



# Full Line Overview

AIR COMPRESSORS, VACUUM PUMPS & AIR MOTORS

[www.gastmfg.com](http://www.gastmfg.com)  
[www.idex-hs.com](http://www.idex-hs.com)





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



## **GAST GROUP**

Since its founding in 1921, the Gast Group has developed into a worldwide leader in the design and manufacture of air-moving products. We offer cost-effective solutions to pneumatic problems for both OEM and end-users. Currently we produce over 100 basic models of quality pneumatic pumps, for a wide variety of applications, designed and built to meet the changing needs of industry.

Our success has come from a dedication to quality products, innovation, and service – commitments through which we pledge to continue to maintain a leadership position.



IDEX Health and Science is comprised of market leaders providing complementary technology and functional excellence needed to support small-scale applied pneumatic and solutions in rapidly growing markets. Current applications range from analytical instrumentation, clinical diagnostics, medical equipment and implantable devices to food & beverage processing, microelectronics and transportation.

The companies comprising IDEX Health & Science, along with their core technologies, include:

- Eastern Plastics: manifolds and high-precision machined components
- Gast®: air compressors, vacuum pumps & air motors
- Ismatec®: peristaltic pumps
- JUN-AIR®: ultra-quiet, clean-air compressors
- Micropump®: gear and micro-annular gear
- Rheodyne®: high and low pressure valves
- Sapphire Engineering™: precision dispensing pumps, components, and flow cells
- Systec®: degassers and debubblers
- Trebor International: air-operated, double-diaphragm pumps
- Upchurch Scientific®: fittings and tubing



## Products for Almost any Application – Worldwide

We offer an extensive and versatile line of air-moving products, including vacuum pumps, compressors, air motors, gearmotors, vacuum generators, and regenerative blowers. We design and build these components for original equipment manufacturers worldwide.

To ensure fast, efficient delivery of products, Gast has a vast network of Representatives/Distributors throughout the United States and the world. Plus, we maintain sales and service facilities in Europe to serve the European community, sales offices in Hong Kong and Shanghai, China, and Certified Service Centers® throughout the World.

## Unparalleled Design Expertise

Unlike other manufacturers, who might expect you to modify your pneumatic system to fit their available product(s), Gast is committed to finding the right product to meet your specific needs. Chances are excellent we'll have a high-quality, off-the-shelf product to fit your existing application or meet your anticipated needs. If not, we'll propose customized cost-effective design options that will serve your special requirements.

Our experienced Research and Development engineers and Product engineers work together to analyze the customer's needs and use computer-aided design to generate timely solutions to their air-handling problems. The design team has one goal: to create problem-solving products that capitalize on the latest available technology, meet all application requirements, and benefit from cost-effective production methods.

The end result: products that are the best value in the marketplace for our customers.

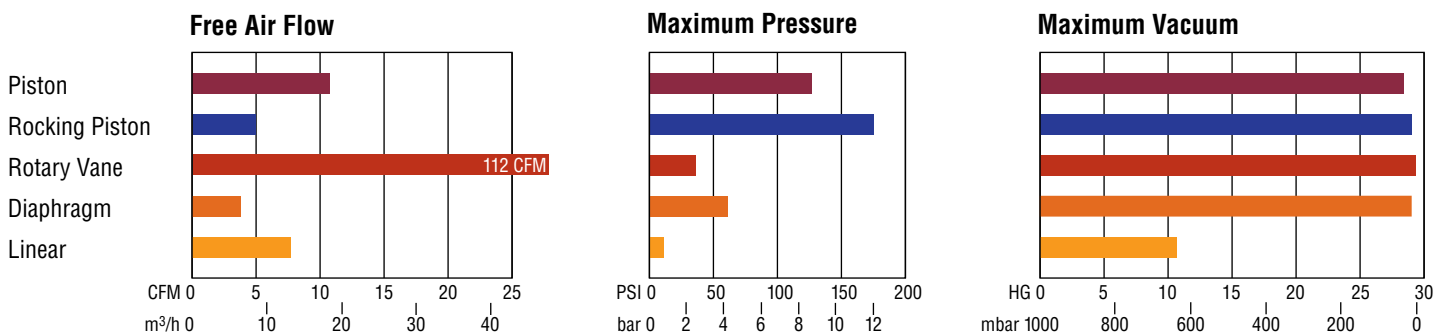
## A Lasting Commitment to Quality

We invest heavily in both equipment and people to maintain the consistent quality for which our products are known worldwide, and we have done so since day one. As early as 1983, we implemented a total quality process designed to ensure the quality of our products. In keeping with that tradition, Gast has achieved ISO 9001 and 14001 certification, thus becoming a member of an elite group of the manufacturing companies of the world receiving that certification, the international symbol of world-class excellence. ISO 9001 and 14001 is the most stringent of the three ISO quality standards.

