



## G-Series

Side Channel Regenerative Blowers  
Pressure & Vacuum Blowers





G-BH1 00



G-BH1  
single stage



G-BH1  
double stage



G-BH2 VELOCIS  
single, double and triple stage



G-BH7  
single stage



G-SAP / G-SAH  
single stage / double stage



G-SMV  
multi stage

## Product overview

### G-BH1 00

#### The smallest side channel blower on the market

With a height and width of approx. 4.9 inches and a depth of approx. 2.4 inches, the G-BH1 00 blowers are the smallest side channel blowers available on the market.

### G-BH1

#### Classic with innovative technology

With their high inlet volume flow up to 1,413 cfm and a differential pressure of up to 313 in. H<sub>2</sub>O, our low noise G-BH1 side channel blowers have earned their reputation. They are reliable, low maintenance and durable. They deliver 20,000 operating hours between service and are virtually maintenance free.

### G-BH2 VELOCIS

#### The side channel revolution

Volume flow up to 520 cfm and differential pressure up to 420 in. H<sub>2</sub>O. With its significantly expanded range of performance, the side channel technology can now be used in completely new fields of application that were previously inconceivable. They deliver 40,000 operating hours between service and are virtually maintenance free.

### G-BH7

#### Unsurpassed at highest differential pressure

Our high performance G-BH7 side channel blowers can create differential pressure of up to 435 in. H<sub>2</sub>O. They deliver 20,000 operating hours between service and are virtually maintenance free.

### G-SAH

#### Double stage side channel blowers

Capacities up to 372 cfm, differential pressure up to 285 in. H<sub>2</sub>O. Integral silencer and suction mesh. High efficiency, low noise level.

### G-SAP

#### Single stage side channel blowers

Capacities up to 520 cfm, differential pressure up to 144 in. H<sub>2</sub>O. Integral silencer and suction mesh. High efficiency, low noise level.

### G-SMV

#### Multi stage side channel vacuum pump

Capacities ranging from 176 cfm to 330 cfm and ultimate vacuum of 321 in. H<sub>2</sub>O.

# Side channel blowers

Some technologies are so good that it is hard to improve them. Side channel blowers from Elmo Rietschle are such an example. They have proven their reliability in service for many decades, performing flawlessly day in and day out with virtually no down time. Noise levels are lower than that of most other vacuum pumps and compressors.

Our side channel blowers are available in a wide selection for performance ranges up to 1,766 cfm at 60 Hz and differential pressures of up to 420 in. H<sub>2</sub>O. With flexibility and power, these blowers cover a variety of demanding applications.

The G-Series side channel blowers feature voltage ranges for 50 and 60 Hz in protection class IP 55 (insulation class F) and are UL 507 and CSA 22.2 No. 113 approved. This makes them the ideal solution for worldwide use.

## Advantages at a glance

- Reliable and built-to-last, virtually maintenance free
  - > Up to 20,000 operating hours without maintenance for G-BH1 00, G-BH1 and G-BH7
  - > Up to 40,000 operating hours without maintenance for G-BH2
- Robust yet light weight
- For use worldwide (UL/CSA/IEC/EN approval)
- 50/60 Hz motors
- Adjustable speed via external or integral frequency converter for all G-BH models

