

# Miniature Plastic & Diaphragm Compressors & Vacuum Pumps





For over 80 years, the Gast Group has been providing air solutions to help companies grow. Our commitment to quality and customer care has made us the recognized leader in our ability to design and provide products that meet your needs. Here are just a few reasons choosing Gast is the right choice for your business:

## **Tough:**

Gast products have a long legacy of performing in harsh environments where other market players cannot. From the dirtiest environments to extreme ambient conditions, you'll find a Gast pump setting the standard.

## **Reliable:**

A testament to our exacting performance standards, the Gast Group has customers in the field with over 60 years of original equipment operation and consider their Gast products to be "fit and forget". Gast products enable you to sell to your valuable customers with confidence.

## **Customized:**

Others claim to offer custom design capability, but we've proven it. The Gast brand has been built by providing the design and manufacturing expertise to fit your precise specifications. The "one-size fits all" approach is not a fit in the Gast Group mentality as we continue to work with you to develop products that are right for your business.

## **Volume Flexible:**

We're volume flexible...because you need us to be. Serving over 200 global markets into every region of the world, the Gast Group knows customer diversity and we know the right choice means getting the amount of product you want when you want it. From 5 to 50,000 pieces, we have a pricing approach that is right for you.

## **Clean Air:**

Providing air solutions for clean air applications is a commitment to design integrity. The Gast Group offers a full line of "clean air" products, specifically designed to meet the demands of medical, dental and breathing air applications without compromising pneumatic performance or efficiency.

## **Quiet:**

When quiet counts, Gast product solutions remain unrivaled. State-of-the-art anechoic sound chambers outfit all major Gast Group facilities, ensuring high tech sound and vibration analysis and devel-



## Worldwide Excellence in Air Technology – Dedicated to the Success of Your Pneumatic Applications

If you need a small, quiet source of vacuum or pressure, you'll find the unit for your application in the Gast line of oilless Diaphragm air compressors and vacuum pumps, which come in standard, twin, and miniature styles. Plastic component construction on the miniature pumps makes them especially compact and lightweight...ideal for light-duty applications.

Air flow capabilities for the entire line range from .65 lpm up to 3.8 cfm (6,5 m<sup>3</sup>/h), vacuum up to 29 in. Hg (31 mbar), and pressure up to 60 psig (4,2 bar). Electric motors are available in dual frequency, shaded pole, and permanent split capacitor (psc) versions as well as AC multi voltages for worldwide applications, plus 4-24 volt DC options on the miniature styles. Horsepowers range from 1/16 to 1/2 HP (0,05 to 0,37 kW) on the standard size models.

Tank models for the DOA series and a full line of recommended accessories are also available.



### Miniature Diaphragm Table of Contents / Performance Overview

MODEL/ SERIES	POWER RATING 60 Hz		FREE AIR FLOW				MAXIMUM PRESSURE		MAXIMUM VACUUM	
	hp	kW	cfm		m <sup>3</sup> /h		psi	bar	" Hg	mbar
			50 Hz	60 Hz	50 Hz	60 Hz				
<b>STANDARD DIAPHRAGM MODELS</b>										
MOA (AC/DC)	1/8	0,09	.65	.80	1,1	1,36	50	3,5	24	200
MAA (AC)	1/8	0,09	1.40	1.58	2,39	2,68	50	3,5	28.5	48
DOA (AC/DC)	1/8	0,25	1.55	1.90	2,63	3,23	60	4,2	25.5	150
DAA (AC)	1/2	0,37	3.25	3.80	5,52	6,46	60	4,2	29	31
<b>MINIATURE DIAPHRAGM MODELS</b>										
2D (DC)	-	-	.65 lpm				5.5	0,38	11	641
3D (DC)	-	-	1.18 lpm				7.1	0,49	11.3	631
5D (DC)	-	-	1.5 lpm				11	0,76	13	573
10D (AC)	-	-			3.8 lpm		15	1,0	15	505
10D (DC)	-	-	4.3 lpm				15	1,0	14	526
15D (AC)	-	-	5.2 lpm		7,0 lpm		24	1,9	20	335
15D (DC)	-	-	7.0 lpm				20	2,0	20	335
15D (DC) Twin	-	-	6-13 lpm				25	1,9	25	99
22D (AC)	1/20	0,04			.7 / 1,2 m <sup>3</sup> /h		25	1,7	23	234
22D (DC)	1/8	0,09	1.3 cfm / 2,2 m <sup>3</sup> /h				25	1,7	22.5	251

### Features and Benefits of our Miniature Pumps

- AC and DC Models
- Low noise, low vibration
- Compact, lightweight
- Oilless
- Long life
- Corrosion resistant
- Low power consumption

### Typical Applications

- Air and gas analysis
- Blood pressure monitors
- Respiration monitors
- Portable aspirators
- Breast pumps
- Body fluid analysis
- Sterilizers
- Ambulance/emergency vehicles
- Vacuum pick-and-place for electronic industry
- Portable dosimeters
- Air brushes
- Agricultural foam markers
- Crop sprayers
- Pest control equipment
- Oil atomizers
- Tape drives
- Ink-jet printers
- Package labeling equipment
- Lab equipment

Pictorial and dimensional data is subject to change without notice.

Various brand name motors are used on any model at the discretion of Gast Manufacturing Inc.

Note that several models in this catalog have brushless DC motors which are referred to as BLDC.

The information presented in this catalog is based on technical data and test results of nominal units. It is believed to be accurate and is offered as an aid in the selection of Gast products. It is the user's responsibility to determine suitability of the product for intended use and the user assumes all risk and liability whatsoever in connection therewith.

**Warning: Units Should Not Pump  
Combustible Gases or Be Used in  
Combustible Atmospheres**





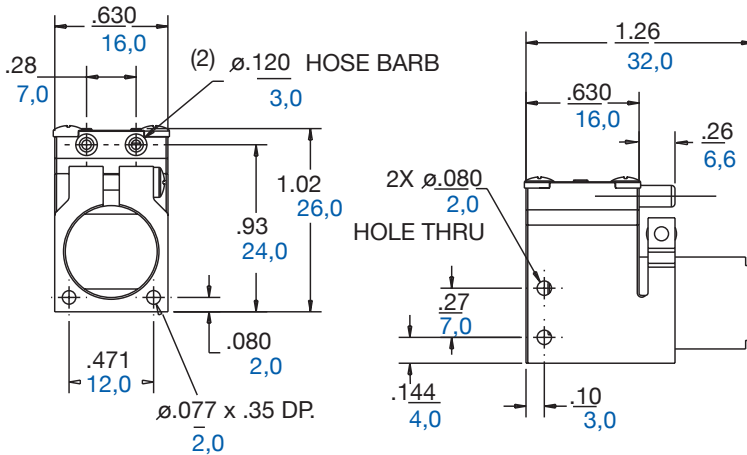
## Miniature Diaphragm 2D1034 Series

**IRONLESS CORE MOTOR (DC)**  
5.5 PSI MAX. PRESSURE, 11" HG MAX. VACUUM  
0.55 LPM OPEN FLOW

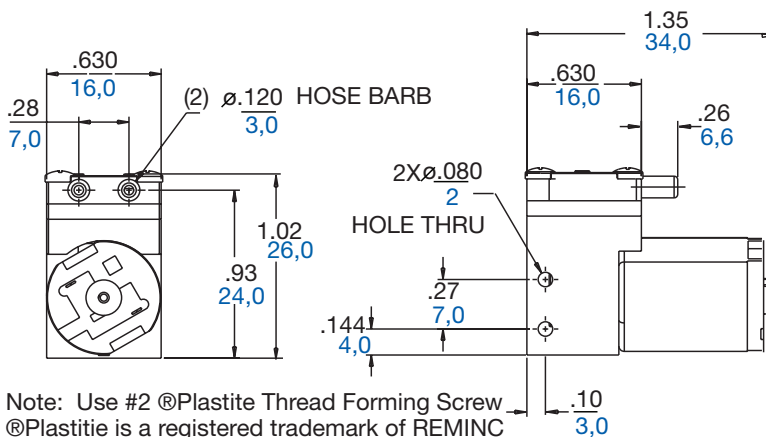
**IRON CORE MOTOR (DC)**  
5 PSI MAX. PRESSURE, 11" HG MAX. VACUUM  
0.65 LPM OPEN FLOW

inches/mm

2D1034-101-1060, 2D1034-101-1061



2D1034-101-1075, 2D1034-101-1058,  
2D1034-101-1034, 2D1034-101-1035



Note: Use #2 @Plastite Thread Forming Screw  
@Plastite is a registered trademark of REMINC  
(RESEACH ENGINEERING & MANUFACTURING INC.)

### PRODUCT FEATURES

- Can be used as compressor or vacuum pump (same model)
- Can be mounted in any plane
- Custom mounting configurations available
- Head mounts in any of four positions
- Consult factory for voltage options
- Stroke options available

### MATERIALS OF CONSTRUCTION

- EPDM (Ethylene Propylene Diene Monomer) valve and diaphragm
- Chemically resistant PPS (Polyphenylene Sulfide) for all other wetted components



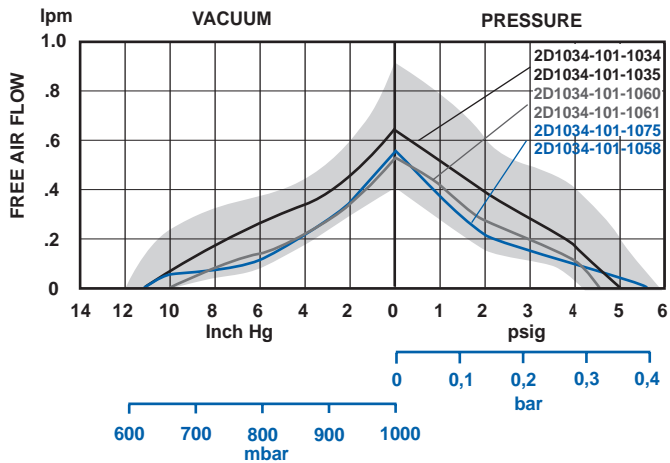
## Product Specifications

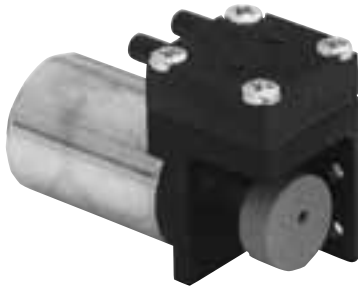
Model Number	Milliamps at Nominal Voltage	Potential Operating Voltage Range	Net Wt	
			oz.	g.
2D1034-101-1060*	30-70	4.5V DC	.56	16
2D1034-101-1061*	25-45	6V DC	.56	16
2D1034-101-1075*	30-80	6V DC	.56	16
2D1034-101-1058*	20-50	7.5 DC	.56	16
2D1034-101-1034**	70-110	6V DC	.56	16
2D1034-101-1035**	45-100	12V DC	.56	16

\* Ironless core motor    \*\* Iron core motor

## Product Performance (U.S., Metric)

**Note:** The 2D performance is based on test results of nominal units. Solid lines show standard performance of models in the chart. Shaded area represents capabilities when models are customized for specific requirements. Please consult factory for customized models.





## Miniature Diaphragm 3D1060 Series

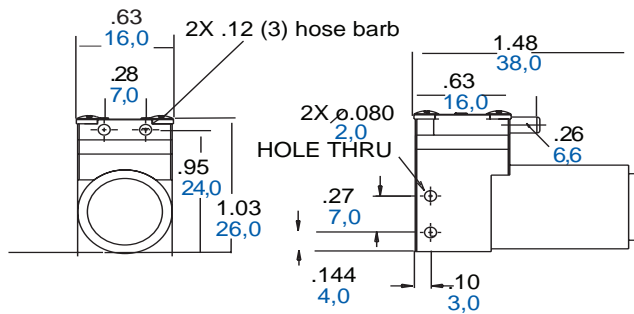
### IRONLESS CORE MOTOR (DC)

7.1 PSI MAX. PRESSURE, 11.2" HG MAX. VACUUM  
.91" LPM OPEN FLOW

### IRON CORE MOTOR (DC)

6.5 PSI MAX. PRESSURE, 11.3" HG MAX. VACUUM  
1.18 LPM OPEN FLOW

inches/mm



Note: Use #2 @Plastite Thread Forming Screw  
@Plastite is a registered trademark of REMINC  
(RESEACH ENGINEERING & MANUFACTURING INC.)

### PRODUCT FEATURES

- Can be used as compressor or vacuum pump (same model)
- Can be mounted in any plane
- Custom mounting configurations available
- Head mounts in any of four positions
- Consult factory for voltage options
- Stroke options available

### MATERIALS OF CONSTRUCTION

- EPDM (Ethylene Propylene Diene Monomer) valve and diaphragm
- Chemically resistant PPS (Polyphenylene Sulfide) for all other wetted components

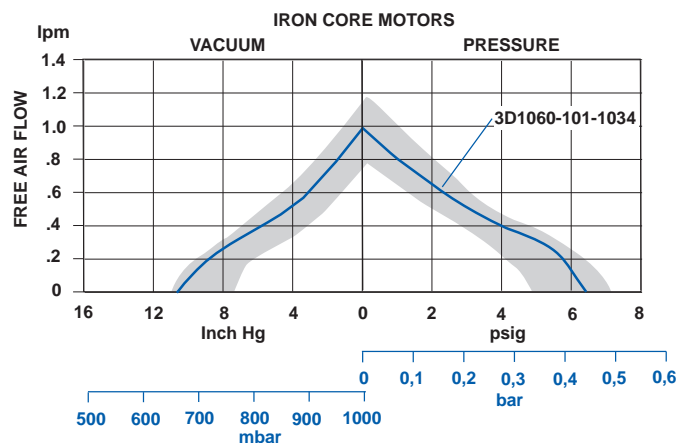
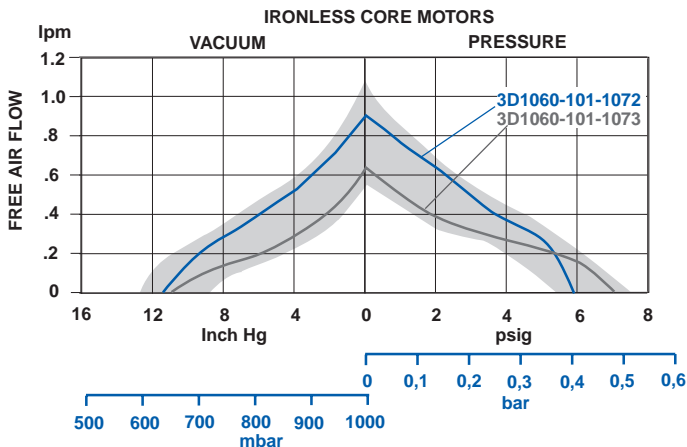
### Product Specifications

Model Number	Milliamps at Nominal Voltage	Potential Operating Voltage Range	Net Wt.	
			oz.	g.
3D1060-101-1072*	30-60	6V DC	.56	16
3D1060-101-1073*	15-40	12V DC	.56	16
3D1060-101-1034**	90-130	6V DC	.56	16

\* Ironless core motor \*\* Iron core motor

### Product Performance (Metric, U.S.)

Note: The 3D performance is based on test results of nominal units. Solid lines show standard performance of models in the chart. Shaded area represents capabilities when models are customized for specific requirements. Please consult factory for customized models.