## European Community Directives **CE**

Given its international perspective, Gast has pledged to conform to the European Community Directives. These directives contain essential requirements concerning health, safety, environment, and consumer protection for all products targeted for the European Community market. Currently, all Gast products available for sale in the European Community are in compliance with the Machinery, Low Voltage, and Electromagnetic Compatibility Directives.

## Compressors & Vacuum Pumps Performance Overview\*



\*Shown here are performance ranges of our positive displacement models. Review sections inside for performance of our regenerative blowers, vacuum generators, and air motors/gearmotors.

Note: Performance shown on inside charts is for continuous operation. Higher performance is possible on an intermittent basis (10 min. on/10 min. off) for some of the models listed. Consult Factory .



Gast Rotary Vane air compressors and vacuum pumps are used in thousands of applications worldwide. Available in oilless, lubricated, motor-mounted, and separate drive styles, they offer a wide choice of capabilities.

Air flow from .31 to 112 cfm\* (0,53 to 190 m<sup>3</sup>/h), vacuum up to 28 in. Hg (65 mbar), and pressure up to 25 psig (1,7 bar), also available are dual function styles. Electric motors are dual frequency, multi-voltage AC for worldwide applications, with models rated 12 and 24 volts DC. Horsepowers range from 1/45 to 15 HP\* (0,02 to 11 kW). RV Series sound level is up to 8db(A) below 23 series quiet sound level. Vacuum tank systems come in simplex and duplex variations, with tank sizes ranging from 2 to 60 gallons.

A complete line of recommended accessories is also available.

## Performance

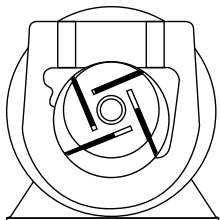
- Pressure to 25 psig (1,7 bar)
- Vacuum to 28" Hg (65 mbar)
- Air flow to 112 cfm (190 m<sup>3</sup>/h)

## Features

- Oilless or Lubricated Models
- Easy Serviceability
- Low Vibration
- Pulse-Free Air Delivery
- Extra Quiet AT Series
- Long, Service-Free Life

## Typical Applications

- Breathing Air Supply
- Circulation Therapy
- Packaging
- Graphic Arts
- Pond Aeration
- Vacuum Hold-Down
- Air Sampling
- Office/Business Machines
- Food Processing Equipment
- Laboratory Use
- Soil Sparging
- Vacuum Forming
- Air Bearings



Sliding, flat vanes in an eccentric-mounted rotor are flung outward against the bore of the pump to generate pressure and vacuum in a rotary vane pump.

MODEL/ SERIES	POWER RATING		FREE AIR FLOW				MAXIMUM PRESSURE		MAXIMUM VACUUM	
	60 Hz hp	kW	cfm		m <sup>3</sup> /h		psi	bar	" Hg	mbar
<b>MOTOR MOUNTED MODELS</b>										
1531 24V BLDC	1/10	0,07	1.7		2,9		10	0,7	25	167
1531	1/10	0,07	1.25	1.5	2,12	2,5	15	1,0	20	335
0532	1/15	0,05	.29	.6	0,49	1,0	15	1,0	20	335
1032	1/15	0,05	.92	1.1	1,56	1,9	10	0,7	20	335
1532	1/10	0,07	1.3	1.5	2,2	2,5	10	0,7	20	335
2032	1/8	0,09	2.0	2.4	3,4	4,1	10	0,7	26	133
3032	1/6	0,12	2.4	2.6	4,1	4,4	10	0,7	26.5	116
0211	1/6	0,12	1.1	1.3	1,9	2,2	20	1,4	20	335
*0323-1423 (6 models)	1/4-1	0,19- 0,56	2.7-11.5	3.2-13	4,6- 19,5	5,4-22	10	0,7	26.5	116
*AT03 - AT05	1/4	0,19	3.8-4.8	—	—	6,5-8,2	5	0,4	24	150
2070	2	1,5	16	20	27	34	15	1,0	25	167
<b>SEPARATE DRIVE MODELS</b>										
0533	1/15	0,05	.5	.6	0,85	1,0	15	1,0	20	335
1033	1/10	0,07	.9	1.1	1,53	1,9	15	1,0	20	335
1034	1/6	0,13	—	1.6	—	2,7	10	0,7	20	335
1534	1/6	0,13	—	2.2	—	3,7	10	0,7	20	335
0240-0740	1/4-1/3	0,19- 0,25	1.5-4.9	1.9-6.0	2,5- 8,3	3,2-10	10	0,7	20	335
0465	1/4	0,19	3.4	4.0	5,8	6,8	—	—	28	65
0765	1/3	0,25	5.0	6.0	8,5	10	—	—	28	65
1550	3/4	0,56	11.5	14.5	19,5	24,7	15	1,0	20	335
1065-2565	1/2-1/2	0,37-1,1	7.3-16.5	8.5-21	12-28	14,4-35,7	25	1,7	28	65
2067-2567	1-1/2	0,75-1,1	14-17	17-21	24-29	29-35,7	15	1,0	28	65
2080-4080	2-5	1,5-3,7	20-37	25-45	34-63	42-76	15	1,0	25	167
3040	2	1,5	31	40	53	68	10	0,7	20	335
4565	3	2,2	36	47.5	61	80,1	15	1,0	25	167
5565	3	2,2	45	55	76	93,5	—	—	20	335
6066	5	3,7	45	55	76	93,5	15*	1,0	25	167
1290**	10	7,5	—	112	—	190	20	1,4	—	—
1290	7.5	5,6	—	112	—	190	-	—	25	167

