \frac{\text{Operating RPM}}{\text{Safe Speed Deration}} = \frac{1504}{.97} = 1551\ \text{RPM}$$

   In Table 3 the minimum shaft required for a 3-4" gap is a Class II with a maximum speed of 2021. Correcting for 500°F using the Safe Speed Deration Factor the Maximum Shaft Speed is:

   Max Shaft Speed = 2021 x .97 = 1960 RPM

   The selection is a Size 2450 Class II gusset base operating at 1504 RPM with a Maximum Operating speed of 1960 RPM at 500°F.

Table 3

Design 8310 & 8314										Design 8320 & 8324									
Size	Wheel Max. Speeds at 70°F	Max. Shaft Speeds at 70°F Derated for Overhang Gusset Base								Size	Wheel Max. Speeds at 70°F	Max. Shaft Speeds at 70°F Derated for Overhang Gusset Base							
		0" Gap		1-2" Gap		3-4" Gap		5-6" Gap				0" Gap		1-2" Gap		3-4" Gap		5-6" Gap	
		Class II	Class IIX	Class II	Class IIX	Class II	Class IIX	Class II	Class IIX			Class II	Class IIX	Class II	Class IIX	Class II	Class IIX	Class II	Class IIX
1225	4846	4846	4846	4157	4846	3243	4438	2630	3603	1225	4463	4463	4463	4162	4463	3243	4437	2627	3598
1350	4535	4446	4446	3853	4446	2998	4102	2426	3323	1350	4030	3951	3951	3897	3951	3023	3951	2441	3344
1500	4066	3986	3986	3548	3986	2769	3789	2245	3075	1500	3613	3542	3542	3542	3542	2774	3542	2247	3078
1650	3695	3623	3623	2939	3623	2318	3173	1895	2596	1650	3219	3219	3219	2853	3219	2245	3073	1831	2509
1825	3309	3244	3244	2696	3244	2133	2919	1746	2392	1825	2911	2854	2854	2590	2854	2046	2800	1674	2293
2000	3015	2956	2956	2956	2956	2751	2956	2282	2878	2000	2652	2600	2600	2600	2600	2600	2600	2170	2600
2225	2722	2669	2669	2669	2669	2391	2669	1996	2517	2225	2394	2347	2347	2347	2347	2185	2347	1823	2299
2450	2477	2428	2428	2428	2428	2021	2428	1692	2135	2450	2252	2208	2208	2208	2208	1888	2208	1582	1996
2700	2239	2203	2203	2203	2203	1813	2203	1527	1926	2700	2043	2003	2003	1868	2003	1536	1936	1294	1633
3000	2022	1982	1982	1982	1982	1766	1982	1499	1853	3000	1838	1802	1802	1802	1802	1541	1802	1308	1617
3300	1804	1769	1769	1769	1769	1612	1769	1374	1682	3300	1656	1624	1624	1624	1624	1387	1624	1183	1448
3650	1630	1598	1598	1598	1598	1405	1598	1201	1485	3650	1467	1467	1467	1467	1467	1237	1467	1060	1310
4025	1479	1450	1450	1445	1450	1221	1450	1051	1299	4025	1358	1331	1331	1133	1331	965	1192	835	1032
4450	1331	1305	1305	1305	1305	1161	1305	1001	1207	4450	1225	1201	1201	1149	1201	980	1169	849	1015
4900	1208	1184	1184	1154	1184	986	1177	857	1024	4900	1112	1090	1090	1083	1090	927	1090	806	964
5425	1092	1071	1071	1071	1071	964	1071	843	1007	5425	1006	986	986	986	986	865	986	758	906

Fan Open Wheel Selection

Sample Selection of a Belt Drive Fan with an open wheel
Select a 8314 fan for the operating conditions of 6000 CFM at 2.5" SP, 300°F, 0' elevation, a 4" plug gap and an open wheel.

1) Multiply the Operating SP by the Air Density Correction Factor Table 2 to obtain Equivalent SP:

   Equivalent SP = Operating SP x Air Density Corr. Factor
   = 2-1/2" x 1.43 = 3-9/16"

2) From the performance tables, select the fan size for 6000 CFM at 3.57 SP an efficient selection would be a size 2450 fan from the performance table given on page 11, the selected fan performance is 1396 RPM and 4.25 BHP, with an outlet velocity of 1740 FPM.

   To correct performance for an open wheel multiply the RPM and BHP by the correction factors found in Figure 1. To find the $\frac{SP}{VP}$ perform the following calculations:

$$(VP) = \left(\frac{\text{Outlet Velocity (OV)}}{4005}\right)^2 = \left(\frac{1740}{4005}\right)^2 = 0.1888$$

$$\frac{SP}{VP} = \frac{3.57}{0.19} = 18.9$$

   Follow the X axis in Figure 1 to 18.9 then draw a vertical line to where it intersects with the RPM curve. Draw a horizontal line from the intersection to the Y axis of the figure. The RPM Correction Factor is 1.07.

   Open Wheel RPM = RPM x Open Wheel Correction Factor
   = 1396 x 1.07 = 1494 RPM

   Continue the vertical line to where it intersects the BHP curve, draw a horizontal line to the Y axis. BHP correction factor is 1.29.

   Open Wheel BHP = BHP x Open Wheel Correction Factor
   = 4.25 x 1.29 = 5.48 BHP

3) Divide the Open Wheel BHP by the Air Density Correction Factor to obtain the operating BHP.

$$\text{Operating BHP} = \frac{\text{Open Wheel BHP}}{\text{Air Density Corr. Factor}} = \frac{5.48}{1.43} = 3.83 \text{ BHP}$$

4) Max. wheel speed at 70°F obtained from Table 3 for a size 2450 is 2477. The Safe Speed Deration Factor at 300°F from Table 1 is .89. Therefore the Max. Safe Wheel Speed is:

   Maximum Wheel Speed = 2477 x .89 = 2205

   This is satisfactory for the application since this RPM is faster than the corrected open wheel RPM of 1494.

   To select the correct class of shaft and bearings the Safe Speed at operating temperature is determined. The Safe Speed Deration Factor at 300°F for steel shafts from Table 1 is 1.0 and the Open Wheel Operating RPM is 1494. The correct speed is:

$$\text{Operating RPM} = \frac{\text{Open Wheel RPM}}{\text{Safe Speed Deration}} = \frac{1494}{1.0} = 1494 \text{ RPM}$$

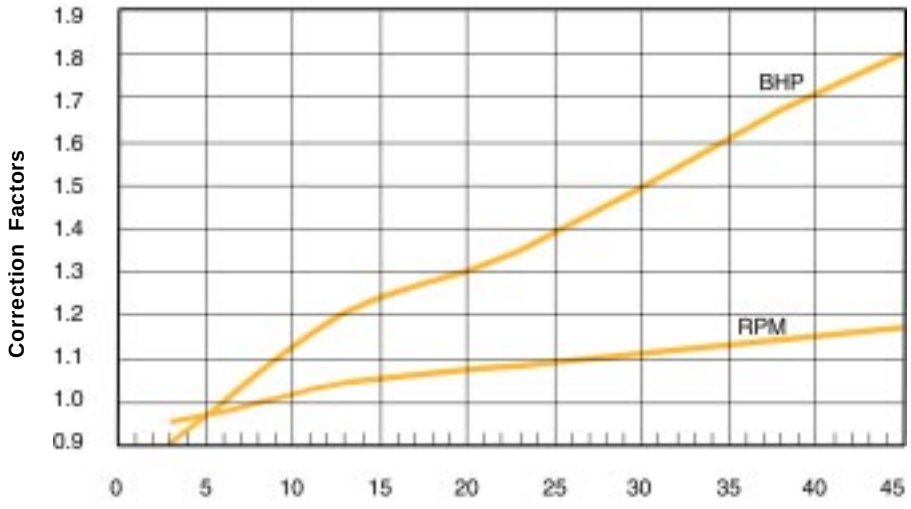
   In Table 3 the maximum shaft required for a 3 to 4" gap is a class II with a maximum speed of 2021. Correcting for 300°F using the Safe Speed Deration Factor the maximum shaft speed is:

   Maximum Shaft Speed = 2021 x 1.0 = 2021 RPM

   The selection is a size 2450 class II Gusset Base operating at 1494 RPM with a maximum operating speed of 2021 RPM at 300°F.

Figure 1

Non-Housed Correction Factor Curve



The Open Wheel Correction Factor Curve is based on laboratory test data from one fan size only and the performance of CML Northern Blower Inc. fan equipment outside the laboratory may vary widely and differ from the performance specifications calculated using data supplied herein. Therefore CML Northern Blower does not and cannot guarantee or warrant the performance of its fan equipment at the end user's location.

Fan Open Wheel Selection With Walls

Sample Selection of a Belt Drive Fan with an open wheel and walls within close proximity
Select a 8314 fan for the operating conditions of 6000 CFM at 2.5" SP, 300°F, 0' elevation, a 4" plug gap and an open wheel. Installation includes a two-wall arrangement with a wheel to wall clearance of 12.25".

1) Follow steps 1 and 2 from open wheel selection on page 6.

2) To correct performance for an open wheel with walls. The fan size selected is a 2450, from page 11, the wheel diameter for this size is 24.5". A two-wall application with 12.25" clearance (c). given C/D = 12.25/24.5 = 1/2 which matches D/2.

   Note: If wall clearance is greater than C X 3 do not correct for wheel to wall arrangement.

   Determine the percent of wide open volume (WOV) during fan operation. From Table 5 find factor of 7.20 for design 8314 size 2450.

$$\%\ WOV = \frac{CFM \times 100}{RPM \times WOV\ factor} = \frac{6000 \times 100}{1494 \times 7.20} = 55.8\%$$

   From Table 4, interpolate the wall proximity factor from two-wall column of C = D/2 for 55.8% WOV. The RPM factor is .99 and the BHP factor is 1.00.

   Correct open wheel performance for 6000 CFM at 2" SP std air is:

   RPM = open wheel RPM x RPM wall proximity factor
   = 1494 x .99 = 1479

   BHP = open wheel BHP x BHP wall proximity factor
   = 5.48 x 1.00 = 5.48

3) Divide the Open Wheel BHP by the Air Density Correction Factor to obtain the operating BHP.

$$Operating\ BHP = \frac{Open\ Wheel\ BHP}{Air\ Density\ Corr.\ Factor} = \frac{5.48}{1.43} = 3.83\ BHP$$

4) Max. wheel speed at 70°F obtained from Table 3 for a size 2450 is 2477. The Safe Speed Deration Factor at 300°F from Table 1 is .89. Therefore the Max. Safe Wheel Speed is:

   Maximum Wheel Speed = 2477 x .89 = 2205

   This is satisfactory for the application since this RPM is faster than the open wheel RPM of 1479 corrected for wall proximity.

   To select the correct class of shaft and bearings the Safe Speed at operating temperature is determined. The Safe Speed Deration Factor at 300°F for steel shafts from Table 1, is 1.0 and the Open Wheel Operating RPM is 1494. The correct speed is:

$$Operating\ RPM = \frac{Open\ Wheel\ RPM}{Safe\ Speed\ Deration} = \frac{1494}{1.0} = 1494\ RPM$$

   In Table 3 the maximum shaft required for a 3 to 4" gap is a class II with a maximum speed of 2021. Correcting for 300°F using the Safe Speed Deration Factor the maximum shaft speed is:

   Maximum Shaft Speed = 2021 x 1.0 = 2021 RPM

   The selection is a size 2450 class II Gusset Base operating at 1494 RPM with a maximum operating speed of 2021 RPM at 300°F.

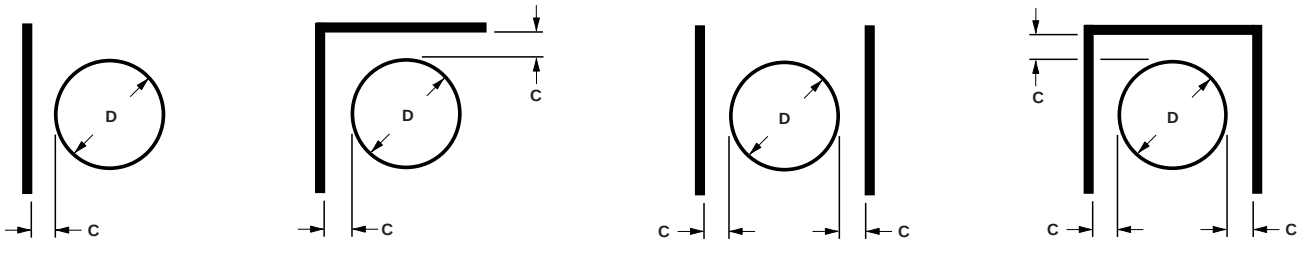
Table 4

Wall Proximity Factors										
% WOV	Factor	C = D/8			C = D/4			C = D/2		
		1 Wall	2 Wall	3 Wall	1 Wall	2 Wall	3 Wall	1 Wall	2 Wall	3 Wall
95	RPM	0.99	1.00	1.01	0.99	0.98	0.99	0.99	1.00	1.00
	BHP	0.97	1.05	1.10	0.97	0.90	0.97	0.97	0.97	1.03
85	RPM	0.99	1.00	1.01	0.99	0.98	0.99	0.99	1.00	1.00
	BHP	0.98	1.00	1.07	0.98	0.91	0.98	1.00	0.98	1.02
75	RPM	0.99	0.99	1.01	0.99	0.98	0.99	1.00	0.99	1.00
	BHP	0.98	0.96	1.04	0.98	0.92	0.96	0.98	0.98	1.00
65	RPM	0.99	0.98	1.01	0.99	0.97	0.98	0.99	0.99	1.00
	BHP	0.98	0.94	1.02	0.96	0.89	0.96	0.98	0.98	0.98
55	RPM	1.00	0.99	1.01	1.00	0.98	0.99	0.99	0.99	1.00
	BHP	1.00	0.95	1.02	1.00	0.93	0.95	1.00	1.00	1.00
45	RPM	1.01	0.99	1.01	1.01	0.98	0.99	1.00	1.00	1.00
	BHP	1.00	0.98	1.00	1.00	0.93	0.95	1.00	1.00	1.00

Table 5

WOV Factors					
Size	D	Design 8314		Design 8324	
		Max. CFM	WOV Factor	Max. CFM	WOV Factor
1225	12.25	1170	0.90	1107	0.85
1350	13.50	1566	1.20	1481	1.14
1500	15.00	2148	1.65	2032	1.56
1650	16.50	2859	2.20	2705	2.08
1825	18.25	3868	2.98	3858	2.97
2000	20.00	5091	3.92	5078	3.91
2225	22.25	7010	5.39	6993	5.38
2450	24.50	9360	7.20	9223	7.09
2700	27.00	12527	9.64	12344	9.50
3000	30.00	17185	13.22	16933	13.03
3300	33.00	22873	17.59	23961	18.43
3650	36.50	30950	23.81	32423	24.94
4225	42.25	41503	31.93	43478	33.45
4450	44.50	56087	43.14	57817	44.47

WHEEL AND PLENUM ARRANGEMENT (D = WHEEL DIAMETER C = CLEARANCE)



Wheel Diameter = 12.25 in.
Outlet Area = 0.86 sq. ft. inside
Maximum BHP = .053 x (RPM/1000)^3
Tip Speed, fpm = 3.21 x RPM

Size
1225 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Max RPM 4846 †

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	928	1501	0.17	1946	0.35																
900	1044	1585	0.21	1979	0.39	2365	0.61														
1000	1160	1668	0.24	2029	0.43	2387	0.66														
1100	1276	1746	0.28	2097	0.48	2422	0.71	2742	0.98												
1200	1392	1825	0.32	2178	0.54	2469	0.77	2770	1.04	3057	1.35										
1300	1508	1913	0.37	2263	0.60	2532	0.84	2808	1.11	3082	1.42	3344	1.76								
1400	1624	2008	0.42	2347	0.67	2608	0.92	2857	1.19	3117	1.51	3369	1.85	3610	2.21	3840	2.59				
1500	1740	2107	0.47	2424	0.75	2692	1.01	2921	1.29	3159	1.60	3399	1.94	3633	2.31	3858	2.70				
1600	1856	2208	0.54	2501	0.82	2777	1.11	2997	1.39	3214	1.70	3440	2.05	3663	2.43	3881	2.82	4295	3.66		
1700	1972	2312	0.61	2582	0.91	2860	1.22	3079	1.52	3281	1.83	3488	2.17	3700	2.55	3911	2.95	4314	3.80		
1800	2088	2418	0.69	2669	1.00	2939	1.33	3164	1.65	3357	1.96	3548	2.30	3747	2.68	3947	3.08	4339	3.96	4711	4.89
1900	2204	2525	0.78	2761	1.09	3016	1.44	3249	1.79	3440	2.12	3619	2.46	3803	2.83	3991	3.23	4369	4.12	4733	5.07
2000	2320	2634	0.87	2857	1.20	3093	1.56	3330	1.93	3526	2.28	3698	2.63	3869	3.00	4044	3.40	4404	4.28	4757	5.25
2100	2436	2744	0.98	2956	1.32	3175	1.69	3409	2.07	3611	2.45	3782	2.81	3944	3.19	4107	3.58	4447	4.46	4787	5.44
2200	2552	2854	1.09	3057	1.44	3262	1.82	3485	2.23	3692	2.63	3867	3.01	4025	3.39	4179	3.79	4497	4.66	4823	5.64
2300	2668	2966	1.21	3160	1.57	3354	1.97	3562	2.39	3771	2.81	3953	3.22	4109	3.62	4258	4.02	4556	4.88		
2400	2784	3079	1.35	3263	1.72	3449	2.12	3643	2.55	3848	2.99	4034	3.43	4194	3.85	4341	4.26	4624	5.13		
2500	2900	3192	1.49	3369	1.87	3547	2.29	3729	2.73	3925	3.19	4113	3.64	4280	4.09	4426	4.52	4698	5.40		
2600	3016	3306	1.65	3475	2.04	3647	2.46	3818	2.92	4003	3.39	4190	3.86	4361	4.34	4510	4.79	4778	5.69		
2700	3132	3421	1.82	3583	2.21	3747	2.65	3912	3.12	4084	3.60	4268	4.10	4439	4.58	4594	5.07				
2800	3248	3536	2.00	3691	2.40	3850	2.85	4008	3.33	4170	3.82	4344	4.33	4517	4.84	4676	5.35				
3000	3480	3767	2.40	3911	2.82	4058	3.29	4206	3.78	4353	4.30	4507	4.85	4670	5.39	4831	5.93				
3200	3713	4000	2.85	4133	3.29	4270	3.78	4408	4.29	4546	4.83	4685	5.40	4831	5.97						
3400	3945	4233	3.36	4359	3.83	4486	4.33	4615	4.86	4745	5.42										
3600	4177	4468	3.93	4585	4.42	4705	4.94	4826	5.49												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 13.50 in.
Outlet Area = 1.05 sq. ft. inside
Maximum BHP = .088 x (RPM/1000)^3
Tip Speed, fpm = 3.53 x RPM