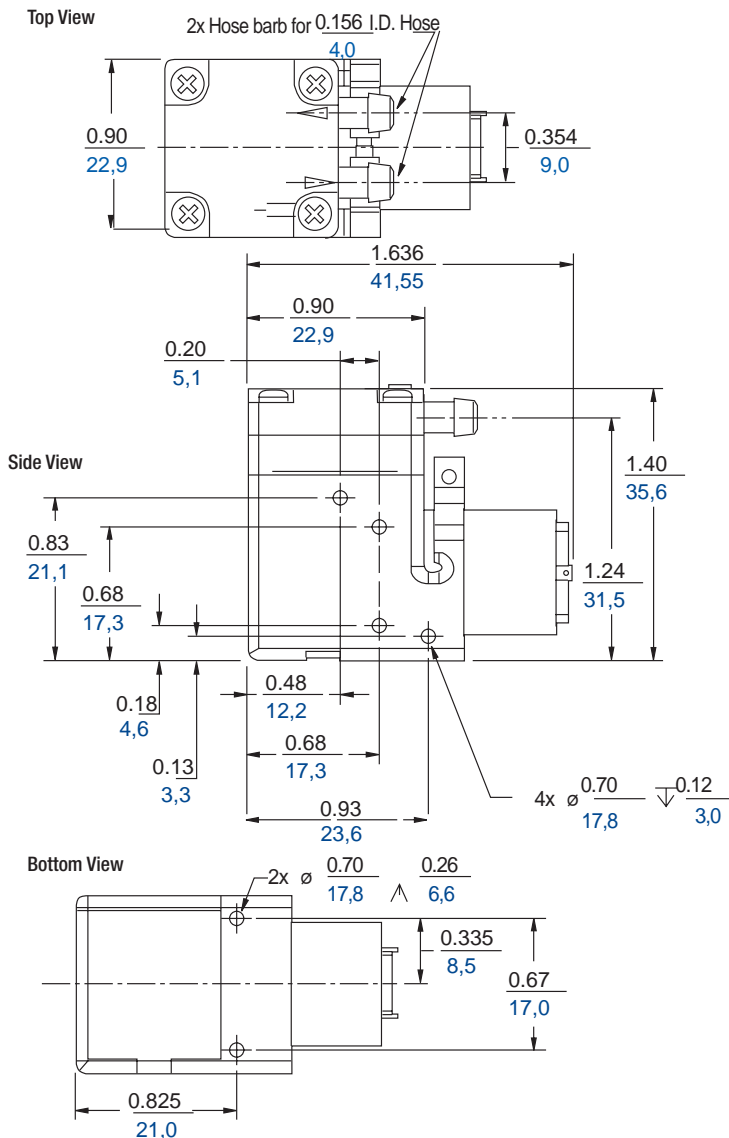




Single head model pictured.  
Also available in twin head style.

inches/mm

**SINGLE HEAD** 5D1060-101-1030, 5D1060-101-1073, 5D1060-102-1034



## Miniature Diaphragm 5D1060/ 5D1070 Series

**IRONLESS CORE MOTOR (DC) SINGLE HEAD**  
11 PSI MAX. PRESSURE, 13" HG MAX. VACUUM,  
.95 LPM OPEN FLOW

**IRON CORE MOTOR (DC) SINGLE HEAD**  
8.5 PSI MAX. PRESSURE, 11" HG MAX. VACUUM,  
1.5 LPM OPEN FLOW

**IRONLESS CORE MOTOR (DC) TWIN HEAD**  
5 PSI MAX. PRESSURE, 16/22" HG MAX. VACUUM\*,  
1.6/2.6 LPM OPEN FLOW\*

### PRODUCT FEATURES

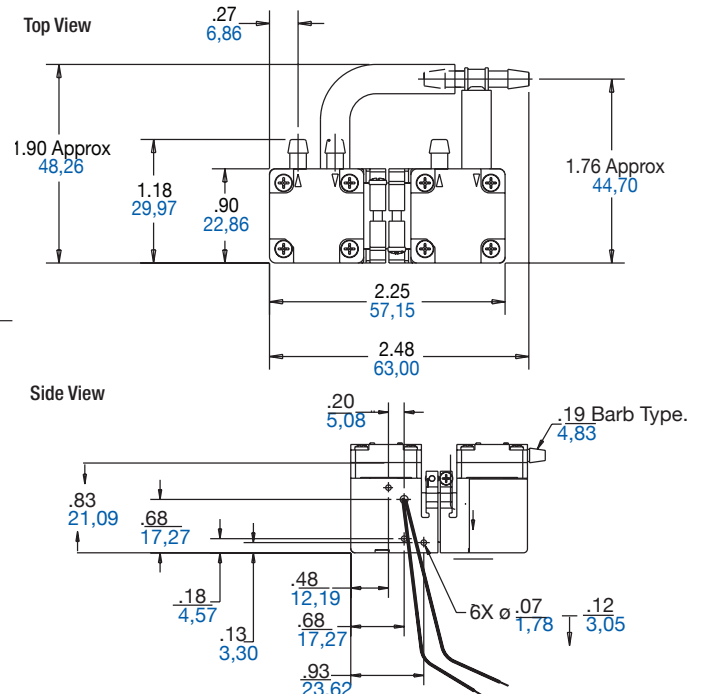
- Can be used as compressor or vacuum pump (same model)
- Can be mounted in any plane
- Diaphragm and valve are easily field serviceable, if required
- Custom mounting configurations available
- Head mounts in any of four positions
- Consult factory for voltage/stroke options

### MATERIALS OF CONSTRUCTION

- Chemically resistant PPS (Polyphenylene Sulfide) head assembly
- EPDM (Ethylene Propylene Diene Monomer) valve and diaphragm

staged/parallel vacuum configuration chart on page 7

### TWIN HEAD 5D6070-101-1076





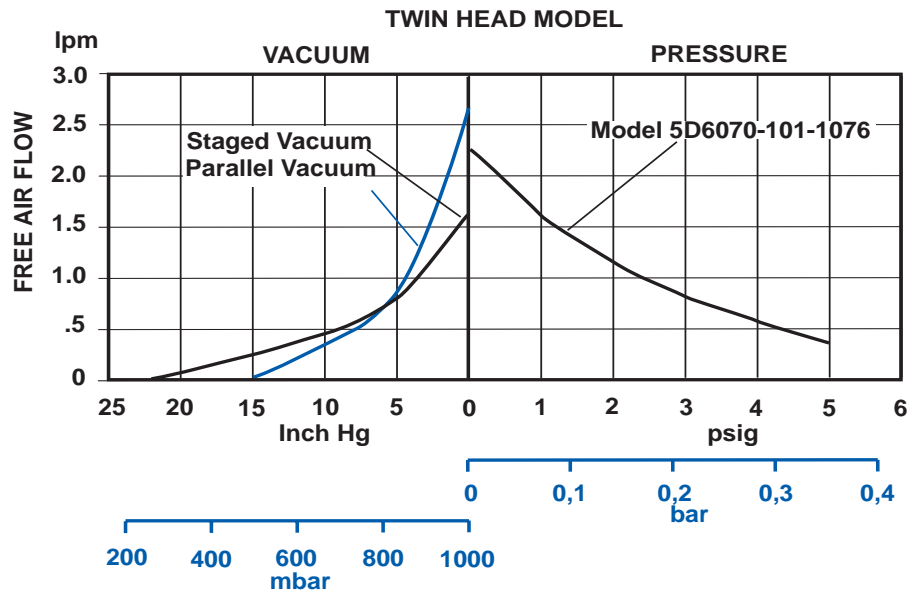
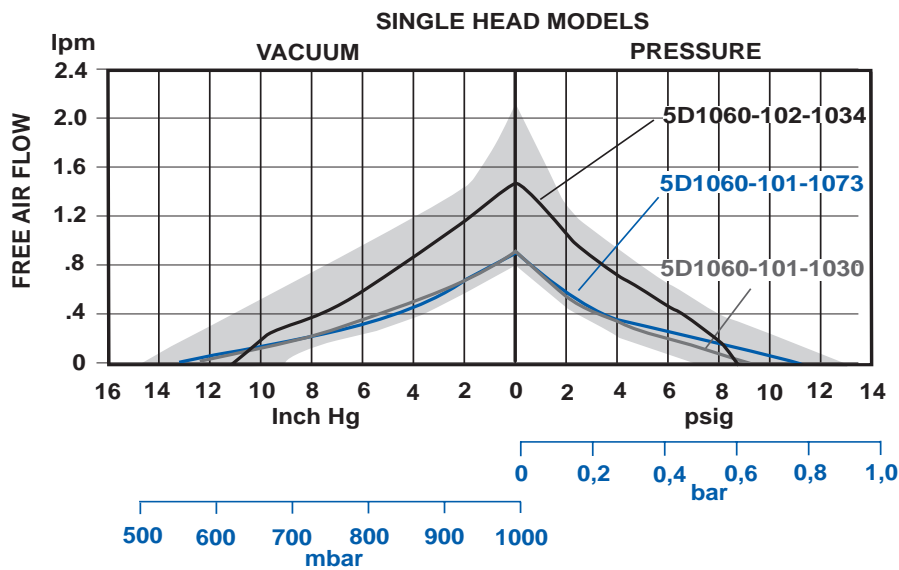
## Product Specifications

Model Number	Milliamps at Nominal Voltage	Potential Operating Voltage Range	Net Wt.	
			oz.	g.
5D1060-101-1030*	15-60	12V DC	1.5	42,5
5D1060-102-1034**	90-200	6V DC	1.5	42,5
5D1060-101-1073*	20-50	12V DC	1.5	42,5
5D6070-101-1076*†	60-160	6V DC	2.0	56.7

\* Ironless core motor \*\* Iron core motor † Twin head model

## Product Performance (Metric, U.S.)

Note: The 5D performance is based on test results of nominal units. Solid lines show standard performance of models in the chart. Shaded area represents capabilities when models are customized for specific requirements. Please consult factory for customized models.







## Miniature Diaphragm 10D1110/10D1125 Series

### AC MOTOR

15 PSI MAX. PRESSURE, 15" HG MAX. VACUUM  
3.8 LPM OPEN FLOW

### DC MOTOR

15 PSI MAX. PRESSURE, 14" HG MAX. VACUUM  
4.3 LPM OPEN FLOW



DC Model



AC Model

### PRODUCT FEATURES

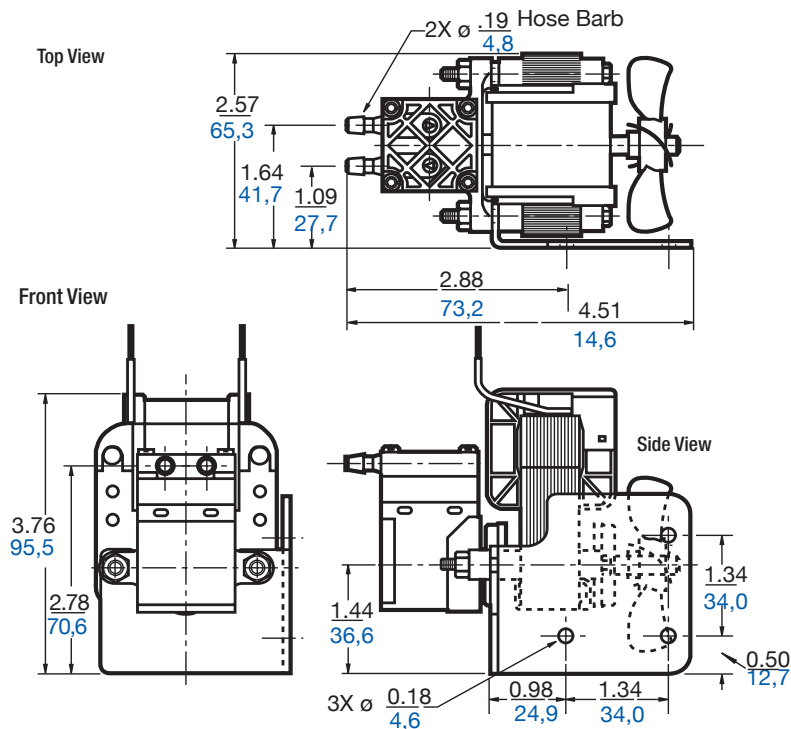
- Use as compressor or vacuum pump (same model)
- Mount in any plane
- Maintenance-free ball bearings are sized for long life
- Diaphragm and valve are easily field serviceable, if required
- Alternate stroke options available
- Custom mounting configurations available
- Heads mount in any of four positions
- Heads available with threaded or barbed ports
- Motor equipped with Electromagnetic Interference (EMI) Suppression

### MATERIALS OF CONSTRUCTION

- Head assembly of chemical/heat resistant PPS (Polyphenylene Sulfide) for corrosion resistance
- EPDM (Ethylene Propylene Diene Monomer) valve and diaphragm

inches/mm

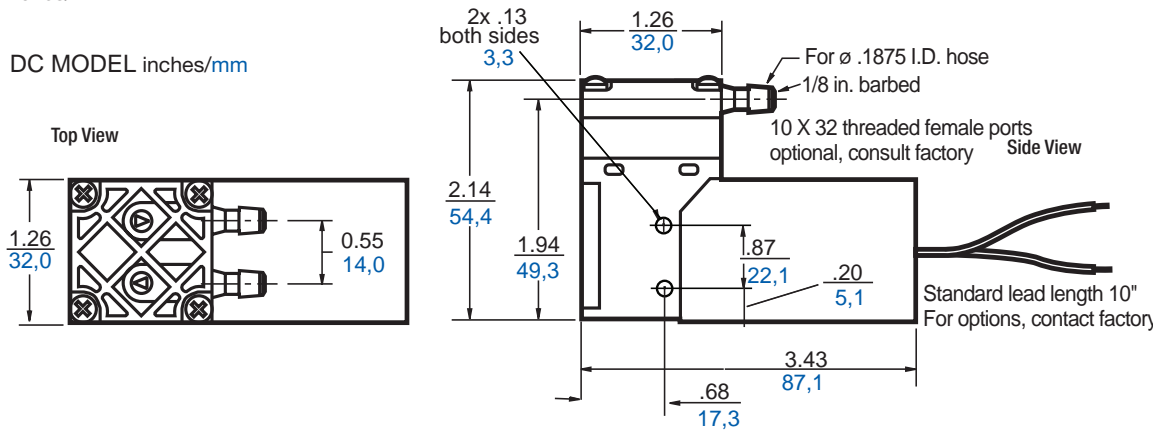
### AC MODELS





inches/mm

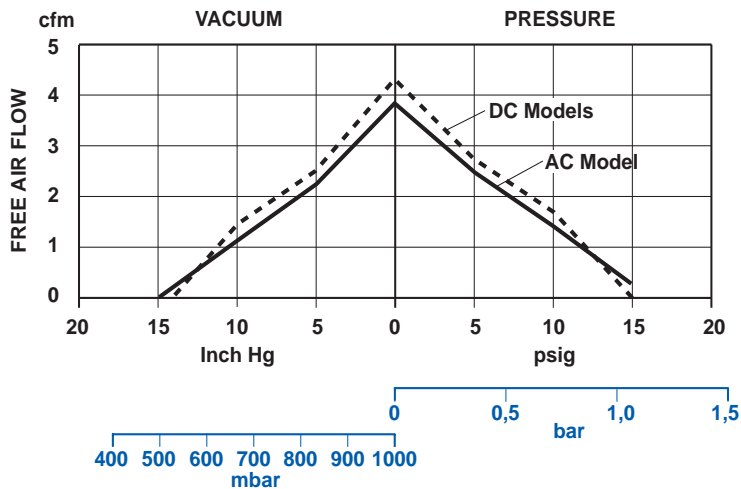
DC MODEL inches/mm

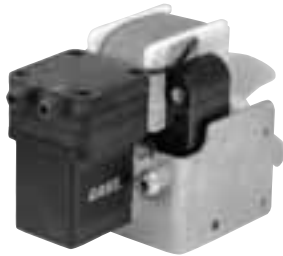


### Product Specifications

Model Number	Motor	Max. Amp. Draw	Net Wt.	
			lbs.	kg.
10D1125-101-1051	6V DC	1	.5	0,23
10D1125-101-1052	12V DC	.5	.5	0,23
10D1125-101-1053	24V DC	.3	.5	0,23
10D1110-101-1043	115-60-1	.6	1.85	0,83

Product Performance (Metric, U.S.) Note: DC performance data taken at nominal voltage.





