

PEERLESS
BLOWERS

Plug-Pak Fans



Your Clean Air Source!

PEERLESS BLOWERS

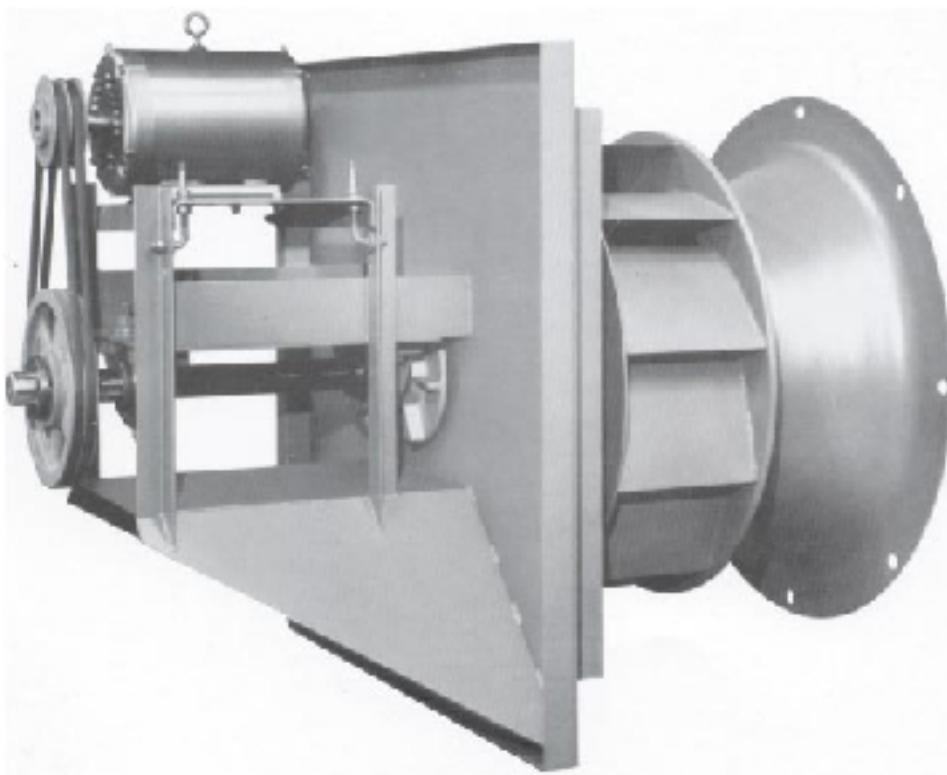
PEERLESS BLOWERS PLUG-PAK FANS

- ALL WELDED CONSTRUCTION
- DEPENDABLE OPERATION AND LONG SERVICE LIFE
- ENGINEERED TO SIMPLIFY INSTALLATION
- MINIMIZE MAINTENANCE REQUIREMENTS

Typical Industries that use

Peerless Blowers Plug-Pak Fans

HVAC	Paint
Chemical	Clothing
Leather	Steel
Aviation	Plastic
Automotive	Food
Textile	Paper



The Peerless Blowers Plug-Pak fan is of all welded construction and engineered to simplify installation and minimize maintenance requirements. The Plug-Pak can be installed in walls, floors, ceilings or plenums.

The Plug-Pak offers non-overloading characteristics with welded steel structural members which increases rigidity and stability of operation while saving space and cost.

The basic Plug-Pak unit consists of a backward blade wheel overhung on a shelf that is supported by two bearings mounted on an external base.

The standard units are built to operate in temperatures up to 300°F. For temperatures in excess of 300°F to a maximum of 800°F a 4" insulated plug and a heat slinger are available as optional accessories.

Wheel diameters from 12-1/4" to 49", Class I or II are available. The Plug-Pak fans produce air volumes to 53,820 CFM and 8" static pressure.

The Plug-Pak is available for either horizontal or vertical mounting with or without scroll housing.

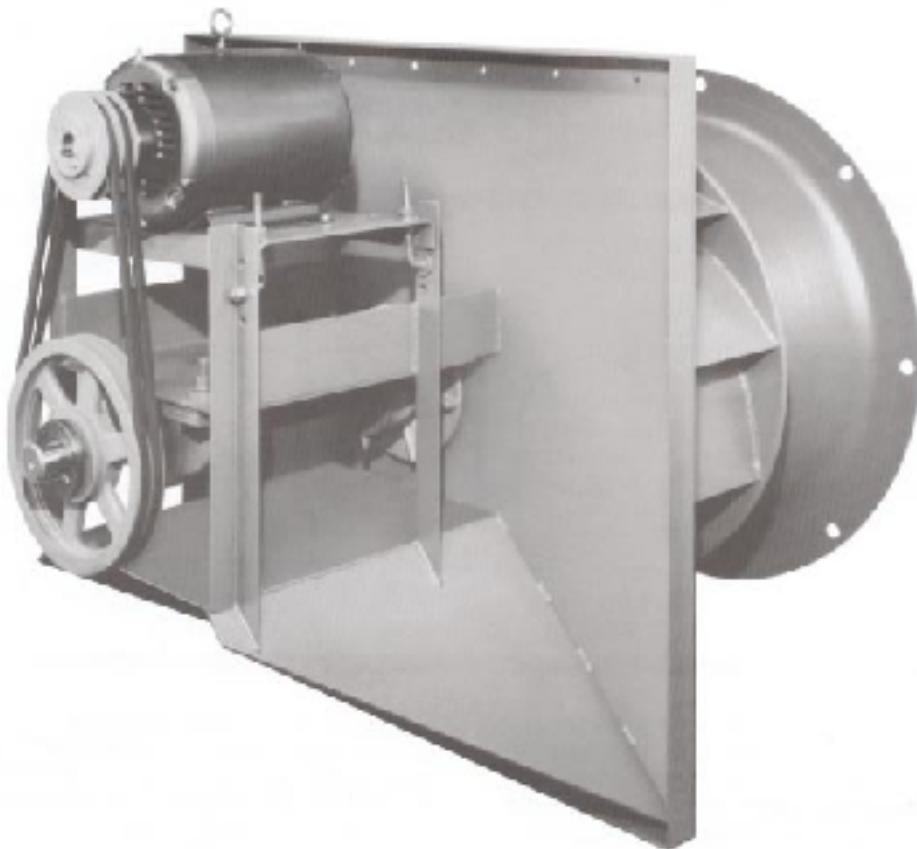
NOTE: Wheel diameters 12-1/4" thru 24-1/2" are flat bladed construction. Wheel diameters 27" and up are available in either flat bladed or airfoil bladed constructions.

STATIC AND DYNAMIC BALANCING

Completed wheel assemblies of all sizes are statically and dynamically balanced on electronically controlled balancing machines. The necessary weights are arc welded into place so that the wheel will always stay in balance.

After the complete blowers are assembled, they are all given a running inspection and again examined for balance by a portable electronic balancing unit. Inspectors add balance weights to the wheel if necessary to pass a very rigid requirement.

PEERLESS BLOWERS PLUG-PAK FANS



CONSTRUCTION FEATURES:

Backward Blade Wheel with non-overload characteristics.

Full Venturi Inlet Cone for smooth air entry into wheel.

High Grade Carbon Steel Shaft. Close tolerances insure precision bearing fit.
Heavy Duty Ball Bearing – Self-aligning selected for high load carrying capacities and long life.

Motor Base & Drive – Formal structural steel members welded to mounting panel, belt drive features adjustable belt tensioning.

Motors – Open drip, totally enclosed or explosion-proof available.

OPERATING FEATURES:

Standard unit suitable to 180°F.

Constructed to operate at temperatures up to 800°F.

Temperatures in excess of 300°F requires the addition of a heat slinger.

Temperatures in excess of 400°F requires the addition of an insulated plug.

Derating must be applied for high temperature application.

Temperature RPM Derating Factors in Percent: Steel Wheel	
300°F	100%
301-400°F	96%
401-500°F	92%
501-600°F	85%
601-700°F	80%
701-800°F	75%

Higher Temperature Applications

Temp. Range Degrees F.	Type Bearings	Lubrication	Other Requirements
Up to 180°F	Ball or Roller	Grease	Standard Fan
180°F to 300°F	Ball or Roller	Hgh Temp. Grease	Standard Fan Hgh Temp Paint
300°F to 600°F	Ball or Roller	Hgh Temp. Grease	Shaft Seal (Optional) Hgh Temp. Paint Heat Slinger Insulated Plug 4" (Optional)
Above 600°F	Consult Factory		

PEERLESS BLOWERS PLUG-PAK FANS

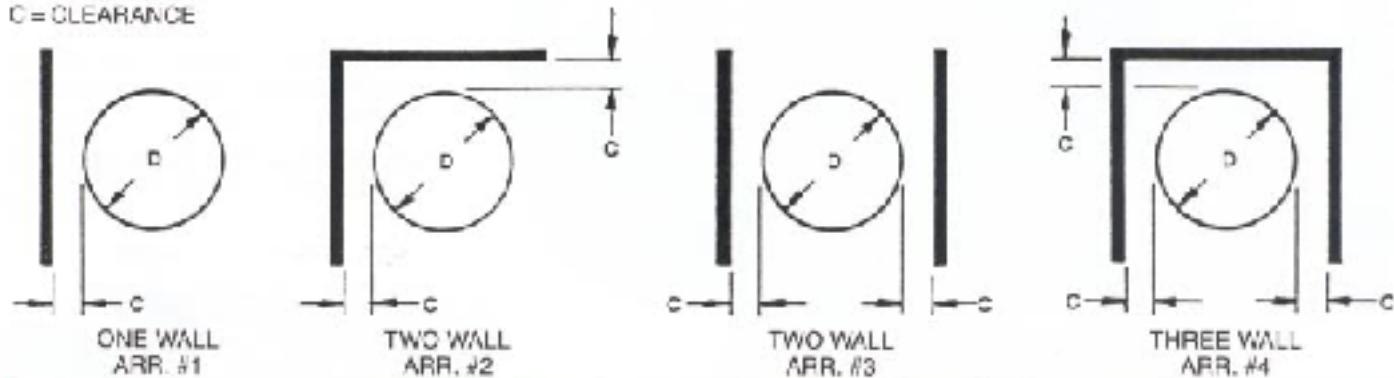
PLUG FAN

(EXAMPLE WIHTOUT HOUSING)

The performance data cataloged herein is based upon standard air, as defined by AMCA, which is dry air at 70 F and sea level pressure (29.92 inches of mercury). This is equal to a density of .075 lbs/ft.

ARRANGEMENTS FOR WHEEL-PLENUM RELATIONSHIP

D = WHEEL DIA.
C = CLEARANCE



PLUG FAN SELECTION (EXAMPLE WITHOUT HOUSING)

6704 CFM @ 2.5 TSP (System) installation is a two-wall arrangement with a wheel-to-wall clearance of 6-3/4 inches.

Step 1. Entering the performance tables, we find that a PG270AF will

deliver 6704 CFM @ 2.5 S.P. operating @ 1050 RPM with 3.85 BHP.

Step 2. Catalog performance must be corrected for wheel-to-wall arrangement. Determine the wheel and Plenum type from the arrangements shown above. (Arr. #2 used for this example). Determine the

clearance iC based upon the closest wall. Performance will not be affected by any additional walls spaced greater than 3 times the iC dimension being used. The selected PG270AF fan has a wheel diameter of 27 inches. Application is therefore $C/D = 6.75/27 = 25\%$ of wheel diameter.

WALL PROXIMITY FACTORS

FACTOR	12.5% OF WHEEL DIAMETER				25% OF WHEEL DIAMETER				50% OF WHEEL DIAMETER			
	1	2	3	4	1	2	3	4	1	2	3	4
RPM	0.95	0.97	0.93	1.06	0.95	0.97	0.92	1.05	0.92	0.94	0.91	1.04
BHP	0.98	0.99	0.97	1.1	0.98	0.99	0.96	1.09	0.97	0.99	0.95	1.08

Corrected unhoused performance for 6704 CFM @ 2.5 SP standard air is $RPM = 1050 \times .97 = 1019$ BHP – 3.85 $\times .99 = 3.81$.

For performance of units with a housing for sizes PG122BC thru PG245BC, refer to the POWER FIXED BLOWERS Catalog.

For sizes PG270AF thru PF490AF, refer to the POWERFOIL BLOWERS Catalog.

For sizes PG270BC thru PG490BC, refer to the POWER FIXED BLOWERS Catalog Supplement.

PEERLESS BLOWERS PLUG-PAK FANS

TYPICAL INSTALLATIONS

Plug Fans offer versatile applications to ovens, packaged air handlers, penthouses, ceiling, wall, and floor panel plenums. Unit assembly may be mounted with shaft in either the vertical or horizontal position. Space savings can be obtained by utilizing the wheel compartment as a pressurized chamber in lieu of a fan scroll. The use of multiple discharges from the pressurized chamber allows for additional savings by reducing ducting requirements.

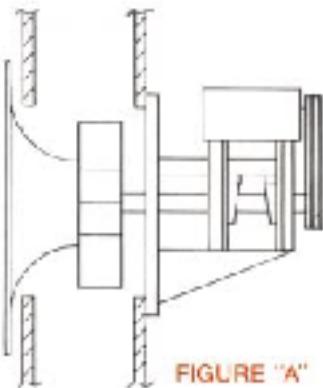
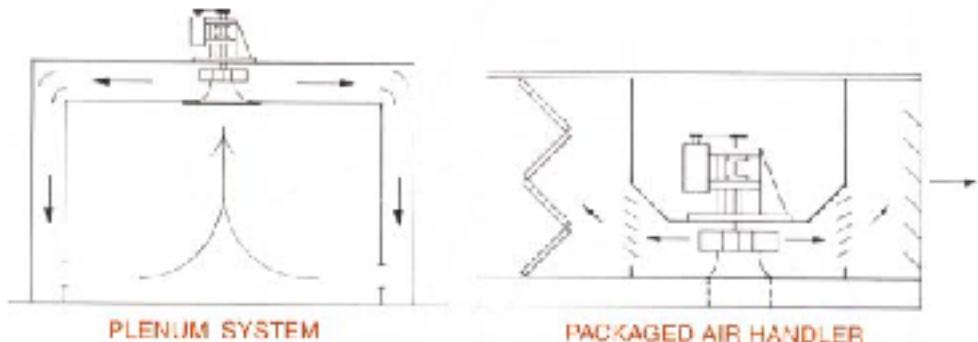


FIGURE "A"

Mounting is accomplished by providing a hole larger than the wheel diameter through the chamber wall. Wheel, shaft, motor, and drive assembly is then positioned to the inlet cone (mounted in opposite wall) and secured in place. See figure "A".

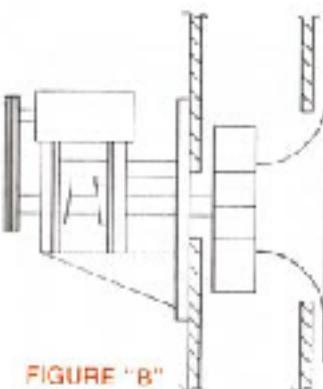


FIGURE "B"

Another method is to provide a hole sized only for the wheel drive shaft. Wheel is then positioned through the opening for the inlet cone after drive and panel assembly has been securely mounted. See figure "B".

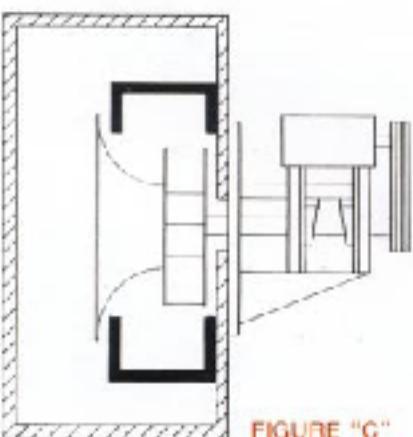
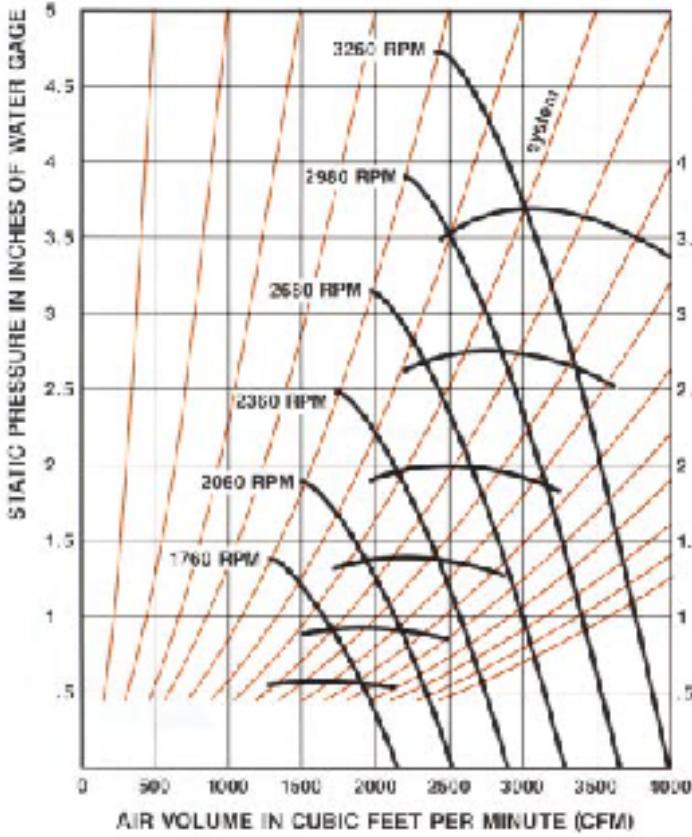


FIGURE "C"

Plug fans may be applied with open wheel (unhoused) or with housing as shown in figure "C". Catalog performance data in this catalog is for unhoused wheel application. Reference POWER FIXED BLOWERS Catalog, Non-Overloading POWER FIXED BLOWERS Catalog Supplement, and POWERFOIL BLOWERS Catalog, SWSI, for housed performance data.

PEERLESS BLOWERS PLUG-PAK FANS

PG122 BC



Wheel Diameter = 12½ inches
Tip Speed = $3.020 \times \text{RPM}$
Maximum BHP = .106 (RPM/1000)²

Pressure Class Limits

Class	Max. RPM
1	2978
2	3683
3	4697

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
987	1138	0.16	1219	0.19	1303	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1158	1232	0.20	1301	0.23	1369	0.27	1438	0.31	1510	0.35	1577	0.41	1699	0.50	1830	0.61	-	-	-	-
1330	1337	0.25	1398	0.29	1458	0.33	1518	0.37	1577	0.41	1699	0.50	1830	0.61	-	-	-	-	-	-
1502	1448	0.32	1504	0.36	1558	0.40	1612	0.45	1665	0.49	1770	0.58	1878	0.68	1989	0.80	2108	0.93	-	-
1673	1566	0.40	1615	0.44	1665	0.49	1714	0.53	1763	0.58	1859	0.68	1953	0.79	2048	0.90	2147	1.01	2249	1.15
1845	1688	0.49	1732	0.54	1777	0.59	1823	0.64	1868	0.69	1956	0.80	2042	0.90	2128	1.02	2214	1.14	2302	1.26
2016	1814	0.61	1854	0.66	1895	0.71	1936	0.76	1977	0.81	2059	0.93	2140	1.04	2219	1.16	2298	1.28	2376	1.41
2188	1942	0.74	1979	0.79	2016	0.85	2053	0.90	2091	0.96	2168	1.07	2243	1.20	2317	1.32	2391	1.45	2463	1.58
2360	2071	0.90	2106	0.95	2141	1.01	2175	1.06	2209	1.12	2280	1.24	2351	1.37	2421	1.50	2490	1.64	2558	1.78
2531	2202	1.07	2235	1.13	2267	1.19	2299	1.25	2331	1.31	2396	1.43	2462	1.57	2528	1.71	2593	1.85	2657	1.99
2703	2333	1.27	2365	1.33	2396	1.39	2426	1.46	2456	1.52	2516	1.65	2577	1.79	2639	1.93	2700	2.08	2761	2.23
2874	2467	1.50	2495	1.56	2525	1.63	2554	1.69	2582	1.76	2638	1.89	2695	2.03	2753	2.18	2811	2.33	2869	2.49
3046	2601	1.75	2627	1.81	2655	1.88	2683	1.95	2710	2.02	2763	2.16	2816	2.31	2870	2.46	2925	2.62	2980	2.78
3218	2736	2.03	2761	2.10	2786	2.17	2813	2.24	2839	2.32	2890	2.46	2940	2.61	2991	2.77	3042	2.93	3093	3.10
3389	2871	2.34	2895	2.41	2919	2.48	2944	2.56	2969	2.64	3018	2.79	3066	2.95	3113	3.11	3161	3.27	3210	3.45
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1845	2392	1.40	2583	1.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	2455	1.54	2619	1.83	2792	2.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2188	2535	1.72	2681	2.01	2832	2.32	2990	2.68	-	-	-	-	-	-	-	-	-	-	-	-
2360	2625	1.92	2759	2.21	2894	2.52	3034	2.86	3179	3.23	-	-	-	-	-	-	-	-	-	-
2531	2721	2.14	2846	2.45	2971	2.76	3098	3.10	3227	3.45	3361	3.84	3501	4.27	-	-	-	-	-	-
2703	2822	2.39	2941	2.70	3058	3.03	3175	3.37	3293	3.72	3414	4.10	3538	4.51	3666	4.95	-	-	-	-
2874	2927	2.66	3040	2.99	3151	3.32	3261	3.67	3371	4.03	3482	4.41	3595	4.81	3711	5.23	3829	5.68	3952	6.16
3046	3034	2.95	3143	3.29	3249	3.65	3354	4.01	3458	4.38	3561	4.76	3666	5.16	3772	5.57	3880	6.00	3990	6.47
3218	3145	3.27	3249	3.63	3351	3.99	3451	4.37	3550	4.75	3648	5.14	3746	5.55	3845	5.96	3945	6.39	4046	6.84
3389	3259	3.62	3358	3.99	3455	4.37	3552	4.76	3647	5.16	3741	5.56	3834	5.97	3927	6.39	4021	6.83	4115	7.27
3561	3376	4.01	3469	4.39	3563	4.78	3656	5.18	3747	5.59	3837	6.01	3927	6.43	4015	6.86	4104	7.30	4193	7.76
3732	3495	4.43	3583	4.81	3673	5.22	3762	5.63	3850	6.06	3937	6.49	4023	6.92	4109	7.37	4193	7.82	4278	8.28
3904	3616	4.89	3700	5.28	3785	5.69	3871	6.12	3956	6.55	4040	7.00	4123	7.45	4205	7.91	4287	8.37	4368	8.84
4076	3739	5.38	3819	5.78	3900	6.20	3982	6.64	4064	7.09	4145	7.54	4226	8.01	4305	8.48	4384	8.96	4462	9.44
4247	3864	5.92	3940	6.33	4017	6.75	4096	7.20	4175	7.66	4253	8.13	4331	8.61	4408	9.09	4484	9.58	4560	10.08

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
BHP DOES NOT INCLUDE DRIVE LOSSES.