Size
1350 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Max RPM 4446 †

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	954	1353	0.21	1712	0.41																
1100	1049	1410	0.24	1755	0.45	2055	0.69														
1200	1145	1473	0.28	1803	0.50	2087	0.74														
1300	1240	1540	0.32	1852	0.54	2127	0.80	2380	1.08												
1400	1335	1610	0.36	1904	0.60	2173	0.86	2414	1.16	2644	1.47										
1500	1431	1681	0.41	1960	0.65	2221	0.93	2454	1.23	2675	1.56										
1600	1526	1755	0.46	2020	0.72	2271	1.00	2500	1.31	2710	1.65	2914	2.00								
1700	1622	1829	0.51	2084	0.79	2323	1.08	2548	1.40	2752	1.74	2948	2.11	3138	2.48						
1800	1717	1906	0.58	2150	0.86	2378	1.17	2597	1.50	2799	1.85	2988	2.22	3169	2.60	3349	3.01				
1900	1812	1983	0.64	2219	0.94	2437	1.26	2648	1.60	2847	1.96	3032	2.34	3206	2.73	3380	3.15				
2000	1908	2061	0.71	2289	1.03	2498	1.36	2701	1.70	2896	2.07	3079	2.46	3248	2.87	3415	3.29	3737	4.18		
2100	2003	2141	0.79	2360	1.13	2562	1.46	2757	1.82	2946	2.20	3127	2.60	3294	3.01	3455	3.44	3766	4.35		
2200	2099	2220	0.88	2433	1.23	2629	1.58	2816	1.94	2998	2.33	3175	2.74	3341	3.16	3500	3.60	3800	4.53	4093	5.50
2300	2194	2301	0.97	2507	1.33	2697	1.70	2877	2.07	3053	2.47	3225	2.88	3390	3.32	3546	3.77	3838	4.71	4122	5.71
2400	2289	2382	1.07	2582	1.45	2767	1.83	2940	2.21	3110	2.61	3277	3.04	3439	3.48	3593	3.94	3881	4.90	4155	5.92
2600	2480	2546	1.29	2735	1.70	2910	2.11	3074	2.52	3233	2.94	3388	3.38	3542	3.84	3691	4.32	3974	5.32	4234	6.37
2800	2671	2712	1.54	2891	1.98	3057	2.42	3213	2.86	3363	3.31	3508	3.76	3653	4.24	3795	4.74	4069	5.76	4325	6.85
3000	2862	2880	1.83	3049	2.29	3207	2.76	3356	3.24	3498	3.71	3637	4.19	3772	4.68	3906	5.19	4171	6.26	4421	7.38
3200	3052	3049	2.15	3209	2.64	3360	3.14	3502	3.65	3639	4.15	3771	4.66	3899	5.17	4025	5.69	4276	6.79		
3400	3243	3219	2.52	3372	3.04	3515	3.56	3651	4.10	3783	4.63	3909	5.17	4032	5.70	4152	6.24	4388	7.38		
3600	3434	3390	2.92	3536	3.47	3673	4.03	3804	4.59	3930	5.16	4051	5.72	4169	6.28	4284	6.85				
3800	3625	3562	3.37	3702	3.95	3832	4.53	3959	5.12	4079	5.71	4196	6.31	4309	6.90	4420	7.50				
4000	3816	3735	3.87	3867	4.47	3994	5.08	4114	5.70	4231	6.32	4344	6.95								
4200	4006	3908	4.42	4035	5.04	4156	5.68	4273	6.33	4385	6.98										
4400	4197	4081	5.02	4204	5.67	4320	6.33	4432	7.01												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 15.00 in.
Outlet Area = 1.29 sq. ft. inside
Maximum BHP = .148 x (RPM/1000)^3
Tip Speed, fpm = 3.93 x RPM

Size
1500 SISW

Max RPM 3986 †

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000		773	1131	0.21																		
1100		850	1167	0.23	1509	0.46																
1200		927	1204	0.25	1531	0.50																
1300		1004	1244	0.28	1561	0.54																
1400		1082	1288	0.31	1594	0.58	1858	0.88														
1600		1236	1384	0.39	1665	0.67	1913	0.99	2141	1.34												
1800		1391	1486	0.48	1742	0.78	1981	1.11	2193	1.48	2394	1.87										
2000		1545	1593	0.58	1829	0.90	2053	1.26	2259	1.64	2447	2.06	2629	2.49								
2200		1700	1703	0.70	1924	1.05	2131	1.42	2329	1.82	2511	2.25	2682	2.71	2848	3.19	3009	3.68				
2400		1854	1816	0.83	2024	1.21	2217	1.60	2403	2.03	2581	2.48	2746	2.95	2903	3.45	3054	3.96				
2600		2009	1931	0.99	2128	1.40	2310	1.81	2484	2.25	2654	2.72	2816	3.21	2967	3.72	3112	4.26	3392	5.38		
2800		2163	2048	1.16	2235	1.60	2408	2.05	2571	2.50	2731	2.99	2887	3.50	3038	4.03	3177	4.58	3443	5.74	3700	6.96
3000		2318	2166	1.36	2345	1.83	2509	2.31	2664	2.78	2815	3.29	2964	3.82	3108	4.36	3248	4.94	3505	6.13	3750	7.39
3200		2472	2286	1.58	2456	2.08	2613	2.59	2762	3.09	2905	3.61	3045	4.16	3184	4.72	3318	5.31	3573	6.54	3808	7.84
3400		2627	2407	1.83	2569	2.36	2720	2.89	2862	3.43	2999	3.98	3132	4.53	3264	5.12	3393	5.72	3642	6.98	3873	8.31
3600		2782	2528	2.10	2684	2.66	2828	3.23	2965	3.79	3097	4.37	3224	4.94	3349	5.55	3473	6.16	3714	7.46	3942	8.83
3800		2936	2651	2.41	2800	2.99	2939	3.59	3071	4.19	3197	4.79	3319	5.39	3439	6.01	3557	6.64	3789	7.98		
4000		3091	2775	2.74	2918	3.36	3052	3.98	3179	4.61	3300	5.24	3419	5.87	3533	6.51	3645	7.16	3868	8.53		
4200		3245	2898	3.11	3036	3.75	3165	4.40	3288	5.06	3406	5.73	3520	6.39	3630	7.05	3738	7.72	3951	9.11		
4400		3400	3023	3.51	3155	4.18	3280	4.86	3399	5.55	3512	6.24	3622	6.93	3729	7.62	3834	8.32				
4600		3554	3148	3.95	3276	4.65	3396	5.36	3511	6.07	3621	6.79	3728	7.51	3832	8.24	3933	8.96				
4800		3709	3274	4.43	3397	5.15	3513	5.88	3624	6.63	3731	7.38	3834	8.13	3935	8.88						
5000		3863	3400	4.94	3518	5.69	3631	6.46	3738	7.22	3842	8.00	3943	8.79								
5200		4018	3526	5.50	3641	6.27	3750	7.06	3855	7.87	3955	8.67										
5400		4172	3653	6.10	3764	6.89	3869	7.71	3970	8.54												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 16.50 in.
Outlet Area = 1.56 sq. ft. inside
Maximum BHP = .239 x (RPM/1000)^3
Tip Speed, fpm = 4.32 x RPM

Size
1650 SISW

Max RPM 3623 †

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400		894	1080	0.29	1383	0.58																
1600		1022	1140	0.35	1425	0.66																
1800		1149	1208	0.42	1477	0.74	1709	1.12														
2000		1277	1282	0.50	1532	0.84	1755	1.23	1958	1.66												
2200		1405	1359	0.59	1591	0.95	1807	1.36	1999	1.81	2181	2.29										
2400		1533	1440	0.69	1656	1.08	1860	1.50	2048	1.97	2220	2.47	2386	2.99								
2600		1660	1522	0.80	1727	1.22	1918	1.66	2101	2.15	2268	2.67	2424	3.21	2577	3.78						
2800		1788	1606	0.93	1801	1.38	1981	1.84	2155	2.34	2319	2.88	2470	3.44	2616	4.04	2758	4.65				
3000		1916	1692	1.08	1877	1.55	2048	2.04	2213	2.56	2373	3.11	2522	3.69	2661	4.30	2796	4.94	3060	6.26		
3200		2043	1779	1.24	1956	1.74	2119	2.26	2275	2.79	2428	3.36	2574	3.96	2712	4.59	2841	5.24	3093	6.61		
3400		2171	1867	1.42	2037	1.95	2193	2.49	2341	3.05	2487	3.63	2628	4.25	2765	4.90	2891	5.56	3133	6.97	3366	8.44
3600		2299	1956	1.61	2119	2.18	2269	2.75	2411	3.33	2549	3.93	2686	4.57	2818	5.23	2944	5.91	3179	7.35	3403	8.87
3800		2427	2045	1.83	2202	2.42	2347	3.03	2484	3.63	2616	4.25	2746	4.90	2873	5.58	2998	6.29	3229	7.76	3446	9.32
4000		2554	2136	2.07	2287	2.69	2426	3.32	2559	3.96	2685	4.60	2809	5.27	2932	5.96	3053	6.69	3281	8.19	3493	9.79
4200		2682	2227	2.33	2373	2.98	2508	3.64	2636	4.31	2757	4.97	2876	5.66	2994	6.37	3111	7.11	3334	8.65	3544	10.28
4400		2810	2319	2.61	2459	3.29	2590	3.98	2713	4.68	2832	5.37	2946	6.08	3059	6.81	3171	7.56	3389	9.14	3595	10.80
4600		2937	2411	2.92	2547	3.63	2673	4.35	2793	5.07	2907	5.80	3018	6.53	3127	7.28	3234	8.04	3445	9.66		
4800		3065	2504	3.25	2635	3.99	2757	4.74	2874	5.49	2985	6.25	3093	7.01	3197	7.77	3300	8.56	3504	10.20		
5000		3193	2597	3.61	2724	4.38	2842	5.15	2955	5.94	3064	6.73	3168	7.51	3270	8.30	3369	9.11	3566	10.79		
5200		3320	2690	4.00	2813	4.79	2928	5.59	3038	6.41	3143	7.22	3245	8.04	3344	8.87	3441	9.69				
5400		3448	2784	4.41	2903	5.23	3015	6.07	3121	6.91	3224	7.76	3323	8.60	3419	9.45	3513	10.30				
5600		3576	2878	4.86	2994	5.71	3102	6.57	3206	7.44	3306	8.31	3402	9.19	3496	10.07	3588	10.95				
5800		3704	2973	5.34	3084	6.21	3190	7.10	3291	8.00	3389	8.91	3483	9.81	3574	10.72						
6200		3959	3162	6.39	3267	7.31	3368	8.26	3464	9.22	3556	10.18										
6600		4214	3352	7.58	3452	8.55	3547	9.55														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
1825 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Wheel Diameter = 18.25 in.
Outlet Area = 1.91 sq. ft. inside
Maximum BHP = .394 x (RPM/1000)^3
Tip Speed, fpm = 4.78 x RPM

Max RPM 3244

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	836		941	0.32																		
1800	941		979	0.37																		
2000	1045		1020	0.42	1279	0.79																
2200	1150		1067	0.49	1317	0.88																
2400	1255		1119	0.56	1356	0.97	1558	1.41														
2600	1359		1173	0.64	1395	1.07	1594	1.54														
2800	1464		1228	0.73	1436	1.18	1633	1.68	1802	2.20												
3000	1568		1284	0.83	1481	1.30	1671	1.82	1839	2.37	1993	2.94										
3200	1673		1340	0.93	1531	1.44	1710	1.97	1878	2.55	2026	3.14	2170	3.77								
3400	1777		1397	1.04	1583	1.59	1752	2.14	1917	2.74	2064	3.36	2200	4.00								
3600	1882		1456	1.16	1636	1.75	1796	2.31	1955	2.94	2103	3.59	2236	4.25	2363	4.93						
3800	1986		1515	1.30	1691	1.92	1844	2.51	1995	3.15	2142	3.83	2274	4.52	2397	5.21	2517	5.94				
4000	2091		1576	1.44	1746	2.10	1894	2.72	2037	3.37	2180	4.07	2313	4.80	2435	5.52	2550	6.26				
4200	2195		1638	1.60	1802	2.29	1947	2.95	2082	3.61	2219	4.33	2351	5.08	2473	5.84	2587	6.60	2805	8.21		
4400	2300		1700	1.78	1858	2.49	2000	3.19	2131	3.88	2261	4.60	2390	5.38	2512	6.17	2625	6.96	2836	8.59		
4600	2404		1764	1.97	1915	2.70	2055	3.45	2181	4.16	2305	4.90	2429	5.68	2550	6.50	2664	7.34	2872	9.01	3070	10.77
4800	2509		1828	2.18	1972	2.93	2110	3.72	2233	4.46	2351	5.21	2471	6.01	2589	6.85	2703	7.72	2909	9.44	3100	11.23
5000	2614		1893	2.40	2030	3.17	2165	4.00	2286	4.78	2400	5.55	2514	6.36	2629	7.21	2741	8.10	2947	9.89	3135	11.71
5400	2823		2023	2.90	2149	3.70	2277	4.59	2395	5.46	2504	6.29	2609	7.13	2714	8.00	2819	8.92	3025	10.84	3210	12.77
5800	3032		2155	3.48	2271	4.30	2391	5.24	2506	6.19	2611	7.11	2710	7.99	2808	8.90	2906	9.83	3101	11.82		
6200	3241		2288	4.13	2396	4.98	2507	5.95	2618	6.98	2721	7.99	2817	8.95	2909	9.89	3000	10.86	3183	12.89		
6600	3450		2423	4.87	2523	5.76	2626	6.75	2731	7.83	2832	8.93	2926	9.97	3015	10.99	3101	11.99				
7000	3659		2558	5.69	2652	6.62	2748	7.64	2847	8.77	2944	9.92	3036	11.06	3123	12.16	3206	13.23				
7500	3920		2727	6.86	2815	7.84	2903	8.89	2994	10.05	3086	11.27	3175	12.52								
8000	4182		2897	8.18	2979	9.22	3062	10.31	3145	11.49	3231	12.77										

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
2000 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Wheel Diameter = 20.00 in.
Outlet Area = 2.29 sq. ft. inside
Maximum BHP = .622 x (RPM/1000)^3
Tip Speed, fpm = 5.24 x RPM

Max RPM 2956

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2200	958		899	0.45																		
2400	1045		931	0.51	1167	0.94																
2600	1132		966	0.57	1196	1.03																
2800	1219		1004	0.64	1225	1.12	1411	1.65														
3000	1306		1045	0.72	1254	1.22	1437	1.77														
3200	1393		1086	0.80	1284	1.32	1466	1.91	1625	2.51												
3400	1480		1128	0.89	1316	1.44	1495	2.04	1649	2.67												
3600	1567		1171	0.99	1351	1.56	1524	2.19	1677	2.84	1818	3.53										
3800	1654		1213	1.09	1388	1.69	1554	2.34	1707	3.03	1843	3.73										
4000	1741		1257	1.20	1427	1.84	1585	2.50	1736	3.21	1871	3.94	1997	4.70								
4200	1828		1301	1.32	1468	2.00	1617	2.67	1765	3.41	1900	4.17	2023	4.94	2143	5.76						
4400	1915		1345	1.44	1509	2.16	1652	2.85	1795	3.61	1930	4.40	2051	5.20	2166	6.03						
4600	2002		1391	1.58	1550	2.34	1689	3.05	1826	3.82	1959	4.64	2080	5.47	2193	6.32	2301	7.19				
4800	2089		1437	1.73	1593	2.52	1728	3.27	1858	4.04	1989	4.89	2110	5.75	2221	6.62	2326	7.51				
5000	2176		1484	1.89	1635	2.71	1767	3.49	1892	4.28	2018	5.14	2140	6.04	2250	6.94	2354	7.85	2555	9.78		
5400	2350		1579	2.24	1720	3.11	1849	3.98	1966	4.82	2082	5.69	2198	6.63	2310	7.61	2412	8.57	2603	10.55		
5800	2524		1677	2.65	1807	3.56	1933	4.52	2045	5.41	2152	6.32	2260	7.28	2367	8.29	2471	9.33	2660	11.42	2834	13.57
6200	2698		1775	3.12	1896	4.05	2017	5.09	2126	6.06	2228	7.02	2328	7.99	2429	9.03	2529	10.11	2718	12.34	2888	14.57
6600	2873		1875	3.64	1987	4.60	2103	5.69	2210	6.76	2308	7.79	2402	8.80	2496	9.86	2591	10.96	2776	13.29	2946	15.65
7000	3047		1975	4.23	2081	5.22	2189	6.35	2294	7.51	2390	8.62	2480	9.68	2569	10.77	2657	11.89	2835	14.28		
7500	3264		2102	5.05	2199	6.08	2300	7.25	2400	8.50	2495	9.73	2581	10.88	2665	12.02	2747	13.18	2913	15.63		
8000	3482		2230	5.99	2320	7.07	2413	8.27	2508	9.57	2600	10.91	2685	12.17	2766	13.40	2844	14.62				
8500	3700		2358	7.04	2443	8.17	2529	9.40	2618	10.75	2706	12.16	2790	13.55	2869	14.88	2944	16.18				
9000	3917		2486	8.22	2567	9.39	2647	10.66	2731	12.05	2814	13.52	2896	15.01								
9500	4135		2616	9.53	2692	10.76	2767	12.06	2845	13.48	2924	15.00										

