



Compressed Air and Vacuum Systems



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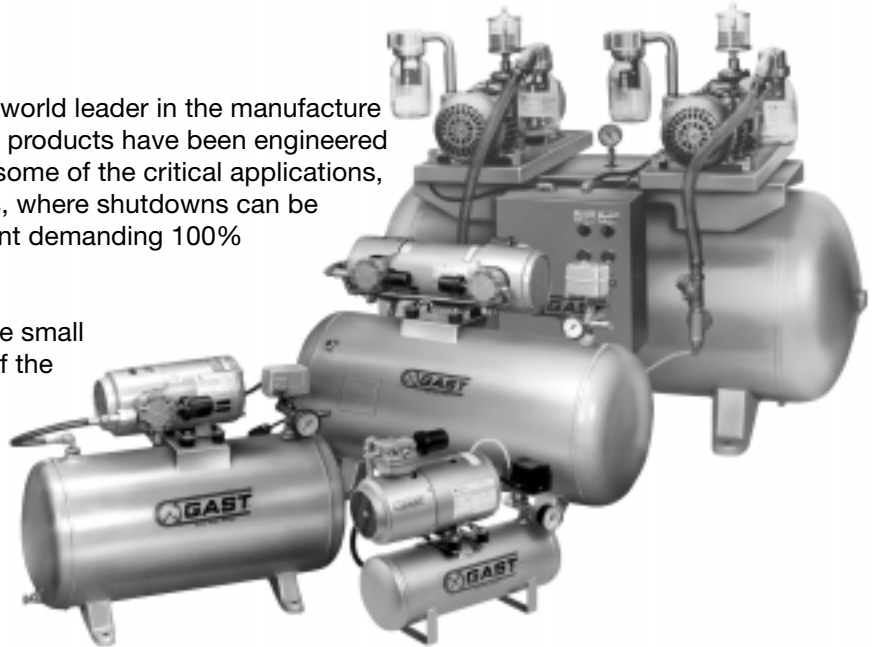
ISO 9001 and 14001 Certified



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

Since 1921, Gast has been recognized as a world leader in the manufacture of vacuum pumps and compressors. These products have been engineered and manufactured to meet the demands of some of the critical applications, ranging from industrial production machines, where shutdowns can be costly, to a wide variety of medical equipment demanding 100% dependability.

Tank systems that can be designed to make small pumps do big jobs are a natural extension of the Gast line. That's why Gast, the original equipment manufacturer's manufacturer is extending its expertise into tank systems for hospitals, medical clinics, pneumatic temperature control, dry sprinkler systems, automatic doors, beverage dispensers, dental equipment, and vacuum forming, to mention just a few applications.



If you're considering a tank system for an application that requires oil-free air, long life, minimum service, and maximum dependability, Gast has one for you.

Call your Gast distributor for custom systems

Your Gast distributor has a complete line of complementary products to satisfy most of your requirements for pneumatic systems of all kinds. If your application requires modification of an existing system or a new design, your Gast distributor will be glad to assist you. Gast tank systems, just as all Gast products, can be modified or customized to satisfy the needs of quantity users. A list of distributors, both domestic and international, are listed on our website at www.gastmfg.com or call us at 616-926-6171 for the stocking distributor in your area.

Gast standard products insure prompt delivery

After extensive research, Gast has redesigned these systems to better satisfy market needs. If the configuration you are looking for is not represented in our standard offering, please contact your Gast authorized distributor for a customized package.

Although cost is a key factor in any buying decision, Gast believes the tank system is a capital investment, which deserves careful consideration from every angle. We believe the special features and the all-around dependability designed into Gast tank systems make them outstanding values.



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.
- **Longer Pump Life** A tank system makes it possible to utilize two pumps on one tank. Add a pressure switch and alternator control to start/stop the pump(s) only when needed. This allows letting the pump cool down and “rest” between cycles to prolong operating life.
- **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.

Gast Manufacturing Corporation has been supplying industry with products that put air to work since 1921. A world leader in the manufacture of air compressors, vacuum pumps, blowers and small air motors for OEM and industrial users, Gast has earned and maintained this preeminence with the help of intelligent, hard-working people and modern, up-to-date equipment and processes. At Gast, air technology is our only business. This means all our resources are dedicated to satisfying your requirements for pneumatic equipment.



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Compressed Air Systems

Moisture When air is compressed in a tank system, water accumulates in the tank. To understand how this works, think of a stack of sponges saturated with water. Exert pressure on the sponges and water comes out. Compressing volumes of air has the same effect. The humidity in the air accumulates in the tank, which will require draining. If you are considering a tank system for an application that requires moisture-free air, the design should include a refrigerated, or desiccant type air dryer. Consult your Gast Distributor for more information.

Air Consumption/Air Delivery Before Pump Cycles This table shows the cubic feet of air in a tank between various duties. With this data, you can estimate how many cycles of your operation can be performed before the pressure switch starts compressor operation.

