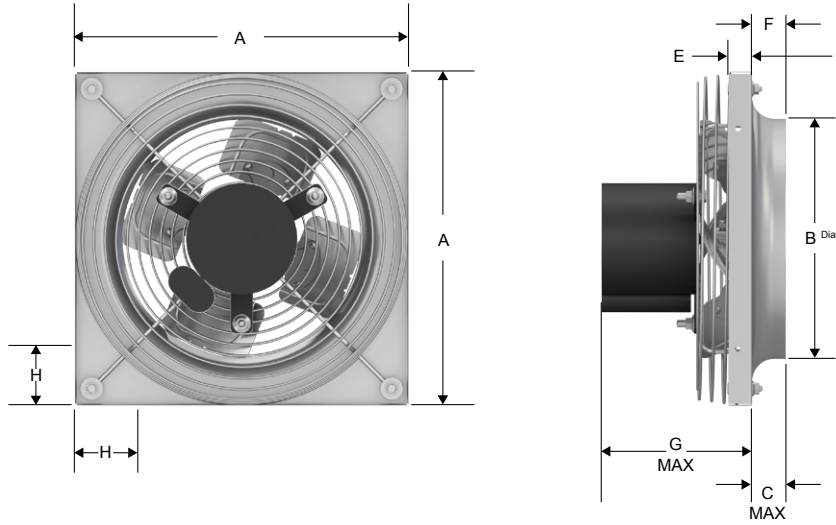


P-SERIES | DIRECT DRIVE



STOCK MODELS ARE HIGHLIGHTED

P-series Performance

Model	HP	Max Watts	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP		0.625" SP	
					CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
P10VA	1/30	80	1050	2749	753	4.6	531	7.5	457	7.9	385	7.2	239	6.7	-	-	-	-	-	-	-	-	-	-
P10RA	1/12	115	1550	4058	878	5.8	688	6.5	649	7.3	604	8.5	499	10.8	404	12.5	275	12.9	-	-	-	-	-	-
P12VA	1/12	204	1050	3299	1354	10.7	1176	9.5	1090	9.9	959	10.5	755	11.1	615	10.1	240	10	-	-	-	-	-	-
P12RA	1/7 (1)	174	1550	4869	1489	10.3	1367	9.8	1326	10.1	1281	10.5	1160	11.7	1046	13.2	882	15.5	798	16.9	568	19.6	210	20
P16VA	1/3	463	1050	4398	2546	9.1	2088	8.8	1859	8.7	1699	8.6	1257	8.3	-	-	-	-	-	-	-	-	-	-
P16SA	1/2	550	1300	5445	3143	13.7	2933	14	2856	14.1	2758	14.3	2495	14.6	2244	15	1982	15.3	1671	15.4	-	-	-	-
P16RA	1/2	724	1550	6492	3555	14	3301	14.1	3256	14.1	3211	14.2	3102	14.5	2955	15.3	2736	16.9	2514	18.3	1979	20	1772	21
P16Q1A	3/4	962	1650	6911	3760	16.3	3557	16.6	3508	16.7	3459	16.7	3358	16.9	3256	17.1	3123	17.6	2864	18.9	2369	22	2032	24
P18VA	1/2	522	1050	4948	4210	15.2	3845	15.1	3768	15.1	3661	15.1	3370	15.3	3030	15.1	2719	13.6	2215	13.1	-	-	-	-
P18RA	3/4	1265	1550	7304	5233	20	4971	21	4971	21	4919	21	4787	22	4633	23	4383	25	4029	28	3547	35	3083	34
P20TA	3/4	815	1140	5969	4852	16.2	4449	16.4	4318	16.5	4185	16.7	3898	17.1	3570	17.7	3278	18.4	2717	20	1969	24	1200	25
P24VA	3/4	1117	1050	6597	6562	14.6	6210	14.6	6136	14.7	6063	14.7	5917	14.7	5758	14.9	5576	15.2	5249	15.8	4065	19.3	3654	21

(1) Hp shown is for TE, ODP Hp is 1/4.

Performance certified is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field calculated per AMCA International Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. Performance ratings include the effect of rear guard in the airstream. For models shown on this page, the AMCA Certified Ratings Seal applies to air and sound.

P-series Dimensions

Model	A	B Dia.	C Max.	E	F	G Max.	H
P10	15	10 3/4	2 1/2	1	1 1/4	6 1/2	3/4
P12	17	12 1/4	3 1/4	1	1	7 1/2	1 7/8
P16	22 3/4	16 3/4	3 3/4	1	2 1/4	11 1/4	2 7/8
P18	24 1/4	18 3/4	3 3/4	1	2	9 1/8	3 5/8
P20	26 3/4	20 7/8	3 3/4	1	1 3/4	12 1/2	3 1/4
P24	32 1/4	25	4 1/4	2	2 3/8	12 7/8	4 11/16

