

Equalizer DF

Models: 4504, 4506, 4509, 4512

Bi-directional Rotation
17 Series - Horizontal Air Flow
46 Series - Vertical Air Flow

Designed to be interchangeable with equivalent Gardner Denver Duroflow® models, EQUALIZER DF rotary positive blowers offer many distinct advantages.

Features

Higher Pressure Capability

Due to the high degree of precision to which EQUALIZER DF blowers are manufactured, most models are rated to 18 PSIG discharge pressure. This provides you with an increased level of security since your EQUALIZER DF blower has more safety factor already built in.

Designed for True, Drop-in Replacement

The last thing you need is an “interchangeable” blower that really isn’t. EQUALIZER DF blowers are designed to be dimensionally interchangeable with competing models, even to the point of matching the port connector bolt patterns.

Helical Gearing

EQUALIZER DF blowers are timed with precision helical gears that are keyed to the rotor shafts. Helical gearing reduces backlash and mechanical noise as compared to spur gears offered by other manufacturers. Keyed interference fit reduces the risk of slippage of the gear on the shaft and loss of timing, one of the leading causes of blower failure.

One Piece Housing

Every EQUALIZER DF blower includes a housing constructed of a single piece of precision machined cast iron, rather than a two piece housing which is subject to misalignment and loss of operating clearances.

Rotors with Integral Shafts

EQUALIZER DF blowers include precision machined ductile iron rotors with large, integrally cast shafts to provide single, unitized rotors to prevent clash as a result of the impeller moving on its shaft.



| Model Size | Max. Press. PSI | Max. Vac. (in. Hg) | Maximum RPM | Displ. CFR | Net Wgt. (lbs.)* |
|------------|-----------------|--------------------|-------------|------------|------------------|
| 4504 | 18 | 16 | 4000 | .112 | 235 |
| 4506 | 18 | 16 | 4000 | .164 | 285 |
| 4509 | 18 | 16 | 4000 | .242 | 320 |
| 4512 | 15 | 16 | 4000 | .321 | 360 |

*Approximate shipping weight.

Versatility

Completely field convertible from horizontal to vertical flow, or vice versa simply by rearranging oil breathers, drains and changing the mounting feet.

Material Specifications:

Housing: Cast iron

End Plates: Cast iron

End Covers: Cast iron

Rotors: Ductile iron

Shafts: Ductile iron cast integrally with rotor

Bearings: Gear end - Double row ball

Drive end - Cylindrical roller

Drive Shaft: Ductile iron cast integrally with drive rotor

Gears: Heat treated alloy steel, helical cut

Seals: Lip and piston ring labyrinth type on rotor shafts;
lip seal on the drive shaft

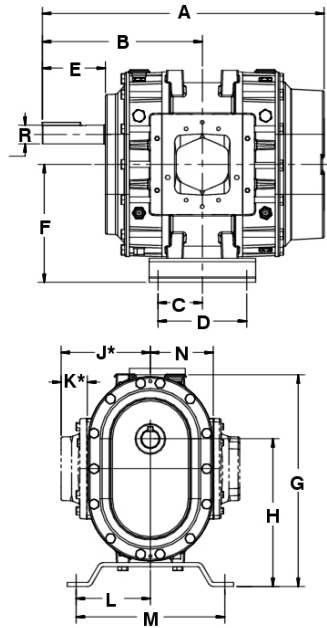
Lubrication: Oil splash system, both ends

Performance Tables

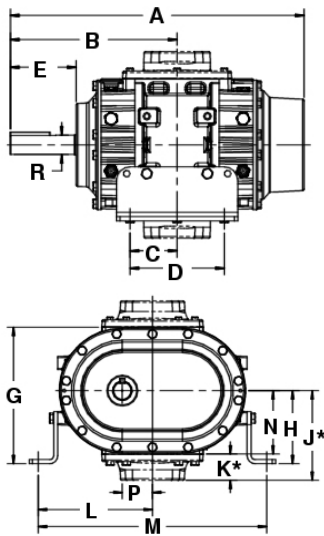
In conjunction with our program of continuous testing and design upgrading, all specifications are subject to change without notice. All data are approximate. Request a quotation for your specific application.

Pressure (14.70 PSIA and 70° F Inlet)