CUBIC FEET OF AIR

Pressure Setting	Tank Size in Gallons				
	2	12	20	30	60
0 PSI	.26	1.6	2.6	4	8
0-50 PSI	1.1	7.0	11.4	17.6	35.2
0-100 PSI	2	12.4	20.8	31.2	62.4
30-50 PSI	0.3	2.2	3.6	5.5	10.9
80-100 PSI	0.3	2.1	3.6	5.4	10.8
70-100 PSI	0.5	3.2	5.4	8.1	16.2

The following example will assist in sizing a tank package based on a desired duty cycle.

Application Example: Determining Duty Cycle (compressor On Vs Off time)

Given: Air requirement is .5 cfm continuous @ 70 psig. Refer to the above chart and based on the pressure switch setting, select one of the tank sizes based on the available /stored air. First choice could be a 20 gallon tank and a .5 Hp compressor. The 4HCC-11T-M450x provides a starting point for you to consider .

Determining pump operating time:

1. Determine the average flow provided by the compressor between the cut in and cut out pressure settings for the pressure switch. (The average pressure for a Simplex tank package is 85 psig and Duplex tank package is 90 psig). The flow at 85 psig for model 4HCC compressor is 1.9 cfm. (For this example .5 cfm is continuously being supplied to the application). The actual flow going into the receiver will be corrected to **1.4 cfm** (1.9cfm - .5cfm = 1.4cfm).

2. Determine the amount of time the receiver (alone) will supply the required flow before the pressure switch turns on the air compressor. We selected a 20-gallon air receiver and referring to the above chart we can determine that 3.6 cubic feet of air is stored in the receiver between 70 psig - 100 psig. The amount of time the receiver satisfies the continuous flow of .5 cfm will be **3.6 cu.ft. / .5 cfm = 7.2 minutes or 7 minutes and 12 seconds.**

3. Determine the amount of time the air compressor will operate to satisfy the pressure switch setting (70 psig - 100 psig). We determined in step #1. the compressor delivers 1.4 cfm into the receiver. The required volume of air of 3.6 cu.ft. will return the receiver pressure to 100 psig. The amount of run time the compressor will operate will be 3.6 cu.ft. / 1.4 cfm = 2.6 minutes or 2 minutes and 36 seconds.

Conclusion:

The 4HCC-11T-M450X will operate with a Duty Cycle of 27% Pump run time: 2.6 minutes per cycle or 15.9 min per hour or 2.12 hours (8 hour shift) or 10.6 hours (5 day week, 8 hour shift) or 551 hours per year. Pump off time: 7.2 minutes per cycle or 1,528 hours per year.

Location of Tank System Regardless of what system your application requires, its size, and the heat it generates, it is usually desirable to locate the tank system away from the work area. Operating noise, even when it is reduced by cycling, can still be a factor in determining location. However, a remote installation can cause problems in a pneumatic system. Some of these may be prevented by following these few simple rules.

1. Be sure the electrical hookup can supply proper voltage and amperage to the area selected for installation. Don't run the system from an extension cord. Do have the system installed by a trained electrician.
2. Choose a location for the tank system which will be readily accessible for weekly maintenance, then establish and follow a regular maintenance schedule. Make copies of all tags and instructions for a permanent file, then return originals to the tank so they're available for quick reference.
3. Use the largest size pipe practical when plumbing the system. The larger the pipe, the smaller the frictional losses. In other words, pipe that is too small will restrict air flow and prevent tools from operating properly regardless of compressor size. Large pipe also provides capacity for expansion of the system, should it become necessary.
4. In both vacuum and compressed air systems, the biggest problem that affects performance is leaks in plumbing. Be sure to use a sealant when setting up your system and periodically check all gaskets in filters.

It should be recognized that the performance in this catalog is based upon ambients at sea level. Changes in altitude or barometric pressure will affect pumping speed for both compressors and vacuum pumps.

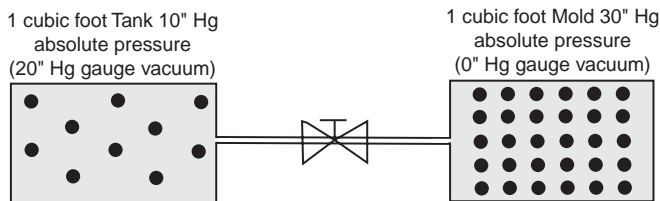


Sizing a Vacuum Receiver

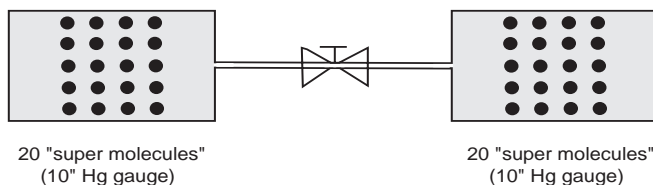
To understand tank sizing for a desired level of vacuum, it is important to remember that the volume of the tank vs the volume of the mold will determine your system vacuum.

