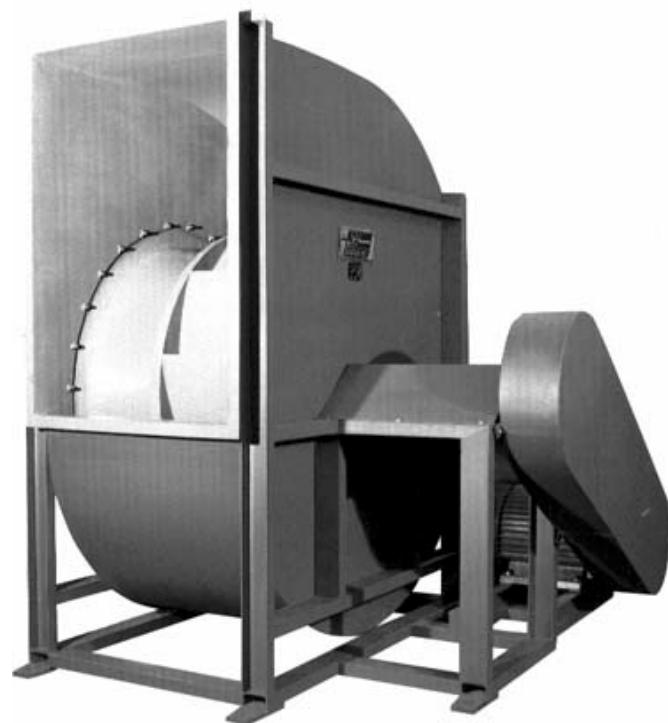
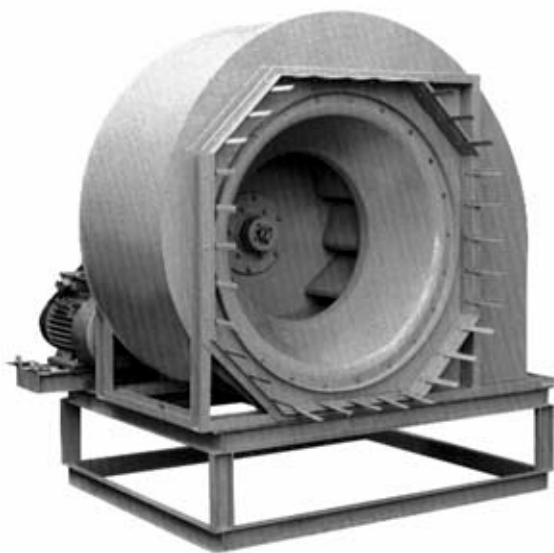




CAT. NO 130-97



**SARAVEL
BACKWARD AIRFOIL FANS**



Custom built units can be designed and fabricated for special applications. One such a unit is illustrated on top. SARAVEL Single intel, down blast-discharge air foil, custom designed to deliver 56000 CFM against 11" total static pressure, used in wood and paper industries.



INTRODUCTION

SARAVEL Backward Curved Airfoil fans are designed to furnish efficient, dependable air movement in a variety of industrial and commercial HVAC applications. With volumes ranging from 800 to 360,000 CFM and static pressures from 1/4 " to 23" w.g., the broad range of capacities along with choice of construction materials, makes SARAVEL air foil fans a versatile unit for any air movement application.

UNIT HOUSINGS

All housings are fabricated from heavy gauge steel sheets with bearing and shaft mountings rigidly supported for durable service life and freedom from vibration. All housings are equipped with spun intake cones designed for smooth air flow into the accompanying venturi shaped intake rim of the fan impeller.

SARAVEL airfoil fan housings create minimum turbulence, and facilitate smooth air flow and efficient static pressure conversion. A well designed cut-off assures good pressure distribution.

FAN PARTS

Shafts: All fan shafts are made of carbon steel and are precision machined to provide an accurate fit with the fan bearings and the wheel hub. For applications in humid or corrosive environments the shafts can be phosphatized. Solid and hollow shafts are designed to operate in less than 20% of the critical speed.

Bearings: All bearings used in SARAVEL airfoil fans are self aligning, grease lubricated, heavy duty bearings and are sealed, thus ensuring containment of the lubricant and exclusion of moisture, dust and other contaminants.

Blades: The air foils fan are furnished with one of two types of blades. The first is a backwardly inclined single thickness used in Models 122 thru 245. The double camber airfoil section is used in Models 270 thru 807.

Hubs: Standard hub is made of gray cast iron, bolted to center plate. The hub is straight bored with minimum tolerance to provide a sliding fit to the shaft. Hubs are positively locked to the shafts through keys and set screws.

The complete fan section including all rotating assemblies: fan wheels, shafts are balanced both statically and dynamically to assure smooth and quiet operation.

FINISHES

Standard finish is air dried primer.

SPECIAL COATINGS

The following coating material can be provided depending on the particular environmental conditions of the installation location:

Bitumen: Offers excellent moisture and fair protection against very mild concentration of most organic and inorganic acids.

Epoxy: Offers protection against mild acid or caustic environment.

Phenolics: Offers resistance to high concentrations of organic or inorganic acids with the exception of strong oxidizing agents.

OPTIONAL ACCESSORIES

The following items can be furnished as per engineering specification as optional accessories:

Access Doors: Heavy duty latched access doors are shaped to conform with the scroll contour and are gasketed to provide access into the fan. Raised doors to facilitate application of external insulation are also available.

Fan Guards : Shafts, bearing, and belt guards are available as standard items for SWSI fans and optional for DWDI fans.

Sheaves & Pulleys: To match required fan RPM & BHP appropriate sheaves and pulleys will be provided.

Screens: Safety screens are available for mounting in the fan inlet or outlet in non-ducted applications.

Special Material: Aluminium or stainless steel units are available.

Split Housing: Split housings are fitted with bolted companion angles along the horizontal, vertical and belly centerlines (segments) and may be used for access to the fan interior or to meet restricted opening requirements and increase the ease in handling and transportation. Refer to page 26 for optional split housing arrangement.

Vibration Isolation Bases: Structural angle, structural channel, inertia bases, and unitary bases are available With or without vibration isolators.



Method of Rating

The performance shown in this catalogue is for standard Air Foil Fans with outlet ducts (with or without inlet ducts). Performance is always based upon the actual test of a fan the same size or smaller than the fan being selected from the catalogue performance.

Selection Procedure

Fan selection, for any combination of volume flow rate and pressure within the operating range, can be made quickly and easily using the procedure presented in this catalog.

The master selection curve combines all the considerations of first cost, space and operating cost to allow the user to select the proper fan for his application. This Master Selection Curve consists of three selections shown as Figs. A, B and C. Fig. "A" (Top) shows capacities for all fan sizes. Fig. "B" shows static pressure plotted in inches and outlet velocities in FPM. Fig. "C" is a percentage curve showing the performance characteristics in percent and also the SP/VP ratio curve (selection ratio).

Example 1:

A DWDI fan application requiring 70,000 CFM air at 5" SP at .075 lbs/ft³ density.

Method

Step 1

Draw a horizontal line at 70,000 CFM in Fig. "A".

AIR DENSITY CORRECTION FACTORS

RPM Factor	AIR Temp °F	Elevation (Feet) above Sea Level					
		0	500	1000	2000	3000	4000
1.00	0	0.87	0.89	0.91	0.94	0.98	1.01
1.00	70	1.00	1.02	1.04	1.08	1.12	1.16
1.00	100	1.06	1.08	1.10	1.14	1.19	2.23
1.00	140	1.13	1.15	1.18	1.22	1.27	1.32
1.00	180	1.21	1.23	1.26	1.30	1.36	1.41
1.00	200	1.25	1.27	1.29	1.34	1.40	1.45
1.00	250	1.34	1.36	1.39	1.45	1.50	1.56
1.00	300	1.43	1.46	1.49	1.55	1.61	1.67
0.99	350	1.53	1.56	1.59	1.65	1.72	1.78
0.98	400	1.62	1.65	1.69	1.75	1.82	1.89
0.96	450	1.72	1.75	1.79	1.86	1.93	2.00
0.95	500	1.81	1.85	1.88	1.96	2.03	2.11
0.90	600	2.00	2.04	2.08	2.16	2.24	2.33
0.85	700	2.19	2.23	2.27	2.36	2.46	2.55
0.70	800	2.38	2.43	2.48	2.57	2.66	2.76

Step 2

In Fig. "B" where the most economical curve intersects the required static pressure curve (5"SP) draw a vertical line up to the 70,000 CFM line in Fig "A" Select the fan size nearest to this point (Size 490) for the most economical fan.

Step 3

In Fig. "B" at point where the vertical line and the static pressure intersect draw a horizontal line to the SP/VP curve in Fig. "C". The example SP/VP ratio is approximately 9.9. In Fig."C" at this SP/VP point draw a vertical line for your fan system line. This system line will show where the size 490 will operate on the fan pressure curve and the efficiencies. Consult the size 490 multi-rating tables for RPM and BHP.

Another important advantage in this Master Selection Curve is that Figs."B"and "C"are sectioned into three zones.

Zone 1 is at the left of the peak efficiency. A fan selected in this zone will be less efficient and will be too large for the application. It will increase your first cost as well as the operating cost.

Fans selected in Zone 2 will operate at the peak efficiency and the lowest noise level.

Fans requiring low static pressures should be selected in Zone 3 where first cost is the only major consideration.

Elevated Temperature And Altitude

If a fan is required to handle air at a density other than standard (0.075 lbs.per cu.ft.) a correction is necessary before selecting the fan from the multi-rating tables.

SARAVEL BACKWARD CENTRIFUGAL FANS

Correction for Elevated Temperature and Altitude
in Fan Selection.

Fan capacity tables are based on Standard Air, 0.075 lbs. per cu.ft. at 70°F. and barometric pressure of 29.92".

For any application other than standard air, correction the horsepower and selecting static pressure must be made.

EXAMPLE 2:

Fan handling 15000 CFM at 6" SP at 200°F and 2000 altitude.

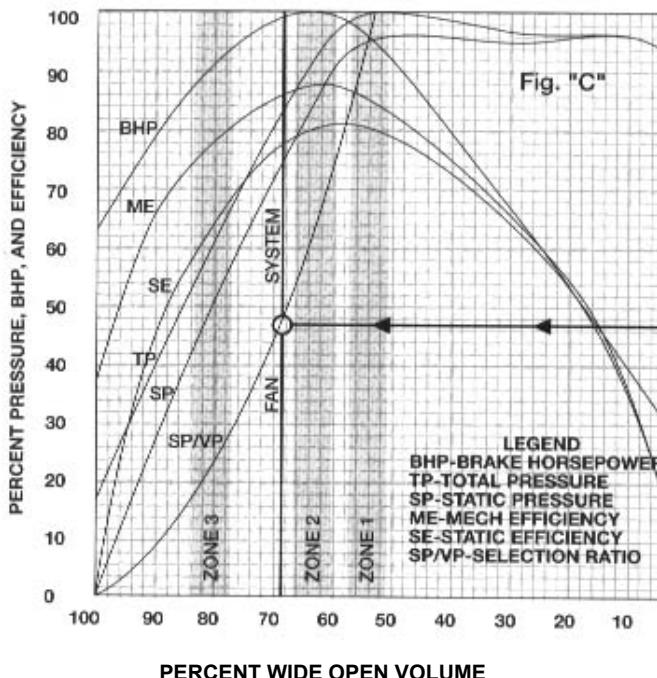
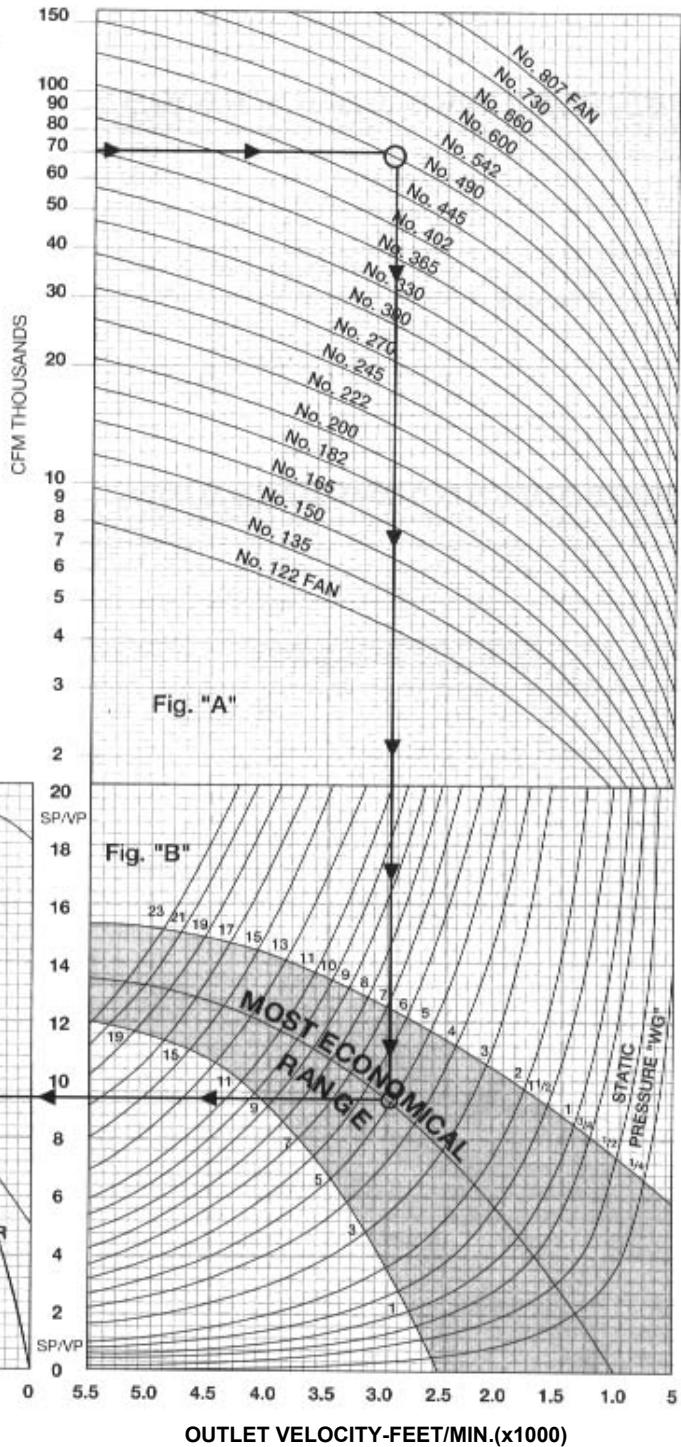
A. From the table on the previous page find the correction factor for 200°F. and 2000 altitude.

The factor is 1.34.

B. Corrected selection pressure 6" SP x 1.34
(correction factor) = 8" SP

C. Select the fan for 15000 CFM at 8" SP. Size 200
Shows 14904 CFM at 8" SP at 2467 RPM at 27.9 BHP.

D. Correct horsepower $27.9 / 1.34 = 20.82$ operating horsepower (BHP).



EXAMPLE 3: FOR SWSI SELECTION

An SWSI fan handling 35,000 CFM at 5" SP air at .075 lbs/ft³. In this case the static pressure and density are equivalent to and the CFM is one half that of Example 1.

The resultant rpm and static pressures remain unchanged but the BHP should be one half of that of [Example 1](#).

