



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)	Max. Comp. Ratio	Nom Min RPM @ Max Disch. Press	Nom Max RPM @ Max Disch. Press	Displ. CFR
5507	18	17	2.31:1	2250	3600	.235
5509	18	17	2.31:1	2150	3600	.282
5511	18	17	2.31:1	2050	3600	.345
5514	15	15	2.02:1	1450	3300	.445
5516	12	15	2.02:1	1150	3600	.509
5518	12	15	2.02:1	1150	3200	.572
5520	8	12	1.84:1	1150	3600	.636

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 end - Double row ball

Free end and drive shaft - Cylindrical 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

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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 (up to 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 Water Cooled End Plates:

All vertical flow 5500 PD PLUS models are available with M-D's exclusive optional water cooled end plates 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 "E" suffix.

Optional Gearhead Drive:

Many 5500 PD PLUS models are available with M-D's exclusive integral speed increasing gearhead allowing for more versatility in direct drive applications. Speed increasing ratios available are:

1.4:1 1.6:1 2.0:1

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 External Pressure Lube
17/46 series	18/85 series
57/81 series	54/84 series
64/67 series	65/68 series **

** 65/68 series utilizes gastight external lubrication system rated to a maximum pressure of 15 PSIG. Consult your local M-D representative or factory if higher design pressure is required.

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TUTHILL CORPORATION

M-D Pneumatics Division

4840 West Kearney Street, P.O. Box 2877
Springfield, Missouri USA 65801-2877
Tel 417 865-8715 800 825-6937 Fax 417 865-2950



www.mdpneumatics.com

