

M-D Pneumatics™ **PD PLUS™**

Model 5500 Heavy Duty High Pressure Industrial Blowers

Bi-directional Rotation

17 Series - Horizontal Air Flow

46 Series - Vertical Air Flow

57 Series - Horizontal Flow, Single Envelope Gastight

81 Series - Vertical Flow, Single Envelope Gastight

64 Series - Horizontal Flow, Double Envelope Gastight

67 Series - Vertical Flow, Double Envelope Gastight

Model 5500 PD PLUS heavy duty industrial blowers are designed for high performance applications, up to 18 PSIG pressure boost or 17" Hg dry vacuum (24" Hg water injected).

17/46 Series

This series has wide application in pneumatic conveying, wastewater treatment, and the general process industry where high pressure, high volume air is required. Seal areas are vented to atmosphere to relieve process pressure against the internal lip seals, and to provide oil-free air.

57/81 Series (Single Envelope Gastight)

This series is utilized in such applications as closed loop pneumatic conveying, fuel or process gas handling, or elevated pressure applications up to 100 PSIG discharge. Vent openings are tapped and plugged to prevent gas leakage, or may be plumbed to the inlet port. These fittings can also accept an inert gas purge for positive containment of the process gas.

64/67 Series (Double Envelope Gastight)

This series is built to laboratory standards where virtually complete sealing is required. In addition to the features shown on the 57/81 series, the drive shaft is mechanically sealed and the oil sumps are plugged to provide an even higher degree of leakage protection.

Model Size	Max. Press. PSI	Max. Vac. (in. Hg)	Nom. Min. RPM at Max. Disch. Pressure	Nom. Max. RPM at Max. Disch. Pressure	Displ. CFR
5507	18	17	2150	3800	.235
5511	17	17	1800	3800	.345
5514	13	15	1250	3800	.440
5518	10	15	1150	3800	.565

Material Specifications:

Housing: Cast iron

End Plates: Cast iron

End Covers: Gear end - Cast iron
Free end - Aluminum

Rotors: Ductile iron

Shafts: Ductile iron cast integrally with rotor

Bearings: Gear (drive) end - Double row ball
Free (back) end - Cylindrical roller
Drive shaft - Spherical roller

Drive Shaft: SAE 4140 forged alloy steel

Gears: Heat treated alloy steel, helical cut

Seals: 17/46 series - Lip and labyrinth type on rotor shafts;
lip seal on the drive shaft

57/81 series - Mechanical and labyrinth type on rotor shafts; lip seal on the drive shaft

64/67 series - Same as 57/81 series plus mechanical sealing on the drive shaft

Lubrication: Oil splash system, both ends

For elevated pressure applications, 57/81 series and 64/67 series are available with high pressure sealing and testing to allow discharge pressures as high as 100 PSIG (18 PSI maximum pressure boost) *

* Blowers operating with a discharge pressure above 20 PSIG require mechanical rotor shaft sealing; above 25 PSIG requires hydrostatic testing and special high pressure seal leakage testing.

Optional Cooling Coils:

All vertical flow 5500 PD PLUS models are available with cooling coils to provide cooling of lubricating oil with less than 0.5 GPM cooling water for high performance applications where external lubrication is not desired or practical. Specify "W" suffix.

Optional Lubrication Systems:

All 5500 PD PLUS models are available with external lubrication to provide positive bearing lubrication and filtration of lubricant for extreme applications. When optional lubrication systems are specified, the series numbers change as follows:

Standard Splash Lube	Optional Integral Pressure Lube
17/46 series	18/85 series
57/81 series	54/84 series
64/67 series	N/A



Tuthill Vacuum & Blower Systems

4840 West Kearney Street

Springfield, Missouri USA 65803-8702

☎ 417.865.8715 800.825.6937 f 417.865.2950

<http://vacuum.tuthill.com>

Performance Tables

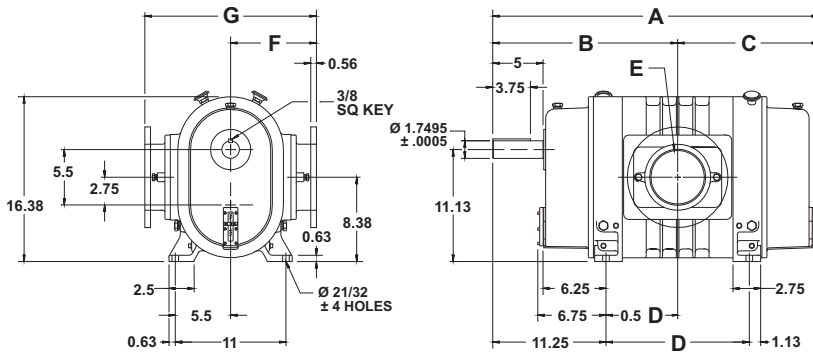
In conjunction with our program of continuous testing and design upgrading, all specifications are subject to change without notice. All data are approximate. Request a quotation for your specific application.

