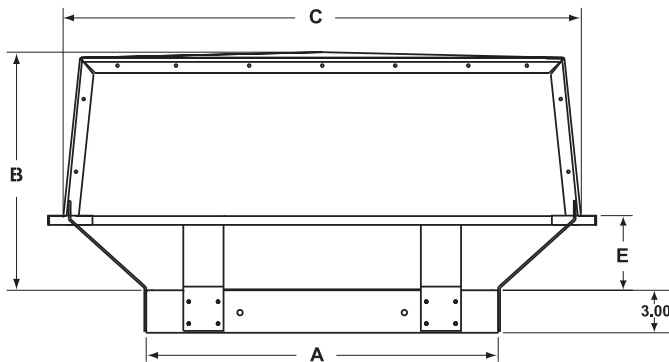




Est. 1938

# Belt Drive Centrifugal Roof Exhauster Model PL

Model PL belt drive fans are downblast centrifugal power roof ventilators designed for exhausting clean air. Capacities up to 31,810 CFM and up to 1 inch static pressure. The PL is built to be a low profile exhauster. PL exhausters are suitable for all types of commercial and institutional buildings such as schools, hospitals, office buildings and retail stores.



DIMENSIONS							
Fan Model	A	B	C	E	Roof Opening*	Damper Model	Curb Model
PL135	24.00	16.29	37.48	5.10	19.5 x 19.5	AR18	C22.5
PL145	24.00	16.29	37.48	5.10	19.5 x 19.5	AR18	C22.5
PL163	28.00	18.83	39.06	5.85	23.5 x 23.5	AR22	C26.5
PL171	28.00	18.82	39.06	5.85	23.5 x 23.5	AR22	C26.5
PL200	28.00	16.25	39.06	3.50	23.5 x 23.5	AR22	C26.5
PL223	28.00	16.25	39.06	3.50	23.5 x 23.5	AR22	C26.5
PL245	34.00	17.95	44.00	3.73	29.5 x 29.5	AR28	C32.5
PL270	34.00	17.95	44.00	3.73	29.5 x 29.5	AR28	C32.5
PL300	40.00	21.00	53.00	5.50	35.5 x 35.5	AR34	C38.5
PL330	40.00	21.00	53.00	5.50	35.5 x 35.5	AR34	C38.5
PL365	46.00	28.00	64.00	6.50	41.5 x 41.5	AR40	C44.5
PL403	46.00	28.00	64.00	6.50	41.5 x 41.5	AR40	C44.5
PL490	60.00	34.50	78.00	8.50	55.5 x 55.5	AR54	C58.5
PL543	60.00	34.50	78.00	8.50	55.5 x 55.5	AR54	C58.5

Dimensions are shown in inches.

\*Recommended maximum.

## Construction Features

### Housing

- Hoods and base constructed of heavy gauge aluminum and supported by steel frame
- Bolted-on hood provides easy access to motor and drive compartment for servicing
- Rugged structural frame transmits entire weight of motor, impeller, drive assembly and hood directly to roof curb
- Steel fasteners are zinc dichromate plated
- Heavy gauge galvanized wire birdscreen
- Full perimeter storm band and wide hood overhang provide extra protection from driving rain and snow
- Full 360° perimeter hood outlet area for quiet, efficient performance

### Airfoil Centrifugal Wheel

- Aluminum construction with backward curved hollow airfoil blades
- Non-overloading design for safe operation
- Precision balanced for smooth vibration free operation

### Bearings

- Permanently lubricated in an Acme D.S. pillow block housing
- Bearings are resiliently mounted in neoprene rings
- Rated at L<sub>50</sub> life of 200,000 hours
- **5 year** limited warranty on Acme D.S. pillow block bearings
- Pillow block bearings standard on PL365-543

### Drive Assembly

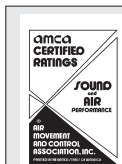
- Cast iron drives sized for 150% of drive horsepower
- Static free, oil and heat resistant belts

### Motors

- Continuous duty motors mounted on slide rails to maintain correct belt tension
- Factory wired to junction box

## Options/Accessories

- Roof Curbs
- Dampers
- Coatings
- Curb Hinge
- Louvered Hood (PLZ)



Acme Engineering & Manufacturing Corporation certifies that the models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



U.L. 705 Listed

Consult your Acme representative for availability.