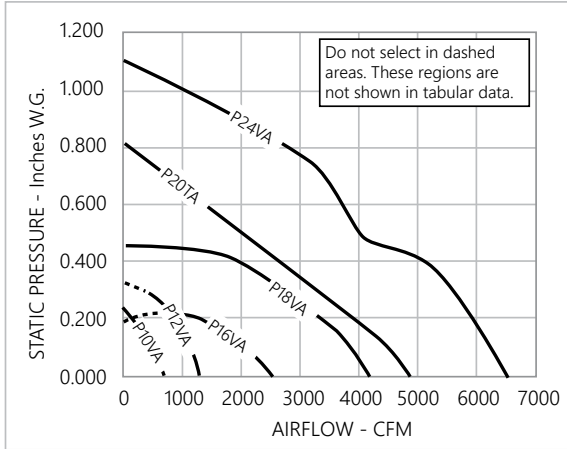
P-SERIES | DIRECT DRIVE

P-Series Fan Curves

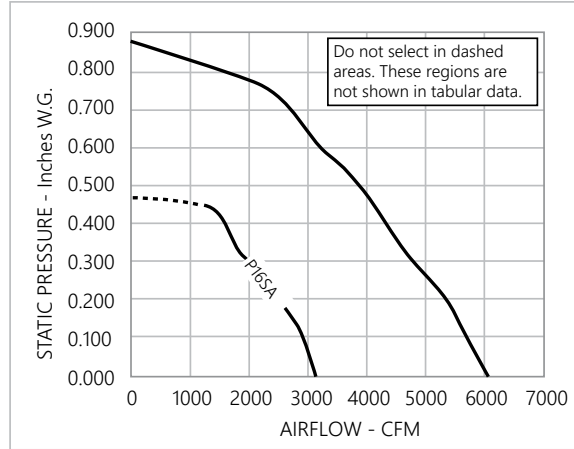
The fan curves illustrated below show the range of capacities available for P-Series direct drive units. Each graph shows the performance of several models at one particular nominal speed. Fan curves provide a quick method for selecting a fan unit based on design point requirements.

The direct drive performance charts provide the tabular data (CFM and static pressure) used to plot the fan curves. In addition, horsepower, tip speed and sones are tabulated. Since sound is normally an important factor in the selection of a fan, an engineer will usually want to select the "slowest" unit which meets CFM and SP requirements. Please refer to the Motor Selection section to make sure the motor you select meets your electrical requirements.