\*\*Soil sparging model

\*Standard model performance. Soil sparging model capable of 20 psi



## Performance

- Pressure to 60 psig (4,2 bar)
- Vacuum to 29" Hg (31 mbar)
- Air flow to 3.8 cfm (6,5 m<sup>3</sup>/h)

## Features

- Oilless
- Rugged Construction
- Quiet
- Cooler Air Output
- Easy Maintenance
- Compact, lightweight
- Corrosion Resistant
- Low Power Consumption

## Typical Applications

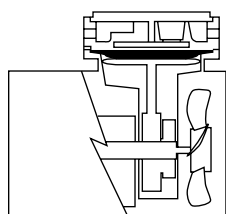
- Blood Analysis
- Respirators/Nebulizers
- Vacuum Pad Hold-Down
- Dental/Surgical
- Automobile Cruise Controls
- Graphic Arts Equipment
- Air and Gas Analysis
- Breast Pumps
- Sterilizers
- Air Brushes
- Agricultural Foam Markers
- Oil Atomizers
- Lab Equipment

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.

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)	1/4	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
8R (DC)	-	-	3.4 lpm				22.5	1,6	17	438
20R (AC)	1/30	0,025	14,0-16,0 lpm				30-45	2,1-3,1	20-25	335-99



In reciprocating motion, with a short stroke, the diaphragm at the top of the connecting rod flexes up and down in a closed chamber, creating pressure or vacuum.



The outstanding performance and flexibility of Gast oilless Rocking Piston air compressors and vacuum pumps, available in standard, twin, and miniature styles, make them the perfect choice for hundreds of applications.

Air flow capabilities from 3.4 lpm to 5.5 cfm (9,35 m<sup>3</sup>/h) are available as are vacuum capabilities up to 29 in. Hg (31 mbar) and pressure to 175 psig (12 bar). Choose from dual frequency, shaded pole, and permanent split capacitor (psc) electric motors with AC multi-voltages available for worldwide applications as well as 6, 12, and 24 volt DC models in brush and brushless types. Horsepowers range from 1/20 to 1/2 HP (0,04 to 0,37 kW).

Tank models and a complete line of recommended accessories are also available.

## Performance

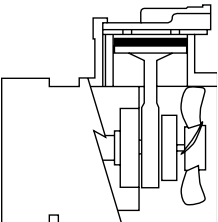
- Pressure to 200 psig (14 bar)
- Vacuum to 29" Hg (31 mbar)
- Air flow to 5.5 cfm (9,35 m<sup>3</sup>/h)

## Features

- Quiet
- Oilless
- Durable
- Lightweight
- Rugged Construction
- Field Service Capability
- Corrosion Resistant Models Available

## Typical Applications

- Oxygen Concentrators
- Beverage Dispensing
- Body Fluid Analysis
- Automotive Suspension
- Dental Vacuum Ovens
- Vacuum Frames
- Core Drilling



Another reciprocating concept mounts a flexible cup at the top of the connecting rod and creates vacuum or pressure as the cup maintains a seal against the cylinder walls in a rocking motion.