Example: Let's assume that for each inch of mercury we have one "super molecule", and we have a tank that is 1 cubic foot and a mold that is 1 cubic foot.

At sea level the barometric pressure is 29.92" Hg absolute (0 gauge). Due to variations in the atmospheric pressure, we can safely assume that 30" is a good round number. So, at sea level we can say that the atmosphere has almost 30 "super molecules."



Now, we open up the valve and what happens? It balances



Now, with an average of 20 molecules per cubic foot, our system vacuum is 30 - 20 = 10" Hg gauge vacuum.

If we double the size of the vacuum tank, we now have an average of 10 super molecules in two cubic feet and 30 super molecules in the one cubic foot mold. So, we have 10 + 10 + 30 = 50 super molecules in 3 total cubic feet, or 17 super molecules per cubic foot, relating back to our new vacuum gauge reading, 30 - 17 = 13" Hg gauge vacuum.

Now that we understand this concept, here is a simple tank calculation based upon Boyles Law of $P_1V_1 = P_2V_2$. If we have a tank that we are going to pump down to 25" Hg and we need a total system vacuum of 20" Hg, we can do the following calculation:

$$\frac{D}{T - D} = R$$

D = Desired Mold Vacuum " Hg
T = Tank Vacuum " Hg
R = Tank to Mold Ratio or Tank Volume: Mold Volume (1)

So:
D = 20" Hg
T = 25" Hg.

$$\frac{20}{25 - 20} = R, \quad \frac{20}{5} = R, \quad 4:1 = R$$

We need a 4:1 ratio between the tank volume and the mold volume. This means if the mold is 1 gallon, the tank must be at least 4 gallons to reach the level of 20" Hg instantaneously.

Other tank to mold volume ratios:

$$\begin{matrix} D = 15" \text{ Hg} & 1.5:1 & D = 22" \text{ Hg} & 7.5:1 \\ T = 25" \text{ Hg} & & T = 25" \text{ Hg} & \end{matrix}$$

Vacuum Forming Work sheet

To set up a proper vacuum forming system we must:

1. Calculate the volume of the cavity(ies) to be evacuated.
2. Calculate the volume of the plumbing
3. Determine the proper receiver (tank) size.
4. Determine the proper vacuum for the application.

All of these factors are interrelated and demand equal consideration in the final system design. This work sheet is designed to help you through these considerations in a step by step fashion.

The next step is usually easy for a vacuum former because they know the area of the mold. Some simple reminders for volume calculations are:

1. Volume is always surface area times depth (height).
2. Volume of squares or rectangles are calculated by multiplying length times height times width.
3. Surface area of a circle is $\text{Pi} \times \text{radius}^2$ or 3.14 times radius^2 .
4. Volume of a sphere is calculated by multiplying $\frac{4}{3} \text{Pi} \times R^3$ or in other words, 4.189 times Radius^3 .

Cubic Feet for 10-foot Section of Schedule 40 pipe

Pipe Size	Inside Dia.	Volume
1/8"	.269	.004 cu ft
1/4"	.364	.007 cu ft
3/8"	.493	.013 cu ft
1/2"	.622	.021 cu ft
3/4"	.824	.037 cu ft
1"	1.049	.06 cu ft
1 1/2"	1.610	.14 cu ft
2"	2.067	.23 cu ft



2 Gallon Compressed Air Systems



DOA-P106T-AA

71R142-P075T-D300X



Applications

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

Includes

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



1HAB-11T-M100X



ROA-P206T-AA

Model Number	Tank Size Gallons	CFM @ PSIG						ON/OFF psig	0 to 100 Setting	Recovery of Standard Setting	Motor Voltage	HP	Shipping Weight lbs.
		0	10	30	50	70	100						
ROA-P206T-AA	2	.76	.65	.47	.38	.27	.19	70/100	5:00	1:55	115-60-1	1/8	39
DOA-P106T-AA	2	1.00	.85	.50	.20	-	-	30/50	1:30	0:55	115-60-1	1/8	39
1HAB-11T-M100X	2	1.25	1.10	.85	.65	.4	.35	70/100	2:55	0:55	115-60-1	1/6	49
1LAA-11T-M100X	2	1.5	1.35	1.1	.90	-	-	30/50	0:50	0:20	115-60-1	1/6	49
2HAH-11T-M200X	2	1.65	1.55	1.30	1.15	.90	.85	70/100	1:45	0:30	115-60-1	1/4	56
71R142-P075T-D300X	2	2.00	1.80	1.50	1.20	1.10	.90	70/100	1:30	0:25	115-50/60-1	1/3	42

Conversion Factors Multiply A X B = C

A	B	C
atmospheres	14.70	pounds/sq. inch
bars	14.50	pounds/sq. inch
kilograms/sq. cm.	14.22	pounds/sq. inch
pounds/sq. inch	0.07031	kilograms/sq. cm.
pounds/sq. inch	6.895	kilopascals (kPa)
kilopascals (kPa)	0.145	pounds/sq. inch
cubic feet	28.32	liters
cubic feet	7.48052	gallons (U. S. liq.)
cubic feet/min.	28.32	liters/min.
liters	0.03531	cubic feet
cubic meters	35.31	cubic feet
cubic meters/hour	0.5885	cubic feet/min.
inches	25.40	millimeters
centimeters	0.3937	inches
millimeters	0.03937	inches
cubic feet	1728	cubic inches
cubic inches	.004329	gallons
inches mercury (absolute)	.4912	pounds/sq. in.



