



**C. Emery Nelson, Inc.**

INDUSTRIAL AND POWER PLANT EQUIPMENT

7631 Commerce Street, Hamel, MN 55340  
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## **TriFlow® Industrial Series**

Positive Displacement Vacuum Pumps



**GD**  
**GARDNER DENVER™**

Experience Proven Results™

# TriFlow®

## The choice of leading OEMs

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

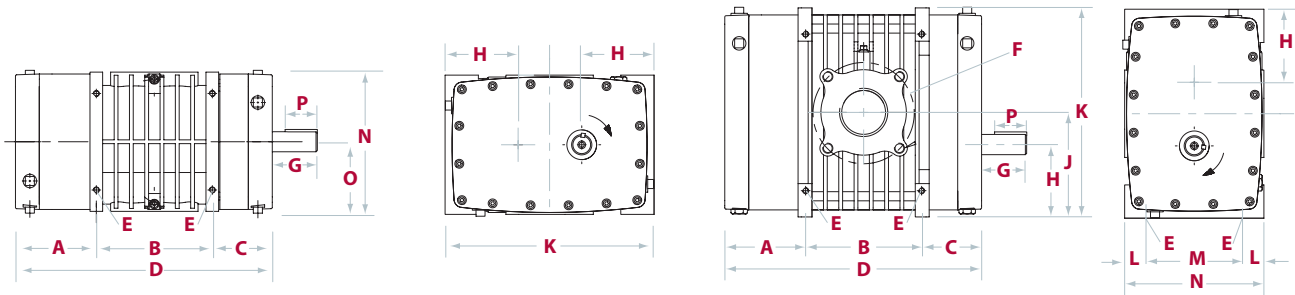


TriFlow®  
Models 410, 408, 406

## 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 temperature of 68°F, an ambient pressure of 14.7 psia and 36% relative humidity. For performance at non-standard conditions, contact your authorized Gardner Denver representative.



Horizontal Configuration

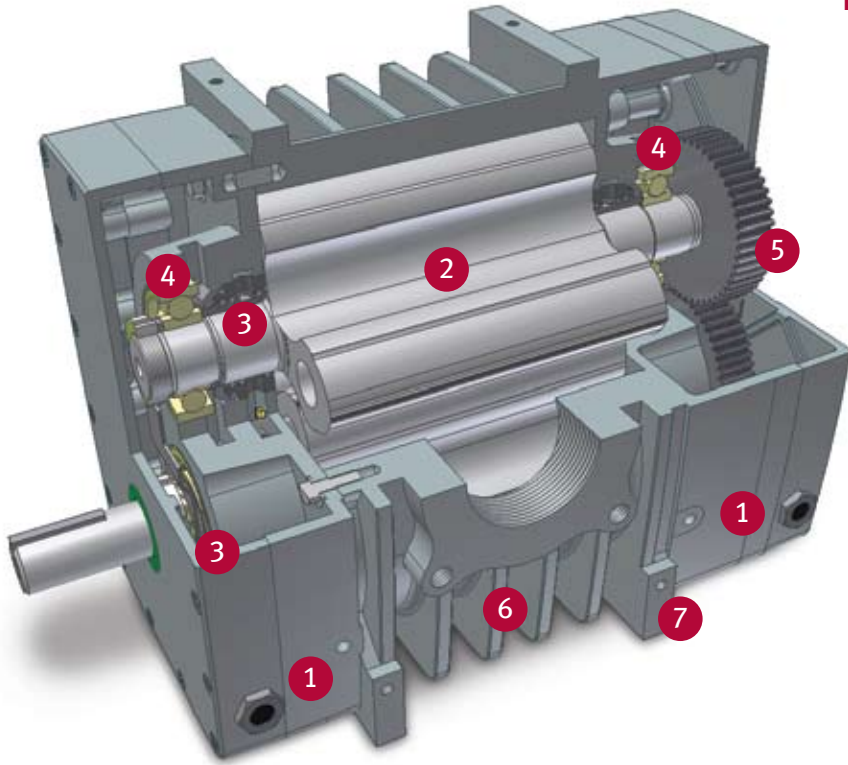
Vertical Configuration

## 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





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