PERFORMANCE DATA																				
Fan Model	RPM	Sones @ 1/8" SP	HP	CFM and BHP vs. Static Pressure																Est. Ship Wt.
				.000"		.125"		.250"		.375"		.500"		.625"		.750"		1.000"		
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
PL135E1	474 712	5.4	1/4	635 950	.01 .02	660 .02														83
PL135E2	657 987	7.3	1/4	878 1320	.01 .05	545 1100	.02 .06	900	.06	585	.06									83
PL135E3	835 1228	9.9	1/4	1115 1640	.03 .10	865 1460	.04 .11	575 1295	.04 .11	1135	.12	930	.13	575	.11					83
PL135E4	917 1376	10.8	1/4	1225 1840	.04 .13	990 1675	.05 .14	755 1525	.05 .16	250 1385	.04 .17	1230	.18	1045	.18	750	.16			83
PL135E5	1032 1548	14.1	1/4	1380 2070	.06 .19	1165 1925	.06 .20	975 1780	.07 .23	725 1655	.07 .24	1535	.25	1395	.25	1240	.25	700	.20	84
PL135F	1327 1720	16.0	1/3	1775 2299	.12 .26	1605 2140	.13 .28	1450 2040	.14 .29	1310 1920	.15 .30	1140 1805	.16 .31	920 1700	.16 .33	545 1575	.13 .34	1270	.35	87
PL145E1	752 1075	9.6	1/4	1230 1760	.04 .11	970 1590	.04 .12	500 1395	.04 .13	1150	.13	760	.12							83
PL145E2	786 1180	11.3	1/4	1285 1930	.04 .14	1040 1770	.05 .15	650 1610	.05 .17	1410	.17	1155	.17	745	.15					83
PL145E3	918 1376	14.4	1/4	1500 2250	.07 .28	1300 2120	.08 .24	1040 1980	.08 .25	600 1830	.07 .27	1660	.28	1455	.28	1180	.26			84
PL145F	1130 1522	17.1	1/3	1850 2490	.13 .31	1690 2370	.14 .32	1510 2250	.15 .33	1290 2120	.15 .35	990 1970	.14 .36	440 1810	.11 .37	1630	.37	1090	.32	87
PL163E1	658 988	9.9	1/4	1545 2325	.04 .15	1185 2100	.05 .17	540 1850	.05 .18	1560	.19	1145	.17	385	.12					100
PL163E2	741 1110	11.3	1/4	1740 2610	.06 .21	1430 2420	.07 .23	950 2200	.08 .24	1960	.26	1690	.26	1305	.25	700	.20			101
PL163F	835 1229	13.9	1/3	1965 2890	.09 .29	1695 2720	.10 .31	1370 2530	.11 .32	865 2325	.10 .34	2100	.35	1855	.36	1505	.34	290	.20	104
PL163G	934 1425	16.6	1/2	2195 3350	.13 .45	1960 3210	.14 .47	1685 3045	.15 .49	1355 2875	.16 .51	800 2695	.13 .53	2505	.54	2290	.55	1745	.53	111
PL171E1	609 896	9.5	1/4	1665 2450	.05 .15	1280 2185	.06 .17	470 1935	.04 .18	1590	.18	1030	.16							100
PL171E2	700 1029	9.8	1/4	1915 2815	.06 .22	1580 2585	.07 .25	1150 2360	.06 .27	2130	.28	1815	.28	1370	.27	550	.18			101