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 22.25 in.
Outlet Area = 2.85 sq. ft. inside
Maximum BHP = 1.07 x (RPM/1000)^3
Tip Speed, fpm = 5.83 x RPM

Size
2225 SISW

Max RPM 2669

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2800		985	817	0.58	1034	1.10																
3000		1055	840	0.64	1052	1.18																
3200		1125	866	0.70	1073	1.27																
3400		1196	894	0.77	1095	1.36	1263	2.01														
3600		1266	922	0.84	1116	1.46	1280	2.12														
3800		1336	952	0.93	1137	1.56	1300	2.25														
4000		1407	982	1.01	1159	1.66	1322	2.38	1463	3.14												
4200		1477	1013	1.10	1182	1.77	1343	2.52	1482	3.30												
4400		1547	1044	1.20	1207	1.89	1365	2.67	1502	3.47	1630	4.32										
4600		1618	1074	1.30	1234	2.03	1386	2.82	1523	3.65	1647	4.51										
4800		1688	1106	1.40	1262	2.17	1408	2.97	1545	3.84	1666	4.72	1783	5.65								
5200		1829	1170	1.63	1320	2.47	1454	3.30	1587	4.22	1708	5.16	1818	6.12	1926	7.13						
5600		1969	1235	1.89	1380	2.81	1506	3.68	1631	4.63	1751	5.63	1861	6.65	1961	7.68	2061	8.76				
6000		2110	1302	2.19	1441	3.17	1561	4.11	1677	5.07	1793	6.12	1903	7.20	2003	8.29	2097	9.39				
6500		2286	1388	2.61	1518	3.66	1634	4.70	1742	5.71	1850	6.79	1956	7.93	2056	9.10	2149	10.28	2323	12.69		
7000		2462	1476	3.10	1596	4.20	1710	5.34	1812	6.42	1911	7.53	2011	8.71	2110	9.95	2202	11.20	2372	13.73	2531	16.36
7500		2637	1565	3.65	1676	4.79	1786	6.04	1885	7.21	1978	8.37	2071	9.58	2164	10.84	2256	12.18	2425	14.87	2578	17.60
8000		2813	1655	4.28	1758	5.46	1864	6.78	1960	8.07	2050	9.30	2136	10.54	2223	11.84	2310	13.20	2478	16.06	2631	18.92
8500		2989	1746	4.98	1842	6.20	1942	7.58	2037	8.98	2124	10.31	2206	11.61	2287	12.94	2368	14.32	2531	17.26		
9000		3165	1837	5.77	1928	7.02	2022	8.45	2114	9.95	2199	11.38	2279	12.78	2356	14.15	2432	15.56	2585	18.56		
9500		3341	1930	6.64	2015	7.94	2103	9.40	2192	10.98	2275	12.53	2353	14.03	2427	15.47	2499	16.92	2644	19.96		
10000		3517	2022	7.61	2103	8.95	2186	10.44	2270	12.07	2352	13.74	2429	15.33	2501	16.87	2570	18.39				
10500		3692	2116	8.67	2192	10.06	2270	11.58	2350	13.26	2429	15.00	2505	16.71	2576	18.36	2643	19.97				
11000		3868	2209	9.83	2282	11.27	2356	12.83	2431	14.54	2508	16.34	2582	18.18	2652	19.95						
12000		4220	2397	12.47	2464	14.02	2530	15.66	2598	17.42	2668	19.32										

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 24.50 in.
Outlet Area = 3.45 sq. ft. inside
Maximum BHP = 1.59 x (RPM/1000)^3
Tip Speed, fpm = 6.41 x RPM

Size
2450 SISW

Max RPM 2428

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000		870	726	0.59																		
3500		1015	770	0.71	959	1.33																
4000		1160	820	0.86	1005	1.56	1148	2.25														
4500		1305	874	1.05	1048	1.79	1194	2.59	1316	3.37												
5000		1450	932	1.26	1093	2.04	1239	2.93	1359	3.80	1468	4.68										
5500		1595	992	1.50	1142	2.33	1282	3.28	1406	4.27	1510	5.20	1609	6.17								
6000		1740	1054	1.77	1195	2.68	1327	3.66	1449	4.71	1558	5.79	1651	6.80	1741	7.85						
6500		1885	1118	2.08	1251	3.06	1374	4.07	1494	5.20	1601	6.35	1700	7.51	1784	8.59	1866	9.71				
7000		2030	1182	2.42	1309	3.49	1425	4.54	1538	5.70	1645	6.93	1743	8.17	1833	9.43	1911	10.58				
7500		2175	1248	2.81	1368	3.95	1479	5.07	1585	6.25	1689	7.54	1786	8.86	1876	10.20	1960	11.53	2104	14.02		
8000		2320	1315	3.24	1429	4.46	1536	5.66	1636	6.87	1734	8.19	1830	9.59	1919	10.99	2003	12.42	2151	15.16	2284	17.87
8500		2465	1382	3.72	1492	5.02	1593	6.30	1690	7.57	1782	8.89	1874	10.34	1963	11.83	2045	13.31	2199	16.33	2328	19.15
9000		2610	1450	4.25	1555	5.62	1653	6.99	1745	8.33	1834	9.68	1920	11.13	2008	12.70	2089	14.26	2242	17.44	2376	20.56
9500		2755	1518	4.83	1619	6.28	1713	7.73	1802	9.15	1888	10.56	1970	12.02	2053	13.60	2134	15.25	2284	18.56	2422	21.93
10000		2900	1587	5.47	1684	6.99	1774	8.51	1860	10.02	1943	11.50	2022	13.00	2100	14.58	2178	16.26	2328	19.74		
10500		3045	1656	6.17	1750	7.76	1837	9.37	1920	10.95	1999	12.51	2076	14.07	2151	15.66	2225	17.34	2372	20.97		
11000		3190	1726	6.93	1816	8.60	1900	10.27	1980	11.95	2057	13.58	2132	15.21	2204	16.84	2275	18.53	2416	22.22		
11500		3335	1795	7.75	1883	9.51	1964	11.25	2042	12.99	2116	14.73	2188	16.42	2258	18.11	2327	19.84				
12000		3480	1865	8.64	1950	10.47	2029	12.28	2104	14.12	2176	15.92	2246	17.71	2315	19.48	2381	21.25				
12500		3625	1936	9.60	2018	11.51	2094	13.41	2167	15.29	2237	17.20	2305	19.06	2371	20.90						
13000		3771	2007	10.64	2086	12.63	2160	14.58	2231	16.56	2299	18.52	2365	20.47								
13500		3916	2078	11.76	2154	13.81	2226	15.85	2295	17.89	2361	19.95	2425	21.98								
14000		4061	2149	12.95	2223	15.07	2293	17.21	2360	19.30	2424	21.41										
14500		4206	2220	14.21	2292	16.43	2360	18.62	2426	20.82												
15000		4351	2291	15.57	2361	17.87	2427	20.13														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
2700 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Wheel Diameter = 27.00 in.
Outlet Area = 4.19 sq. ft. inside
Maximum BHP = 2.58 x (RPM/1000)^3
Tip Speed, fpm = 7.07 x RPM

Max RPM 2203

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	955	682	0.80	853	1.50																
4500	1075	716	0.94	888	1.73																
5000	1194	755	1.09	921	1.96	1050	2.82														
5500	1313	796	1.28	954	2.20	1087	3.17	1196	4.12												
6000	1433	839	1.49	987	2.45	1119	3.51	1228	4.55												
6500	1552	884	1.73	1023	2.72	1152	3.86	1264	5.02	1357	6.11										
7000	1672	930	1.99	1061	3.04	1185	4.22	1296	5.47	1393	6.69	1478	7.88								
7500	1791	977	2.28	1102	3.41	1219	4.61	1329	5.93	1428	7.28	1513	8.55	1592	9.82						
8000	1911	1025	2.59	1144	3.80	1254	5.03	1362	6.42	1460	7.83	1549	9.26	1627	10.61	1700	11.96				
8500	2030	1073	2.94	1187	4.23	1293	5.51	1395	6.92	1492	8.41	1581	9.92	1664	11.45	1734	12.85				
9000	2149	1122	3.32	1232	4.70	1334	6.04	1430	7.46	1525	9.03	1613	10.60	1696	12.23	1771	13.80	1902	16.80		
9500	2269	1171	3.74	1277	5.20	1375	6.62	1467	8.06	1559	9.65	1646	11.32	1727	13.00	1804	14.71	1936	17.91	2061	21.22
10000	2388	1221	4.20	1323	5.73	1418	7.23	1507	8.73	1593	10.32	1679	12.06	1760	13.82	1836	15.59	1972	19.08	2090	22.40
10500	2508	1272	4.70	1370	6.30	1461	7.89	1548	9.45	1630	11.06	1713	12.82	1793	14.68	1868	16.50	2007	20.23	2126	23.78
11000	2627	1323	5.24	1418	6.91	1506	8.59	1590	10.23	1669	11.88	1748	13.63	1827	15.55	1901	17.46	2038	21.33	2162	25.17
11500	2746	1374	5.82	1466	7.57	1551	9.33	1632	11.04	1710	12.76	1784	14.52	1860	16.44	1934	18.44	2070	22.46	2195	26.53
12000	2866	1425	6.45	1514	8.28	1597	10.10	1675	11.91	1751	13.68	1823	15.50	1895	17.40	1967	19.45	2103	23.64		
12500	2985	1476	7.13	1563	9.04	1643	10.94	1720	12.83	1793	14.67	1863	16.53	1932	18.45	2001	20.51	2137	24.88		
13000	3105	1528	7.86	1612	9.83	1690	11.81	1764	13.78	1836	15.72	1904	17.63	1971	19.59	2037	21.65	2169	26.08		
13500	3224	1580	8.64	1662	10.69	1738	12.74	1810	14.80	1879	16.81	1946	18.81	2011	20.81	2075	22.87	2202	27.34		
14000	3343	1633	9.47	1712	11.61	1786	13.73	1856	15.85	1924	17.97	1989	20.02	2052	22.08	2114	24.18				
15000	3582	1737	11.30	1812	13.59	1883	15.86	1949	18.13	2014	20.42	2076	22.64	2136	24.85	2195	27.05				
16000	3821	1843	13.38	1914	15.83	1981	18.23	2045	20.67	2106	23.08	2165	25.48								
17000	4060	1949	15.72	2017	18.30	2081	20.89	2141	23.43	2199	26.00										
18000	4299	2056	18.31	2120	21.06	2181	23.78														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
3000 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Wheel Diameter = 30.00 in.
Outlet Area = 5.17 sq. ft. inside
Maximum BHP = 4.37 x (RPM/1000)^3
Tip Speed, fpm = 7.85 x RPM

Max RPM 1982

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	967	617	1.01	770	1.88																
5500	1064	642	1.14	796	2.11																
6000	1161	669	1.29	821	2.34	937	3.38														
6500	1257	699	1.47	844	2.57	962	3.71														
7000	1354	730	1.67	868	2.81	988	4.06	1085	5.25												
7500	1451	761	1.89	893	3.07	1012	4.40	1110	5.71	1199	7.02										
8000	1548	794	2.12	919	3.35	1036	4.75	1137	6.18	1220	7.52										
8500	1644	827	2.38	947	3.66	1060	5.11	1160	6.62	1246	8.09	1324	9.54								
9000	1741	861	2.66	976	4.01	1084	5.49	1183	7.07	1273	8.68	1348	10.19	1422	11.77						
9500	1838	896	2.96	1007	4.39	1109	5.88	1207	7.55	1296	9.24	1375	10.90	1444	12.48	1515	14.20				
10000	1934	931	3.28	1037	4.80	1136	6.32	1232	8.04	1319	9.80	1400	11.59	1470	13.29	1536	14.98				
10500	2031	966	3.63	1069	5.23	1164	6.81	1256	8.55	1343	10.40	1423	12.26	1497	14.14	1561	15.87				
11000	2128	1002	4.02	1102	5.70	1194	7.34	1281	9.08	1368	11.01	1447	12.94	1521	14.93	1587	16.81	1707	20.51		
12000	2321	1074	4.87	1168	6.70	1254	8.50	1336	10.31	1417	12.28	1495	14.39	1567	16.48	1636	18.63	1757	22.74	1866	26.80
13000	2515	1147	5.84	1236	7.82	1317	9.79	1395	11.72	1469	13.72	1543	15.89	1616	18.18	1683	20.45	1808	25.06	1915	29.46
14000	2708	1222	6.96	1305	9.09	1383	11.21	1456	13.30	1527	15.39	1595	17.57	1664	19.93	1731	22.38	1854	27.29	1966	32.23
15000	2902	1296	8.21	1376	10.49	1449	12.77	1520	15.03	1587	17.26	1652	19.50	1715	21.87	1779	24.39	1901	29.62		
16000	3095	1372	9.63	1447	12.06	1518	14.49	1584	16.91	1649	19.30	1711	21.66	1771	24.08	1831	26.61	1950	32.07		
17000	3288	1448	11.21	1520	13.80	1587	16.38	1651	18.96	1713	21.51	1772	24.02	1830	26.54	1886	29.11				
18000	3482	1524	12.97	1593	15.71	1657	18.43	1719	21.19	1778	23.88	1835	26.57	1891	29.23	1945	31.89				
19000	3675	1601	14.92	1667	17.82	1729	20.70	1787	23.56	1844	26.45	1899	29.32	1953	32.11						
20000	3869	1678	17.07	1741	20.13	1801	23.13	1857	26.17	1912	29.20	1965	32.21								
21000	4062	1755	19.43	1816	22.63	1873	25.82	1928	28.97	1980	32.13										
22000	4256	1833	22.00	1891	25.36	1946	28.68														
23000	4449	1911	24.80	1967	28.35																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 33.00 in.
Outlet Area = 6.26 sq. ft. inside
Maximum BHP = 7.52 x (RPM/1000)^3
Tip Speed, fpm = 8.64 x RPM

Size
3300 SISW

Max RPM 1769

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000		959	545	1.19	688	2.26																
6500		1038	564	1.33	702	2.45																
7000		1118	584	1.48	718	2.65																
7500		1198	606	1.65	735	2.88	846	4.23														
8000		1278	629	1.84	752	3.11	860	4.51														
9000		1438	677	2.26	789	3.64	893	5.15	986	6.77												
10000		1598	726	2.75	830	4.25	928	5.86	1018	7.58	1099	9.39										
11000		1757	776	3.29	875	4.95	965	6.66	1052	8.49	1131	10.38	1205	12.38								
12000		1917	826	3.91	921	5.75	1006	7.56	1087	9.48	1165	11.49	1237	13.57	1305	15.75	1371	18.01				
13000		2077	877	4.61	970	6.64	1049	8.56	1126	10.60	1200	12.71	1271	14.90	1336	17.14	1399	19.47				
14000		2237	929	5.40	1019	7.61	1095	9.69	1166	11.81	1237	14.03	1305	16.32	1371	18.70	1431	21.10	1546	26.16		
15000		2397	982	6.29	1068	8.67	1142	10.94	1210	13.15	1276	15.47	1341	17.88	1405	20.33	1465	22.88	1577	28.10	1683	33.63
16000		2556	1036	7.30	1118	9.82	1191	12.29	1255	14.64	1318	17.05	1380	19.56	1440	22.12	1499	24.75	1610	30.19	1712	35.82
17000		2716	1090	8.42	1168	11.08	1240	13.75	1303	16.26	1362	18.77	1420	21.37	1478	24.05	1535	26.77	1644	32.42	1744	38.24
18000		2876	1145	9.66	1219	12.45	1289	15.31	1351	18.02	1408	20.65	1463	23.34	1518	26.13	1573	28.95	1678	34.79		
19000		3036	1200	11.04	1271	13.95	1339	16.98	1400	19.92	1455	22.68	1508	25.48	1560	28.35	1612	31.28	1714	37.32		
20000		3195	1255	12.56	1323	15.59	1388	18.75	1449	21.90	1503	24.88	1555	27.80	1604	30.74	1654	33.77	1751	40.02		
21000		3355	1311	14.21	1377	17.38	1439	20.68	1498	24.00	1552	27.21	1602	30.26	1650	33.32	1697	36.44				
22000		3515	1367	16.03	1430	19.31	1490	22.74	1548	26.26	1601	29.64	1650	32.90	1697	36.10	1742	39.32				
23000		3675	1424	18.01	1484	21.42	1542	24.98	1597	28.60	1650	32.25	1699	35.72	1744	39.06						
24000		3834	1481	20.17	1538	23.69	1594	27.35	1648	31.16	1699	34.93	1748	38.62								
25000		3994	1537	22.49	1593	26.12	1647	29.93	1699	33.82	1749	37.81										
26000		4154	1595	25.00	1648	28.74	1700	32.68	1750	36.71												
27000		4314	1652	27.70	1703	31.57	1753	35.60														
28000		4473	1709	30.60	1758	34.58																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 36.50 in.
Outlet Area = 7.65 sq. ft. inside
Maximum BHP = 12.5 x (RPM/1000)^3
Tip Speed, fpm = 9.56 x RPM