PG135 BC

Wheel Diameter = 13½ inches
 Tip Speed = $3.534 \times RPM$
 Maximum BHP = .172 (RPM/1000)³

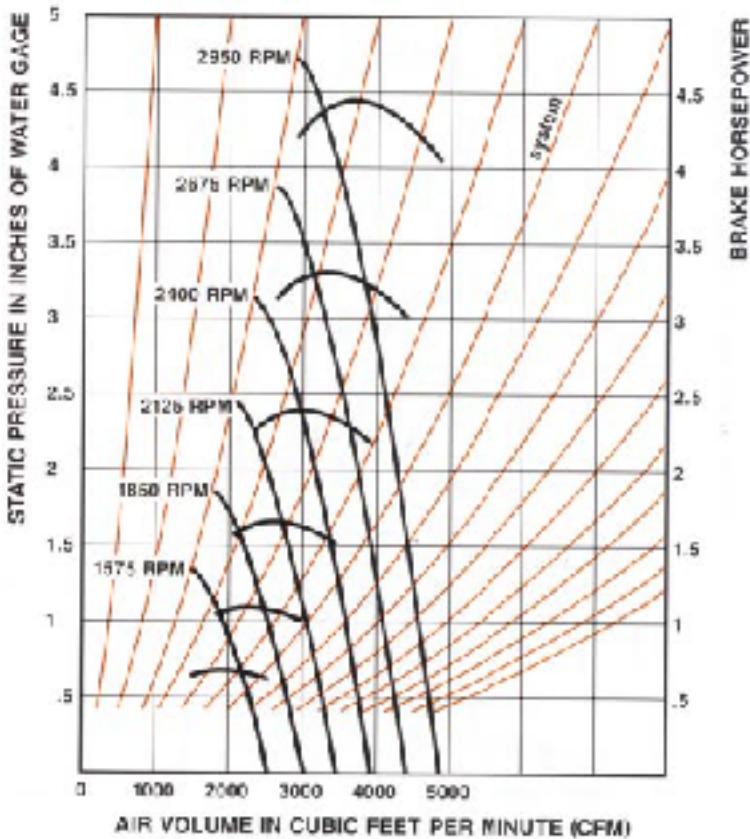
Pressure Class Limits

Class	Max. RPM
1	2702
2	3524
3	4443

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS



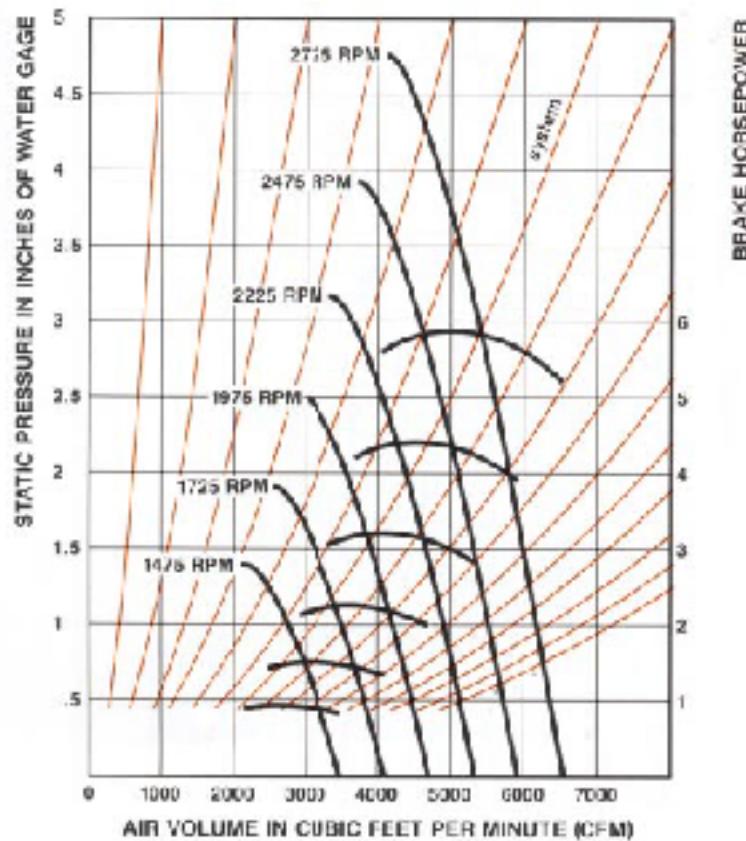
PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		
	RPM	BHP																			
1198	1032	0.19	1106	0.23	1183	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1407	1118	0.24	1180	0.28	1242	0.33	1305	0.37	1370	0.43	-	-	-	-	-	-	-	-	-	-	
1615	1213	0.31	1269	0.35	1323	0.40	1377	0.45	1431	0.50	1542	0.61	1660	0.74	-	-	-	-	-	-	-
1824	1314	0.39	1364	0.44	1414	0.49	1463	0.54	1511	0.60	1606	0.71	1704	0.83	1805	0.97	1913	1.13	-	-	
2032	1421	0.48	1466	0.54	1511	0.59	1556	0.65	1600	0.71	1686	0.83	1772	0.95	1859	1.09	1948	1.23	2041	1.39	
2240	1532	0.60	1572	0.66	1613	0.71	1654	0.77	1695	0.84	1775	0.97	1853	1.10	1931	1.24	2009	1.38	2089	1.53	
2449	1646	0.74	1682	0.80	1719	0.86	1756	0.92	1794	0.99	1869	1.12	1942	1.27	2014	1.41	2085	1.56	2156	1.71	
2657	1762	0.90	1796	0.96	1829	1.03	1863	1.09	1898	1.16	1967	1.30	2035	1.45	2103	1.61	2169	1.76	2235	1.92	
2866	1879	1.09	1911	1.15	1942	1.22	1973	1.29	2005	1.36	2069	1.51	2133	1.66	2196	1.83	2259	1.99	2321	2.16	
3074	1998	1.30	2028	1.37	2058	1.44	2086	1.51	2115	1.59	2174	1.74	2234	1.90	2294	2.07	2353	2.24	2411	2.42	
3282	2117	1.54	2146	1.62	2174	1.69	2201	1.77	2228	1.84	2283	2.00	2338	2.17	2394	2.34	2450	2.53	2506	2.71	
3491	2238	1.82	2264	1.89	2291	1.97	2317	2.05	2343	2.13	2394	2.30	2446	2.47	2498	2.65	2551	2.84	2603	3.03	
3699	2360	2.12	2384	2.20	2409	2.29	2435	2.37	2459	2.46	2507	2.63	2556	2.80	2605	2.99	2654	3.18	2704	3.38	
3908	2483	2.47	2505	2.55	2528	2.63	2552	2.72	2576	2.81	2622	2.99	2688	3.17	2714	3.36	2760	3.56	2807	3.76	
4116	2605	2.84	2627	2.93	2649	3.02	2671	3.11	2694	3.20	2738	3.39	2782	3.58	2825	3.78	2869	3.98	2913	4.18	
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		
	RPM	BHP																			
2240	2170	1.70	2343	2.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2449	2228	1.88	2376	2.23	2534	2.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2657	2300	2.09	2433	2.44	2569	2.82	2713	3.25	-	-	-	-	-	-	-	-	-	-	-	-	
2866	2382	2.33	2503	2.69	2626	3.06	2753	3.47	2885	3.93	-	-	-	-	-	-	-	-	-	-	
3074	2469	2.60	2583	2.97	2696	3.35	2811	3.76	2928	4.20	3050	4.67	3177	5.19	-	-	-	-	-	-	-
3282	2561	2.90	2668	3.28	2775	3.68	2881	4.09	2988	4.52	3098	4.98	3210	5.47	3327	6.01	-	-	-	-	-
3491	2656	3.22	2758	3.63	2859	4.04	2959	4.46	3059	4.90	3160	5.36	3262	5.84	3367	6.35	3475	6.89	3586	7.48	
3699	2753	3.58	2852	4.00	2948	4.43	3043	4.87	3137	5.32	3232	5.78	3326	6.26	3423	6.76	3521	7.29	3621	7.85	
3908	2854	3.97	2948	4.41	3040	4.85	3131	5.31	3221	5.77	3310	6.25	3400	6.73	3489	7.24	3580	7.76	3672	8.31	
4116	2957	4.40	3047	4.85	3135	5.13	3223	5.78	3309	6.26	3394	6.75	3479	7.25	3563	7.76	3648	8.29	3734	8.84	
4324	3063	4.87	3148	5.33	3233	5.80	3317	6.29	3400	6.79	3482	7.30	3563	7.81	3644	8.33	3724	8.87	3805	9.42	
4533	3171	5.38	3252	5.85	3333	6.34	3414	6.84	3494	7.35	3573	7.88	3651	8.41	3728	8.95	3805	9.50	3882	10.06	
4741	3281	5.93	3358	6.41	3435	6.91	3513	7.43	3590	7.96	3666	8.50	3741	9.05	3816	9.60	3890	10.17	3964	10.74	
4950	3393	6.54	3465	7.02	3539	7.53	3614	8.06	3688	8.61	3762	9.16	3836	9.73	3907	10.30	3978	10.88	4049	11.47	
5158	3506	7.19	3575	7.68	3645	8.20	3717	8.74	3788	9.30	3859	9.87	3930	10.45	4000	11.04	4069	11.64	4138	12.24	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS



PG150 BC

Wheel Diameter = 15 inches
Tip Speed = $3.927 \times \text{RPM}$
Maximum BHP = .290 ($\text{RPM}/1000$)³

Pressure Class Limits

Class	Max. RPM
1	2453
2	3205
3	4043

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1472	907	0.21	992	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1728	971	0.27	1031	0.32	1098	0.37	1173	0.44	-	-	-	-	-	-	-	-	-	-	-	-	
1984	1050	0.34	1101	0.39	1152	0.44	1207	0.50	1266	0.57	1403	0.73	-	-	-	-	-	-	-	-	-
2240	1135	0.42	1181	0.48	1226	0.54	1271	0.60	1317	0.66	1418	0.81	1535	0.98	-	-	-	-	-	-	-
2496	1224	0.52	1266	0.59	1308	0.65	1348	0.71	1388	0.78	1471	0.92	1560	1.08	1661	1.27	1775	1.47	-	-	
2752	1316	0.64	1355	0.71	1393	0.78	1431	0.85	1468	0.92	1541	1.06	1616	1.22	1696	1.39	1783	1.59	1880	1.81	
3008	1411	0.79	1446	0.86	1481	0.93	1517	1.01	1552	1.08	1619	1.23	1686	1.39	1754	1.56	1826	1.75	1903	1.96	
3264	1510	0.96	1540	1.03	1573	1.10	1605	1.18	1638	1.27	1702	1.43	1764	1.59	1825	1.76	1888	1.95	1953	2.14	
3520	1611	1.15	1638	1.23	1667	1.30	1697	1.39	1727	1.47	1788	1.65	1846	1.82	1903	2.00	1960	2.19	2018	2.38	
3776	1712	1.38	1738	1.45	1764	1.53	1790	1.62	1818	1.71	1875	1.89	1931	2.08	1986	2.27	2039	2.46	2092	2.66	
4032	1814	1.63	1839	1.71	1863	1.80	1887	1.88	1912	1.97	1965	2.16	2018	2.36	2070	2.57	2121	2.77	2171	2.97	
4288	1915	1.90	1941	2.00	1964	2.09	1986	2.18	2009	2.27	2057	2.47	2107	2.68	2157	2.89	2206	3.10	2254	3.32	
4544	2016	2.21	2042	2.32	2065	2.42	2086	2.51	2107	2.61	2151	2.81	2198	3.02	2245	3.24	2292	3.47	2338	3.70	
4800	2117	2.54	2143	2.67	2167	2.78	2188	2.88	2208	2.98	2248	3.18	2291	3.40	2335	3.63	2380	3.87	2425	4.11	
5056	2220	2.92	2244	3.04	2268	3.17	2290	3.29	2309	3.39	2347	3.60	2386	3.82	2427	4.06	2470	4.30	2512	4.55	
5312	2325	3.34	2345	3.46	2369	3.60	2391	3.73	2411	3.84	2447	4.06	2483	4.28	2522	4.52	2561	4.77	2602	5.03	
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
3264	2022	2.36	2174	2.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3520	2077	2.59	2205	3.05	2348	3.58	2511	4.14	-	-	-	-	-	-	-	-	-	-	-	-	
3776	2145	2.86	2257	3.31	2377	3.82	2511	4.39	2661	4.99	-	-	-	-	-	-	-	-	-	-	
4032	2221	3.18	2321	3.62	2427	4.11	2541	4.66	2666	5.27	2803	5.91	-	-	-	-	-	-	-	-	
4288	2301	3.53	2394	3.98	2489	4.46	2590	4.99	2697	5.58	2813	6.22	2939	6.90	-	-	-	-	-	-	
4544	2383	3.92	2472	4.39	2560	4.87	2651	5.38	2746	5.95	2847	6.57	2955	7.24	3071	7.95	3198	8.68	-	-	
4800	2468	4.35	2553	4.83	2637	5.32	2720	5.84	2807	6.39	2897	6.99	2991	7.63	3092	8.33	3200	9.07	3316	9.84	
5056	2554	4.80	2637	5.31	2717	5.82	2796	6.34	2876	6.89	2957	7.48	3043	8.10	3132	8.78	3227	9.50	3327	10.27	
5312	2642	5.30	2722	5.83	2799	6.36	2875	6.90	2950	7.45	3026	8.03	3104	8.65	3185	9.30	3269	10.00	3358	10.74	
5568	2732	5.83	2808	6.38	2883	6.94	2956	7.50	3028	8.06	3100	8.65	3173	9.26	3247	9.90	3324	10.58	3404	11.30	
5824	2822	6.40	2896	6.97	2969	7.56	3040	8.14	3109	8.72	3178	9.32	3247	9.93	3316	10.57	3387	11.24	3460	11.94	
6080	2915	7.02	2985	7.61	3056	8.21	3125	8.82	3192	9.43	3259	10.04	3324	10.67	3390	11.31	3457	11.98	3525	12.67	
6336	3009	7.69	3076	8.29	3144	8.92	3211	9.55	3277	10.18	3341	10.82	3405	11.46	3468	12.11	3531	12.78	3595	13.47	
6592	3105	8.41	3168	9.02	3233	9.66	3298	10.32	3362	10.98	3425	11.64	3487	12.30	3548	12.97	3609	13.64	3669	14.34	
6848	3202	9.19	3262	9.81	3324	10.46	3387	11.14	3449	11.82	3511	12.50	3571	13.19	3630	13.88	3689	14.57	3747	15.28	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
BHP DOES NOT INCLUDE DRIVE LOSSES.

PG165 BC

Wheel Diameter = 16½ inches
 Tip Speed = $4.320 \times \text{RPM}$
 Maximum BHP = .467 (RPM/1000)³

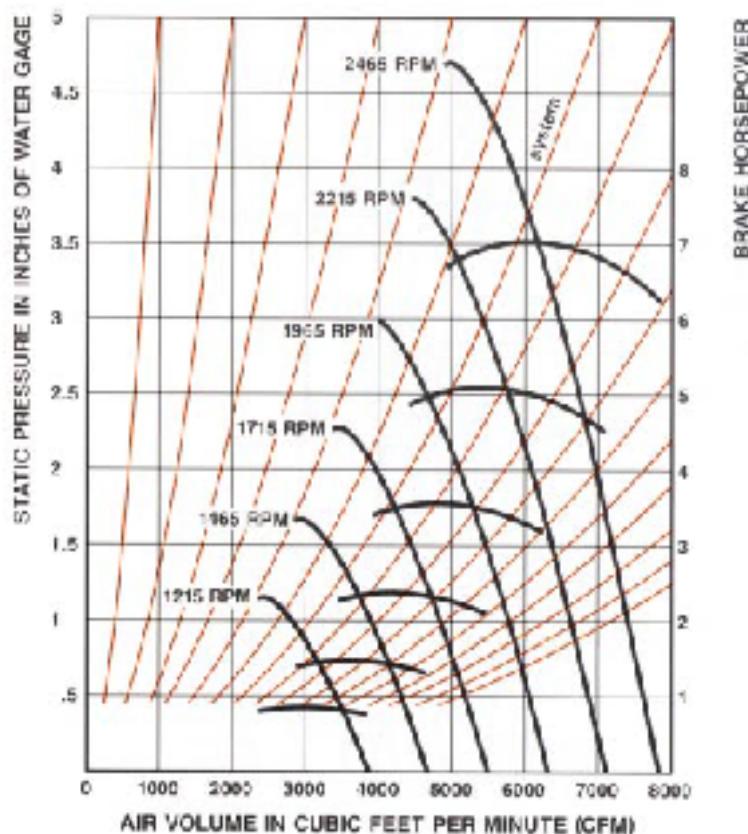
Pressure Class Limits

Class	Max. RPM
1	2235
2	2914
3	3575

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS

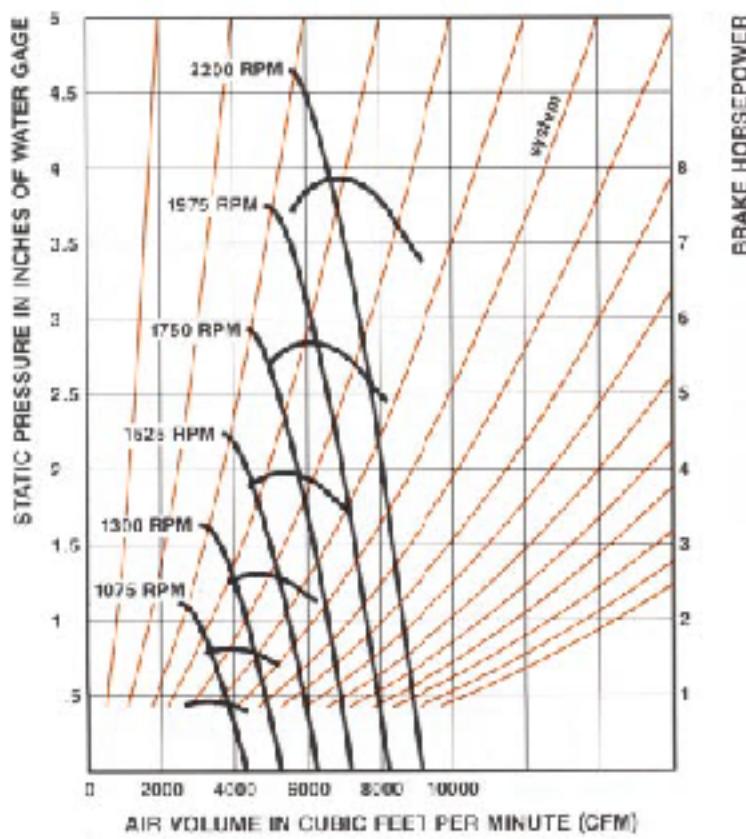


PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		
	RPM	BHP																			
1781	824	0.26	901	0.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2091	882	0.32	937	0.38	998	0.45	1066	0.53	-	-	-	-	-	-	-	-	-	-	-	-	
2401	955	0.41	1001	0.47	1047	0.54	1097	0.61	1151	0.69	1275	0.88	-	-	-	-	-	-	-	-	-
2710	1032	0.51	1074	0.58	1115	0.65	1155	0.72	1198	0.80	1289	0.98	1395	1.19	-	-	-	-	-	-	-
3020	1112	0.63	1151	0.71	1189	0.78	1226	0.86	1262	0.94	1337	1.11	1419	1.31	1510	1.54	1614	1.78	-	-	-
3330	1196	0.78	1231	0.86	1267	0.94	1301	1.03	1334	1.11	1401	1.28	1469	1.47	1541	1.69	1621	1.93	1709	2.19	
3640	1283	0.95	1314	1.04	1347	1.13	1379	1.22	1411	1.31	1472	1.49	1532	1.68	1595	1.89	1660	2.11	1730	2.37	
3949	1373	1.16	1400	1.24	1430	1.34	1459	1.43	1489	1.53	1547	1.73	1604	1.93	1659	2.14	1716	2.36	1775	2.59	
4259	1464	1.40	1489	1.48	1515	1.58	1542	1.68	1570	1.78	1625	1.99	1678	2.21	1730	2.42	1782	2.65	1835	2.88	
4569	1557	1.67	1580	1.76	1603	1.86	1628	1.96	1653	2.07	1705	2.29	1756	2.52	1805	2.75	1854	2.98	1902	3.22	
4879	1649	1.97	1672	2.07	1694	2.17	1715	2.28	1738	2.39	1786	2.62	1835	2.86	1882	3.10	1928	3.35	1974	3.60	
5188	1741	2.30	1764	2.42	1785	2.53	1805	2.64	1826	2.75	1870	2.99	1916	3.24	1961	3.50	2005	3.76	2049	4.01	
5498	1832	2.67	1857	2.81	1878	2.93	1897	3.04	1916	3.15	1956	3.39	1998	3.65	2041	3.92	2084	4.20	2126	4.47	
5808	1925	3.08	1948	3.23	1970	3.36	1989	3.49	2007	3.61	2044	3.85	2083	4.11	2123	4.39	2164	4.68	2204	4.97	
6118	2018	3.53	2040	3.68	2062	3.84	2081	3.98	2099	4.11	2133	4.36	2169	4.62	2207	4.91	2245	5.21	2284	5.51	
6428	2114	4.05	2132	4.19	2154	4.35	2174	4.51	2192	4.56	2224	4.91	2258	5.18	2292	5.47	2329	5.78	2365	6.09	
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		
	RPM	BHP																			
3949	1838	2.86	1977	3.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4259	1889	3.13	2005	3.69	2135	4.34	2283	5.01	-	-	-	-	-	-	-	-	-	-	-	-	
4569	1950	3.46	2052	4.00	2161	4.62	2283	5.31	2419	6.04	-	-	-	-	-	-	-	-	-	-	
4879	2019	3.85	2110	4.38	2206	4.97	2310	5.64	2423	6.37	2548	7.15	-	-	-	-	-	-	-	-	
5188	2092	4.28	2176	4.82	2263	5.40	2354	6.04	2452	6.75	2557	7.52	2672	8.35	-	-	-	-	-	-	
5498	2167	4.75	2247	5.31	2327	5.89	2410	6.52	2496	7.20	2588	7.94	2686	8.76	2792	9.62	2907	10.50	-	-	
5808	2244	5.26	2321	5.84	2397	6.44	2473	7.06	2551	7.73	2633	8.45	2720	9.23	2811	10.08	2909	10.98	3015	11.91	
6118	2322	5.81	2397	6.42	2470	7.04	2542	7.68	2614	8.34	2689	9.05	2766	9.80	2847	10.62	2933	11.49	3024	12.42	
6428	2402	6.41	2474	7.05	2545	7.69	2613	8.35	2682	9.02	2751	9.72	2822	10.46	2895	11.25	2972	12.10	3053	13.00	
6737	2483	7.05	2553	7.72	2621	8.39	2688	9.07	2753	9.76	2818	10.46	2884	11.20	2952	11.98	3022	12.80	3094	13.67	
7047	2566	7.74	2633	8.44	2699	9.14	2764	9.85	2827	10.56	2889	11.28	2952	12.02	3015	12.79	3079	13.60	3146	14.45	
7357	2650	8.49	2714	9.21	2778	9.94	2841	10.67	2902	11.41	2962	12.15	3022	12.91	3082	13.69	3143	14.49	3204	15.33	
7667	2735	9.30	2796	10.03	2858	10.79	2919	11.55	2979	12.32	3037	13.09	3095	13.86	3153	14.65	3210	15.46	3268	16.30	
7976	2823	10.18	2880	10.92	2939	11.69	2999	12.49	3057	13.28	3114	14.08	3170	14.88	3225	15.69	3281	16.51	3336	17.35	
8286	2911	11.12	2965	11.87	3022	12.66	3079	13.48	3136	14.30	3191	15.13	3246	15.96	3300	16.79	3353	17.63	3406	18.48	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS