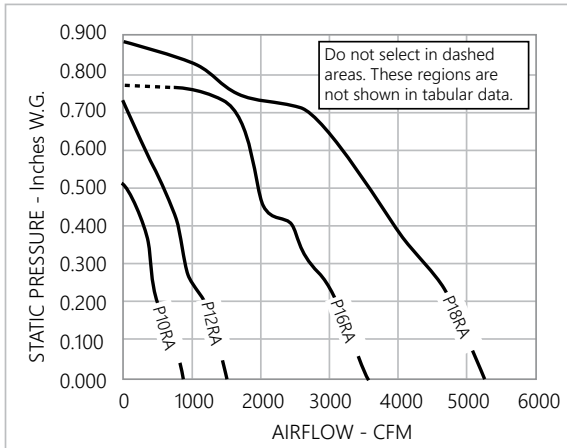
1050/1140 RPM



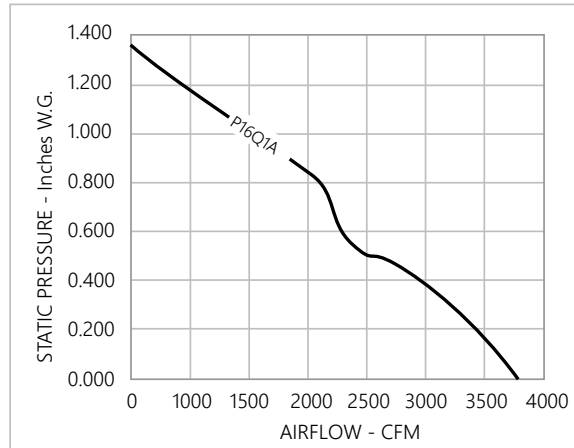
1300 RPM



1550 RPM

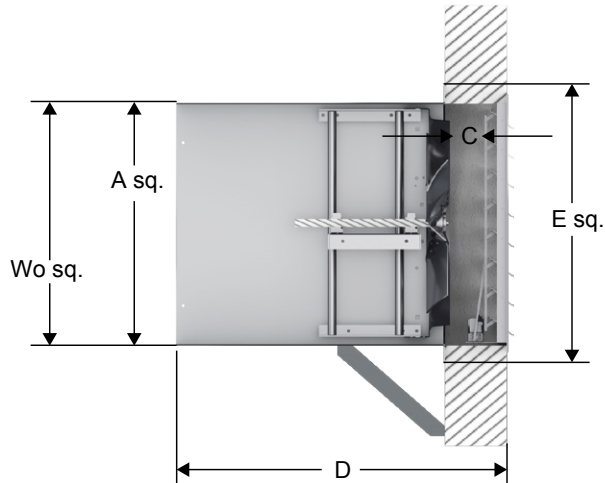


1650 RPM



Note: Breezeway fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

OPTIONS & ACCESSORIES



Size	P-Series					
	10	12	16	18	20	24
Wo ^{sq.}	15 3/4	17 3/4	23 1/2	25	27 1/2	33
A ^{sq.}	15 1/4	17 1/4	23	24 1/2	27	32 1/2
C ^{MIN.}	4	4	4	4	5	5
D	18 3/4	18 3/4	22 3/4	23	24 3/4	30 3/4
E ^{sq.}	17 1/2	19 1/2	25 1/4	26 3/4	29 1/4	34 3/4

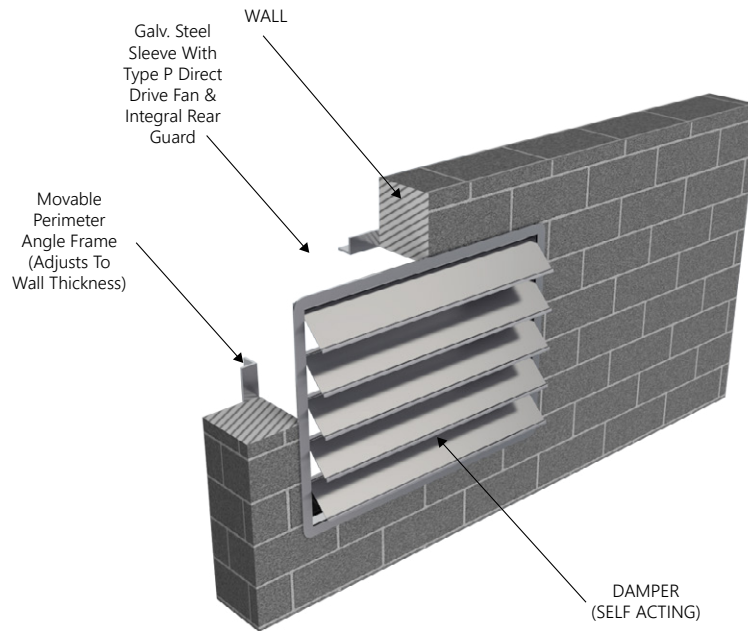
All dimensions in inches.

P-Series Slip-in Fan Pak

This provides a ventilation package in one convenient and compact assembly. The Fan Pak incorporates the Breezeway Type P direct drive fans with their integral back guards installed in a galvanized steel sleeve with a self-acting damper on the exterior face. (A motorized damper can be substituted for the standard damper when desired.)

A moveable angle frame is positioned on the perimeter of the sleeve. This adjusts to the wall thickness. When properly fastened, it secures the assembly in the wall opening. Anchor bolts, lag screws or other appropriate fasteners should be used to fasten the unit to the inside and outside face of the wall or mounting frame.

OPTIONS & ACCESSORIES



Variable Speed Motor Control

PennBarry Lek-Trol™ solid state controllers are an economical way to reduce the high speed of selected P-Series motors by as much as 50%. Check the Lek-Trol™ availability table below to verify suitability for the fan model selected.

Motors suitable for use with field supplied Frequency Inverters can be supplied for BLL, BHM, BHH, BC and BCH models. Contact your PennBarry representative.

P-Series Direct Drive Available Lek-Trol™ Speed Controls

Model	Nominal HP	RPM				Single Phase					
		1050	1300	1550	1650	115/1/60 ODP		230/1/60 ODP		TE 115/200/240	
						Avail.	Lek-Trol	Avail.	Lek-Trol	Avail.	Lek-Trol
P10VA	1/30	X	-	-	-	Yes	LT30	-	-	-	-
P10RA	1/12	-	-	X	-	Yes	LT30	Use TE	LT35	Yes (2)	LT30/35*
P12VA	1/12	X	-	-	-	Yes	LT30	-	-	-	-
P12RA	1/7	-	-	X	-	Yes	LT50	Use TE	LT35	Yes (2)	LT30/35*
P16VA	1/3	X	-	-	-	Yes	-	-	-	-	-
P16SA	1/2	-	X	-	-	Yes	LT50	-	-	-	-
P16RA	1/2	-	-	X	-	Yes	LT40	Use TE	-	Yes (2)	-
P16Q1A	3/4	-	-	-	X	Yes	LT60	Use TE	-	Yes (2)	-
P18VA	1/2	X	-	-	-	Yes	-	-	-	-	-
P18RA	3/4	-	-	X	-	Yes	-	-	-	-	-
P20TA	3/4	X (1)	-	-	-	Use TE	-	Use TE	-	Yes (2)	-
P24VA	3/4	X	-	-	-	Use TE	-	Use TE	-	Yes (2)	-

(1) Nominal 1140 RPM. (2) 50/60 Hz. *LT30 for 115V, LT35 for 200/240V.