

## PD Plus®

### Model 5500 Heavy Duty

Bi-directional Rotation

Series Options:

Horizontal Air Service

Vertical Air Service

Horizontal Flow, Single Envelope Gas Service

Vertical Flow, Single Envelope Gas Service

Horizontal Flow, Double Envelope Gas Service

Vertical Flow, Double Envelope Gas Service

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

#### Vertical & Horizontal Air Flow

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.

#### Vertical & Horizontal Single Envelope Gas Service

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

#### Vertical & Horizontal Double Envelope Gas Service

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

#### 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.

#### Special Materials

Stainless Steel\*

Carbon Steel \*\*

Ductile Iron

\*5507, 5514 & 5516 only \*\*5507 only

#### Special Coatings

Bi-Protec® (Nickel/Armoly®)



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	3600	.235
5511	17	17	1800	3600	.345
5514	13	15	1250	3600	.440
5518	10	15	1150	3600	.565

#### Material Specifications:

**Housing:** Cast iron

**End Plates:** Cast iron

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

**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:** Alloy steel, helical cut

**Seals:** Standard - Lip and labyrinth type on rotor shafts; lip seal on the drive shaft; less than 25 PSIG  
Single Envelope Gas Service - Mechanical and labyrinth type on rotor shafts; lip seal on the drive shaft; less than 25 PSIG  
Double Envelope Gas Service - Same as Single Envelope series plus mechanical sealing on the drive shaft; greater than 25 PSIG

**Lubrication:** Oil splash system, both ends

\* Blowers operating with a discharge pressure above 25 PSIG requires hydrostatic testing and special high pressure seal leakage testing.

## 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.

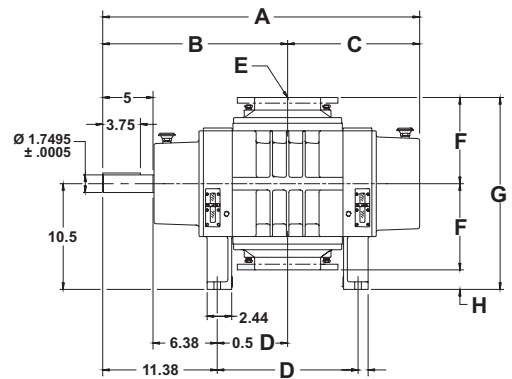
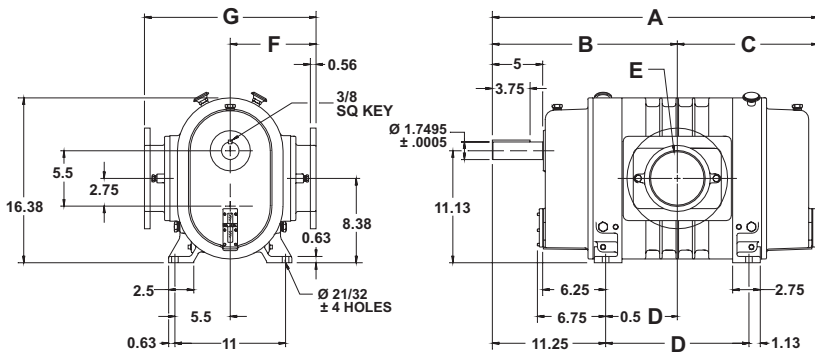
### Pressure (14.70 PSIA and 70° F Inlet)

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									13	97	8.8
	1750	296	11	265	16	248	20	232	24	225	25	211	29					15	213	15
	3600	730	22	700	34	683	41	667	48	660	52	646	59	633	67	627	70	17	619	35
5511	1150	239	9.9	197	15	173	19	152	22									13	159	12
	1750	446	15	404	23	380	28	359	34	349	36	330	41					15	332	21
	3600	1084	31	1042	47	1018	58	997	69	987	74	968	85	950	96			17	931	49
5514	1150	309	12	257	19	228	23	234	28									13	210	15
	1750	573	19	521	29	492	36	465	42	453	46							15	432	27
	3600	1387	39	1335	59	1306	73	1279	87	1267	94							15	1246	55
5518	1150	410	15	346	24	310	30											13	289	
	1750	749	24	685	36	649	45											15	576	38
	3600	1794	48	1730	75	1695	93											15	1621	69

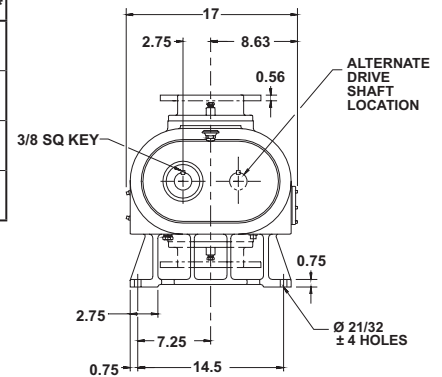
## Dimensions

Horizontal Flow

Vertical Flow



MODEL	SERIES	A	B	C	D	E	F	G	Net Wgt. (lbs.)*
5507	17/57	28.94	16.63	12.31	10.5	4" NPT	8.5	17	440
	46/81	28.31		11.69	10.75			19	
5511	17/57	32.44	18.38	14.06	14	5" NPT	8.5	17	510
	46/81	31.81		13.44	14.25			19	
5514	17/57	35.44	19.88	15.56	17	6" FLG	10	20	580
	46/81	34.81		14.81	17.25			20.5	
5518	17/57	39.44	21.88	17.56	21	8" FLG	10	20	690
	46/81	38.81		16.94	21.25			20.5	



Values are approximate and should not be used for construction. Certain dimensions for double envelope gas -service differ slightly from those shown above. Certified prints are available through your local Tuthill Springfield Sales Professional.

\*Approximate shipping weight.

Your Local Tuthill Vacuum Blower Systems Sales Professional:



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TH-050 07/20