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
122	13 1/8"	2.698	1.55	0.152 x (RPM/1000) ³	3.44 x RPM

CLASS	I	II	III	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	13,500	16,500	
MAX. RPM	2,907	3,924	4,797	

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1240	834	0.08	917	0.11	991	0.14	1064	0.18	1144	0.21								
1550	953	0.12	1032	0.16	1102	0.20	1166	0.23	1225	0.27	1282	0.31	1342	0.36				
1860	1083	0.17	1151	0.21	1216	0.26	1280	0.31	1337	0.35	1389	0.40	1439	0.45	1535	0.54	1635	0.65
2170	1216	0.24	1283	0.29	1339	0.34	1393	0.39	1453	0.45	1504	0.50	1551	0.55	1641	0.66	1725	0.78
2480	1356	0.32	1411	0.38	1472	0.44	1520	0.49	1566	0.55	1616	0.61	1669	0.68	1754	0.80	1835	0.93
2790	1501	0.43	1548	0.49	1598	0.55	1652	0.63	1696	0.69	1737	0.75	1780	0.81	1872	0.96	1949	1.10
3100	1645	0.54	1690	0.63	1733	0.70	1779	0.77	1827	0.85	1870	0.92	1906	0.98	1983	1.12	2065	1.29
3410	1792	0.67	1835	0.80	1873	0.87	1913	0.94	1955	1.02	1998	1.10	2043	1.20	2108	1.33	2177	1.49
3720	1940	0.83	1979	0.96	2017	1.07	2052	1.15	2089	1.22	2127	1.31	2167	1.40	2242	1.59	2303	1.74
4030	2090	1.01	2125	1.14	2161	1.29	2195	1.39	2228	1.47	2262	1.55	2297	1.65	2370	1.85	2436	2.04
4340	2240	1.22	2273	1.36	2306	1.51	2340	1.67	2370	1.75	2400	1.84	2432	1.93	2497	2.13	2567	2.36
4650	2392	1.45	2422	1.60	2452	1.76	2484	1.93	2514	2.08	2542	2.17	2571	2.26	2630	2.46	2692	2.68
4960	2544	1.72	2571	1.88	2600	2.04	2629	2.22	2656	2.40	2686	2.54	2712	2.63	2767	2.84	2823	3.06
5270	2696	2.03	2722	2.19	2748	2.36	2775	2.54	2803	2.73	2831	2.93	2856	3.06	2907	3.26	2958	3.49
5580	2849	2.37	2873	2.54	2898	2.71	2923	2.90	2949	3.10	2975	3.30	3002	3.51	3049	3.74	3097	3.96

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2480	1911	1.06	1983	1.18	2128	1.44	2289	1.75										
2790	2022	1.24	2092	1.38	2224	1.67	2351	1.95	2488	2.28	2637	2.66						
3100	2138	1.45	2205	1.60	2332	1.91	2450	2.23	2565	2.55	2684	2.89	2811	3.27	2948	3.71		
3410	2252	1.67	2323	1.85	2446	2.19	2559	2.53	2668	2.88	2772	3.22	2877	3.58	2988	3.97	3106	4.41
3720	2366	1.91	2433	2.10	2561	2.49	2674	2.86	2778	3.24	2878	3.62	2975	4.00	3070	4.37	3168	4.77
4030	2492	2.21	2550	2.39	2676	2.81	2789	3.22	2892	3.62	2990	4.03			3083	4.44	3173	4.85
4340	2626	2.56	2678	2.73	2787	3.13	2906	3.61	3008	4.04	3103	4.47	3194	4.91	3282	5.35	3367	5.80
4650	2757	2.93	2812	3.14	2910	3.53	3014	3.98	3127	4.50	3220	4.96	3308	5.41	3394	5.88	3478	6.36
4960	2882	3.30	2944	3.57	3040	3.99	3133	4.43	3233	4.92	3339	5.49	3425	5.96	3509	6.45	3591	6.95
5270	3012	3.73	3068	3.99	3175	4.52	3260	4.95	3350	5.42	3445	5.96	3545	6.56	3626	7.07	3706	7.59
5580	3146	4.21	3197	4.47	3305	5.04	3393	5.54	3475	6.00	3560	6.52	3650	7.09	3745	7.73	3823	8.28
5890	3283	4.74	3331	5.00	3429	5.57	3531	6.20	3606	6.66	3684	7.17	3765	7.72	3851	8.33	3940	8.99
6200	3423	5.33	3467	5.60	3558	6.16	3655	6.80	3741	7.40	3813	7.90	3888	8.44	3966	9.02	4047	9.66
6510	3565	5.99	3606	6.25	3691	5.82	3780	7.45	3874	8.16	3948	8.71	4017	9.24	4088	9.81	4162	10.4
6820	3708	6.71	3747	6.97	3827	7.55	3910	8.17	3997	8.87	4086	9.61	4150	10.1	4216	10.7	4284	11.3

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3720	3270	5.20	3378	5.68	3491	6.20												
4030	3350	5.67	3440	6.11	3535	6.58	3736	7.64										
4340	3451	6.24	3531	6.67	3614	7.12	3785	8.09	3970	9.20								
4650	3559	6.84	3636	7.30	3715	7.78	3867	8.72	4026	9.76	4195	10.9	4376	12.2				
4960	3670	7.46	3746	7.96	3822	8.48	3967	9.48	4110	10.4	4257	11.5	4414	12.7	4579	14.0	4752	15.5
5270	3785	8.12	3858	8.64	3933	9.19			4211	11.3	4345	12.4	4482	13.5	4627	14.7	4779	16.0
5580	3899	8.83	3973	9.38	4045	9.94	4184	11.0	4318	12.2	4448	13.3	4573	14.4	4702	15.6		
5890	4017	9.59	4091	10.1	4160	10.7	4296	11.9	4428	13.1	4555	14.3	4677	15.5	4796	16.7		
6200	4131	10.3	4208	11.0	4277	11.6	4411	12.8	4540	14.0	4664	15.3	4785	16.6				
6510	4239	11.0	4319	11.8	4397	12.5	4529	13.8	4655	15.1	4776	16.4						
6820	4355	11.9	4428	12.6	4504	13.3	4646	14.8	4770	16.1								
7130	4478	12.8	4545	13.5	4615	14.2	4760	15.8										
7440	4606	13.9	4668	14.6	4733	15.3												
7750	4738	15.1	4796	15.7														
8060																		

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
135	14 15/32"	3.206	1.89	$0.247 \times (\text{RPM}/1000)^3$ ³	3.79 x RPM

CLASS	I	II	III	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	13,500	16,500	
MAX. RPM	2,639	3,562	4,354	

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1506	757	0.10	832	0.14	900	0.18	965	0.21	1038	0.26								
1882	865	0.14	937	0.19	1000	0.24	1058	0.29	1111	0.33	1163	0.38	1217	0.43				
2259	983	0.21	1044	0.26	1104	0.31	1162	0.37	1213	0.43	1260	0.49	1306	0.55	1393	0.66	1483	0.79
2635	1103	0.29	1164	0.35	1215	0.41	1264	0.47	1318	0.54	1364	0.61	1408	0.67	1489	0.81	1565	0.94
3012	1230	0.40	1281	0.46	1335	0.54	1379	0.60	1421	0.67	1467	0.74	1515	0.83	1592	0.97	1665	1.13
3388	1362	0.53	1405	0.60	1450	0.67	1499	0.76	1539	0.84	1576	0.91	1615	0.99	1699	1.17	1769	1.34
3765	1493	0.66	1533	0.77	1573	0.85	1614	0.93	1658	1.03	1697	1.12	1730	1.19	1799	1.37	1874	1.57
4141	1626	0.82	1665	0.97	1700	1.05	1736	1.14	1774	1.24	1813	1.34	1853	1.45	1913	1.62	1976	1.81
4518	1760	1.01	1795	1.17	1830	1.30	1862	1.39	1895	1.49	1930	1.59	1966	1.70	2035	1.93	2089	2.11
4894	1896	1.23	1928	1.39	1961	1.57	1991	1.69	2021	1.78	2052	1.89	2084	2.00	2151	2.25	2211	2.48
5271	2033	1.48	2062	1.65	2092	1.84	2123	2.03	2150	2.13	2178	2.23	2207	2.35	2266	2.59	2329	2.87
5647	2170	1.77	2197	1.95	2225	2.14	2253	2.35	2281	2.52	2307	2.63	2333	2.75	2386	2.99	2443	3.26
6024	2308	2.09	2333	2.28	2359	2.48	2385	2.70	2412	2.92	2437	3.08	2461	3.20	2511	3.45	2562	3.72
6400	2446	2.46	2470	2.66	2494	2.87	2518	3.09	2543	3.32	2569	3.56	2592	3.71	2637	3.96	2684	4.23
6777	2585	2.87	2607	3.08	2629	3.30	2652	3.52	2676	3.76	2699	4.01	2724	4.27	2766	4.54	2810	4.82

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3012	1734	1.28	1800	1.44	1931	1.75	2077	2.13										
3388	1835	1.50	1898	1.68	2018	2.02	2133	2.37	2258	2.77	2393	3.23						
3765	1940	1.76	2001	1.94	2116	2.33	2223	2.71	2327	3.09	2435	3.51	2551	3.98	2675	4.51		
4141	2043	2.03	2107	2.25	2219	2.66	2322	3.08	2420	3.50	2515	3.92	2611	4.35	2711	4.83	2818	5.35
4518	2147	2.32	2208	2.55	2324	3.03	2426	3.47	2521	3.93	2612	4.40	2700	4.86	2786	5.31	2874	5.79
4894	2261	2.68	2314	2.90	2428	3.41	2531	3.91	2625	4.40	2713	4.90	2797	5.40	2879	5.89	2959	6.38
5271	2383	3.11	2430	3.32	2529	3.81	2637	4.39	2729	4.91	2816	5.43	2898	5.96	2978	6.50	3055	7.04
5647	2502	3.56	2551	3.82	2640	4.29	2735	4.83	2837	5.47	2921	6.02	3002	6.57	3080	7.14	3156	7.72
6024	2615	4.01	2671	4.34	2758	4.85	2843	5.83	2934	5.98	3030	6.67	3108	7.25	3184	7.83	3258	8.44
6400	2733	4.53	2784	4.85	2881	5.49	2958	6.01	3040	6.59	3126	7.24	3217	7.97	3290	8.59	3362	9.21
6777	2855	5.11	2901	5.42	2999	6.13	3079	6.73	3153	7.29	3231	7.92	3312	8.62	3398	9.39	3469	10.0
7153	2979	5.76	3022	6.08	3112	6.77	3204	7.53	3272	8.09	3343	8.70	3417	9.38	3498	10.1	3575	10.9
7530	3106	6.48	3146	6.80	3229	7.49	3316	8.26	3395	8.99	3460	9.59	3528	10.2	3598	10.9	3672	11.7
7906	3235	7.27	3272	7.59	3349	8.29	3430	9.05	3515	9.91	3582	10.5	3645	11.2	3709	11.9	3777	12.6
8283	3365	8.14	3400	8.47	3472	9.16	3548	9.93	3627	10.7	3707	11.6	3766	12.3	3826	12.9	3888	13.7

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4518	2967	6.32	3065	6.90	3168	7.53												
4894	3039	6.89	3121	7.42	3207	7.99	3390	9.27										
5271	3131	7.58	3204	8.10	3279	8.65	3435	9.83	3602	11.1								
5647	3229	8.30	3300	8.87	3371	9.45	3509	10.6	3653	11.8	3907	13.2	3970	14.8				
6024	3331	9.06	3399	9.67	3468	10.3	3600	11.5	3729	12.7	3863	14.0	4005	15.4	4155	17.0	4312	18.8
6400	3434	9.86	3501	10.5	3568	11.1			3821	13.7	3942	15.0	4067	16.4	4198	17.9	4336	19.5
6777	3538	10.7	3605	11.3	3671	12.0	3797	13.4	3981	14.8	4036	16.2	4150	17.5	4267	19.0		
7153	3645	11.6	3712	12.3	3775	13.0	3899	14.4	4017	15.9	4133	17.4	4244	18.8	4352	20.2		
7530	3748	12.5	3818	13.3	3881	14.1	4003	15.5	4119	17.1	4232	18.6	4342	20.2				
7906	3846	13.4	3919	14.3	3990	15.2	4109	16.7	4224	18.3	4334	19.9						
8283	3952	14.5	4018	15.3	4087	16.2	4215	18.0	4329	19.6								
8659	4063	15.6	4124	16.4	4187	17.3	4319	19.2										
9036	4179	16.9	4236	17.7			4294	18.5										
9412	4299	18.3	4352	19.1														
9789	4363																	

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
150	16 3/32"	3.796	2.33	0.418 x (RPM/1000) ³	4.21 x RPM

CLASS	I	II	III	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	13,500	16,500	
MAX. RPM	2,375	3,207	3,919	

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1859	681	0.12	749	0.17	809	0.22	869	0.27	934	0.32								
2324	778	0.18	843	0.24	900	0.30	952	0.35	1000	0.41	1047	0.47	1095	0.54				
2789	884	0.26	940	0.32	993	0.39	1045	0.46	1091	0.53	1134	0.60	1175	0.67	1253	0.82	1335	0.97
3254	993	0.36	1048	0.44	1093	0.51	1138	0.58	1186	0.67	1228	0.75	1267	0.83	1340	1.00	1409	1.17
3719	1107	0.49	1152	0.57	1201	0.67	1241	0.74	1279	0.83	1320	0.92	1363	1.02	1432	1.20	1498	1.39
4184	1225	0.65	1264	0.74	1305	0.83	1349	0.94	1385	1.03	1418	1.12	1453	1.22	1529	1.45	1592	1.65
4649	1343	0.82	1380	0.95	1415	1.05	1452	1.15	1492	1.27	1527	1.38	1557	1.48	1619	1.69	1686	1.94
5114	1463	1.01	1498	1.20	1529	1.30	1562	1.41	1596	1.53	1632	1.66	1668	1.80	1721	2.00	1778	2.23
5579	1584	1.24	1616	1.44	1647	1.61	1676	1.72	1706	1.84	1737	1.97	1769	2.11	1831	2.38	1880	2.61
6044	1706	1.51	1735	1.72	1765	1.94	1792	2.08	1819	2.20	1847	2.33	1875	2.47	1935	2.78	1989	3.06
6509	1829	1.83	1856	2.04	1883	2.27	1910	2.51	1935	2.63	1960	2.76	1986	2.90	2039	3.20	2096	3.54
6974	1953	2.18	1977	2.41	2002	2.64	2028	2.90	2053	3.12	2076	3.25	2099	3.39	2148	3.69	2198	4.03
7439	2077	2.59	2100	2.82	2123	3.07	2146	3.33	2171	3.61	2193	3.81	2215	3.95	2259	4.26	2305	4.59
7904	2201	3.04	2222	3.29	2244	3.54	2266	3.81	2289	4.10	2312	4.40	2332	4.58	2373	4.89	2416	5.23
8369	2326	3.55	2346	3.81	2366	4.07	2387	4.35	2408	4.64	2429	4.95	2451	5.27	2489	5.61	2528	5.95

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3719	1560	1.59	1619	1.77	1738	2.16	1869	2.63										
4184	1651	1.86	1708	2.07	1816	2.50	1920	2.93	2032	3.42	2153	4.00						
4649	1746	2.17	1801	2.40	1904	2.87	2001	3.35	2094	3.82	2191	4.33	2295	4.91	2407	5.57		
5114	1838	2.50	1896	2.78	1997	3.28	2090	3.80	2178	4.32	2263	4.84	2349	5.37	2440	5.96	2536	6061
5579	1932	2.86	1987	3.15	2091	3.74	2183	4.29	2268	4.86	2350	5.43	2429	6.00	2507	6.56	2586	7.16
6044	2035	3.31	2082	3.58	2185	4.21	2277	4.83	2362	5.43	2441	6.05			2517	6.67	2590	7.27
6509	2144	3.84	2186	4.10	2276	4.70	2373	5.42	2456	6.07	2534	6.71	2608	7.37	2680	8.03	2749	8.69
6974	2252	4.40	2296	4.71	2376	5.30	2461	5.97	2553	6.76	2629	7.44	2701	8.12	2771	8.82	2840	9.54
7439	2353	4.96	2403	5.36	2482	5.99	2558	6.64	2640	7.38	2727	8.23	2797	8.95	2865	9.67	2932	10.4
7904	2459	5.59	2505	5.98	2593	6.78	2662	7.42	2735	8.14	2813	8.94	2894	9.85	2961	10.6	3026	11.3
8369	2569	6.31	2611	6.70	2698	7.57	2771	8.31	2837	9.01	2907	9.78	2980	10.6	3058	11.6	3122	12.4
8834	2681	7.11	2719	7.50	2800	8.36	2883	9.30	2944	9.99	3008	10.7	3074	11.5	3144	12.4	3217	13.4
9298	2795	8.00	2831	8.40	2905	9.25	2984	10.2	3055	11.1	3114	11.8	3175	12.6	3238	13.5	3304	14.4
9763	2911	8.98	2944	9.38	3014	10.2	3087	11.1	3163	12.2	3223	13.0	3280	13.8	3338	14.7	3398	15.6
10228	3028	10.0	3059	10.4	3125	11.3	3193	12.2	3264	13.3	3336	14.4	3388	15.2	3443	16.0	3498	16.9

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5579	2670	7.81	2758	8.52	2851	9.30												
6044	2735	8.51	2809	9.16	2886	9.87	3051	11.4	3242	13.8								
6509	2818	9.36	2883	10.0	2951	10.6	3091	12.1										
6974	2906	10.2	2969	10.9	3033	11.6	3157	13.0	3287	14.6	3426	16.3	3573	18.3				
7439	2997	11.1	3059	11.9	3121	12.7	3239	14.2	3356	15.7	3476	17.3	3604	19.1	3739	21.1	3880	23.2
7904	3090	12.1	3151	12.9	3211	13.7	3327	15.4	3439	17.0	3548	18.6	3660	20.2	3778	22.1	3902	24.1
8369	3184	13.2	3244	14.0	3303	14.9	3416	16.6	3526	18.3	3632	20.0	3734	21.7	3840	23.4		
8834	3280	14.3	3340	15.2	3397	16.1	3508	17.8	3615	19.7	3719	21.5	3819	23.3	3916	25.0		
9298	3373	15.5	3436	16.5	3492	17.4	3602	19.2	3707	21.1	3808	23.0	3907	24.9				
9763	3461	16.6	3526	17.7	3590	18.8	3698	20.7	3801	22.6	3900	24.6						
10228	3556	17.9	3616	18.9	3677	20.0	3793	22.2	3895	24.2								
10693	3656	19.3	3711	20.3	3768	21.4	3887	23.7										
11158	3761	20.9	3812	21.9	3864	22.9												
11623	3868	22.6	3916	23.6														
12088	3988	24.3	4082	25.3														

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
165	17 11/16"	4.54	2.82	$0.673 \times (\text{RPM}/1000)^3$ ³	4.63 x RPM

CLASS	I	II	III	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	13,500	16,500	
MAX. RPM	2,160	2,916	3,564	

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
2250	619	0.15	681	0.21	736	0.26	790	0.32	849	0.39								
2813	707	0.22	766	0.29	818	0.36	865	0.43	909	0.50	952	0.57	996	0.65				
3376	804	0.31	854	0.39	903	0.47	950	0.56	992	0.65	1031	0.73	1068	0.82	1139	0.99	1213	1.18
3938	902	0.43	952	0.53	993	0.62	1034	0.71	1078	0.82	1116	0.91	1151	1.01	1218	1.21	1280	1.41
4501	1006	0.59	1047	0.69	1092	0.81	1128	0.90	1163	1.00	1200	1.11	1239	1.24	1302	1.46	1362	1.69
5064	1114	0.79	1149	0.90	1186	1.01	1226	1.14	1259	1.25	1289	1.36	1321	1.48	1389	1.75	1447	2.00
5627	1221	0.99	1254	1.15	1286	1.27	1320	1.39	1356	1.54	1388	1.67	1415	1.79	1471	2.04	1533	2.35
6189	1330	1.23	1362	1.46	1390	1.58	1420	1.71	1451	1.85	1483	2.01	1516	2.18	1564	2.42	1616	2.71
6752	1440	1.51	1469	1.74	1497	1.95	1523	2.08	1550	2.23	1579	2.38	1608	2.55	1664	2.89	1709	3.16
7315	1551	1.83	1577	2.08	1604	2.35	1629	2.52	1653	2.67	1678	2.83	1704	2.99	1759	3.36	1808	3.71
7877	1663	2.21	1687	2.47	1711	2.75	1736	3.03	1759	3.18	1781	3.34	1805	3.51	1854	3.87	1905	4.29
8440	1775	2.64	1797	2.91	1820	3.20	1843	3.51	1866	3.77	1887	3.94	1908	4.11	1952	4.47	1998	4.88
9003	1888	3.13	1908	3.41	1929	3.71	1951	4.03	1973	4.37	1994	4.61	2013	4.78	2053	5.15	2095	5.56
9566	2001	3.68	2020	3.98	2040	4.29	2060	4.62	2080	4.96	2101	5.32	2120	5.55	2157	5.93	2196	6.33
10128	2114	4.30	2132	4.61	2151	4.93	2170	5.27	2189	5.62	2208	5.99	2228	6.38	2263	6.79	2298	7.20

