



# 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 Special Coatings

Bi-Protec® (Nickel/Armoloy®)

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



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

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.

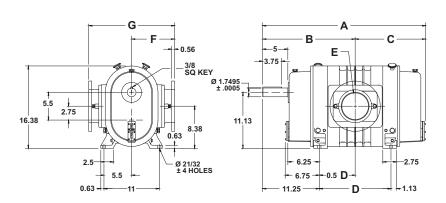
# Pressure (14.70 PSIA and 70° F Inlet)

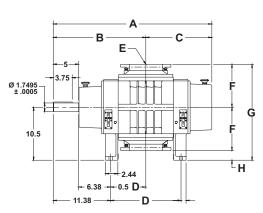
	SPEED	5 PSIG		8 PSIG		10 PSIG		12 PSIG		13 PSIG		15 PSIG		17 PSIG		18 PSIG		Max. Vacuum		
	(RPM)	CFM	ВНР	CFM	ВНР	CFM	ВНР	CFM	ВНР	CFM	ВНР	CFM	ВНР	CFM	ВНР	CFM	ВНР	" Hg	CFM	ВНР
5507	1150 1750 3600	155 296 730	7.2 11 22	124 265 700	11 16 34	107 248 683	13 20 41	91 232 667	15 24 48	225 660	25 52	211 646	29 59	633	67	627	70	13 15 17	97 213 619	8.8 15 35
5511	1150 1750 3600	239 446 1084	9.9 15 31	197 404 1042	15 23 47	173 380 1018	19 28 58	152 359 997	22 34 69	349 987	36 74	330 968	41 85	950	96			13 15 17	159 332 931	12 21 49
5514	1150 1750 3600	309 573 1387	12 19 39	257 521 1335	19 29 59	228 492 1306	23 36 73	234 465 1279	28 42 87	453 1267	46 94							13 15 15	210 432 1246	15 27 55
5518	1150 1750 3600	410 749 1794	15 24 48	346 685 1730	24 36 75	310 649 1695	30 45 93											13 15 15	289 576 1621	38 69

### **Dimensions**

#### Horizontal Flow

### Vertical Flow





8.63

0.56

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

3/8 SQ KEY 0.

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 Vacuum & Blower Systems Sales Professional.

Your Local Tuthill Vacuum Blower Systems Sales Professional:



Tuthill Vacuum & Blower Systems
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Springfield, Missouri USA 65803-8702
o 417.865.8715 800.825.6937 f 417.865.2950
tuthillvacuumblower.com



ALTERNATE DRIVE SHAFT LOCATION

Ø 21/32 ± 4 HOLES

TH-050 12/16

<sup>\*</sup>Approximate shipping weight.