12, 20, 30 Gallon Compressed Air Systems (Simplex)



Applications

- Cylinder Actuation
- Pneumatic Temperature Control
- Photo Processing
- Spray Painting
- Pneumatic Logic
- Small to Medium Shops and Filling Stations

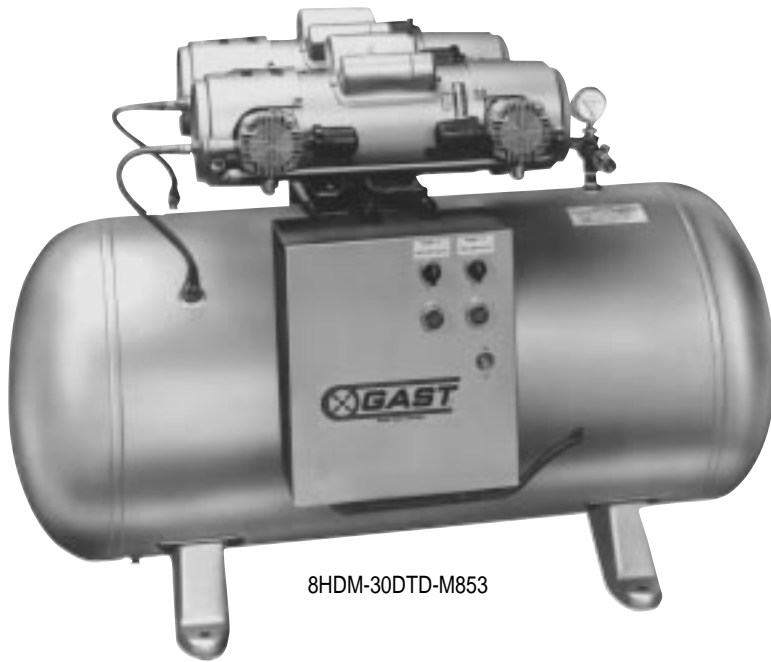
Includes

- ASME Coded Tank
- Pressure Switch
- Manual Drain
- Pressure Safety Valve (ASME)
- Pressure Gauge
- Globe Valve
- Magnetic Starter (6HCA, 7HDD & 8HDM not shown in picture)
- 100% Oilless Operation (auto drain assembly K602 optional)

Model Number	Tank Size Gallons	CFM @ PSIG						ON/OFF psig	0 to Off Setting Min/Sec	Recovery of Standard Setting Min/Sec	Motor Voltage	HP	Shipping Weight lbs.
		0	10	30	50	70	100						
3HEB-11T-M345X	12	2.40	2.2	1.85	1.50	1.30	1.15	80/100	5:45	1:55	115-60-1	1/3	93
4HCC-11TA-M450X	20	3.50	3.3	2.80	2.40	2.10	1.70	80/100	7:00	2:50	230-60-1	1/2	118
4HCC-11T-M450X	20	3.50	3.3	2.80	2.40	2.10	1.70	80/100	7:00	2:50	115-60-1	1/2	118
5HCD-11TA-M550X	20	4.70	4.40	3.90	3.40	2.90	2.40	80/100	5:00	1:55	230-60-1	3/4	121
5HCD-11T-M550X	20	4.70	4.40	3.90	3.40	2.90	2.40	80/100	5:00	1:55	115-60-1	3/4	121
6HCA-11TA-M616X	30	5.40	5.20	4.70	4.30	3.90	3.20	80/100	5:50	2:25	230-60-1	1	124
6HCA-11T-M616X	30	5.40	5.20	4.70	4.30	3.90	3.20	80/100	5:50	2:25	115-60-1	1	124
6HCA-11TC-M617	30	5.40	5.20	4.70	4.30	3.90	3.20	80/100	5:50	2:25	230-60-3	1	123
6HCA-11TD-M617	30	5.40	5.20	4.70	4.30	3.90	3.20	80/100	5:50	2:25	460-60-3	1	123
7HDD-11T-M750X	30	9.00	8.40	7.25	6.50	5.75	5.0	80/100	4:15	1:35	115-60-1	1 1/2	155
7HDD-11TA-M750X	30	9.00	8.40	7.25	6.50	5.75	5.0	80/100	4:15	1:35	230-60-1	1 1/2	155
7HDD-11TC-M853	30	9.00	8.40	7.25	6.50	5.75	5.0	80/100	4:15	1:35	230-60-3	2	155
7HDD-11TD-M853	30	9.00	8.40	7.25	6.50	5.75	5.0	80/100	4:15	1:35	460-60-3	2	155
8HDM-11TC-M853	30	11.00	10.25	9.25	8.5	7.5	7.0	80/100	3:30	1:10	230-60-3	2	160
8HDM-11TD-M853	30	11.00	10.25	9.25	8.5	7.5	7.0	80/100	3:30	1:10	460-60-3	2	160