Size
3650 SISW

Max RPM 1598

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000		1045	511	1.64	636	3.01																
9000		1175	542	1.96	660	3.44	761	5.09														
10000		1306	576	2.33	686	3.92	783	5.65														
11000		1437	612	2.76	713	4.45	808	6.29	891	8.27												
12000		1567	648	3.24	743	5.05	833	7.00	914	9.06	989	11.26										
13000		1698	684	3.77	775	5.72	860	7.78	940	9.95	1012	12.24	1080	14.64								
14000		1828	721	4.35	809	6.47	888	8.62	965	10.90	1036	13.29	1102	15.77	1165	18.39						
15000		1959	758	4.99	844	7.31	919	9.56	992	11.95	1062	14.44	1126	17.03	1186	19.68	1245	22.49				
16000		2090	796	5.71	880	8.21	951	10.58	1020	13.07	1088	15.67	1151	18.36	1211	21.12	1267	23.97				
17000		2220	835	6.50	916	9.19	985	11.70	1051	14.29	1115	16.99	1177	19.77	1236	22.67	1291	25.59	1395	31.77		
18000		2351	874	7.38	953	10.23	1020	12.92	1082	15.61	1143	18.41	1203	21.30	1261	24.30	1316	27.34	1417	33.65	1515	40.40
19000		2481	913	8.33	990	11.35	1056	14.24	1116	17.04	1174	19.93	1231	22.93	1287	26.03	1341	29.19	1441	35.69	1535	42.54
20000		2612	953	9.39	1026	12.53	1092	15.66	1150	18.59	1205	21.58	1260	24.67	1314	27.87	1367	31.13	1466	37.85	1558	44.85
21000		2743	994	10.54	1064	13.82	1128	17.13	1185	20.24	1238	23.34	1291	26.53	1343	29.84	1393	33.19	1491	40.13	1582	47.31
22000		2873	1034	11.79	1102	15.20	1165	18.70	1221	22.01	1272	25.22	1322	28.51	1372	31.91	1421	35.36	1517	42.51		
23000		3004	1075	13.15	1140	16.69	1201	20.35	1257	23.90	1307	27.24	1355	30.64	1403	34.11	1450	37.68	1543	45.03		
24000		3134	1116	14.63	1178	18.28	1238	22.09	1293	25.83	1343	29.41	1389	32.88	1435	36.45	1481	40.13	1570	47.69		
25000		3265	1157	16.22	1217	20.01	1275	23.95	1330	27.93	1378	31.64	1424	35.29	1468	38.97	1512	42.73				
26000		3395	1198	17.93	1257	21.84	1313	25.91	1366	30.04	1415	34.05	1459	37.83	1502	41.60	1544	45.44				
27000		3526	1240	19.78	1296	23.80	1350	28.00	1403	32.33	1450	36.48	1495	40.48	1537	44.41	1578	48.35				
28000		3657	1282	21.75	1336	25.90	1389	30.25	1439	34.66	1487	39.11	1531	43.29	1572	47.36						
29000		3787	1323	23.87	1376	28.14	1427	32.58	1476	37.16	1523	41.74	1567	46.18								
30000		3918	1366	26.13	1416	30.50	1466	35.08	1514	39.79	1560	44.57										
32000		4179	1450	31.08	1497	35.69	1544	40.52	1590	45.50												
34000		4440	1534	36.67	1579	41.52																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
4025 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Wheel Diameter = 40.25 in.
Outlet Area = 9.31 sq. ft. inside
Maximum BHP = 20.3 x (RPM/1000)^3
Tip Speed, fpm = 10.5 x RPM

Max RPM 1450

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1074	470	2.07	581	3.78																
11000	1181	493	2.40	600	4.21	691	6.22														
12000	1289	518	2.77	619	4.68	707	6.77														
13000	1396	545	3.19	639	5.20	725	7.40	802	9.77												
14000	1504	572	3.65	660	5.77	744	8.08	818	10.54	888	13.17										
15000	1611	599	4.15	683	6.40	764	8.82	837	11.38	904	14.09										
16000	1718	626	4.69	708	7.09	784	9.61	855	12.28	921	15.07	982	18.00								
17000	1826	653	5.27	733	7.85	805	10.46	875	13.24	939	16.13	999	19.14	1056	22.33						
18000	1933	681	5.91	759	8.67	828	11.39	894	14.26	958	17.27	1017	20.38	1072	23.61	1126	27.02				
19000	2041	709	6.60	786	9.56	852	12.38	915	15.37	977	18.47	1035	21.70	1089	25.01	1142	28.48				
20000	2148	738	7.36	813	10.51	876	13.46	937	16.54	997	19.75	1054	23.08	1108	26.50	1159	30.04	1256	37.47		
21000	2255	767	8.18	840	11.51	902	14.63	960	17.79	1018	21.10	1073	24.54	1127	28.08	1177	31.71	1271	39.24		
22000	2363	796	9.07	867	12.56	928	15.86	984	19.13	1039	22.55	1093	26.08	1146	29.73	1195	33.46	1287	41.15	1376	49.37
23000	2470	825	10.03	895	13.68	955	17.18	1009	20.57	1062	24.08	1114	27.71	1165	31.47	1214	35.29	1305	43.18	1390	51.49
24000	2577	855	11.07	922	14.84	982	18.57	1034	22.09	1085	25.71	1136	29.43	1185	33.28	1233	37.20	1324	45.33	1407	53.75
25000	2685	885	12.19	950	16.10	1009	20.02	1060	23.71	1109	27.40	1158	31.27	1206	35.19	1253	39.22	1343	47.59	1425	56.17
26000	2792	915	13.38	978	17.42	1036	21.56	1087	25.43	1135	29.23	1181	33.16	1227	37.20	1273	41.37	1361	49.92	1443	58.76
27000	2900	945	14.66	1006	18.84	1063	23.13	1113	27.21	1160	31.17	1205	35.17	1250	39.35	1294	43.58	1380	52.31		
28000	3007	976	16.04	1035	20.35	1090	24.80	1141	29.12	1186	33.19	1230	37.33	1273	41.55	1316	45.89	1400	54.83		
30000	3222	1037	19.07	1092	23.62	1145	28.35	1195	33.10	1239	37.56	1281	41.96	1321	46.35	1362	50.88	1441	60.23		
32000	3437	1098	22.50	1151	27.29	1201	32.29	1249	37.38	1293	42.31	1334	47.04	1372	51.66	1410	56.36				
34000	3651	1161	26.35	1210	31.39	1258	36.67	1304	42.03	1347	47.44	1387	52.50	1424	57.44						
36000	3866	1223	30.67	1270	35.93	1315	41.43	1359	47.12	1401	52.81	1441	58.35								
38000	4081	1286	35.45	1330	40.94	1374	46.74	1415	52.61												
40000	4296	1349	40.74	1391	46.47	1432	52.46														

Size
4450 SISW

Design 8310 Centrifugal Airfoil Plug Fan

Wheel Diameter = 44.50 in.
Outlet Area = 11.37 sq. ft. inside
Maximum BHP = 33.1 x (RPM/1000)^3
Tip Speed, fpm = 11.7 x RPM

Max RPM 1305

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11000	967	405	2.15	510	4.01																
12000	1055	420	2.42	523	4.41																
13000	1143	437	2.73	536	4.85	620	7.10														
14000	1231	454	3.06	550	5.31	631	7.67														
15000	1319	473	3.42	564	5.79	644	8.30	715	10.92												
16000	1407	491	3.81	579	6.31	658	8.96	726	11.66												
17000	1495	511	4.25	595	6.87	672	9.64	739	12.48	801	15.45										
18000	1583	530	4.72	611	7.46	685	10.35	752	13.35	812	16.39	872	19.65								
19000	1671	550	5.23	628	8.10	700	11.10	766	14.26	825	17.41	881	20.72								
20000	1759	571	5.78	646	8.77	715	11.91	780	15.18	839	18.50	893	21.88	946	25.40						
21000	1847	592	6.38	664	9.50	731	12.76	794	16.14	853	19.62	906	23.12	957	26.69	1007	30.52				
22000	1935	613	7.03	683	10.27	747	13.65	809	17.14	867	20.77	920	24.42	969	28.09	1017	31.94				
24000	2111	655	8.47	721	11.96	782	15.60	839	19.33	895	23.17	947	27.13	997	31.14	1042	35.08	1130	43.43		
26000	2287	699	10.13	760	13.87	818	17.74	872	21.75	925	25.82	976	30.01	1024	34.28	1069	38.60	1153	47.27	1234	56.41
28000	2463	743	12.02	801	16.01	855	20.13	907	24.37	957	28.71	1005	33.10	1052	37.64	1097	42.22	1179	51.44	1255	60.82
30000	2638	787	14.17	842	18.42	894	22.77	943	27.24	990	31.83	1036	36.50	1081	41.21	1125	46.07	1207	55.94	1281	65.83
32000	2814	832	16.56	884	21.07	934	25.68	981	30.40	1026	35.22	1070	40.18	1112	45.11	1154	50.14	1235	60.56		
34000	2990	877	19.26	927	24.02	974	28.90	1019	33.86	1062	38.90	1104	44.10	1145	49.30	1185	54.57	1262	65.34		
36000	3166	923	22.26	971	27.27	1015	32.39	1058	37.63	1100	42.89	1140	48.32	1179	53.77	1217	59.30	1292	70.52		
38000	3342	969	25.57	1014	30.85	1057	36.21	1098	41.67	1138	47.23	1177	52.85	1214	58.54	1251	64.34				
40000	3518	1015	29.22	1058	34.76	1100	40.39	1139	46.08	1178	51.90	1215	57.73	1251	63.67	1286	69.70				
42000	3694	1061	33.25	1103	39.06	1143	44.90	1181	50.87	1217	56.88	1253	63.00	1288	69.19						
44000	3870	1107	37.66	1148	43.68	1186	49.81	1223	56.00	1258	62.31	1293	68.68								
46000	4046	1154	42.42	1193	48.71	1230	55.12	1265	61.56	1299	68.06										
48000	4222	1201	47.60	1238	54.18	1273	60.79														

Wheel Diameter = 49.00 in.
Outlet Area = 13.78 sq. ft. inside
Maximum BHP = 53.6 x (RPM/1000)^3
Tip Speed, fpm = 12.8 x RPM

Size
4900 SISW

Max RPM 1184

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13000		943	364	2.52	461	4.74																
14000		1016	375	2.78	469	5.12																
15000		1088	387	3.07	479	5.54																
16000		1161	400	3.38	490	5.99	565	8.74														
17000		1233	413	3.71	500	6.45	573	9.31														
18000		1306	427	4.07	511	6.93	583	9.94	648	13.12												
19000		1378	441	4.46	521	7.44	593	10.60	656	13.84												
20000		1451	455	4.88	533	7.98	604	11.28	665	14.62	724	18.21										
22000		1596	484	5.81	557	9.16	624	12.68	685	16.36	740	20.05	793	24.02								
24000		1741	515	6.87	583	10.47	646	14.23	706	18.17	759	22.15	809	26.21	857	30.51						
26000		1886	546	8.08	610	11.92	670	15.96	727	20.09	780	24.44	828	28.71	874	33.11	918	37.71				
28000		2031	577	9.45	639	13.54	695	17.81	749	22.20	801	26.74	849	31.39	893	36.03	936	40.76	1019	50.80		
30000		2176	610	10.98	668	15.33	722	19.83	773	24.52	822	29.26	870	34.19	914	39.13	955	44.09	1033	54.35		
32000		2321	642	12.71	698	17.30	749	22.05	798	26.97	845	31.97	891	37.07	935	42.35	976	47.63	1051	58.23	1124	69.37
34000		2466	675	14.62	728	19.47	777	24.47	824	29.62	870	34.88	913	40.21	956	45.72	997	51.29	1071	62.48	1140	73.87
36000		2611	709	16.76	759	21.85	806	27.10	851	32.48	895	38.00	937	43.59	978	49.28	1017	55.09	1092	66.94	1160	78.80
38000		2756	742	19.08	791	24.44	836	29.96	879	35.59	921	41.32	961	47.17	1001	53.11	1039	59.14	1113	71.51	1180	84.03
40000		2901	776	21.65	823	27.29	866	33.02	908	38.89	948	44.90	987	50.97	1025	57.20	1062	63.44	1133	76.22		
42000		3047	810	24.48	855	30.34	897	36.34	937	42.45	976	48.69	1013	55.02	1050	61.53	1085	67.98	1155	81.18		
44000		3192	844	27.55	887	33.68	928	39.92	966	46.30	1004	52.74	1040	59.34	1076	66.02	1110	72.77	1177	86.44		
46000		3337	878	30.87	920	37.27	959	43.76	996	50.37	1033	57.10	1068	63.90	1102	70.80	1135	77.82				
48000		3482	913	34.48	953	41.13	991	47.89	1027	54.75	1062	61.71	1096	68.74	1129	75.90	1162	83.17				
52000		3772	982	42.62	1020	49.79	1055	57.01	1089	64.40	1122	71.83	1154	79.35								
56000		4062	1052	52.00	1087	59.65	1120	67.45	1152	75.29	1183	83.20										
60000		4352	1122	62.72	1155	70.96																

Wheel Diameter = 54.25 in.
Outlet Area = 16.91 sq. ft. inside
Maximum BHP = 89.1 x (RPM/1000)^3
Tip Speed, fpm = 14.2 x RPM

Size
5425 SISW

Max RPM 1071

Design 8310 Centrifugal Airfoil Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		10"SP		12"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000		1065	346	3.7	430	6.6																
20000		1184	365	4.3	445	7.5	512	10.9														
22000		1302	385	5.0	461	8.5	526	12.1	585	16.0												
24000		1420	405	5.8	477	9.5	541	13.5	597	17.5	651	21.9										
26000		1539	427	6.6	495	10.6	557	14.9	611	19.2	662	23.6										
28000		1657	449	7.6	513	11.9	572	16.3	627	21.0	675	25.6	722	30.5								
30000		1775	471	8.8	532	13.2	589	17.9	642	22.8	690	27.8	735	32.8	777	38.1						
32000		1894	494	10.0	553	14.7	607	19.7	658	24.8	706	30.1	749	35.4	790	40.8	830	46.4				
34000		2012	518	11.3	573	16.3	625	21.5	674	26.9	721	32.4	764	38.0	805	43.7	843	49.4	919	61.7		
36000		2130	541	12.8	595	18.1	644	23.5	691	29.1	736	34.8	780	40.8	820	46.8	857	52.7	929	65.1		
38000		2249	565	14.5	617	20.0	664	25.7	710	31.5	753	37.5	795	43.6	835	50.0	872	56.2	941	68.9	1009	82.6
40000		2367	590	16.3	639	22.0	685	28.0	728	34.0	770	40.3	811	46.6	850	53.2	888	59.8	955	73.0	1020	86.8
42000		2485	614	18.3	661	24.2	706	30.4	748	36.7	788	43.2	828	49.8	866	56.6	903	63.5	970	77.3	1032	91.4
44000		2604	639	20.4	684	26.6	727	33.0	768	39.6	807	46.4	845	53.2	882	60.2	918	67.3	985	81.8	1047	96.2
46000		2722	663	22.7	707	29.2	749	35.9	788	42.7	826	49.7	863	56.8	899	64.0	934	71.3	1001	86.3	1061	101.4
48000		2841	688	25.2	731	31.9	771	38.8	809	45.9	846	53.1	882	60.5	916	67.9	950	75.5	1016	91.0		
50000		2959	713	27.9	754	34.9	793	42.1	830	49.4	866	56.8	901	64.4	934	72.1	967	79.9	1031	95.9		
52000		3077	738	30.8	778	38.0	816	45.4	852	53.0	887	60.7	920	68.5	953	76.5	985	84.6	1047	100.9		
54000		3196	763	33.9	802	41.4	839	49.1	874	56.9	907	64.8	940	72.9	972	81.1	1003	89.4	1064	106.1		
56000		3314	788	37.2	826	45.0	862	52.9	896	60.9	929	69.2	960	77.4	992	85.8	1022	94.4				
58000		3432	814	40.7	851	48.8	885	56.9	918	65.3	950	73.7	981	82.2	1012	90.9	1041	99.7				
60000		3551	839	44.5	875	52.8	909	61.3	941	69.8	972	78.5	1002	87.2	1032	96.1	1061	105.1				
65000		3847	903	55.1	937	64.0	968	73.0	998	82.2	1028	91.5	1056	100.9								
70000		4142	968	67.2	999	76.8	1028	86.5	1057	96.3												
75000		4438	1032	81.1	1062	91.4																

Size
1225 SISW

Design 8320 Centrifugal BI Plug Fan

Wheel Diameter = 12.25 in.
Outlet Area = 0.86 sq. ft. inside
Maximum BHP = .067 x (RPM/1000)^3
Tip Speed, fpm = 3.21 x RPM