PL171F	742 1110	11.4	1/3	2030 3035	.08 .28	1715 2825	.10 .31	1345 2610	.11 .33	570 2410	.08 .34	2155	.35	1835	.34	1370	.31			104
PL171G	817 1247	14.3	1/2	2235 3410	.11 .40	1945 3220	.13 .43	1650 3025	.14 .45	1190 2845	.12 .48	130 2660	.07 .49	2435	.50	2160	.49	1280	.41	111
PL200E1	499 727	8.6	1/4	1790 2605	.05 .16	1370 2290	.06 .17	815 2025	.06 .18	1750	.19	1410	.19							194
PL200E2	530 820	9.3	1/4	1900 2940	.06 .23	1500 2660	.07 .24	1100 2410	.08 .25	2170	.27	1930	.28	1630	.28	1115	.24			195
PL200F	632 906	10.8	1/3	2265 3245	.10 .31	1910 2980	.11 .32	1610 2750	.12 .33	1225 2540	.13 .35	2325	.36	2110	.37	1850	.37			198
PL200G	710 1049	16.4	1/2	2545 3584	.15 .47	2230 3380	.16 .49	1960 3205	.17 .51	1675 3030	.18 .52	1260 2880	.17 .54	2715	.55	2530	.57	2080	.58	203
PL223E1	393 590	6.8	1/4	1910 2870	.04 .15	1345 2490	.05 .16	2128	.17	1585	.17									196
PL223E2	430 674	8.0	1/4	2090 3280	.06 .22	1585 2940	.07 .23	2635	.25	2280	.26	1740	.25							197
PL223F	478 749	9.8	1/3	2325 3645	.08 .30	1865 3335	.09 .31	1250 3055	.09 .34	2775	.35	2440	.36	1885	.35					200
PL223G	574 860	12.1	1/2	2790 4183	.13 .45	2400 3910	.15 .47	2025 3660	.16 .50	1375 3425	.16 .50	3170	.53	2880	.54	2500	.54			205
PL245E	368 577	7.3	1/4	2500 3920	.06 .21	1805 3450	.07 .23	3020	.25	2580	.26	1945	.25							210
PL245F	442 638	9.3	1/3	3005 4335	.10 .29	2410 3900	.11 .31	1820 3510	.12 .33	3130	.35	2710	.36	2010	.34					213
PL245G	466 713	10.8	1/2	3170 4845	.11 .40	2600 4455	.13 .43	2060 4095	.14 .44	3750	.47	3415	.49	3045	.50	2505	.49			220
PL245H	545 831	14.8	3/4	3705 5650	.18 .64	3200 5300	.20 .67	2770 4980	.21 .69	2265 4680	.22 .72	4400	.74	4110	.77	3800	.79	3020	.78	223
PL270E	327 491	6.9	1/4	2815 4225	.06 .21	2045 3695	.08 .24	3210	.26	2535	.26									213
PL270F	368 532	8.0	1/3	3170 4580	.09 .27	2490 4090	.11 .30	835 3635	.06 .32	3125	.33	1855	.29							216
PL270G	405 606	9.8	1/2	3485 5215	.12 .40	2855 4785	.14 .43	2130 4370	.15 .46	3980	.48	3505	.49	2625	.46					223
PL270H	486 688	12.7	3/4	4183 5922	.21 .59	3645 5540	.23 .62	3151 5160	.25 .65	2437 4820	.25 .68	4470	.71	4050	.72	3470	.72			226