60 Gallon Compressed Air Systems (Duplex)



8HDM-30DTD-M853

Applications

- Hospitals
- Medical /Dental Clinics
- Pneumatic Temperature Control
- Small to Medium Shops and Filling Stations
- Pneumatic Logic
- Clean Room Environment

Includes

- ASME Coded Tank
- Easy-to-use Electric Panel (see Page 10)
- Manual Drain
- Pressure Safety Valve (ASME)
- Pressure Gauge
- Globe Valve
- 100% Oilless Operation (auto drain assembly K602 optional)

Model Number	Tank Size Gallons	Total CFM of both Units @ PSIG						#1 Pressure Setting On/Off psig	#2 Pressure Setting On/Off psig	Pump Up Time in Minutes: Seconds (Approx.)			Voltage/Motor Enclosure	HP	Shipping Weight lbs
		0	10	30	50	70	100			On-Off Setting or 0-90 psig	Recovery of 1 Pump 80-100	Recovery of 2 Pumps 70-100			
4HCC-89DT-M450X	60	7.00	6.60	5.60	4.80	4.20	3.60	80/100	70/90	10:55	5:00	4:10	115-60-1 Open	1/2	360
4HCC-89DTC-M553	60	7.00	6.60	5.60	4.80	4.20	3.60	80/100	70/90	10:55	5:00	4:10	230-60-3 Open	3/4	360
6HCA-15DT-M616X	60	10.80	10.40	9.40	8.60	7.80	7.00	80/100	70/90	6:40	3:10	2:25	115-60-1 Open	1	425
6HCA-15DTA-M616X	60	10.80	10.40	9.40	8.60	7.80	7.00	80/100	70/90	6:40	3:10	2:25	230-60-1 Open	1	425
6HCA-15DTC-M617	60	10.80	10.40	9.40	8.60	7.80	7.00	80/100	70/90	6:40	3:10	2:25	230-60-3 Open	1	425
6HCA-15DTD-M617	60	10.80	10.40	9.40	8.60	7.80	7.00	80/100	70/90	6:40	3:10	2:25	460-60-3 Open	1	425
7HDD-69DTA-M750X	60	18.00	16.80	14.50	13.00	11.50	10.50	80/100	70/90	4:20	2:25	1:40	230-60-1 Open	1.5	450
7HDD-69DTC-M853	60	18.00	16.80	14.50	13.00	11.50	10.50	80/100	70/90	4:20	2:25	1:40	230-60-3 Open	1.5	450
7HDD-69DTD-M853	60	18.00	16.80	14.50	13.00	11.50	10.50	80/100	70/90	4:20	2:25	1:40	460-60-3 Open	1.5	450
8HDM-30DTA-M850X	60	22.00	20.50	18.50	17.00	15.00	14.20	80/100	70/90	3:30	1:50	1:30	230-60-1 Open	2	455
8HDM-30DTC-M853	60	22.00	20.50	18.50	17.00	15.00	14.50	80/100	70/90	3:20	1:40	1:10	230-60-1 Open	2	455
8HDM-30DTD-M853	60	22.00	20.50	18.50	17.00	15.00	14.50	80/100	70/90	3:20	1:40	1:10	460-60-3 Open	2	455



Vacuum Tank Systems (Simplex and Duplex)



0523-V184T-G588DX



2565-V93DTC-T336

Applications

- Vacuum Thermo-Forming
- Food Processing
- Impregnation & Degassing
- Avionics
- Transfer/Handling Equipment

Includes

- Swing Type Check Valve
- Vacuum Switch
- Large Inline Filter/Exhaust Muffler
- Easy-to-use Electrical Panel (Duplex only - See page 10)
- Vacuum Gauge
- Pre-tank Filter AV460C (Optional)

Tank Simplex Model Number	Size (Gallons)	Switch Setting " Hg		Approximate Pump Down Speed (minutes; seconds)		System Voltage O = Oilless L = Lubricated	H.P.	Shipping Weight lbs
		Off	On	0-25" Hg	20-25" Hg			
0523-V81T-G588DX	2	25"	20"	0:15	0:09	115-60-1/L	1/4	47
0523-V184T-G588DX	2	25"	20"	0:15	0:09	115-60-1/O	1/4	46
1023-V17T-G608X	30	25"	20"	1:30	0:45	115-60-1/L	3/4	191
1023-V17TA-G608X	30	25"	20"	1:30	0:45	230-60-1/L	3/4	191
1023-V126T-G608X	30	25"	20"	1:30	0:50	115-60-1/O	3/4	191
1023-V126TA-G608X	30	25"	20"	1:30	0:50	230-60-1/O	3/4	191
2565-V90TC-T336	30	25"	20"	0:30	0:14	230-60-3/L	1.5	234
2565-V90TD-T336	30	25"	20"	0:30	0:14	460-60-3/L	1.5	234