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4501	1418	1.92	1472	2.15	1580	2.62	1699	3.19										
5064	1501	2.25	1552	2.51	1650	3.03	1745	3.55	1847	4.14	1957	4.84						
5627	1587	2.63	1637	2.91	1731	3.48	1818	4.05	1904	4.63	1992	5.24	2086	5.95	2188	6.74		
6189	1671	3.03	1724	3.36	1815	3.97	1900	4.60	1980	5.23	2057	5.85	2136	6.50	2218	7.22	2305	8.01
6752	1756	3.47	1806	3.81	1901	4.52	1984	5.20	2062	5.88	2136	6.57	2208	7.26	2279	7.94	2351	8.66
7315	1850	4.01	1893	4.34	1986	5.10	2070	5.85	2147	6.58	2219	7.33	2288	8.07	2355	8.80	2420	9.54
7877	1949	4.65	1987	4.97	2069	5.69	2157	6.56	2233	7.34	2303	8.12	2371	8.91	2436	9.72	2499	10.5
8440	2047	5.33	2087	5.71	2159	6.41	2237	7.23	2321	8.18	2390	9.00	2456	9.83	2519	10.6	2581	11.5
9003	2139	6.00	2185	6.48	2256	7.25	2326	8.04	2400	8.94	2478	9.97	2542	10.8	2604	11.7	2665	12.6
9566	2236	6.77	2277	7.24	2357	8.21	2420	8.98	2486	9.85	2557	10.8	2631	11.9	2691	12.8	2750	13.7
10128	2335	7.64	2373	8.11	2453	9.16	2518	10.0	2579	10.9	2642	11.8	2709	12.8	2779	14.0	2837	15.0
10691	2437	8.61	2472	9.08	2545	10.1	2621	11.2	2676	12.1	2734	13.0	2795	14.0	2858	15.1	2924	16.3
11254	2540	9.69	2573	10.1	2641	11.1	2712	12.3	2777	13.4	2830	14.3	2886	15.3	2943	16.3	3003	17.5
11816	2646	10.8	2676	11.3	2739	12.3	2806	13.5	2875	14.8	2930	15.8	2981	16.7	3034	17.8	3089	18.9
12379	2752	12.1	2781	12.6	2840	13.7	2902	14.8	2967	16.1	3032	17.4	3080	18.4	3129	19.4	3180	20.5

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6752	2427	9.45	2507	10.3	2591	11.2	2773	13.8										
7315	2486	10.3	2553	11.0	2623	11.9	2810	14.6	2947	16.7								
7877	2561	11.3	2621	12.1	2682	12.9												
8440	2641	12.4	2699	13.2	2757	14.1	2870	15.8	2988	17.7	3114	19.8	3248	22.1				
9003	2724	13.5	2780	14.4	2837	15.3	2945	17.2	3051	19.0	3160	21.0	3276	23.1	3398	25.5	3527	28.1
9566	2809	14.7	2864	15.6	2919	16.6			3126	20.5	3225	22.5	3327	24.5	3434	26.7	3547	29.2
10128	2894	16.0	2949	17.0	3002	18.0	3105	20.1	3205	22.1	3301	24.2	3394	26.2	3490	28.4		
10691	2981	17.4	3036	18.4	3087	19.5	3189	21.6	3286	23.8	3380	26.0	3471	28.2	3560	30.3		
11254	3066	18.8	3123	19.9	3175	21.0	3274	23.3	3370	25.5	3462	27.8	3552	30.2				
11816	3146	20.1	3205	21.4	3263	22.7	3361	25.0	3455	27.4	3545	29.7						
12379	3232	21.6	3287	22.9	3343	24.2	3448	26.9	3541	29.3								
12942	3323	23.4	3373	24.6	3425	25.9	3533	28.7										
13505	3418	25.3	3465	26.5	3513	27.7												
14067	3516	27.4	3560	28.6														
14630																		

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
182	19 9/16"	5.96	3.45	1.12 x (RPM/1000) ³	5.12 x RPM

CLASS	I	II	III	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	13,500	16,500	
MAX. RPM	1,951	2,637	3,223	

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP												
2754	560	0.19	615	0.25	665	0.32	714	0.40	768	0.48										
3443	639	0.27	692	0.35	740	0.44	782	0.53	822	0.62	860	0.70	900	0.80	965	1.00	1030	1.21	1097	1.44
4132	726	0.39	772	0.48	816	0.58	859	0.69	897	0.79	932	0.90	965	1.00	1030	1.21	1097	1.44		
4820	815	0.53	861	0.65	898	0.76	935	0.87	975	1.00	1009	1.12	1041	1.24	1101	1.48	1157	1.73		
5509	910	0.73	947	0.85	987	0.99	1019	1.10	1051	1.23	1084	1.36	1120	1.52	1177	1.79	1231	2.07		
6198	1007	0.97	1038	1.10	1072	1.24	1108	1.40	1138	1.53	1165	1.66	1194	1.81	1256	2.14	1308	2.45		
6886	1103	1.21	1134	1.41	1163	1.55	1193	1.71	1226	1.89	1255	2.05	1279	2.19	1330	2.50	1385	2.87		
7575	1202	1.50	1231	1.78	1257	1.93	1283	2.09	1311	2.27	1340	2.46	1370	2.66	1414	2.97	1461	3.31		
8264	1302	1.85	1327	2.14	1353	2.39	1377	2.55	1401	2.73	1427	2.92	1453	3.12	1504	3.54	1545	3.87		
8952	1402	2.25	1426	2.55	1450	2.88	1472	3.09	1494	3.27	1517	3.46	1541	3.66	1590	4.11	1634	4.54		
9641	1503	2.71	1525	3.02	1547	3.36	1570	3.72	1590	3.90	1610	4.09	1631	4.30	1675	4.74	1722	5.25		
10330	1604	2.23	1625	3.57	1645	3.92	1666	4.30	1687	4.62	1705	4.82	1725	5.03	1764	5.47	1806	5.97		
11018	1706	3.83	1725	4.18	1744	4.55	1764	4.94	1783	5.35	1802	5.64	1820	5.86	1856	6.31	1894	6.80		
11707	1809	4.51	1826	4.87	1844	5.25	1862	5.65	1880	6.07	1899	6.52	1916	6.79	1950	7.25	1985	7.75		
12396	1911	5.26	1927	5.64	1944	6.04	1961	6.45	1978	6.88	1996	7.34	2014	7.81	2045	8.31	2077	8.81		

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
5509	1282	2.35	1331	2.63	1428	3.21	1536	3.90											
6198	1357	2.76	1403	3.07	1492	3.71	1577	4.34	1669	5.07	1769	5.92							
6886	1435	3.22	1480	3.56	1564	4.26	1644	4.96	1721	5.66	1800	6.42	1886	7.28	1978	8.25			
7575	1510	3.71	1558	4.12	1641	4.87	1717	5.63	1790	6.40	1860	7.17	1930	7.96	2005	8.83	2083	9.80	
8264	1587	4.25	1632	4.67	1718	5.54	1794	6.36	1864	7.20	1931	8.04	1996	8.89	2060	9.72	2125	10.6	
8952	1672	4.91	1711	5.31	1795	6.24	1871	7.16	1940	8.05	2006	8.97	2068	9.88	2128	10.7	2188	11.6	
9641	1762	5.69	1796	6.08	1870	6.97	1950	8.03	2018	8.99	2082	9.94	2143	10.9	2202	11.8	2259	12.8	
10330	1850	6.52	1886	6.98	1952	7.85	2022	8.85	2098	10.0	2160	11.0	2220	12.0	2277	13.0	2333	14.1	
11018	1934	7.34	1975	7.93	2039	8.87	2102	9.84	2169	10.9	2240	12.2	2298	13.2	2354	14.3	2409	15.4	
11707	2021	8.29	2058	8.87	2130	10.0	2187	10.9	2247	12.0	2311	13.2	2378	14.5	2433	15.7	2486	16.8	
12396	2111	9.35	2145	9.93	2217	11.2	2276	12.3	2331	13.3	2389	14.4	2449	15.7	2512	17.1	2565	18.4	
13084	2203	10.5	2234	11.1	2301	12.3	2369	13.7	2419	14.8	2471	15.9	2526	17.1	2583	18.5	2643	19.9	
13773	2296	11.8	2326	12.4	2387	13.7	2452	15.1	2510	16.4	2558	17.5	2608	18.7	2661	20.0	2715	21.4	
14462	2391	13.3	2419	13.9	2476	15.1	2536	16.5	2599	18.1	2648	19.3	2695	20.5	2743	21.8	2792	23.1	
15150	2488	14.9	2514	15.5	2567	16.7	2623	18.1	2681	19.7	2741	21.3	2784	22.5	2829	23.7	2874	25.1	

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
8264	2194	11.5	2266	12.6	2342	13.7	2507	16.9	2663	20.4									
8952	2247	12.6	2308	13.5	2371	14.6	2540	17.9	2701	21.6	2815	24.2	2936	27.1					
9641	2315	13.8	2369	14.8	2425	15.8	2733	22.8	2757	23.3	2856	25.7	2961	28.3	3072	31.2	3188	34.4	
10330	2388	15.1	2440	16.2	2492	17.3	2594	19.3	2757	23.3	2856	25.7	3007	30.0	3104	32.7	3206	35.7	
11018	2462	16.5	2513	17.6	2564	18.8	2662	21.0	2825	25.2	2915	27.5							
11707	2539	18.0	2589	19.2	2638	20.4	2733	22.8	2825	25.2	2915	27.5	3007	30.0	3104	32.7	3206	35.7	
12396	2616	19.6	2666	20.8	2714	22.0	2807	24.6	2897	27.1	2984	29.7	3068	32.1	3155	34.7			
13084	2695	21.3	2744	22.6	2791	23.8	2882	26.5	2970	29.1	3056	31.8	3138	34.5	3218	37.1			
13773	2771	23.0	2823	24.4	2870	25.8	2960	28.5	3046	31.2	3129	34.1	3210	36.9					
14462	2844	24.6	2897	26.2	2950	27.8	3038	30.7	3123	33.5	3204	36.4							
15150	2922	26.5	2971	28.0	3021	29.7	3117	32.9	3200	35.9									
15839	3004	28.6	3049	30.1	3096	31.7	3194	35.2											
16528	3090	31.0	3132	32.4	3175	34.0													
17216	3178	33.5	3218	35.0															
17905	3104																		



SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)

FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
200	21 7/16"	6.86	4.14	$1.87 \times (\text{RPM}/1000)^3$	5.61 x RPM

CLASS	I	II	III
MAX. TIP SPEED	10,000	13,500	16,500
MAX. RPM	1,783	2,406	2,941

The performance ratings nearest the black lines represent the most economical fan selection.

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
3312	492	0.21	540	0.29	585	0.37	629	0.45	675	0.54								
4140	565	0.31	609	0.40	648	0.49	687	0.60	723	0.70	757	0.80	794	0.91				
4968	640	0.44	683	0.55	719	0.66	754	0.78	785	0.89	819	1.02	849	1.14	907	1.38	967	1.64
5796	719	0.61	756	0.74	794	0.87	824	0.99	857	1.13	884	1.26	911	1.39	967	1.68	1018	1.97
6624	800	0.83	836	0.98	867	1.11	900	1.27	928	1.41	955	1.55	984	1.72	1031	2.00	1081	2.34
7552	884	1.11	915	1.26	946	1.43	974	1.58	1003	1.75	1030	1.91	1053	2.07	1104	2.43	1146	2.75
8280	969	1.45	996	1.61	1025	1.78	1053	1.97	1078	2.13	1103	2.32	1131	2.52	1173	2.86	1218	3.26
9108	1053	1.85	1080	2.03	1105	2.21	1132	2.41	1157	2.61	1180	2.79	1203	2.99	1250	3.42	1289	3.79
9936	1139	2.32	1166	2.54	1188	2.72	1212	2.92	1236	3.14	1260	3.37	1280	3.56	1323	3.99	1366	4.46
10764	1225	2.88	1250	3.10	1273	3.32	1294	3.53	1316	3.75	1338	3.99	1361	4.24	1398	4.66	1438	5.14
11592	1312	3.52	1335	3.76	1358	4.01	1378	4.23	1397	4.45	1418	4.69	1438	4.95	1478	5.45	1513	5.92
12420	1399	4.26	1421	4.51	1442	4.77	1463	5.03	1481	5.26	1499	5.50	1518	5.76	1557	6.32	1592	6.84
13248	1487	5.10	1507	5.36	1527	5.63	1548	5.92	1566	6.18	1583	6.43	1600	6.69	1636	7.25	1673	7.87
14076	1576	6.05	1594	6.32	1613	6.60	1632	6.90	1652	7.22	1667	7.47	1683	7.74	1716	8.31	1750	8.93
14904	1664	7.12	1682	7.40	1699	7.69	1717	8.00	1735	8.32	1753	8.64	1768	8.91	1798	9.49	1830	10.1

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6624	1127	2.67	1170	2.99	1259	3.66	1350	4.37										
7452	1189	3.10	1233	3.49	1312	4.22	1384	4.96	1470	5.74	1552	6.56						
8280	1259	3.63	1296	3.99	1374	4.83	1446	5.66	1515	6.47	1588	7.33	1660	8.19	1733	9.11		
9108	1329	4.22	1369	4.66	1437	5.45	1509	6.39	1576	7.32	1637	8.17	1701	9.09	1768	10.0	1833	11.0
9936	1401	4.86	1438	5.31	1508	6.24	1571	7.13	1638	8.17	1698	9.15	1756	10.1	1814	11.1	1873	12.1
10764	1478	5.65	1510	6.09	1579	7.08	1641	8.05	1699	9.02	1762	10.1	1817	11.2	1873	12.3	1925	13.3
11592	1550	6.44	1589	7.01	1649	7.97	1714	9.09	1769	10.1	1823	11.1	1881	12.3	1935	13.4	1987	14.6
12420	1625	7.35	1660	7.91	1725	9.02	1782	10.0	1844	11.3	1894	12.3	1944	13.4	1997	14.7	2050	16.0
13248	1703	8.39	1735	8.94	1801	10.1	1856	11.2	1911	12.4	1969	13.8	2016	14.9	2062	16.0	2111	17.3
14076	1784	9.57	1813	10.1	1873	11.3	1934	12.6	1983	13.8	2035	15.0	2090	16.5	2135	17.7	2178	18.9
14904	1862	10.7	1893	11.4	1948	12.6	2006	14.0	2060	15.3	2107	16.5	2157	17.9	2208	19.4	2252	20.7
15732	1941	12.1	1972	12.8	2026	14.1	2080	15.4	2136	16.9	2184	18.3	2228	19.6	2275	21.0	2324	22.6
16560	2021	13.5	2050	14.3	2107	15.7	2156	17.1	2207	18.5	2262	20.2	2304	21.5	2347	22.9	2391	24.4
17388	2103	15.2	2130	15.9	2186	17.5	2234	18.9	2282	20.3	2332	21.9	2383	23.6	2423	25.0	2463	26.5
18216	2186	16.9	2211	17.7	2264	19.3	2315	20.9	2360	22.3	2406	23.9	2454	25.6	2501	27.3	2539	28.8

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9936	1934	13.1	1994	14.2	2056	15.3	2203	18.9										
10764	1979	14.3	2034	15.4	2091	16.6	2240	20.5	2343	22.9								
11592	2036	15.7	3085	16.9	2135	18.0	2403	25.9										
12420	2098	17.2	2148	18.5	2192	19.6	2285	22.1	2382	24.7	2478	27.3	2576	30.0				
13248	2162	18.7	2208	20.0	2254	21.3	2341	23.9	2428	26.6	2518	29.3	2609	32.1	2701	35.0	2792	37.9
14076	2224	20.2	2271	21.6	2318	23.1	2403	25.9	2485	28.6	2567	31.4	2650	34.2	2737	37.3	2821	40.2
14904	2293	22.0	2335	23.3	2378	24.8	2467	27.9	2547	30.9	2624	33.7	2701	36.7	2779	39.6	2862	42.9
15732	2368	24.1	2406	25.3	2445	26.7	2528	29.8	2610	33.1	2687	36.2	2760	39.3	2832	42.3	2906	45.4
16560	2437	26.0	2482	27.7	2518	29.0	2592	31.9	2672	35.2	2749	38.6	2822	41.9	2893	45.2		
17388	2505	28.0	2549	29.7	2594	31.6	2663	34.4	2735	37.6	2811	41.1	2885	44.7				
18216	2578	30.3	2618	32.0	2659	33.7	2739	34.2	2805	40.3	2874	43.6						
19044	2654	32.9	2691	34.5	2729	36.2	2808	39.9	2879	43.3								
19872	2732	35.7	2767	37.2	2802	38.9	2876	42.5										
20700	2805	38.4	2845	40.3	2878	41.9												
21528	2877	41.1	2918	43.2														

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
222	23 7/8"	8.30	5.12	$3.19 \times (\text{RPM}/1000)^3$	6.24 x RPM