Performance certified is for installation type A: Free inlet, Free Outlet. Performance ratings do not include the effects of appurtenance (accessories). The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free Inlet hemispherical sone levels. The brake horsepower capability of an exhauster motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable. Power rating (BHP) does not include transmission losses.

PERFORMANCE DATA																						
Fan Model	RPM	Sones @ 1/8" SP	HP	CFM and BHP vs. Static Pressure																		Est. Ship Wt.
				.000"		.125"		.250"		.375"		.500"		.625"		.750"		1.000"				
				CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP			
PL300F	311	9.0	1/3	3935	.09	2900	.11														340	
	457			5785	.30	4990	.33	4385	.35	3720	.37	2325	.33									
PL300G	337	9.7	1/2	4265	.12	3310	.14	2300	.15												348	
	514			6505	.43	5775	.46	5220	.49	4660	.51	4050	.53	2860	.48							
PL300H	395	13.2	3/4	5000	.19	4140	.22	3400	.24	1930	.21										351	
	593			7505	.66	6860	.70	6315	.73	5860	.76	5375	.79	4855	.81	4240	.81					
PL300J	481	15.1	1	4810	.35	5320	.38	4740	.41	4130	.43	3380	.43								354	
	653			8265	.88	7660	.93	7147	.97	6730	1.00	6305	1.03	5850	1.06	5380	1.08	3800	1.01			
PL300K	553	17.3	1 1/2	7000	.53	6320	.57	5765	.60	5265	.63	4720	.65	4125	.66	2135	.50				366	
	751			9505	1.34	8980	1.39	8500	1.44	8100	1.48	7720	1.52	7370	1.55	6980	1.59	6160	1.65			
PL330F	248	8.5	1/3	3925	.09	2674	.11														346	
	384			6077	.31	5240	.34	4475	.37	3211	.37											
PL330G	301	9.8	1/2	4764	.16	3725	.18	1505	.15												353	
	427			6758	.43	5995	.46	5293	.49	4568	.52	2398	.44									
PL330H	327	12.8	3/4	5175	.20	4208	.22	3184	.24												356	
	499			7897	.67	7246	.72	6621	.75	6031	.79	5421	.82	4340	.81							
PL330J	386	15.0	1	6109	.32	5276	.35	4514	.38	3330	.38										359	
	546			8641	.88	8050	.93	7463	.97	6909	1.01	6386	1.05	5767	1.08	4717	1.06					
PL330K	450	16.4	1 1/2	7122	.50	6395	.54	5719	.57	5083	.60	4101	.61								371	
	611			9670	1.23	9148	1.28	8601	1.33	8106	1.37	7618	1.42	7150	1.46	6636	1.50	4170	1.38			
PL330L	531	21	2	8404	.81	7795	.85	7196	.90	6632	.93	6094	.97	5391	.99	3745	.92				380	
	688			10889	1.75	10432	1.81	9942	1.87	9481	1.92	9041	1.97	8608	2.01	8192	2.07	7229	2.14			
PL365G	246	9.2	1/2	5575	.13	4050	.16														463	
	369			8365	.44	7280	.47	6340	.52	5155	.53											
PL365H	279	11.6	3/4	6325	.19	4985	.22	3225	.22												466	
	426			9655	.67	8670	.71	7880	.77	7000	.82	5945	.82	3990	.73							
PL365J	313	12.9	1	7095	.27	5871	.30	4625	.33												469	
	469			10630	.90	9735	.93	8965	1.00	8245	1.06	7400	1.10	6375	1.09	4620	.97					
PL365K	375	15.7	1 1/2	8500	.46	7420	.50	6510	.55	5365	.56										480	
	532			12060	1.31	11250	1.35	10540	1.41	9915	1.49	9255	1.56	8425	1.60	7645	1.60	4140	1.32			
PL365L	395	18.9	2	8955	.61	7920	.65	7060	.72	6045	.74	4600	.71								488	
	593			13440	1.81	12700	1.86	12045	1.92	11450	2.00	10905	2.10	10290	2.16	9635	2.21	8058	2.21			
PL365M	494	21	3	11195	1.05	10340	1.09	9595	1.15	8925	1.23	8160	1.27	7280	1.28	6135	1.24				540	