Duplex Model Number	Tank Size Gallons	Switch Setting "Hg				Approximate Pump Down Speed (minutes;seconds)			System Voltage Lubricated-L Oilless-O	H.P.	Shipping Weight lbs
		Switch #1		Switch #2		0-25" Hg	20-25" Hg	17-25" Hg			
		Off	On	Off	On	(2 pumps)	(1 pump)	(2 pumps)			
2565-V93DTC-T336	60	25"	20"	20"	17"	0:30	0:29	0:17	230-60-3/L	1.5	450
2565-V93DTD-T336	60	25"	20"	20"	17"	0:30	0:29	0:17	460-60-3/L	1.5	450
6066-V113DTC-T339	60	25"	20"	20"	17"	0:29*	0:15*	0:13*	230-60-3/O	5	575
						0:25**	0:10**	0:8**			575
6066-V113DTD-T339	60	25"	20"	25"	17"	0:29*	0:15*	0:13*	460-60-3/O	5	575
						0:25**	0:10**	0:8**			575

* Pump running cold

**Pump operating at stabilized



Duplex Control Panel

Gast Duplex Control Panel has been designed to offer the customer all the options necessary to operate their tank package efficiently and safely. All panels are completely wired and tested prior to being installed on the unit. The entire package is then tested as a system before leaving Gast.

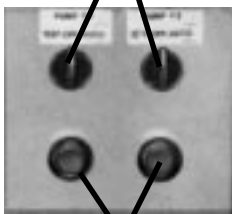
STANDARD EQUIPMENT INCLUDES:

- All electric components UL and CSA recognized. See components for other listing.
- Panel mounted three position (Test-On-Off) selector switch
- Panel door mounted reset push-button for each magnetic starter
- Motor Starters - Each motor is equipped with a quick response, factory set thermal overloads.
- Alternator - Heavy duty electromechanical device insures the reliability expected by Gast quality minded engineers.
- Transformer - Industrial Grade reduce voltage transformer.

ALTERNATOR - This UL, CSA and IEC recognized component automatically alternates which pump operates each cycle. The alternator is wired (control circuit) in such a way that if one pump cannot satisfy the demand alone, then the other pump will start and both will run until the demand is satisfied.

MAGNETIC STARTER – supplied for each motor. This UL, CSA, and IEC recognized component incorporates heavy duty contacts which complete (start) or open (stop) the circuit to the motor. The contactor (contact bar) is actuated by a magnetic coil energized by the 115 volt control circuit.

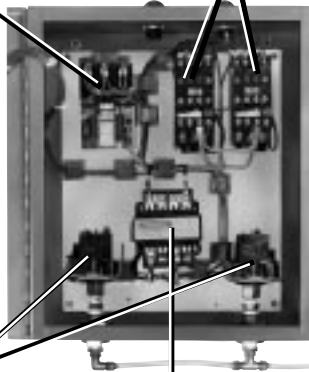
SELECTOR SWITCH
3 POSITIONS



RESET
PUSH BUTTONS

PRESSURE OR
VACUUM SWITCH

CONTROL CIRCUIT COMPONENTS – (selector switch, sensing switch (pressure or vacuum), magnetic starter coil and alternator).




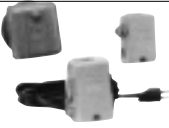


TRANSFORMER – This component is UL, CSA and IEC recognized. The step down transformer supplies only the control circuit with 115 volts (the electric motors could operate at a higher voltage). The transformer secondary is fused to protect the control components from a voltage surge which otherwise could damage their operation.

Similar panels are used on pressure and vacuum tank packages. The pressure or vacuum switch is mounted inside of the duplex panel enclosure. This feature eliminates the excessive wiring and/or conduit associated with switches mounted externally on the air receiver.




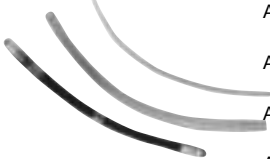
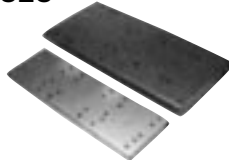

Reference Dimensions (inches)