Horizontal Flow



Vertical Flow



| MODEL | REPLACEMENT FOR | SPEED (RPM) | 5 PSIG | | 8 PSIG | | 10 PSIG | | 12 PSIG | | 15 PSIG | | 18 PSIG | | MAX. VACUUM | | | | | |
|-------|-----------------|-------------|--------|-----|--------|-----|---------|-----|---------|-----|---------|-----|---------|-----|-------------|------|-----|-----|-----|--|
| | | | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | CFM | BHP | " HG | CFM | BHP | | | |
| 4504 | DUROFLOW® 4504 | 1150 | 62 | 3.9 | 44 | 5.6 | | | | | | | | | | | 11 | 41 | 4.2 | |
| | | 1750 | 129 | 6.0 | 111 | 8.5 | 101 | 10 | 92 | 12 | | | | | | | 13 | 95 | 7.2 | |
| | | 2950 | 263 | 10 | 246 | 14 | 235 | 17 | 226 | 20 | 214 | 24 | 203 | 29 | 16 | 207 | 14 | | | |
| | | 3500 | 325 | 12 | 307 | 17 | 297 | 20 | 288 | 24 | 276 | 29 | 265 | 34 | 16 | 269 | 17 | | | |
| | | 4000 | 381 | 14 | 363 | 20 | 353 | 23 | 344 | 27 | 332 | 33 | 321 | 39 | 16 | 325 | 19 | | | |
| 4506 | DUROFLOW 4506 | 1150 | 105 | 5.2 | 82 | 7.7 | | | | | | | | | | | 11 | 79 | 5.6 | |
| | | 1750 | 203 | 8.0 | 181 | 12 | 168 | 14 | 157 | 17 | | | | | | | 14 | 152 | 10 | |
| | | 2950 | 400 | 13 | 378 | 20 | 365 | 24 | 354 | 28 | 339 | 35 | 325 | 41 | 16 | 330 | 19 | | | |
| | | 3500 | 491 | 16 | 468 | 23 | 456 | 28 | 444 | 34 | 429 | 41 | 415 | 49 | 16 | 420 | 23 | | | |
| | | 4000 | 573 | 18 | 551 | 27 | 538 | 33 | 527 | 38 | 511 | 47 | 497 | 55 | 16 | 502 | 26 | | | |
| 4509 | DUROFLOW 4509 | 1150 | 170 | 7.2 | 142 | 11 | 125 | 13 | | | | | | | | | 12 | 127 | 8.3 | |
| | | 1750 | 316 | 11 | 287 | 16 | 271 | 20 | 256 | 24 | | | | | | | 15 | 238 | 15 | |
| | | 2950 | 607 | 18 | 578 | 28 | 562 | 34 | 547 | 40 | 527 | 50 | 509 | 59 | 16 | 516 | 27 | | | |
| | | 3500 | 740 | 22 | 711 | 33 | 695 | 40 | 680 | 48 | 661 | 59 | 643 | 70 | 16 | 649 | 32 | | | |
| | | 4000 | 861 | 25 | 832 | 38 | 816 | 46 | 802 | 55 | 782 | 67 | 764 | 80 | 16 | 770 | 37 | | | |
| 4512 | DUROFLOW 4512 | 1150 | 240 | 9.2 | 206 | 14 | 187 | 17 | | | | | | | | | 13 | 175 | 11 | |
| | | 1750 | 433 | 14 | 399 | 21 | 380 | 26 | 362 | 31 | | | | | | | 15 | 340 | 20 | |
| | | 2950 | 819 | 24 | 784 | 36 | 765 | 44 | 748 | 52 | 724 | 65 | 701 | 77 | 16 | 710 | 35 | | | |
| | | 3500 | 996 | 28 | 961 | 43 | 942 | 52 | 924 | 62 | 901 | 77 | 888 | 88 | 16 | 887 | 42 | | | |
| | | 4000 | 1156 | 32 | 1122 | 49 | 1103 | 60 | 1085 | 71 | 1062 | 88 | | | 16 | 1048 | 48 | | | |

Dimensions

| MODEL | SERIES | A | B | C | D | E | F | G | H | L | M | N | P | R | WT. (LBS.) |
|-------|--------|-------|-------|------|-------|------|------|-------|-------|------|-------|------|------|-------|------------|
| 4504 | 17 | 18.45 | 10.02 | 2.44 | 4.88 | 3.52 | 9.09 | 16.34 | 11.40 | 5.75 | 11.50 | 4.88 | 2.30 | 1.437 | 270 |
| | 46 | | | 2.50 | 5.00 | | — | 10.50 | 5.63 | 8.75 | 17.50 | | | | |
| 4506 | 17 | 21.82 | 12.39 | 3.44 | 6.88 | 4.89 | 9.09 | 16.34 | 11.40 | 5.75 | 11.50 | 4.88 | 2.30 | 1.437 | 310 |
| | 46 | | | 3.50 | 7.00 | | — | 10.50 | 5.63 | 8.75 | 17.50 | | | | |
| 4509 | 17 | 24.80 | 13.87 | 3.44 | 6.88 | 4.89 | 9.09 | 16.34 | 11.40 | 5.75 | 11.50 | 4.88 | 2.30 | 1.437 | 350 |
| | 46 | | | 3.50 | 7.00 | | — | 10.50 | 5.63 | 8.75 | 17.50 | | | | |
| 4512 | 17 | 27.81 | 15.38 | 4.94 | 9.88 | 4.89 | 9.09 | 16.34 | 11.40 | 5.75 | 11.50 | 4.88 | 2.30 | 1.437 | 390 |
| | 46 | | | 5.00 | 10.00 | | — | 10.50 | 5.63 | 8.75 | 17.50 | | | | |

Optional Port Connectors

| MODEL | NPT | J* | K* | WT. (LBS.) EACH CONNECTOR |
|-------|------------|-------|------|---------------------------|
| 4504 | 4" | 9.02 | 4.15 | 11 |
| | 4" (short) | | | |
| 4506 | 4" (short) | 10.94 | 6.03 | 19 |
| | 4" (long) | | | |
| 4509 | 4" (short) | 12.47 | 2.93 | 17 |
| | 5" (short) | | | |
| | 5" (long) | | | |
| 4512 | 6" (short) | 13.19 | 8.28 | 19 |
| | 6" (long) | | | |

Values are approximate and should not be used for construction. Certified prints are available through your local M-D Pneumatics Sales Professional.

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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