Max RPM 4463 †

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	928	1381	0.17	1792	0.34																
900	1044	1448	0.20	1829	0.37																
1000	1160	1524	0.24	1878	0.42	2199	0.63														
1100	1276	1606	0.28	1934	0.47	2238	0.69														
1200	1392	1691	0.32	1996	0.53	2286	0.75	2554	1.00												
1300	1508	1777	0.37	2066	0.59	2340	0.82	2597	1.08	2839	1.36										
1400	1624	1863	0.43	2143	0.66	2399	0.90	2646	1.17	2878	1.45	3101	1.77								
1500	1740	1949	0.49	2224	0.74	2464	0.99	2700	1.26	2923	1.56	3136	1.87	3345	2.21						
1600	1856	2038	0.56	2307	0.83	2535	1.09	2758	1.37	2976	1.67	3181	1.99	3378	2.33	3573	2.70				
1700	1972	2130	0.64	2392	0.92	2611	1.19	2822	1.49	3030	1.79	3229	2.12	3420	2.46	3606	2.83	3789	3.22		
1800	2088	2226	0.73	2478	1.02	2691	1.31	2891	1.61	3089	1.93	3282	2.26	3469	2.61	3647	2.98	3822	3.37	3995	3.78
1900	2204	2323	0.82	2563	1.12	2774	1.43	2965	1.75	3153	2.07	3339	2.41	3521	2.77	3694	3.15	3862	3.54	4028	3.95
2000	2320	2423	0.93	2650	1.24	2859	1.57	3042	1.89	3221	2.23	3399	2.58	3575	2.94	3745	3.33	3908	3.72	4068	4.13
2100	2436	2525	1.04	2736	1.36	2944	1.71	3123	2.05	3294	2.40	3464	2.76	3633	3.13	3798	3.52	3958	3.92	4114	4.34
2200	2552	2628	1.17	2824	1.50	3029	1.86	3206	2.22	3371	2.57	3533	2.95	3695	3.33	3855	3.72	4011	4.13	4163	4.56
2300	2668	2732	1.31	2915	1.65	3115	2.02	3291	2.40	3451	2.77	3606	3.15	3761	3.54	3915	3.94	4067	4.36	4216	4.79
2400	2784	2837	1.45	3007	1.81	3201	2.18	3375	2.58	3533	2.97	3682	3.36	3831	3.77	3979	4.18	4126	4.60	4271	5.04
2500	2900	2943	1.61	3102	1.98	3286	2.36	3461	2.78	3616	3.18	3762	3.59	3904	4.00	4046	4.42	4188	4.86	4329	5.30
2600	3016	3049	1.79	3198	2.16	3374	2.56	3547	2.98	3701	3.41	3843	3.83	3981	4.25	4118	4.69	4255	5.13	4391	5.58
2700	3132	3156	1.97	3297	2.35	3462	2.76	3632	3.19	3786	3.65	3926	4.08	4061	4.51	4192	4.96	4324	5.42	4454	5.88
2800	3248	3263	2.17	3396	2.56	3552	2.98	3718	3.42	3871	3.89	4011	4.35	4142	4.79	4269	5.24	4396	5.71		
3000	3480	3479	2.61	3600	3.02	3737	3.47	3891	3.93	4042	4.41	4181	4.91	4309	5.39	4430	5.87				
3200	3713	3696	3.11	3807	3.54	3930	4.00	4069	4.49	4214	4.99	4352	5.52								
3400	3945	3914	3.67	4017	4.12	4128	4.61	4253	5.11	4388	5.63										
3600	4177	4133	4.30	4229	4.78	4331	5.28	4443	5.81												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
1350 SISW

Design 8320 Centrifugal BI Plug Fan

Wheel Diameter = 13.50 in.
Outlet Area = 1.05 sq. ft. inside
Maximum BHP = .119 x (RPM/1000)^3
Tip Speed, fpm = 3.53 x RPM

Max RPM 3951 †

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	954	1251	0.21	1637	0.43																
1100	1049	1291	0.24	1665	0.47																
1200	1145	1338	0.27	1695	0.51	1999	0.77														
1300	1240	1390	0.31	1728	0.55	2025	0.83	2285	1.13												
1400	1335	1447	0.36	1763	0.60	2054	0.89	2310	1.20												
1500	1431	1506	0.40	1802	0.65	2084	0.95	2337	1.27	2565	1.62										
1600	1526	1568	0.46	1845	0.71	2118	1.02	2366	1.35	2590	1.71	2798	2.08								
1700	1622	1632	0.51	1893	0.78	2153	1.09	2395	1.43	2618	1.80	2824	2.19								
1800	1717	1698	0.57	1945	0.85	2191	1.17	2428	1.52	2647	1.90	2850	2.29	3038	2.71						
1900	1812	1765	0.64	2000	0.94	2232	1.25	2462	1.62	2677	2.00	2877	2.41	3064	2.83	3241	3.27				
2000	1908	1833	0.71	2057	1.02	2277	1.34	2499	1.71	2709	2.11	2905	2.53	3091	2.96	3266	3.41	3433	3.88		
2100	2003	1902	0.79	2116	1.12	2326	1.45	2537	1.82	2743	2.23	2936	2.65	3119	3.10	3293	3.56	3458	4.04	3616	4.53
2200	2099	1972	0.88	2177	1.22	2378	1.56	2578	1.93	2778	2.35	2969	2.78	3149	3.24	3320	3.71	3485	4.20	3641	4.70
2300	2194	2044	0.97	2240	1.33	2432	1.68	2623	2.06	2815	2.47	3003	2.92	3181	3.39	3349	3.87	3512	4.37	3666	4.88
2400	2289	2115	1.07	2304	1.44	2489	1.81	2671	2.19	2855	2.61	3038	3.07	3213	3.54	3380	4.03	3540	4.54	3692	5.06
2600	2480	2261	1.30	2436	1.69	2607	2.10	2776	2.49	2944	2.92	3115	3.38	3283	3.87	3446	4.39	3600	4.92	3749	5.45
2800	2671	2408	1.55	2571	1.97	2731	2.41	2888	2.84	3044	3.27	3201	3.74	3359	4.24	3515	4.77	3667	5.32	3813	5.89
3000	2862	2557	1.84	2710	2.29	2859	2.75	3007	3.22	3153	3.67	3298	4.14	3444	4.65	3592	5.19	3738	5.76	3880	6.34
3200	3052	2707	2.17	2851	2.65	2991	3.14	3130	3.63	3268	4.12	3404	4.61	3540	5.12	3677	5.66	3814	6.23		
3400	3243	2859	2.54	2994	3.04	3127	3.56	3258	4.08	3388	4.61	3516	5.12	3644	5.64	3772	6.19	3900	6.76		
3600	3434	3012	2.95	3139	3.48	3265	4.03	3389	4.57	3512	5.13	3633	5.68	3755	6.22	3875	6.78				
3800	3625	3165	3.40	3286	3.96	3405	4.53	3523	5.11	3639	5.69	3755	6.28	3870	6.86						
4000	3816	3319	3.90	3433	4.49	3547	5.09	3659	5.69	3770	6.30	3880	6.92								
4200	4006	3474	4.46	3583	5.07	3690	5.69	3798	6.33	3903	6.97										
4400	4197	3629	5.06	3733	5.71	3836	6.36	3938	7.01												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 15.00 in.
Outlet Area = 1.29 sq. ft. inside
Maximum BHP = .201 x (RPM/1000)^3
Tip Speed, fpm = 3.93 x RPM

Size
1500 SISW

Max RPM 3542

Design 8320 Centrifugal BI Plug Fan

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	773	1068	0.21																		
1100	850	1092	0.23																		
1200	927	1117	0.26	1467	0.52																
1300	1004	1145	0.28	1486	0.55																
1400	1082	1176	0.31	1508	0.59	1784	0.91														
1600	1236	1249	0.38	1554	0.68	1821	1.02	2056	1.39												
1800	1391	1333	0.47	1606	0.78	1864	1.14	2094	1.53	2300	1.95										
2000	1545	1423	0.58	1669	0.89	1912	1.27	2134	1.69	2337	2.13	2524	2.60								
2200	1700	1517	0.69	1741	1.04	1965	1.42	2180	1.86	2377	2.32	2561	2.81	2730	3.31						
2400	1854	1615	0.83	1822	1.20	2026	1.59	2230	2.05	2422	2.53	2600	3.04	2769	3.57	2927	4.11	3077	4.68		
2600	2009	1716	0.99	1908	1.39	2096	1.79	2285	2.25	2470	2.76	2644	3.28	2809	3.83	2965	4.40	3113	4.99	3255	5.60
2800	2163	1819	1.16	1998	1.60	2173	2.03	2347	2.49	2523	3.00	2693	3.56	2853	4.12	3007	4.72	3152	5.32	3291	5.95
3000	2318	1923	1.36	2091	1.82	2255	2.29	2418	2.76	2581	3.28	2744	3.84	2902	4.44	3050	5.04	3193	5.67	3332	6.33
3200	2472	2029	1.59	2187	2.07	2342	2.57	2494	3.06	2647	3.58	2800	4.16	2952	4.77	3099	5.40	3238	6.05	3372	6.71
3400	2627	2136	1.84	2286	2.35	2432	2.88	2576	3.40	2718	3.93	2862	4.51	3006	5.13	3149	5.78	3287	6.46	3418	7.14
3600	2782	2245	2.12	2386	2.66	2524	3.21	2661	3.77	2796	4.32	2930	4.90	3067	5.52	3202	6.18	3336	6.88	3467	7.59
3800	2936	2354	2.43	2488	2.99	2619	3.58	2749	4.17	2877	4.74	3005	5.33	3132	5.96	3261	6.62	3390	7.33	3516	8.06
4000	3091	2464	2.76	2592	3.36	2717	3.97	2840	4.59	2962	5.20	3083	5.81	3204	6.44	3326	7.11	3448	7.82		
4200	3245	2574	3.14	2696	3.76	2815	4.40	2933	5.04	3050	5.70	3166	6.33	3281	6.97	3395	7.64	3511	8.35		
4400	3400	2686	3.54	2801	4.20	2916	4.86	3029	5.53	3140	6.21	3251	6.88	3361	7.55	3470	8.23				
4600	3554	2798	3.99	2908	4.67	3017	5.36	3126	6.06	3232	6.76	3339	7.48	3444	8.17						
4800	3709	2910	4.47	3015	5.17	3120	5.89	3224	6.62	3327	7.35	3428	8.09	3530	8.82						
5000	3863	3022	4.99	3123	5.72	3225	6.47	3324	7.22	3423	7.98	3521	8.75								
5200	4018	3135	5.54	3232	6.31	3329	7.08	3425	7.86	3520	8.65										
5400	4172	3248	6.15	3342	6.94	3435	7.74	3527	8.54												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 16.50 in.
Outlet Area = 1.56 sq. ft. inside
Maximum BHP = .324 x (RPM/1000)^3
Tip Speed, fpm = 4.32 x RPM

Size
1650 SISW

Max RPM 3219

Design 8320 Centrifugal BI Plug Fan

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1400	894	1005	0.30	1327	0.61																
1600	1022	1046	0.35	1356	0.68																
1800	1149	1097	0.41	1388	0.76	1637	1.16														
2000	1277	1155	0.49	1425	0.85	1666	1.27	1877	1.73												
2200	1405	1219	0.58	1465	0.95	1698	1.39	1906	1.87	2094	2.39										
2400	1533	1287	0.69	1512	1.07	1735	1.53	1937	2.03	2121	2.56	2291	3.12								
2600	1660	1357	0.80	1565	1.21	1774	1.67	1971	2.19	2151	2.75	2318	3.33	2475	3.94						
2800	1788	1430	0.93	1624	1.36	1817	1.84	2007	2.38	2184	2.95	2349	3.56	2501	4.18	2648	4.84				
3000	1916	1504	1.08	1687	1.54	1866	2.02	2047	2.57	2219	3.17	2379	3.79	2531	4.44	2674	5.11	2810	5.81		
3200	2043	1581	1.24	1752	1.74	1920	2.23	2089	2.79	2257	3.40	2414	4.05	2562	4.72	2704	5.41	2837	6.12	2965	6.86
3400	2171	1658	1.42	1820	1.94	1979	2.47	2137	3.02	2296	3.65	2451	4.32	2596	5.01	2735	5.73	2867	6.46	2993	7.22
3600	2299	1736	1.62	1890	2.17	2041	2.73	2190	3.29	2340	3.92	2489	4.60	2632	5.32	2768	6.05	2899	6.82	3024	7.60
3800	2427	1816	1.84	1962	2.42	2105	3.01	2246	3.59	2387	4.22	2530	4.91	2670	5.65	2803	6.40	2931	7.18	3055	7.99
4000	2554	1896	2.08	2036	2.69	2172	3.31	2306	3.92	2440	4.55	2575	5.25	2709	6.00	2840	6.77	2966	7.57	3087	8.39
4200	2682	1977	2.34	2110	2.97	2241	3.63	2369	4.27	2496	4.92	2623	5.62	2752	6.37	2879	7.16	3003	7.98	3122	8.83
4400	2810	2059	2.63	2186	3.29	2310	3.97	2433	4.65	2555	5.32	2676	6.02	2798	6.77	2921	7.58	3041	8.41	3159	9.28
4600	2937	2141	2.94	2262	3.63	2382	4.33	2500	5.05	2616	5.74	2732	6.46	2848	7.21	2965	8.02	3082	8.87	3197	9.76
4800	3065	2223	3.27	2340	3.99	2455	4.72	2568	5.47	2680	6.20	2791	6.93	2902	7.69	3013	8.50	3125	9.36		
5000	3193	2306	3.64	2418	4.38	2529	5.14	2638	5.91	2745	6.68	2852	7.44	2958	8.21	3064	9.02	3172	9.88		
5200	3320	2390	4.03	2497	4.80	2604	5.59	2709	6.39	2812	7.19	2916	7.98	3017	8.77	3119	9.58				
5400	3448	2473	4.45	2577	5.25	2680	6.07	2781	6.89	2881	7.73	2980	8.55	3079	9.36	3177	10.20				
5600	3576	2558	4.90	2657	5.73	2756	6.57	2854	7.42	2950	8.28	3047	9.15	3142	9.99						
5800	3704	2642	5.39	2738	6.24	2834	7.11	2928	7.98	3022	8.87	3114	9.77	3206	10.65						
6200	3959	2811	6.45	2901	7.35	2990	8.28	3079	9.21	3166	10.15										
6600	4214	2981	7.65	3065	8.61	3149	9.59														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
1825 SISW

Design 8320 Centrifugal BI Plug Fan

Wheel Diameter = 18.25 in.
Outlet Area = 1.91 sq. ft. inside
Maximum BHP = .546 x (RPM/1000)^3
Tip Speed, fpm = 4.78 x RPM

Max RPM 2854

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	837	880	0.33																		
1800	942	910	0.38	1190	0.75																
2000	1046	942	0.43	1210	0.82																
2200	1151	979	0.50	1235	0.90	1456	1.38														
2400	1256	1019	0.57	1264	0.99	1476	1.48														
2600	1360	1063	0.65	1295	1.09	1500	1.59	1685	2.15												
2800	1465	1110	0.74	1327	1.20	1527	1.72	1707	2.29												
3000	1570	1159	0.84	1362	1.33	1556	1.86	1730	2.44	1893	3.09										
3200	1674	1209	0.95	1401	1.47	1587	2.01	1758	2.61	1915	3.26	2063	3.97								
3400	1779	1261	1.07	1442	1.62	1619	2.18	1786	2.79	1940	3.46	2085	4.17	2223	4.93						
3600	1884	1314	1.21	1485	1.78	1654	2.37	1816	2.99	1968	3.67	2108	4.40	2242	5.16	2373	5.98				
3800	1988	1369	1.35	1531	1.95	1691	2.57	1848	3.21	1996	3.90	2134	4.63	2265	5.41	2391	6.24				
4000	2093	1424	1.51	1578	2.13	1731	2.78	1881	3.45	2026	4.14	2162	4.89	2290	5.68	2413	6.52	2533	7.40		
4200	2198	1480	1.69	1627	2.34	1773	3.01	1917	3.70	2057	4.41	2191	5.17	2317	5.97	2437	6.82	2554	7.71	2666	8.63
4400	2302	1537	1.88	1677	2.55	1816	3.25	1954	3.96	2090	4.70	2221	5.47	2345	6.28	2463	7.14	2578	8.04	2687	8.97
4600	2407	1595	2.08	1728	2.78	1861	3.50	1993	4.25	2124	5.01	2252	5.79	2374	6.62	2491	7.48	2603	8.40	2711	9.34
4800	2511	1653	2.30	1780	3.02	1908	3.78	2035	4.55	2161	5.33	2285	6.14	2405	6.98	2520	7.85	2630	8.77	2735	9.72
5000	2616	1711	2.54	1833	3.28	1956	4.07	2078	4.86	2199	5.68	2319	6.50	2436	7.36	2550	8.25	2658	9.17	2762	10.13
5400	2825	1830	3.08	1941	3.86	2055	4.69	2168	5.55	2281	6.41	2392	7.29	2503	8.19	2612	9.10	2717	10.05	2819	11.03
5800	3035	1950	3.69	2053	4.52	2158	5.40	2263	6.30	2369	7.23	2473	8.15	2576	9.10	2679	10.06	2781	11.04		
6200	3244	2071	4.39	2166	5.26	2264	6.18	2362	7.14	2461	8.12	2558	9.10	2656	10.10	2752	11.10	2848	12.12		
6600	3453	2193	5.19	2281	6.09	2372	7.05	2465	8.06	2557	9.10	2649	10.13	2741	11.18	2832	12.24				
7000	3663	2315	6.07	2398	7.01	2483	8.02	2570	9.07	2657	10.16	2743	11.25	2830	12.35						
7500	3924	2469	7.32	2546	8.32	2624	9.37	2705	10.48	2785	11.62										
8000	4186	2624	8.74	2695	9.79	2768	10.90	2842	12.05												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
2000 SISW

Design 8320 Centrifugal BI Plug Fan

Wheel Diameter = 20.00 in.
Outlet Area = 2.29 sq. ft. inside
Maximum BHP = .863 x (RPM/1000)^3
Tip Speed, fpm = 5.24 x RPM