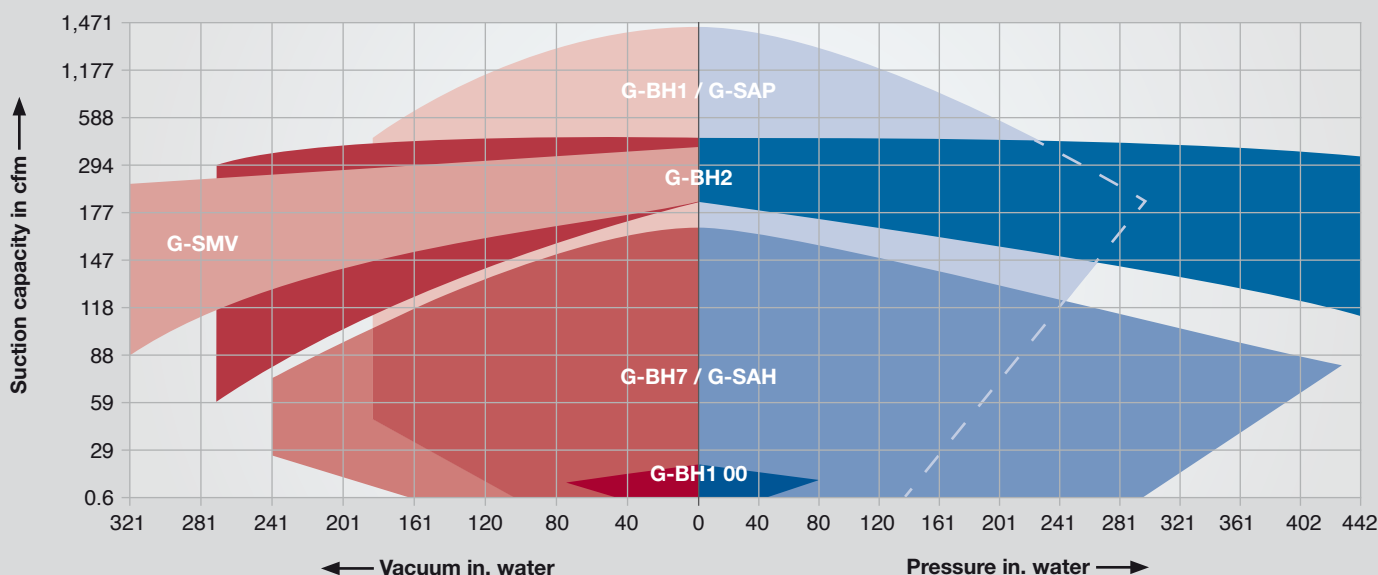
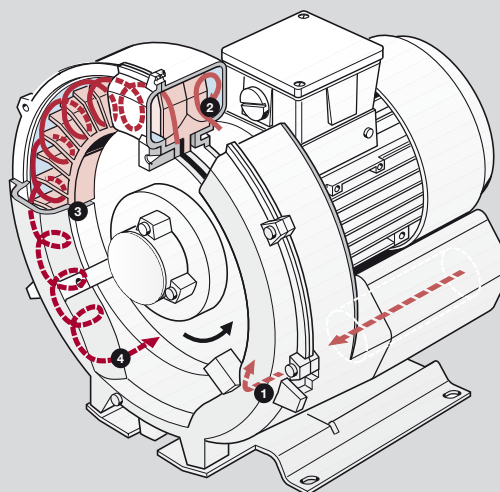


# Technical specifications

## Operating principle

The impellers in the G-Series machines are mounted directly on the motor shaft for contact free compression. Maximum operational reliability, even at high differential pressures, is ensured by the arrangement of the bearings outside the compression chamber.

The gas is taken in through the inlet **(1)**. As it enters the side channel **(2)**, the rotating impellor **(3)** imparts velocity to the gas in the direction of rotation. Centrifugal force in the impellor blades accelerates the gas outward and the pressure increases. Every rotation adds kinetic energy, resulting in further increase of pressure along the side channel. The side channel narrows at the rotor, sweeping the gas off the impellor blades and discharging it through the outlet silencer **(4)** where it exits the pump.







# Applications

**Central vacuum systems**

**Degassing**

**Dental vacuum**

**Drying out buildings**

**Filling bags / bottles / silos**

**Fishpond aeration**

**Gas analyzers**

**Industrial vacuum cleaners**

**Laser printers**

**Pneumatic conveying**

**Letter sorting / envelope handling**

**Lifting and holding parts using vacuum suction**

**Packaging industry**

**Plastics industry**

**Printing and paper industry**

**Soil remediation**

**Swimming pool technology / jacuzzis**

**Textile industry**

**Sewage Aeration**

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