	677			15345	2.70	14700	2.70	14100	2.80	13540	2.90	13040	3.00	12560	3.10	12040	3.20	10890	3.30			
PL403H	234	9.9	3/4	6945	.19	5100	.22														473	
	357			10595	.67	9335	.74	8165	.78	6895	.79	2950	.58									
PL403J	265	11.5	1	7865	.27	6215	.32	4150	.31												476	
	397			11785	.92	10650	1.00	9550	1.06	8510	1.08	7195	1.09	2540	.72							
PL403K	318	13.7	1 1/2	9440	.51	8035	.53	6720	.56	4485	.52										488	
	450			13355	1.35	12340	1.44	11390	1.51	10455	1.55	9520	1.58	8390	1.58	6355	1.48					
PL403L	377	16.5	2	11190	.79	9990	.86	8870	.91	7750	.93	6045	.91								495	
	498			14780	1.82	13870	1.92	12975	2.01	12125	2.07	11315	2.12	10445	2.15	9430	2.15	2565	1.29			
PL403M	406	18.6	3	12050	.99	10950	1.07	9880	1.13	8860	1.16	7660	1.16	4905	1.02						550	
	563			16710	2.64	15900	2.75	15100	2.85	14340	2.94	13600	3.00	12860	3.05	12110	3.09	10300	3.10			
PL490H	168	8.9	3/4	9335	.18	6185	.22														687	
	265			14155	.65	11905	.69	10025	.76	7465	.74											
PL490J	191	9.9	1	10615	.27	7805	.31														690	
	287			15950	.91	13900	.95	12145	1.04	10390	1.08	7155	.98									
PL490K	229	11.8	1 1/2	12725	.46	10260	.51	8095	.55												702	
	325			18060	1.32	16210	1.36	14580	1.46	13125	1.51	11530	1.51	8890	1.48							
PL490L	268	13.0	2	14890	.74	12720	.79	10900	.86	8825	.88										709	
	363			20170	1.84	18485	1.87	16965	1.97	15600	2.10	14310	2.17	12860	2.19	10725	2.12					
PL490M	298	18.7	3	16560	1.02	14575	1.06	12865	1.16	11220	1.21	8985	1.19								765	
	413			22950	2.72	21450	2.72	20080	2.82	18800	2.96	17650	3.10	16500	3.18	15250	3.21	11600	3.07			
PL490N	410	28	5	22780	2.66	21300	2.70	19850	2.81	18600	2.93	17350	3.03	16080	3.10	14800	3.14	11100	2.91		779	
	505			28060	4.95	26880	4.97	25700	5.03	24500	5.21	23500	5.40	22450	5.56	21700	5.72	19450	5.88			
PL543J	169	8.3	1	11685	.31	8416	.36														704	
	239			16525	.89	14290	.97	11900	1.02	7840	.95											
PL543K	185	10.2	1 1/2	12795	.41	9920	.47	2220	.26												716	
	273			18880	1.33	16905	1.42	14945	1.50	12626	1.53	8110	1.36									
PL543L	200	11.0	2	13830	.52	11180	.59	7450	.58												725	
	296			20470	1.69	18650	1.86	16910	1.88	14875	1.94	12505	1.92	4960	1.32							
PL543M	243	15.5	3	16805	.94	14590	1.02	12270	1.07	3280	.62										778	
	341			23580	2.59	21995	2.71	20460	2.81	18925	2.91	17110	2.97	15115	2.97	11935	2.83					
PL543N	305	18.8	5	21090	1.85	19315	1.95	17615	2.04	15710	2.12	13520	2.12	9000	1.88						783	
	400			27660	4.17	26300	4.30	24950	4.46	23650	4.58	22350	4.68	20850	4.77	19250	4.80	14950	4.64			

Performance certified is for installation type A: Free inlet, Free Outlet. Performance ratings do not include the effects of appurtenance (accessories). The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free Inlet hemispherical sone levels. The brake horsepower capability of an exhauster motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable. Power rating (BHP) does not include transmission losses.

For more information on this product contact your sales support.