Pressure (14.70 PSIA and 70° F Inlet)

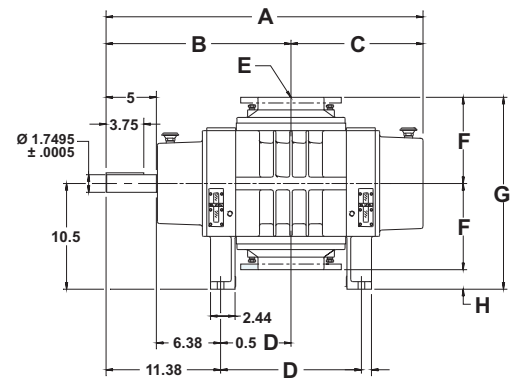
BLOWER MODEL	SPEED (RPM)	5 PSIG		8 PSIG		10 PSIG		12 PSIG		13 PSIG		15 PSIG		17 PSIG		18 PSIG		Max. Vacuum		
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	" Hg	CFM	BHP
5507	1150	155	7.2	124	11	107	13	91	15	225	25	211	29					13	97	8.8
	1750	296	11	265	16	248	20	232	24	660	52	646	59	633	67	627	70	15	213	15
	3600	730	22	700	34	683	41	667	48									17	619	35
5511	1150	239	9.9	197	15	173	19	152	22	349	36	330	41					13	159	12
	1750	446	15	404	23	380	28	359	34	987	74	968	85	950	96			15	332	21
	3600	1084	31	1042	47	1018	58	997	69									17	931	49
5514	1150	333	12	285	19	258	24	234	28									13	243	16
	1750	600	19	552	29	525	36	501	43	490	46							15	471	27
	3600	1423	39	1375	60	1349	74	1325	88	1313	95							15	1294	56
5518	1150	440	16	383	24	350	30											13	331	20
	1750	784	24	726	37	694	46											15	627	34
	3600	1842	49	1784	76	1752	94											15	1685	70

Dimensions

Series 17/57 (Horizontal Flow)



Series 46/81 (Vertical Flow)

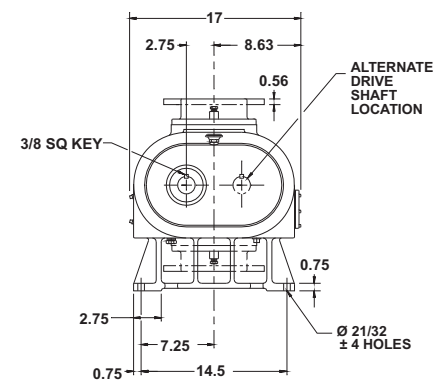


MODEL	SERIES	A	B	C	D	E	F	G
5507	17/57	28.94	16.63	12.31	10.5	4" NPT	8.5	17
	46/81	28.31		11.69	10.75			19
5511	17/57	32.44	18.38	14.06	14	5" NPT	8.5	17
	46/81	31.81		13.44	14.25			19
5514	17/57	35.44	19.88	15.56	17	6" FLG	10	20
	46/81	34.81		14.81	17.25			20.5
5518	17/57	39.44	21.88	17.56	21	8" FLG	10	20
	46/81	38.81		16.94	21.25			20.5

Values are approximate and should not be used for construction.

Certain dimensions for 64/67 double envelope gastight differ slightly from those shown above.

Certified prints are available through your local Tuthill Vacuum & Blower Systems Sales Professional.



Your Local Tuthill Vacuum & Blower Systems Sales Professional:



Tuthill Vacuum & Blower Systems

4840 West Kearney Street

Springfield, Missouri USA 65803-8702

o 417.865.8715 800.825.6937 f 417.865.2950

<http://vacuum.tuthill.com>