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				
8R (DC)	—	—	3.4 lpm		3.4 lpm		22.5	1,55	17	438
20R (AC)	--	--	.5 - .57			.85-.97	30-45	2,1-3,1	20-25	335-99
34R (DC)	1/4	0,19	1.0		1.7		200	14,0	—	—
45R (DC)	1/4	0,19	1.9		3.23		115	7,9	25,5	864
55R*	1/20	0,04	.16	.20	0,27	0,34	30	2,1	24	200
55R (DC)	1/10	0,07	.25		0,42		30	2,1	24	200
LOA**	1/16	0,05	—	.38	—	0,65	90	6,2	25	167
LOA*	1/6	0,12	.52	.83	0,88	1,41	100	7,0	26	133
LOA (DC)	1/10	0,07	.62		1,05		100	7,0	27	99
LAA	1/6	0,12	1.28	1.52	2,17	2,58	50	3,5	29	31
SOA	1/6	0,12	1.4	1.7	2,38	2,89	30	2,1	27,5	82
SAA (STAGED)	1/6	0,12	—	1.75	—	3,00	—	—	29,5	15
SAA (PARALLEL)	1/6	0,12	—	3.00	—	5,10	—	—	27	99
SAA	1/6	0,12	—	1.95	—	3,31	30	2,1	—	—
ROA**	1/8	0,09	1.05	1.25	1,78	2,12	100	7,0	26	133
ROA*	1/4	0,19	1.50	1.60	2,55	2,72	100	7,0	27	99
ROA (DC)	1/8	0,09	1.50		2,55		—	—	26	133
RAA	1/4	0,19	2.5	2.7	4,25	4,59	100	7,0	27,5	82
71R (SINGLE CYL)	1/3	0,25	2.4	2.0	4,08	3,40	100	7,0	—	—
71R (TWIN CYL)	1/3 - 3/4	0,25 - 0,56	3,25 - 4,5	4,0 - 4,5	5,52 - 7,65	6,80 - 7,65	15 - 100	1,04 - 7,0	28	65
71R (TWIN CYL)***	1/3 - 1/2	0,25 - 0,37	1.7	1.9	2,89	3,23	175	12,1	—	—
72R (SINGLE CYL)	1/3	0,25	2.0 - 2.5	2.5	3,4 - 4,25	4,25	100	7,0	28	65
72R (TWIN CYL)	1/3 - 3/4	0,25 - 0,56	2,5 - 5,5	2,5 - 5,5	4,25 - 9,35	4,25 - 9,35	25 - 100	1,73 - 7,0	29	31
74R	1/4	0,19	1.30	1.50	2,21	2,55	100	7,0	—	—
75R	1/3	0,25	4.5	5.1	7,65	8,67	40	2,8	27	99
81R	1/3	0,25	3,0	3,7	5,1	6,3	100	7,0	—	—
82R	1/3	0,25	4.2	4.5	7,1	7,6	30	2,1	—	—
82R DC	1/3	0,25	3.2	3.9	5,4	6,6	30	2,1	25	167
85R	1/3	0,25	4.3	4.3	7,31	7,31	40	2,8	27	99

\*PSC - Permanent Split Capacitor

\*\* Shaded Pole

\*\*\* 71R twin cylinder high pressure models



Gast Piston air compressors and vacuum pumps are built to withstand the most rugged operating conditions with corrosion-resistant materials used for critical internal parts. Ring design provides consistent flows throughout the service life of the unit. All models are oilless and come in motor-mounted or separate drive styles.

Air flow capacities range from 1.3 to 11 cfm (2,2 to 18,7 m<sup>3</sup>/h), with vacuum to 28.5 in. Hg (48 mbar) and pressure to 125 psig (8,8 bar). Dual frequency, AC multi-voltage electric motors accommodate worldwide applications; 12 and 24 volt DC options are also available. Horsepowers range from 1/6 to 2 HP (0,12 to 1,5 kW).

Tank-mounted Piston compressors come in simplex and duplex styles and in tank sizes ranging from 2 to 60 gallons.

A complete line of recommended accessories is also available.

## Performance

- Pressure to 125 psig (8,8 bar)
- Vacuum to 28.5" Hg (48 mbar)
- Air flow to 11 cfm (18,7 m<sup>3</sup>/h)

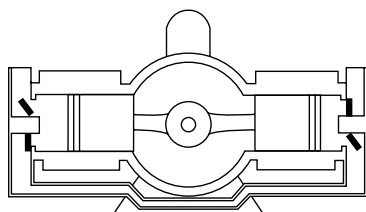
## Features

- Oilless
- Rugged Construction
- Long Service-Free Life
- Corrosion Resistant

## Typical Applications

- Cable Pressurization
- Tire Inflators
- Air Suspension
- Beverage Dispensing
- Pneumatic Temperature Controls
- Door Closures
- Power Spraying
- Spray Painting
- Medical/Dental Clinics