PG182 BC

Wheel Diameter = 18 1/4 inches
Tip Speed = $4.778 \times \text{RPM}$
Maximum BHP = .737 (RPM/1000)^a

Pressure Class Limits

Class	Max. RPM
1	2044
2	2866
3	3362

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
2184	756	0.31	815	0.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2564	813	0.40	862	0.47	911	0.55	962	0.63	1015	0.72	-	-	-	-	-	-	-	-	-	-	
2943	881	0.50	922	0.58	964	0.66	1007	0.75	1050	0.84	1140	1.03	-	-	-	-	-	-	-	-	-
3323	954	0.63	990	0.71	1027	0.80	1064	0.89	1102	0.98	1178	1.19	1257	1.40	-	-	-	-	-	-	-
3703	1031	0.78	1064	0.87	1097	0.97	1130	1.06	1163	1.16	1230	1.37	1298	1.59	1368	1.83	1441	2.08	-	-	
4083	1111	0.97	1141	1.06	1171	1.16	1201	1.26	1230	1.37	1291	1.58	1351	1.81	1413	2.06	1476	2.32	1541	2.59	
4463	1193	1.18	1220	1.28	1247	1.39	1275	1.50	1302	1.61	1357	1.84	1412	2.07	1468	2.33	1524	2.59	1581	2.87	
4842	1277	1.43	1302	1.54	1327	1.65	1352	1.77	1377	1.89	1428	2.13	1478	2.38	1529	2.63	1580	2.90	1632	3.19	
5222	1362	1.72	1385	1.83	1408	1.95	1431	2.08	1455	2.20	1502	2.46	1548	2.72	1595	2.99	1642	3.26	1690	3.55	
5602	1448	2.05	1469	2.17	1491	2.30	1512	2.42	1534	2.55	1578	2.82	1622	3.10	1665	3.38	1709	3.67	1753	3.97	
5982	1535	2.43	1555	2.55	1575	2.68	1595	2.82	1615	2.95	1656	3.24	1697	3.53	1738	3.82	1779	4.12	1820	4.43	
6362	1622	2.85	1641	2.98	1660	3.12	1679	3.26	1698	3.40	1736	3.69	1775	4.00	1813	4.31	1851	4.62	1890	4.94	
6741	1709	3.31	1728	3.46	1746	3.60	1764	3.75	1782	3.90	1817	4.20	1854	4.52	1890	4.84	1926	5.17	1963	5.51	
7121	1797	3.83	1815	3.99	1833	4.14	1850	4.29	1866	4.45	1900	4.76	1934	5.09	1969	5.43	2003	5.77	2037	6.12	
7501	1884	4.40	1903	4.57	1920	4.74	1936	4.90	1952	5.06	1984	5.38	2016	5.72	2049	6.07	2081	6.43	2114	6.79	
7881	1972	5.02	1990	5.21	2007	5.39	2023	5.56	2038	5.72	2069	6.06	2099	6.41	2130	6.77	2161	7.14	2192	7.52	
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
4083	1607	2.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4463	1639	3.16	1759	3.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4842	1684	3.48	1791	4.11	1902	4.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5222	1737	3.85	1834	4.49	1934	5.16	2036	5.86	-	-	-	-	-	-	-	-	-	-	-	-	
5602	1797	4.27	1886	4.92	1976	5.61	2069	6.33	2164	7.08	-	-	-	-	-	-	-	-	-	-	
5982	1861	4.75	1943	5.40	2027	6.10	2112	6.84	2199	7.62	2288	8.41	2378	9.20	-	-	-	-	-	-	
6362	1928	5.27	2005	5.94	2083	6.65	2162	7.40	2242	8.19	2324	9.01	2407	9.85	2481	10.69	-	-	-	-	
6741	1999	5.84	2071	6.54	2144	7.27	2218	8.03	2292	8.82	2368	9.65	2445	10.52	2523	11.41	2602	12.30	2683	13.19	
7121	2072	6.47	2140	7.20	2209	7.94	2278	8.71	2348	9.52	2419	10.36	2490	11.25	2562	12.15	2636	13.08	2710	14.02	
7501	2146	7.16	2212	7.91	2277	8.67	2342	9.47	2408	10.29	2474	11.14	2541	12.02	2609	12.94	2677	13.89	2747	14.87	
7881	2223	7.90	2285	8.68	2347	9.47	2409	10.28	2471	11.12	2534	11.99	2597	12.88	2661	13.81	2725	14.77	2790	15.76	
8261	2301	8.71	2360	9.51	2419	10.33	2478	11.17	2538	12.03	2597	12.91	2657	13.82	2717	14.76	2778	15.72	2839	16.72	
8640	2380	9.57	2437	10.41	2493	11.25	2550	12.12	2606	13.00	2663	13.90	2720	14.83	2777	15.78	2835	16.76	2893	17.77	
9020	2460	10.51	2514	11.37	2569	12.24	2623	13.14	2677	14.04	2731	14.97	2786	15.92	2840	16.88	2895	17.88	2950	18.89	
9400	2541	11.51	2593	12.40	2646	13.30	2698	14.23	2750	15.16	2802	16.11	2854	17.08	2906	18.07	2958	19.07	3011	20.11	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
BHP DOES NOT INCLUDE DRIVE LOSSES.

PG200 BC

Wheel Diameter = 20 inches
 Tip Speed = $5.236 \times RPM$
 Maximum BHP = $1.165 (RPM/1000)^2$

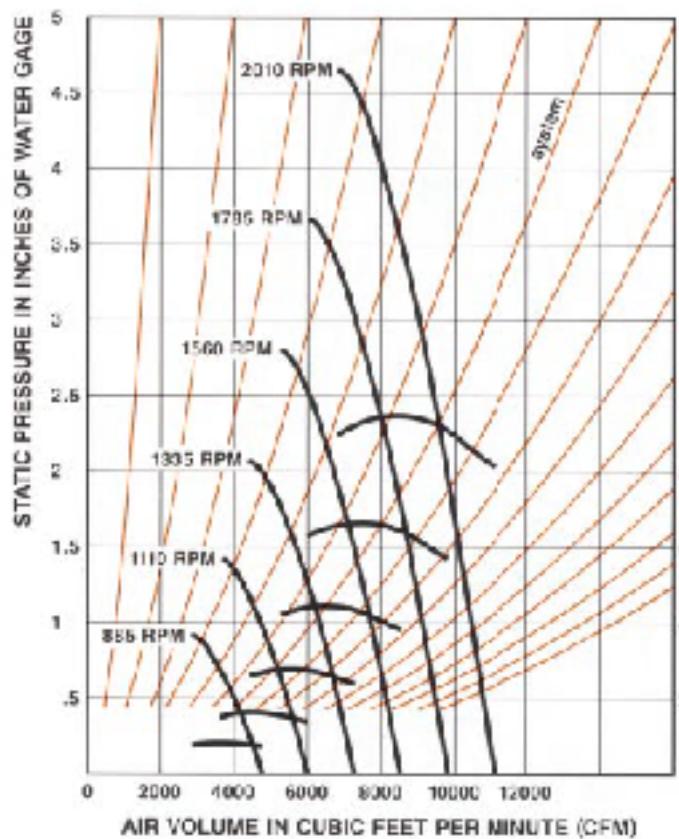
Pressure Class Limits

Class	Max. RPM
1	1888
2	2432
3	3058

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS



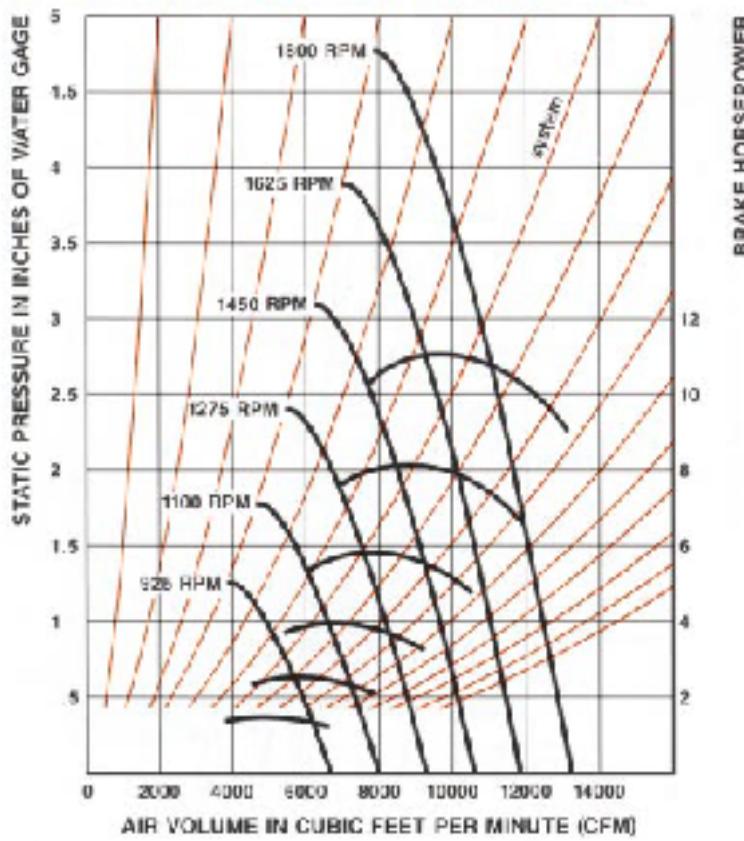
BRAKE HORSEPOWER

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
2623	689	0.38	744	0.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3079	742	0.48	786	0.56	832	0.66	878	0.76	926	0.86	-	-	-	-	-	-	-	-	-	-	
3536	803	0.60	841	0.69	880	0.79	919	0.90	958	1.01	1040	1.24	-	-	-	-	-	-	-	-	
3992	870	0.75	904	0.86	937	0.96	971	1.07	1005	1.18	1075	1.42	1147	1.69	-	-	-	-	-	-	-
4448	941	0.94	971	1.05	1001	1.16	1031	1.27	1061	1.39	1122	1.64	1185	1.91	1249	2.20	1314	2.49	-	-	
4904	1013	1.16	1041	1.28	1068	1.40	1095	1.52	1123	1.64	1178	1.90	1233	2.18	1289	2.47	1347	2.78	1406	3.11	
5360	1088	1.42	1113	1.54	1138	1.67	1163	1.80	1188	1.93	1238	2.21	1289	2.49	1339	2.79	1391	3.11	1443	3.44	
5817	1165	1.72	1188	1.85	1211	1.98	1234	2.12	1257	2.27	1303	2.55	1349	2.85	1395	3.16	1442	3.49	1489	3.83	
6273	1243	2.07	1264	2.20	1285	2.35	1306	2.49	1327	2.64	1370	2.95	1413	3.26	1456	3.59	1499	3.92	1542	4.27	
6729	1321	2.46	1341	2.61	1360	2.76	1380	2.91	1400	3.07	1440	3.39	1480	3.72	1519	4.06	1559	4.41	1599	4.76	
7185	1401	2.91	1419	3.07	1437	3.22	1455	3.38	1474	3.55	1511	3.89	1549	4.23	1586	4.59	1623	4.95	1660	5.32	
7641	1480	3.42	1498	3.58	1515	3.74	1532	3.91	1549	4.08	1584	4.44	1619	4.80	1654	5.17	1689	5.55	1725	5.94	
8098	1560	3.98	1577	4.16	1593	4.33	1610	4.50	1626	4.68	1658	5.05	1692	5.43	1725	5.82	1758	6.21	1791	6.61	
8554	1640	4.60	1657	4.79	1672	4.98	1688	5.16	1703	5.34	1734	5.72	1765	6.12	1796	6.52	1828	6.93	1859	7.35	
9010	1720	5.28	1736	5.49	1752	5.69	1767	5.88	1781	6.07	1810	6.47	1840	6.87	1869	7.29	1899	7.72	1929	8.16	
9466	1800	6.03	1816	6.25	1831	6.47	1846	6.67	1860	6.87	1888	7.28	1915	7.70	1943	8.14	1972	8.58	2000	9.03	
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
4904	1466	3.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5360	1496	3.79	1605	4.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5817	1537	4.18	1634	4.93	1735	5.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6273	1585	4.63	1674	5.39	1765	6.20	1858	7.03	-	-	-	-	-	-	-	-	-	-	-	-	
6729	1639	5.13	1721	5.91	1804	6.73	1888	7.61	1975	8.50	-	-	-	-	-	-	-	-	-	-	
7185	1698	5.70	1773	6.49	1850	7.33	1927	8.22	2006	9.15	2087	10.10	2170	11.04	-	-	-	-	-	-	
7641	1760	6.33	1830	7.14	1901	7.99	1973	8.89	2046	9.84	2120	10.82	2196	11.83	2273	12.84	-	-	-	-	
8098	1824	7.02	1890	7.86	1957	8.73	2024	9.64	2092	10.60	2161	11.60	2231	12.63	2302	13.70	2374	14.78	2448	15.84	
8554	1890	7.77	1953	8.64	2016	9.54	2079	10.47	2143	11.43	2207	12.45	2272	13.50	2338	14.59	2405	15.71	2473	16.84	
9010	1959	8.60	2018	9.50	2078	10.42	2137	11.37	2197	12.36	2258	13.38	2319	14.44	2381	15.54	2443	16.68	2506	17.85	
9466	2028	9.49	2085	10.42	2142	11.37	2198	12.35	2255	13.36	2312	14.40	2370	15.47	2428	16.59	2487	17.74	2546	18.92	
9922	2100	10.45	2154	11.42	2208	12.41	2262	13.41	2316	14.44	2370	15.50	2424	16.60	2479	17.72	2535	18.88	2591	20.08	
10379	2172	11.50	2223	12.50	2275	13.52	2327	14.55	2378	15.61	2430	16.70	2482	17.81	2534	18.95	2587	20.13	2639	21.34	
10835	2245	12.62	2294	13.65	2344	14.71	2393	15.78	2443	16.87	2492	17.98	2542	19.11	2592	20.28	2642	21.47	2692	22.69	
11291	2319	13.83	2367	14.89	2414	15.98	2462	17.08	2509	18.21	2556	19.35	2604	20.51	2651	21.70	2699	22.91	2747	24.15	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS



PG222 BC

Wheel Diameter = 22½ inches
Tip Speed = $5.825 \times \text{RPM}$
Maximum BHP = 1.898 (RPM/1000)³

Pressure Class Limits

Class	Max. RPM
1	1551
2	2168
3	2731

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP	
	RPM	BHP																		
2968	604	0.41	656	0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3534	651	0.52	692	0.63	733	0.74	777	0.85	812	1.01	848	1.14	923	1.41	-	-	-	-	-	-
4099	708	0.67	742	0.78	777	0.89	812	1.01	848	1.14	923	1.41	953	1.62	1019	1.93	-	-	-	-
4665	770	0.85	800	0.96	830	1.08	860	1.21	891	1.34	953	1.62	1019	1.93	-	-	-	-	-	-
5230	834	1.06	862	1.19	890	1.32	917	1.45	943	1.59	997	1.88	1053	2.20	1110	2.53	1170	2.88	-	-
5795	901	1.31	927	1.45	952	1.60	977	1.74	1001	1.89	1056	2.19	1098	2.51	1148	2.86	1199	3.22	1252	3.60
6361	969	1.60	993	1.76	1017	1.92	1040	2.07	1062	2.23	1107	2.55	1151	2.89	1195	3.24	1240	3.61	1286	4.00
6926	1038	1.94	1061	2.11	1083	2.28	1105	2.45	1126	2.63	1168	2.97	1208	3.32	1249	3.69	1289	4.07	1330	4.46
7492	1109	2.34	1130	2.52	1150	2.70	1171	2.89	1191	3.07	1230	3.44	1268	3.82	1306	4.20	1343	4.59	1381	5.00
8057	1181	2.79	1200	2.98	1219	3.17	1238	3.37	1257	3.57	1295	3.97	1331	4.37	1366	4.77	1401	5.18	1436	5.60
8622	1254	3.31	1271	3.51	1289	3.71	1307	3.92	1325	4.13	1360	4.55	1395	4.98	1429	5.41	1462	5.84	1494	6.28
9188	1328	3.90	1344	4.10	1360	4.31	1376	4.53	1393	4.75	1427	5.20	1460	5.66	1492	6.11	1524	6.57	1555	7.03
9753	1402	4.55	1417	4.77	1432	4.99	1447	5.21	1463	5.44	1495	5.92	1526	6.40	1557	6.88	1588	7.37	1617	7.85
10319	1476	5.28	1490	5.51	1505	5.74	1519	5.97	1534	6.21	1564	6.71	1594	7.21	1623	7.72	1652	8.23	1681	8.75
10884	1550	6.07	1564	6.33	1578	6.57	1591	6.81	1605	7.06	1633	7.57	1662	8.10	1690	8.64	1718	9.18	1746	9.72
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP	
	RPM	BHP																		
6361	1333	4.40	1431	5.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6926	1372	4.88	1458	5.75	1548	6.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7492	1419	5.42	1496	6.31	1575	7.26	1658	8.26	-	-	-	-	-	-	-	-	-	-	-	-
8057	1471	6.04	1541	6.94	1613	7.91	1687	8.93	1763	10.00	1842	11.11	-	-	-	-	-	-	-	-
8622	1527	6.73	1592	7.66	1658	8.64	1725	9.67	1794	10.76	1865	11.90	1938	13.08	-	-	-	-	-	-
9188	1586	7.49	1647	8.45	1708	9.46	1770	10.51	1833	11.61	1897	12.76	1963	13.96	2031	15.20	2100	16.47	-	-
9753	1647	8.34	1704	9.33	1762	10.36	1819	11.43	1878	12.55	1937	13.72	1998	14.93	2059	16.19	2123	17.49	2187	18.82
10319	1709	9.26	1764	10.29	1818	11.36	1873	12.45	1927	13.59	1983	14.77	2039	16.00	2096	17.28	2154	18.59	2213	19.95
10884	1773	10.26	1826	11.34	1877	12.44	1929	13.57	1981	14.73	2032	15.93	2085	17.18	2138	18.47	2191	19.80	2246	21.17
11449	1837	11.33	1888	12.47	1938	13.61	1987	14.78	2036	15.97	2085	17.20	2135	18.46	2184	19.77	2235	21.11	2285	22.50
12015	1903	12.50	1952	13.69	2000	14.88	2048	16.09	2095	17.31	2141	18.57	2188	19.86	2235	21.18	2282	22.55	2330	23.95
12580	1969	13.75	2017	14.99	2064	16.24	2109	17.49	2154	18.76	2199	20.05	2244	21.37	2288	22.72	2333	24.10	2378	25.52
13146	2036	15.09	2083	16.39	2128	17.69	2172	18.99	2216	20.30	2259	21.63	2301	22.99	2344	24.36	2387	25.77	2429	27.21
13711	2104	16.52	2149	17.88	2193	19.23	2236	20.59	2278	21.95	2320	23.33	2361	24.72	2402	26.13	2442	27.57	2483	29.03
14276	2173	18.06	2216	19.47	2259	20.88	2301	22.29	2341	23.71	2382	25.13	2422	26.56	2461	28.01	2500	29.48	2539	30.98

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

PG245 BC

Wheel Diameter = 24½ inches
 Tip Speed = 6.414 x RPM
 Maximum BHP = 3.072 (RPM/1000)²