AC Models



DC Models

## Miniature Diaphragm 15D 1150 Series

### DC MOTOR

20 PSI MAX. PRESSURE, 20" HG MAX. VACUUM  
7.0 LPM OPEN FLOW

### AC MOTOR

25 PSI MAX. PRESSURE, 20" HG MAX. VACUUM  
7.0 LPM OPEN FLOW

### PRODUCT FEATURES

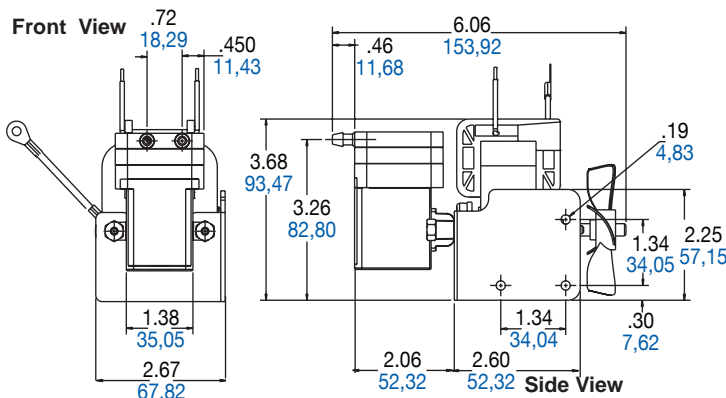
- Flow-enhanced design meets compressed air/vacuum demand
- Easy-install design can be mounted on any plane
- Oversized ball bearings ensure maintenance-free operation
- Robust valve design tolerant of small amounts of intake liquid
- Field serviceable diaphragm/valve designs: K813 (EPDM) Ethylene Propylene Diene Monomer, K813A (Neoprene)

### MATERIALS OF CONSTRUCTION

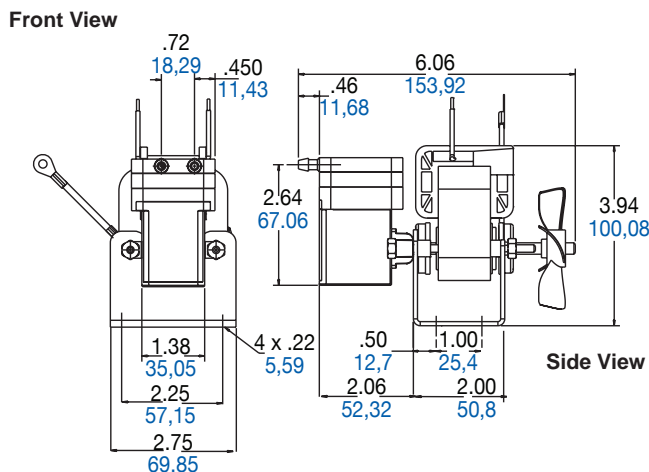
- Heat/chemical resistant Polyphenylene Sulfide (PPS) head assembly for greater corrosion resistance
- Ethylene Propylene Diene Monomer (EPDM) diaphragm, Ethylene Propylene Diene Monomer (EPDM) valve assembly. Neoprene diaphragm, neoprene valve assembly. 100 Series models are Ethylene Propylene Diene Monomer (EPDM), 200 Series models are Neoprene.

inches/mm

#### AC Units Schematic A (Right Angle Foot Bracket)

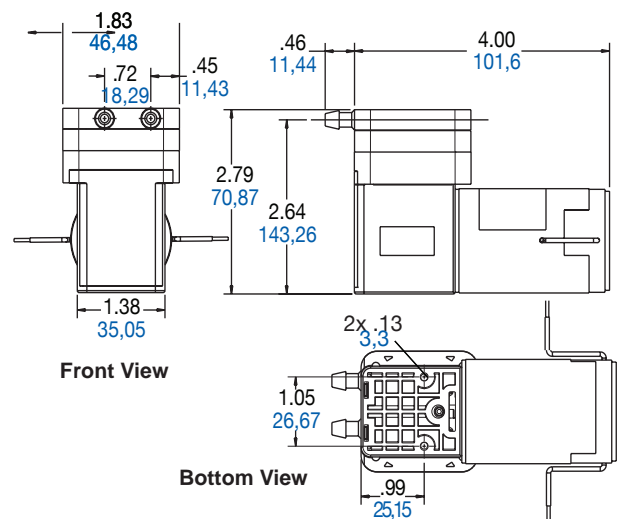


#### AC Units Schematic B (U-Shaped Foot Bracket)



DC Units

Side View



Note: Use #2 @Plastite Thread Forming Screw 3/16" I.D.

Tube Hose Best Fit

@Plastite is a registered trademark of REMINC

(RESEARCH ENGINEERING & MANUFACTURING)



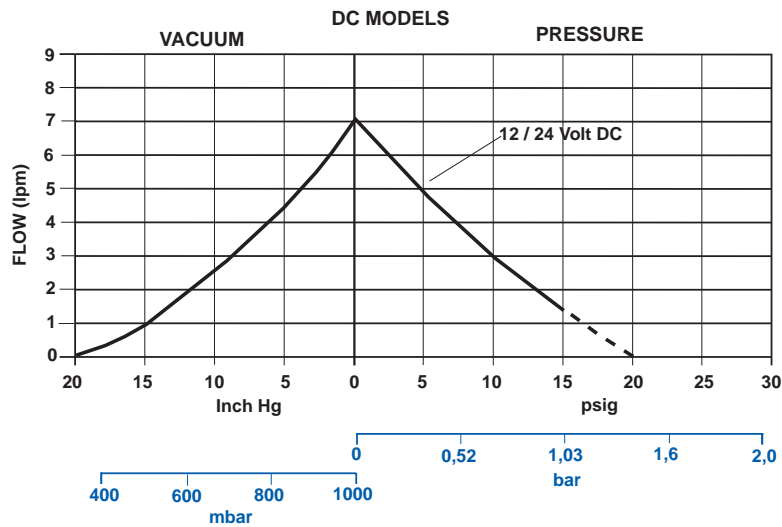
## Product Specifications

Model Number	Motor	Maximum Amp Draw		Net Weight		Diaphragm Material
		60 HZ	50 HZ	lbs./oz.	g./kg.	
15D1150-101-1006	12 V DC	1.2		14 oz.	397 g.	EPDM
15D1150-201-1006	12 V DC	1.2		14 oz.	397 g.	Neoprene
15D1150-101-1014	24 V DC	.6		14 oz.	397 g.	EPDM
15D1150-201-1014	24 V DC	.6		14 oz.	397 g.	Neoprene
15D1150-101-1012**	100-115-60/50-1	.9	.5	2.5 lbs.	1,14 kg.	EPDM
15D1150-102-1012*	100-115-60/50-1	.9	.5	2.5 lbs.	1,14 kg.	EPDM
15D1150-201-1012**	100-115-60/50-1	.9	.5	2.5 lbs.	1,14 kg.	Neoprene
15D1150-101-1021**	230-60/50-1	.9	.5	2.5 lbs.	1,14 kg.	EPDM
15D1150-202-1021*	230-60/50-1	.9	.5	2.5 lbs.	1,14 kg.	Neoprene

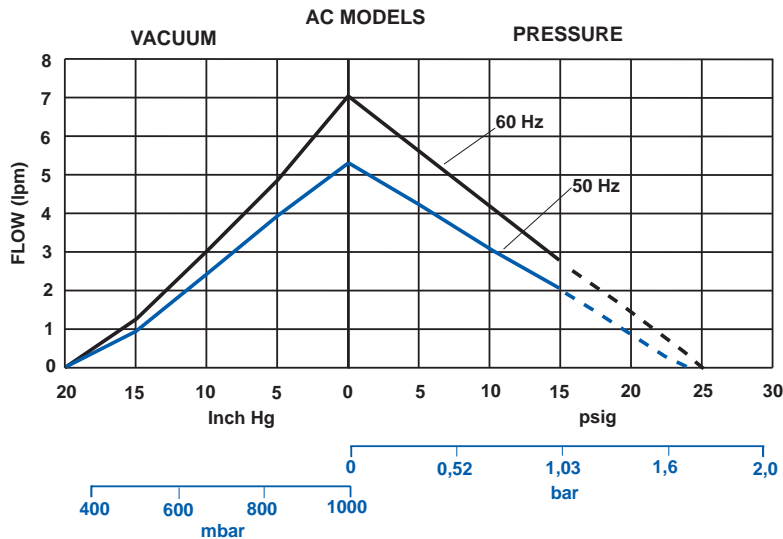
\* Standard right angle foot bracket see schematic A  
 \*\* Optional U-Shaped foot bracket see schematic B

**Note: The above units are not EU RoHS**

## Product Performance (Metric, U.S.)

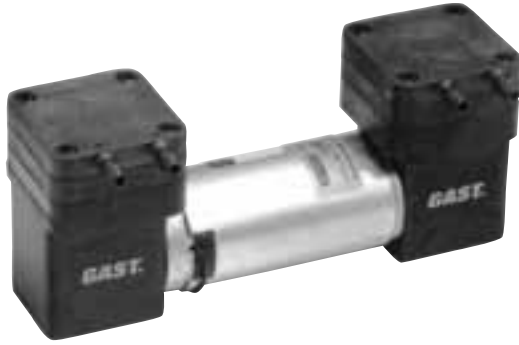


Dashed Line Indicates Intermittent Duty



Dashed Line Indicates Intermittent Duty





## Miniature Diaphragm Twin 15D 5150/7150 Series

### DC MOTOR

25 PSI MAX. PRESSURE\*, 13.0 LPM OPEN FLOW  
26" HG MAX. VACUUM, 6.0 LPM OPEN FLOW

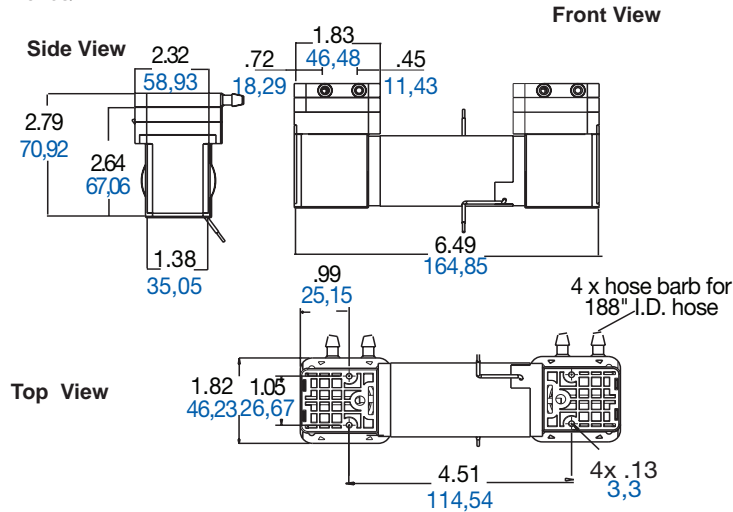
### PRODUCT FEATURES

- Flow-enhanced design meets compressed air/vacuum demand
- Ultra quiet noise level down to 45dB(A)
- Easy-install design can be mounted on any plane
- Oversized ball bearings ensure maintenance-free operation
- Robust valve design tolerant of small amounts of intake liquid
- Field serviceable diaphragm/valve designs: K813 EPDM (Ethylene Propylene Diene Monomer) & K813A (Neoprene)

### MATERIALS OF CONSTRUCTION

- Heat/chemical resistant Polyphenylene Sulfide (PPS) head assembly for greater corrosion resistance
- EPDM (Ethylene Propylene Diene Monomer) diaphragm, EPDM, (Ethylene Propylene Diene Monomer) valve assembly (standard) Neoprene diaphragm, neoprene valve assembly (optional) 100 Series models are EPDM (Ethylene Propylene Diene Monomer), 200 Series models are Neoprene

inches/mm



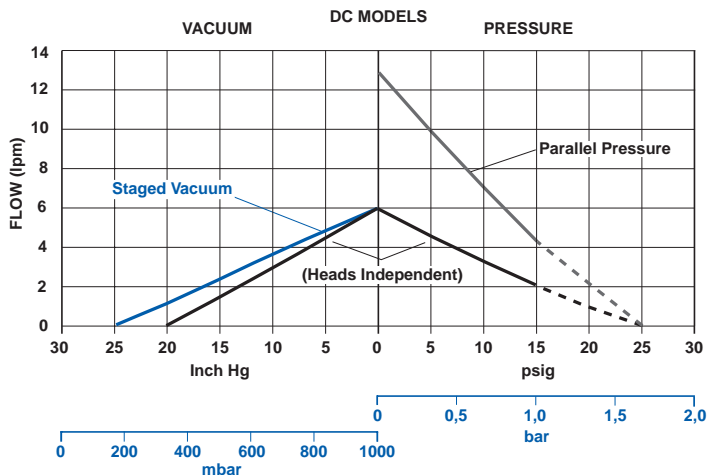
Note: Use #6 @Plastite Thread Forming Screw  
 @Plastite is a registered trademark of REMINC  
 (RESEACH ENGINEERING & MANUFACTURING INC.)

### Product Specifications

Model Number	Motor	Maximum Amp Draw	Net Wt.		Diaphragm Material
			oz.	kg.	
15D5150-101-1039*	12 V DC	1.2	42.5	0,64	EPDM
15D5150-201-1039*	12 V DC	1.2	42.5	0,64	Neoprene
15D7150-101-1039+	12 V DC	1.5	42.5	0,64	EPDM

\* Staged vacuum models - shipped with tubing connected to ports  
 + Independent models - provided with one head as vacuum and one head as pressure

### Product Performance (Metric, U.S.)





inches/mm

## Miniature Diaphragm 22D1180 DC Series

### DC MOTOR

25 PSI MAX. PRESSURE, 22.5" HG MAX. VACUUM  
26.8 LPM OPEN FLOW

### PRODUCT FEATURES

- Permanently lubricated ball bearings on rod and motor drive bearing
- Rear sleeve bearing (1002, 1005 models have ball bearing for higher pressure)
- Field service capability
- Includes AJ988 filter assembly, unattached

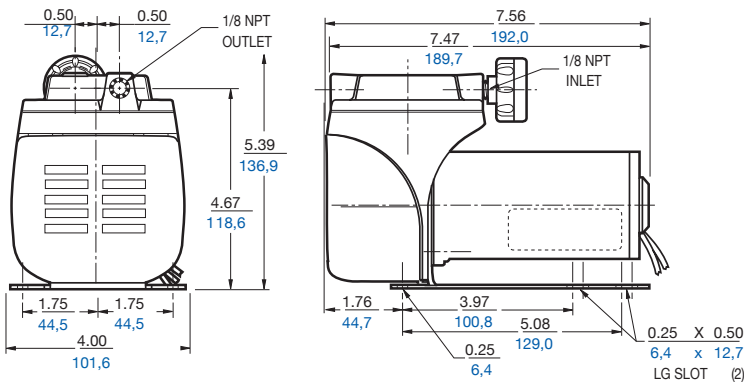
### MATERIALS OF CONSTRUCTION

- Head assembly and bracket made of Polyphenylene Sulfide (PPS) for excellent chemical & heat resistance
- Stainless steel valves
- Neoprene/nylon diaphragm standard
- Other diaphragm materials available

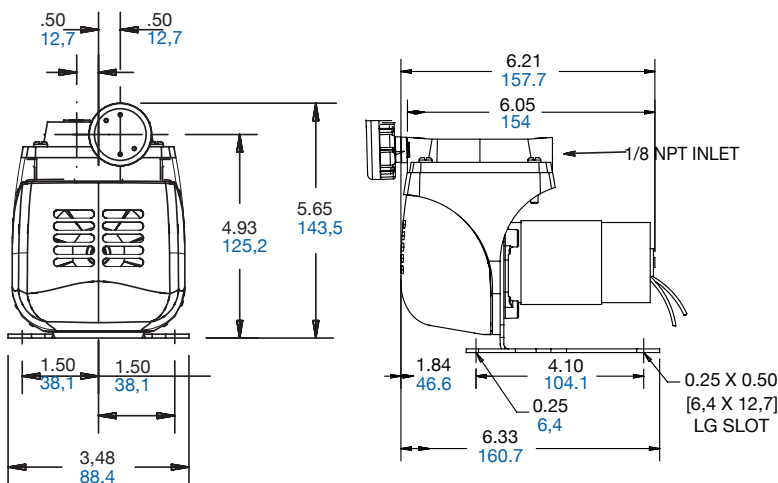
### RECOMMENDED ACCESSORIES

- AA640 Vacuum gauge
- AA204 Vacuum relief valve
- AA644B Pressure gauge
- AA203 Pressure relief valve
- AF584A Rubber feet (3)
- B300Q Muffler/filter (high capacity; to be used in dirty environments or when superior noise reduction is required)

22D1180-201-1002, 22D1180-201-1005, \*22D1180-205-1002 \*22D1180-202-1005  
\*Ports in opposite positions to the below diagrams



22D1180-201-1088



Shown with attached filter/muffler

12V & 24V units have the shorter 3.97" mtg foot dimension.  
24V units also have the longer 5.08" mtg foot dimension.