Max RPM 2600

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2200	958	835	0.46	1088	0.91																
2400	1046	860	0.52	1104	0.98																
2600	1133	887	0.58	1123	1.06																
2800	1220	917	0.65	1144	1.15	1340	1.73														
3000	1307	949	0.73	1167	1.24	1357	1.84														
3200	1394	984	0.82	1190	1.35	1377	1.96	1544	2.64												
3400	1481	1020	0.91	1216	1.47	1397	2.08	1560	2.78												
3600	1568	1057	1.01	1243	1.60	1420	2.23	1579	2.93	1727	3.70										
3800	1656	1095	1.12	1272	1.73	1443	2.38	1599	3.10	1743	3.88	1880	4.72								
4000	1743	1134	1.24	1303	1.88	1468	2.55	1621	3.27	1762	4.07	1895	4.92								
4200	1830	1174	1.36	1335	2.03	1493	2.73	1643	3.47	1782	4.27	1912	5.14	2037	6.06						
4400	1917	1215	1.50	1369	2.20	1520	2.92	1667	3.68	1803	4.49	1931	5.36	2053	6.30	2169	7.27				
4600	2004	1256	1.65	1403	2.37	1549	3.12	1691	3.90	1825	4.72	1951	5.61	2070	6.55	2184	7.54	2296	8.58		
4800	2091	1299	1.81	1439	2.56	1579	3.33	1716	4.13	1848	4.97	1972	5.87	2089	6.82	2201	7.82	2311	8.88		
5000	2178	1341	1.99	1476	2.76	1610	3.56	1743	4.38	1872	5.24	1994	6.15	2109	7.11	2220	8.13	2326	9.18	2429	10.28
5400	2353	1428	2.37	1552	3.19	1677	4.05	1800	4.92	1922	5.82	2041	6.76	2153	7.74	2260	8.77	2362	9.85	2462	10.98
5800	2527	1516	2.81	1631	3.67	1748	4.59	1862	5.51	1977	6.46	2089	7.43	2199	8.44	2303	9.50	2404	10.60	2500	11.75
6200	2701	1605	3.31	1712	4.21	1821	5.18	1929	6.16	2036	7.16	2143	8.19	2247	9.23	2349	10.31	2447	11.42	2541	12.59
6600	2875	1696	3.87	1796	4.81	1897	5.83	1999	6.87	2100	7.93	2200	9.00	2299	10.08	2398	11.20	2493	12.34	2585	13.53
7000	3050	1787	4.49	1880	5.49	1976	6.54	2072	7.64	2167	8.75	2262	9.87	2356	11.01	2449	12.16	2542	13.35		
7500	3268	1902	5.38	1988	6.42	2077	7.53	2166	8.70	2255	9.88	2344	11.06	2432	12.27	2519	13.49				
8000	3485	2018	6.38	2098	7.47	2180	8.64	2263	9.86	2347	11.11	2430	12.36	2513	13.63	2595	14.92				
8500	3703	2134	7.51	2209	8.65	2286	9.87	2364	11.14	2442	12.46	2521	13.78	2598	15.12						
9000	3921	2251	8.77	2321	9.97	2393	11.23	2466	12.56	2540	13.93										
9500	4139	2369	10.18	2435	11.43	2502	12.75	2571	14.12												

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 22.25 in.
Outlet Area = 2.85 sq. ft. inside
Maximum BHP = 1.48 x (RPM/1000)^3
Tip Speed, fpm = 5.83 x RPM

Size
2225 SISW

Max RPM 2347

Design 8320 Centrifugal BI Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2800	986		757	0.59	982	1.16																
3000	1056		776	0.65	994	1.23																
3200	1126		795	0.72	1008	1.31																
3400	1197		817	0.78	1023	1.39	1201	2.11														
3600	1267		840	0.86	1039	1.48	1213	2.21														
3800	1338		864	0.94	1056	1.58	1226	2.32	1379	3.16												
4000	1408		889	1.03	1074	1.69	1240	2.44	1390	3.29												
4200	1478		915	1.12	1092	1.81	1255	2.57	1402	3.43												
4400	1549		942	1.22	1111	1.94	1271	2.71	1415	3.58	1549	4.54										
4600	1619		970	1.33	1132	2.07	1288	2.86	1430	3.75	1561	4.71										
4800	1690		998	1.44	1154	2.21	1305	3.03	1445	3.92	1573	4.89	1695	5.94								
5200	1830		1056	1.69	1200	2.52	1342	3.38	1477	4.29	1602	5.29	1719	6.36	1831	7.50						
5600	1971		1115	1.97	1250	2.85	1382	3.77	1511	4.72	1634	5.74	1747	6.83	1854	7.98	1959	9.22				
6000	2112		1176	2.29	1302	3.23	1426	4.19	1549	5.19	1666	6.23	1777	7.34	1883	8.53	1982	9.77	2080	11.07	2175	12.43
6500	2288		1254	2.75	1370	3.74	1485	4.78	1598	5.84	1711	6.93	1818	8.07	1920	9.28	2018	10.55	2111	11.88	2201	13.26
7000	2464		1334	3.27	1440	4.32	1548	5.43	1654	6.55	1759	7.71	1862	8.89	1961	10.12	2056	11.42	2146	12.77	2234	14.18
7500	2640		1415	3.87	1513	4.97	1613	6.15	1713	7.34	1811	8.55	1909	9.79	2004	11.07	2097	12.39	2186	13.78	2271	15.21
8000	2816		1497	4.54	1588	5.70	1682	6.93	1775	8.20	1868	9.48	1959	10.78	2051	12.11	2140	13.47	2226	14.87	2310	16.34
8500	2992		1579	5.30	1665	6.51	1752	7.80	1840	9.13	1928	10.48	2015	11.85	2100	13.24	2186	14.66	2270	16.09		
9000	3168		1662	6.14	1743	7.40	1825	8.75	1908	10.15	1990	11.57	2073	13.01	2154	14.45	2235	15.93	2316	17.43		
9500	3344		1746	7.08	1822	8.39	1899	9.79	1978	11.25	2056	12.74	2134	14.25	2211	15.75	2288	17.29				
10000	3520		1830	8.11	1902	9.47	1975	10.92	2049	12.45	2123	14.00	2197	15.58	2271	17.15	2344	18.75				
10500	3696		1915	9.25	1982	10.66	2052	12.17	2122	13.73	2193	15.37	2263	17.00	2333	18.65						
11000	3872		2000	10.49	2064	11.96	2129	13.51	2196	15.14	2263	16.81	2330	18.53								
12000	4224		2171	13.33	2229	14.90	2288	16.56														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 24.50 in.
Outlet Area = 3.45 sq. ft. inside
Maximum BHP = 2.24 x (RPM/1000)^3
Tip Speed, fpm = 6.41 x RPM

Size
2450 SISW

Max RPM 2208

Design 8320 Centrifugal BI Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	870		669	0.61																		
3500	1015		708	0.74	897	1.39																
4000	1160		750	0.90	928	1.60																
4500	1305		792	1.10	965	1.84	1110	2.67														
5000	1450		842	1.32	1005	2.12	1143	3.01	1271	3.95												
5500	1595		898	1.58	1047	2.44	1180	3.37	1301	4.38	1415	5.43										
6000	1740		955	1.88	1088	2.80	1219	3.78	1335	4.84	1443	5.94	1548	7.10								
6500	1885		1015	2.23	1133	3.21	1261	4.24	1373	5.34	1477	6.51	1576	7.71	1672	8.97						
7000	2030		1075	2.62	1183	3.66	1303	4.75	1413	5.90	1513	7.11	1609	8.38	1700	9.68	1789	11.03				
7500	2175		1137	3.06	1237	4.17	1345	5.31	1455	6.51	1553	7.77	1645	9.09	1732	10.45	1818	11.85	1901	13.29		
8000	2320		1199	3.56	1294	4.72	1390	5.94	1497	7.18	1593	8.49	1683	9.85	1768	11.28	1850	12.72	1929	14.20	2008	15.73
8500	2465		1262	4.12	1352	5.34	1440	6.62	1539	7.92	1635	9.27	1723	10.68	1806	12.15	1885	13.66	1962	15.19	2037	16.76
9000	2610		1326	4.73	1411	6.02	1494	7.35	1582	8.73	1677	10.12	1764	11.58	1845	13.09	1923	14.66	1997	16.25	2069	17.87
9500	2755		1391	5.42	1471	6.76	1550	8.16	1629	9.60	1719	11.05	1807	12.55	1886	14.10	1962	15.72	2034	17.36	2105	19.04
10000	2900		1455	6.17	1532	7.58	1607	9.03	1681	10.53	1762	12.05	1849	13.60	1927	15.19	2002	16.85	2073	18.54	2142	20.28
10500	3045		1520	6.99	1593	8.46	1665	9.98	1735	11.53	1809	13.12	1890	14.73	1970	16.36	2044	18.06	2114	19.80	2181	21.58
11000	3190		1586	7.88	1655	9.42	1724	11.00	1792	12.62	1859	14.26	1933	15.94	2011	17.62	2086	19.37	2155	21.14		
11500	3335		1652	8.86	1718	10.47	1784	12.10	1848	13.77	1913	15.49	1980	17.22	2053	18.97	2128	20.75	2197	22.57		
12000	3480		1718	9.93	1782	11.58	1844	13.28	1907	15.02	1968	16.79	2030	18.59	2097	20.41	2169	22.24				
12500	3625		1784	11.07	1845	12.79	1906	14.56	1965	16.35	2024	18.18	2083	20.05	2145	21.93						
13000	3771		1850	12.31	1909	14.09	1967	15.91	2025	17.78	2082	19.66	2138	21.58	2195	23.52						
13500	3916		1917	13.64	1974	15.50	2030	17.37	2085	19.28	2140	21.24	2194	23.22								
14000	4061		1983	15.07	2039	16.98	2093	18.93	2146	20.90	2199	22.90										
14500	4206		2050	16.60	2104	18.57	2156	20.58	2207	22.63												
15000	4351		2117	18.23	2169	20.26																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
2700 SISW

Wheel Diameter = 27.00 in.
Outlet Area = 4.19 sq. ft. inside
Maximum BHP = 3.64 x (RPM/1000)^3
Tip Speed, fpm = 7.07 x RPM

Design 8320 Centrifugal BI Plug Fan

Max RPM 2003

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	955	627	0.83																		
4500	1075	658	0.97	825	1.79																
5000	1194	689	1.15	849	2.01	990	2.97														
5500	1313	721	1.34	877	2.26	1009	3.27														
6000	1433	758	1.57	907	2.53	1033	3.60	1150	4.74												
6500	1552	799	1.82	938	2.84	1060	3.96	1171	5.15	1278	6.43										
7000	1672	842	2.11	970	3.18	1089	4.35	1196	5.61	1297	6.91										
7500	1791	885	2.43	1001	3.57	1120	4.78	1223	6.08	1320	7.46	1413	8.88								
8000	1911	930	2.79	1035	3.99	1151	5.25	1252	6.60	1346	8.02	1435	9.50	1522	11.04						
8500	2030	975	3.18	1073	4.45	1183	5.76	1282	7.16	1373	8.63	1460	10.17	1543	11.76	1624	13.39				
9000	2149	1021	3.62	1114	4.95	1214	6.33	1313	7.77	1402	9.29	1486	10.89	1566	12.52	1645	14.21	1721	15.94		
9500	2269	1068	4.10	1156	5.49	1246	6.94	1345	8.42	1433	9.99	1515	11.64	1592	13.32	1668	15.07	1741	16.85	1813	18.68
10000	2388	1115	4.64	1198	6.08	1282	7.59	1376	9.13	1464	10.75	1544	12.43	1620	14.17	1693	15.98	1764	17.81	1834	19.68
10500	2508	1162	5.21	1242	6.72	1321	8.29	1407	9.90	1495	11.55	1574	13.29	1648	15.07	1720	16.93	1790	18.83	1857	20.75
11000	2627	1210	5.84	1286	7.41	1361	9.04	1440	10.72	1526	12.42	1605	14.20	1678	16.03	1749	17.94	1816	19.89	1882	21.87
11500	2746	1258	6.53	1331	8.16	1403	9.85	1476	11.59	1557	13.35	1637	15.17	1709	17.05	1778	19.01	1844	20.99	1908	23.03
12000	2866	1307	7.26	1377	8.96	1445	10.71	1514	12.51	1589	14.34	1668	16.20	1740	18.13	1808	20.12	1873	22.16	1935	24.25
12500	2985	1355	8.06	1422	9.82	1489	11.64	1554	13.49	1623	15.38	1699	17.30	1772	19.28	1839	21.30	1902	23.39	1964	25.53
13000	3105	1404	8.92	1469	10.74	1532	12.61	1595	14.53	1659	16.50	1730	18.47	1803	20.49	1870	22.56	1933	24.70	1994	26.89
13500	3224	1453	9.84	1515	11.72	1577	13.66	1638	15.64	1698	17.66	1764	19.71	1834	21.77	1901	23.89	1964	26.08		
14000	3343	1502	10.83	1562	12.78	1622	14.77	1680	16.81	1738	18.89	1799	21.01	1865	23.13	1933	25.30	1995	27.51		
15000	3582	1601	13.02	1657	15.08	1713	17.21	1767	19.36	1822	21.57	1876	23.81	1933	26.06	1995	28.34				
16000	3821	1700	15.50	1753	17.70	1805	19.93	1856	22.22	1907	24.54	1958	26.89								
17000	4060	1799	18.29	1850	20.62	1899	22.98	1947	25.37	1995	27.81										
18000	4299	1899	21.42	1947	23.86	1993	26.34														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
3000 SISW

Wheel Diameter = 30.00 in.
Outlet Area = 5.17 sq. ft. inside
Maximum BHP = 6.12 x (RPM/1000)^3
Tip Speed, fpm = 7.85 x RPM

Design 8320 Centrifugal BI Plug Fan

Max RPM 1802

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000	967	567	1.04																		
5500	1064	590	1.18	741	2.18																
6000	1161	612	1.35	758	2.40																
6500	1257	635	1.54	777	2.64	900	3.86														
7000	1354	660	1.75	798	2.90	915	4.17														
7500	1451	688	1.98	821	3.18	934	4.51	1038	5.93												
8000	1548	718	2.24	843	3.49	953	4.87	1053	6.34	1150	7.91										
8500	1644	749	2.52	866	3.83	974	5.25	1071	6.78	1163	8.39										
9000	1741	780	2.83	889	4.20	996	5.67	1091	7.26	1179	8.91	1264	10.65								
9500	1838	812	3.17	913	4.60	1019	6.12	1111	7.76	1197	9.47	1279	11.25	1360	13.14						
10000	1934	845	3.53	938	5.03	1042	6.60	1132	8.29	1216	10.05	1296	11.89	1373	13.80						
10500	2031	878	3.93	966	5.50	1065	7.12	1154	8.85	1236	10.67	1314	12.57	1389	14.52	1462	16.54				
11000	2128	912	4.37	996	5.99	1087	7.68	1177	9.45	1257	11.32	1333	13.27	1406	15.29	1476	17.34	1546	19.48		
12000	2321	980	5.35	1057	7.09	1135	8.91	1223	10.77	1301	12.73	1374	14.78	1444	16.92	1511	19.08	1576	21.31	1640	23.60
13000	2515	1049	6.48	1120	8.34	1191	10.29	1268	12.28	1347	14.33	1418	16.47	1485	18.68	1550	20.97	1612	23.33	1672	25.70
14000	2708	1118	7.78	1185	9.77	1250	11.83	1318	13.95	1393	16.10	1464	18.32	1529	20.65	1591	23.02	1651	25.46	1709	27.96
15000	2902	1189	9.25	1251	11.37	1312	13.55	1373	15.80	1439	18.09	1510	20.41	1574	22.79	1635	25.28	1694	27.82	1750	30.42
16000	3095	1260	10.92	1318	13.16	1376	15.47	1433	17.83	1491	20.26	1555	22.69	1620	25.17	1680	27.72	1737	30.36	1792	33.06
17000	3288	1331	12.80	1387	15.17	1441	17.60	1494	20.07	1548	22.63	1604	25.18	1666	27.79	1726	30.41	1783	33.13		
18000	3482	1403	14.91	1455	17.39	1507	19.93	1558	22.54	1608	25.19	1658	27.89	1713	30.63	1772	33.37				
19000	3675	1475	17.22	1525	19.83	1574	22.52	1622	25.23	1669	28.00	1717	30.83	1765	33.70						
20000	3869	1548	19.79	1595	22.54	1641	25.32	1687	28.17	1732	31.08	1777	34.01								
21000	4062	1620	22.62	1666	25.49	1710	28.41	1753	31.36	1796	34.37										
22000	4256	1693	25.72	1736	28.70	1778	31.75														
23000	4449	1766	29.10																		

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 33.00 in.
Outlet Area = 6.26 sq. ft. inside
Maximum BHP = 10.2 x (RPM/1000)^3
Tip Speed, fpm = 8.64 x RPM