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 MOTOR MOUNTED MODELS</b>										
1L	1/6	0,12	1.5	1.5	2,55	2,55	50	3,5	—	—
2L	1/4	0,19	2.4	2.4	4,1	4,1	50	3,5	—	—
3L	1/3	0,25	3.1	3.1	5,3	5,3	50	3,5	—	—
4L	1/2	0,37	4.5	4.5	7,7	7,7	50	3,5	—	—
5L	3/4	0,56	5.4	5.4	9,2	9,2	50	3,5	—	—
6L	1	0,74	6.3	6.3	10,7	10,7	50	3,5	—	—
7L	1 1/2-2	1,1-1,5	10.2	10.2	17,3	17,3	50	3,5	—	—
8L	2	1,5	9.1	12.4	15,5	20,7	50	3,5	—	—
1H	1/6	0,12	1.3	1.3	2,2	2,2	100	7,0	—	—
2H	1/4	0,19	2.1	2.1	3,6	3,6	100	7,0	—	—
3H	1/3	0,25	2.4	2.4	4,1	4,1	100	7,0	—	—
4H	1/2	0,37	3.5	3.5	6,0	6,0	100	7,0	—	—
5H	3/4	0,56	4.7	4.7	8,0	8,0	100	7,0	—	—
6H	1	0,74	5.4	5.4	10,7	9,2	100	7,0	—	—
7H	1 1/2-2	1,1-1,5	9.1	9.1	15,5	15,5	100	7,0	—	—
7HFA	1 1/2	1,1	5.4	6.5	9,2	11,0	115	8,0	—	—
8H	2	1,5	11	11	18,7	18,7	100	7,0	—	—
IVAF	1/6	0,12	1.49	1.80	2,53	3,06	—	—	27.5	82
IVSF	1/6	0,12	2.49	3.00	4,23	5,10	—	—	28.5	48
IVBF	1/6	0,12	2.66	3.20	4,52	5,44	—	—	27.5	82
4VSF	1/2	0,37	3.38	4.2	5,75	7,1	—	—	28.5	48
4VCF	1/2	0,37	4.15	5.00	7,06	8,50	—	—	27.5	82
5VSF	1 1/2	1,1	5.19	6.25	8,82	10,63	—	—	28.5	48
5VDF	1 1/2	1,1	8.72	10.50	14,82	17,85	—	—	27.5	82
<b>SEPARATE DRIVE MODELS</b>										
•PAB	.3	0,22	1.3		2,2		100	7,0	—	—
•PBB	.6	0,45	2.5		4,3		100	7,0	—	—
•PCA	1.7	1,27	6.1		10,4		125	8,8	—	—
•PCD	1.1	0,82	4.7		8,0		100	7,0	—	—
•VAB	.13	0,10	1.3		2,2		—	—	27.5	82
•VBB	.21	0,16	2.5		4,3		—	—	27.5	82
•VCD	.26	0,19	4.8		8,2		—	—	27.5	82



In reciprocating motion, the piston moves up and down or back and forth inside a cylinder creating pressure or vacuum.



## Performance

- Pressure to 10.5 psig (0,72 bar)
- Vacuum to 12.1" Hg (603 mbar)
- Air flow to 8.9 cfm (252 lpm)

## Features

- Oilless
- Long Life
- Low Noise Level
- High Efficiency
- Compact and Powerful
- No Lubrication Necessary
- Smooth Air Flow
- Simple Maintenance

## Typical Applications

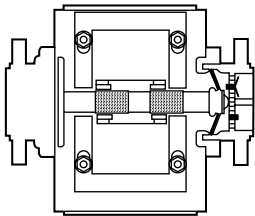
- Blood Cuff Monitors
- Waste Water Treatment
- Environmental Monitoring and Air Sampling
- Oxygen Supply for Medical Instruments
- Liquid Agitation and Mixing
- Hospital Air Mattresses
- Medical Nebulizers
- Air Supply for Leak Test Equipment
- Solder Removal
- Automotive Emission Test Equipment
- Leak Test Equipment
- Scientific and Medical Analysis Equipment

For applications requiring extremely quiet and highly efficient operation and simple maintenance, Gast's oilless Linear pumps have found widespread use in the medical, industrial, chemical, environmental, and scientific industries.

Performance ranges from .39 to 8.9 cfm (11 to 252 lpm), pressures to 10.5 psig (0,72 bar), vacuum levels to 12.1 in. Hg (603 mbar), with an operating noiselevel as low as 28 dB(a).

Operation is based upon the principles of electromagnetic oscillation – eliminating the need for sliding parts, minimizing power consumption, and offering high efficiency. Because there are no sliding parts there is no need for lubrication – the exhausted air is always clean and particle-free.

MODEL/ SERIES	MAX. POWER Watts	FREE AIR FLOW				MAXIMUM PRESSURE				MAXIMUM VACUUM	
		cfm		lpm		psi		bar		" Hg	mbar
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz		
DDL5	10	.45	.45	13	13	3.3	3.2	.23	.22		
DDL5BS	10	.39	.39	11	11	2.8	2.8	.19	.19	5.5	825
DDL5ES	10	.39	.39	11	11	2.8	2.8	.19	.19	5.5	825
DDL8	14	.81	.81	23	23	3.2	3.2	.22	.22		
DDL8B	14	.81	.81	23	23	3.2	3.2	.22	.22		
DDL8BS	11	.81	.99	23	28	2.6	3.0	.18	.21	7.5	760
DDL15	22	.98	1.1	28	32	4.4	4.5	.30	.31		
DDL15B	22	.98	1.1	28	32	4.4	4.5	.30	.31		
DDL30	36	2.3	1.9	65	54	5.1	5.4	.35	.37		
DDL30B	36	2.3	1.9	65	54	5.1	5.4	.35	.37		
DDL30BS	45	2.3	1.9	65	59	4.4	5.5	.30	.38	12.2	600
DDL40	47	2.6	2.3	76	65	5.8	5.9	.40	.41		
DDL40B	47	2.6	2.3	76	65	5.8	5.9	.40	.41		
DDL40BS	60	3.2	3.7	92	105	5.1	6.2	.35	.43	11.9	610
DDL60	63	3.6	2.8	102	79	6.1	6.3	.42	.43		
DDL80	93	3.9	4.2	111	120	7.0	7.0	.48	.48		
DDL120	138	6.0	5.9	169	167	6.1	7.0	.42	.48		
DDL150	150	6.3	6.6	179	187	7.3	7.1	.50	.49		