CLASS	I	II	III	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	13,500	16,500	
MAX. RPM	1,602	2,163	2,643	

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP												
4101	442	0.26	485	0.36	526	0.46	565	0.56	606	0.67	650	0.87	680	1.00	713	1.13	815	1.71	869	2.04
5127	508	0.39	547	0.50	582	0.61	617	0.74	677	0.96	705	1.10	736	1.26	763	1.41				
6152	575	0.55	613	0.69	646	0.82														
7178	646	0.76	680	0.91	713	1.08	741	1.23	770	1.40	795	1.56	819	1.72	869	2.08	915	2.44		
8203	719	1.03	751	1.21	779	1.38	809	1.57	834	1.74	858	1.93	884	2.13	926	2.48	971	2.90		
9229	794	1.38	822	1.56	850	1.77	875	1.95	901	2.16	925	2.37	947	2.56	992	3.01	1030	3.40		
10254	871	1.80	895	1.99	921	2.21	946	2.44	968	2.64	992	2.87	1016	3.12	1054	3.55	1095	4.03		
11280	946	2.29	971	2.52	993	2.74	1017	2.99	1040	3.24	1060	3.46	1081	3.70	1123	4.24	1158	4.70		
12305	1023	2.88	1048	3.14	1068	3.37	1089	3.62	1110	3.89	1132	4.17	1150	4.41	1188	4.94	1227	5.52		
13331	1101	3.56	1123	3.84	1144	4.11	1163	4.37	1182	4.64	1202	4.94	1223	5.25	1256	5.78	1292	6.37		
14356	1179	4.36	1199	4.65	1221	4.97	1238	5.23	1256	5.51	1274	5.81	1292	6.13	1328	6.76	1360	7.34		
15382	1257	5.28	1276	5.58	1296	5.91	1315	6.23	1331	6.52	1347	6.82	1364	7.14	1399	7.83	1430	8.47		
16407	1337	6.32	1354	6.64	1372	6.98	1391	7.33	1407	7.65	1422	7.96	1438	8.29	1470	8.99	1503	9.75		
17432	1416	7.50	1432	7.83	1449	8.18	1466	8.55	1484	8.94	1498	9.25	1512	9.59	1542	10.2	1573	11.0		
18458	1495	8.82	1511	9.17	1527	9.53	1543	9.91	1559	10.3	1575	10.7	1588	11.0	1616	11.7	1644	12.5		

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
8203	1012	3.31	1052	3.71	1131	4.54	1213	5.42											
9229	1068	3.84	1108	4.32	1179	5.22	1248	6.14	1321	7.11	1394	8.12							
10254	1131	4.49	1164	4.95	1235	5.99	1300	7.01	1361	8.01	1427	9.08	1491	10.1	1557	11.2			
11280	1194	5.22	1230	5.77	1291	6.76	1356	7.91	1416	9.07	1471	10.1	1528	11.2	1589	12.4	1647	13.6	
12305	1259	6.02	1292	6.58	1355	7.73	1411	8.83	1472	10.1	1526	11.3	1578	12.5	1630	13.7	1683	14.9	
13331	1328	7.00	1357	7.54	1419	8.77	1475	9.97	1527	11.1	1583	12.5	1633	13.8	1683	15.2	1730	16.4	
14356	1393	7.98	1427	8.68	1482	9.87	1540	11.2	1590	12.5	1638	13.8	1690	15.2	1738	16.7	1786	18.1	
15382	1460	9.10	1491	9.79	1550	11.1	1601	12.5	1657	14.0	1702	15.3	1747	16.7	1794	18.2	1842	19.8	
16407	1531	10.3	1559	11.0	1618	12.6	1668	13.9	1717	15.4	1769	17.0	1811	18.4	1853	19.9	1897	21.4	
17432	1603	11.8	1629	12.5	1683	14.0	1738	15.6	1782	17.1	1829	18.6	1878	20.4	1918	21.9	1957	23.4	
18458	1673	13.3	1701	14.1	1750	15.6	1803	17.3	1851	19.0	1894	20.5	1938	22.0	1984	24.0	2024	25.7	
19483	1744	15.0	1772	15.9	1821	17.5	1869	19.1	1919	21.0	1962	22.6	2002	24.3	2044	26.0	2088	28.0	
20509	1816	16.8	1842	17.7	1893	19.5	1937	21.1	1984	23.0	2032	25.0	2070	26.6	2109	28.4	2149	30.2	
21534	1890	18.8	1914	19.7	1964	21.7	2008	23.4	2051	25.2	2096	27.2	2141	29.3	2177	31.0	2213	32.8	
22560	1964	21.0	1987	21.9	2034	23.9	2080	25.9	2120	27.7	2162	29.6	2205	31.7	2247	33.9	2281	35.7	

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
12305	1738	16.3	1792	17.6	1847	18.9														
13331	1778	17.8	1828	19.1	1879	20.6	1980	23.5	2105	28.4										
14356	1830	19.5	1874	20.9	1919	22.3	2013	25.4												
15382	1885	21.3	1930	22.9	1970	24.3	2053	27.4	2140	30.6	2226	33.8	2315	37.2						
16407	1943	23.2	1984	24.8	2025	26.4			2104	29.6	2182	32.9	2263	36.3	2344	39.7	2427	43.3	2509	46.9
17432	1998	25.0	2040	26.8	2083	28.7			2160	32.1	2233	35.4	2306	38.9	2381	42.4	2460	46.2	2535	49.8
18458	2060	27.2	2098	28.9	2437	30.7	2216	34.5	2289	38.2	2358	41.8	2427	45.4	2497	49.1	2571	53.1		
19483	2128	29.8	2162	31.4	2197	33.1	2271	36.9	2345	40.9	2414	44.8	2480	48.6	2545	52.4	2611	56.3		
20509	2190	32.3	2230	34.3	2262	35.9	2329	39.6	2401	43.9	2471	47.9	2536	52.0	2600	56.0				
21534	2251	34.7	2290	36.8	2331	39.1	2393	42.6	2458	46.5	2526	50.9	2593	55.3						
22560	2316	37.6	2352	39.6	2389	41.8	2461	46.1	2520	49.9	2583	54.0								
23585	2384	40.7	2418	42.7	2452	44.8	2524	49.4	2587	53.7										
24611	2455	44.2	2486	46.1	2518	48.2	2584	52.7												
25636	2521	47.5	2557	49.9	2586	51.9														
26662	2585	50.9	2622	53.5																

SARAVEL BACKWARD CENTRIFUGAL FANS (SINGLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
245	26 9/32"	9.86	6.21	$5.17 \times (\text{RPM}/1000)^3$	6.87 x RPM

CLASS	I	II	III
MAX. TIP SPEED	10,500	13,500	16,500
MAX. RPM	1,455	1,965	2,401

The performance ratings nearest the black lines represent the most economical fan selection.

CFM	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4"SP		1 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
4972	401	0.32	441	0.44	477	0.56	513	0.68	551	0.82								
6215	461	0.47	497	0.61	529	0.75	561	0.90	590	1.06	618	1.21	648	1.37				
7458	522	0.66	557	0.83	586	0.99	615	1.17	641	1.33	668	1.53	693	1.71	740	2.08	789	2.47
8701	587	0.92	617	1.11	648	1.31	673	1.49	699	1.70	722	1.89	744	2.09	789	2.53	831	2.96
9944	653	1.25	682	1.47	708	1.67	735	1.91	757	2.11	779	2.33	803	2.59	841	3.01	882	3.52
11187	721	1.67	746	1.89	772	2.14	795	2.37	818	2.62	840	2.88	860	3.11	901	3.65	935	4.13
12430	791	2.18	813	2.42	836	2.68	859	2.96	879	3.21	900	3.48	923	3.79	957	4.30	994	4.89
13673	859	2.78	882	3.05	902	3.32	923	3.62	944	3.93	963	4.20	981	4.49	1020	5.14	1052	5.69
14917	929	3.49	951	3.81	970	4.09	989	4.39	1008	4.72	1028	5.06	1045	5.35	1079	5.99	1115	6.70
16160	1000	4.32	1020	4.66	1039	4.99	1056	5.30	1074	5.63	1092	5.99	1110	6.37	1141	7.00	1174	7.72
17403	1071	5.29	1089	5.64	1109	6.02	1124	6.35	1140	6.69	1157	7.05	1174	7.43	1206	8.19	1235	8.90
18646	1142	6.40	1159	6.77	1177	7.16	1194	7.55	1209	7.90	1224	8.27	1239	8.65	1271	9.50	1299	10.2
19889	1214	7.66	1230	8.05	1246	8.46	1263	8.89	1278	9.28	1292	9.65	1306	10.0	1335	10.8	1365	11.8
21123	1286	9.09	1301	9.49	1316	9.92	1332	10.3	1348	10.8	1361	11.2	1374	11.6	1400	12.4	1428	13.4
22375	1358	10.6	1372	11.1	1387	11.5	1401	12.0	1416	12.5	1430	12.90	1443	13.3	1467	14.2	1493	15.1

CFM	1 3/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5"SP		5 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9944	919	4.01	955	4.49	1027	5.50	1102	6.57										
11187	970	4.65	1006	5.24	1071	6.33	1134	7.44	1200	8.62	1266	9.85						
12430	1027	5.45	1058	6.00	1122	7.26	1180	8.49	1236	9.71	1296	11.0	1354	12.3	1414	13.6		
13673	1085	6.33	1117	6.99	1173	8.19	1231	9.60	1286	10.9	1336	12.2	1388	13.6	1443	15.1	1496	16.5
14917	1143	7.30	1173	7.98	1231	9.37	1282	10.7	1337	12.2	1386	13.7	1433	15.1	1480	16.6	1528	18.1
16160	1206	8.49	1233	9.14	1289	10.6	1339	12.0	1387	13.5	1438	15.2	1483	16.8	1529	18.4	1571	19.9
17403	1265	9.68	1296	10.5	1346	11.9	1399	13.6	1444	15.1	1488	16.7	1535	18.5	1579	20.2	1622	22.0
18646	1326	11.0	1355	11.8	1407	13.5	1454	15.1	1505	17.0	1546	18.5	1587	20.2	1630	22.1	1673	24.0
19889	1390	12.6	1416	13.4	1470	15.2	1515	16.9	1559	18.7	1607	20.7	1645	22.4	1683	24.1	1723	26.0
21132	1456	14.3	1479	15.1	1528	17.0	1578	19.0	1619	20.7	1661	22.6	1706	24.7	1742	26.5	1778	28.4
22375	1520	16.2	1545	17.1	1590	18.9	1637	21.0	1681	23.0	1720	24.9	1760	26.9	1802	29.2	1838	31.1
23618	1584	18.1	1609	19.2	1654	21.2	1697	23.2	1743	25.4	1782	27.4	1819	29.4	1857	31.6	1897	33.9
24861	1650	20.4	1673	21.4	1719	23.7	1759	25.6	1801	27.8	1846	30.3	1881	32.3	1915	34.4	1952	36.7
26104	1716	22.8	1738	23.9	1784	26.3	1824	28.4	1863	30.6	1903	32.9	1945	35.5	1977	37.6	2010	39.8
27347	1784	25.5	1805	26.6	1847	29.0	1889	31.4	1926	33.6	1963	35.9	2003	38.5	2041	41.1	2072	43.2

CFM	6" SP		6 1/2" SP		7" SP		8" SP		9" SP		10" SP		11" SP		12"SP		13" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14917	1579	19.7	1627	21.3	1678	23.0	1798	28.4										
16160	1615	21.6	1660	23.2	1707	25.0	1828	30.8	1912	34.4								
17403	1662	23.6	1702	25.3	1743	27.1												
18646	1712	25.8	1753	27.8	1789	29.5	1864	33.2	1944	37.1	2022	41.0	2102	45.1				
19889	1764	28.1	1802	30.1	1839	32.1	1911	35.9	1982	39.9	2055	44.0	2129	48.2	2204	52.5	2278	56.9
21132	1815	30.3	1853	32.5	1892	34.7			2028	43.0	2095	47.2	2163	51.4	2234	56.0	2303	60.4
22375	1871	33.0	1905	35.0	1941	37.2	2013	41.9	2079	46.3	2142	50.7	2204	55.1	2268	59.5	2335	64.4
23618	1932	36.1	1963	38.1	1995	40.2	2063	44.8	2130	49.6	2193	54.4	2253	59.0	2311	63.5	2372	68.3
24861	1989	39.1	2025	41.6	2055	43.6	2116	48.0	2180	52.9	2244	58.0	2303	63.0	2361	67.9		
26104	2045	42.1	2080	44.7	2117	47.4	2173	51.7	2232	56.4	2294	61.7	2355	67.1				
27347	2104	45.5	2136	48.0	2170	50.6	2235	55.9	2289	60.5	2346	65.5						
28590	2166	49.4	2196	51.8	2227	54.3	2292	59.9	2350	65.1								
29834	2230	53.6	2258	55.9	2287	58.4	2347	63.8										
31077	2289	57.6	2322	60.5	2349	63.0												
32320	2348	61.8	2382	64.9														

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
270	28 15/16"	12.68	7.54	$7.75 \times (\text{RPM}/1000)^3$	7.58 x RPM

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,000	20,000	22,500	
MAX. RPM	1,319	1,847	2,309	2,639	2,968	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6032	362	0.35	431	0.61	503	0.95												
7540	422	0.52	475	0.82	531	1.15	589	1.55	621	1.85	671	2.30	719	2.81	766	3.35	812	3.93
9048	483	0.72	532	1.11	575	1.47												
10556	546	0.97	592	1.44	631	1.88	668	2.30	707	2.73	749	3.22	791	3.78	832	4.36	913	5.65
12064	611	1.28	653	1.83	691	2.36	724	2.85	756	3.32	789	3.81	825	4.33	862	4.92	935	6.20
13572	677	1.68	717	2.30	752	2.90	784	3.49	813	4.02	842	4.55	871	5.11	901	5.65	965	6.91
15080	744	2.17	779	2.81	813	3.50	844	4.16	873	4.82	899	5.40	925	6.01	950	6.65	1004	7.83
16588	812	2.76	843	3.43	877	4.22	905	4.93	932	5.65	959	6.39	982	7.02	1007	7.72	1053	9.02
18096	881	3.46	909	4.16	939	4.97	967	5.80	994	6.61	1018	7.37	1043	8.18	1064	8.88	1108	10.3
19604	949	4.27	975	5.01	1002	5.84	1031	6.79	1055	7.63	1080	8.53	1102	9.34	1124	10.2	1166	11.7
21112	1018	5.20	1043	6.00	1067	6.85	1093	7.80	1119	8.82	1141	9.72	1164	10.7	1184	11.5	1226	13.4
22620	1087	6.26	1110	7.13	1133	8.00	1157	8.98	1181	10.0	1204	11.1	1225	12.0	1247	13.1	1285	15.0
24128	1156	7.46	1179	8.41	1200	9.32	1222	10.3	1244	11.3	1268	12.5	1288	13.6	1307	14.6	1346	16.8
25636	1225	8.82	1247	9.85	1267	10.7	1287	11.8	1308	12.9	1330	14.1	1352	15.3	1370	16.4	1408	18.7
27144	1295	10.3	1316	11.4	1335	12.4	1354	13.4	1373	14.6	1393	15.8	1414	17.1	1434	18.4	1469	20.7

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP												
12064	1006	7.61																
13572	1032	8.36	1096	9.91	1157	11.5												
15080	1062	9.22	1121	10.7	1179	12.4	1237	14.2	1292	16.0								
16588	1102	10.3	1154	11.8	1208	13.5	1263	15.3	1314	17.1	1366	19.1	1416	21.1				
18096	1151	11.7	1196	13.2	1243	14.8	1293	16.6	1342	18.4	1391	20.4	1439	22.5	1486	24.6	1532	26.8
19604	1206	13.3	1245	14.9	1287	16.4	1330	18.1	1374	19.9	1420	21.9	1466	24.0	1511	26.2	1555	28.4
21112	1263	15.0	1300	16.7	1337	18.4	1375	20.1	1414	21.8	1455	23.7	1498	25.8	1539	27.9	1582	30.2
22620	1322	16.9	1357	18.7	1392	20.5	1426	22.3	1461	24.1	1497	25.9	1535	27.9	1573	30.0	1614	32.3
24128	1382	18.8	1416	20.8	1449	22.8	1482	24.7	1513	26.5	1546	28.6	1579	30.4	1614	32.5	1650	34.6
25636	1442	20.9	1476	23.2	1507	25.2	1539	27.2	1569	29.3	1599	31.3	1630	33.4	1661	35.4	1693	37.5
27144	1504	23.2	1535	25.4	1568	27.9	1597	29.9	1627	32.1	1656	34.4	1684	36.4	1712	38.6	1742	40.8
28652	1565	25.5	1597	28.0	1627	30.4	1658	33.0	1685	35.2	1713	37.5	1742	39.9	1768	42.0	1794	44.2
30160	1627	28.0	1659	30.8	1688	33.3	1716	35.8	1746	38.6	1772	40.8	1798	43.2	1825	45.8	1850	48.1
31668	1690	30.7	1720	33.5	1750	36.4	1777	39.0	1804	41.7	1833	44.6	1857	47.0	1882	49.5	1908	52.1
33176	1754	33.7	1782	36.5	1811	39.5	1839	42.5	1865	45.2	1891	48.0	1918	51.1	1941	53.6	1965	56.2

