M-D Pneumatics®

PD PLUS I 9016, 9020, 9027

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

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.

pressure boost or 15" Hg dry vacuum (24" Hg water injected).

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.

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.



| 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.

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.

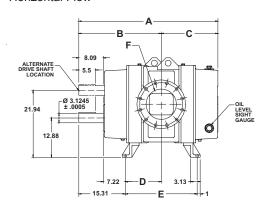
Pressure (14.70 PSIA and 70° F Inlet)

| BLOWER | SPEED | SPEED 2 PSIG | | 5 PSIG | | 8 PSIG | | 10 PSIG | | 12 PSIG | | 14 PSIG | | 15 PSIG | | Max. Vacuum | | |
|--------|-------|--------------|-----|--------|-----|--------|-----|---------|-----|---------|-----|---------|-----|---------|-----|-------------|------|-----|
| MODEL | (RPM) | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | " Hg | CFM | ВНР |
| | 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

32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69 32.69

Horizontal Flow



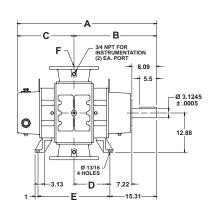
| MODEL | SERIES | Α | В | С | D | E | F | Net Wgt. (lbs.)* |
|-------|----------------|-------|-------|-------|-------|-------|---------|------------------|
| 9016 | 17/57 46/81 | 49.69 | 29.09 | 20.59 | 13.78 | 27.56 | 12" FLG | 1985 |
| 9020 | 17/57 46/81 | 54.59 | 31.56 | 23.03 | 16.25 | 32.5 | 12"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

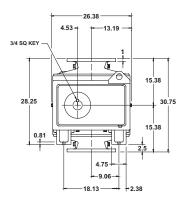
Values are approximate and should not be used for construction.

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 M-D Pneumatics Sales Professional.

Vertical Flow





CONTACT US

For more information, contact your Regional Sales Manager or call us at:

1-800-825-6937

Your Local Sales Professional:

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^{*}Approximate shipping weight.