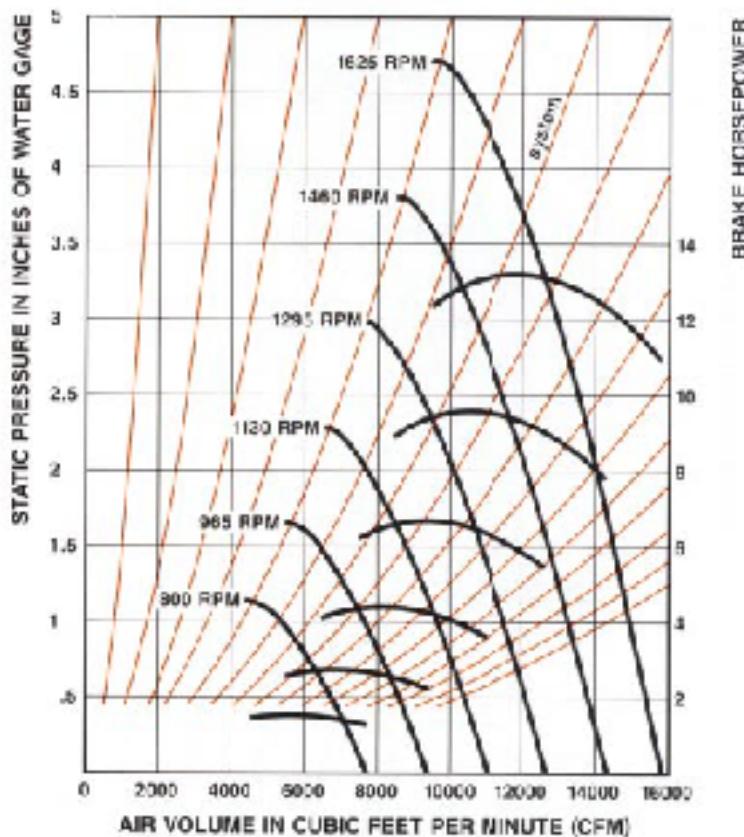
Pressure Class Limits

Class	Max. RPM
1	1508
2	1967
3	2480

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II

PEERLESS BLOWERS PLUG-PAK FANS



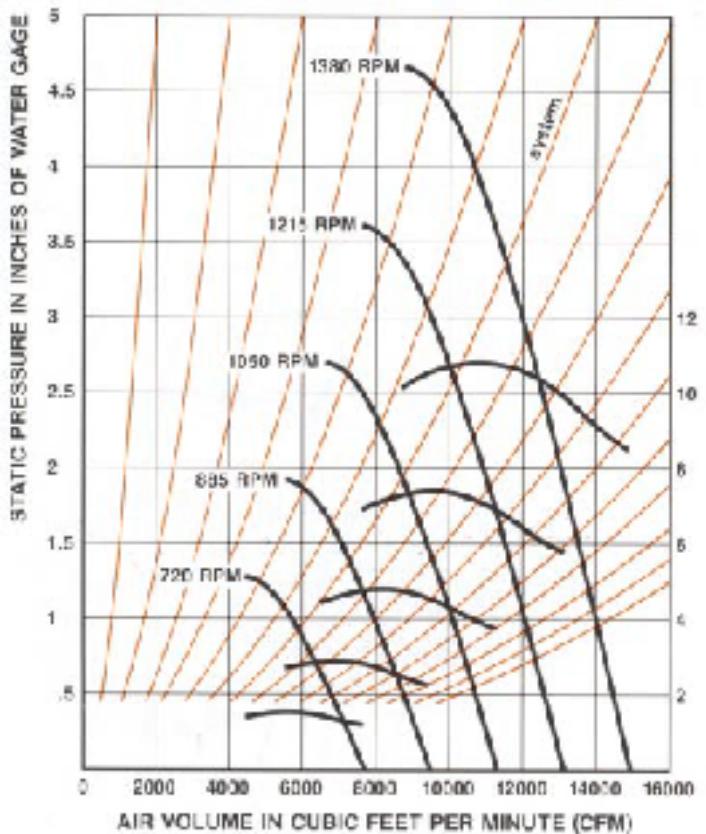
PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.625 SP		0.75 SP		.875 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP	
	RPM	BHP																		
3599	549	0.50	595	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4285	591	0.64	628	0.76	666	0.89	705	1.03	-	-	-	-	-	-	-	-	-	-	-	-
4970	643	0.81	674	0.94	705	1.08	737	1.22	770	1.38	839	1.71	-	-	-	-	-	-	-	-
5656	699	1.02	727	1.17	754	1.31	781	1.47	809	1.63	866	1.97	925	2.34	-	-	-	-	-	-
6341	758	1.28	783	1.44	808	1.60	832	1.76	857	1.93	906	2.28	956	2.66	1008	3.07	1062	3.50	-	-
7027	818	1.59	842	1.76	865	1.93	887	2.11	909	2.29	953	2.66	997	3.05	1043	3.46	1089	3.90	1137	4.36
7712	880	1.94	902	2.13	923	2.32	944	2.51	965	2.71	1005	3.10	1045	3.50	1086	3.93	1126	4.38	1168	4.85
8398	943	2.36	963	2.56	983	2.77	1003	2.98	1023	3.18	1060	3.60	1097	4.03	1134	4.47	1171	4.93	1208	5.41
9083	1007	2.84	1026	3.05	1045	3.27	1063	3.50	1082	3.72	1117	4.17	1152	4.63	1186	5.09	1220	5.57	1254	6.06
9769	1073	3.39	1090	3.61	1107	3.85	1125	4.09	1142	4.33	1176	4.81	1209	5.30	1241	5.79	1273	6.28	1304	6.79
10454	1139	4.02	1154	4.25	1170	4.50	1187	4.75	1203	5.01	1236	5.52	1267	6.04	1297	6.56	1327	7.08	1357	7.61
11140	1206	4.73	1220	4.97	1235	5.23	1250	5.49	1265	5.76	1296	6.31	1326	6.86	1355	7.41	1384	7.96	1412	8.52
11825	1273	5.52	1297	5.78	1300	6.05	1314	6.32	1329	6.60	1358	7.18	1386	7.76	1414	8.35	1442	8.93	1469	9.52
12511	1340	6.40	1354	6.68	1366	6.96	1379	7.24	1393	7.53	1420	8.13	1447	8.75	1474	9.37	1501	9.98	1527	10.60
13196	1407	7.36	1421	7.68	1433	7.97	1445	8.26	1458	8.56	1483	9.18	1509	9.82	1535	10.48	1560	11.13	1585	11.78
VOL CFM	2.5 SP		3 SP		3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP	
	RPM	BHP																		
7712	1211	5.34	1299	6.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8398	1246	5.91	1324	6.97	1405	8.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9083	1288	6.57	1358	7.65	1431	8.80	1506	10.02	-	-	-	-	-	-	-	-	-	-	-	-
9769	1336	7.32	1400	8.42	1465	9.59	1532	10.83	1601	12.12	1673	13.47	-	-	-	-	-	-	-	-
10454	1387	8.16	1446	9.28	1506	10.47	1567	11.73	1629	13.05	1694	14.43	1760	15.85	-	-	-	-	-	-
11140	1440	9.09	1495	10.25	1551	11.46	1607	12.74	1665	14.08	1723	15.47	1783	16.93	1845	18.43	1908	19.97	-	-
11825	1495	10.11	1548	11.31	1600	12.56	1652	13.86	1705	15.22	1759	16.63	1814	18.11	1870	19.63	1928	21.21	1986	22.82
12511	1552	11.22	1602	12.48	1651	13.77	1701	15.10	1750	16.48	1801	17.91	1851	19.40	1903	20.95	1956	22.54	2009	24.19
13196	1610	12.44	1658	13.75	1705	15.08	1752	16.45	1799	17.86	1846	19.32	1893	20.83	1941	22.39	1990	24.00	2040	25.67
13882	1669	13.74	1715	15.12	1760	16.51	1805	17.92	1849	19.37	1894	20.85	1939	22.39	1984	23.97	2029	25.60	2076	27.28
14567	1728	15.15	1773	16.59	1817	18.04	1860	19.50	1902	20.99	1944	22.52	1987	24.08	2030	25.69	2072	27.34	2116	29.04
15253	1789	16.67	1832	18.18	1874	19.69	1916	21.21	1957	22.74	1997	24.31	2037	25.91	2078	27.54	2119	29.22	2160	30.94
15938	1849	18.29	1892	19.87	1933	21.45	1973	23.03	2012	24.62	2051	26.23	2090	27.87	2129	29.54	2167	31.25	2206	32.99
16624	1911	20.03	1952	21.68	1992	23.32	2031	24.97	2069	26.62	2107	28.28	2144	29.97	2181	31.68	2218	33.42	2255	35.20
17309	1973	21.90	2013	23.60	2051	25.32	2089	27.03	2126	28.75	2163	30.47	2199	32.21	2235	33.96	2271	35.75	2306	37.56

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS



PG270 BC

Wheel Diameter = 27 inches
 Tip Speed = $7.069 \times \text{RPM}$
 Maximum BHP = $4.12 (\text{RPM}/1000)^2$

Pressure Class Limits

Class	Max. RPM
1	1402
2	1828
3	2303

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP		
	RPM	BHP																			
3352	467	0.42	553	0.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4190	518	0.57	577	0.78	642	1.04	716	1.34	-	-	-	-	-	-	-	-	-	-	-	-	
5028	579	0.78	627	1.01	676	1.27	728	1.55	784	1.87	846	2.24	-	-	-	-	-	-	-	-	-
5866	645	1.04	687	1.31	728	1.59	769	1.87	812	2.19	858	2.53	906	2.91	958	3.33	1013	3.77	-	-	
6704	713	1.35	752	1.67	789	1.98	824	2.29	860	2.62	897	2.96	935	3.33	975	3.72	1016	4.14	1106	5.09	
7542	782	1.73	819	2.09	853	2.45	885	2.80	917	3.15	948	3.51	981	3.88	1013	4.27	1047	4.68	1119	5.58	
8380	854	2.20	887	2.59	919	2.99	949	3.38	978	3.77	1007	4.16	1035	4.56	1064	4.96	1093	5.38	1153	6.26	
9218	927	2.77	957	3.17	986	3.61	1015	4.05	1043	4.48	1070	4.91	1096	5.34	1121	5.77	1147	6.20	1200	7.11	
10056	1001	3.44	1028	3.86	1055	4.32	1083	4.80	1190	5.28	1134	5.75	1159	6.22	1183	6.69	1207	7.15	1254	8.10	
10894	1075	4.21	1100	4.67	1126	5.14	1151	5.65	1176	6.17	1200	6.69	1224	7.20	1247	7.71	1269	8.22	1313	9.23	
11732	1149	5.11	1174	5.59	1197	6.09	1221	6.62	1244	7.17	1267	7.73	1290	8.28	1312	8.84	1333	9.39	1375	10.48	
12570	1224	6.13	1248	6.65	1270	7.17	1292	7.72	1314	8.29	1336	8.88	1357	9.48	1378	10.08	1399	10.68	1439	11.85	
13408	1300	7.30	1322	7.84	1343	8.39	1364	8.96	1384	9.55	1405	10.17	1425	10.80	1446	11.44	1465	12.08	1504	13.35	
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP		
CFM	RPM	BHP																			
7542	1196	6.59	1280	7.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8380	1216	7.23	1284	8.30	1355	9.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9218	1254	8.07	1310	9.11	1370	10.23	1432	11.45	1498	12.76	1567	14.15	-	-	-	-	-	-	-	-	-
10056	1302	9.09	1351	10.13	1402	11.23	1455	12.40	1511	13.66	1568	15.00	1629	16.43	1692	17.94	-	-	-	-	-
10894	1357	10.26	1401	11.32	1446	12.43	1492	13.59	1540	14.82	1590	16.12	1641	17.49	1694	18.94	1750	20.48	1807	22.09	
11732	1416	11.57	1456	12.68	1497	13.82	1539	14.99	1581	16.22	1625	17.50	1670	18.84	1716	20.25	1764	21.73	1813	23.28	
12570	1477	13.02	1515	14.19	1553	15.38	1591	16.59	1630	17.83	1669	19.12	1709	20.45	1750	21.84	1792	23.28	1835	24.79	
13408	1541	14.60	1577	15.85	1613	17.09	1648	18.36	1684	19.64	1720	20.95	1756	22.30	1793	23.69	1831	25.12	1870	26.61	
14246	1606	16.31	1641	17.64	1675	18.97	1708	20.29	1742	21.63	1775	22.98	1809	24.36	1843	25.77	1877	27.22	1912	28.71	
15084	1672	18.16	1705	19.58	1738	20.99	1770	22.39	1802	23.79	1834	25.20	1865	26.63	1897	28.08	1929	29.55	1961	31.06	
15922	1738	20.15	1771	21.66	1803	23.16	1834	24.64	1864	26.12	1894	27.60	1924	29.08	1954	30.58	1984	32.10	2014	33.64	
16760	1806	22.30	1838	23.89	1868	25.48	1899	27.05	1928	28.62	1957	30.17	1986	31.73	2014	33.29	2042	34.86	2071	36.45	
17598	1874	24.61	1905	26.29	1935	27.96	1964	29.62	1993	31.28	2021	32.92	2048	34.55	2076	36.19	2103	37.82	2130	39.47	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PG300 BC

PEERLESS BLOWERS PLUG-PAK FANS

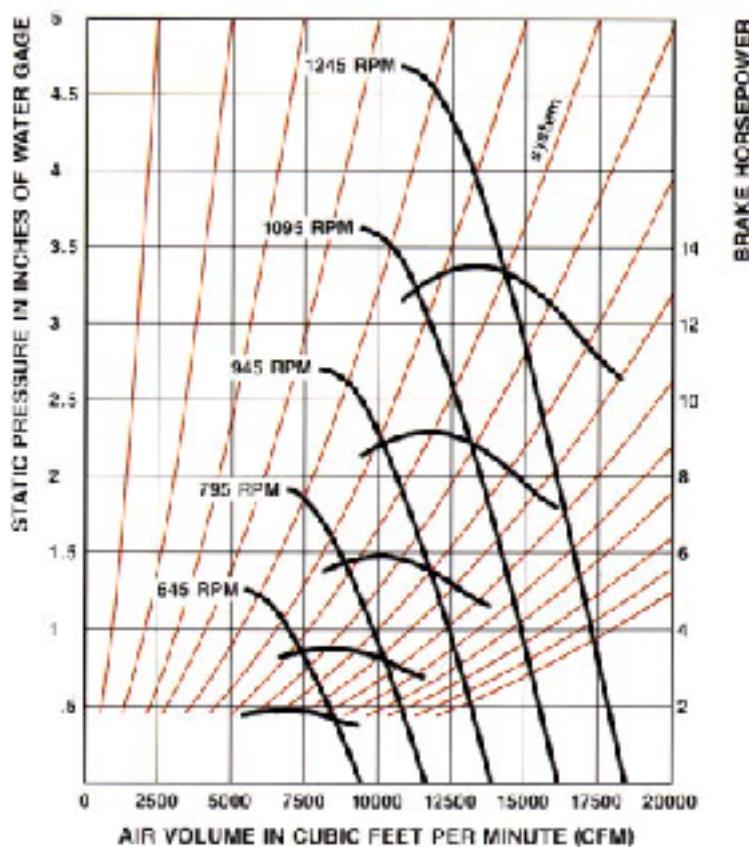
Wheel Diameter = 30 inches
 Tip Speed = $7.85 \times \text{RPM}$
 Maximum BHP = $6.98 (\text{RPM}/1000)^3$

Pressure Class Limits

Class	Max. RPM
1	1262
2	1645
3	2073

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III



PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

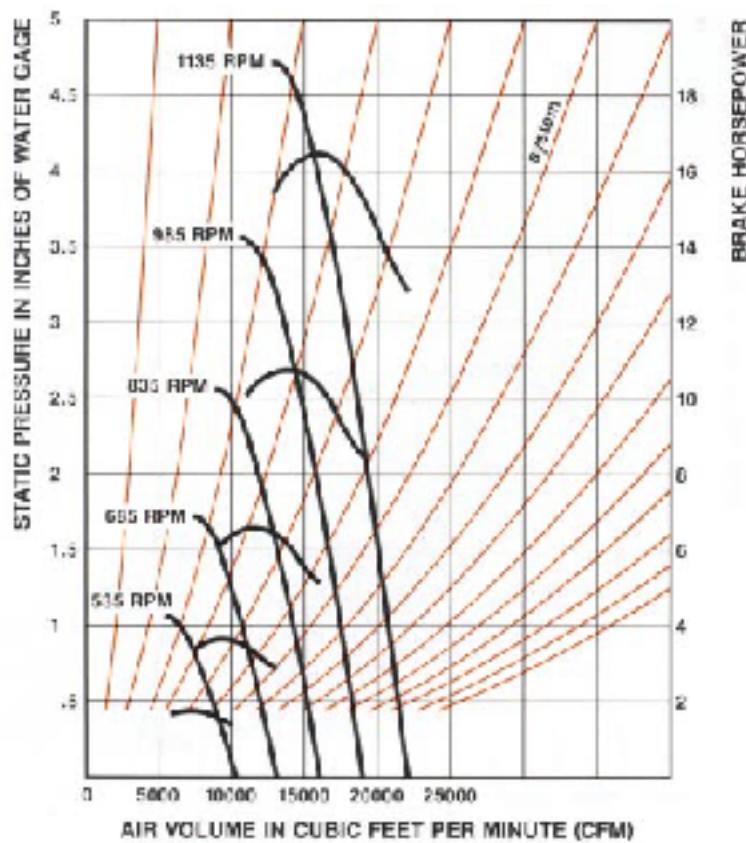
VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP		
	RPM	BHP																			
4136	421	0.51	498	0.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5170	466	0.70	519	0.97	578	1.28	644	1.66	-	-	-	-	-	-	-	-	-	-	-	-	
6204	521	0.96	564	1.25	608	1.56	655	1.91	706	2.31	761	2.77	-	-	-	-	-	-	-	-	-
7238	580	1.28	619	1.62	655	1.96	692	2.31	731	2.70	772	3.12	816	3.59	862	4.11	912	4.66	-	-	
8272	641	1.67	677	2.06	710	2.45	742	2.83	774	3.23	807	3.66	841	4.11	877	4.59	915	5.11	996	6.28	
9306	704	2.14	737	2.58	767	3.02	797	3.45	825	3.89	854	4.33	882	4.79	912	5.27	943	5.78	1007	6.89	
10340	768	2.72	798	3.19	827	3.69	854	4.17	881	4.66	906	5.14	932	5.62	958	6.12	984	6.64	1038	7.73	
11374	834	3.42	861	3.92	888	4.45	914	4.99	939	5.53	963	6.06	986	6.59	1009	7.12	1033	7.66	1080	8.78	
12408	901	4.24	925	4.77	950	5.33	974	5.92	998	6.51	1021	7.10	1043	7.68	1065	8.25	1086	8.83	1129	10.00	
13442	967	5.20	990	5.76	1013	6.35	1036	6.97	1058	7.61	1080	8.25	1101	8.89	1122	9.52	1142	10.14	1182	11.39	
14476	1034	6.30	1057	6.91	1078	7.52	1099	8.17	1120	8.85	1141	9.54	1161	10.23	1181	10.91	1200	11.59	1237	12.94	
15510	1102	7.56	1123	8.21	1143	8.85	1163	9.53	1182	10.24	1202	10.97	1221	11.71	1240	12.44	1259	13.18	1295	14.63	
16544	1170	9.01	1190	9.68	1209	10.36	1227	11.06	1246	11.79	1264	12.56	1283	13.34	1301	14.13	1319	14.91	1353	16.48	-
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP		
CFM	RPM	BHP																			
9306	1076	8.14	1152	9.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10340	1095	8.93	1155	10.25	1220	11.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11374	1129	9.97	1179	11.25	1233	12.63	1289	14.13	1348	15.75	1411	17.47	-	-	-	-	-	-	-	-	
12408	1172	11.22	1217	12.50	1262	13.86	1310	15.31	1359	16.86	1411	18.52	1466	20.28	1522	22.14	-	-	-	-	
13442	1221	12.67	1261	13.98	1301	15.35	1343	16.78	1386	18.29	1431	19.90	1477	21.59	1525	23.39	1575	25.28	1626	27.27	
14476	1274	14.29	1311	15.65	1347	17.06	1385	18.51	1423	20.02	1462	21.60	1503	23.26	1544	25.00	1587	26.82	1632	28.74	
15510	1330	16.07	1364	17.52	1398	18.98	1432	20.48	1467	22.01	1502	23.60	1538	25.25	1575	26.96	1613	28.75	1652	30.61	
16544	1387	18.03	1419	19.56	1451	21.10	1483	22.66	1515	24.24	1548	25.86	1581	27.53	1614	29.24	1648	31.02	1683	32.85	
17578	1445	20.14	1477	21.78	1507	23.41	1537	25.05	1567	26.70	1598	28.37	1628	30.08	1658	31.82	1690	33.60	1721	35.44	
18612	1505	22.42	1535	24.17	1564	25.91	1593	27.64	1622	29.37	1650	31.11	1679	32.87	1707	34.66	1736	36.48	1765	38.34	
19646	1565	24.88	1594	26.74	1623	28.59	1650	30.42	1678	32.25	1705	34.07	1732	35.91	1759	37.76	1786	39.63	1813	41.53	
20680	1625	27.53	1654	29.50	1682	31.46	1709	33.40	1735	35.33	1761	37.25	1787	39.17	1813	41.10	1838	43.04	1864	45.00	
21714	1687	30.38	1714	32.45	1741	34.52	1768	36.57	1793	38.61	1819	40.64	1844	42.66	1868	44.67	1893	46.69	1917	48.72	

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS

PG330 BC

Wheel Diameter = 33 inches
 Tip Speed = $8.639 \times \text{RPM}$
 Maximum BHP = 11.23 (RPM/1000)^a



Pressure Class Limits

Class	Max. RPM
1	1147
2	1495
3	1884

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP																		
5008	382	0.62	453	0.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6260	424	0.85	472	1.17	525	1.55	586	2.01	-	-	-	-	-	-	-	-	-	-	-	-
7512	474	1.16	513	1.51	553	1.89	595	2.32	642	2.80	692	3.35	-	-	-	-	-	-	-	-
8764	528	1.55	562	1.96	596	2.37	629	2.80	665	3.27	702	3.78	742	4.35	784	4.97	829	5.64	-	-
10016	583	2.02	615	2.49	645	2.96	674	3.43	704	3.91	734	4.42	765	4.97	797	5.56	832	6.19	905	7.60
11268	640	2.59	670	3.12	698	3.66	724	4.18	750	4.71	776	5.24	802	5.80	829	6.38	857	7.00	915	8.34
12520	699	3.29	726	3.87	752	4.46	777	5.05	801	5.63	824	6.22	847	6.81	871	7.41	894	8.03	943	9.36
13772	758	4.14	783	4.74	807	5.39	831	6.04	853	6.69	875	7.33	896	7.97	918	8.62	939	9.27	982	10.62
15024	819	5.14	841	5.77	863	6.45	886	7.17	907	7.88	928	8.59	948	9.29	968	9.99	987	10.69	1026	12.10
16276	879	6.29	900	6.97	921	7.68	942	8.44	962	9.21	982	9.99	1001	10.76	1020	11.52	1038	12.27	1074	13.79
17528	940	7.63	961	8.36	980	9.10	999	9.88	1018	10.71	1037	11.54	1055	12.38	1073	13.20	1091	14.03	1125	15.65
18780	1002	9.15	1021	9.93	1039	10.71	1057	11.53	1075	12.38	1093	13.27	1110	14.16	1128	15.06	1144	15.95	1177	17.71
20032	1064	10.90	1082	11.71	1099	12.54	1116	13.38	1133	14.27	1149	15.19	1166	16.14	1183	17.09	1199	18.05	1230	19.94
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP																		
11268	979	9.85	1047	11.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12520	995	10.80	1050	12.40	1109	14.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13772	1026	12.06	1072	13.61	1121	15.28	1172	17.10	1226	19.06	1282	21.14	-	-	-	-	-	-	-	-
15024	1065	13.58	1106	15.13	1147	16.77	1191	18.52	1236	20.40	1283	22.40	1332	24.54	1384	26.79	-	-	-	-
16276	1110	15.32	1146	16.91	1183	18.57	1221	20.30	1260	22.14	1301	24.07	1343	26.13	1386	28.30	1432	30.59	1479	33.00
17528	1158	17.29	1191	18.94	1225	20.64	1259	22.40	1294	24.23	1329	26.14	1366	28.14	1404	30.25	1443	32.46	1483	34.78
18780	1209	19.45	1240	21.20	1271	22.97	1302	24.78	1334	26.64	1366	28.56	1398	30.55	1432	32.62	1466	34.78	1502	37.04
20032	1261	21.81	1290	23.67	1319	25.54	1349	27.42	1378	29.34	1407	31.30	1437	33.31	1467	35.39	1498	37.53	1530	39.75
21284	1314	24.37	1342	26.36	1370	28.33	1398	30.31	1425	32.31	1452	34.33	1480	36.39	1508	38.50	1536	40.66	1565	42.88
22536	1368	27.13	1395	29.25	1422	31.35	1448	33.44	1474	35.54	1500	37.65	1526	39.78	1552	41.94	1578	44.14	1604	46.39
23788	1422	30.10	1449	32.36	1475	34.59	1500	36.81	1525	39.02	1550	41.23	1574	43.45	1599	45.69	1623	47.95	1648	50.25
25040	1478	33.31	1504	35.69	1529	38.06	1553	40.41	1577	42.75	1601	45.07	1625	47.40	1648	49.73	1671	52.08	1694	54.44
26292	1533	36.76	1559	39.27	1583	41.77	1607	44.25	1630	46.72	1653	49.17	1676	51.61	1698	54.05	1721	56.50	1743	58.96