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21" SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19604	1641	33.0																
21112	1665	34.9	1745	39.8														
22620	1693	37.0	1769	41.9	1920	52.7												
24128	1724	39.3	1798	44.3	1943	55.3	2083	67.1										
25636	1759	42.0	1830	47.0	1968	57.9	2102	69.7	2252	85.5								
27144	1802	45.2	1865	50.0	1996	60.8	2126	72.7										
28652	1850	48.9	1907	53.6	2029	64.2	2155	76.2	2276	89.0	2393	102						
30160	1901	52.8	1954	57.7	2066	68.0	2184	79.8	2304	92.9	2418	106	2528	120				
31668	1956	57.0	2006	62.1	2108	72.4	2218	83.9	2330	96.8	2443	110	2554	125	2658	140		
33176	2015	61.8	2060	66.7	2155	77.4	2256	88.7	2364	101	2471	115	2577	129	2683	145	2782	160
34684	2071	66.1	2117	71.9	2206	82.8	2300	94.0	2399	106	2502	120	2606	134	2705	150	2808	166
36192	2129	71.0	2174	76.9	2259	88.2	2347	99.9	2440	112	2536	125	2634	140	2735	155	2829	171
37700	2190	76.4	2232	82.2	2316	94.3	2398	106	2484	118	2574	131	2668	146	2762	161	2860	178
39208	2249	81.6	2291	88.0	2374	100	2451	112	2532	125	2616	138	2704	152	2796	167	2886	183
40716	2309	86.8	2353	94.2	2430	106	2507	119	2583	132	2662	145	2745	159	2830	174	2919	190

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
300	32 5/32"	15.22	9.31	13.1 x (RPM/1000) ³	8.42 x RPM

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	1,188	1,662	2,078	2,375	2,672	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7448	326	0.43	388	0.75	452	1.17												
9310	379	0.64	427	1.02	478	1.42	530	1.91	603	2.84	647	3.47	689	4.13	731	4.86		
11172	435	0.89	479	1.37	518	1.81	559	2.28										
13034	492	1.20	533	1.78	568	2.32	601	2.84	636	3.37	674	3.98	712	4.66	749	5.88	822	6.98
14896	549	1.59	588	2.26	622	2.91	652	3.51	681	4.10	710	4.70	742	5.34	776	6.07	841	7.66
16759	609	2.08	645	2.85	676	3.58	705	4.31	732	4.96	757	5.62	783	6.31	811	6.98	869	8.54
18621	669	2.68	701	3.47	732	4.32	759	5.14	785	5.96	809	6.68	832	7.43	855	8.16	904	9.67
20483	731	3.41	759	4.23	789	5.21	814	6.09	839	6.97	863	7.89	884	8.67	906	9.53	948	11.1
22345	792	4.28	818	5.13	845	6.13	871	7.16	894	8.17	916	9.10	938	10.1	958	10.9	997	12.7
24207	854	5.27	878	6.19	902	7.21	928	8.38	950	9.42	972	10.5	992	11.5	1012	12.6	1049	14.5
26069	916	6.42	938	7.41	960	8.46	984	9.64	1007	10.9	1027	12.0	1048	13.2	1066	14.2	1103	16.5
27931	978	7.73	999	8.30	1020	9.89	1041	11.0	1063	12.4	1084	13.7	1102	14.9	1122	16.2	1156	18.5
29793	1040	9.22	1061	10.3	1080	11.5	1099	12.7	1120	14.0	1141	15.5	1159	16.8	1177	18.1	1211	20.7
31655	1103	10.8	1123	12.1	1140	13.3	1158	14.5	1177	15.9	1197	17.4	1217	19.0	1233	20.3	1267	23.1
33518	1165	12.7	1184	14.1	1201	15.3	1218	16.6	1236	18.0	1254	19.5	1272	21.1	1291	22.8	1322	25.6

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP												
14896	905	9.40																
16759	928	10.3	986	12.2	1041	14.2												
18621	956	11.3	1009	13.3	1061	15.3	1113	17.5	1163	19.8								
20483	992	12.7	1039	14.6	1087	16.6	1137	18.9	1183	21.2	1229	23.6	1275	26.1				
22345	1036	14.5	1067	16.3	1119	18.3	1164	20.5	1207	22.7	1252	25.2	1295	27.7	1337	30.4	1378	33.1
24207	1085	16.4	1121	18.4	1158	20.3	1197	22.4	1237	24.6	1278	27.1	1319	29.7	1360	32.3	1399	35.0
26069	1137	18.5	1170	20.6	1203	22.7	1237	24.8	1273	27.0	1309	29.3	1348	31.8	1385	34.5	1424	37.3
27931	1190	20.8	1221	23.1	1253	25.3	1283	27.5	1315	29.8	1347	32.0	1381	34.5	1416	37.0	1452	39.8
29793	1244	23.3	1274	25.7	1304	28.1	1333	30.5	1362	32.8	1391	35.3	1421	37.6	1453	40.1	1485	42.7
31655	1297	25.8	1328	28.6	1356	31.1	1385	33.6	1412	36.2	1439	38.6	1467	41.2	1495	43.7	1523	46.3
33518	1353	28.6	1382	31.4	1411	34.4	1437	37.0	1464	39.7	1490	42.4	1515	45.0	1541	47.7	1567	50.4
35380	1408	31.5	1437	34.6	1464	37.6	1492	40.8	1516	43.4	1541	46.3	1567	49.3	1591	51.9	1615	54.7
37242	1464	34.6	1493	38.0	1519	41.1	1545	44.3	1571	47.7	1594	50.4	1618	53.4	1642	56.6	1665	59.4
39104	1521	38.0	1547	41.4	1575	45.0	1599	48.1	1624	51.5	1649	55.1	1671	58.0	1694	61.1	1717	64.3
40966	1578	41.7	1603	45.1	1629	48.7	1655	52.5	1678	55.8	1702	59.3	1726	63.1	1747	66.2	1768	69.4

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21" SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
24207	1477	40.8	1571	49.2														
26069	1498	43.0	1592	51.8	1727	65.1												
27931	1523	45.7																
29793	1552	48.6	1618	54.7	1749	68.3	1874	82.8										
31655	1583	51.8	1646	58.1	1771	71.5	1892	86.1	2026	105								
33518	1622	55.8	1678	61.7	1796	75.1	1913	89.8	1965	114	2073	131	2198	136	2275	149		
35380	1664	60.4	1716	66.2	1826	79.3	1939	94.2	2048	109	2154	126	2298	154	2392	173		
37242	1711	65.2	1759	71.2	1859	83.9	1965	98.6	2073	114	2176	131	2371	154	2462	192	2546	211
39104	1761	70.4	1805	76.7	1897	89.4	1996	103	2097	119	2198	136	2298	154	2392	173	2503	198
40966	1813	76.3	1854	82.4	1939	95.6	2031	109	2127	125	2224	142	2319	160	2415	179	2527	205
42828	1863	81.7	1905	88.7	1985	102	2069	116	2158	131	2251	148	2345	166	2435	185	2546	211
44690	1916	87.7	1956	95.0	2033	109	2112	123	2195	138	2282	154	2371	172				
46552	1971	94.4	2008	101	2084	116	2158	131	2235	146	2316	162	2401	180	2486	199	2574	220
48414	2024	100	2062	108	2136	124	2206	139	2279	155	2354	170	2433	188	2516	207	2597	226
50277	2077	107	2117	116	2187	132	2256	148	2325	164	2396	180	2470	197	2547	215	2627	235

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
330	35 3/8"	17.98	11.27	21.1 x (RPM/1000) ³	9.26 x RPM

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	1,080	1,511	1,890	2,160	2,430	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2"SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9009	296	0.53	352	0.91	411	1.42												
11261	345	0.77	389	1.23	434	1.72	482	2.32	549	3.44	588	4.20	626	5.00	665	5.88		
13513	396	1.08	435	1.65	471	2.20	508	2.76										
15765	447	1.45	484	2.15	516	2.81	547	3.43	578	4.08	612	4.82	647	5.64	681	6.51	747	8.44
18018	499	1.92	535	2.74	565	3.52	593	4.25	619	4.96	646	5.69	675	6.46	705	7.35	765	9.27
20270	554	2.51	587	3.44	615	4.33	641	5.21	665	6.00	689	6.80	712	7.63	737	8.44	790	10.3
22522	609	3.24	637	4.20	665	5.23	690	6.21	714	7.21	735	8.07	757	8.98	778	9.87	822	11.7
24774	664	4.13	690	5.12	717	6.30	741	7.37	763	8.44	784	9.55	804	10.4	824	11.5	862	13.4
27027	720	5.18	743	6.21	768	7.42	792	8.66	813	9.88	833	11.0	853	12.2	871	13.2	907	15.4
29279	776	6.38	798	7.49	820	8.72	843	10.1	864	11.4	884	12.7	902	13.9	920	15.2	954	17.5
31531	833	7.76	853	8.96	873	10.2	894	11.6	916	13.1	934	14.5	953	15.9	969	17.2	1003	20.0
33783	889	9.35	909	10.6	927	11.9	946	13.4	967	15.0	985	16.5	1002	18.0	1020	19.6	1051	22.4
36036	946	11.1	964	12.5	982	13.9	999	15.4	1018	17.0	1037	18.7	1054	20.3	1070	21.9	1101	25.1
38288	1002	13.1	1021	14.7	1037	16.1	1053	17.6	1070	19.2	1088	21.0	1106	22.9	1121	24.6	1152	28.0
40540	1059	15.4	1077	17.0	1092	18.5	1108	20.1	1123	21.8	1140	23.6	1157	25.5	1174	27.5	1202	31.0

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2"SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18018	823	11.3																
20270	844	12.5	896	14.8	946	17.2	1012	21.2	1057	23.9								
22522	869	13.7	918	16.0	965	18.5												
24774	902	15.4	944	17.7	988	20.1	1033	22.9	1075	25.6	1117	28.5	1159	31.6				
27027	942	17.6	979	19.7	1017	22.1	1058	24.8	1098	27.5	1138	30.5	1177	33.6	1216	36.8	1253	40.0
29279	987	19.9	1019	22.2	1053	24.6	1088	27.1	1124	29.8	1162	32.7	1199	35.9	1236	39.1	1272	42.4
31531	1033	22.4	1064	24.9	1094	27.5	1125	30.0	1157	32.6	1190	35.4	1225	38.5	1260	41.7	1295	45.1
33783	1082	25.2	1111	27.9	1139	30.6	1167	33.3	1195	36.0	1225	38.7	1256	41.7	1287	44.8	1320	48.2
36036	1131	28.2	1158	31.1	1186	34.0	1212	36.9	1238	39.7	1265	42.7	1292	45.5	1321	48.5	1350	51.7
38288	1180	31.2	1208	34.6	1233	37.6	1259	40.7	1284	43.8	1308	46.7	1333	49.9	1359	52.9	1385	56.0
40540	1230	34.7	1256	38.0	1283	41.7	1307	44.7	1331	48.0	1355	51.4	1378	54.4	1401	57.7	1425	61.0
42793	1280	38.1	1306	41.8	1331	45.4	1357	49.3	1379	52.5	1401	56.0	1425	59.6	1446	62.8	1468	66.1
45045	1331	41.8	1357	46.0	1381	49.7	1404	53.5	1429	57.7	1450	61.0	1471	64.6	1493	68.4	1514	71.8
47297	1383	45.9	1407	50.0	1432	54.4	1454	58.2	1476	62.3	1499	66.7	1519	70.2	1540	73.9	1561	77.8
49549	1435	50.4	1458	54.5	1482	59.0	1505	63.5	1526	67.5	1547	71.8	1569	76.4	1589	80.0	1608	83.9

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21"SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
29279	1343	49.3																
31531	1362	52.1	1428	59.5														
33783	1385	55.2	1448	62.6	1571	78.7												
36036	1411	58.8	1471	66.2	1590	82.6	1704	100										
38288	1440	62.7	1497	70.2	1611	86.5	1720	104	1842	127								
40540	1474	67.5	1526	74.7	1633	90.8	1739	108										
42793	1513	73.1	1560	80.0	1660	95.9	1763	113	1862	132	1958	153						
45045	1556	78.9	1599	86.2	1690	101	1787	119	1885	138	1978	159	2069	180				
47297	1601	85.2	1641	92.8	1725	108	1815	125	1907	144	1999	165	2089	187	2175	209		
49549	1648	92.3	1685	99.6	1763	115	1846	132	1934	151	2022	172	2108	193	2196	217	2276	240
51802	1694	98.8	1732	107	1805	123	1882	140	1963	158	2047	179	2132	201	2214	224	2298	249
54054	1742	106	1779	114	1849	131	1920	149	1996	167	2075	187	2155	209	2238	232	2315	256
56306	1792	114	1826	122	1895	140	1962	159	2032	176	2106	196	2183	218	2260	240	2340	266
58558	1841	121	1875	131	1942	150	2006	168	2072	187	2141	206	2212	227	2288	250	2361	274
60811	1889	129	1925	140	1988	159	2051	179	2114	198	2178	217	2246	238	2316	260	2388	285

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
365	39 1/8"	21.40	13.79	$36.2 \times (\text{RPM}/1000)^3$	$10.24 \times \text{RPM}$

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	977	1,367	1,709	1,953	2,197	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2"SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11032	259	0.60	309	1.07	367	1.64												
13790	299	0.87	341	1.42	381	2.00	427	2.71	483	4.02	522	4.89	560	5.80	597	6.76		
16548	341	1.23	380	1.88	414	2.55	446	3.22										
19306	384	1.67	421	2.43	452	3.20	480	3.98	508	4.75	538	5.61	570	6.59	603	7.60	670	9.76
22064	428	2.23	462	3.10	492	3.98	519	4.86	543	5.73	567	6.60	592	7.53	619	8.56	676	10.8
24822	474	2.94	505	3.92	533	4.89	559	5.88	582	6.86	604	7.82	626	8.83	647	9.81	694	12.0
27580	520	3.83	548	4.82	575	5.93	599	7.01	622	8.13	643	9.20	663	10.3	683	11.4	722	13.6
30338	567	4.89	592	5.92	618	7.18	641	8.34	662	9.52	683	10.7	702	11.9	721	13.1	757	15.6
33096	614	6.10	637	7.24	660	8.50	683	9.86	704	11.1	724	12.4	743	13.8	760	15.0	794	17.7
35854	661	7.53	683	8.78	704	10.0	726	11.5	746	12.9	766	14.3	783	15.7	801	17.2	834	20.0
38612	708	9.19	729	10.5	749	11.8	769	13.3	790	15.0	807	16.4	825	18.0	842	19.4	874	22.6
41370	756	11.0	776	12.6	794	13.9	812	15.4	832	17.1	850	18.8	867	20.4	884	22.1	914	25.3
44128	804	13.2	823	14.8	840	16.3	857	17.8	875	19.5	893	21.4	910	23.2	925	24.8	955	28.3
46886	852	15.6	870	17.3	887	18.9	902	20.5	918	22.2	935	24.1	953	26.1	968	27.9	997	31.6
49644	900	18.4	917	20.1	933	21.9	948	23.5	963	25.3	979	27.2	995	29.2	1011	31.4	1039	35.1

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP												
22064	734	13.1																
24822	744	14.5	797	17.2	847	19.9												
27580	763	16.0	808	18.8	854	21.6	901	24.6	947	27.8								
30338	792	17.9	829	20.6	870	23.5	911	26.7	954	29.8	995	33.1	1038	36.6				
33096	828	20.4	859	22.9	893	25.7	929	28.8	967	32.2	1005	35.6	1044	39.1	1083	42.6	1121	46.4
35854	865	22.8	895	25.8	924	28.5	955	31.5	988	34.7	1022	38.2	1057	41.9	1092	45.6	1128	49.4
38612	904	25.6	932	28.6	961	31.8	988	34.8	1016	38.0	1045	41.3	1076	44.9	1108	48.7	1141	52.7
41370	944	28.6	972	31.9	998	35.1	1024	38.5	1050	41.7	1076	45.0	1103	48.5	1131	52.1	1160	56.1
44128	984	31.8	1011	35.3	1038	38.9	1062	42.3	1087	45.8	1111	49.4	1135	52.8	1160	56.5	1185	60.2
46886	1025	35.2	1052	39.1	1077	42.6	1102	46.5	1125	50.2	1148	53.8	1172	57.8	1194	61.3	1216	65.0
49644	1067	39.1	1092	42.9	1118	47.0	1141	50.8	1164	54.8	1187	58.8	1208	62.6	1230	66.7	1252	70.6
52402	1108	43.1	1134	47.2	1158	51.3	1182	55.6	1203	59.6	1226	63.9	1248	68.1	1268	72.1	1288	76.3
55160	1150	47.5	1176	51.9	1199	56.1	1222	60.5	1245	65.0	1265	69.2	1286	73.6	1308	78.3	1327	82.4
57918	1194	52.3	1217	56.7	1241	61.4	1263	65.7	1285	70.4	1307	75.2	1326	79.5	1346	84.1	1366	89.1
60676	1237	57.4	1260	62.0	1282	66.7	1305	71.6	1325	76.2	1346	81.0	1367	86.1	1386	90.6	1405	95.4

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21"SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
35854	1199	57.2																
38612	1207	60.8	1273	69.0														
41370	1220	64.5	1282	73.2	1405	91.2												
44128	1239	68.4	1296	77.3	1413	96.0	1528	116										
46886	1264	73.0	1315	81.8	1422	101	1532	120	1643	148								
49644	1295	78.5	1340	86.9	1438	106	1540	126										
52402	1329	84.6	1370	93.1	1458	111	1554	133	1652	154	1748	177						
55160	1366	91.3	1404	99.9	1484	118	1571	139	1663	162	1757	185						
57918	1403	97.9	1441	107	1515	125	1594	145	1679	169	1766	193	1848	209	1857	217	1942	242
60676	1443	105	1478	114	1549	134	1621	154	1699	176	1781	200	1865	226	1952	252	2033	278
63434	1482	112	1517	122	1586	143	1652	163	1723	184	1800	209	1879	235	1959	261	2042	289
66192	1521	120	1557	131	1622	152	1687	173	1753	195	1822	218	1896	244	1973	271	2050	299
68950	1562	128	1595	139	1660	161	1724	184	1785	205	1849	228	1918	253	1989	281	2063	310
71708	1603	137	1635	148	1701	172	1760	194	1820	217	1880	240	1943	264	2010	292	2079	320
74466	1643	146	1677	158	1739	182	1798	205	1857	230	1913	252	1972	277	2034	303	2099	332



SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)

FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
402	43 5/32"	27.50	16.77	$59.2 \times (\text{RPM}/1000)^3$	$11.29 \times \text{RPM}$

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	886	1,240	1,550	1,771	1,993	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		13/4" SP		2"SP		21/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13421	235	0.73	280	1.30	333	2.00												
16776	271	1.06	309	1.73	346	2.43	387	3.29										
20132	310	1.50	344	2.28	375	3.10	405	3.91	438	4.90	473	5.95	508	7.05	541	8.22		
23487	348	2.03	381	2.96	409	3.90	435	4.84	460	5.78	488	6.82	517	8.01	547	9.24	607	11.8
26842	388	2.71	419	3.78	446	4.84	470	5.91	492	6.97	514	8.03	537	9.16	561	10.4	613	13.1
30198	430	3.58	458	4.77	483	5.95	507	7.15	528	8.34	547	9.52	567	10.7	587	11.9	629	14.6
33553	472	4.66	497	5.87	521	7.22	543	8.53	564	9.89	583	11.2	601	12.5	619	13.8	654	16.5
36908	514	5.94	536	7.21	560	8.74	581	10.1	600	11.5	620	13.1	637	14.5	654	16.0	686	18.9
40264	556	7.43	577	8.81	599	10.3	620	12.0	638	13.5	656	15.1	674	16.7	689	18.3	720	21.5
43619	599	9.17	619	10.6	638	12.2	658	14.0	677	15.7	694	17.5	710	19.1	726	20.9	756	24.3
46974	642	11.1	661	12.8	679	14.4	697	16.2	716	18.3	732	20.0	748	21.9	763	23.7	792	27.4
50330	685	13.4	704	15.3	720	16.9	736	18.8	754	20.8	771	22.9	786	24.8	801	26.9	829	30.7
53685	729	16.1	746	18.0	762	19.8	777	21.7	793	23.7	809	26.0	825	28.2	839	30.2	866	34.4
57040	772	19.0	788	21.1	804	23.1	818	25.0	833	27.1	848	29.3	864	31.8	878	34.0	904	38.5
60396	816	22.4	831	24.5	846	26.7	860	28.6	873	30.8	887	33.0	902	35.5	917	38.2	942	42.7

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP												
26842	666	16.0																
30198	675	17.7	722	20.9	768	24.2												
33553	692	19.5	733	22.8	775	26.3	817	29.9	859	33.8								
36908	718	21.8	752	25.0	788	28.6	826	32.5	864	36.3	902	40.2	941	44.5				
40264	750	24.8	779	27.9	810	31.3	842	35.1	877	39.2	911	43.4	947	47.6	981	51.9	1016	56.4
43619	784	27.8	812	31.4	838	34.7			895	42.2	926	46.5	958	51.0	990	55.5	1023	60.1
46974	819	31.2			845	34.8	871	38.7	896	42.3	921	46.2	948	50.2	976	54.6	1005	59.2
50330	855	34.7			881	38.8	905	42.7	929	46.8	952	50.8	975	54.8	1000	59.1	1025	63.4
53685	892	38.7	917	42.9	941	47.3	963	51.5	985	55.7	1007	60.1	1029	64.2	1051	68.7	1074	73.3
57040	929	42.9	954	47.6	976	51.9	999	56.5	1020	61.0	1041	65.5	1062	70.4	1082	74.6	1103	79.1
60396	967	47.6	990	52.2	1014	57.2	1034	61.8	1056	66.7	1076	71.5	1095	76.1	1115	81.1	1135	85.9
63751	1005	52.4	1028	57.5	1049	62.4	1072	67.7	1091	72.5	1111	77.7	1131	82.9	1149	87.7	1168	92.8
67106	1043	57.7	1066	63.1	1087	68.2	1108	73.6	1128	79.1	1147	84.2	1166	89.6	1186	95.3	1203	100
70462	1082	63.6	1103	69.0	1125	74.8	1145	80.0	1165	85.6	1184	91.5	1202	96.7	1220	102	1239	108
73817	1121	69.9	1142	75.4	1163	81.2	1183	87.1	1201	92.7	1221	98.6	1240	104	1256	110	1274	116

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21"SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
43619	1087	69.5	1154	84.0														
46974	1094	73.9	1162	89.0	1274	111												
50330	1106	78.5																
53685	1123	83.3	1175	94.1	1281	116	1385	141										
57040	1146	88.8	1192	99.5	1289	122	1389	147	1489	180								
60396	1174	95.5	1215	105	1304	129	1396	154										
63751	1205	103	1242	113	1322	135	1408	161	1497	188	1585	215						
67106	1238	111	1273	121	1346	143	1425	169	1508	197	1593	225	1675	254				
70462	1272	119	1307	130	1373	153	1445	177	1522	205	1601	234	1683	265	1761	295		
73817	1308	128	1340	139	1404	163	1470	187	1540	214	1615	244	1691	275	1769	307	1843	338
77172	1343	137	1375	149	1438	174	1498	198	1562	224	1632	254	1703	286	1776	318	1851	351
80528	1379	146	1411	159	1470	184	1529	210	1589	237	1652	265	1719	297	1788	330	1858	364
83883	1416	156	1446	169	1505	196	1563	224	1618	249	1676	278	1738	308	1804	342	1870	377
97239	1453	167	1483	181	1542	209	1596	236	1650	264	1704	292	1761	322	1822	355	1885	390
90594	1489	178	1521	193	1576	221	1630	250	1684	279	1734	307	1788	338	1844	369	1903	404

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
445	47 23/32"	33.18	20.49	$97.7 \times (\text{RPM}/1000)^3$	$12.48 \times \text{RPM}$

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
Max. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
Max. RPM	801	1,122	1,402	1,603	1,803	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16400	212	0.90	254	1.59	301	2.44												
20500	245	1.30	280	2.12	313	2.98	350	4.03	396	5.98	428	7.27	459	8.62	490	10.0		
24600	280	1.83	311	2.79	339	3.79	366	4.78										
28700	315	2.48	345	3.62	370	4.76	394	5.91	416	7.06	441	8.34	468	9.79	495	11.3	549	14.5
32800	351	3.32	379	4.62	403	5.92	425	7.23	445	8.52	465	9.81	486	11.1	508	12.7	555	16.0
36900	388	4.38	414	5.83	437	7.27	458	8.74	477	10.1	495	11.6	513	13.1	531	14.5	569	17.8
41000	427	5.69	449	7.17	471	8.82	491	10.4	510	12.0	527	13.6	544	15.3	560	16.9	592	20.2
45100	465	7.27	485	8.81	507	10.6	526	12.4	543	14.1	560	16.0	576	17.7	591	19.6	621	23.2
49201	503	9.08	522	10.7	541	12.6	560	14.6	578	16.5	593	18.4	609	20.5	623	22.3	652	26.3
53301	542	11.2	560	13.0	577	14.9	596	17.1	612	19.2	628	21.3	642	23.4	657	25.5	684	29.7
57401	581	13.6	598	15.7	614	17.6	630	19.8	648	22.3	662	24.4	677	26.8	690	28.9	717	33.5
61501	620	16.4	637	18.7	651	20.7	666	23.0	682	25.5	697	28.0	711	30.3	725	32.9	750	37.6
65601	659	19.7	675	22.0	689	24.2	703	26.5	717	29.0	732	31.8	746	34.4	759	36.9	784	42.1
69701	698	23.3	713	25.8	727	28.2	740	30.5	753	33.1	767	35.8	781	38.9	794	41.6	818	47.0
73801	738	27.3	752	29.9	766	32.6	777	35.0	790	37.6	803	40.4	816	43.4	829	46.6	852	52.2

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP												
32800	602	19.5																
36900	610	21.6	653	25.5	695	29.6												
41000	626	23.8	663	27.9	701	32.2	739	36.5	777	41.3								
45100	649	26.7	680	30.6	713	35.0	747	39.7	782	44.4	816	49.2	851	54.4				
49201	679	30.3	705	34.1	732	38.3	762	42.9	793	47.9	824	53.0	856	58.2	888	63.4	919	69.0
53301	709	33.9	734	38.3	758	42.4			783	46.9	810	51.6	838	56.8	867	62.3	896	67.9
57401	741	38.1			765	42.6	788	47.3	810	51.7	833	56.5	857	61.4	883	66.7	909	72.4
61501	774	42.5			797	47.5	818	52.2	840	57.2	861	62.0	882	66.9	904	72.2	927	77.5
65601	807	47.3	829	52.4	851	57.8	871	62.9	891	68.1	911	73.4	931	78.5				
69701	840	52.4	863	58.1	883	63.4	903	69.2	923	74.6	941	80.0	961	86.0	979	91.2	998	96.7
73801	875	58.2	896	63.8	917	69.9	935	75.5	955	81.5	973	87.4	991	93.1	1009	99.2	1027	105
77901	909	64.1	930	70.2	949	76.3	969	82.7	987	88.6	1005	95.0	1023	101	1040	107	1057	113
82001	943	70.6	964	77.2	983	83.4	1002	98.9	1021	96.7	1038	102	1055	109	1072	116	1088	122
86101	979	77.8	998	84.3	1018	91.4	1035	97.7	1053	104	1071	111	1087	118	1104	125	1121	132
90201	1014	85.4	1033	92.2	1052	99.2	1070	106	1087	113	1104	120	1121	128	1137	134	1152	141

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21" SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
53301	983	85.0																
57401	990	90.4	1044	102														
61501	1001	95.9	1051	108	1152	135												
65601	1016	101	1063	115	1159	142	1253	172										
69701	1037	108	1078	121	1166	150	1256	179	1347	220								
73801	1062	116	1099	129	1179	157	1263	188										
77901	1090	125	1124	138	1196	166	1274	197	1354	230	1434	263						
82001	1120	135	1152	148			1217	175	1364	241	1441	275	1515	310				
86101	1151	145	1182	159	1242	187			1307	217	1448	287	1523	323	1593	360		
90201	1184	156	1212	170	1270	199	1329	229	1393	262	1461	298	1529	336	1601	375	1667	413
94302	1215	167	1244	182	1301	213	1355	242	1413	274	1476	310	1541	349	1607	389	1675	429
98402	1247	179	1277	195	1330	225	1383	257	1437	290	1494	324	1555	362	1618	404	1681	444
102502	1281	191	1308	207	1362	240	1414	274	1464	305	1517	340	1573	377	1631	418	1692	461
106602	1314	204	1341	221	1395	256	1443	288	1492	322	1542	357	1593	393	1648	434	1705	476
110702	1347	217	1376	236	1426	270	1475	305	1523	342	1569	375	1617	413	1668	451	1721	493

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
490	52 17/32"	38.94	24.85	159 x (RPM/1000) ³	13.75 x RPM

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	728	1,018	1,273	1,455	1,636	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2"SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19889	193	1.09	230	1.92	273	2.97												
24861	223	1.58	254	2.57	284	3.61	318	4.88										
29833	254	2.22	283	3.39	308	4.59	332	5.80	360	7.26	389	8.82	417	10.4	444	12.1		
34805	286	3.01	313	4.39	336	5.78	357	7.17	378	8.56	400	10.1	424	11.8	449	13.7	499	17.6
39778	319	4.02	344	5.60	366	7.18	386	8.77	404	10.3	422	11.9	441	13.5	461	15.4	504	19.5
44750	353	5.31	376	7.07	397	8.82	416	10.6	433	12.3	450	14.1	466	15.9	482	17.6	517	21.6
49722	387	6.90	408	8.70	428	10.7	446	12.6	463	14.6	479	16.6	494	18.5	508	20.5	537	24.5
54694	422	8.81	441	10.6	460	12.9	477	15.0	493	17.1	509	19.4	523	21.5	537	23.7	564	28.1
59667	457	11.0	474	13.0	492	15.3	509	17.7	524	20.1	539	22.4	553	24.8	566	27.1	592	31.9
64639	492	13.5	508	15.8	524	18.1	541	20.8	556	23.3	570	25.9	583	28.3	597	31.0	621	36.0
69611	527	16.5	543	19.0	557	21.4	572	24.1	588	27.1	601	29.6	615	32.5	627	35.1	651	40.7
74584	563	20.0	578	22.7	591	25.1	605	27.9	619	30.9	633	34.0	645	36.8	658	39.8	681	45.6
79556	598	23.9	613	26.7	625	29.4	638	32.2	651	35.2	665	38.6	677	41.8	689	44.8	711	51.1
84528	634	28.2	648	31.2	660	34.2	672	37.0	684	40.1	696	43.5	709	47.1	721	50.4	743	57.7
89500	670	33.2	683	36.3	695	39.6	706	42.5	717	45.6	729	49.0	741	52.6	753	56.6	774	63.4

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2"SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
39778	547	23.7																
44750	554	26.3	593	31.0	631	35.9												
49722	568	28.9	602	33.9	636	39.1	671	44.3	705	50.1								
54694	590	32.4	618	37.1	647	42.4	679	48.2	710	53.8	741	59.7	773	66.0				
59667	616	36.7	640	41.3	665	46.4	692	52.0	720	58.0	748	64.3	778	70.5	806	76.9	835	83.6
64639	644	41.2	667	46.5	688	51.4			711	56.9	735	62.6	761	68.9	787	75.6	813	82.3
69611	673	46.2	694	51.7	715	57.4	736	62.7	757	68.5	778	74.4	801	80.9	825	87.8	849	95.0
74584	703	51.5	724	57.6	743	63.3	763	69.4	782	75.2	801	81.2	821	87.5	842	94.0	864	101
79556	733	57.4	753	63.6	773	70.1	791	76.3	809	82.6	827	89.1	845	95.2	864	101	883	108
84528	763	63.5	784	70.5	802	76.9	820	83.9	838	90.5	855	97.1	872	104	889	110	906	117
89500	794	70.6	813	77.4	833	84.8	849	91.5	867	98.9	884	106	900	112	916	120	932	127
94437	825	77.7	844	85.2	862	92.5	880	100	896	107	913	115	929	122	944	130	959	137
99445	857	85.6	875	93.6	893	101	910	109	927	117	942	124	958	132	974	141	988	148
104417	889	94.3	906	102	924	110	940	118	957	126	973	135	987	143	1002	151	1018	160
109389	921	103	938	111	955	120	972	129	987	137	1003	146	1018	155	1032	163	1046	172

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21"SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
64639	893	103	948	124														
69611	899	109	954	132	1046	164												
74584	909	116	954	132														
79556	923	123	965	139	1052	173	1138	209										
84528	941	131	979	147	1059	182	1141	217	1223	266								
89500	964	141	998	156	1071	191	1147	228										
94437	990	152	1020	167	1086	201	1157	239	1230	279	1302	320						
99445	1017	164	1046	180	1105	213	1170	250	1238	292	1308	334	1376	377				
104417	1045	176	1073	193	1128	226	1187	263	1250	304	1315	348	1383	392	1446	437		
109389	1075	190	1101	206	1153	241	1207	278	1265	318	1326	362	1389	408	1453	455	1514	502
114362	1103	203	1130	221	1181	258	1230	294	1283	333	1340	377	1399	424	1459	471	1521	521
119334	1133	217	1159	236	1208	274	1256	312	1305	351	1357	393	1412	440	1469	490	1526	539
124306	1163	232	1188	251	1236	291	1284	332	1329	370	1377	412	1428	457	1481	507	1536	559
129278	1194	248	1218	268	1266	310	1311	350	1355	391	1400	433	1447	477	1497	526	1548	578
134251	1223	263	1249	286	1295	328	1339	370	1383	414	1425	455	1469	501	1514	547	1563	599

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
542	58 5/32"	46.40	30.46	$264 \times (\text{RPM}/1000)^3$	$15.22 \times \text{RPM}$

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	657	920	1,150	1,314	1,478	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2"SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
24379	174	1.34	208	2.36	247	3.64												
30474	201	1.93	229	3.15	256	4.43	287	5.99										
36569	230	2.72	255	4.15	278	5.63	300	7.12	325	8.90	351	10.8	377	12.8	401	14.9		
42664	258	3.69	283	5.38	304	7.08	323	8.80	341	10.5	362	12.4	383	14.5	406	16.7	450	21.5
48759	288	4.93	311	6.86	331	8.80	349	10.7	365	12.6	381	14.5	398	16.6	416	18.9	455	23.9
54854	319	6.51	340	8.67	359	10.8	376	13.0	391	15.1	406	17.3	421	19.5	435	21.6	466	26.5
60949	350	8.46	368	10.6	387	13.1	403	15.5	418	17.9	432	20.3	446	22.7	459	25.2	485	30.0
67044	381	10.8	398	13.1	416	15.8	431	18.4	445	21.0	460	23.8	472	26.3	485	29.1	509	34.5
73139	413	13.5	428	16.0	444	18.7	460	21.7	474	24.6	487	27.4	500	30.5	511	33.2	534	39.1
79234	444	16.6	459	19.4	473	22.2	488	25.5	502	28.6	515	31.8	527	34.8	539	38.0	561	44.2
85329	476	20.3	490	23.3	503	26.2	517	29.5	531	33.2	543	36.4	555	39.8	566	43.0	588	49.9
91424	508	24.5	522	27.8	534	30.8	546	34.1	559	37.9	572	41.7	583	45.1	594	48.9	615	55.9
97519	540	29.2	553	32.8	565	36.0	576	39.4	588	43.2	600	47.3	612	51.2	622	54.9	643	62.6
103614	573	34.6	585	38.3	596	41.9	607	45.4	618	49.2	629	53.3	641	57.8	651	61.8	671	69.9
109709	605	40.7	616	44.5	628	48.5	638	52.1	648	55.9	658	60.1	669	64.5	680	69.4	699	77.7