Model	Overall			 Length Width		Hole	Plumbing Connection All Female
	Length	Height	Width	Length	Width		
ROA-P206T	19	18	8	10	4	3/8	1/4
DOA-D106T	18	15	8	10	4	3/8	1/4
1HAB-11T	18	17	8	10	4	3/8	1/4
1LAA-11T	18	17	8	10	4	3/8	1/4
2HAH-11T	18	18	8	10	4	3/8	1/4
3HBB-11T	26	21	14	16	12	7/16	1/4
4HCC-11T	33	27	16	18	14	9/16	1/4
5HCD-11T	33	27	16	18	14	9/16	1/4
6HCA-11T	38	29	17	22	15	9/16	3/8
7HDD-11T	38	29	17	22	15	9/16	3/8
8HDM-11T	38	29	17	22	15	9/16	3/8
0523-V	21	17	10	10	4	3/8	1/4
1023-V	39	30	22	22	15	9/16	1 1/4
2565-V90	40	35	24	24	15	9/16	1 1/4
4HCC-89	48	35	38	26	18 1/2	9/16	1/2
5HCD-95	48	35	38	26	18 1/2	9/16	1/2
6HCA-15	48	35	38	26	18 1/2	9/16	1/2
7HDD-69D	48	35	38	26	18 1/2	9/16	1/2
8HDM-30D	48	35	38	26	18 1/2	9/16	1/2
2565-V93	49	36	37	26	18 1/2	9/16	1 1/4
6066-V113	50	48	34	26	18 1/2	9/16	1 1/4



ACCESSORY	PART NO.	DESCRIPTION	USED ON
 <p>PRESSURE AND VACUUM TANK ASSEMBLIES (COMPLETE PACKAGE MINUS PUMP)</p>	AF599D	2 GALLON TANK ASSM FOR ROA & DOA SERIES (PRESSURE)	DOA/ROA-P106-TT
	AF599	2 GALLON TANK ASSEMBLY FOR 48 FRAME PISTON (PRESSURE)	1HAB, 2HAH
	AF599A	2 GALLON TANK ASSM FOR 56 FRAME PISTON (PRESSURE)	4HCC, 5HCD
	AK329	2 GALLON TANK ASSEMBLY FOR 48 FRAME PISTON (LOW PRESSURE)	1LAA-11T-M100X
	AF600	12 GALLON TANK ASSEMBLY FOR 48 FRAME PISTON (PRESSURE)	1HAB, 2HAH, 3HBB
	AF600B	12 GALLON TANK ASSEMBLY FOR 56 FRAME PISTON (PRESSURE)	4HCC, 5HCD, 6HCA
	AF601	20 GALLON TANK ASSEMBLY FOR 2 CYLINDER 56 FRAME PISTON (PRESSURE)	4HCC, 5HCD, 6HCA
	AF606	30 GALLON TANK ASSEMBLY FOR 56 FRAME PISTON (PRESSURE)	5HCD, 6HCA, 7HDD, 8HDM
	AF599H	2 GALLON TANK ASSEMBLY FOR 48 FRAME ROTARY VANE (VACUUM)	0523 (OILLESS & LUBE)
	AH293	12 GALLON TANK ASSEMBLY FOR 48 FRAME ROTARY VANE (VACUUM)	0323, 0523
	AH318	30 GALLON TANK ASSEMBLY FOR 56 FRAME ROTARY VANE (VACUUM)	1023 (OILLESS & LUBE)
	AH333	30 GALLON TANK ASSEMBLY FOR "65 SERIES" ROTARY VANE (VACUUM), DOES NOT INCLUDE MAGNETIC STARTER	2565, 2567
AH336	60 GALLON TANK ASSEMBLY FOR "65 SERIES" ROTARY VANE (VACUUM) DOES NOT INCLUDE MAGNETIC STARTER	2565, 6066	
 <p>PRESSURE & VACUUM SWITCHES</p>	AF265	DIAPHRAGM-TYPE UNLOADING PRESSURE SWITCH 10-100 PSI RANGE, 20-30 LB DIFFERENTIAL	ROA-DOA
	AF564	DIAPHRAGM-TYPE PRESSURE SWITCH 10-100 PSI RANGE, 20-30 LB. DIFFERENTIAL (NO UNLOADER)	ALL SIMPLEX SYSTEMS
	AE265	DIAPHRAGM-TYPE VACUUM SWITCH, CUTOUT 5-25" HG, DIFFERENTIAL 4-12" HG	ALL SIMPLEX SYSTEMS
 <p>CHECK VALVES</p>	AE238	SPRING-LOADED CHECK VALVE, 1/4 NPTM THREADED AT BOTH ENDS	ROA (PRESSURE) 0523 (VACUUM)
	AJ550	COMPRESSION-TYPE CHECK VALVE, 1/4 NPTF THREADED AT BOTH ENDS	DOA, 1HAB-6HCA (PRESSURE)
	AJ550A	COMPRESSION-TYPE CHECK VALVE, 3/8" NPTF THREADED AT ENDS	7HDD (PRESSURE)
	AJ824	SPRING-LOADED CHECK VALVE, 3/8" NPTF THREADED AT BOTH ENDS	1023 (VACUUM)
	AH326A	SWING CHECK VALVE, 3/4" NPTF THREADED AT BOTH ENDS	2565 (VACUUM)
	AH326B	SWING CHECK VALVE, 1" NPTF THREADED AT BOTH ENDS	6066 (VACUUM)
	AK430	SPRING-LOADED CHECK VALVE, 3/8" NPTF HOSE CONNECTION (INSIDE TANK)	4HCC-8HDM
 <p>GAUGES</p>	AA806	2" DIAL FACE PRESSURE GAUGE, 0-160 PSI (0-11 BAR), 1/4" NPTM MOUNTING	ALL SIMPLEX
	AE362	2" DIAL FACE PRESSURE GAUGE, 0-100 PSI (0-7 BAR) 1/4" NPTM BOTTOM MOUNTING	ALL DUPLEX PRESSURE SYSTEMS
	AE136	2" DIAL FACE VACUUM GAUGE, 0-30 HG (0-76MM HG) 1/4" NPTM BACK MOUNTING	ALL SIMPLEX VACUUM SYSTEMS
	AA640	2" DIAL FACE VACUUM GAUGE, 0-30 HG (0-76MM HG) 1/4" NPTM BOTTOM MOUNTING	ALL DUPLEX VACUUM SYSTEMS



