

**TriFlow® Industrial Series**  
Positive Displacement Vacuum Pumps



Gardner Denver is shaping the standards of performance and reliability in the design of positive displacement blowers and vacuum pumps. The tradition continues with the TriFlow Series vacuum pumps. Each TriFlow is engineered for a wide range of commercial and industrial applications. Specifically, TriFlow is the choice of leading Original Equipment Manufacturers (OEMs) of truck mounted vacuum cleaning systems.

TriFlow offers operators significant benefits and advantages:

- Great performance and efficiency in a compact design
- Quiet operation
- Highest quality materials and construction
- Flexible installation capability
- Reduced maintenance
- Available in 3 sizes – 406, 408 & 410
- TriFlow delivers
  - Vacuum to 16" Hg and Flows to 700 cfm



TriFlow 410

## TriFlow: Setting the Industry Standard

### QUIET OPERATION

- Three lobe impeller geometry allows higher throughput while creating lower pulsation levels than two lobe units, resulting in reduced noise
- An internal feedback porting arrangement contributes to the further reduction of noise

### QUALITY PROMISE

- Backed by one of the largest distributor networks in the industry
- Every TriFlow vacuum pump is built under rigid ISO 9001:2000 quality standards
- Each TriFlow is individually tested to meet rigorous performance specifications
- Warranty Period
  - 18 months from the date of shipment or
  - 12 months from the date of installation, whichever occurs first

### QUALITY CONSTRUCTION

Each model incorporates the following for longer service life, reduced downtime and maintenance

- Highly reliable Dual Splash Lubrication
- Heavy duty bearings
- High strength timing gears
- Integral heat dissipation fins on the case to help maintain proper clearances

### OIL-FREE AIR DELIVERY

- Piston ring seals are incorporated on each impeller shaft with a lip seal on the drive shaft, providing superior sealing to prevent oil leakage into the air chamber
- Independent oil sumps prevent cross contamination and allow the vacuum pump to operate safely on an incline when used in carpet cleaning applications

### FLEXIBLE INSTALLATION

- Unique, integral mounting surfaces are precision machined for ease of installation and drive system alignment
- Critical mounting dimensions are similar to those of existing two lobe positive displacement vacuum pumps allowing for system upgrades
- The inlet and outlet ports include both flange and FNPT connections for ease of plumbing

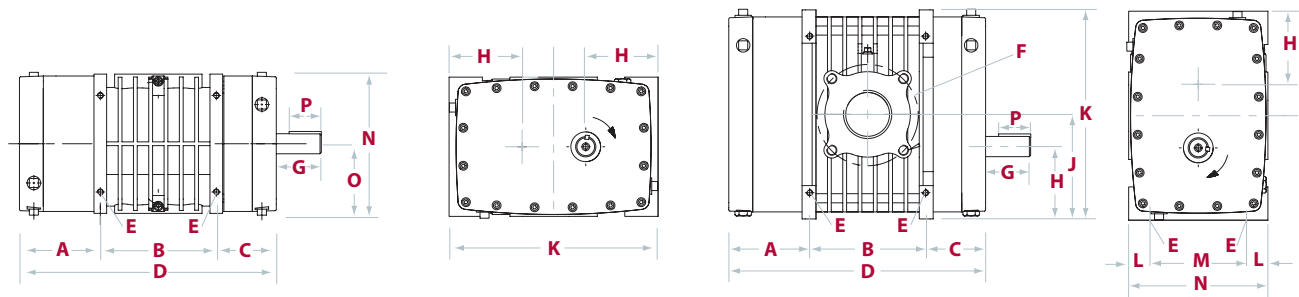


TriFlow®  
 Models 410, 408, 406

## Performance Data

| MODEL | RPM   | VACUUM |      |        |      |        |      |        |      |
|-------|-------|--------|------|--------|------|--------|------|--------|------|
|       |       | 10 "HG |      | 12 "HG |      | 14 "HG |      | 16 "HG |      |
|       |       | CFM    | BHP  | CFM    | BHP  | CFM    | BHP  | CFM    | BHP  |
| 406   | 1,760 | 127    | 4.4  | 117    | 5.2  | 106    | 6.0  | --     | --   |
|       | 2,190 | 174    | 5.6  | 163    | 6.6  | 153    | 7.6  | --     | --   |
|       | 2,620 | 220    | 6.8  | 210    | 8.1  | 199    | 9.3  | --     | --   |
|       | 3,600 | 327    | 10.0 | 317    | 11.7 | 306    | 13.3 | 294    | 15.0 |
|       | 4,000 | 371    | 11.4 | 361    | 13.2 | 350    | 15.1 | 337    | 17.0 |
| 408   | 1,760 | 190    | 6.3  | 176    | 7.5  | 161    | 8.7  | --     | --   |
|       | 2,190 | 259    | 8.0  | 245    | 9.5  | 230    | 11.0 | --     | --   |
|       | 2,620 | 328    | 9.7  | 314    | 11.5 | 298    | 13.3 | --     | --   |
|       | 3,600 | 485    | 13.9 | 471    | 16.4 | 455    | 18.9 | 438    | 21.3 |
|       | 4,000 | 549    | 15.8 | 535    | 18.5 | 519    | 21.2 | 502    | 24.0 |
| 410   | 1760  | 235    | 8.6  | 214    | 10.2 | 191    | 11.8 | 165    | 13.4 |
|       | 2190  | 326    | 10.9 | 305    | 12.8 | 282    | 14.8 | 256    | 16.8 |
|       | 2620  | 417    | 13.4 | 396    | 15.7 | 373    | 18.1 | 341    | 20.5 |
|       | 3600  | 623    | 20.0 | 602    | 23.2 | 579    | 26.5 | 553    | 29.7 |
|       | 4000  | 708    | 23.0 | 687    | 26.6 | 664    | 30.3 | 638    | 33.9 |