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2"SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
48759	494	29.1																
54854	501	32.2	536	38.0	570	44.1												
60949	513	35.4	543	41.5	575	47.9	606	54.4	637	61.4								
67044	533	39.7	558	45.5	585	52.0	613	59.1	641	66.0	669	73.2	698	80.9				
73139	557	45.0	578	50.7	601	56.9	625	63.8	650	71.2	676	78.8	702	86.5	728	94.3	754	101
79234	581	50.5	602	57.0	622	63.1	642	69.8	664	76.8	687	84.5	711	92.7	734	100	759	109
85329	608	56.7	627	63.3	646	70.4	664	76.9	683	84.0	703	91.2	724	99.2	745	107	767	116
91424	635	63.2	654	70.6	671	77.7	689	85.1	706	92.2	724	99.5	742	107	760	115	780	124
97519	662	70.4	680	78.0	698	86.0	714	93.5	731	101	747	109	763	116	780	124	797	133
103614	689	77.9	708	86.5	724	94.3	741	102	757	110	772	119	788	127	803	135	818	143
109709	718	86.5	734	94.8	752	104	767	112	783	121	798	129	813	138	827	147	842	156
115804	745	95.3	762	104	779	113	795	123	809	131	824	141	839	150	853	159	867	168
121899	774	104	791	114	806	124	822	133	837	143	851	152	865	162	880	173	892	182
127994	803	115	819	125	835	135	849	145	864	155	879	166	892	175	905	186	919	196
134089	832	127	847	137	862	147	878	158	891	168	905	179	920	190	932	200	945	210

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21"SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
79234	806	126	856	152														
85329	812	134	862	161	945	201												
91424	821	142	862	161														
97519	833	151	871	171	950	212	1028	256										
103614	850	161	884	180	956	223	1030	267	1105	327								
109709	871	173	901	192	967	234	1036	280										
115804	894	187	922	205	981	246	1045	293	1111	342	1176	392						
121899	919	201	945	220	998	261	1057	307	1118	358	1182	409	1243	462				
127994	944	216	969	237	1019	278	1072	322	1129	373	1188	426	1249	481	1306	536		
134089	971	233	994	253	1042	296	1090	340	1143	390	1198	444	1254	500	1313	557	1367	615
140184	997	249	1020	271	1067	317	1111	360	1159	408	1210	462	1264	519	1318	578	1374	638
146279	1023	266	1047	290	1091	335	1134	382	1179	431	1226	482	1275	539	1327	600	1379	661
152374	1051	285	1073	308	1117	357	1160	407	1200	453	1244	505	1290	561	1338	621	1387	686
158469	1078	304	1100	328	1144	380	1184	429	1224	480	1264	531	1307	585	1352	645	1398	709
164564	1105	323	1128	351	1169	402	1209	454	1249	508	1287	558	1327	614	1368	670	1412	734

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
600	64 11/32"	47.50	37.26	$435 \times (\text{RPM}/1000)^3$	$16.83 \times \text{RPM}$

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	594	832	1,039	1,188	1,336	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2"SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
29816	157	1.64	188	2.89	223	4.45												
37271	182	2.37	207	3.85	232	5.41	259	7.32	294	10.8	317	13.2	341	15.6	363	18.2		
44725	208	3.33	231	5.08	251	6.89	271	8.70										
52179	233	4.51	256	6.58	275	8.66	292	10.7	309	12.8	327	15.1	347	17.8	367	20.5	407	26.4
59633	260	6.03	281	8.40	299	10.7	315	13.1	330	15.4	345	17.8	360	20.3	377	23.1	411	29.2
67087	288	7.96	307	10.6	324	13.2	340	15.9	354	18.5	367	21.1	380	23.8	393	26.5	422	32.5
74542	316	10.3	333	13.0	350	16.0	364	18.9	378	21.9	391	24.8	403	27.8	415	30.8	439	36.7
81996	345	13.2	360	16.0	376	19.4	390	22.5	403	25.7	416	29.1	427	32.2	439	35.6	460	42.2
89450	373	16.5	387	19.5	401	22.9	416	26.6	428	30.1	440	33.5	452	37.3	462	40.6	483	47.8
96904	402	20.3	415	23.7	428	27.2	442	31.2	454	35.0	466	38.9	476	42.5	487	46.5	507	54.1
104358	431	24.8	443	28.5	455	32.1	467	36.1	480	40.6	491	44.5	502	48.7	512	52.6	531	61.0
111813	460	29.9	472	34.0	483	37.7	494	41.8	506	46.3	517	51.0	527	55.2	537	59.8	556	68.4
119267	489	35.8	500	40.1	511	44.1	521	48.2	532	52.8	543	57.9	553	62.7	563	67.2	581	76.6
126721	518	42.4	529	46.9	539	51.3	549	55.5	558	60.2	569	65.2	579	70.7	589	75.6	607	85.5
134175	547	49.8	557	54.4	568	59.3	576	63.7	586	68.4	595	73.5	605	78.9	615	84.8	632	95.0

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2"SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
59633	446	35.6																
67087	453	39.4	484	46.5	515	53.9												
74542	464	43.3	491	50.8	519	58.6	548	66.5	576	75.1								
81996	481	48.6	504	55.6	529	63.6	554	72.3	580	80.7	605	89.5	631	98.9				
89450	503	55.1	522	62.0	543	69.6	565	78.0	588	87.0	611	96.4	635	105	658	115	682	125
96904	526	61.8	544	69.8	562	77.1			581	85.3	601	93.9	621	103	643	113	664	123
104358	550	69.3	567	77.5	584	86.1	601	94.0	618	102	636	111	654	121	674	131	694	142
111813	574	77.3	591	86.3	607	95.0	623	104	639	112	654	121	671	131	688	141	705	151
119267	599	86.1	615	95.4	631	105	646	114	661	123	676	133	690	142	705	152	721	162
126721	623	95.3	640	105	655	115	670	125	684	135	698	145	712	156	726	165	740	175
134175	649	105	664	116	680	127	694	137	708	148	722	158	735	169	748	180	761	191
141629	674	116	689	127	704	138	719	150	732	161	745	172	759	184	771	194	783	206
149084	700	128	715	140	729	151	743	163	757	175	769	187	782	199	795	211	807	222
156538	726	141	740	153	755	166	768	177	781	190	795	203	806	215	818	227	831	240
163992	752	155	766	167	780	180	793	193	806	205	819	219	832	232	843	245	854	257

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21"SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
96904	729	154	774	186														
104358	734	164	779	197	855	246												
111813	742	174																
119267	754	185	788	209	859	259	929	313										
126721	769	197	800	221	865	273	931	326	999	400								
134175	787	212	815	235	875	287	937	343										
141629	808	228	833	251	887	301	945	359	1004	418	1063	479						
149084	831	246	854	270	903	319	956	376	1011	438	1068	500	1124	565				
156538	853	264	877	290	921	340	969	394	1021	456	1074	521	1129	588	1181	656		
163992	878	285	899	310	942	362	986	416	1033	477	1083	543	1134	611	1187	682	1236	752
171446	901	304	923	332	964	387	1005	441	1048	499	1094	565	1143	635	1191	707	1242	781
178900	925	325	947	355	986	410	1026	467	1066	527	1108	589	1153	659	1200	734	1246	809
186355	950	348	970	377	1010	436	1048	498	1085	555	1125	618	1166	686	1210	760	1255	839
193809	975	372	995	402	1034	465	1070	525	1107	587	1143	649	1182	716	1222	789	1264	867
201263	999	395	1020	429	1057	492	1093	555	1129	621	1164	683	1199	751	1237	820	1276	897

SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)



FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
660	70 25/32"	57.30	45.08	702 x (RPM/1000) ³	18.52 x RPM

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	540	756	945	1,080	1,215	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
36085	143	1.98	171	3.50	203	5.39												
45106	165	2.86	188	4.66	211	6.55	236	8.87	267	13.1	288	16.0	310	18.9	330	22.1		
54128	189	4.03	210	6.15	228	8.34	247	10.5										
63149	212	5.46	232	7.96	250	10.4	265	13.0	281	15.5	297	18.3	315	21.5	333	24.8	370	31.9
72170	237	7.30	255	10.1	272	13.0	286	15.9	300	18.7	313	21.5	327	24.6	342	28.0	374	35.4
81192	262	9.64	279	12.8	295	16.0			309	19.2	322	22.4			334	25.6	346	28.8
90213	287	12.5	303	15.7	318	19.4	331	22.9	344	26.6			355	30.1	366	33.6	377	37.3
99235	313	15.9	327	19.3	342	23.5	354	27.2	366	31.1			378	35.2	388	39.0	399	43.1
108256	339	19.9	352	23.6	365	27.8	378	32.2	389	36.5			400	40.6	411	45.1	420	418
117277	365	24.6	377	28.7	389	32.9	401	37.7	412	42.3			423	47.0	433	51.5	443	56.3
126299	391	30.0	403	34.5	414	38.8	425	43.7	437	49.2			446	53.8	456	59.0	465	63.7
135320	418	36.2	429	41.2	439	45.6	449	50.6	460	56.1			470	61.7	479	66.8	488	72.3
144341	444	43.3	455	48.5	464	53.4	474	58.4	483	63.9			493	70.0	503	75.8	511	81.3
153363	471	51.3	481	56.7	490	62.1	499	67.2	508	72.8			517	78.9	527	85.6	535	91.5
162384	497	60.2	507	65.9	516	71.8	524	77.1	532	82.8			541	88.9	550	95.6	559	102

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
72170	406	43.1	440	56.2	468	65.2			498	80.5	524	90.9						
81192	411	47.7	447	61.5	472	70.9												
90213	422	52.4																
99235	438	58.8	458	67.4	481	77.0	504	87.5	527	97.7	550	108	574	119				
108256	457	66.7	475	75.1	494	84.3	514	94.5	534	105	556	116	577	128	598	139	620	151
117277	478	74.7	495	84.4	511	93.4			528	103	546	113	565	125	584	137	604	149
126299	500	83.9	515	93.8	531	104	546	113	562	124	578	135	595	146	613	159	631	172
135320	521	93.5	537	104	552	115	566	126	580	136			595	147	610	158	625	170
144341	544	104	559	115	573	127	587	138	601	149			614	161	627	172	641	184
153363	566	115	582	128	595	139	609	152	622	164	634	176	648	189	660	200	672	212
162384	590	128	604	140	618	153	630	166	644	179	656	192	668	204	680	218	692	231
171406	613	141	627	154	640	167	653	182	665	195	678	209	690	223	701	235	712	249
180427	636	155	650	169	663	183	675	197	688	212	699	226	711	240	723	256	733	269
189448	660	171	673	185	686	201	698	215	710	230	722	246	733	260	744	275	755	291
198470	684	188	696	202	709	218	721	234	733	249	744	265	756	281	766	296	777	312

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21" SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
117277	663	187	704	225														
126299	667	198	708	239	777	298												
135320	674	211																
144341	685	224	716	253	781	314	845	379										
153363	699	238	727	267	786	330	847	395	851	415	908	484						
162384	716	256	741	284	795	347												
171406	735	277	757	304	806	365	859	435	913	506	966	580						
180427	755	298	776	326	820	386	869	455	919	530	971	606	1021	684				
189448	776	320	797	351	837	411	881	477	928	552	976	631	1026	712	1074	794		
198470	798	345	817	375	856	438	896	504	939	577	985	657	1031	740	1079	825	1124	910
207491	819	368	839	402	877	469	913	533	953	604	995	684	1039	769	1083	856	1129	945
216512	841	393	860	429	897	497	932	566	969	638	1007	713	1048	798	1090	889	1133	979
225534	863	421	882	456	918	528	953	602	987	671	1022	748	1060	830	1100	920	1140	1015
234555	886	450	904	486	940	563	973	635	1006	710	1039	786	1070	866	1111	955	1149	1049
243577	908	478	927	519	961	595	994	672	1027	752	1058	826	1090	909	1124	992	1160	1086



SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)

FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
730	78 9/32"	69.78	55.15	$1173 \times (\text{RPM}/1000)^3$	20.48 $\times \text{RPM}$

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	488	684	854	977	1,099	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/2" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
44139	129	2.43	154	4.28	183	6.59												
55174	149	3.50	170	5.70	190	8.02	213	10.8	241	16.1	261	19.5	280	23.2	298	27.0		
66208	170	4.93	190	7.52	206	10.2	223	12.8										
77243	192	6.68	210	9.74	226	12.8	240	15.9	254	19.0	269	22.4	285	26.3	301	30.4	335	39.0
88278	214	8.93	231	12.4	246	15.9	259	19.4	271	22.9	283	26.4	296	30.1	309	34.2	338	43.3
99313	237	11.7	252	15.7	266	19.5	279	23.5	291	27.4	302	31.3	313	35.3	323	39.2	347	48.1
110348	260	15.3	274	19.3	287	23.7	299	28.0	311	32.5	321	36.8	331	41.2	341	45.6	360	54.4
121383	283	19.5	296	23.7	309	28.7	320	33.3	331	38.1	341	43.0	351	47.7	360	52.7	378	62.4
132417	307	24.4	318	28.9	330	34.0	341	39.4	352	44.6	361	49.7	371	55.2	380	60.2	397	70.8
143452	330	30.1	341	35.1	352	40.2	363	46.2	373	51.8	383	57.5	391	63.0	400	68.8	416	80.1
154487	354	36.7	364	42.2	374	47.5	384	53.5	395	60.2	403	65.9	412	72.1	420	77.9	437	90.4
165522	378	44.3	388	50.4	397	55.8	406	61.9	416	68.6	425	75.5	433	81.7	442	88.5	457	101
176557	402	53.0	411	59.4	420	65.3	428	71.4	437	78.2	446	85.7	455	92.8	462	99.5	477	113
187591	426	62.8	435	69.4	443	75.9	451	82.2	459	89.1	467	96.5	476	104	484	112	498	126
188626	450	73.7	458	80.6	466	87.8	474	94.3	481	101	489	108	497	116	505	125	519	140

CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
88278	367	52.7	398	68.8	423	79.8			450	98.5	473	111						
99313	372	58.3	404	75.2	427	86.8												
110348	381	64.1																
121383	396	71.9	414	82.4	434	94.2	455	107	476	119	497	132	519	146				
132417	413	81.6	429	91.8	446	103	464	115	483	128	502	142	522	156	541	170	560	185
143452	432	91.4	447	103	462	114			477	126	493	139	511	153	528	167	546	182
154487	452	102	466	114	480	127	494	139	508	152	522	165	538	179	554	194	570	210
165522	471	114	486	127	499	140	512	154	525	167								
176557	492	127	505	141	518	155	531	169	543	183	555	197	567	211				
187591	512	141	526	156	538	170	550	186	562	200	574	215	586	231	596	245	608	260
198626	533	156	546	171	559	188	570	203	582	219	593	235	604	250	615	267	626	282
209661	554	172	566	189	578	205	591	222	601	238	613	255	623	272	633	288	644	305
220696	575	190	587	207	599	224	611	242	622	260	632	276	643	294	654	313	663	329
231731	596	209	608	226	620	246	631	263	642	281	653	300	663	318	673	336	683	356
242766	618	229	629	248	641	267	652	286	662	304	673	324	683	344	693	362	702	381

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21" SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
143452	599	228	636	276														
154487	603	243	641	292	702	365												
165522	610	258																
176557	619	273	647	309	706	384	764	464										
187591	632	292	657	327	711	404	765	483	821	592								
198626	647	314	670	348	719	424	770	507										
209661	664	338	685	372	729	447	776	532	825	619	874	710						
220696	683	365	702	399	742	473	785	556	831	648	878	741	923	836				
231731	701	391	720	430	757	503	796	584	839	676	883	772	928	871	971	971		
242766	721	422	739	458	774	536	810	617	849	706	890	804	932	905	975	1009	1016	1114
253800	740	451	758	491	793	574	826	652	861	739	899	836	939	941	979	1047	1021	1156
264835	760	481	778	525	811	608	843	692	876	780	911	872	948	976				
275870	781	516	797	558	830	646	862	737	892	821	924	915	958	1015	994	1125	1031	1242
286905	801	550	817	595	850	689	880	777	910	869	940	962	971	1060	1004	1168	1039	1283
297940	821	585	838	635	869	728	899	822	928	920	956	1011	986	1112	1016	1214	1049	1329



SARAVEL BACKWARD CENTRIFUGAL FANS (DOUBLE CAMBER)

FAN SIZE	WHEEL DIA. INCH	INLET AREA SQ. FT	OUTLET AREA SQ. FT	MAX. BHP	TIP SPEED FPM
807	86 19/32"	85.40	67.48	$1930 \times (\text{RPM}/1000)^3$	22.66 x RPM

CLASS	I	II	III	IV	V	The performance ratings nearest the black lines represent the most economical fan selection.
MAX. TIP SPEED	10,000	14,000	17,500	20,000	22,500	
MAX. RPM	441	618	772	883	993	

