



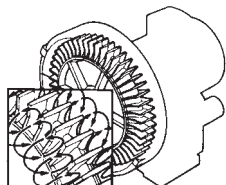
AIR COMPRESSORS • VACUUM PUMPS

Features

- Low Noise
- Oilless
- Mount in Any Position
- Maintenance-Free
- Continuous, Non-Pulsating Air Flow
- Compact Size
- Light Weight

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."



Regenerative Blowers

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 810 cfm, vacuum capabilities up to 184 in. H₂O and pressure capabilities up to 284 in. H₂O. TEFC electric motors are UL and CSA certified on several models 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 16 HP.

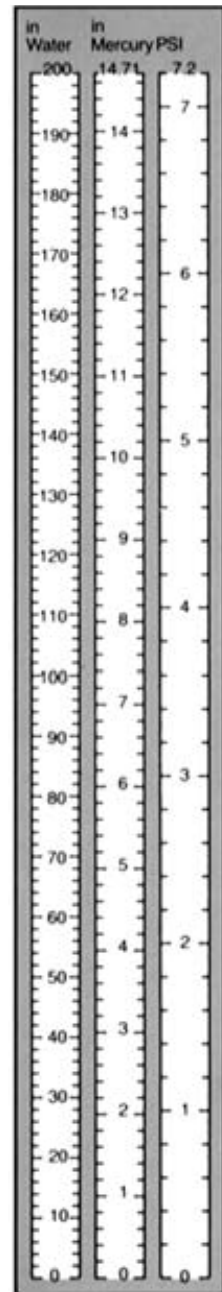
Special models with explosion-proof motors, 1/3 to 10 HP, are designed for soil vapor extraction applications. A complete line of recommended accessories is also available.

MODEL/SERIES	POWER RATING (hp)	AIR FLOW (cfm)	MAXIMUM PRESSURE "H ₂ O"	MAXIMUM VACUUM "H ₂ O"
R1	1/8	27	28.5	26.5
R2	1/3, 1/2	42	39	35
R3	1/2	53	55	50
R4	1	92	52	48
R4P	1-1/2	127	65	60
R4H	6	128	284	184
R5	2-1/2	160	65	60
R6	2-1/2-5	215	45-105	35-88
R4M	9	252	170	137
R6PS	11	265	170	130
R6P	5-1/2	290	110	90
R7	10	420	115	95
R7S	16	420	180	130
R6PP	11	485	95	80
R7P	16	810	90	85
SDR4•	4	147	110	90
SDR5•	10	240	152	120
SDR6•	15	300	163	135
SDR6P•	15	360	150	135

•=Separate drive models

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VACUUM-PRESSURE EQUIVALENCE TABLE



Conversions	
In. H ₂ O x .036 = Psi	
In. H ₂ O x .074 = 1 in. Hg	
In. H ₂ O x 1.868 = mm Hg	
In. H ₂ O x 2.491 = mbar	
mbar x .402 = "H ₂ O	
Psi x 27.68 = "H ₂ O	
In. Hg x 13.594 = "H ₂ O	

Blower System Design Tips

In order to utilize your regenerative blower most efficiently, proper system design is essential. The most important thing to recognize is that by utilizing large diameter plumbing, friction losses in plumbing can be greatly reduced. Here are some guidelines to use when setting up your blower system:

1. The plumbing should at least be the same size as the blower port or ideally one size larger. The plumbing should remain this size until it has reached the location of the work area.
2. Elbows create additional friction which causes pressure loss and back pressure. Plumbing at least one pipe size larger than the blower pipe ports minimizes the friction loss they create.
3. The pressure/vacuum relief valve should be installed in a "T" which is at least one pipe size larger than that of the exhaust of the blower. To properly protect a large horsepower blower, set the relief valve to limit the blowers duty to 5" below its continuous duty rating.
4. The exhaust air temperature of the blowers increases with increasing duty. At duties over 70" of water it is too hot for most plastic pipe. Metal pipe must be considered.