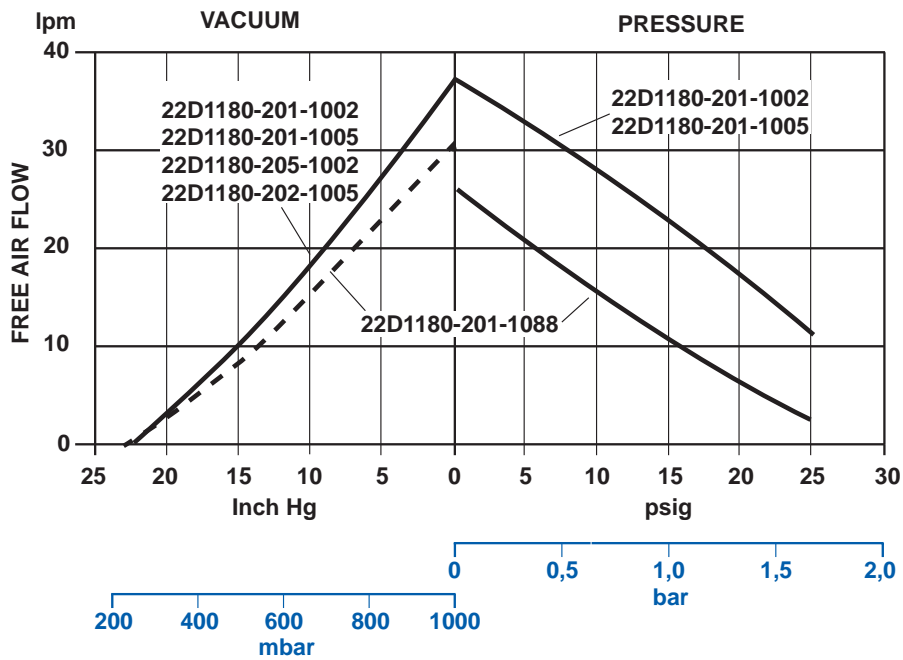


### Product Specifications

Model Number	Motor	RPM	Running Amps	HP	kw	Net Wt.	
						lbs.	kg.
22D1180-201-1088	12V DC	3000	3.6	1/20	0,04	2.7	1,22
22D1180-201-1002	12V DC	3200	6.2	1/8	0,09	4.9	2,21
22D1180-201-1005	24V DC	3200	3.5	1/8	0,09	4.9	2,21
*22D1180-205-1002	12V DC	3200	6,2	1/8	0,09	4.9	2,21
*22D1180-202-1005	24V DC	3200	3,5	1/8	0,09	4.9	2,21

\*Ports in opposite positions to the diagrams on the previous page.

### Product Performance (Metric, U.S.)





## Miniature Diaphragm 22D1180 Series

### SHADED POLE MOTOR

20 PSI CONTINUOUS PRESSURE (25 PSI INTER.)  
22" HG MAX. VACUUM, 18.7 LPM OPEN FLOW (60Hz)

### PSC MOTOR

25 PSI MAX. PRESSURE, 23" HG MAX. VACUUM  
26.3 LPM OPEN FLOW (60Hz)

### PRODUCT FEATURES

- Permanently lubricated ball bearings on rod and motor drive bearing
- Rear sleeve bearing (DC 1002, 1005 models have ball bearing for higher pressure)
- Field service capability
- PSC models include attached capacitor
- Includes AJ988 filter assembly, unattached

### MATERIALS OF CONSTRUCTION

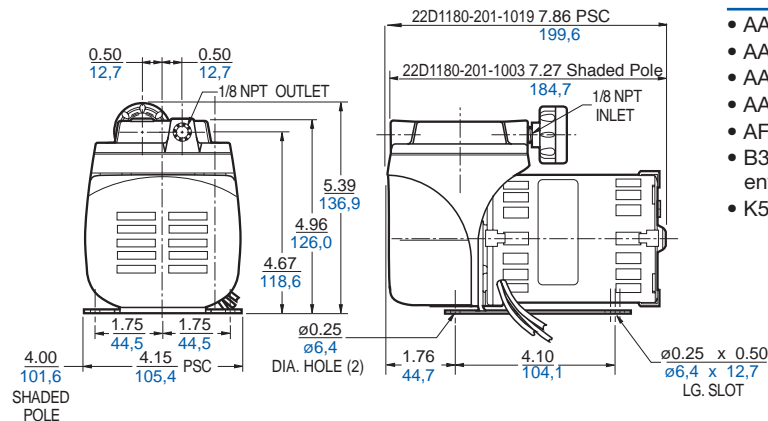
- Head assembly and bracket made of Polyphenylene Sulfide (PPS) for excellent chemical and heat resistance
- Stainless steel valves
- Neoprene/nylon diaphragm standard
- Other diaphragm materials available

### RECOMMENDED ACCESSORIES

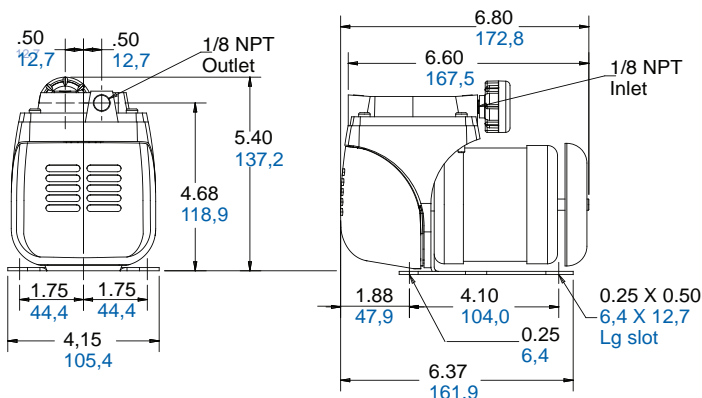
- AA640 Vacuum gauge
- AA204 Vacuum relief valve
- AA644B Pressure gauge
- AA203 Pressure relief valve
- AF584A Rubber feet (3)
- B300Q Muffler/filter (high capacity; to be used in dirty environments or when superior noise reduction is required)
- K588 Service Kit Assembled Head

inches/mm

22D1180-201-1003, 22D1180-201-1019 Shown with attached filter/muffler



22D1180-201-1087 Shown with attached filter/muffler







## Product Specifications

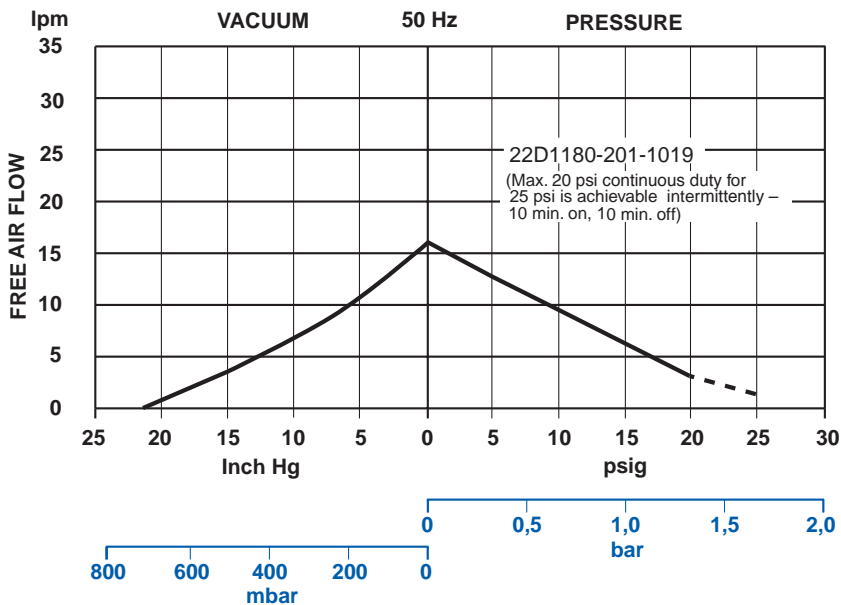
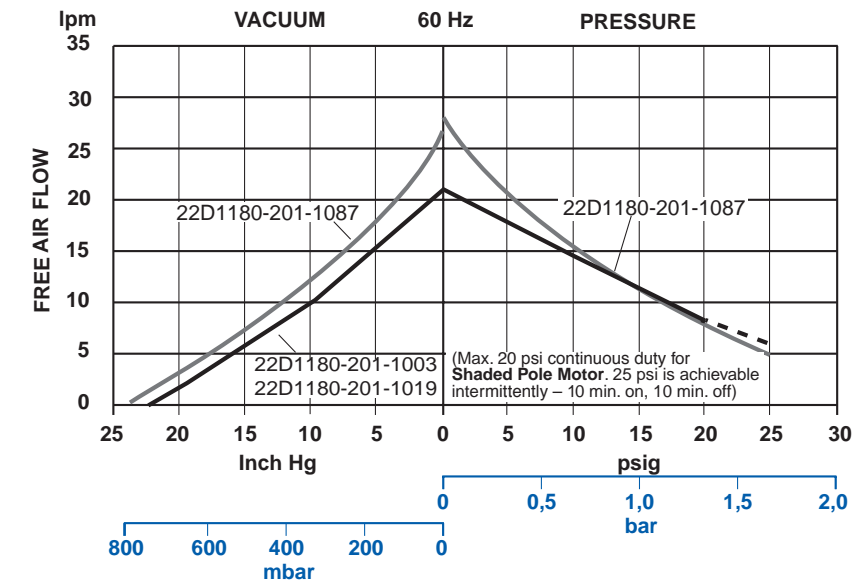
Model Number	Motor	RPM	Running Amps	HP	kw	Net Wt.	
						lbs.	kg
22D1180-201-1003	*115-60-1	1725	1.6	1/20	0,04	4.8	2,16
† 22D1180-201-1019	PSC 230-50/60-1	1725	0.8	1/20	0,04	5.5	2,48
22D1180-201-1087	PSC 115-60-1	1725	0.5	1/20	0,04	5.1	2,31

\*Shaded Pole

†@60 Hz – 50 Hz is 1425 RPM

## Product Performance (Metric, U.S.)

Metric, AC model shows 60 Hz performance.





## Here's why you can count on 60 psi (4,2 bar), 29" Hg (31 mbar)

Our connecting rod is bonded to its bearing - not clamped as in lighter duty pumps. In all pumps except our Miniatures we use larger bearings. So with a Gast unit, you get greater strength and durability where work loads are greatest.

## Easy maintenance.

When you need to change air filters, it's just a 60-second screwdriver job to get inside.

Putting the head assembly back together is no problem either. The fasteners are made in non-symmetrical patterns. So the only way the head goes together is the right way

## Cooler air output.

Even at maximum duty, output air is cool and oil-free. As ambient air enters and leaves the head, it never goes near the motor to pick up heat and foreign matter. Cooler temperatures add to overall efficiency and service life.



## Variety of electric motor

Gast diaphragm pumps are available in a wide range of popular voltages and frequencies. Motor types range from economical shaded pole to more efficient permanent split capacitor (PSC) which can also provide improved starting characteristics for certain applications. Two and four pole motors are also available.

## Typical Applications

- Portable Dental Equipment
- Aspirators/Suction Units
- Sterilizers/Autoclaves
- Air & Water Sampling
- Water Purification Systems
- Pond Aeration
- Automotive Emissions Testing
- Food Processing
- Graphic Arts Equipment

- AC and DC Models
- Low noise, low vibration
- Compact, lightweight
- Oilless
- Motor-Mounted

## Oilless, Motor-Mounted to 3.8 cfm, 60 psi and 29.0 hg.

Model Number	Motor Voltage & HP	Motor Type	RPM		CFM @ 0 psi		m <sup>3</sup> /h @ 0 bar		Maximum Pressure		Maximum Vacuum		kW	Page Number
			60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	psi	bar	"hg	mbar		
MOA-P101-AA	1/16, 115-60-1	Shaded pole	1575	-----	0.51	-----	0.85	-----	50	3.5	-----	-----	0.05	17
MOA-P101-CA	1/16, 115-60-1	Shaded pole	1575	-----	0.52	0.40	0.86	0.67	50	3.5			0.05	17
MOA-P101-CD	1/16,220/230-50/60-1	Shaded pole	1575	1275	0.51	0.40	0.85	0.68	50	3.5			0.05	17
MOA-P101-JH	1/16, 12 Volt	DC		1800	0.56	0.95	30	3.5			0.05	17		
MOA-P101-KH	1/8, 12 Volt	DC		3000	0.80	1.36	50	3.5			0.09	17		
MOA-P101-JK	1/16, 24 Volt	DC		1800	0.56	0.95	50	3.5			0.05	17		
MOA-P108-FB	1/8, 110/115-50/60-1	PSC (2 pole)	3000	2500	0.80	0.65	1.40	1.10	50	3.5			0.09	17
MOA-P108-FD	1/8, 220/230-50/60-1	PSC (2 pole)	3000	2500	0.80	0.65	1.40	1.10	50	3.5			0.09	17
MOA-P108-HB	1/16, 110/115-50/60-1	PSC (4 pole)	1575	1275	0.52	0.40	0.86	0.67	50	3.5			0.05	17
MOA-P108-HD	1/16, 230/220-60/50-1	PSC	1575	1275	0.52	0.40	0.86	0.67	50	3.5			0.05	17
MOA-P109-AA	1/16, 115-60-1	Shaded pole			0.52	0.40	0.86	0.67	50	3.5			0.05	17
MOA-P109-CA	1/16, 115-60-1	Shaded pole	1575	-----	0.52	0.40	0.86	0.67	50	3.5			0.05	17
MOA-V111-JH	1/16, 12 Volt	DC		1800	0.56	0.95			24.0	812.64	0.05	17		
MOA-V111-KH	1/8, 12 Volt	DC		3000	0.80	1.36			24.0	812.64	0.09	17		
MOA-V111-JK	1/16, 24 Volt	DC		1800	0.56	0.95			24.0	812.64	0.05	17		
MOA-V111-CD	1/16, 220/230-50/60-1	Shaded pole	1575	1275	0.49	0.40	0.83	0.68			24.0	812.64	0.05	17
MOA-V112-AE	1/16, 110/115-50/60-1	Shaded pole	1575	1275	0.49	0.40	0.83	0.68			24.0	812.64	0.05	17
MOA-V112-FB	1/8, 110/115-50/60-1	PSC (2 pole)	3000	2500	0.72	0.60	1.22	1.02			24.0	812.64	0.09	17
MOA-V112-FD	1/8, 220/230-50/60-1	PSC (2 pole)	3000	2500	0.72	0.60	1.22	1.02			24.0	812.64	0.09	17
MOA-V113-AE	1/16, 110/115-50/60-1	Shaded pole	1575	1275	0.49	0.40	0.83	0.68			24.0	812.64	0.05	17
MAA-P102-HB	1/16, 115/110-60/50-1	PSC (4 pole)	1575	1275	1.02	0.90	1.73	1.53	50	3.5			0.05	19
MAA-P102-HD	1/16,220/230-50/60-1	PSC (4 pole)	1575	1275	1.02	0.90	1.73	1.53	50	3.5			0.05	19