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PG365 BC

Wheel Diameter = 36½ inches
 Tip Speed = 9,566 x RPM
 Maximum BHP = 18.67 (RPM/1000)³

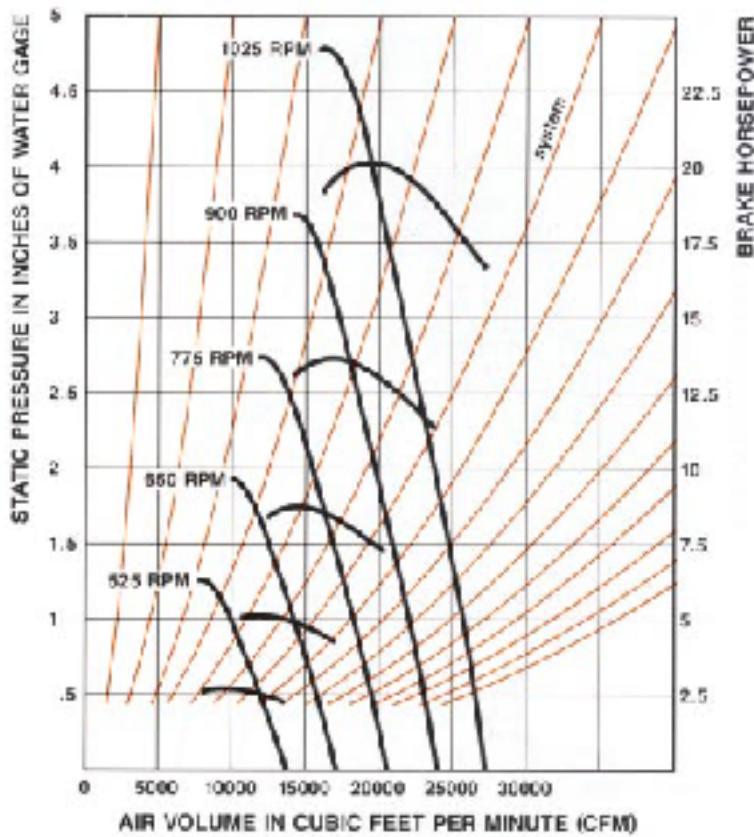
Pressure Class Limits

Class	Max. RPM
1	1037
2	1352
3	1703

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS

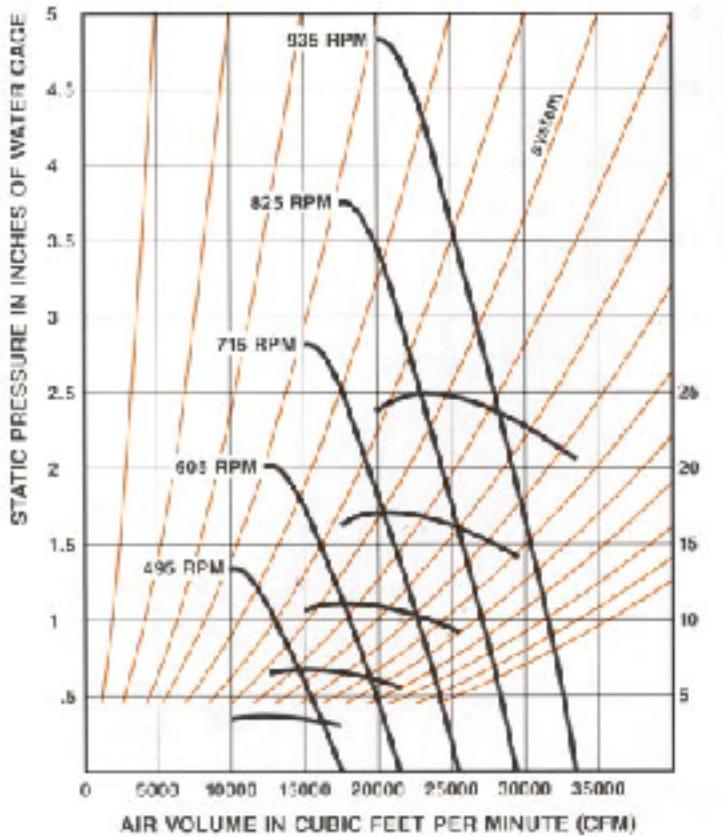


PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP																		
7660	384	1.06	426	1.44	469	1.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9192	431	1.46	465	1.87	499	2.33	535	2.83	572	3.36	-	-	-	-	-	-	-	-	-	-
10724	480	1.96	511	2.45	541	2.93	570	3.45	599	4.01	630	4.61	662	5.23	-	-	-	-	-	-
12256	529	2.57	560	3.15	587	3.70	612	4.25	637	4.83	663	5.44	689	6.09	716	6.77	744	7.49	-	-
13788	579	3.29	609	3.98	635	4.61	658	5.23	681	5.85	704	6.49	726	7.15	749	7.85	773	8.58	821	10.13
15320	630	4.16	658	4.93	684	5.67	707	6.37	728	7.06	749	7.74	769	8.44	789	9.16	810	9.91	851	11.48
16852	682	5.21	708	6.02	733	6.87	755	7.67	776	8.44	796	9.20	815	9.95	833	10.71	852	11.48	889	13.10
18384	736	6.48	758	7.30	782	8.22	805	9.13	825	10.00	844	10.84	862	11.67	880	12.49	897	13.31	931	14.99
19916	791	7.99	810	8.79	832	9.75	854	10.76	874	11.74	893	12.68	911	13.59	928	14.49	944	15.38	976	17.16
21448	847	9.76	863	10.53	883	11.50	904	12.57	923	13.65	942	14.70	960	15.72	976	16.71	992	17.68	1023	19.59
22980	903	11.76	918	12.55	935	13.50	954	14.61	973	15.77	991	16.92	1009	18.04	1025	19.13	1041	20.20	1071	22.28
24512	958	14.00	973	14.87	988	15.79	1005	16.90	1023	18.11	1041	19.35	1058	20.57	1075	21.77	1090	22.94	1119	25.21
26044	1013	16.45	1029	17.51	1042	18.41	1057	19.49	1074	20.72	1091	22.02	1108	23.34	1124	24.64	1139	25.91	1168	28.39
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
CFM	RPM	BHP																		
15320	894	13.18	939	14.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16852	926	14.82	965	16.65	1005	18.57	1046	20.56	-	-	-	-	-	-	-	-	-	-	-	-
18384	965	16.75	999	18.61	1034	20.56	1070	22.60	1107	24.72	1145	26.91	-	-	-	-	-	-	-	-
19916	1007	18.99	1038	20.88	1070	22.86	1102	24.93	1135	27.09	1168	29.33	1202	31.65	1237	34.01	-	-	-	-
21448	1052	21.51	1081	23.48	1110	25.51	1139	27.61	1169	29.80	1199	32.07	1229	34.42	1261	36.84	1292	39.33	1325	41.87
22980	1099	24.33	1126	26.39	1153	28.49	1180	30.64	1207	32.87	1235	35.16	1263	37.54	1291	40.00	1319	42.53	1349	45.13
24512	1147	27.42	1173	29.60	1199	31.80	1224	34.03	1249	36.31	1275	38.65	1300	41.06	1326	43.55	1352	46.10	1379	48.73
26044	1195	30.78	1221	33.11	1246	35.43	1270	37.77	1294	40.13	1318	42.53	1341	44.99	1365	47.51	1390	50.10	1414	52.76
27576	1244	34.40	1269	36.91	1293	39.38	1317	41.84	1340	44.31	1362	46.80	1385	49.33	1407	51.90	1430	54.53	1453	57.23
29108	1293	38.28	1318	40.99	1342	43.64	1365	46.25	1387	48.84	1409	51.44	1430	54.06	1451	56.71	1473	59.41	1494	62.15
30640	1342	42.43	1367	45.35	1391	48.19	1414	50.98	1435	53.72	1456	56.45	1477	59.18	1497	61.93	1517	64.71	1538	67.52
32172	1392	46.86	1416	50.00	1440	53.05	1462	56.02	1483	58.94	1504	61.82	1524	64.69	1544	67.56	1564	70.44	1583	73.34
33704	1441	51.59	1466	54.94	1489	58.20	1511	61.38	1532	64.49	1552	67.54	1572	70.57	1592	73.58	1611	76.58	1629	79.59

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS



PG402 BC

Wheel Diameter = 40 $\frac{1}{4}$ inches
 Tip Speed = 10.54 x RPM
 Maximum BHP = 30.45 (RPM/1000)²

Pressure Class Limits

Class	Max. RPM
1	941
2	1226
3	1545

Data in bold face indicates quietest and most efficient performance

Class I
 Class II
 Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9311	349	1.28	386	1.75	426	2.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11173	391	1.77	422	2.28	453	2.83	485	3.44	519	4.09	-	-	-	-	-	-	-	-	-	-
13035	435	2.39	464	2.98	490	3.57	517	4.20	544	4.87	572	5.60	601	6.36	-	-	-	-	-	-
14898	480	3.13	508	3.83	532	4.50	555	5.17	578	5.88	601	6.62	625	7.41	650	8.24	675	9.10	-	-
16760	525	4.01	552	4.84	576	5.61	597	6.36	618	7.11	638	7.89	659	8.70	679	9.55	701	10.43	744	12.32
18622	571	5.06	597	5.99	620	6.89	641	7.75	660	8.58	679	9.41	697	10.26	716	11.14	734	12.05	772	13.97
20484	618	6.34	642	7.33	664	8.35	685	9.33	704	10.27	722	11.18	739	12.10	756	13.02	772	13.97	806	15.93
22346	667	7.88	688	8.87	709	10.00	730	11.10	748	12.16	766	13.19	782	14.19	798	15.19	813	16.19	844	18.23
24209	717	9.72	735	10.68	755	11.86	774	13.08	793	14.27	810	15.42	826	16.53	841	17.62	856	18.70	885	20.87
26071	768	11.86	783	12.80	801	13.99	819	15.29	837	16.60	854	17.88	870	19.11	885	20.32	900	21.50	927	23.82
27933	819	14.30	832	15.26	848	16.42	865	17.76	882	19.17	899	20.57	915	21.94	930	23.27	944	24.56	971	27.09
29795	969	17.02	882	18.09	896	19.21	911	20.55	928	22.02	944	23.53	960	25.02	974	26.48	989	27.90	1015	30.66
31657	919	20.01	933	21.29	945	22.39	959	23.70	974	25.20	989	26.78	1004	28.38	1019	29.96	1033	31.51	1059	34.52
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18622	811	16.02	851	18.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20484	840	18.02	875	20.24	911	22.58	949	25.00	-	-	-	-	-	-	-	-	-	-	-	-
22346	875	20.37	906	22.63	938	25.00	970	27.48	1004	30.07	1038	32.72	-	-	-	-	-	-	-	-
24209	913	23.09	942	25.39	970	27.80	999	30.32	1029	32.95	1059	35.67	1090	38.48	1122	41.36	-	-	-	-
26071	954	26.16	980	28.55	1007	31.02	1033	33.57	1060	36.23	1087	38.99	1115	41.85	1143	44.80	1172	47.83	1201	50.92
27933	997	29.58	1021	32.09	1046	34.64	1070	37.26	1095	39.97	1120	42.76	1145	45.65	1171	48.64	1197	51.71	1223	54.87
29795	1040	33.34	1064	36.00	1087	38.67	1110	41.38	1133	44.15	1156	47.00	1179	49.93	1203	52.95	1226	56.06	1250	59.26
31657	1084	37.43	1107	40.27	1130	43.09	1152	45.92	1173	48.79	1195	51.72	1216	54.71	1238	57.78	1260	60.92	1282	64.15
33520	1128	41.83	1151	44.89	1173	47.89	1194	50.88	1215	53.88	1235	56.91	1256	59.98	1276	63.12	1297	66.32	1317	69.59
35382	1173	46.55	1195	49.85	1217	53.07	1238	56.24	1258	59.39	1277	62.55	1297	65.74	1316	68.96	1336	72.24	1355	75.58
37244	1217	51.60	1240	55.15	1261	58.61	1281	61.99	1301	65.33	1320	68.65	1339	71.97	1358	75.31	1376	78.69	1394	82.11
39106	1262	56.99	1284	60.80	1306	64.51	1326	68.12	1345	71.67	1364	75.18	1382	78.67	1400	82.15	1418	85.65	1435	89.18
40968	1307	62.74	1329	66.80	1350	70.77	1370	74.63	1389	78.42	1408	82.14	1426	85.82	1443	89.47	1461	93.12	1478	96.78

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PG445 BC

Wheel Diameter = 44½ inches
 Tip Speed = $11.65 \times \text{RPM}$
 Maximum BHP = 50.30 (RPM/1000)³

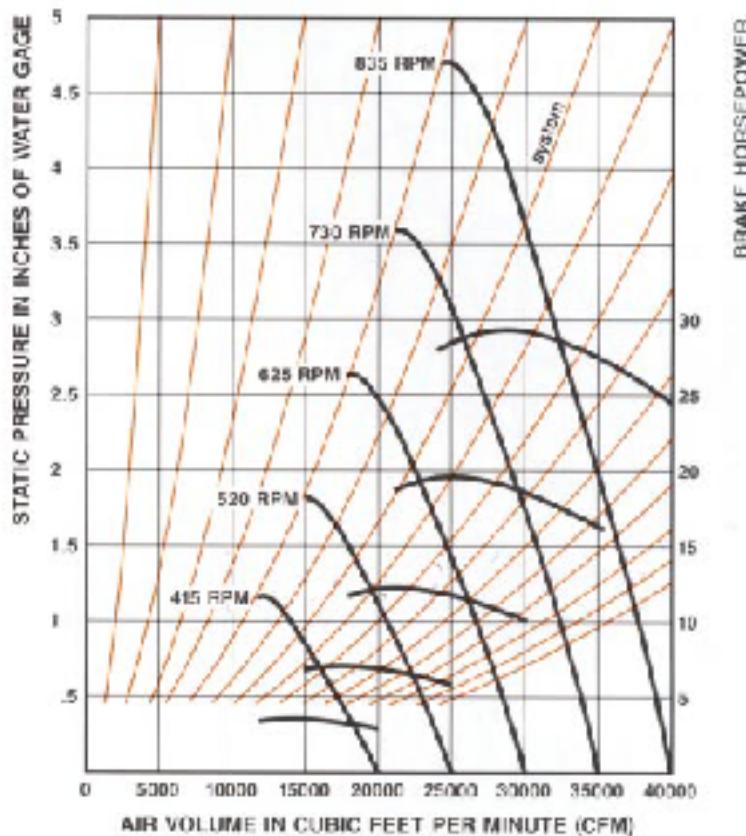
Pressure Class Limits

Class	Max. RPM
1	851
2	1109
3	1397

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS



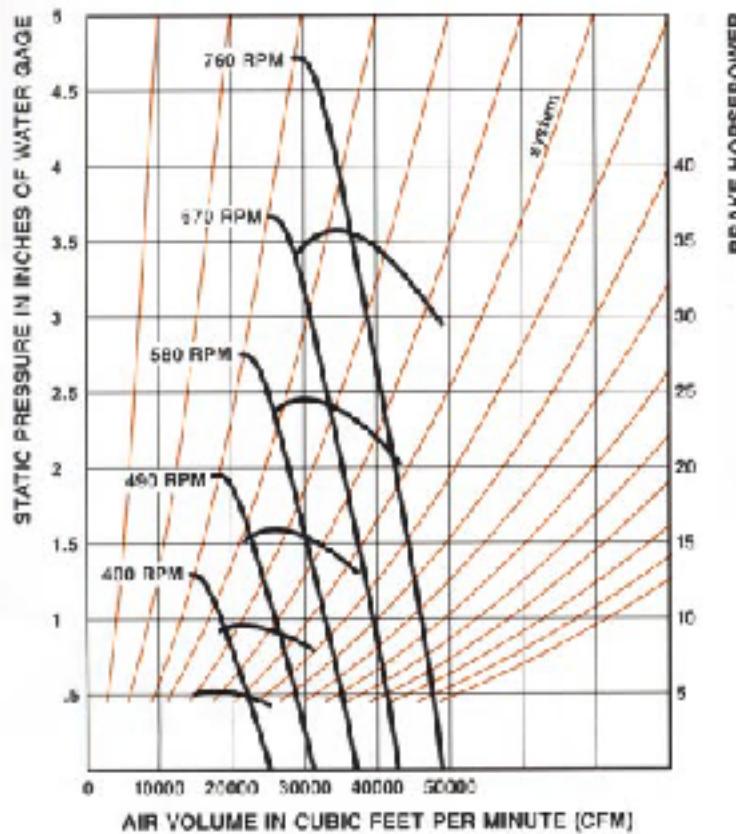
PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9311	349	1.28	386	1.75	426	2.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11173	391	1.77	422	2.28	453	2.83	485	3.44	519	4.09	-	-	-	-	-	-	-	-	-	-
13035	435	2.39	464	2.98	490	3.57	517	4.20	544	4.87	572	5.60	601	6.36	-	-	-	-	-	-
14898	480	3.13	508	3.83	532	4.50	555	5.17	578	5.88	601	6.62	625	7.41	650	8.24	675	9.10	-	-
16760	525	4.01	552	4.84	576	5.61	597	6.36	618	7.11	638	7.89	659	8.70	679	9.55	701	10.43	744	12.32
18622	571	5.06	597	5.99	620	6.89	641	7.75	660	8.58	679	9.41	697	10.26	716	11.14	734	12.05	772	13.97
20484	618	6.34	642	7.33	664	8.35	685	9.33	704	10.27	722	11.18	739	12.10	756	13.02	772	13.97	806	15.93
22346	667	7.88	688	8.87	709	10.00	730	11.10	748	12.16	766	13.19	782	14.19	798	15.19	813	16.19	844	18.23
24209	717	9.72	735	10.68	755	11.86	774	13.08	793	14.27	810	15.42	826	16.53	841	17.62	856	18.70	885	20.87
26071	768	11.86	783	12.80	801	13.99	819	15.29	837	16.60	854	17.88	870	19.11	885	20.32	900	21.50	927	23.82
27933	819	14.30	832	15.26	848	16.42	865	17.76	882	19.17	899	20.57	915	21.94	930	23.27	944	24.56	971	27.09
29795	969	17.02	882	18.09	896	19.21	911	20.55	928	22.02	944	23.53	960	25.02	974	26.48	989	27.90	1015	30.66
31657	919	20.01	933	21.29	945	22.39	959	23.70	974	25.20	989	26.78	1004	28.38	1019	29.96	1033	31.51	1059	34.52
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18622	811	16.02	851	18.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20484	840	18.02	875	20.24	911	22.58	949	25.00	-	-	-	-	-	-	-	-	-	-	-	-
22346	875	20.37	906	22.63	938	25.00	970	27.48	1004	30.07	1038	32.72	-	-	-	-	-	-	-	-
24209	913	23.09	942	25.39	970	27.80	999	30.32	1029	32.95	1059	35.67	1090	38.48	1122	41.36	-	-	-	-
26071	954	26.16	980	28.55	1007	31.02	1033	33.57	1060	36.23	1087	38.99	1115	41.85	1143	44.80	1172	47.83	1201	50.92
27933	997	29.58	1021	32.09	1046	34.64	1070	37.26	1095	39.97	1120	42.76	1145	45.65	1171	48.64	1197	51.71	1223	54.87
29795	1040	33.34	1064	36.00	1087	38.67	1110	41.38	1133	44.15	1156	47.00	1179	49.93	1203	52.95	1226	56.06	1250	59.26
31657	1084	37.43	1107	40.27	1130	43.09	1152	45.92	1173	48.79	1195	51.72	1216	54.71	1238	57.78	1260	60.92	1282	64.15
33520	1128	41.83	1151	44.89	1173	47.89	1194	50.88	1215	53.88	1235	56.91	1256	59.98	1276	63.12	1297	66.32	1317	69.59
35382	1173	46.55	1195	49.85	1217	53.07	1238	56.24	1258	59.39	1277	62.55	1297	65.74	1316	68.96	1336	72.24	1355	75.58
37244	1217	51.60	1240	55.15	1261	58.61	1281	61.99	1301	65.33	1320	68.65	1339	71.97	1358	75.31	1376	78.69	1394	82.11
39106	1262	56.99	1284	60.80	1306	64.51	1326	68.12	1345	71.67	1364	75.18	1382	78.67	1400	82.15	1418	85.65	1435	89.18
40968	1307	62.74	1329	66.80	1350	70.77	1370	74.63	1389	78.42	1408	82.14	1426	85.82	1443	89.47	1461	93.12	1478	96.78

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS

PG490 BC



Wheel Diameter = 49 inches
Tip Speed = $12.83 \times \text{RPM}$
Maximum BHP = 81.42 (RPM/1000)²