Electromagnetic oscillation of the rod/diaphragm assembly changes the volume of space enclosed between the casing and the diaphragm, creating pressure or vacuum.





For those vacuum applications where a regular vacuum pump may not be preferred, Gast Vacuum Generators provide an excellent alternative.

Choose from 27 chemical and corrosion resistant models capable of achieving up to 27 in. Hg (99 mbar) with vacuum flow rates ranging from 0.2 to 158 cfm (0,3 to 268,5 m<sup>3</sup>/h). Single or multi stage designs offer several options, including High Vacuum, High Flow, combination High Performance, and Severe Duty Series.

Also available are vacuum cups in flat and bellows, threaded or “slip fit” mounting options, with diameters from 1/4 to 5 7/8 in.

## Performance

- Vacuum to 27" Hg (99 mbar)
- Air flow to 158 cfm (268,5 m<sup>3</sup>/h)

## Features

- Economical to Operate
- Compact Size
- Lightweight Construction
- Low Air Consumption
- No Moving Parts
- Quiet Operation
- Minimal Maintenance
- Low Cost

## Typical Applications

- Envelope Insertion/Extraction
- Evacuation of Volatile Vapors
- Aspiration
- Carton Forming
- Robotic Pick and Place
- Any number of other vacuum applications where pump size, noise level or high-temperature environment are considerations.

MODEL	DESCRIPTION	FREE AIR FLOW		MAXIMUM VACUUM		AIR CONSUMPTION
		cfm @ 0" Hg	m <sup>3</sup> /h @ 1000 mbar	" Hg	mbar	cfm @ Suggested Operating Pressure
VG-005-00-00	Single-Stage High Vacuum Series	.2	0,3	27	99	.46 @ 30-75 psi
VG-010-00-00		.95	1,6	26	133	1.60 @ 30-75 psi
VG-015-00-00		2.2	3,7	27	99	3.50 @ 30-75 psi
VG-020-00-00		4	6,8	27	99	6.40 @ 30-75 psi
VG-007-00-00	Single-Stage High Flow Series	.46	,78	17	420	.49 @ 70 psi
VG-012-00-00		1.6	2,7	17	420	1.90 @ 70 psi
VG-022-00-00		6.8	11,6	17	420	7.09 @ 70 psi
VG-340-M0-00		34	57,8	16.5	455	26.40 @ 80 psi
VG-065-00-00	Multi-Stage High Vacuum Series	6.8	11,6	27	99	2.7 @ 68 psi
VG-130-00-00		12	20,4	27	99	4.9 @ 68 psi
VG-260-00-00		17	28,9	26	133	7.0 @ 68 psi
VG-075-00-00	Multi-Stage High Flow Series	12	20,4	20	335	3.4 @ 87 psi
VG-140-00-00		16	27,2	20	335	5.5 @ 87 psi
VG-260-02-00	Multi-Stage (Combination) High-Performance and Severe-Duty	36	61,1	26	133	14 @ 68 psi
VG-260-04-00		71	120,6	26	133	28 @ 68 psi
VG-260-08-00		158	268,5	26	133	56 @ 68 psi

\*Metric models have MG prefix instead of VG.



When compressed air is forced through a conical nozzle, its velocity increases and pressure decreases. Gast vacuum generators operate on this venturi principle, which creates vacuum without a single moving part.



## Performance

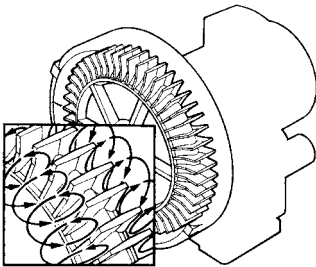
- Pressure to 284" H<sub>2</sub>O (10.25 psig/707 mbar)
- Vacuum to 184" H<sub>2</sub>O (13.5" Hg/458 mbar)
- Air flow to 1350 cfm (2294 m<sup>3</sup>/h)

## Features

- Oilless
- Mount in Any Position
- Maintenance-Free
- Continuous, Non-Pulsating Air Flow

## Typical Applications

- Air Tables
- Solution and Media Agitation
- Vacuum Hold-Down and Pickup
- Air Blow-Off
- Soil and Ground Water Remediation
- Carton Forming and Packaging
- Lab Filtration
- Sewage Aeration
- Materials Handling
- Aquaculture
- Pneumatic Conveying



A certain amount of air slips past each impeller blade during rotation and returns to the base of a succeeding blade for reacceleration - "regenerative."