Model Number	Motor Voltage & HP	Motor Type	RPM		CFM @ 0 psi		m <sup>3</sup> /h @ 0 bar		Maximum Pressure		Maximum Vacuum		kW	Page Number
			60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	psi	bar	"Hg	mbar		
MAA-P102-MB	1/8, 115/110-60/50-1	PSC 2 pole	3000	2500	1.60	1.40	2.72	2.38	50	3.5			0.09	19
MAA-V103-HB	1/16, 115/110-60/50-1	PSC 4 pole	1575	1275	1.02	0.85	1.73	1.45			24.0	812.64	0.05	19
MAA-V103-MB	1/8, 115/110-60/50-1	PSC 2 pole	3000	2500	1.70	1.60	2.89	2.72			24.0	812.64	0.09	19
MAA-V109-HB	1/16, 115/110-60/50-1	PSC 4 pole	1575	1275	0.47	0.39	0.80	0.66			28.0	948.08	0.05	19
MAA-V109-HD	1/16, 220/230-60/50-1	PSC (4 pole)	1575	1275	0.47	0.39	0.80	0.66			28.0	948.08	0.05	19
MAA-V109-MB	1/8, 115/110-60/50-1	PSC (2 pole)	3000	2500	0.80	0.66	1.36	1.12			28.5	965.01	0.09	19
MAA-V109-MD	1/8, 208-230/220-240-60/50-1	PSC (2 pole)	3000	2500	0.80	0.66	1.36	1.12			28.5	965.01	0.09	19
DOA-P701-AA	1/8, 115-60-1	Shaded pole	1575	-----	1.10	-----	1.87	-----	60	4.2			0.09	21
DOA-P704-AA	1/8, 115-60-1	Shaded pole	1575	-----	1.10	-----	1.87	-----	60	4.2			0.09	26
DOA-P504-BN	1/8, 220/240-50-1	Shaded pole	-----	1275	-----	1.10	-----	1.87	60	4.2			0.09	26
DOA-P703-AA	1/8, 115-60-1	Shaded pole	1575	-----	1.10	-----	1.87	-----	60	4.2			0.09	21
DOA-P701-AC	1/8, 230-60-1	Shaded pole	1575	-----	1.10	-----	1.87	-----	60	4.2			0.09	21
DOA-P501-BN	1/8, 220/240-50-1	Shaded pole	-----	1275	-----	0.90	-----	1.53	60	4.2			0.09	21
DOA-P509-BN	1/8, 220/240-50-1	Shaded pole	-----	1275	-----	0.90	-----	1.53	60	4.2			0.09	21
DOA-P501-DB	1/8, 115/110-60/50-1	PSC (4 pole)	1575	1275	1.10	0.90	1.87	1.53	60	4.2			0.09	21
DOA-P501-DD	1/8, 230/220-60/50-1	PSC (4 pole)	1575	1275	1.10	0.90	1.87	1.53	60	4.2			0.09	21
DOA-P501-FB	1/3, 115/110-60/50-1	PSC (2 pole)	3000	2500	1.90	1.55	3.23	2.63	60	4.2			0.25	21
DOA-P703-FB	1/3, 115/110-60/50-1	PSC (2 pole)	3000	2500	1.90	1.55	3.23	2.63	60	4.2			0.25	21
DOA-P501-FD	1/3, 220/230-60/50-1	PSC (2 pole)	3000	2500	1.90	1.55	3.23	2.63	60	4.2			0.25	21
DOA-P518-FD	1/3, 220/230-60/50-1	PSC (2 pole)	3000	2500	1.90	1.55	3.23	2.63	60	4.2			0.25	21
DOA-P501-JH	1/8, 12 Volt	DC		2100		1.10	1.87	60	4.2		0.09	21		
DOA-P501-KH	1/6, 12 Volt	DC		3200		1.90	3.23	60	4.2		0.12	21		
DOA-P501-JK	1/8, 24 Volt	DC		2100		1.10	1.87	60	4.2		0.09	21		
DOA-V722-AA	1/8, 115-60-1	Shaded pole	1575	-----	1.10	-----	1.87	-----			25.5	863.43	0.09	21
DOA-V702-AC	1/8, 230-60-1	Shaded pole	1575	-----	1.10	-----	1.87	-----			25.5	863.43	0.09	21
DOA-V502-BN	1/8, 220/240-50-1	Shaded pole	-----	1275	-----	0.95	-----	1.62			25.5	863.43	0.09	21
DOA-V502-DB	1/8, 115/110-60/50-1	PSC (4 pole)	1575	1275	1.10	0.95	1.87	1.62			25.5	863.43	0.09	21
DOA-V502-DD	1/8, 230/220-60/50-1	PSC (4 pole)	1575	1275	1.10	0.95	1.87	1.62			25.5	863.43	0.09	21
DOA-V502A-FB	1/3, 110/115-60/50-1	PSC (2 pole)	3000	2500	1.80	1.50	3.06	2.55			25.5	863.43	0.25	21
DOA-V502A-FD	1/3, 220/230-60/50-1	PSC (2 pole)	3000	2500	1.80	1.50	3.96	2.55			25.5	863.43	0.25	21
DOA-V502-JH	1/8, 12 Volt	DC		2100		1.26		2.14		25.5	863.43	0.09	21	
DOA-V502-JK	1/8, 24 Volt	DC		2100		1.26		2.14		25.5	863.43	0.09	21	
DOL-701-AA	1/8, 115-60-1	Shaded pole	1575	-----	1.10	-----	2.14	-----	60	4.2	25.5	863.43	0.09	25
DOA-V505-BN	220/240-50-1	Shaded pole		1275	-----	0.95	-----	1.62			25.0	846.50	0.09	27
DOA-P701-DB	110/115-60/50-1	PSC motor	1575	1275	1.10	0.90	1.87	1.53	60	4.2	25.5	863.43	0.09	27
DAA-P501-EB	1/4, 110/115-60/50-1	PSC (4 pole)	1575	1275	2.40	1.90	4.08	3.23	60	4.2			0.19	23
DAA-P501-ED	1/4, 220/230-60/50-1	PSC (4 pole)	1575	1275	2.40	1.90	4.08	3.23	60	4.2			0.19	23
DAA-P517-ED	1/4, 220/230-60/50-1	PSC (4 pole)	1575	1275	2.40	1.90	4.08	3.23	60	4.2			0.19	23
DAA-P513-EG	1/4, 240-50-1	PSC 4 pole	-----	1275	-----	1.90	-----	3.23	60	4.2			0.19	23
DAA-P501-GB	1/2, 110/115-50/60-1	PSC 2 pole	3000	2500	3.80	3.25	6.46	5.52	60	4.2			0.37	23
DAA-P503-GB	1/2, 110/115-50/60-1	PSC 2 pole	3000	2500	3.80	3.25	6.46	5.52	60	4.2			0.37	23
DAA-P501-GD	1/2, 220/230-50/60-1	PSC (2 pole)	3000	2500	3.80	3.25	6.46	5.52	60	4.2			0.37	23
DAA-P503-GD	1/2, 220/230-50/60-1	PSC (2 pole)	3000	2500	3.80	3.25	6.46	5.52	60	4.2			0.37	23
DAA-P512-GD	1/2, 220/230-50/60-1	PSC (2 pole)	3000	2500	3.80	3.25	6.46	5.52	60	4.2			0.37	23
DAA-V505-EB	1/4, 110/115-50/60-1	PSC (4 pole)	1575	1275	2.20	1.80	3.74	3.06			25.5	863.43	0.19	23
DAA-V502-EB	1/4, 110/115-50/60-1	PSC (4 pole)	1575	1275	1.16	0.85	1.97	1.45			29.0	981.94	0.19	23
DAA-V505-ED	1/4, 220/230-50/60-1	PSC (4 pole)	1575	1275	2.20	1.80	3.74	3.06			25.5	863.43	0.19	23
DAA-V502-ED	1/4, 220/230-50/60-1	PSC (4 pole)	1575	1275	1.16	0.85	1.97	1.45			29.0	981.94	0.19	23
DAA-V510-EG	1/4, 240-50-1	PSC (4 pole)	-----	1275	-----	0.85	-----	1.45			29.0	981.94	0.19	23
DAA-V505-GB	1/2, 110/115-50/60-1	PSC (2 pole)	3000	2500	3.60	3.00	6.12	5.10			25.5	863.43	0.37	23
DAA-V507-GB	1/2, 110/115-50/60-1	PSC (2 pole)	3000	2500	1.95	1.40	3.32	2.38			29.0	981.94	0.37	23
DAA-V505-GD	1/2, 220/230-50/60-1	PSC (2 pole)	3000	2500	3.60	3.00	6.12	5.10			25.5	863.43	0.37	23
DAA-V507-GD	1/2, 220/230-50/60-1	PSC (2 pole)	3000	2500	1.95	1.40	3.32	2.38			29.0	981.94	0.37	23

CSA approved by Canadian Standards Association.  
cUR - UL recognized for use in Canada  
CE conforms to European Standards  
UL UR recognized.



## MOA SERIES

### PSC 4 POLE AC

50 PSI MAX. PRESSURE, 24" HG MAX. VACUUM,  
.52 CFM OPEN FLOW (60Hz)

### PSC 2 POLE AC

50 PSI MAX. PRESSURE, 24" HG MAX. VACUUM,  
.80 CFM OPEN FLOW (60Hz)

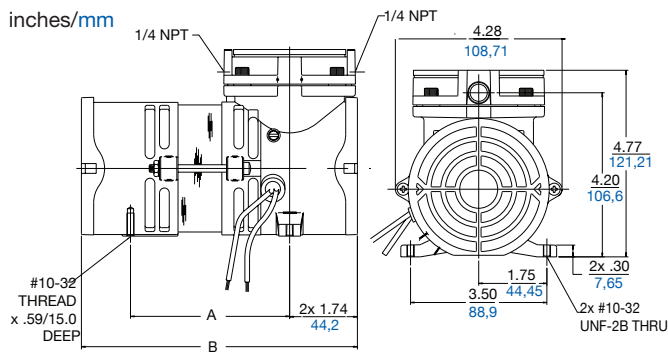
### DC LOW SPEED DC

50 PSI MAX. PRESSURE, 24" HG MAX. VACUUM,  
.56 CFM OPEN FLOW

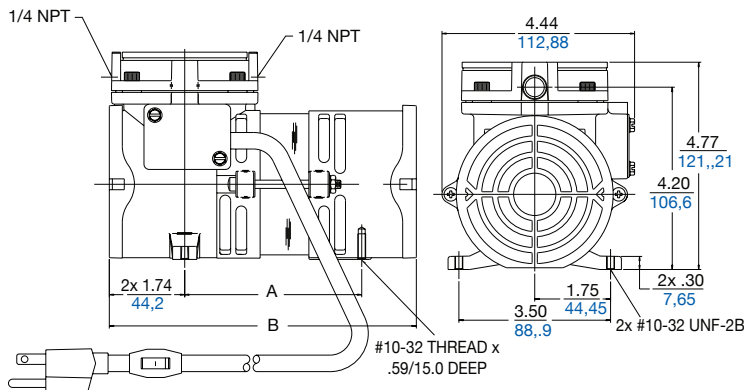
### HIGH SPEED DC

50 PSI MAX. PRESSURE, 24" HG MAX. VACUUM,  
.81 CFM OPEN FLOW

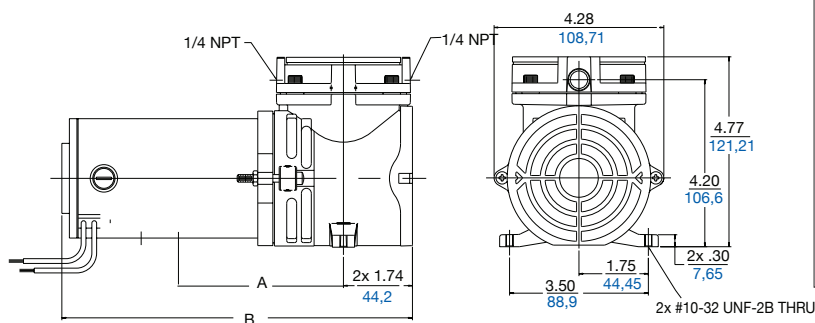
#### AC Models



#### AC Models (+ with electrical box)



#### DC Models



#### PRODUCT FEATURES

- Oilless operation
- Motor-mounted
- Rugged construction
- Low maintenance

#### INCLUDES

- Capacitors for PSC motors: AG331 (FB, HB and HD motors), AF873A (FD motor)

#### RECOMMENDED ACCESSORIES

- Pressure gauge AF583 / Vacuum gauge AA640
- Pressure relief valve AF887 / Vacuum relief valve AA550C-V
- Rubber feet AG505
- Repair Kit K309 for all diaphragm units but MOA-P109-AA, which uses Repair Kit K309A

	A Dimension		B Dimensions	
	Inches	mm	Inches	mm
MOA-P101-AA	4.09	103,89	7.09	180,09
+MOA-P109-AA	4.09	103,89	7.09	180,09
MOA-V112-AE	4.09	103,76	7.09	180,09
+MOA-V113-AE	4.09	103,89	7.09	180,09
MOA-P101-CA	4.59	116,59	7.59	192,79
+MOA-P109-CA	4.59	116,59	7.59	192,79
MOA-P101-CD	4.59	116,59	7.59	192,79
MOA-V111-CD	4.59	116,59	7.59	192,79
MOA-P108-FB	4.09	103,89	7.09	180,09
MOA-V112-FB	4.09	103,89	7.09	180,09
MOA-P108-FD	4.09	103,89	7.09	180,09
MOA-V112-FD	4.09	103,89	7.09	180,09
MOA-P108-HB	4.59	116,59	7.59	192,79
MOA-P108-HD	4.59	116,59	7.59	192,79
MOA-P101-JH	4.16	105,66	8,84	224,54
MOA-V111-JH	4.16	105,66	8,84	224,54
MOA-P101-JK	4.16	105,66	8,84	224,54
MOA-V111-JK	4.16	105,66	8,84	224,54
MOA-V111-KH	4.16	105,66	8,76	222,50
MOA-P101-KH	4.16	105,66	8,76	222,50

+ with electrical box





## Product Specifications

Model Number	Motor	Motor Type	RPM		HP	kW	Net Wt.		Regulatory
			60 Hz	50 Hz			lbs.	kg.	
MOA-P101-AA	115-60-1	Shaded Pole	1575	-----	1/16	0,05	5.63	2,56	cUR/CE
MOA-P101-CA	115-60-1	Shaded Pole	1575	-----	1/16	0,05	5.63	2,56	cUR
MOA-P101-CD	220/230-50/60-1	Shaded Pole	1575	1275	1/16	0,05	5.63	2,56	CSA/CE
MOA-P101-JH	12 Volt	DC		1800	1/16	0,05	5.63	2,56	CE
MOA-P101-KH	12 Volt	DC		3000	1/8	0,09	5.63	2,56	CE
MOA-P101-JK	24 Volt	DC		1800	1/16	0,05	5.63	2,56	CE
**MOA-P108-FB	110/115-50/60-1	PSC (2 Pole)	3000	2500	1/8	0,09	5.63	2,56	CE
**MOA-P108-FD	220/230-50/60-1	PSC (2 Pole)	3000	2500	1/8	0,09	5.63	2,56	CSA/CE
**MOA-P108-HB	110/115-50/60-1	PSC (4 Pole)	1575	1275	1/16	0,05	5.63	2,56	cUR/CE
**MOA-P108-HD	230/220-60/50-1	PSC	1575	1275	1/16	0,05	5.63	2,56	CSA/CE
*MOA-P109-AA	115-60-1	Shaded Pole	1575	-----	1/16	0,05	5.63	2,56	UR/CSA
*MOA-P109-CA	115-60-1	Shaded Pole	1575	-----	1/16	0,05	5.63	2,56	UR
MOA-V111-JH	12 Volt	DC		1800	1/16	0,05	5.63	2,56	
MOA-V111-KH	12 Volt	DC		3000	1/8	0,09	5.63	2,56	CE
MOA-V111-JK	24 Volt	DC		1800	1/16	0,05	5.63	2,56	CE
MOA-V111-CD	220/230-50/60-1	Shaded Pole	1575	1275	1/16	0,05	5.63	2,56	CSA/CE
MOA-V112-AE	110/115-50/60-1	Shaded Pole	1575	1275	1/16	0,05	5.63	2,56	CSA/CE
**MOA-V112-FB	110/115-50/60-1	PSC (2 Pole)	3000	2500	1/8	0,09	5.63	2,56	CSA
**MOA-V112-FD	220/230-50/60-1	PSC (2 Pole)	3000	2500	1/8	0,09	5.63	2,56	CSA/CE
*MOA-V113-AE	110/115-50/60-1	Shaded Pole	1575	1275	1/16	0,05	5.63	2,56	CSA

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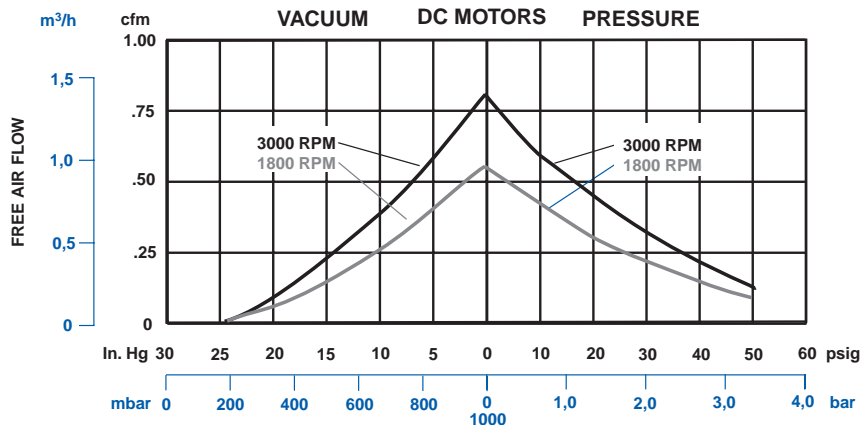
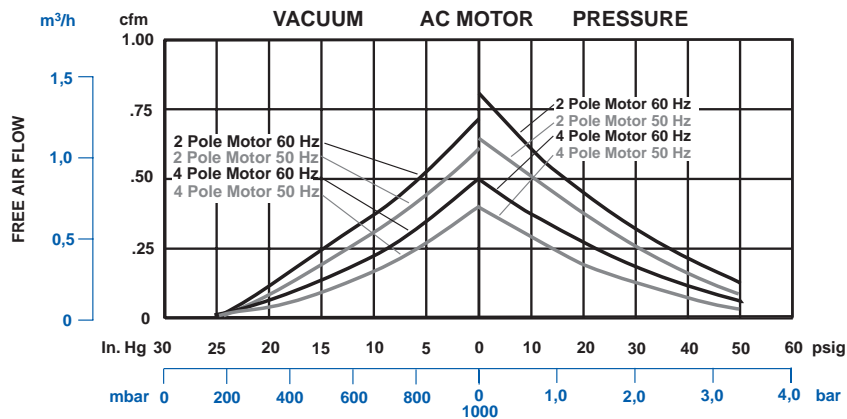
CE conforms to European Standards

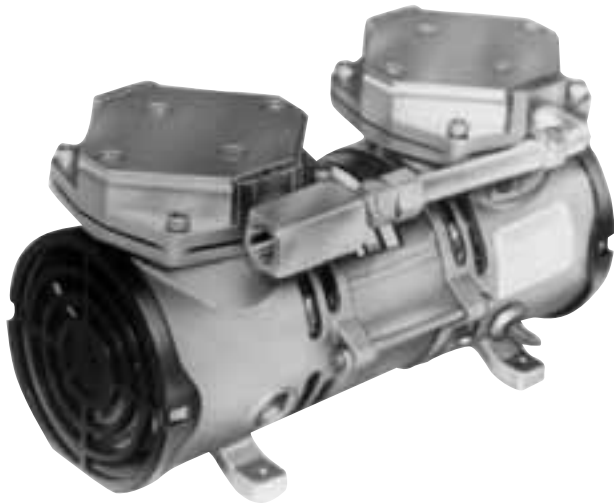
UL UR recognized.