Pressure Class Limits

Class	Max. RPM
1	773
2	1007
3	1269

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR BACKWARD INCLINED WHEEL

VOL CFM	0.5 SP		0.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13800	286	1.9	317	26	350	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16560	321	2.6	347	3.4	372	4.2	399	5.1	426	6.1	-	-	-	-	-	-	-	-	-	-
19320	357	3.5	381	4.4	403	5.3	424	6.2	447	7.2	469	8.3	493	9.4	-	-	-	-	-	-
22080	394	4.6	417	5.7	437	6.7	456	7.7	475	8.7	494	9.8	514	11.0	534	12.2	554	13.5	-	-
24840	431	5.9	453	7.2	473	8.3	490	9.4	507	10.5	524	11.7	541	12.9	558	14.2	576	15.5	611	18.3
27600	469	7.5	490	8.9	509	10.2	526	11.5	542	12.7	558	14.0	573	15.2	588	16.5	603	17.9	634	20.7
30360	508	9.4	527	10.9	546	12.4	563	13.8	578	15.2	593	16.6	607	17.9	621	19.3	634	20.7	662	23.6
33120	548	11.7	565	13.2	583	14.8	599	16.5	615	18.0	629	19.5	642	21.0	655	22.5	668	24.0	693	27.0
35880	589	14.4	603	15.8	620	17.6	636	19.4	651	21.2	665	22.9	678	24.5	691	26.1	703	27.7	727	30.9
38640	631	17.6	643	19.0	658	20.7	673	22.7	688	24.6	702	26.5	715	28.3	727	30.1	739	31.9	762	35.3
41460	673	21.2	684	22.6	696	24.3	711	26.3	725	28.4	739	30.5	752	32.5	764	34.5	776	36.4	798	40.2
46920	714	25.2	725	26.8	736	28.5	749	30.5	762	32.6	775	34.9	788	37.1	800	39.2	812	41.3	834	45.4
49620	755	29.7	767	31.6	776	33.2	788	35.1	800	37.3	813	39.7	825	42.1	837	44.4	849	46.7	870	51.2
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27600	666	23.8	699	27.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30360	690	26.7	719	30.0	748	33.5	779	37.1	-	-	-	-	-	-	-	-	-	-	-	-
33120	719	30.2	744	33.5	770	37.1	797	40.7	825	44.6	853	48.5	-	-	-	-	-	-	-	-
35880	750	34.2	773	37.6	797	41.2	821	44.9	845	48.8	870	52.9	896	57.0	922	61.3	-	-	-	-
38640	784	38.8	805	42.3	827	46.0	849	49.8	871	53.7	893	57.8	976	62.0	939	66.4	963	70.9	987	75.5
41460	819	43.8	839	47.6	859	51.3	879	55.2	899	592	920	63.4	941	67.7	962	721	983	46.6	1005	81.3
46920	854	49.4	874	53.4	893	57.3	912	61.3	931	654	950	69.7	969	74.0	988	78.5	1007	83.1	1027	87.8
49620	890	55.5	909	59.7	928	63.9	946	68.1	964	723	981	76.7	999	81.1	1017	85.6	1035	90.3	1053	95.1
49680	927	62.0	946	66.5	964	71.0	981	75.4	998	79.9	1015	84.3	1032	88.9	1048	93.5	1065	98.3	1082	103.1
52440	963	69.0	982	73.9	1000	78.7	1017	83.4	1033	88.0	1049	92.7	1065	97.4	1081	102.2	1097	107.1	1113	112.0
55200	1000	76.5	1018	81.7	1036	86.9	1053	91.9	1069	96.8	1085	101.7	1100	106.7	1115	111.6	1130	116.6	1145	121.7
57960	1037	84.5	1055	90.1	1072	95.6	1089	101.0	1105	106.2	1120	111.4	1135	116.6	1150	121.8	1165	126.9	1179	132.2
60720	1073	93.0	1092	99.0	1109	104.9	1125	110.6	1141	116.2	1156	121.7	1171	127.2	1186	132.6	1200	138.0	1214	143.4

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
BHP DOES NOT INCLUDE DRIVE LOSSES.

PG270 AF

Wheel Diameter = 27 inches
 Tip Speed = $7.069 \times RPM$
 Maximum BHP = $3.35 \text{ (RPM/1000)}^3$

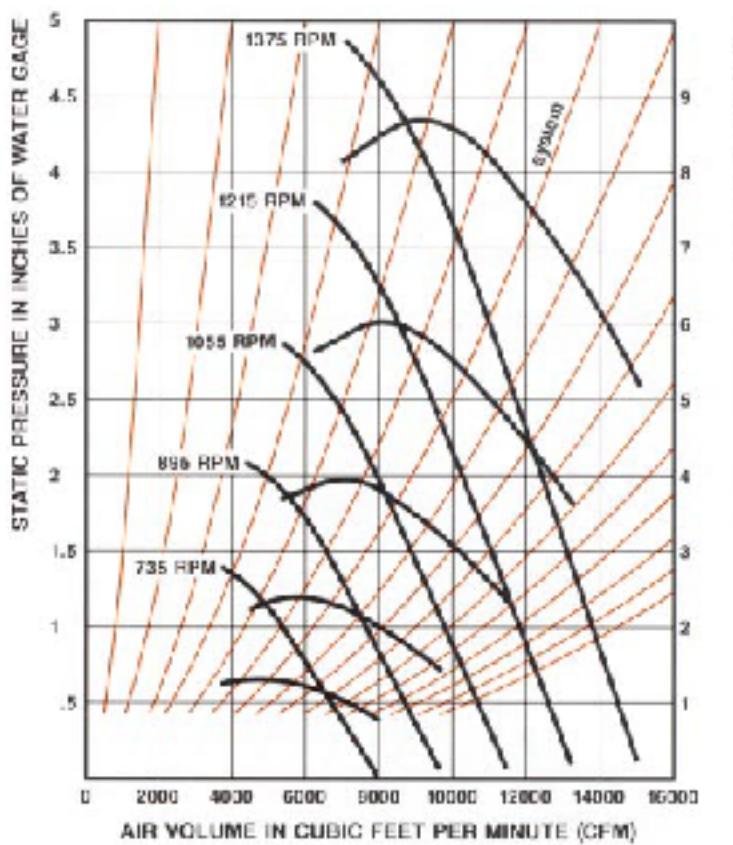
Pressure Class Limits

Class	Max. RPM
1	1453
2	1893
3	2389

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS



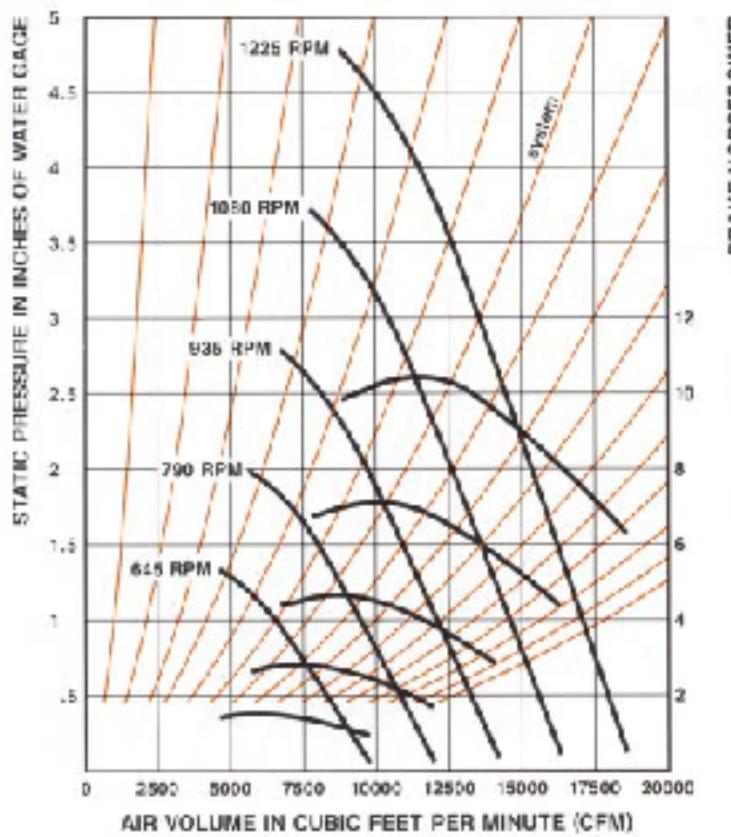
PERFORMANCE DATA FOR AIRFOIL WHEEL

VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.50 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
3352	485	0.38	562	0.58	624	0.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4190	538	0.50	599	0.72	662	0.96	720	1.21	770	1.45	-	-	-	-	-	-	-	-	-	-
5028	603	0.66	652	0.89	702	1.15	755	1.44	807	1.74	855	2.04	899	2.32	936	2.59	-	-	-	-
5866	666	0.85	715	1.13	757	1.39	799	1.69	844	2.01	889	2.35	934	2.70	976	3.05	1011	3.45	1050	3.85
6704	726	1.04	780	1.40	820	1.71	857	2.01	893	2.33	932	2.69	971	3.06	1011	3.45	1050	3.85	1125	4.65
7542	788	1.26	842	1.68	886	2.07	921	2.41	953	2.75	985	3.10	1019	3.48	1053	3.88	1088	4.31	1158	5.19
8380	858	1.58	902	1.97	948	2.44	986	2.86	1018	3.24	1047	3.61	1076	4.00	1106	4.40	1136	4.83	1198	5.74
9218	934	2.00	964	2.31	1008	2.81	1049	3.32	1083	3.79	1113	4.21	1140	4.62	1166	5.03	1192	5.46	1247	6.38
10056	1009	2.49	1033	2.77	1069	3.22	1110	3.79	1146	4.34	1178	4.85	1205	5.32	1231	5.76	1255	6.21	1303	7.13
10894	1074	2.93	1107	3.36	1133	3.72	1169	4.28	1207	4.90	1240	5.49	1270	6.05	1296	6.56	1320	7.06	1365	8.02
11732	1131	3.27	1184	4.06	1203	4.36	1232	4.85	1267	5.48	1301	6.14	1332	6.79	1360	7.39	1386	7.96	1430	9.02
12570	1190	3.67	1257	4.79	1278	5.16	1298	5.55	1328	6.13	1361	6.82	1393	7.53	1422	8.22	1449	8.88	1496	10.10
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
7123	1210	5.77	1272	6.58	1324	7.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7961	1243	6.40	1307	7.36	1367	8.30	1422	9.20	1469	10.05	-	-	-	-	-	-	-	-	-	-
8799	1281	7.03	1341	8.07	1401	9.12	1458	10.17	1511	11.20	1561	12.21	1606	13.17	1646	14.08	-	-	-	-
9637	1327	7.74	1381	8.80	1436	9.92	1491	11.06	1545	12.21	1597	13.369	1646	14.50	1692	15.61	1735	16.68	1775	17.72
10475	1381	8.56	1429	9.63	1479	10.77	1529	11.96	1580	13.19	1630	14.43	1679	15.69	1727	16.94	1773	18.18	1817	19.40
11313	1440	9.53	1484	10.60	1528	11.74	1574	12.95	1620	14.21	1667	15.51	1714	16.84	1761	18.19	1806	19.54	1851	20.90
12151	1504	10.63	1544	11.72	1584	12.87	1625	14.07	1667	15.34	1710	16.66	1754	18.03	1798	19.44	1841	20.87	1885	22.32
12989	1570	11.84	1608	12.99	1645	14.15	1683	15.36	1721	16.63	1760	17.95	1800	19.34	1840	20.77	1881	22.24	1922	23.75
13827	1635	13.10	1674	14.36	1710	15.59	1745	16.82	1780	18.10	1815	19.42	1851	20.80	1888	22.24	1926	23.73	1964	25.27
14665	1699	14.39	1739	15.80	1775	17.14	1809	18.44	1842	19.74	1875	21.08	1908	22.47	1942	23.90	1977	25.39	2012	26.93
15503	1761	15.68	1803	17.28	1841	18.76	1875	20.16	1907	21.54	1938	22.92	1969	24.32	2001	25.76	2033	27.25	2065	28.78
16341	1822	16.98	1866	18.75	1905	20.41	1940	21.97	1972	23.45	2003	24.90	2033	26.35	2063	27.82	-	-	-	-

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS

PG300 AF



Wheel Diameter = 30 inches
Tip Speed = $7.854 \times \text{RPM}$
Maximum BHP = $5.67 (\text{RPM}/1000)^2$

Pressure Class Limits

Class	Max. RPM
1	1308
2	1703
3	2150

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PERFORMANCE DATA FOR AIRFOIL WHEEL

VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP																		
4136	437	0.47	506	0.72	561	0.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5170	484	0.62	539	0.89	596	1.19	648	1.50	693	1.79	-	-	-	-	-	-	-	-	-	-
6204	542	0.82	586	1.10	632	1.42	679	1.78	726	2.15	770	2.51	809	2.87	842	3.20	-	-	-	-
7238	600	1.05	644	1.39	981	1.72	719	2.08	760	2.48	800	2.90	840	3.34	879	3.77	915	4.19	976	4.99
8272	654	1.28	702	1.73	738	2.11	771	2.48	804	2.88	839	3.32	874	3.78	910	4.26	945	4.76	1012	5.74
9306	710	1.56	758	2.07	797	2.55	829	2.98	858	3.39	887	3.83	917	4.30	948	4.79	979	5.32	1042	6.41
10340	772	1.95	811	2.43	853	3.01	888	3.53	916	4.00	943	4.46	969	4.93	995	5.43	1022	5.96	1078	7.09
11374	840	2.48	868	2.86	908	3.47	944	4.10	975	4.67	1001	5.20	1026	5.70	1049	6.21	1073	6.74	1122	7.87
12408	908	3.07	929	3.42	962	3.98	999	4.67	1032	5.36	1060	5.98	1085	6.56	1108	7.12	1129	7.67	1173	8.81
13442	967	3.61	996	4.15	1020	4.60	1052	5.28	1086	6.04	1116	6.78	1143	7.47	1167	8.10	1188	8.71	1229	9.91
14476	1018	4.04	1066	5.02	1082	5.39	1108	5.99	1140	6.76	1171	7.58	1199	8.38	1224	9.13	1247	9.83	1287	11.14
15510	1071	4.53	1131	5.91	1150	6.38	1169	6.85	1195	7.57	1225	8.41	1254	9.29	1280	10.15	1304	10.97	1346	12.46
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP																		
8789	1089	7.12	1144	8.13	1192	9.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9823	1119	7.9	1177	9.08	1231	10.24	1279	11.36	1322	12.41	1360	13.39	-	-	-	-	-	-	-	-
10857	1153	8.68	1207	9.96	1261	11.26	1312	12.55	1360	13.83	1405	15.08	1445	16.26	1481	17.38	1513	18.42	-	-
11891	1194	9.55	1243	10.86	1293	12.24	1342	13.65	1390	15.08	1437	16.50	1481	17.90	1523	19.27	1562	20.60	1597	21.88
12925	1242	10.57	1286	11.89	1331	13.30	1376	14.77	1422	16.28	1467	17.82	1511	19.37	1555	20.91	1596	22.45	1635	23.95
13959	1296	11.77	1335	13.09	1375	14.50	1416	15.98	1458	17.54	1500	19.15	1543	20.79	1585	22.46	1626	24.13	1666	25.80
14993	1354	13.13	1390	14.47	1426	15.88	1463	17.37	1501	18.94	1539	20.57	1578	22.26	1618	24.00	1657	25.77	1696	27.56
16027	1413	14.61	1447	16.04	1481	17.48	1515	18.97	1549	20.53	1584	22.16	1620	23.87	1656	25.64	1693	27.46	1729	29.32
17061	1472	16.18	1506	17.73	1539	19.24	1570	20.77	1602	22.34	1634	23.98	1666	25.68	1699	27.46	1733	29.30	1767	31.19
18095	1529	17.77	1565	19.51	1598	21.16	1628	22.76	1658	24.38	1688	26.03	1718	27.74	1748	29.51	1779	31.35	1810	33.24
19129	1585	19.36	1623	21.33	1656	23.16	1687	24.89	1716	26.59	1744	28.30	1773	30.03	1801	31.80	1829	33.64	1858	35.53
20163	1640	20.96	1679	23.15	1714	25.20	1746	27.12	1775	28.95	1803	30.75	1830	32.53	1857	34.35	-	-	-	-

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

PG330 AF

Wheel Diameter = 33 inches
 Tip Speed = $8.639 \times RPM$
 Maximum BHP = 9.13 (RPM/1000)³

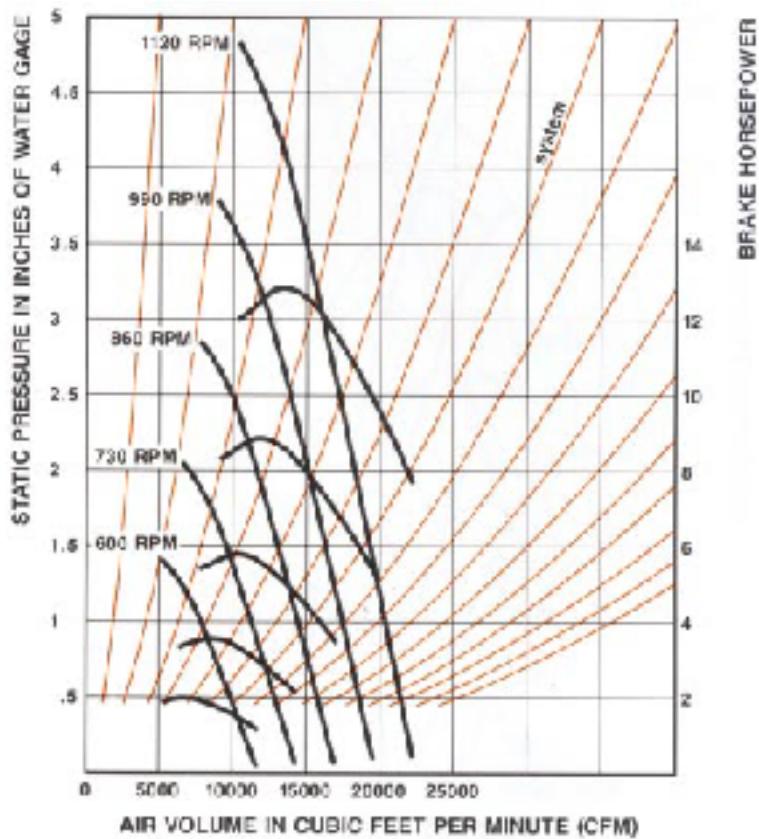
Pressure Class Limits

Class	Max. RPM
1	1169
2	1548
3	1955

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

PEERLESS BLOWERS PLUG-PAK FANS



PERFORMANCE DATA FOR AIRFOIL WHEEL

VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
5008	397	0.57	460	0.87	510	1.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6260	440	0.75	490	1.07	542	1.44	589	1.81	630	2.16	-	-	-	-	-	-	-	-	-	-
7512	493	0.99	533	1.33	574	1.72	617	2.15	660	2.60	700	3.04	735	3.47	766	3.87	-	-	-	-
8764	545	1.27	585	1.69	619	2.08	654	2.52	690	3.00	728	3.51	764	4.04	799	4.56	831	5.07	887	6.04
10016	594	1.55	638	2.09	971	2.55	701	3.00	731	3.49	762	4.01	794	4.57	827	5.16	859	5.75	920	6.95
11268	645	1.89	689	2.51	725	3.09	753	3.60	780	4.10	806	4.63	834	5.20	862	5.80	890	6.43	948	7.75
12520	702	2.36	738	2.94	776	3.64	807	4.27	833	4.84	857	5.40	881	5.97	905	6.57	929	7.21	980	8.57
13772	764	2.99	789	3.46	825	4.20	858	4.96	886	5.65	910	6.29	932	6.90	954	7.52	976	8.15	1020	9.52
15024	825	3.72	845	4.14	874	4.81	908	5.66	938	6.48	964	7.24	986	7.94	1007	8.61	1027	9.28	1066	10.66
16276	879	4.37	906	5.02	927	5.56	957	6.39	987	7.31	1015	8.21	1039	9.04	1060	9.81	1080	10.54	1117	11.99
17528	925	4.89	969	6.07	984	6.52	1008	7.24	1036	8.18	1064	9.17	1090	10.14	1113	11.04	1134	11.89	1170	13.48
18780	974	5.48	1028	7.15	1045	7.72	1062	8.29	1086	9.16	1113	10.18	1140	11.25	1164	12.28	1186	13.27	1224	15.08
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
10642	990	8.62	1040	9.84	1084	10.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11894	1017	9.56	1070	10.99	1119	12.39	1163	13.74	1202	15.02	1236	16.20	-	-	-	-	-	-	-	-
13146	1048	10.50	1097	12.05	1146	13.62	1193	15.19	1237	16.74	1277	18.24	1314	19.68	1347	21.03	1375	22.29	-	-
14398	1086	11.56	1130	13.15	1175	14.81	1220	16.52	1264	18.24	1306	19.96	1347	21.66	1385	23.32	1420	24.92	1452	26.47
15650	1130	12.79	1169	14.39	1210	16.09	1251	17.87	1292	19.70	1334	21.56	1374	23.44	1413	25.31	1451	27.16	1487	28.98
16902	1179	14.24	1214	15.84	1250	17.54	1288	19.34	1326	21.22	1364	23.17	1403	25.16	1441	27.17	1478	29.19	1515	31.21
18154	1231	15.88	1263	17.51	1296	19.22	1330	21.02	1364	22.91	1399	24.89	1435	26.94	1471	29.04	1507	31.18	1542	33.34
19406	1284	17.68	1316	19.40	1346	21.14	1377	22.95	1408	24.84	1440	26.82	1472	28.88	1505	31.02	1539	33.22	1572	35.48
20658	1338	19.57	1369	21.46	1399	23.029	1427	25.13	1456	27.04	1485	29.01	1515	31.08	1545	33.23	1576	35.45	1607	37.74
21910	1390	21.50	1423	23.61	1452	25.60	1480	27.54	1507	29.50	1534	31.49	1561	33.56	1589	35.70	1617	37.93	1646	40.23
23162	1441	23.43	1475	25.81	1506	28.02	1534	30.12	1560	32.18	1586	34.24	1611	36.33	1637	38.48	1663	40.70	1689	43.00
24414	1491	25.37	1527	28.01	1559	30.49	1587	32.82	1614	35.03	1639	37.20	1663	39.36	1688	41.56	-	-	-	-