Size
3300 SISW

Max RPM 1624

Design 8320 Centrifugal BI Plug Fan

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	959	506	1.23																		
6500	1038	522	1.37	666	2.60																
7000	1118	539	1.53	676	2.79																
7500	1198	556	1.71	688	3.01																
8000	1278	575	1.91	701	3.23	816	4.79														
9000	1438	616	2.36	731	3.76	838	5.39	937	7.19												
10000	1598	660	2.89	765	4.39	864	6.09	958	7.97	1046	9.98										
11000	1757	708	3.53	801	5.13	894	6.89	982	8.84	1066	10.94	1146	13.16								
12000	1917	756	4.27	840	5.98	927	7.81	1010	9.82	1090	12.00	1166	14.31	1239	16.72						
13000	2077	806	5.12	882	6.93	963	8.87	1042	10.93	1117	13.19	1190	15.58	1259	18.06	1327	20.68				
14000	2237	856	6.09	927	8.00	1000	10.06	1075	12.20	1147	14.50	1216	16.95	1283	19.55	1348	22.22	1411	25.00		
15000	2397	907	7.18	973	9.22	1041	11.38	1111	13.62	1179	15.98	1245	18.49	1309	21.14	1372	23.93	1433	26.77	1492	29.71
16000	2556	958	8.40	1021	10.59	1083	12.83	1148	15.19	1213	17.62	1277	20.18	1338	22.90	1398	25.73	1457	28.69	1514	31.74
17000	2716	1009	9.75	1070	12.11	1128	14.44	1188	16.91	1249	19.44	1310	22.07	1369	24.84	1427	27.73	1483	30.74	1538	33.86
18000	2876	1061	11.26	1120	13.78	1174	16.21	1229	18.79	1287	21.44	1345	24.14	1402	26.96	1457	29.92	1511	32.98	1564	36.16
19000	3036	1113	12.92	1170	15.63	1221	18.18	1273	20.83	1327	23.60	1382	26.41	1436	29.29	1490	32.31	1542	35.42	1593	38.66
20000	3195	1165	14.74	1220	17.63	1270	20.32	1318	23.05	1368	25.93	1420	28.86	1472	31.83	1524	34.91	1574	38.08	1623	41.36
21000	3355	1218	16.75	1271	19.80	1319	22.67	1365	25.47	1412	28.44	1460	31.49	1509	34.58	1559	37.73	1608	40.95		
22000	3515	1271	18.94	1322	22.17	1368	25.18	1412	28.13	1456	31.13	1502	34.30	1549	37.54	1596	40.76				
23000	3675	1324	21.34	1373	24.70	1418	27.90	1461	30.96	1502	34.08	1545	37.33	1589	40.66						
24000	3834	1377	23.91	1424	27.44	1469	30.85	1510	34.05	1549	37.24	1590	40.54								
25000	3994	1430	26.71	1476	30.40	1519	33.94	1559	37.34	1597	40.66										
26000	4154	1484	29.72	1528	33.59	1570	37.29	1609	40.84												
27000	4314	1537	32.97	1580	36.97	1621	40.90														
28000	4473	1591	36.45																		

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 36.50 in.
Outlet Area = 7.65 sq. ft. inside
Maximum BHP = 16.9 x (RPM/1000)^3
Tip Speed, fpm = 9.56 x RPM

Size
3650 SISW

Max RPM 1467

Design 8320 Centrifugal BI Plug Fan

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1045	473	1.69	603	3.20																
9000	1175	498	2.02	619	3.60																
10000	1306	526	2.42	639	4.06	740	5.98														
11000	1437	557	2.88	661	4.60	757	6.59	847	8.79												
12000	1567	589	3.40	685	5.21	776	7.27	862	9.55												
13000	1698	624	4.01	712	5.92	798	8.04	880	10.41	956	12.93										
14000	1828	659	4.70	739	6.72	821	8.90	899	11.33	973	13.94	1044	16.70								
15000	1959	695	5.49	769	7.60	847	9.88	921	12.36	992	15.05	1059	17.89	1125	20.88						
16000	2090	732	6.35	801	8.57	873	10.95	944	13.49	1012	16.25	1077	19.18	1140	22.23	1202	25.45				
17000	2220	769	7.33	834	9.65	901	12.15	969	14.75	1034	17.56	1097	20.55	1158	23.71	1217	26.98	1274	30.39		
18000	2351	807	8.38	868	10.84	930	13.44	995	16.14	1057	19.00	1118	22.06	1177	25.30	1234	28.64	1289	32.11	1344	35.70
19000	2481	844	9.56	903	12.15	961	14.84	1022	17.66	1082	20.58	1141	23.70	1197	26.98	1253	30.42	1306	33.96	1359	37.62
20000	2612	882	10.83	939	13.58	993	16.37	1050	19.30	1108	22.31	1165	25.48	1219	28.81	1273	32.32	1325	35.94	1376	39.68
21000	2743	920	12.22	975	15.15	1026	18.01	1080	21.06	1135	24.17	1190	27.41	1243	30.79	1294	34.36	1345	38.05	1394	41.87
22000	2873	958	13.74	1012	16.83	1061	19.80	1111	22.94	1163	26.18	1215	29.49	1267	32.94	1317	36.55	1366	40.30	1414	44.19
23000	3004	997	15.39	1049	18.65	1096	21.74	1143	24.97	1192	28.33	1242	31.73	1292	35.25	1341	38.91	1388	42.71	1435	46.66
24000	3134	1035	17.16	1086	20.62	1131	23.83	1176	27.12	1223	30.62	1270	34.13	1318	37.74	1366	41.43	1412	45.29	1457	49.30
25000	3265	1074	19.07	1123	22.69	1167	26.07	1210	29.46	1254	33.02	1300	36.70	1345	40.37	1391	44.15	1436	48.07		
26000	3395	1113	21.14	1161	24.93	1204	28.50	1245	31.95	1286	35.60	1330	39.38	1373	43.18	1418	47.05	1462	51.04		
27000	3526	1152	23.37	1198	27.34	1240	31.02	1280	34.65	1320	38.33	1361	42.21	1403	46.18	1445	50.15				
28000	3657	1191	25.76	1236	29.86	1277	33.74	1316	37.48	1354	41.27	1393	45.23	1433	49.29						
29000	3787	1231	28.30	1274	32.55	1315	36.66	1352	40.51	1388	44.38	1425	48.40	1463	52.58						
30000	3918	1270	31.01	1312	35.42	1352	39.68	1388	43.75	1423	47.71	1459	51.79								
32000	4179	1349	36.97	1389	41.74	1426	46.30	1462	50.66												
34000	4440	1428	43.68	1466	48.72																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
4025 SISW

Design 8320 Centrifugal BI Plug Fan

Wheel Diameter = 40.25 in.
Outlet Area = 9.31 sq. ft. inside
Maximum BHP = 27.5 x (RPM/1000)^3
Tip Speed, fpm = 10.5 x RPM

Max RPM 1331

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1074	434	2.14	549	3.99																
11000	1181	453	2.48	562	4.40																
12000	1289	474	2.88	577	4.86	670	7.18														
13000	1396	496	3.32	593	5.38	682	7.78														
14000	1504	520	3.82	610	5.96	695	8.43	774	11.15												
15000	1611	545	4.37	629	6.62	711	9.15	787	11.96	859	14.96										
16000	1718	570	5.00	649	7.35	727	9.93	800	12.82	870	15.92										
17000	1826	597	5.70	670	8.15	745	10.80	815	13.75	882	16.93	946	20.29								
18000	1933	624	6.47	692	9.02	763	11.76	831	14.77	896	18.02	958	21.46	1018	25.07						
19000	2041	651	7.32	715	9.97	783	12.81	848	15.88	910	19.19	971	22.72	1029	26.42	1085	30.24				
20000	2148	679	8.24	739	11.00	803	13.96	866	17.08	926	20.45	985	24.06	1041	27.84	1095	31.74	1149	35.82		
21000	2255	707	9.24	764	12.11	824	15.18	885	18.39	943	21.81	1000	25.48	1055	29.34	1107	33.34	1159	37.47	1209	41.78
22000	2363	735	10.32	790	13.32	846	16.50	904	19.80	961	23.28	1016	27.01	1069	30.94	1120	35.02	1171	39.24	1219	43.61
23000	2470	763	11.50	816	14.63	869	17.90	924	21.31	979	24.86	1033	28.64	1084	32.63	1134	36.79	1183	41.10	1231	45.55
24000	2577	791	12.75	843	16.04	893	19.40	945	22.93	998	26.55	1050	30.38	1101	34.45	1149	38.66	1197	43.06	1244	47.61
25000	2685	819	14.10	870	17.56	917	20.99	967	24.65	1018	28.38	1069	32.26	1118	36.37	1165	40.65	1211	45.13	1257	49.77
26000	2792	848	15.55	897	19.19	943	22.71	990	26.48	1039	30.32	1088	34.27	1135	38.41	1181	42.76	1227	47.32	1271	52.00
27000	2900	876	17.11	924	20.90	968	24.54	1013	28.38	1060	32.36	1107	36.41	1153	40.60	1199	45.02	1243	49.60	1286	54.34
28000	3007	905	18.77	952	22.74	994	26.50	1037	30.43	1082	34.52	1127	38.66	1172	42.94	1217	47.39	1259	52.01	1302	56.82
30000	3222	962	22.41	1007	26.74	1048	30.78	1087	34.87	1128	39.16	1170	43.58	1212	48.00	1254	52.58	1295	57.35		
32000	3437	1020	26.54	1063	31.21	1102	35.60	1139	39.86	1176	44.31	1214	48.97	1254	53.63	1293	58.36				
34000	3651	1079	31.21	1120	36.19	1157	40.90	1192	45.43	1226	50.04	1262	54.85	1298	59.78						
36000	3866	1138	36.38	1176	41.67	1212	46.78	1246	51.61	1278	56.38	1311	61.31								
38000	4081	1196	42.12	1233	47.76	1268	53.16	1300	58.32												
40000	4296	1255	48.48	1291	54.42	1324	60.22														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Size
4450 SISW

Design 8320 Centrifugal BI Plug Fan

Wheel Diameter = 44.50 in.
Outlet Area = 11.37 sq. ft. inside
Maximum BHP = 45.1 x (RPM/1000)^3
Tip Speed, fpm = 11.7 x RPM

Max RPM 1201

Volume	O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM	FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11000	967	377	2.22																		
12000	1055	391	2.51	493	4.61																
13000	1143	405	2.84	504	5.03																
14000	1231	420	3.24	515	5.47	597	8.05														
15000	1319	436	3.68	526	5.97	607	8.65														
16000	1407	453	4.15	539	6.51	617	9.28	688	12.26												
17000	1495	470	4.63	552	7.11	628	9.94	697	13.03												
18000	1583	488	5.15	567	7.77	640	10.66	707	13.86	770	17.22										
19000	1671	506	5.70	581	8.50	652	11.45	718	14.73	779	18.19										
20000	1759	525	6.32	597	9.31	665	12.31	729	15.65	789	19.22	845	22.93								
21000	1847	544	6.97	613	10.19	679	13.22	741	16.63	800	20.30	855	24.12	908	28.11						
22000	1935	564	7.69	629	11.11	693	14.20	753	17.68	811	21.42	865	25.36	917	29.44						
24000	2111	603	9.30	663	13.04	723	16.46	780	20.01	834	23.87	886	27.99	936	32.30	983	36.66	1030	41.20		
26000	2287	644	11.14	699	15.14	754	19.09	808	22.68	860	26.69	910	30.91	958	35.36	1004	40.02	1048	44.72	1091	49.53
28000	2463	685	13.26	737	17.49	788	21.91	838	25.79	888	29.81	935	34.18	981	38.76	1026	43.54	1069	48.50	1110	53.54
30000	2638	727	15.67	775	20.12	823	24.85	870	29.31	917	33.39	962	37.85	1006	42.53	1049	47.45	1091	52.56	1131	57.82
32000	2814	769	18.40	814	23.07	859	28.04	904	33.06	948	37.49	991	41.91	1033	46.74	1074	51.75	1114	56.96	1153	62.39
34000	2990	811	21.44	854	26.37	896	31.54	938	36.92	980	41.97	1021	46.54	1062	51.37	1101	56.51	1139	61.84	1177	67.33
36000	3166	854	24.85	894	29.98	934	35.39	974	41.02	1013	46.69	1052	51.68	1091	56.55	1129	61.71	1166	67.18		
38000	3342	898	28.63	935	34.00	973	39.64	1010	45.48	1048	51.51	1085	57.15	1122	62.36	1158	67.50	1194	72.99		
40000	3518	941	32.82	976	38.38	1012	44.25	1048	50.36	1083	56.59	1119	62.86	1154	68.64	1189	73.96				
42000	3694	984	37.40	1018	43.19	1052	49.32	1086	55.59	1120	62.10	1154	68.78	1187	75.11						
44000	3870	1028	42.42	1060	48.45	1093	54.75	1125	61.32	1157	68.02	1189	74.89								
46000	4046	1072	47.90	1103	54.15	1133	60.69	1164	67.44	1195	74.38										
48000	4222	1116	53.87	1145	60.32	1175	67.10														

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 49.00 in.
Outlet Area = 13.78 sq. ft. inside
Maximum BHP = 73.1 x (RPM/1000)^3
Tip Speed, fpm = 12.8 x RPM

Size
4900 SISW

Max RPM 1090

Design 8320 Centrifugal BI Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13000		943	339	2.60																		
14000		1016	349	2.88	444	5.37																
15000		1088	359	3.19	451	5.78																
16000		1161	370	3.54	459	6.20																
17000		1233	382	3.93	468	6.65	543	9.77														
18000		1306	394	4.37	476	7.14	550	10.36														
19000		1378	406	4.83	486	7.67	557	10.99	623	14.57												
20000		1451	419	5.31	496	8.25	566	11.65	629	15.32												
22000		1596	445	6.34	517	9.54	583	13.07	644	16.97	700	21.04										
24000		1741	473	7.50	539	11.08	602	14.69	660	18.73	715	23.05	766	27.52								
26000		1886	502	8.84	563	12.86	622	16.54	678	20.70	731	25.23	781	29.93	827	34.75						
28000		2031	531	10.35	588	14.73	644	18.66	697	22.95	748	27.54	796	32.46	842	37.57	886	42.73				
30000		2176	561	12.07	614	16.72	667	21.11	718	25.41	766	30.18	813	35.22	857	40.50	900	45.97	941	51.49		
32000		2321	592	13.99	642	18.88	691	23.80	739	28.19	786	33.05	830	38.20	874	43.66	915	49.31	955	55.11	994	61.02
34000		2466	623	16.14	670	21.27	716	26.63	762	31.35	807	36.23	850	41.53	891	47.09	932	52.89	971	58.90	1009	65.02
36000		2611	654	18.52	698	23.88	742	29.58	786	34.84	828	39.77	870	45.17	910	50.84	949	56.77	987	62.92	1024	69.27
38000		2756	686	21.17	727	26.76	769	32.67	810	38.52	851	43.74	891	49.13	930	54.93	968	61.00	1005	67.24	1041	73.74
40000		2901	717	24.08	757	29.89	797	36.03	836	42.34	875	48.07	913	53.51	951	59.35	988	65.57	1023	71.94	1058	78.53
42000		3047	749	27.27	787	33.32	825	39.70	862	46.33	899	52.64	936	58.38	972	64.19	1008	70.50	1043	77.02	1076	83.72
44000		3192	782	30.76	817	37.02	853	43.62	889	50.50	925	57.41	960	63.61	995	69.53	1029	75.81	1063	82.45		
46000		3337	814	34.57	848	41.07	882	47.91	917	54.97	951	62.26	984	69.09	1018	75.39	1051	81.61	1084	88.27		
48000		3482	846	38.71	879	45.41	912	52.45	945	59.80	977	67.31	1010	74.83	1042	81.58	1074	87.98				
52000		3772	912	47.98	942	55.12	972	62.65	1002	70.42	1032	78.39	1062	86.60								
56000		4062	977	58.73	1005	66.33	1033	74.29	1061	82.50	1089	90.93										
60000		4352	1043	71.08	1069	79.09																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Wheel Diameter = 54.25 in.
Outlet Area = 16.91 sq. ft. inside
Maximum BHP = 122 x (RPM/1000)^3
Tip Speed, fpm = 14.2 x RPM