\* Cord, switch & plug assembly

\*\*Capacitor shipped not attached

## Product Performance (Metric, U.S.)





## MAA SERIES

**PSC 4 POLE, SINGLE STAGE** 50 PSI  
MAX. PRESSURE, 1.03 CFM OPEN FLOW (60Hz)

**PSC 2 POLE, SINGLE STAGE** 50 PSI  
MAX. PRESSURE, 1.58 CFM OPEN FLOW (60Hz)

**PSC 4 POLE SINGLE STAGE**  
24" HG MAX. VACUUM 1.0 CFM OPEN FLOW (60Hz)

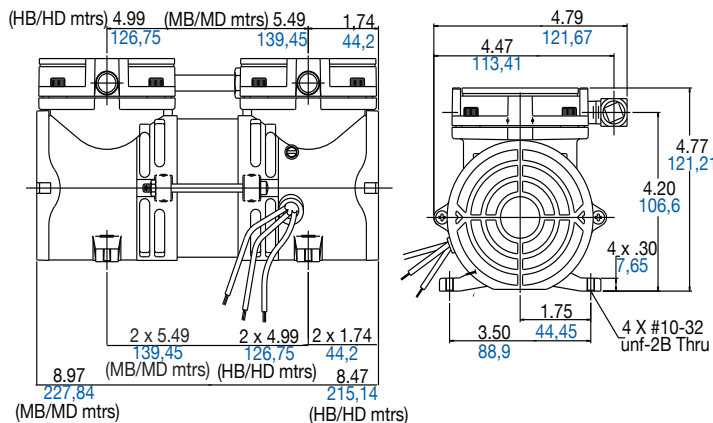
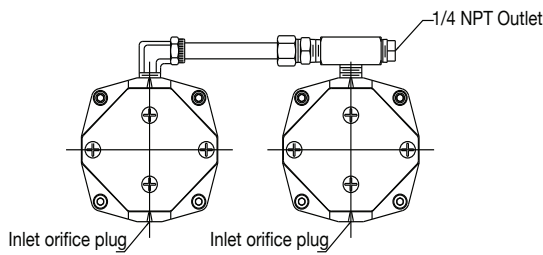
**PSC 2 POLE SINGLE STAGE**  
24" HG MAX. VACUUM, 1.4 CFM OPEN FLOW (60Hz)

**PSC 4 POLE TWO STAGE**  
28" HG MAX. VACUUM, .47 CFM OPEN FLOW (60Hz)

**PSC 2 POLE TWO STAGE**  
28.5" HG MAX. VACUUM, .80 CFM OPEN FLOW (60Hz)

inches/mm

Single Staged Shown



### PRODUCT FEATURES

- Oilless operation
- Motor-mounted
- Rugged construction
- Low maintenance

### INCLUDES

- Capacitors shipped unattached AG331 (4-pole motors), AF485A (2-pole motor)

### RECOMMENDED ACCESSORIES

- Pressure gauge AF583, vacuum gauge AA640
- Pressure relief valve AF887, Vacuum relief valve AA550C-V
- Rubber feet (4) AG505
- Repair Kit K309 (Use 2)

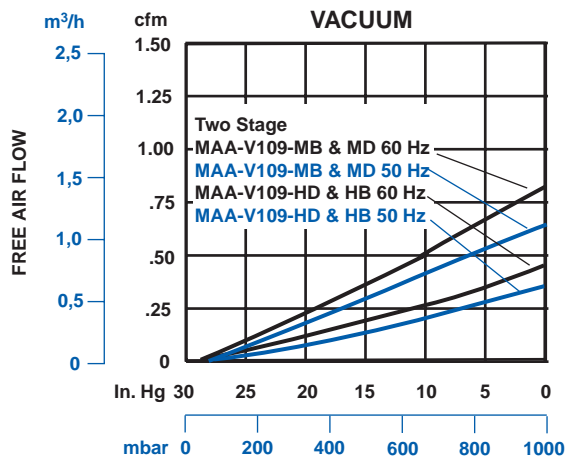
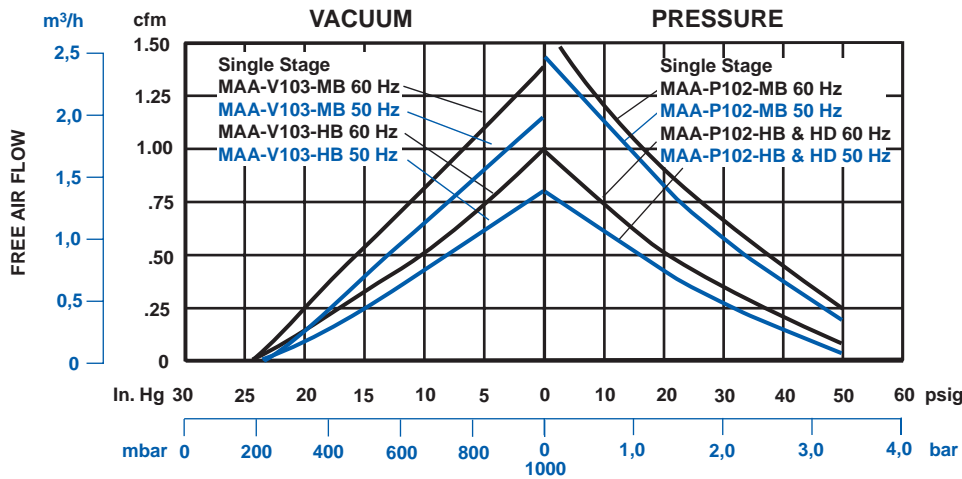


## Product Specifications

Model Number	Motor	Type	Stages Vacuum Models	RPM		HP	kW	Net. Wt.		Regulatory
				60 Cycle	50 Cycle			lbs	kg	
MAA-P102-HB	115/110-60/50-1	PSC (4 pole)	-	1575	1275	1/16	0,05	8	3,6	cUR/CE
MAA-P102-HD	220/230-50/60-1	PSC (4 pole)	-	1575	1275	1/16	0,05	8	3,6	cUR/CE
MAA-P102-MB	115/110-60/50-1	PSC (2 pole)	-	3000	2500	1/8	0,09	9	4,1	CE
MAA-V103-HB	115/110-60/50-1	PSC (4 pole)	One	1575	1275	1/16	0,05	8	3,6	cUR/CE
MAA-V109-HB	115/110-60/50-1	PSC (4 pole)	Two	1575	1275	1/16	0,05	8	3,6	cUR
MAA-V109-HD	220/230-50/60-1	PSC (4 pole)	Two	1575	1275	1/6	0,05	8	3,6	cUR
MAA-V103-MB	115/110-60/50-1	PSC (2 pole)	One	3000	2500	1/8	0,09	9	4,1	CE
MAA-V109-MB	115/110-60/50-1	PSC (2 pole)	Two	3000	2500	1/8	0,09	9	4,1	CE
MAA-V109-MD	208-230/ 220-240-60/50-1	PSC (2 pole)	Two	3000	2500	1/8	0,09	9	4,1	CE

cUR - UL recognized for use in Canada  
 CE conforms to European Standards  
 UL UR recognized.

## Product Performance (Metric, U.S.)





## DOA SERIES

### SHADED POLE/ PSC 4 POLE

60 PSI MAX. PRESSURE, 25.5" HG MAX. VACUUM  
1.1 CFM OPEN FLOW (60Hz)

### PSC 2 POLE

60 PSI MAX. PRESSURE, 25.5" HG MAX. VACUUM  
1.9 CFM OPEN FLOW (60Hz)

### LOW SPEED DC (BRUSH TYPE)

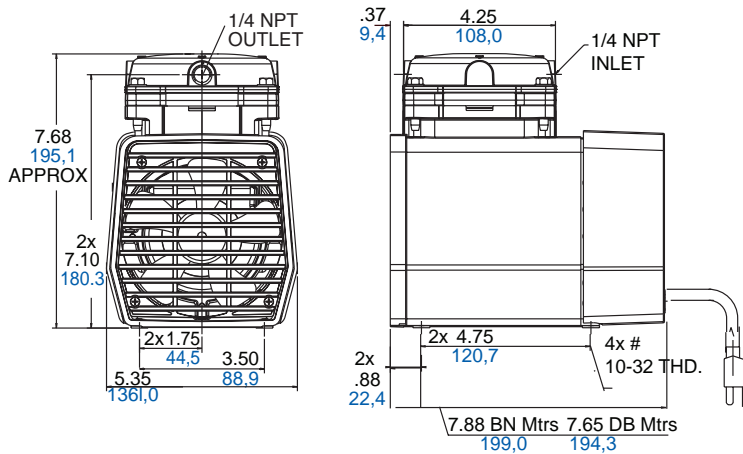
60 PSI MAX. PRESSURE, 25.5" HG MAX. VACUUM  
1.1 CFM OPEN FLOW

### HIGH SPEED DC (BRUSH TYPE)

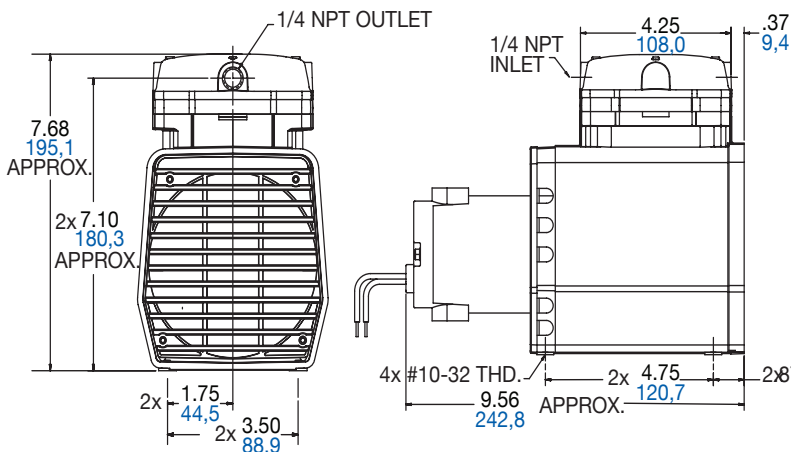
60 PSI MAX. PRESSURE, 25.5" HG MAX. VACUUM  
1.9 CFM OPEN FLOW

inches/mm

AC Models



DC Models



## PRODUCT FEATURES

- Oilless operation
- Motor mounted
- Rugged construction/low maintenance

## INCLUDES

- Muffler AH190A for vacuum
- Capacitor AF873A unattached (DB & DD motors)
- Capacitor AF485A unattached (FB motor)
- Capacitor AF876 unattached (FD motor)

## RECOMMENDED ACCESSORIES

- Pressure gauge AF583/Vacuum gauge AA640
- Pressure relief valve AF887 / Vacuum relief valve AA550C-V
- (4) rubber feet AF584A
- Repair Kit K294A





## Product Specifications

Note: "P" model are pressure "V" models are vacuum only

Model Number	Motor	Motor Type	RPM		HP	kW	Net Wt.		Regulatory
			60Hz	50 Hz			lbs.	kg	
*DOA-P701-AA	115-60-1	Shaded pole	1575	----	1/8	0,09	14.5	6,6	UL/CNL
**DOA-P703-AA	115-60-1	Shaded pole	1575	----	1/8	0,09	16.0	6,6	UL/CNL
*DOA-P701-AC	230-60-1	Shaded pole	1575	----	1/8	0,09	14.5	6,6	CSA
***DOA-P501-BN	220/240-50-1	Shaded pole	----	1275	1/8	0,09	14.5	6,6	CE
+DOA-P509-BN	220/240-50-1	Shaded pole	----	1275	1/8	0,09	16.0	7,3	CE
DOA-P501-DB	115/110-60/50-1	PSC (4 pole)	1575	1275	1/8	0,09	14.5	6,6	CE
DOA-P501-DD	230/220-60/50-1	PSC (4 pole)	1575	1275	1/8	0,09	14.5	6,6	cUR
DOA-P501-FB	115/110-60/50-1	PSC (2 pole)	3000	2500	1/3	0,25	14.5	6,6	cUR
##DOA-P703-FB	115/110-60/50-1	PSC (2 pole)	3000	2500	1/3	0,25	14.5	6,6	UL/CNL
DOA-P501-FD	230/220-60/50-1	PSC (2 pole)	3000	2500	1/3	0,25	14.5	6,6	UL/CNL/CE
#DOA-P518-FD	230/220-60/50-1	PSC (2 pole)	3000	2500	1/3	0,25	14.5	6,6	cUR/CE
DOA-P501-JH	12 Volt	DC		2100	1/8	0,09	13.0	5,9	CE
DOA-P501-KH	12 Volt	DC		3200	1/8	0,09	13.0	5,9	
DOA-P501-JK	24 Volt	DC		2100	1/8	0,09	13.0	5,9	CE
*DOA-V722-AA	115-60-1	Shaded pole	1575	----	1/8	0,09	14.5	6,6	UL/CNL
*DOA-V702-AC	230-60-1	Shaded pole	1575	----	1/8	0,09	14.5	6,6	CSA
***DOA-V502-BN	220/240-50-1	Shaded pole	----	1275	1/8	0,09	14.5	6,6	CE
DOA-V502-DB	115/110-60/50-1	PSC (4 pole)	1575	1275	1/8	0,09	14.5	6,6	CSA/CE
DOA-V502-DD	230/220-60/50-1	PSC (4 pole)	1575	1275	1/8	0,09	14.5	6,6	cUR/CE
DOA-V502A-FB	115/110-60/50-1	PSC (2 pole)	3000	2500	1/3	0,25	14.5	6,6	ULR/CNR
DOA-V502A-FD	230/220-60/50-1	PSC (2 pole)	3000	2500	1/3	0,25	14.5	6,6	cUR/CE
DOA-V502-JH	12 Volt	DC		2100	1/8	0,09	13.0	5,9	CE
DOA-V502-JK	24 Volt	DC		2100	1/8	0,09	13.0	5,9	CE

\*Includes cord and plug

\*\*Unloader model, includes cord and plug (no rubber feet or handle).

\*\*\*Includes cord no plug.

+VDE Listed model. Includes unloader valve, rubber feet and carrying handle.