The Gast full line of Regenerative Blowers for high volume vacuum or compressed air applications offers both motor-mounted and separate drive models.

Air flow capabilities range from 27 to 1350 cfm (46 to 2294 m<sup>3</sup>/h), vacuum capabilities up to 184 in. H<sub>2</sub>O (13.5 in. Hg/458 mbar), and pressure capabilities up to 284 in. H<sub>2</sub>O (10.25 psig/707 mbar). TEFC electric motors are UL and CSA certified on several models (see chart) and come in single and three-phase, dual frequency, and multi-voltage versions for worldwide applications; 12 volt DC is available on the smallest model. Horsepowers range from 1/8 to 30 HP (0,09 to 22,4 kW).

Special models with explosion-proof motors, 1/3 to 10 HP, are designed for soil vapor extraction applications. Consult Distributor or Factory for details – these models are not shown on chart.

A complete line of recommended accessories is also available.

MODEL/ SERIES	POWER RATING		FREE AIR FLOW				MAXIMUM PRESSURE				MAXIMUM VACUUM			
	60 Hz		cfm		m <sup>3</sup> /h		" H <sub>2</sub> O		mbar		" H <sub>2</sub> O		mbar	
	hp	kW	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
<b>STANDARD MOTOR MOUNTED MODELS</b>														
R1	1/8	0,09	23	27	39	46	21	28.5	52	71	20	26.5	50	66
R2	1/3, 1/2	0,25, 0,37	33	42	56	71	30	39	75	97	25	35	62	87
R3	1/2	0,37	43	52-53	88-90	31-40	35-78	43-55	77-100	107-137	28-35	40-50	70-87	100-125
R4	1	0,75	74	92	126	156	38	52	95	130	34	48	85	120
R4P	1 1/2	1,1	110	127	187	216	47-50	63-65	117-125	157-162	43-45	59-60	107-112	147-149
R5	2 1/2	1,86	133	160	226	272	50	65	125	162	47	60	117	149
R6	2 1/2, 5	1,86-3,73	180	215	306	365	35-78	40-105	87-194	100-262	45-70	45-88	112-174	112-219
R4M	9	6,7	217	252	369	428	150	170	374	423	125	136	311	339
R6P	5 1/2	4,1	235-245	280-290	399-416	476-493	50-85	30-110	125-212	75-274	60-70	35-90	149-174	87-224
R7	10	7,46	350	420	595	714	115	100-125	286	249-311	90	95-110	224	237-274
R6PP	11	8,2	405	485	688	824	75	95	187	237	65	80	162	199
R7P	18	13,4	666	795	1132	1351	90	105	224	262	85	95	212	237
R9	15	11,3	585	680	994	1155	125	125	311	311	105	115	262	286
R9P	30	22,4	1140	1350	1937	2294	110	125	274	311	100	110	249	274
<b>HIGH PRESSURE MOTOR MOUNTED MODELS</b>														
R4H	6	4,5	107	128	182	217	277	284	690	707	184	184	457	457
R6PS	11	8,2	215	265	365	450	145	170	361	423	110	130	274	324
R7S	18	13,4	350	420	595	714	170	200	423	498	130	150	324	374
R9S	30	22,4	542	660	921	1121	208	221	518	551	143	150	357	374
<b>SEPARATE DRIVE MODELS</b>														
SDR4	4	3,0	147		250		110		274		90		224	
SDR5	10	7,5	240		408		152		379		120		299	
SDR6	15	11,2	300		510		163		406		135		336	
SDR6P	15	11,2	360		612		150		374		135		336	

Our AC blower motors are UL & CSA approved.



Known industry wide for their rugged construction and reliability, Gast Air Motors and air powered Gearmotors are available in lubricated or non-lubricated models.

Lubricated Air Motors come in seven basic models up to 9.5 HP (7,1 kW); motor speeds are variable from 300 to 10,000 RPM. Non-lubricated versions, which require absolutely no lubrication, come in three basic models ranging from .18 to .82 HP (0,13 to 0,61 kW) and with motor speeds up to 4,000 RPM. Choose from hub, foot, face, NEMA C-Flange, or Metric D Series interface mountings and clockwise, counter-clockwise, or reversible rotations; four and eight vane models are also available.