CFM	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP		1 3/4" SP		2" SP		2 1/2" SP			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
54009	117	2.97	140	5.23	166	8.06														
67511	135	4.29	154	6.98	172	9.81	193	13.2												
81014	154	6.03	171	9.21	187	12.4	201	15.7	218	19.7	236	23.9	253	28.4	270	33.1				
94516	173	8.18	190	11.9	204	15.7	217	19.4	229	23.2	243	27.4	257	32.2	272	37.2	302	47.8		
108018	193	10.9	209	15.2	222	19.5	234	23.8	245	28.0	256	32.3	267	36.8	280	41.9	305	52.9		
121521	214	14.4	228	19.2	241	23.9			252	28.8	263	33.5			273	38.3	282	43.2	313	58.9
135023	235	18.7	247	23.6	260	29.0	270	34.3	281	39.8			290	45.0	299	50.4	308	55.8	326	66.6
148525	256	23.9	267	29.0	279	35.1	289	40.8	299	46.6			309	52.7	317	58.4	326	64.5	342	76.4
162028	277	29.9	288	35.4	298	41.6	309	48.2	318	54.6			327	60.8	336	67.5	343	73.7	359	86.6
175530	298	36.9	308	42.9	318	49.2	328	56.5	337	63.3			346	70.4	354	77.0	362	84.2	376	98.0
189033	320	45.0	329	51.7	338	58.1	347	65.4	357	73.6			365	80.6	373	88.3	380	95.4	395	110
202535	341	54.3	351	61.7	359	68.3	367	75.7	376	84.0			384	92.4	391	100	399	108	413	123
216037	363	64.9	372	72.7	379	79.9	387	87.4	395	95.7			403	104	411	113	418	121	432	138
229540	385	76.8	393	84.9	400	92.9	407	100	415	109			422	118	430	128	437	137	451	155
243042	406	90.2	414	98.7	422	107	428	115	435	124			442	133	449	143	457	153	469	172

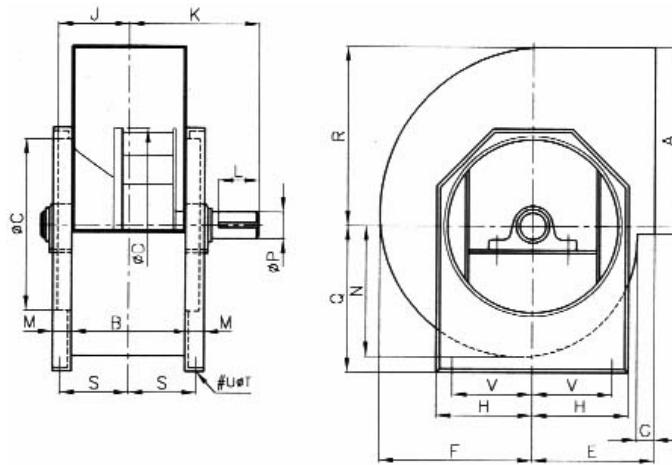
CFM	3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		6 1/2" SP		7" SP			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
108018	332	64.5	360	84.2	383	97.7			407	120	428	136								
121521	336	71.4	365	92.0	386	106														
135023	345	78.5																		
148525	358	88.0	375	100	393	115	412	130	431	146	450	162	469	179						
162028	374	99.9	388	112	403	126	420	141	437	157	454	174	472	191	489	208	506	227		
175530	390	111	404	126	418	139			431	154	446	170	461	187	477	205	493	223	510	242
189033	408	125	421	140	434	155	446	170	459	186	472	202	486	219	501	238	515	258		
202535	426	140	439	156	451	172	463	188	474	204			486	220	498	237	511	255	524	274
216037	445	156	457	172	469	190	480	207	491	224	502	242	513	258			524	276	535	294
229540	463	172	475	191	486	209	498	227	508	245	518	263	529	283	539	300	549	318		
243042	482	191	493	210	505	230	515	248	526	268	536	287	546	306	556	326	565	346		
256544	501	211	512	231	523	251	534	272	544	291	554	312	564	333	573	353	582	373		
270047	520	232	531	254	541	274	552	296	562	318	572	338	581	360	591	383	599	403		
283549	539	256	550	277	561	301	570	322	580	344	590	368	599	389	608	412	617	436		
297051	559	281	569	303	579	326	589	350	599	373	608	396	618	421	626	443	635	467		

CFM	8" SP		9" SP		11" SP		13" SP		15" SP		17" SP		19" SP		21" SP		23" SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
175530	542	280	575	338														
189033	545	297	579	358	635	446												
202535	551	316																
216037	560	335	585	378	638	470	690	568										
229540	571	357	594	400	642	494	692	591	742	724								
243042	585	384			605	425	650	520	696	621								
256544	601	414	619	455	659	547	702	651	746	758	790	869						
270047	617	447	634	489	671	579	710	681	751	793	794	907						
283549	634	479	651	526	684	615			720	714	759	827	798	945				
297051	652	516	668	561	700	656	732	755	768	864	805	983						
310554	669	551	685	601	716	702	746	798	779	905	813	1024						
324056	687	589	703	643	733	744	762	847	792	955	823	1068						
337558	706	631	721	683	750	791	779	902	806	1005	835	1120						
351061	724	674	739	728	768	843	795	951	822	1063	849	1177						
364563	742	716	758	777	786	891	812	1006	839	1126	864	1237						



SARAVEL Backward Centrifugal Fans

**SINGLE WIDTH
SINGLE INTEL**



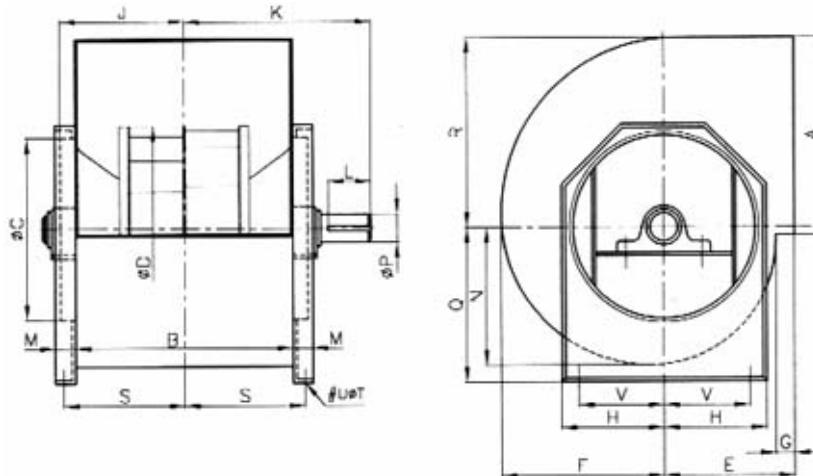
SWI DIMENSIONS

FAN SIZE	A	B	C	D inch	E	F	G	H	J	K	L	M	N	P	KEYWAY wxh	Q	R	S	T	U	V	FAN SIZE
122	350	230	400	13	320	260	30	210	145	260	75	40	275	35	10 x 8	350	340	233	12	4	130	122
135	375	260	430	14	350	280	30	230	155	265	75	40	300	35	10 x 8	380	370	255	12	4	150	135
150	420	285	470	16	385	310	30	250	170	285	75	40	330	35	10 x 8	420	420	280	12	4	170	150
165	460	320	520	17	420	330	30	270	180	320	75	40	360	45	14 x 9	470	450	308	12	4	200	165
182	510	350	600	19	470	370	40	320	220	325	75	50	400	45	14 x 9	520	500	340	14	4	210	182
200	560	380	630	21	510	410	45	330	230	335	75	50	430	45	14 x 9	580	540	370	14	4	230	200
222	630	420	700	23	570	445	45	370	250	380	85	50	480	50	16 x 10	640	600	410	14	4	365	222
245	690	460	760	26	630	480	45	400	280	410	85	50	520	50	16 x 10	700	670	450	14	4	300	245
270	750	520	860	28	690	535	55	445	315	460	85	60	575	55	16 x 10	780	725	500	14	4	320	270
300	840	560	940	32	750	585	55	480	330	490	85	60	640	60	18 x 11	860	800	550	14	4	360	300
330	920	630	1030	35	825	640	55	530	360	500	85	60	700	60	18 x 11	940	880	600	14	4	400	330
365	1030	700	1110	39	910	675	40	600	420	540	90	80	780	70	20 x 12	840	975	670	14	4	500	365
402	1135	770	1280	43	1020	750	50	650	450	580	100	80	855	70	20 x 12	900	1090	735	14	4	550	402
445	1255	830	1400	47	1100	840	55	720	500	650	100	80	945	70	20 x 12	980	1180	810	14	4	600	445
490	1360	925	1520	52	1230	910	60	780	550	700	100	80	1025	85	22 x 14	1060	1300	890	14	4	670	490
542	1530	1040	1660	58	1360	1020	65	850	600	780	125	80	1130	85	22 x 14	1200	1450	975	14	4	750	542
600	1690	1150	1690	64	1500	1130	75	960	680	830	125	120	1270	100	28 x 16	1300	1600	1100	18	6	800	600
660	1860	1270	1850	70	1650	1230	85	1050	735	880	125	120	1395	100	28 x 16	1450	1750	1200	18	6	900	660
730	1800	1375	2040	78	1830	1380	95	1150	800	960	125	120	1540	100	28 x 16	1600	1950	1320	18	6	1000	730
807	2280	1550	2260	86	2035	1500	110	1250	880	1100	125	120	1700	105	28 x 16	1750	2135	1450	18	6	1200	807



SARAVEL Backward Centrifugal Fans

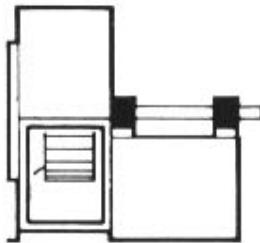
**DOUBLE WIDTH
DOUBLE INTEL**



DWDI DIMENSIONS

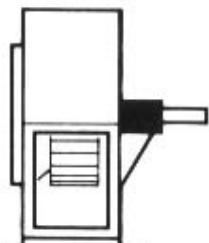
FAN SIZE	A	B	C	D inch	E	F	G	H	J	K	L	M	N	P	KEYWAY w×h	Q	R	S	T	U	V	FAN SIZE
122	350	420	400	13	320	260	30	210	145	235	400	75	275	35	10 x 8	350	340	233	12	4	130	122
135	375	460	430	14	350	280	30	230	155	260	435	75	300	35	10 x 8	380	370	255	12	4	150	135
150	420	520	470	16	385	310	30	250	170	280	465	75	330	35	10 x 8	420	420	280	12	4	170	150
165	460	560	520	17	420	330	30	270	180	310	495	85	360	45	14 x 9	470	450	308	12	4	200	165
182	510	620	600	19	470	370	40	320	220	350	550	85-	400	45	14 x 9	520	500	340	14	4	210	182
200	560	680	630	21	510	410	45	330	230	380	600	85	430	45	14 x 9	580	540	370	14	4	230	200
222	630	750	700	23	570	445	45	370	250	430	655	85	480	50	16 x 10	640	600	410	14	4	265	222
245	690	830	760	26	630	480	45	400	280	460	700	85	520	50	16 x 10	700	670	450	14	4	300	245
270	750	930	860	28	690	535	55	445	315	520	770	100	575	55	16 x 10	780	725	500	14	4	320	270
300	840	1020	940	32	750	585	55	480	330	565	830	100	640	60	18 x 11	860	800	550	14	4	360	300
330	920	1130	1030	35	825	640	55	530	360	620	900	100	700	60	18 x 11	940	880	600	14	4	400	330
365	1030	1255	1110	39	910	675	40	600	420	690	890	100	780	70	20 x 12	840	975	670	14	4	500	365
402	1135	1380	1280	43	1020	750	50	650	450	750	920	100	855	70	20 x 12	900	1090	735	14	4	550	402
445	1255	1530	1400	47	1100	840	55	720	500	830	1000	100	945	70	20 x 12	980	1180	810	14	4	600	445
490	1360	1680	1520	52	1230	910	60	780	550	930	1080	125	1025	85	22 x 14	1060	1300	890	14	4	670	490
542	1530	1835	1660	58	1360	1020	65	850	600	1010	1200	125	1130	85	22 x 14	1200	1450	975	14	4	750	542
600	1690	2060	1690	64	1500	1130	75	960	680	1140	1350	130	1270	100	28 x 16	1300	1600	1100	18	6	800	600
660	1860	2270	1850	70	1650	1230	85	1050	735	1240	1450	150	1395	100	28 x 16	1450	1750	1200	18	6	900	660
730	1800	2510	2040	78	1830	1380	95	1150	800	1360	1570	150	1540	100	28 x 16	1600	1950	1320	18	6	1000	730
807	2280	2770	2260	86	2035	1500	110	1250	800	1490	1730	150	1700	105	28 x 16	1750	2135	1450	18	6	1200	807

SARAVEL BACKWARD CENTRIFUGAL FANS



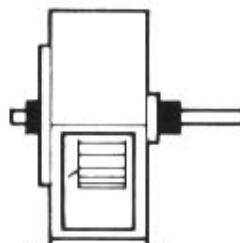
ARR. 1 SWSI

For belt drive or direct connection. Impeller overhung two bearings on base.



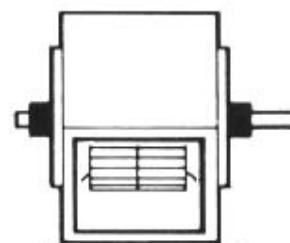
ARR. 2 SWSI

For belt drive or direct connection. Impeller overhung bearings in bracket supported by fan housing.



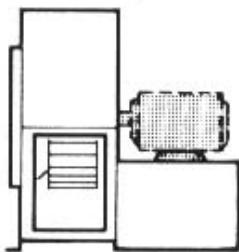
ARR. 3 SWSI

For belt drive or direct connection. One bearings on each side and supported by fan housing.



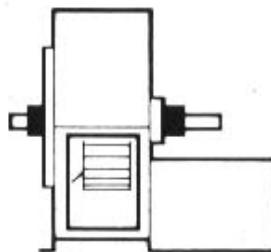
ARR. 3 DWDI

For belt drive or direct connection. One bearings on each side and supported by fan housing.



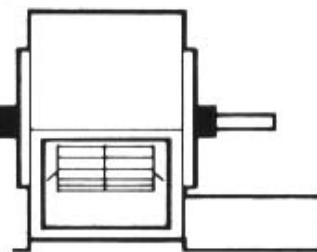
ARR. 4 SWSI

For direct drive. Impeller overhung on prime mover shaft. No bearings on fan. prime moverbase mounted or intergrally directly connected



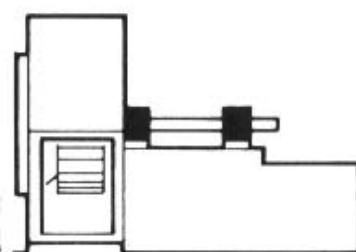
ARR. 7 SWSI

For belt drive or direct connection. Arrangement 3 plus base for prime mover.



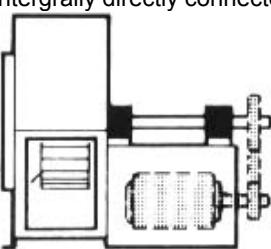
ARR. 7 DWDI

For belt drive or direct connection. Arrangement 3 plus base for prime mover.



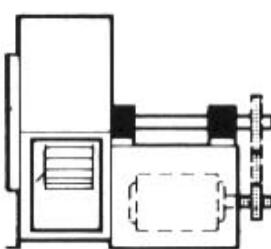
ARR. 8 SWSI

For belt drive or direct connection. Arrangement 1 plus extended base for prime mover.



ARR. 9 SWSI

For belt drive impeller overhung, two bearings, with Prime mover outside base.



ARR. 10 SWSI

For belt drive impeller overhung, two bearings, with Prime mover outside base.

Drive Arrangement for Centrifugal Fans

SW- Single width
SI-Single inlet

DW-Double width
DI-Double inlet



Split Housing For Large Fans

Horizontal Split Housings (1) are available in Size 365 through 807 for convenience in installation or handling.

V-Split Housings (2) are available in fixed discharge sizes to facilitate wheel removal without disturbing duct connections.

"T" Split Housings (3) are furnished in addition to a horizontal split to increase ease in handling.

Scalp Split or Belly Split (4 or 5) is generally provided for shipping convenience and is not suitable for removing wheel and shaft.

SARAVEL BACKWARD CENTRIFUGAL FANS

ENGINEERING SPECIFICATIONS

Furnish and install as shown on the plans, SARAVEL Backward Curved Airfoil Fans of the arrangement indicated.

UNIT HOUSINGS

Housings are to be of all welded heavy gage steel sheet construction adequately braced with heavy channels and angles for rigidity. All housings shall be equipped with spun intake cones designer for smooth air flow into the accompanying venture shaped intake rim of the fan impeller.

FAN PARTS

Shafts: All fan shafts are to be of hot rolled carbon steel and shall be accurately turned and gaged to provide an accurate fit with the fan bearings and the wheel hub.

For applications in humid or corrosive environments the shafts shall be phosphatized as per engineering specification. Solid and hollow shafts are designed to operate in less than 20% of the critical speed.

Bearings: All bearings used are to be heavy duty, grease lubricated, self aligning, anti-friction ball or roller type selected for minimum average bearing life in excess of 150,000 hours at the maximum RPM

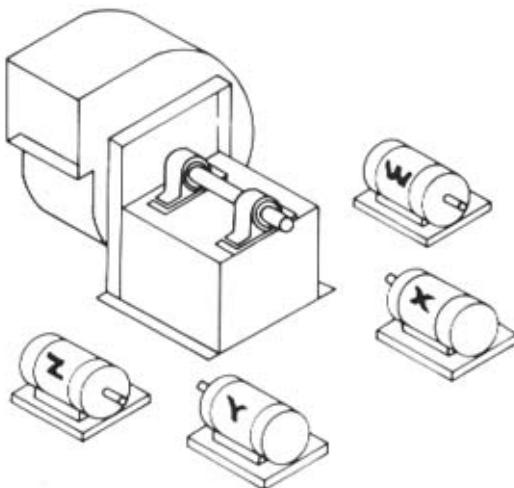
Blades: Backward curved blades are to be single thickness inclined or double camber airfoil die formed of heavy gauge steel sheet.

Hubs: Standard hub shall be made of gray cast iron, bolted to centerplate.

The complete fan section including all rotating assemblies: fan wheels, shafts, sheaves, and pulleys, shall be balanced both statically and dynamically to assure smooth and quiet operation.

FINISHES

Each fan component shall be thoroughly degreased and deburred before the application of air dried primer.



Motor Positions for Belt Drive Centrifugal Fans

Location of motor is determined by facing the drive side of fan and designating the motor Positions by letters W,X,Y or Z as the case may be.



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