# Capacitor mounted in mini-box (add 1.54 (39,1) to width), two meter cord (European color-coded), no plug.

## Capacitor mounted in mini-box (add 1.54 (39,1) to width), cord and plug.

CNL UL listed for use in Canada

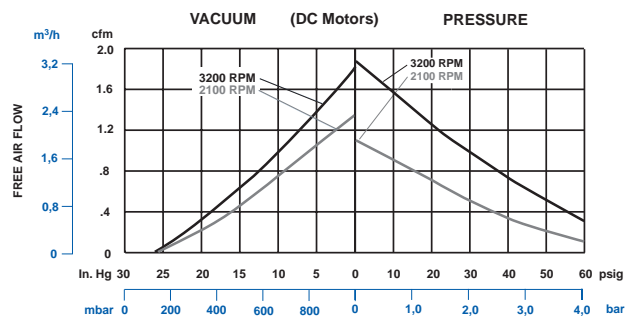
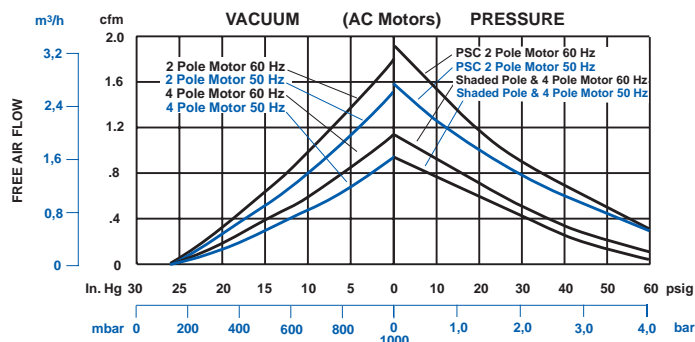
CSA approved by Canadian Standards Association

cUR - UL recognized for use in Canada

CE conforms to European Standards

UL UR recognized.

## Product Performance (Metric, U.S.)





# Oilless Diaphragm Pump 3.6 cfm/6,12 m<sup>3</sup>/h



## DAA SERIES

### PSC 4 POLE

60 PSI MAX. PRESSURE, 2.4 CFM OPEN FLOW (60Hz)

### PSC 2 POLE

60 PSI MAX. PRESSURE, 3.8 CFM OPEN FLOW (60Hz)

### PSC 4 POLE TWO STAGE

25.5" HG MAX. VACUUM, 2.2 CFM OPEN FLOW (60Hz)

### PSC 2 POLE TWO STAGE

25.5" HG MAX. VACUUM, 3.6 CFM OPEN FLOW (60Hz)

### PSC 4 POLE TWO STAGE

29.0" HG MAX. VACUUM, 1.15 CFM OPEN FLOW (60Hz)

### PSC 2 POLE TWO STAGE

29.0" HG MAX. VACUUM, 2.0 CFM OPEN FLOW (60Hz)

## PRODUCT FEATURES

- Oilless operation
- Motor mounted
- Rugged construction/low maintenance

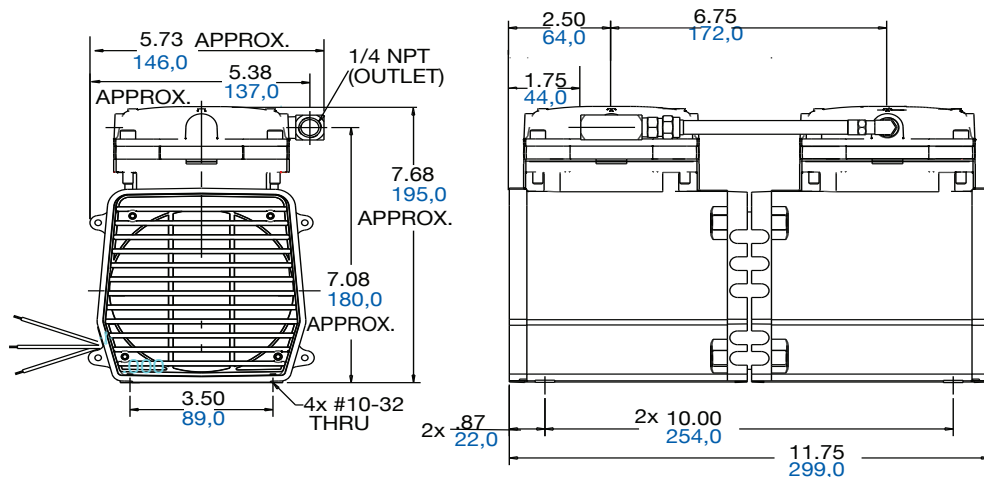
## INCLUDES

- Muffler AH190A for vacuum
- Capacitor AF876 (EB motors), AF873A (ED motors), AF485A (GB and GD motors)

## RECOMMENDED ACCESSORIES

- Pressure gauge AF583/Vacuum gauge AA640
- Pressure relief valve AF887 / Vacuum relief valve AA550C-V
- (4) rubber feet AF584A
- Repair Kit K294A (use 2)

inches/mm





## Product Specifications

Note: "P" model are pressure "V" models are vacuum only

Model Number	Motor	Motor Type	RPM		HP	KW	Net Wt.		Regulatory
			60 Hz	50 Hz			lbs.	kg.	
DAA-P501-EB	115/110-60/50-1	PSC (4 pole)	1575	1275	1/4	0,19	28	12,7	cUR/CE
DAA-P501-ED	230/220-60/50-1	PSC (4 pole)	1575	1275	1/4	0,19	28	12,7	cUR/CE
*DAA-P517-ED	230/220-60/50-1	PSC (4 pole)	1575	1275	1/4	0,19	28	12,7	cUR/CE
**DAA-P513-EG	240-50-1	PSC (4 pole)	-----	1275	1/4	0,19	28	12,7	CE
***DAA-P501-GB	115/110-60/50-1	PSC (2 pole)	3000	2500	1/2	0,37	28	12,7	cUR
+DAA-P503-GB	115/110-60/50-1	PSC (2 pole)	3000	2500	1/2	0,37	28	12,7	cUR/CE
***DAA-P501-GD	230/220-60/50-1	PSC (2 pole)	3000	2500	1/2	0,37	28	12,7	cUR/CE
+DAA-P503-GD	230/220-60/50-1	PSC (2 pole)	3000	2500	1/2	0,37	28	12,7	cUR/CE
++DAA-P512-GD	230/220-60/50-1	PSC (2 pole)	3000	2500	1/2	0,37	28	12,7	cUR/CE
DAA-V505-EB	115/110-60/50-1	PSC (4 pole) single stage	1575	1275	1/4	0,19	23	10,4	cUR
DAA-V502-EB	115/110-60/50-1	PSC (4 pole) two stage	1575	1275	1/4	0,19	23	10,4	cUR/CE
DAA-V505-ED	230/220-60/50-1	PSC (4 pole) single stage	1575	1275	1/4	0,19	23	10,4	cUR/CE
DAA-V502-ED	230/220-60/50-1	PSC (4 pole) two stage	1575	1275	1/4	0,19	23	10,4	cUR
**DAA-V510-EG	240-50-1	PSC (4 pole) two stage	-----	1275	1/4	0,19	23	10,4	CE
DAA-V505-GB	115/110-60/50-1	PSC (2 pole) single stage	3000	2500	1/2	0,37	23	10,4	cUR
DAA-V507-GB	115/110-60/50-1	PSC (2 pole) two stage	3000	2500	1/2	0,37	23	10,4	cUR

\* Available only in Europe capacitor mounted on unit in mini-box, (European color-coded), no plug.

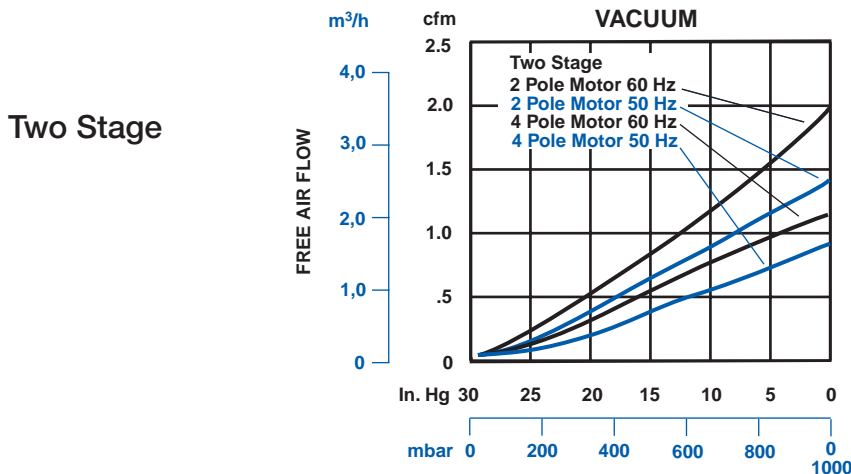
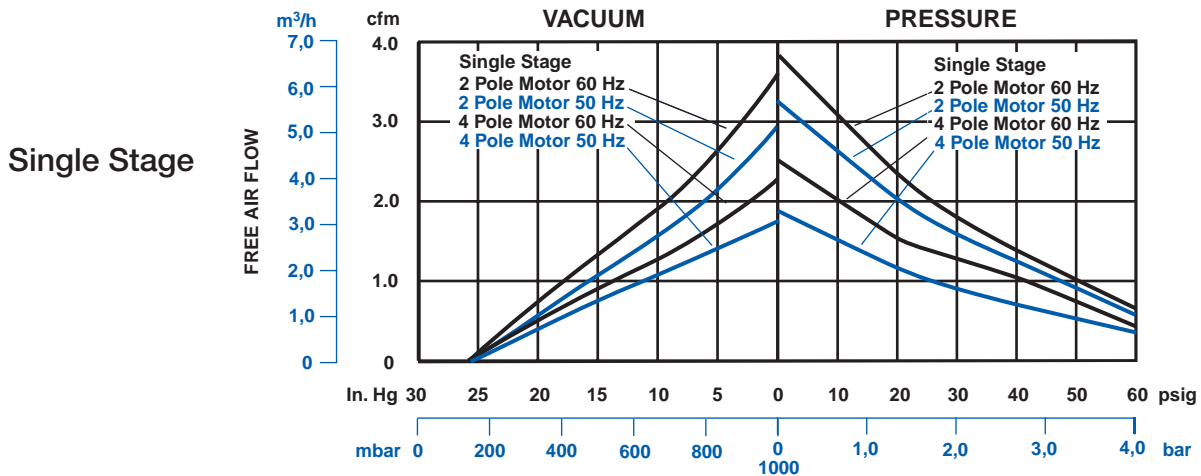
\*\*Capacitor mounted on unit in mini-box, two meter cord (European color-coded), no plug.

\*\*\*No capacitor, parallel manifold for pressure (single stage only)

+Capacitor unattached, parallel manifold for pressure (single stage only)

++Capacitor attached, parallel manifold for pressure (single stage only)

## Product Performance (Metric, U.S.)





## DOL MEDICAL DENTAL UNITS

### SHADED POLE/PSC 4 POLE

60 PSI MAX. PRESSURE, 25.5" HG MAX. VACUUM  
1.1 CPM OPEN FLOW (60Hz)

#### PRODUCT FEATURES

- Oilless operation
- Motor mounted
- Rugged construction/low maintenance
- Meets UL standard 544 & CUL & CNL of UL1450 & CSA C22.2 No. 68-92

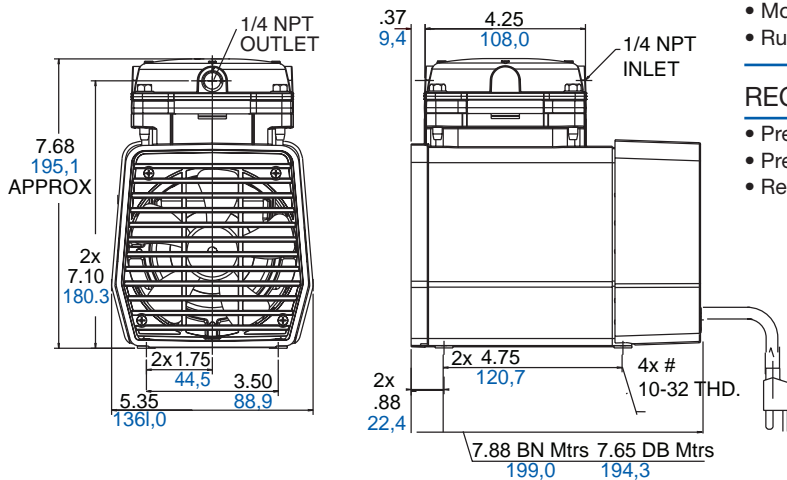
#### INCLUDES

- Cord and hospital grade plug
- Carrying handle - AP523A
- Mounted on/off switch
- Rubber feet - AF584A

#### RECOMMENDED ACCESSORIES

- Pressure gauge AF583/Vacuum gauge AA640
- Pressure relief valve AF887 / Vacuum relief valve AA550C-V
- Repair Kit K294A

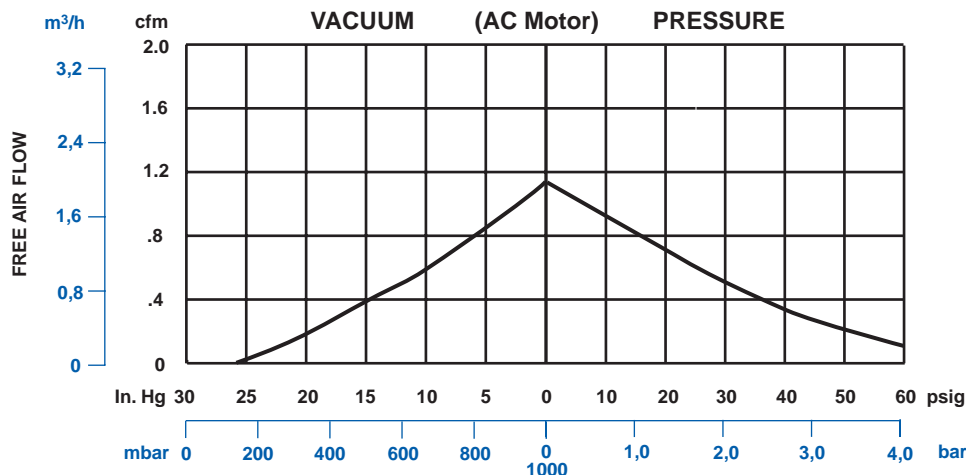
inches/mm



### Product Specifications

Model Number	Motor	Motor Type	RPM		HP	kW	Net Wt.		Regulatory
			60 Cycle	50 Cycle			lbs.	k g	
DOL-701-AA	115-60-1	Shaded pole	1575	----	1/8	0,09	14.8	6,7	UL/CNL

### Product Performance (Metric, U.S.)







## DOA LAB MODELS

### SHADED POLE

60 PSI MAX. PRESSURE, 25.5" HG MAX. VACUUM  
1.1 CPM OPEN FLOW (60Hz)

#### PRODUCT FEATURES

- Oilless operation
- Motor mounted
- Rugged construction/low maintenance

#### INCLUDES

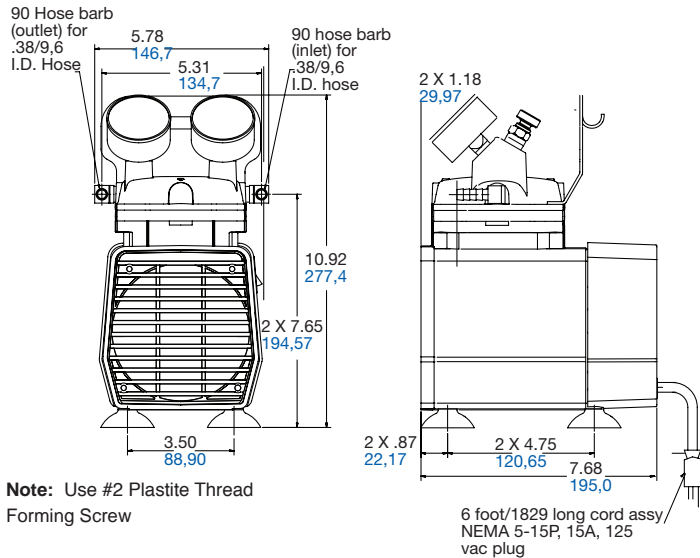
- Gauges - Vacuum AE136, Pressure AA806
- Hose barb - AG613
- Regulators - Vacuum AA550C-V, Pressure AF887
- Carrying handle - AP523A
- Rubber feet - AF584A

