

M-D Pneumatics™ Rotary Positive Displacement Blowers

PD Plus

Model 9000 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 9000 PD PLUS heavy duty industrial blowers are designed for high performance applications, up to 15 PSIG pressure boost or 15" 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, fuel or process gas handling, or elevated pressure applications up to 35 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 single envelope series, the drive shaft is mechanically sealed and the oil sumps are plugged to provide an even higher degree of leakage protection.

Maximum Efficiency

Model 9000 PD PLUS models include extended tip rotor profile for increased displacement and operating efficiency versus any other blower in its class.

Extra Capacity Oil Sumps

Rectangular shaped end covers provide the highest oil capacity of any blower in its class. Greater oil capacity, combined with maximum operating efficiency means that your 9000 PD PLUS blower runs cooler and lasts longer.



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	
9016	15	15	860	2400	1.321	
9020	15	15	860	2400	1.733	
9027	15	15	860	2400	2.311	

Material Specifications:

Housing: Cast iron
End Plates: Cast iron
End Covers: Cast iron
Rotors: Ductile iron

Shafts: Ductile iron cast integrally with rotor

Bearings: Rotors - Double row ball
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

Single Envelope Gas Service - Mechanical and labyrinth type on rotor shafts; lip seal on drive shaft Double Envelope Gas Service - Same as Single

Envelope series plus mechanical sealing on drive shaft

Lubrication: Oil splash system, both ends

For elevated pressure applications, single and double envelope gas service series are available with high pressure sealing and testing to allow discharge pressures as high as 35 PSIG (15 PSI nominal 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 Lubrication Systems

All 9000 PD PLUS models are available with integral pressure lubrication to provide positive bearing lubrication and filtration of lubricant for extreme applications. Optional lubrication can be specified.

Special Materials
Ductile Iron*
*9020 & 9027 only

Special Coatings
Bi-Protec® (Nickel/Armoloy®)

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.

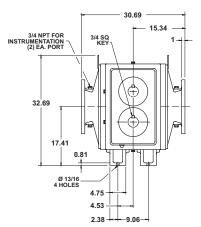
Pressure (14.70 PSIA and 70° F Inlet)

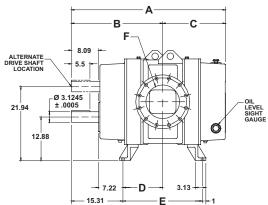
BLOWER	SPEED	2 P	SIG	5 P	SIG	8 P	SIG	10 F	SIG	12 F	SIG	14 P	SIG	15 P	SIG	Ma	x. Vacu	um
MODEL	(RPM)	CFM	BHP	" Hg	CFM	BHP												
	600	497	19	419	30	375	37									13	349	24
	1150	1224	37	1146	57	1101	70	1062	83	1043	90	1025	97	1008	103	15	1011	53
9016	1450	1620	47	1542	72	1498	88	1458	105	1439	113	1421	122	1404	130	15	1408	66
	1750	2016	56	1938	86	1894	107	1854	127	1835	137	1817	147	1800	157	15	1804	80
	2400	2875	77	2797	119	2753	146	2713	174	2694	188	2676	202	2659	215	15	2663	110
	600	652	25	550	38	492	47									13	458	31
	1150	1605	47	1503	73	1445	91	1393	108	1368	117	1345	125	1322	134	15	1327	68
9020	1450	2125	60	2023	92	1965	114	1913	136	1888	147	1864	158	1842	169	15	1847	86
	1750	2645	72	2543	112	2485	138	2432	165	2408	178	2384	191	2362	204	15	2367	103
	2400	3772	99	3669	153	3611	189	3559	226	3534	244	3511	262	3488	280	15	3493	142
	600	870	32	733	50	656	62									13	610	41
9027	1150	2141	62	2004	97	1927	120	1857	143	1824	154	1793	166	1763	178	15	1769	89
	1450	2834	78	2697	122	2620	151	2550	180	2518	195	2486	209	2456	224	15	2463	112
	1750	3527	94	3391	147	3313	182	3244	217	3211	235	3180	253	3149	270	15	3156	136
	2400	5030	129	4893	201	4816	250	4746	298	4713	322	4682	347	4651	371	15	4658	186

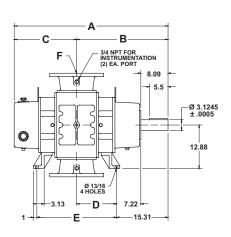
Dimensions

Horizontal Flow

Vertical Flow





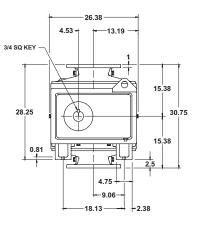


MODEL	SERIES	Α	В	С	D	E	F	Net Wgt. (lbs.)*
9016	17/57 46/81	49.69	29.09	20.59	13.78	27.56	12" FLG	1985
9020	17/57 46/81	54.59	31.56	23.03	16.25	32.5	12" FLG	2100
9027	17/57 46/81	61.5	35	26.5	19.69	39.38	14" FLG	2495

Values are approximate and should not be used for construction.

Certain dimensions for 64/67 double envelope gas-service and pressure lubricated series 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:



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^{*}Approximate shipping weight.