Size
5425 SISW

Max RPM 986

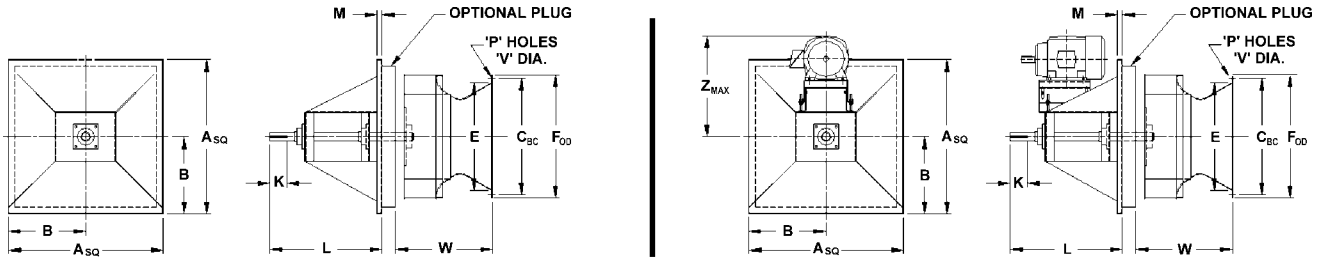
Design 8320 Centrifugal BI Plug Fan

Volume		O.Vel	1"SP		2"SP		3"SP		4"SP		5"SP		6"SP		7"SP		8"SP		9"SP		10"SP	
CFM		FPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000		1065	322	3.8	406	6.9																
20000		1184	338	4.5	417	7.8																
22000		1302	355	5.3	430	8.7	496	12.7														
24000		1420	373	6.3	444	9.8	508	13.9	565	18.4												
26000		1539	393	7.3	459	11.0	520	15.3	576	20.0	628	24.9										
28000		1657	413	8.3	475	12.4	533	16.8	588	21.7	638	26.8										
30000		1775	434	9.6	492	14.1	548	18.5	600	23.5	649	28.9	695	34.4								
32000		1894	455	10.9	510	15.9	563	20.4	613	25.5	661	31.1	706	36.8	748	42.8						
34000		2012	476	12.4	528	17.8	579	22.5	627	27.7	673	33.4	717	39.4	759	45.6	798	51.9				
36000		2130	499	14.1	547	19.7	596	24.9	642	30.2	686	35.9	729	42.1	770	48.5	809	55.0	846	61.8		
38000		2249	521	15.9	567	21.8	613	27.5	658	32.8	701	38.7	742	45.0	782	51.6	820	58.4	856	65.3	892	72.4
40000		2367	543	18.0	588	24.0	631	30.2	674	35.7	716	41.7	756	48.1	794	54.8	832	61.8	867	69.0	902	76.3
42000		2485	566	20.1	608	26.5	650	33.1	691	39.0	731	45.0	770	51.5	807	58.3	844	65.5	879	72.8	913	80.4
44000		2604	589	22.5	629	29.1	669	36.1	708	42.5	747	48.5	785	55.1	821	62.1	857	69.3	891	76.9	924	84.6
46000		2722	613	25.2	651	31.9	689	39.1	727	46.1	764	52.4	800	59.0	836	66.1	870	73.5	904	81.1	936	89.1
48000		2841	636	28.0	672	35.0	709	42.4	745	50.0	781	56.7	816	63.2	851	70.5	884	77.9	917	85.7	949	93.7
50000		2959	659	31.0	694	38.3	729	45.9	764	53.8	799	61.2	833	67.9	866	75.0	899	82.7	931	90.6	962	98.7
52000		3077	683	34.3	717	41.8	750	49.6	784	57.8	817	65.7	850	72.9	882	80.0	914	87.7	946	95.8	976	104.1
54000		3196	707	37.8	739	45.5	771	53.6	804	62.0	836	70.5	868	78.1	899	85.4	930	93.1	960	101.3		
56000		3314	731	41.6	762	49.5	793	57.9	824	66.5	855	75.3	886	83.6	916	91.3	946	98.9	976	107.0		
58000		3432	754	45.7	784	53.8	814	62.3	845	71.2	874	80.4	904	89.3	934	97.3	963	105.1				
60000		3551	778	50.0	807	58.3	836	67.1	865	76.2	894	85.6	923	95.0	952	103.7	980	111.8				
65000		3847	839	62.0	865	70.9	892	80.3	919	90.0	945	99.9	972	110.0								
70000		4142	899	76.0	924	85.4	948	95.4	973	105.6												
75000		4438	960	92.0	983	102.0																

Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation type B-Free inlet, Ducted outlet.
† Belt Drive is not recommended above 3600 RPM

Arrangement 1 & 9

Size 1225 Through 5425
0" to 4" Gap



SIDE ELEVATION (DRIVE SIDE) FRONT ELEVATION SIDE ELEVATION (DRIVE SIDE) FRONT ELEVATION

ARRANGEMENT 1 **ARRANGEMENT 9**

DIMENSIONS - INCH

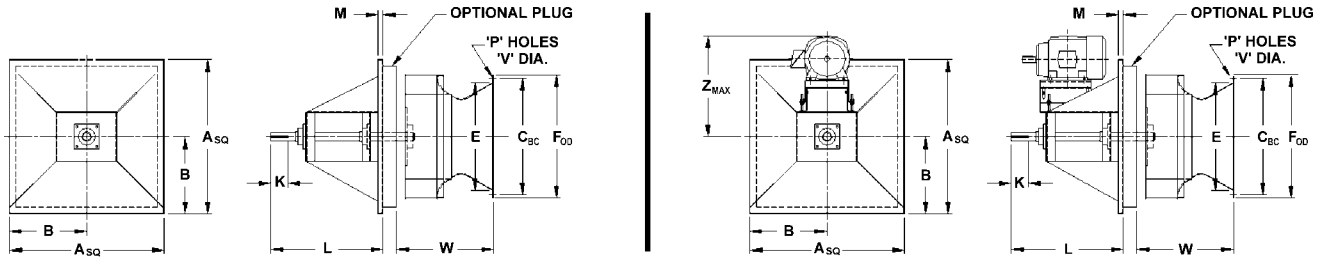
FAN SIZE	SHAFT		KEYWAY		A	B	C	E	F	K
	CLASS II	CLASS IIX	CLASS II	CLASS IIX						
1225	1-7/16	1-11/16	3/8 x 3/16	3/8 x 3/16	23	11-1/2	14-1/4	12-7/8	15-1/2	3
1350	1-7/16	1-11/16	3/8 x 3/16	3/8 x 3/16	23	11-1/2	15-1/2	14-1/8	16-3/4	3
1500	1-7/16	1-11/16	3/8 x 3/16	3/8 x 3/16	23	11-1/2	17	15-5/8	18-1/4	3
1650	1-7/16	1-11/16	3/8 x 3/16	3/8 x 3/16	23	11-1/2	18-1/2	17-1/8	19-3/4	3
1825	1-7/16	1-11/16	3/8 x 3/16	3/8 x 3/16	23	11-1/2	20-1/4	18-7/8	21-1/2	3
2000	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	22-1/2	20-5/8	24-1/4	4-1/2
2225	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	24-3/4	22-7/8	26-1/2	4-1/2
2450	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	27	25-1/8	28-3/4	4-1/2
2700	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	29-1/2	27-5/8	31-1/4	4-1/2
3000	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	33	30-5/8	35-1/4	5
3300	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	36	33-5/8	38-1/4	5
3650	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	39-1/2	37-1/8	41-3/4	5
4025	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	43-1/4	40-7/8	45-1/2	5
4450	2-7/16	2-11/16	5/8 x 5/16	5/8 x 5/16	60	30	47-1/2	45-1/8	49-3/4	5
4900	2-7/16	2-11/16	5/8 x 5/16	5/8 x 5/16	60	30	52	49-5/8	54-1/4	5
5425	2-11/16	2-15/16	5/8 x 5/16	3/4 x 3/8	60	30	57-3/8	55	59-5/8	5

FAN SIZE	L		M	P	V	W	Z	OPTIONAL		MAX MOTOR FRAME	
	CLASS II	CLASS IIX						PLUG SIZE	PLUG WIDTH	T-FRAME	U-FRAME
1225	21	21	1-1/2	8	3/4	9-13/16	24-1/4	19 SQ.	0"-4"	213	254
1350	21	21	1-1/2	8	3/4	10-13/16	24-1/4	19 SQ.	0"-4"	215	256
1500	21	21	1-1/2	8	3/4	12	24-1/4	19 SQ.	0"-4"	215	256
1650	21	21	1-1/2	8	3/4	13-3/16	24-1/4	19 SQ.	0"-4"	215	256
1825	21	21	1-1/2	8	3/4	14-9/16	24-1/4	19 SQ.	0"-4"	215	256
2000	29-1/2	29-1/2	2	8	3/4	16	31-1/8	28 SQ.	0"-4"	256	286
2225	29-1/2	29-1/2	2	16	3/4	17-13/16	31-1/8	28 SQ.	0"-4"	256	286
2450	29-1/2	29-1/2	2	16	3/4	19-1/2	31-1/8	28 SQ.	0"-4"	256	286
2700	29-1/2	29-1/2	2	16	3/4	21-1/2	31-1/8	28 SQ.	0"-4"	256	286
3000	33-1/4	33-1/4	2	16	3/4	23-7/8	34-1/8	42 SQ.	0"-4"	286	326
3300	33-1/4	33-1/4	2	16	3/4	26-1/4	34-1/8	42 SQ.	0"-4"	286	326
3650	33-1/4	33-1/4	2	16	3/4	29-1/8	34-1/8	42 SQ.	0"-4"	286	326
4025	33-1/4	33-1/4	2	16	1-1/16	32-1/8	34-1/8	42 SQ.	0"-4"	286	326
4450	33-3/4	33-3/4	2-1/2	16	1-1/16	35-7/16	34-1/8	56 SQ.	0"-4"	286	326
4900	33-3/4	33-3/4	2-1/2	24	1-1/16	39	34-1/8	56 SQ.	0"-4"	286	326
5425	33-3/4	33-3/4	2-1/2	24	1-1/16	43-1/4	34-1/8	56 SQ.	0"-4"	286	326

DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED.

Arrangement 1 & 9

Size 1225 Through 5425
5" to 6" Gap



SIDE ELEVATION (DRIVE SIDE) | FRONT ELEVATION | SIDE ELEVATION (DRIVE SIDE) | FRONT ELEVATION

ARRANGEMENT 1 | **ARRANGEMENT 9**

DIMENSIONS - INCH

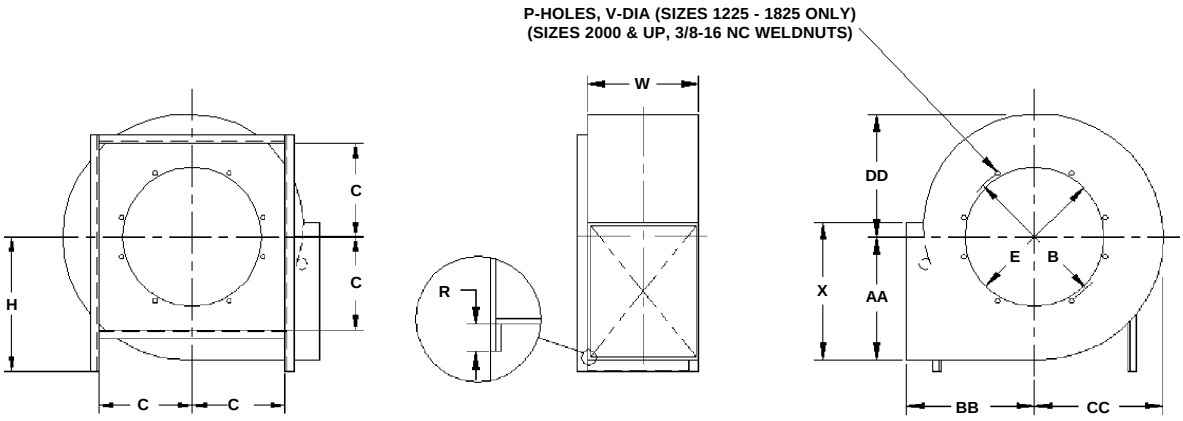
FAN SIZE	SHAFT		KEYWAY		A	B	C	E	F	K
	CLASS II	CLASS IIX	CLASS II	CLASS IIX						
1225	1-7/16	1-15/16	3/8 x 3/16	1/2 x 1/4	23	11-1/2	14-1/4	12-7/8	15-1/2	3
1350	1-7/16	1-15/16	3/8 x 3/16	1/2 x 1/4	23	11-1/2	15-1/2	14-1/8	16-3/4	3
1500	1-7/16	1-15/16	3/8 x 3/16	1/2 x 1/4	23	11-1/2	17	15-5/8	18-1/4	3
1650	1-7/16	1-15/16	3/8 x 3/16	1/2 x 1/4	23	11-1/2	18-1/2	17-1/8	19-3/4	3
1825	1-7/16	1-15/16	3/8 x 3/16	1/2 x 1/4	23	11-1/2	20-1/4	18-7/8	21-1/2	3
2000	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	22-1/2	20-5/8	24-1/4	4-1/2
2225	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	24-3/4	22-7/8	26-1/2	4-1/2
2450	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	27	25-1/8	28-3/4	4-1/2
2700	1-15/16	2-3/16	1/2 x 1/4	1/2 x 1/4	32	16	29-1/2	27-5/8	31-1/4	4-1/2
3000	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	33	30-5/8	35-1/4	5
3300	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	36	33-5/8	38-1/4	5
3650	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	39-1/2	37-1/8	41-3/4	5
4025	2-3/16	2-7/16	1/2 x 1/4	5/8 x 5/16	46	23	43-1/4	40-7/8	45-1/2	5
4450	2-7/16	2-11/16	5/8 x 5/16	5/8 x 5/16	60	30	47-1/2	45-1/8	49-3/4	5
4900	2-7/16	2-11/16	5/8 x 5/16	5/8 x 5/16	60	30	52	49-5/8	54-1/4	5
5425	2-11/16	2-15/16	5/8 x 5/16	3/4 x 3/8	60	30	57-3/8	55	59-5/8	5

FAN SIZE	L		M	P	V	W	Z	OPTIONAL		MAX MOTOR FRAME	
	CLASS II	CLASS IIX						PLUG SIZE	PLUG WIDTH	T-FRAME	U-FRAME
1225	21	26	1-1/2	8	3/4	9-13/16	24-1/4	19 SQ.	5"-6"	213	254
1350	21	26	1-1/2	8	3/4	10-13/16	24-1/4	19 SQ.	5"-6"	215	256
1500	21	26	1-1/2	8	3/4	12	24-1/4	19 SQ.	5"-6"	215	256
1650	21	26	1-1/2	8	3/4	13-3/16	24-1/4	19 SQ.	5"-6"	215	256
1825	21	26	1-1/2	8	3/4	14-9/16	24-1/4	19 SQ.	5"-6"	215	256
2000	29-1/2	29-1/2	2	8	3/4	16	31-1/8	28 SQ.	5"-6"	256	286
2225	29-1/2	29-1/2	2	16	3/4	17-13/16	31-1/8	28 SQ.	5"-6"	256	286
2450	29-1/2	29-1/2	2	16	3/4	19-1/2	31-1/8	28 SQ.	5"-6"	256	286
2700	29-1/2	29-1/2	2	16	3/4	21-1/2	31-1/8	28 SQ.	5"-6"	256	286
3000	33-1/4	33-3/4	2	16	3/4	23-7/8	34-1/8	42 SQ.	5"-6"	286	326
3300	33-1/4	33-3/4	2	16	3/4	26-1/4	34-1/8	42 SQ.	5"-6"	286	326
3650	33-1/4	33-3/4	2	16	3/4	29-1/8	34-1/8	42 SQ.	5"-6"	286	326
4025	33-1/4	33-1/4	2	16	1-1/16	32-1/8	34-1/8	42 SQ.	5"-6"	286	326
4450	33-3/4	33-3/4	2-1/2	16	1-1/16	35-7/16	34-1/8	56 SQ.	5"-6"	286	326
4900	33-3/4	33-3/4	2-1/2	24	1-1/16	39	34-1/8	56 SQ.	5"-6"	286	326
5425	33-3/4	33-3/4	2-1/2	24	1-1/16	43-1/4	34-1/8	56 SQ.	5"-6"	286	326

DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED.

Arrangement 1 & 9

Size 1225 Through 5425



Note: • Housing is suitable for universal discharge.
- Sizes 1225 - 3650 (no stiffeners) the housing can be used for CW or CCW fan (both side sheets have a wheel opening).
- Sizes 4025 - 5425 (C/W stiffeners) CW housing shown, CCW housing opposite.
- Support legs are for shipping purposes only. All fans are shipped in BH position. Support legs can be removed by customer if required.

DIMENSIONS - INCH

FAN SIZE	B	C	E	H	P	R	V	W	X	AA	BB	CC	DD
1225	14-1/4	N/A	12-7/8	N/A	8	7/16	.207	9-13/16	12-15/16	11-11/16	9-1/2	11-1/16	9-1/4
1350	15-1/2	N/A	14-1/8	N/A	8	7/16	.207	10-13/16	14-1/4	13	10-1/2	12-1/4	10-3/16
1500	17	N/A	15-5/8	N/A	8	7/16	.207	12	15-13/16	14-7/16	11-1/4	13-9/16	11-5/16
1650	18-1/2	N/A	17-1/8	N/A	8	7/16	.207	13-3/16	17-3/8	15-7/8	12-1/4	14-15/16	12-7/16
1825	20-1/4	N/A	18-7/8	N/A	8	7/16	.207	14-9/16	19-3/16	17-9/16	13-1/4	16-1/2	13-3/4
2000	22-1/2	N/A	20-5/8	N/A	8	N/A	N/A	16	21	19-1/4	15-1/2	18-1/16	15-1/16
2225	24-3/4	N/A	22-7/8	N/A	16	N/A	N/A	17-13/16	23-3/8	21-3/8	17-3/4	20-1/8	16-3/4
2450	27	N/A	25-1/8	N/A	16	N/A	N/A	19-1/2	25-3/4	23-9/16	19-1/2	22-1/8	18-1/2
2700	29-1/2	N/A	27-5/8	N/A	16	N/A	N/A	21-1/2	28-3/8	25-31/32	21-1/4	24-3/8	20-3/8
3000	33	N/A	30-5/8	N/A	16	N/A	N/A	23-7/8	31-1/2	28-27/32	23-1/4	27-1/16	22-5/8
3300	36	N/A	33-5/8	N/A	16	N/A	N/A	26-1/4	34-5/8	31-23/32	24-3/4	29-3/4	24-7/8
3650	39-1/2	N/A	37-1/8	N/A	16	N/A	N/A	29-1/8	38-1/4	35-1/16	26-1/2	32-15/16	27-1/2
4025	43-1/4	24-1/4	40-7/8	41-11/16	16	N/A	N/A	32-1/8	42-5/16	38-11/16	28-3/4	36-3/8	30-3/8
4450	47-1/2	26-7/8	45-1/8	45-13/16	16	N/A	N/A	35-7/16	46-3/4	42-13/16	31-1/2	40-3/16	33-9/16
4900	52	30-1/8	49-5/8	50-1/8	24	N/A	N/A	39	51-7/16	47-1/8	34-3/4	44-1/4	36-15/16
5425	57-3/8	33	55	55-1/8	24	N/A	N/A	43-1/4	56-15/16	52-1/8	38-1/4	48-15/16	40-7/8

DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED.

CML Northern Blower Inc.
901 Regent Avenue West
Winnipeg, Manitoba
Canada R2C 2Z8
204.222.4216
204.222.7601
cml@northernblower.com
www.northernblower.com