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS

PG365 AF

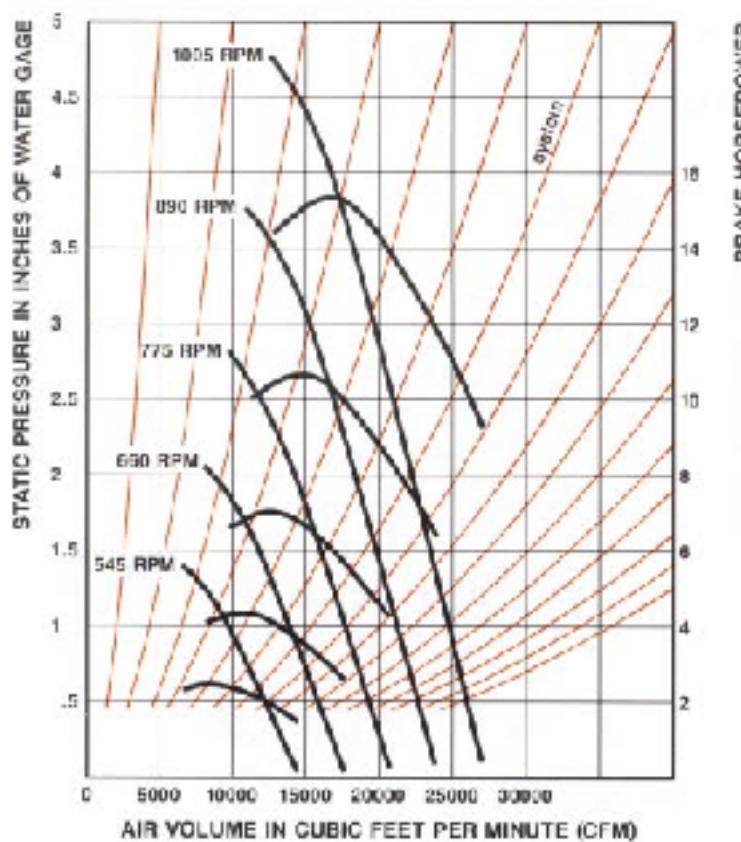
Wheel Diameter = $36\frac{1}{2}$ inches
 Tip Speed = $9.566 \times RPM$
 Maximum BHP = $15.11 (RPM/1000)^2$

Pressure Class Limits

Class	Max. RPM
1	1098
2	1431
3	1802

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III



PERFORMANCE DATA FOR AIRFOIL WHEEL

VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6128	359	0.70	416	1.06	462	1.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7660	398	0.91	443	1.31	490	1.76	533	2.22	569	2.64	-	-	-	-	-	-	-	-	-	-
9192	446	1.21	482	1.63	519	2.10	558	2.63	597	3.18	633	3.72	665	4.25	692	4.73	-	-	-	-
10724	493	1.55	529	2.06	560	2.55	591	3.08	624	3.67	658	4.30	691	4.94	722	5.58	752	6.21	802	7.39
12256	537	1.90	577	2.56	607	3.12	634	3.67	661	4.26	689	4.91	718	5.59	748	6.31	777	7.04	832	8.50
13788	583	2.31	623	3.06	655	3.78	681	4.41	705	5.02	729	5.67	754	6.36	779	7.09	805	7.87	857	9.48
15320	635	2.89	667	3.59	701	4.45	730	5.23	753	5.93	775	6.61	796	7.30	818	8.04	840	8.82	886	10.49
16852	691	3.66	713	4.23	746	5.14	776	6.07	801	6.92	823	7.69	843	8.44	863	9.20	882	9.98	922	11.65
18384	746	4.55	764	5.06	791	5.89	821	6.92	848	7.93	871	8.86	892	9.71	910	10.54	928	11.35	964	13.04
19916	795	5.35	819	6.14	838	6.81	865	7.82	893	8.95	918	10.04	939	11.05	959	12.00	977	12.90	1010	14.67
21448	837	5.98	876	7.43	890	7.98	911	8.86	937	10.01	962	11.22	986	12.40	1006	13.51	1025	14.55	1058	16.49
22980	880	6.70	929	8.75	945	9.44	960	10.14	982	11.20	1007	12.45	1030	13.76	1052	15.03	1072	16.23	1107	18.45
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13022	895	10.54	941	12.03	980	13.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14554	920	11.70	967	13.44	1012	15.16	1052	569	1087	18.37	-	-	-	-	-	-	-	-	-	-
16086	948	12.85	992	14.74	1036	16.66	1078	597	1118	20.47	1155	22.32	1188	24.07	1218	25.73	-	-	-	-
17618	981	14.14	1022	16.08	1063	18.12	1103	624	1143	22.32	1181	24.42	1218	26.50	1252	28.53	1284	30.49	1313	32.39
19150	1021	15.65	1057	17.60	1094	19.68	1131	661	1169	24.10	1206	26.38	1242	28.67	1278	30.96	1312	33.23	1344	35.46
20682	1066	17.42	1098	19.38	1130	21.46	1164	705	1199	25.96	1233	28.34	1268	30.78	1302	33.24	1336	35.71	1369	38.19
22214	1113	19.43	1142	21.43	1172	23.51	1202	753	1233	28.03	1265	30.45	1297	32.96	1330	35.53	1362	38.15	1394	40.79
23746	1161	21.63	1190	23.74	1217	25.87	1245	801	1273	30.39	1302	32.81	1331	35.34	1361	37.95	1391	40.65	1421	43.40
25278	1210	23.95	1238	26.25	1265	28.49	1291	848	1316	3.07	1343	35.49	1370	38.02	1397	40.65	1425	43.37	1453	46.17
26810	1257	26.30	1286	28.88	1313	31.32	1338	893	1363	36.08	1387	28.52	1412	41.06	1437	43.68	1462	46.40	1488	49.21
28342	1303	28.66	1334	31.57	1361	34.28	1387	937	1411	39.36	1434	41.89	1457	44.45	1480	47.07	1504	49.80	1527	52.60
29874	1348	31.03	1380	34.27	1409	37.30	1435	982	1459	42.86	1482	45.51	1504	48.16	1526	50.84	1548	53.58	1570	56.40

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.
 BHP DOES NOT INCLUDE DRIVE LOSSES.

PG402 AF

Wheel Diameter = 40 1/4 inches
 Tip Speed = 10.54 x RPM
 Maximum BHP = 24.64 (RPM/1000)³

Pressure Class Limits

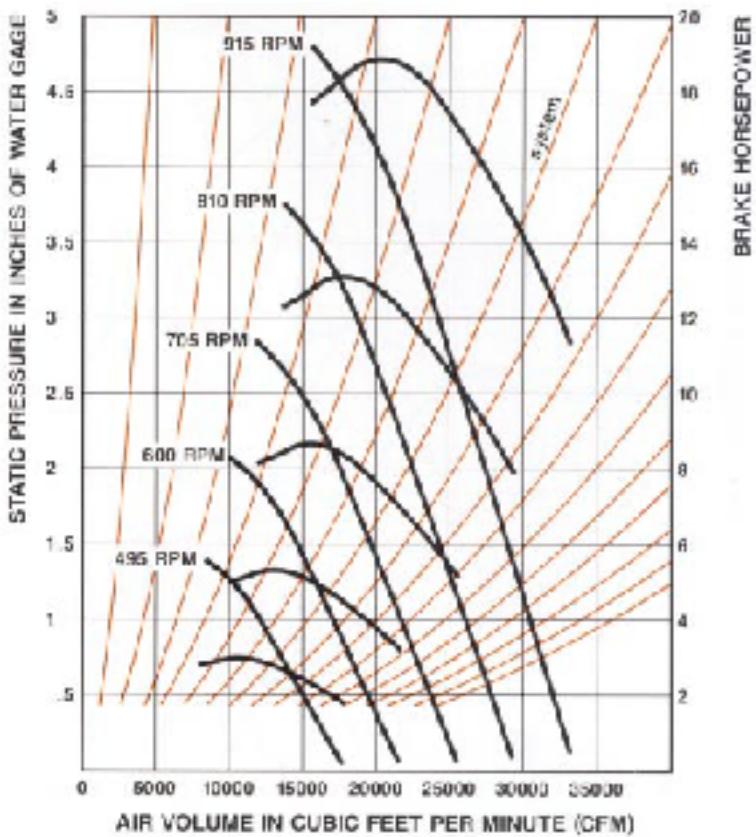
Class	Max. RPM
1	996
2	1297
3	1634

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

Minimum horsepower required to start fan = 1 1/2 HP

PEERLESS BLOWERS PLUG-PAK FANS



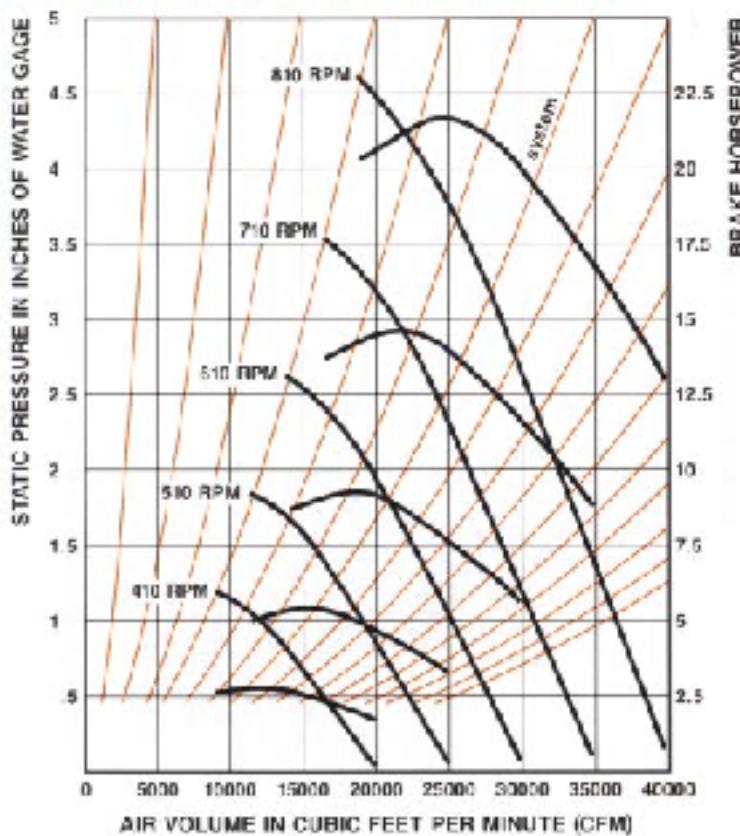
PERFORMANCE DATA FOR AIRFOIL WHEEL

VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7449	326	0.85	377	1.29	419	1.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9311	361	1.11	402	1.59	444	2.14	483	2.69	516	3.21	-	-	-	-	-	-	-	-	-	-
11173	404	1.48	437	1.98	471	2.56	506	3.20	541	3.86	574	4.53	603	5.16	628	5.76	-	-	-	-
13035	447	1.89	480	2.51	508	3.10	536	3.75	566	4.46	597	5.23	626	6.00	655	6.78	682	7.55	728	8.98
14898	487	2.31	523	3.11	550	3.80	575	4.46	599	5.18	625	5.97	651	6.80	678	7.67	704	8.56	755	10.34
16760	529	2.81	565	3.73	594	4.59	618	5.36	639	6.11	661	6.89	683	7.73	706	8.63	730	9.57	777	11.53
18622	575	3.51	605	4.37	636	5.41	662	6.36	683	7.21	703	8.03	722	8.88	742	9.78	762	10.72	804	12.76
20484	626	4.46	647	5.14	676	6.25	704	7.38	727	8.41	746	9.35	765	10.26	782	11.18	800	12.13	836	14.17
22346	677	5.53	693	6.15	717	7.16	744	8.41	769	9.64	790	10.77	809	11.81	825	12.81	842	13.80	874	15.85
24209	721	6.50	743	7.47	760	8.28	784	9.51	810	10.88	832	12.21	852	13.44	869	14.59	886	15.68	916	17.83
26071	759	7.27	794	9.03	807	9.70	826	10.78	850	12.17	873	13.65	894	15.08	913	16.43	929	17.69	959	20.05
27933	798	8.15	843	10.64	857	11.48	871	12.34	891	13.62	913	15.15	934	16.73	954	18.28	972	19.74	1003	22.43
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15829	812	12.82	853	14.63	888	16.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17691	834	14.23	877	16.35	917	18.44	954	20.44	986	22.34	1013	24.10	-	-	-	-	-	-	-	-
19553	859	15.63	900	17.92	940	20.26	978	22.59	1014	24.90	1047	27.14	1077	29.27	1104	31.28	1128	33.16	-	-
21415	890	17.19	926	19.56	964	22.04	1000	24.58	1036	27.14	1071	29.70	1104	32.22	1135	34.69	1164	37.07	1190	39.39
23278	926	19.03	958	21.40	992	23.94	1026	26.58	1060	29.30	1093	32.08	1127	34.86	1159	37.65	1190	40.41	1219	43.12
25140	966	21.18	995	23.56	1025	26.09	1056	28.77	1087	31.57	1118	34.47	1150	37.43	1181	40.42	1212	43.43	1242	46.44
27002	1009	23.63	1036	26.06	1063	28.59	1090	31.27	1119	34.09	1147	37.03	1176	40.08	1206	43.20	1235	46.39	1264	49.61
28864	1053	26.30	1079	28.87	1104	31.46	1129	34.14	1154	36.96	1181	39.90	1207	42.97	1234	46.15	1262	49.43	1289	52.78
30726	1097	29.12	1123	31.92	1147	34.64	1170	37.39	1194	40.22	1218	43.16	1242	46.23	1267	49.43	1292	52.73	1317	56.15
32589	1140	31.98	1167	35.12	1191	38.08	1214	40.98	1236	43.88	1258	46.85	1280	49.93	1303	53.11	1326	5.43	1349	59.84
34451	1182	34.86	1210	38.39	1235	41.69	1257	44.81	1279	47.87	1300	50.93	1321	54.05	1342	57.24	1363	60.55	1385	63.97
36313	1222	37.74	1252	41.68	1278	45.36	1301	48.82	1323	52.12	1344	55.35	1364	58.56	1384	61.83	1404	65.15	1424	68.58

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

PEERLESS BLOWERS PLUG-PAK FANS



PG445 AF

Wheel Diameter = 44½ inches
 Tip Speed = $11.65 \times \text{RPM}$
 Maximum BHP = $40.70 (\text{RPM}/1000)^3$

Pressure Class Limits

Class	Max. RPM
1	901
2	1173
3	1480

Data in bold face indicates quietest and most efficient performance

Class I
 Class II
 Class III

Minimum horsepower required to start fan—2 HP

PERFORMANCE DATA FOR AIRFOIL WHEEL

VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9112	295	1.04	341	1.58	379	2.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11390	326	1.36	363	1.95	402	2.62	437	3.29	467	3.93	-	-	-	-	-	-	-	-	-	-
13688	366	1.81	395	2.42	426	3.12	458	3.91	489	4.72	519	5.53	545	6.31	568	7.04	-	-	-	-
15946	404	2.30	434	3.06	459	3.78	485	4.58	512	5.46	540	6.39	567	7.34	592	8.29	617	9.22	658	10.98
18224	441	2.82	473	3.80	498	4.64	520	5.46	542	6.34	565	7.29	589	8.31	613	9.38	637	10.46	682	12.64
20502	478	3.43	511	4.56	537	5.62	559	6.55	578	7.46	598	8.42	618	9.45	639	10.54	660	11.69	703	14.09
22780	520	4.29	547	5.34	575	6.62	598	7.77	618	8.81	635	9.82	653	10.86	671	11.95	689	13.11	727	15.59
25058	567	5.45	585	6.28	612	7.64	637	9.02	657	10.28	675	11.43	691	12.55	707	13.67	723	14.83	756	17.32
27336	612	6.76	627	7.52	648	8.75	673	10.29	695	11.79	715	13.17	731	14.44	747	15.66	761	16.87	791	19.38
29614	652	7.95	672	9.13	687	10.12	710	11.62	732	1.30	753	14.92	771	16.43	86	17.83	801	19.17	828	21.80
31892	686	8.89	718	11.04	730	11.86	747	13.17	768	14.88	789	16.68	808	18.44	825	20.08	841	21.62	868	24.51
34170	722	9.96	762	13.00	775	14.03	788	15.08	806	16.65	826	18.51	845	20.45	863	22.34	879	24.13	908	27.42
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19363	734	15.67	772	17.88	804	19.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21641	754	17.39	793	19.98	830	22.53	863	24.99	892	27.31	917	29.46	-	-	-	-	-	-	-	-
23919	777	19.10	814	21.91	850	24.77	884	27.61	917	30.43	947	33.17	974	35.78	999	38.24	1020	40.53	-	-
26197	805	21.01	838	23.90	871	26.94	905	30.04	937	33.18	969	3.30	999	39.38	1027	42.41	1053	45.32	1077	48.14
28475	838	23.26	867	26.16	897	29.26	928	32.49	958	35.82	989	39.21	1019	42.62	1048	46.02	1076	49.39	1103	52.70
30753	874	25.89	900	28.80	927	31.90	955	35.17	983	38.59	1012	42.13	1040	45.75	1068	49.41	1096	53.08	1123	56.76
33031	913	28.88	937	31.85	961	34.95	986	38.22	1012	41.67	1038	45.26	1064	48.99	1091	52.81	1117	56.70	1144	60.63
35309	952	32.15	976	35.28	998	38.45	1021	41.73	1044	45.17	1068	48.77	1092	52.52	1116	56.41	1141	60.41	1166	64.52
37587	992	25.59	1015	39.01	1037	42.34	1059	45.70	1080	49.16	1101	52.76	1123	56.51	1146	60.42	1168	64.46	1192	68.63
39865	1031	29.10	1055	42.93	1077	46.55	1098	50.09	1118	53.63	1138	57.26	1158	61.03	1178	64.92	1199	68.97	1221	73.15
42143	1069	42.61	1094	46.93	1117	50395	1137	54.77	1157	58.51	1176	62.26	1195	66.06	1214	69.97	1233	74.02	1253	78.19
44421	1105	46.13	1132	50.94	1156	55.45	1177	59.67	1197	63.70	1215	67.65	1234	71.58	1252	75.57	1270	79.64	1288	83.83

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

PG490 AF

Wheel Diameter = 49 inches
 Tip Speed = $12.83 \times \text{RPM}$
 Maximum BHP = 65.88 (RPM/1000)²