Air powered Gearmotors are available in right-angle and in-line models offering a maximum torque range of 73 to 5,200 lb. in. (8 to 587 Nm) and gear ratios from 10:1 to 60:1 single reduction gear reducers.

A full line of recommended accessories is also available.

## Performance

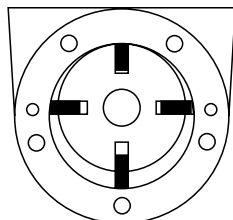
- Up to 9.5 HP (7,1 kW)
- Variable speeds to 10,000 rpm
- Gearmotor maximum torque to 5200 lb. in. (587 Nm)

## Features

- Variable Speed
- Non-Electrical Sparking
- Cool Running
- Compact and Portable
- Operate in All Positions
- Mounting Flexibility

## Typical Applications

- Mixing Equipment
- Conveyor Drives
- Pump Drives
- Food Packaging
- Pharmaceutical Packaging
- Hoists and Winches
- Hose Reels
- Fiberglass Choppers
- Tension Devices
- Turntables



Compressed air into an air motor forces the sliding vanes out of the eccentric-mounted rotor. An extended shaft on the rotor spins to perform the work.

MODEL	OPERATING DATA							MAXIMUM TORQUE		
	MAX. SPEED rpm	OUTPUT POWER		TORQUE		MAX. AIR CONSUMPTION		MAX. SPEED rpm	MAXIMUM TORQUE	
		hp	kW	lb. in.	Nm	cfm	m <sup>3</sup> /h		lb. in.	Nm
<b>STANDARD AIR MOTORS</b>										
1AM (A)	10,000	0.45	0,33	2.75	0,31	20.5	35,1	650	5.6	0,65
1UP (B)	6,000	0.45	0,33	5.25	0,58	27	47	500	6.00	0,68
2AM (A)	3,000	0.93	0,68	19.50	2,20	30	49,5	350	26.10	3,05
4AM (A)	3,000	1.70	1,30	36.00	4,1	78	132,5	300	56.00	6,3
6AM (A)	3,000	4.00	3,00	84.00	10,00	128	228	300	115.00	13,00
8AM (A)	2,500	5.25	3,90	132.00	14,40	175	293	300	185.00	21,00
16AM (A)	2,000	9.50	7,10	290.00	34,00	275	475	300	372.00	43,0
<b>STAINLESS STEEL AIR MOTORS</b>										
1AM	10,000	0.45	0,33	2.75	0,31	20.5	35,1	650	5.6	0,65
4AM	3,000	1.70	1,30	36.00	4,1	78	132,5	300	56.00	6,3

MODEL	GEAR RATIO	OPERATING DATA								MAXIMUM TORQUE		
		MAX. SPEED rpm	LINE PRES.	OUTPUT POWER		TORQUE		MAX. AIR CONSUMPTION		MAX. SPEED rpm	MAXIMUM TORQUE	
				hp	kW	lb. in.	Nm	cfm	m <sup>3</sup> /h		lb. in.	Nm
<b>GEARMOTORS</b>												
1AM-NRV	15:1	350	A	0.34	0,26	62	7,1	21.0	36	30	72	8,1
1UP-NRV	15:1	400	C	0.32	0,23	49	5,5	2	36	30	71	8,0
2AM-43A	20:1	150	C	0.26	0,39	110	12,4	18	30,6	60	145	16,4
2AM-43A	20:1	150	A	0.58	0,43	240	27,1	42	71,4	60	270	30,5
4AM-RV	10:1	300	B	1.26	0,94	274	31,0	57.5	98	30	425	48,0
4AM-RV	15:1	200	B	1.25	0,90	400	45,2	60.0	102	20	640	72,0
4AM-70C	20:1	150	A	1.17	0,87	487	55,0	71.0	120	15	740	83,6
4AM-70C	40:1	75	A	0.95	0,71	800	90,4	71.0	120	7	1255	141,8
4AM-70C	60:1	50	A	0.82	0,61	1040	117,5	71.0	120	5	1640	185,3
6AM-22A	10:1	300	A	3.40	2,54	720	81,4	130.0	221	30	950	107,4
6AM-22A	20:1	150	A	2.65	1,98	1100	124,3	130.0	221	15	1550	175,6
6AM-22A	40:1	75	A	2.10	1,57	1725	194,9	135.0	230	8	2500	282,5
8AM-32A	20:1	125	A	3.70	2,76	1850	209,1	177.0	301	15	2550	288,2
16AM-13	20:1	100	A	6.50	4,85	4175	471,8	275.0	468	15	5175	584,8

A - 100 psig and 7,0 bar line pressure for imperial and metric data, respectively.

B - 80 psig and 5,5 bar line pressure for imperial and metric data, respectively.

# 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, visit our website at [www.gastmfg.com](http://www.gastmfg.com) or contact one of our offices below.

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