Performance based on inlet air at standard conditions: Sea level, ambient pressure of 14.7 psia, 68°F Inlet Temperature, 36% Relative Humidity. For performance with gases other than air or at non-standard conditions, contact your authorized Gardner Denver representative.



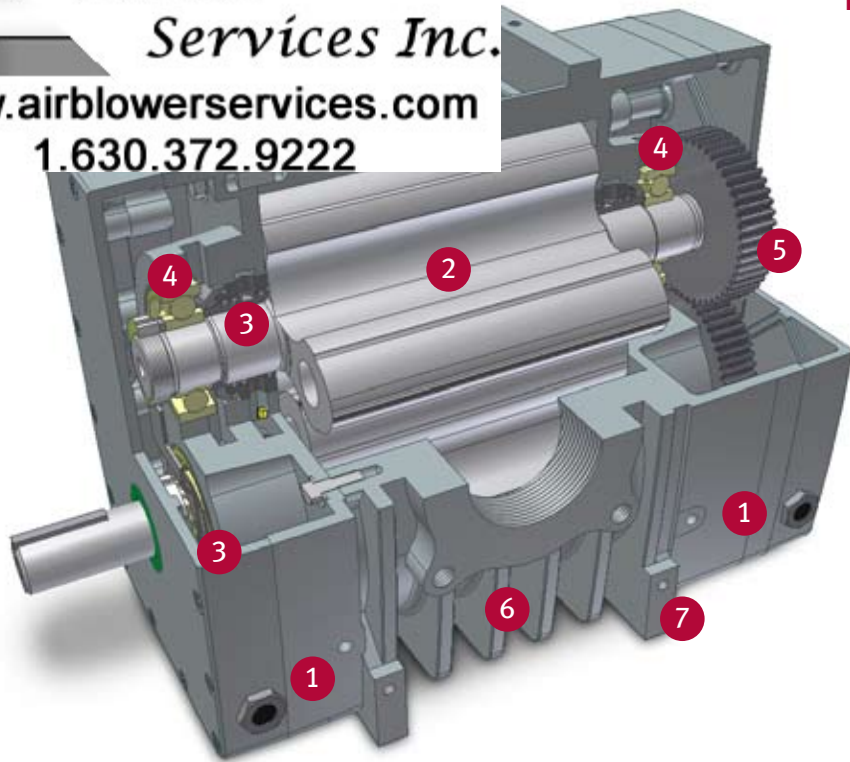
Horizontal Configuration

Vertical Configuration

## Dimensional Data

| Model | WT. | Port Size Conn. | Shaft Diam. | A | B    | C    | D     | E          | F   | G   | H   | J   | K  | L    | M | N    | O    | P   |
|-------|-----|-----------------|-------------|---|------|------|-------|------------|-----|-----|-----|-----|----|------|---|------|------|-----|
| 406   | 141 | 2.5" NPT        | 1.25        | 5 | 4.7  | 4.2  | 13.9  | 3/8-16 UNC | 5.7 | 2.8 | 4.5 | 6.5 | 13 | 1.33 | 6 | 8.66 | 4.33 | 2.0 |
| 408   | 168 | 3" NPT          | 1.25        | 5 | 7.2  | 4.2  | 16.4  | 3/8-16 UNC | 6.3 | 2.8 | 4.5 | 6.5 | 13 | 1.33 | 6 | 8.66 | 4.33 | 2.0 |
| 410   | 202 | 4" NPT          | 1.25        | 5 | 9.46 | 3.73 | 18.22 | 3/8-16 UNC | N/A | 2.8 | 4.5 | 6.5 | 13 | 1.33 | 6 | 8.66 | 4.33 | 2.0 |

Weights are in pounds and approximate. All dimensions shown in inches. Dimensions for installation purposes provided upon request.



## TriFlow® Design Advantages

1. Dual splash lubrication for reduced maintenance intervals and superior durability
2. Trilobe impeller design reduces noise and vibration
3. Piston ring and shaft lip seals prevent oil leakage
4. Heavy duty bearings for greater reliability
5. High strength timing gears for longer service life
6. Large fins provide greater heat dissipation and clearance stability extending operating life
7. Machined mounting bosses for ease of installation

### Genuine Gardner Denver Parts and Lubricants

- Maintain the Gardner Denver performance advantage and reliability with Genuine GD Replacement Parts available through authorized sales and service representatives
- Protect your Gardner Denver investment with AEON™ PD, the only lubricant specially formulated for all blowers in any environment
- Now available for standard, food grade and extreme duty applications



# Gardner Denver®

For additional information contact your local representative or  
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