Pressure Class Limits

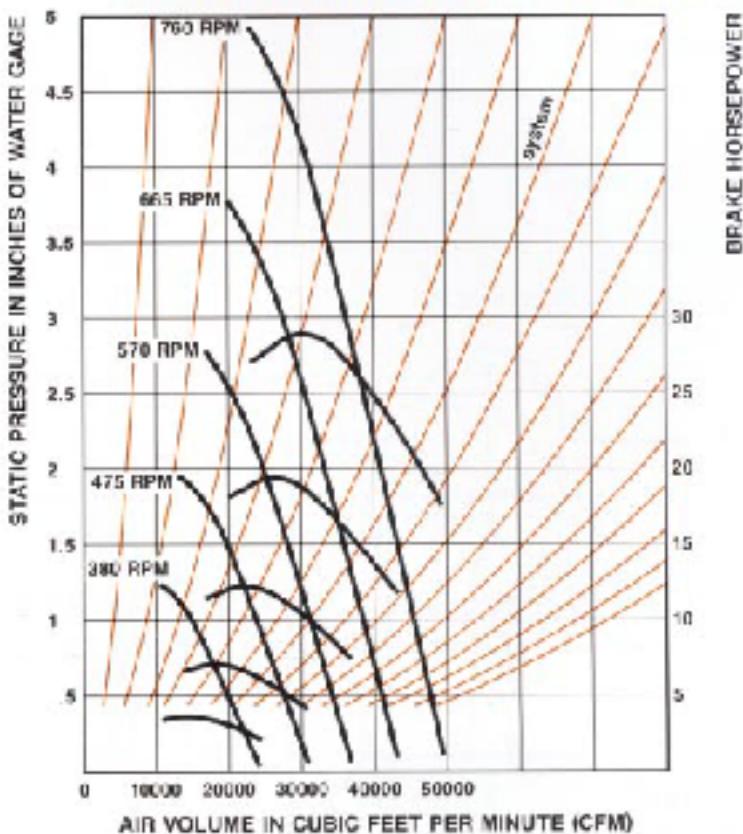
Class	Max. RPM
1	818
2	1066
3	1342

Data in bold face indicates quietest and most efficient performance

- Class I
- Class II
- Class III

Minimum horsepower required to start fan—5 HP

PEERLESS BLOWERS PLUG-PAK FANS



PERFORMANCE DATA FOR AIRFOIL WHEEL

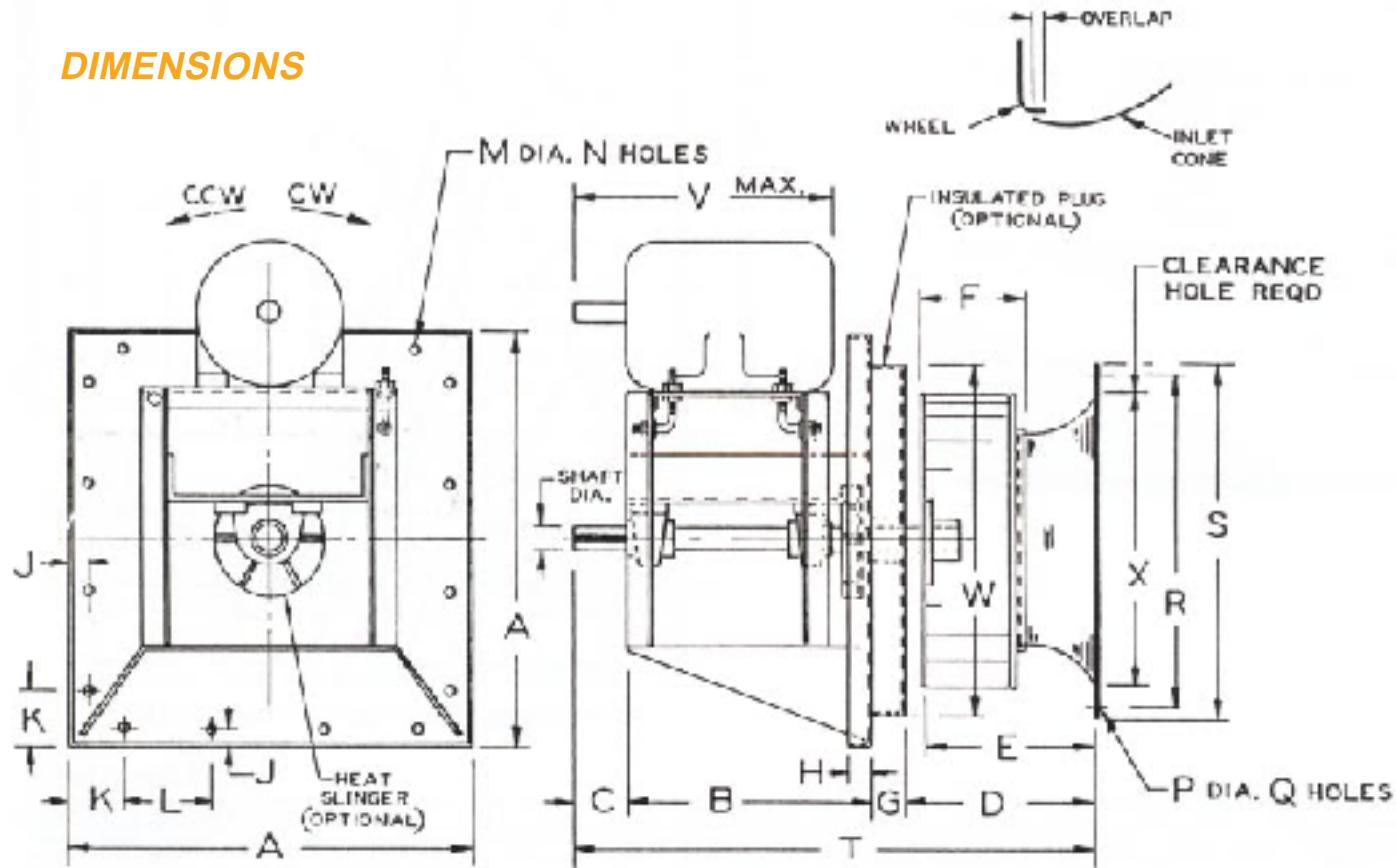
VOL CFM	.5 SP		.75 SP		1 SP		1.25 SP		1.50 SP		1.75 SP		2 SP		2.25 SP		2.5 SP		3 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
11040	267	1.26	310	1.92	344	2.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13800	297	1.65	330	2.36	365	3.17	397	3.99	424	4.76	-	-	-	-	-	-	-	-	-	-
16560	332	2.19	359	2.94	387	3.79	416	4.74	444	5.72	471	471	495	7.65	516	8.53	-	-	-	-
19320	367	2.79	394	3.72	417	4.59	440	5.55	465	6.62	490	490	515	8.90	538	10.05	560	11.18	598	13.31
22080	400	3.42	430	4.61	452	5.63	472	6.62	492	7.68	513	513	535	10.08	557	11.37	579	12.69	620	15.32
24840	434	4.16	464	5.52	488	6.81	507	7.94	525	9.05	543	543	561	11.46	580	12.79	600	14.18	638	17.09
27600	473	5.20	497	6.48	523	8.03	543	9.42	561	10.68	577	577	593	13.16	609	14.49	626	15.89	660	18.90
30360	514	6.60	531	7.62	556	9.26	578	10.94	597	12.47	613	613	628	15.21	642	16.57	657	17.98	687	21.00
33120	556	8.20	569	9.12	589	10.61	611	12.47	632	14.29	649	649	664	17.51	678	18.99	691	20.45	718	23.50
35880	592	9.64	610	11.07	624	12.27	644	14.09	665	16.12	684	684	700	19.92	714	21.62	727	23.24	752	26.43
38640	623	10.78	652	13.38	663	14.38	679	15.97	698	18.04	717	717	734	22.35	750	24.35	763	26.22	788	29.72
41400	656	12.08	692	15.76	704	17.01	715	18.28	732	20.19	750	750	767	24.80	784	27.08	799	29.26	824	33.25
VOL CFM	3.5 SP		4 SP		4.5 SP		5 SP		5.5 SP		6 SP		6.5 SP		7 SP		7.5 SP		8 SP	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
23460	667	19.00	701	21.68	730	24.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26220	685	21.09	720	24.23	753	27.32	783	30.30	810	33.11	832	832	-	-	-	-	-	-	-	-
28980	706	23.16	739	26.56	772	30.03	803	33.48	833	36.90	860	860	885	43.38	907	46.36	926	49.14	-	-
31740	731	25.48	761	28.98	791	32.66	822	36.42	851	40.23	880	880	907	47.75	933	51.42	956	54.94	978	58.37
34500	761	28.20	787	31.72	815	35.47	843	39.40	870	43.43	898	898	925	51.67	952	55.79	977	59.89	1001	63.90
37260	794	31.39	818	34.92	842	38.67	867	42.64	893	46.79	919	919	945	55.47	970	59.91	995	64.36	1020	68.82
40020	829	35.02	851	38.62	873	42.38	895	46.34	919	50.52	942	942	966	59.40	990	64.03	1015	68.75	1039	73.52
42780	865	38.99	886	42.78	907	46.62	927	50.60	948	54.77	970	970	992	63.68	1014	68.40	1036	73.25	1059	78.22
45540	901	43.16	922	47.30	942	51.34	961	55.41	981	59.61	1000	1000	1020	68.51	1041	73.26	1061	78.16	1082	83.21
48300	936	47.40	958	52.05	978	56.44	997	60.73	1015	65.03	1033	1033	1052	73.99	1070	78.72	1089	86.63	1108	88.69
51060	971	51.66	994	56.90	1014	61.78	1033	66.41	1051	79.94	1068	1068	1085	80.10	1102	84.83	1120	89.74	1138	94.80
53820	1004	55.93	1028	61.77	1050	67.23	1069	72.35	1087	77.24	1104	1104	1120	86.79	1137	91.63	1153	96.56	-	-

PERFORMANCE SHOWN IS FOR FAN WITHOUT HOUSING AND DUCTS.

BHP DOES NOT INCLUDE DRIVE LOSSES.

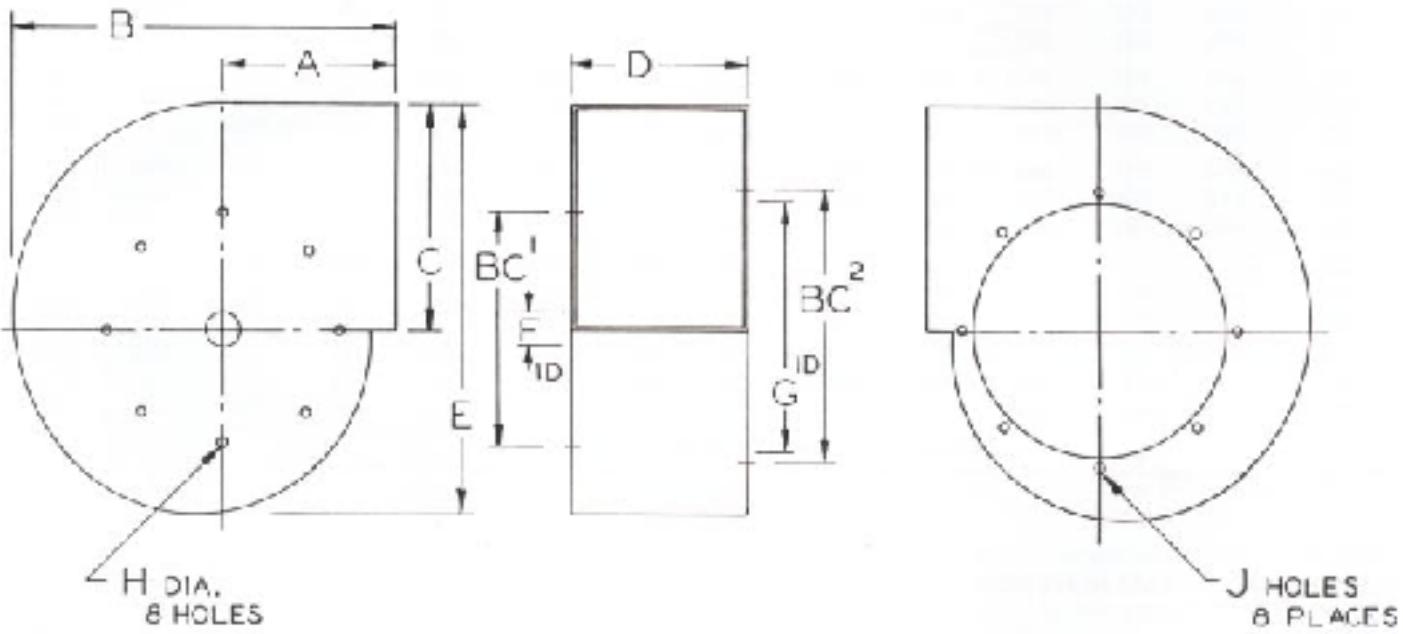
PEERLESS BLOWERS PLUG-PAK FANS

DIMENSIONS



Fan Size	Whl. Dia.	Shaft Dia.		A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	V	W Sq.	X	Overlap	Max. Motor
		Ci. I	Ci. II																							
PG122	12-1/4	1-7/16	1-11/16	22	19	4-1/2	9-5/8	8-7/8	6-3/8	4	1-1/2	1	3	8	1/2	12	7/8	8	14-1/4	15-5/8	37-1/8	16-1/2	17-1/2	13	5/16	184T
PG135	13-1/2	1-7/16	1-11/16	22	19	4-1/2	10-3/4	9-15/16	6-7/8	4	1-1/2	1	3	8	1/2	12	7/8	8	15-1/2	16-7/8	38-1/4	16-1/2	17-1/2	14-1/4	3/16	184T
PG150	15	1-7/16	1-11/16	22	19	4-1/2	11-3/4	10-11/16	7-11/16	4	1-1/2	1	3	8	1/2	12	7/8	8	17-1/8	18-1/2	39-1/4	20-1/4	17-1/2	15-7/8	3/8	213T
PG165	16-1/2	1-7/16	1-11/16	22	19	4-1/2	13	11-7/8	8-5/16	4	1-1/2	1	3	8	1/2	12	7/8	8	19	20-3/8	40	20-1/4	17-1/2	17-1/2	5/16	213T
PG182	18-1/4	1-11/16	1-15/16	31	23	5-1/2	14-1/4	13-1/8	8-15/16	4	2	1-1/4	3-1/2	8	1/2	16	7/8	8	20-3/4	22-1/8	46-3/4	23-1/4	25-1/2	19-1/4	3/16	254T
PG200	20	1-11/16	1-15/16	31	23	5-1/2	15-7/8	14-3/8	10-1/32	4	2	1-1/4	3-1/2	8	1/2	16	7/8	8	22-5/8	24	48-3/8	23-1/4	25-1/2	21-3/8	15/32	254T
PG222	22-1/4	1-11/16	1-15/16	31	23	5-1/2	17-3/8	15-3/4	10-15/16	4	2	1-1/4	3-1/2	8	1/2	16	7/8	8	25	26-3/8	49-7/8	25	25-1/2	23-3/4	3/8	256T
PG245	24-1/4	1-11/16	1-15/16	31	23	5-1/2	19-1/4	17-11/16	12	4	2	1-1/4	3-1/2	8	1/2	16	7/8	8	27-5/8	29	51-3/4	25	25-1/2	26-5/8	3/8	256T
PG270	27	1-15/16	2-3/16	44	29	6	21-1/4	19-3/16	9-3/4	4	2-3/16	1-1/4	3-1/2	7-1/2	1/2	24	1	8	30-1/4	32-1/2	60-1/4	26-1/2	37-1/2	29-1/4	7/16	284T
PG300	30	1-15/16	2-3/16	44	29	6	23-3/8	21	10-3/4	4	2-3/16	1-1/4	3-1/4	7-1/2	1/2	24	1	8	33-1/2	35-3/4	62-3/8	28-1/4	37-1/2	32-1/2	11/32	286T
PG330	33	1-15/16	2-3/16	44	29	6	25-7/8	23-11/32	11-7/8	4	2-3/16	1-1/4	3-1/4	7-1/2	1/2	24	1	8	36-5/8	38-7/8	64-7/8	29-1/2	37-1/2	35	3/8	324T
PG365	36-1/2	1-15/16	2-3/16	44	29	6	28-1/2	25-1/4	13-1/16	4	2-3/16	1-1/4	3-1/4	7-1/2	1/2	24	1	8	41	42-9/16	67-1/2	31	37-1/2	39-1/8	3/4	326T
PG402	40-1/4	2-7/16	2-11/16	52	33	6-1/2	31-5/8	28-3/8	14-3/8	4	2-3/4	1-1/4	3-1/4	7-5/8	1/2	28	1	8	45-1/8	46-1/2	75-1/8	34	46-1/2	43-7/8	19/32	364T
PG445	44-1/2	2-7/16	2-11/16	52	33	6-1/2	35	31-1/4	15-13/16	4	2-3/4	1-1/4	3-1/8	7-5/8	1/2	28	1	8	49-1/4	51	78-1/2	35	46-1/2	48	9/16	365T
PG490	49	2-7/16	2-15/16	58	33	6-1/2	38-1/2	36-5/8	17-1/2	4	2-3/4	1-1/4	3-3/16	7-3/8	1/2	28	1	8	54	55-3/4	82	35	51	52-3/4	21/32	365T

HOUSING DIMENSIONS



SIZE	A	B	C	D	E	F	G	H	J	BC ¹	BC ²
PG122	10-1/2	22	13-1/4	9-5/8	23-3/8	2-1/4	12-3/4	3/8	.275 Extruded	14-1/4	14-1/4
PG135	11-3/8	24	14-5/8	10-3/4	25-3/4	2-1/4	14-1/8	3/8	.275 Extruded	14-1/4	15-1/2
PG150	12-3/8	26-1/2	16-1/4	11-3/4	28-5/8	2-1/4	15-5/8	3/8	.275 Extruded	14-1/4	17-1/8
PG165	13-3/8	28-7/8	17-3/4	13	31-3/8	2-1/4	17-1/2	3/8	.275 Extruded	14-1/4	19
PG182	14-5/8	31-3/4	19-5/8	14-1/4	34-5/8	2-1/2	19-1/4	3/8	.275 Extruded	20-3/4	20-3/4
PG200	15-3/4	34-1/2	21-1/2	15-7/8	38	2-1/2	20-5/8	3/8	.275 Extruded	20-3/4	22-5/8
PG222	17-1/4	38-1/8	24	17-3/8	42-1/4	2-1/2	23	3/8	.275 Extruded	20-3/4	25
PG245	19-7/8	42-7/8	26-1/4	19-1/4	46-3/8	2-1/2	25-3/8	3/8	.275 Extruded	20-3/4	27-5/8
PG270	21-1/2	46-3/4	29	21-1/4	51-1/8	2-3/4	28	7/16	3/8-16 Weld Nut	30-1/4	30-1/4
PG300	23-5/8	51-3/4	32-1/4	23-3/8	56-7/8	2-3/4	31-1/4	7/16	3/8-16 Weld Nut	30-1/4	33-1/2
PG330	25-5/8	56-1/2	35-3/8	25-7/8	62-1/2	2-3/4	34-3/8	7/16	3/8-16 Weld Nut	30-1/4	36-5/8
PG365	28	62-1/8	39-1/4	28-1/2	69-1/4	2-3/4	38-3/4	7/16	3/8-16 Weld Nut	30-1/4	41
PG402	30-5/8	68-1/4	43-1/4	31-5/8	76-1/4	3-1/4	43-7/8	9/16	1/2-13 x 1-1/2 Weld Stud	44-1/2	45-1/8
PG445	33-7/8	75-1/4	47-3/4	35	83-7/8	3-1/4	48	9/16	1/2-13 x 1-1/2 Weld Stud	44-1/2	49-1/4
PG490	37-1/8	82-7/8	52-5/8	38-1/2	92-3/4	3-1/2	52-3/4	9/16	1/2-13 x 1-1/2 Weld Stud	49	54

PEERLESS BLOWERS PLUG-PAK FANS

AIR DENSITY FACTORS FOR VARIOUS TEMPERATURES AND ALTITUDES

Unity Basis = Standard Air Density of .075 lb./ft.³

At sea level (29.92 in. Hg barometric pressure) this is equivalent to dry air at 70°F.

Air Temp.	Altitude in Feet Above Sea Level												
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	15000	20000
°F	Barometric Pressure in Inches of Mercury												
70	29.92	28.86	27.82	26.82	25.84	24.90	23.98	23.09	22.22	21.39	20.58	16.89	13.75
100	1.000	0.964	0.930	0.896	0.864	0.832	0.801	0.772	0.743	0.714	0.688	0.564	0.460
150	0.946	0.912	0.880	0.848	0.818	0.787	0.758	0.730	0.703	0.676	0.651	0.534	0.435
200	0.869	0.838	0.808	0.770	0.751	0.723	0.696	0.671	0.656	0.620	0.598	0.490	0.400
250	0.803	0.774	0.747	0.720	0.694	0.668	0.643	0.620	0.596	0.573	0.552	0.453	0.360
300	0.747	0.720	0.694	0.669	0.645	0.622	0.598	0.576	0.555	0.533	0.514	0.421	0.344
350	0.697	0.672	0.648	0.624	0.604	0.580	0.558	0.538	0.518	0.498	0.480	0.393	0.321
400	0.654	0.631	0.608	0.586	0.565	0.544	0.524	0.505	0.486	0.467	0.450	0.369	0.301
450	0.616	0.594	0.573	0.552	0.532	0.513	0.493	0.476	0.458	0.440	0.424	0.347	0.283
500	0.582	0.561	0.542	0.522	0.503	0.484	0.466	0.449	0.433	0.416	0.401	0.328	0.268
550	0.552	0.532	0.513	0.495	0.477	0.459	0.442	0.426	0.410	0.394	0.380	0.311	0.254
600	0.525	0.506	0.488	0.470	0.454	0.437	0.421	0.405	0.390	0.375	0.361	0.296	0.242
650	0.500	0.482	0.469	0.448	0.432	0.416	0.400	0.386	0.372	0.352	0.344	0.282	0.230
700	0.477	0.460	0.444	0.427	0.412	0.397	0.382	0.368	0.354	0.341	0.328	0.269	0.219
750	0.457	0.441	0.425	0.410	0.395	0.380	0.366	0.353	0.340	0.326	0.315	0.258	0.210
800	0.420	0.404	0.389	0.375	0.362	0.350	0.336	0.323	0.311	0.300	0.290	0.237	0.193

All fan performance tables are based on standard air density which is .075 lbs./ft.³.

When desired performance is at other than standard conditions (.075 lbs./ft.³), it must be converted to equivalent standard condition before entering the tables.

TEMPERATURE AND ALTITUDE CORRECTION DATA

Procedure for Using Correction Factors

The density of air at 70 degrees F and 29.92" barometric pressure (sea level) is .075 lbs./cu. Ft. and all fan performance tables shown herein have been developed at this standard density. When either temperature or barometric pressure deviates from the above, a change in density obviously results, thus changing fan BHP requirements (system capacity and pressure requirements being fixed by design conditions).

In order to use standard performance tables to determine correct BHP when installation environment involves either or both non-standard temperature and barometric pressure, the following density correction factor table has been developed through applicable physical laws.

Example: Use of correction factor table.

Requirement- A blower to deliver 13788 CFM at 1.5" S.P. at 350 degrees F. and 7000 ft. above sea level.

Data Needed to Fill Requirement:

Fan size, BHP and RPM.

- From table below correction factor for 350 degrees F. and 7000 ft. above sea level = 2.00.
- 1.5" S.P. (design S.P.) x 2.00 = 3" S.P. (S.P. corrected to 70 degrees at sea level).
- Select from performance table a blower to deliver 13788 CFM at 3" S.P. Best selection indicates a No. PG365BC Plug Fan at 821 RPM and 10.13 BHP.
- Correct BHP by dividing 10.13 BHP by 2. This equals 5.065 BHP (correct for 350 degrees F. at 7000 ft altitude).

Recommended Selection:

Peerless Electric Plug Fan Pak PG365BC: capacity 13788 CFM, S.P. 1.5", temperature 350 degrees F. altitude 7000 ft. 821 RPM, 5.065 BHP.

Note: Caution should be exercised in selecting the motor sizes of operating fans handling high temperature air. If the operation of the system is such that there is a build-up period starting with lower temperature air, this will result in the fan requiring more horsepower during that period and the motor size should be selected for the most severe condition

WHEEL WEIGHTS AND WR² IN LBS. FT.²

FAN SIZE	SWSI			
	CLASS I		CLASS II	
	WEIGHT	WR ²	WEIGHT	WR ²
PG122BC	20.2 23.4 27.5 35 41 56.5 67.5 80.5	1.9 2.9 4.3 6.9 10.5 17 22.9 38.4	24.3	2.7
PG135BC			28.4	3.9
PG150BC			33.6	5.7
PG165BC			42.3	8.3
PG182BC			49.6	12.6
PG200BC			56.4	17.4
PG222BC			60.3	23
PG245BC			77.6	34.2
PG270BC	83 120 158 189 225 273 431	48 84 135 204 296 444 867	83	48
PG300BC			120	84
PG330BC			158	137
PG365BC			191	205
PG402BC			224	296
PG445BC			346	520
PG490BC			515	979
PG270BC	77 99 133 159 204 247 363	48 72 121 181 285 427 776	78	48
PG300BC			99	72
PG330BC			133	121
PG365BC			161	182
PG402BC			204	285
PG445BC			282	437
PG490BC			400	789

Caution:

The minimum motor starting requirements shown on the performance pages are for belt driven units.

WR²m referred to the motor is
 $(\text{RPM Fan} / \text{RPM MTR})^2 \times \text{WR}^2 \text{ FAN} \times 1.1$

Direct driven units will require larger motors to accelerate the fan inertia load to the designed speed.

Motor manufacturers differ on the WR²m capabilities of their motors. An average value for standard design B, open drip-proof, 1750 rpm motors was used to determine the minimum motor hp.

SPECIFICATION GUIDE FOR CENTRIFUGAL PLUG-PAK FANS

Furnish and install, as shown on the plans and/or in the schedule of equipment, backwardly inclined non-overloading fans. Each fan unit shall have an air capacity not less than that indicated on the drawings when operating against the indicated external static pressure. Each fan unit shall be furnished and installed complete with electric motor, and adjustment V-belt drive.

Fan wheels shall be constructed of heavy gauge steel, backwardly inclined flat blades continuously seam-welded to backplate and wheel cone. Wheel and fan shaft shall be dynamically balanced in combination at the specified speed, and shall operate without objectionable vibration.

Fan shafts shall be of non-sulphurized carbon steel, machined to close tolerances, and shall be keyed to the fan wheel.

Fan units set forth in this specification shall be those known as Plug-Pak Fans as manufactured by Madison Manufacturing Company.

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