ACCESSORY	PART NO.	DESCRIPTION	USED ON
DRAINS	AE248	MANUAL DRAIN COCK, 1/4" NPTM	ALL SYSTEMS
	AK602	AUTO TANK DRAIN, 1/4" NPT	PRESSURE SYSTEMS
	K602	AUTO TANK DRAIN ASSEMBLY	PRESSURE SYSTEMS
 INTAKE FILTERS	AH190	1/4" NPTM, PLASTIC WITH INTERNAL FELTS (FOR LOWER FLOWS)	ROA (CAN BE USED ON DOA)
	B300A	1/4" NPTM, PLASTIC WITH INTERNAL FELTS	1HAB-7HDD
	B300F	3/8" NPTM, PLASTIC WITH INTERNAL FELTS	8HDM
	AA900D	JAR-TYPE, 3/4" NPTF PORTS	2565
	AV460C	CATCH POT WITH VACUUM BAG ELEMENT AND CLOTH SACK, 1 1/4" NPTF PORTS (INSTALL BEFORE TANK)	6066
	V400G	JAR-TYPE, 3/4" NPTF PORTS	0523 (OILLESS & LUBRICATED)
	AB599	JAR-TYPE, 3/8" NPTF PORTS	1023 (OILLESS & LUBRICATED)
 EXHAUST MUFFLERS	V425L	JAR-TYPE, 1/4" NPTF WITH DEFLECTOR IN EXHAUST PORT	0523 (OILLESS & LUBRICATED)
	AB599B	JAR-TYPE, 3/8" NPTF WITH DEFLECTOR IN EXHAUST PORT	1023 (OILLESS & LUBRICATED)
	AA900E	JAR-TYPE, 3/4" NPTF WITH DEFLECTOR IN EXHAUST PORT	2565 SIMPLEX AND DUPLEX
	AD560B	JAR-TYPE, 1" NPTF WITH DEFLECTOR IN EXHAUST PORT	6066
 SHOCK MOUNTS	AF631	1" DIA, 3/4" THICKNESS, 1/4 X 20 THREADING 1/2" LONG	OPTIONAL
	AF633	1 1/2" DIA, 1" THICKNESS, 5/16 X 18 THREADING 5/8" LONG	ALL SYSTEMS EXCEPT ROA AND DOA
 HOSE AND TUBING	AE814B	12 1/2" L. PLASTIC TUBING (NEEDS AG427 MALE CONNECTOR)	ROA, DOA
	AF634	14" L. TEFLON CORE, 1/4" NPTM FITTINGS	1HAB-5HCD
	AH332	16" L. TEFLON CORE, 3/8" NPTM FITTINGS	6HCA-8HDM
	AH325F	16" L. PLASTIC TUBING (NEEDS 2-AH138E CLAMPS)	0523 (OILLESS & LUBRICATED)
	AH325	16 3/4" L. PLASTIC TUBING (NEEDS 2-AH138C CLAMPS)	2565
	AH307C	25 1/2" L. PLASTIC TUBING (NEEDS 2-AH138D CLAMPS)	6066
 BASES	AF953	SINGLE BASE FOR 56 FRAME PISTON UNITS (NEED 1)	4HCC-8HDM DUPLEX
	AH340	BASE FOR DUPLEX VACUUM SYSTEM (NEED 2)	2565
	AB322E	BASE FOR DUPLEX VACUUM SYSTEM (NEED 2)	6066
	AE144	BACKPLATE, MOUNTING MAGNETIC STARTER	1, 1 1/2 HP
 OIL & SOLVENT	AD220	1 QUART HIGH DETERGENT 10 WEIGHT LUBRICATING OIL	0523, 1023, 2565
	AH255B	32 OUNCES OF NONFLAMMABLE FLUSHING SOLVENT	VACUUM SYSTEMS