#### RECOMMENDED ACCESSORIES

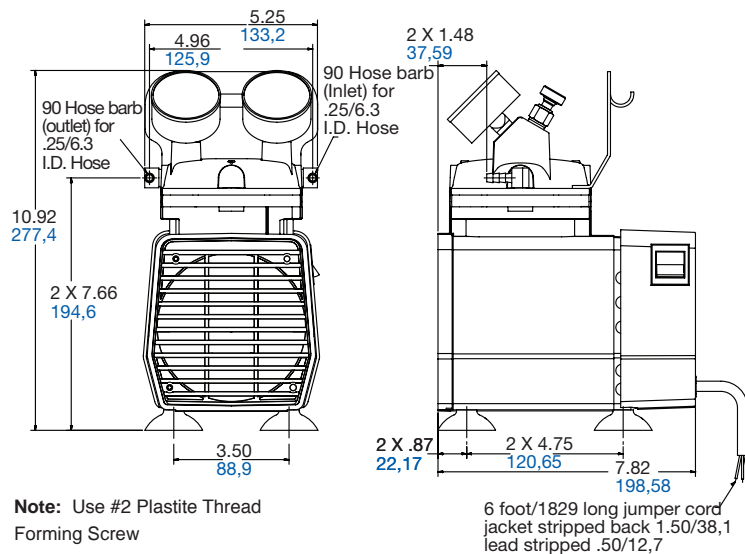
- Repair Kit K294J

inches/mm

#### DOA-P704-AA



#### DOA-P504-BN



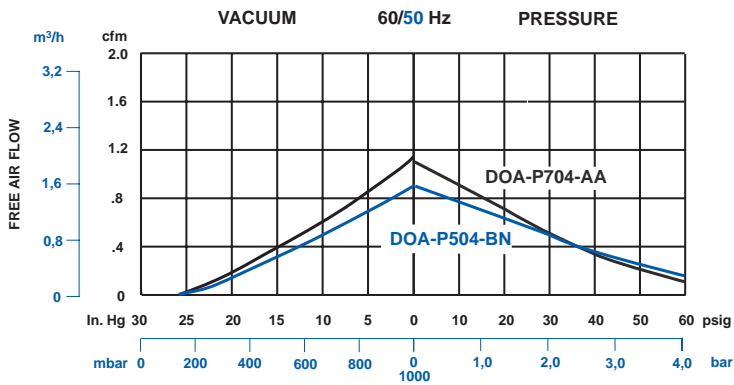


### Product Specifications

Model Number	Motor	Motor Type	RPM		HP	kW	Net Wt.		Regulatory
			60 Hz	50 Hz			lbs.	kg.	
DOA-P704-AA	115-60-1	Shaded pole	1575	----	1/8	0,09	16.0	7,3	UL/CNL
DOA-P504-BN	220/240-50-1	Shaded pole	----	1275	1/8	0,09	16.0	7,3	CE

CNL UL listed for use in Canada/ CE conforms to European Standards

### Product Performance (Metric, U.S.)





## DOA CORROSION RESISTANT

### SHADED POLE

25" HG MAX. VACUUM,  
.95 CFM OPEN FLOW (50Hz)



#### PRODUCT FEATURES

- Oilless operation
- Motor-mounted
- Rugged construction
- Low maintenance

#### MATERIALS OF CONSTRUCTION

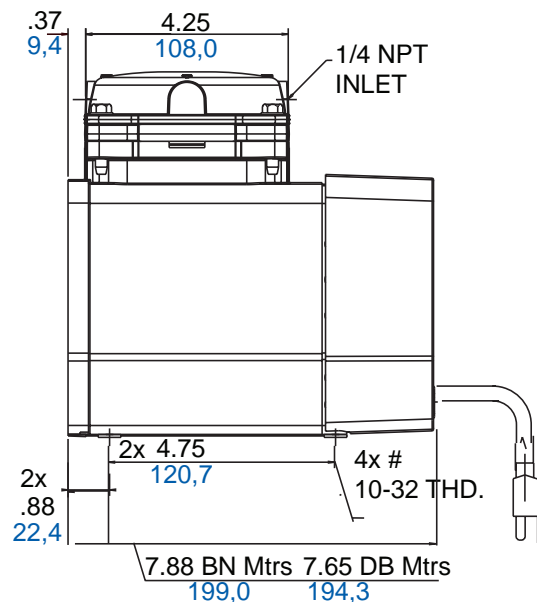
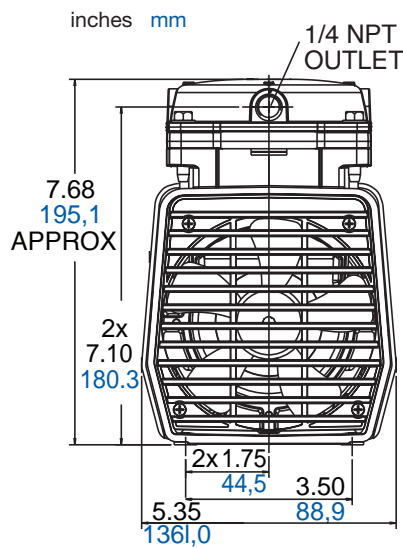
- Teflon coated head assembly
- Stainless steel valves
- Neoprene diaphragm
- Teflon diaphragm cover

#### INCLUDES

- Capacitor

#### RECOMMENDED ACCESSORIES

- Pressure gauge AF583 / Vacuum gauge AA640
- Pressure regulator AF887 / Vacuum regulator assy AA550C-V
- (4) Rubber feet AF584A
- Repair Kit K294A for Shaded Pole
- Repair Kit K294H for PSC motor





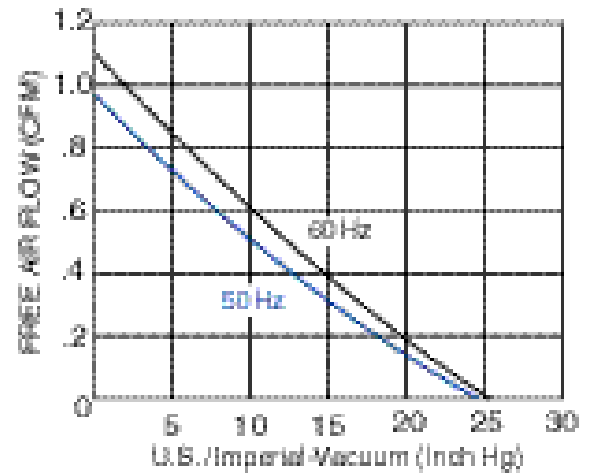
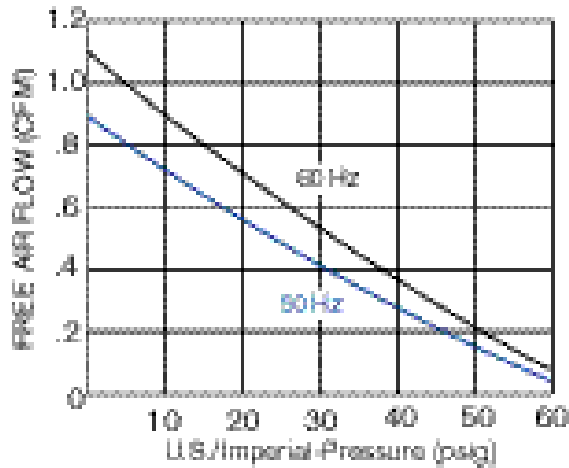
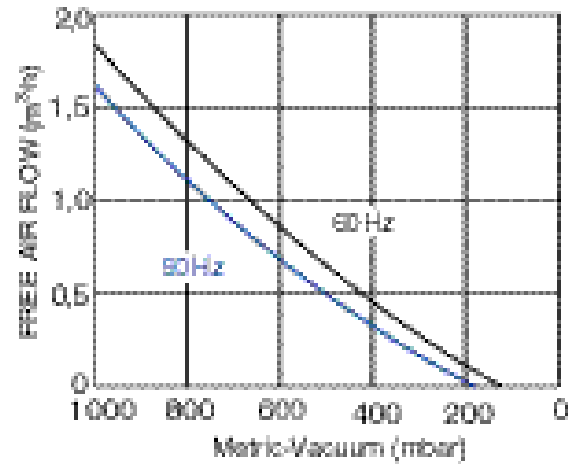
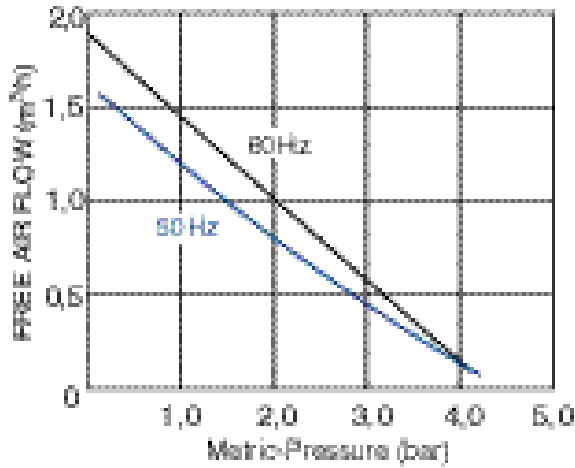
### Product Specifications

Model Number	Motor & Motor Type	RPM	50 Hz	HP	kW	Net Wt.		Regulatory
		60 Hz				lbs.	kg.	
DOA-V505-BN	Shaded pole 220/240-50-1	1275	----	1/8	0,09	19.0	8.6	CE
DOA-P701-DB	PSC 110/115-50/60-1 motor	1575	1275	1/8	0,09	20.0	9.0	CSA

CE conforms to European Standards

CSA approved by Canadian Standards Association

### Product Performance (Metric, U.S.)





## DOA-706T-AA

### PRODUCT FEATURES

- AE163A Pressure Switch
- AE248 Manual Drain
- AS100B Pressure Safety Valve (ASME)
- AA806 Pressure Gauge
- Globe Valve
- Unloading Capability
- 100% Oilless Operation

### APPLICATIONS

- Beverage Dispensing
- Lab Use
- Portable Displays
- Commercial Door Actuation
- Portable - Off Site Use

### RECOMMENDED ACCESSORIES

- Repair Kit K294A

### Product Specifications

Model Number	Tank Size Gallons	CFM @ PSIG						ON/OFF psig	0 to 50 Setting	Recovery of Standard Setting	Motor Voltage	HP	Shipping Weight lbs.
		0	10	30	50	70	100						
DOA-P706T-AA	2	1.00	.85	.50	.20	-	-	30/50	1:30	0:55	115-60-1	1/8	39

### When to specify a compressed air or vacuum tank system

*Many find it difficult to decide whether to use stand-alone pumps or complete tank packages for their applications.*

**The tank system offers many advantages, which satisfy:**

- **High Volumes** If your application requires an instantaneous supply of high pressure or vacuum, then the reservoir provided by a tank system is essential. Even the largest of pumps has to start at atmospheric pressure and therefore will not be able to give that instantaneous supply of pressure/vacuum.
- **Cost Savings** Using a tank system can reduce initial maintenance and replacement costs. Here's why: Applications that require high volumes of air in intermittent cycles can use relatively small pumps. The longer the interval between cycles, the more applicable a tank system can be. For example, a 1 HP compressor on a tank can supply the same amount of flow for one minute as a stand alone 10 HP compressor.
- **Quiet Operation** In a tank system the pump runs on demand, which means that it is not operating a good part of the time. No operation, no operating noise.
- **Pulse Free** Pulse-free air is required by many pneumatic systems for proper operation of pneumatic tools or components. A tank provides pulsation free air from the reciprocating compressor.
- **Central System** Small industrial shops where different tools are required at different times find tank systems ideal, since one tank system can supply air to multiple locations.





PART NO	DESCRIPTION	USED ON
<b>CAPACITOR</b>		
AF876	EB, FD MOTORS	DAA
AF873A	DB, DD, ED, & FD MOTORS	DOA
AF485A	FB, GB & GD MOTORS	DAA
AG331	FB, HB & HD & 4 POLE MOTORS	MAA
AF485A	2-POLE MOTOR PSC MOTORS:	
AF873A	FD MOTOR	MOA
<b>DRAINS</b>		
AE248	MANUAL DRAIN COCK, 1/4" NPTM	DIAPHRAGM TANK UNITS
<b>FILTER/MUFFLER ASSEMBLY</b>		
AA617G		DOA, DAA
<b>GAUGE</b>		
AF583	1/4" NPT, 0-160 PSI	DOA
<b>HANDLE</b>		
AF870	STAMPED ALUMINUM	DOA
AP523A		DOA, LAB, DOL MEDICAL UNIT
<b>HOSE BARBS</b>		
AG613		DIAPHRAGM LAB & TANK UNITS
<b>MUFFLER</b>		
AF353A		DOA, MOA, DAA
AH190A		VACUUM DAA SERIES, MAA
B300Q	HIGH CAPACITY; TO BE USED IN DIRTY ENVIRONMENTS OR WHEN SUPERIOR) NOISE REDUCTION IS REQUIRED	22D
<b>PRESSURE GAUGE</b>		
AA806		DOA, DAA, DIAPHRAGM PUMPS
AA644B		22D
AF583		DOA, DOL MEDICAL UNIT, CORROSIVE RESISTANT DIAPHRAGM
		MAA, MOA
<b>PRESSURE RELIEF VALVE</b>		
AF887		DOL MEDICA UNIT, DOA M AA, MOA
AA203		22D
<b>PRESSURE SAFETY VALVE</b>		
AS100B		DIAPHRAGM TANK UNITS



PART NO	DESCRIPTION	USED ON
<b>PRESSURE SWITCH</b>		
AE163A		DIAPHRAGM TANK UNIT
<b>REGULATORS</b>		
AA806		DIAPHRAGM LAB MODELS, DIAPHRAGM
<b>TANK</b>		
AA550C-V, VACUUM		DOL MEDICAL UNIT, DOA LAB, DOA CORROSIVE RESISTANT
AF887, PRESSURE		DOL MEDICAL UNIT, DOA LAB, DOA CORROSIVE RESISTANT
<b>RUBBER FEET</b>		
AG505		MOA, MAA
AF584A		22D, DOA, DOL MEDICAL, DOA LAB DOA CORROSIVE RESISTANT
<b>SERVICE KITS</b>		
K294A		DIAPHRAGM TANK UNITS, DOL MEDICAL UNITS, SHADED POLE, DOA CORROSIVE RESISTANT, DOA LAB UNIT
K294J		DOA, DAA (USE 2)
K294K		ALL DIAPHRAGM UNITS EXCEPT MOA-P109-AA, MAA USE 2
K309		MOA-P109-A
K309A`		22D
K588	ASSEMBLED HEAD	22D
K588A	OLD STYLE HEAD	22D
K788		5D
K811		10D
K813	EPDM	15D
K813A	NEOPRENE	15D
<b>TANK ASSEMBLIES (COMPLETE PACKAGE MINUS PUMP)</b>		
AF599D	2 GALLON TANK ASSEMBLY	DOA/ROA-P106T-AA
<b>VACUUM GAUGE</b>		
AE136		DIAPHRAGM LAB MODELS
AA640		DOL MEDICAL UNIT, DOA MAA. MOA
AA640		22D
<b>VACUUM RELIEF VALVE</b>		
AA550C-V		DOL MEDICAL UNIT, MAA, MOA
AA204		22D

# Reasons to Call Gast First

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- **Quality and Satisfaction**

Gast's reputation for quality and customer satisfaction in air-moving products has been setting the industry's standard of excellence throughout the world since 1921.

- **Wide Variety**

Gast offers a complete line of air-moving products in a broad range of types and sizes, and includes more extras without adding on extra costs. Utilizing state-of-the-art design, manufacturing processes, and electric motor technology, Gast products can be customized to meet the demands of many applications.

- **Literature**

Easy-to-follow literature provides a broad overview of Gast's extensive line of pneumatic products including operating principles, typical applications and general operating parameters and specifications to offer preliminary guidelines for choosing the right Gast pump for the job.

- **Vast Network of National and International Distributors**

Gast distributors carry a substantial stock of pneumatic products, parts and accessories. For the name and location of your closest representative, call one of the offices listed below or visit our website at [www.gastmfg.com](http://www.gastmfg.com).

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Beech House Knaves Beech  
Business Centre  
Loudwater, High Wycombe  
Bucks, England HP10 9SD  
Tel: Int + 44 1628 551500  
FAX: Int + 44 1628 551590

Gast Hong Kong  
Unit 12, 21/F, Block B  
New Trade Plaza  
6, On Ping Street, Shatin  
N. T. Hong Kong  
Ph: (852) 2690 1066  
Fax: (852) 2690-1012

