



**G-Series Side Channel** ]

**ROTOPARS.COM** 





G-BH1 00



G-BH1  
single stage



G-BH1  
double stage



G-BH2 VELOCIS  
single, double and triple stage



G-BH7  
single stage



G-SAH / G-SAP  
single stage



G-SMV  
multi stage

## Side channel blowers

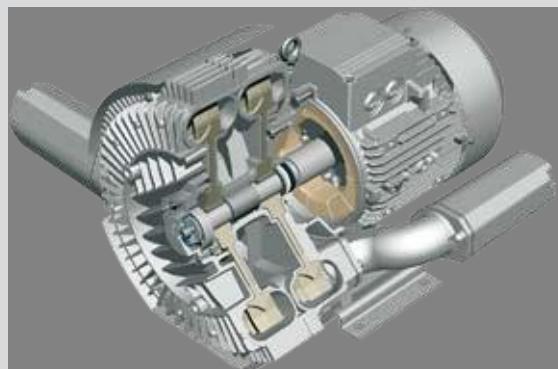
Some technologies are so good that it is hard to improve them. Side channel blowers from Elmo Rietschle are such an example. They have proven their reliability in service for many decades, performing flawlessly day in and day out with virtually no down time. Noise levels have been lower than that of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

Our side channel blowers are available in a wide selection for performance ranges up to 3,000 m<sup>3</sup>/h and differential pressures of up to 1,000 mbar. They cover the most varied requirements flexibly and powerfully.

The G-Series side channel blowers feature voltage range motors 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: They can be used without modifications or tests in Europe, Asia and America. They are mostly available ex stock and with ATEX certification.

### Advantages at a glance

- Reliable and built-to-last, virtually maintenance free
  - > Up to 20,000 operating hours without maintenance down time for G-BH1 00, G-BH1 and G-BH7
  - > Up to 40,000 operating hours without maintenance down time for G-BH2
- Robust yet light weight
- For use worldwide (UL/CSA/IEC/EN approval)
- 50/60 Hz motors
- ATEX 94/9 EG
- Adjustable speed via external or integral frequency converter for all G-BH models







## Applications

**Central vacuum systems**

**Degasification of food**

**Dental vacuum**

**Drying out buildings**

**Filling bags / bottles / silos**

**Fishpond ventilation**

**Gas analysis**

**Industrial vacuum cleaners**

**Laser printers**

**Pneumatic conveying**

- Conveying granulated material and powdery media

**Letter sorting / enveloping**

**Lifting and holding parts using vacuum suction**

**Packaging industry**

- Assembling and folding packaging materials
- Vacuum packaging

**Plastics industry**

- Contact free plastic film redirection
- Cooling and drying extruder products
- EPS foaming
- Granulate conveying
- Plastic welding
- Thermoforming

**Printing and paper industry**

- Sheet separation, turning, transport, fixation, and drying

**Soil remediation**

**Swimming pool technology / jacuzzis**

**Textile industry**

**Ventilation of sewage treatment plants**

# Product overview

## G-BH1 00

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

With a height and width of approx. 125 mm and a depth of approx. 60 mm, the G-BH1 00 blowers are the smallest side channel blowers available on the market.

## G-BH1

### **Classics with innovative technology**

With their high inlet volume flow up to 2,500 m<sup>3</sup>/h and a differential pressure of up to 780 mbar, 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 without fail and are virtually maintenance free.

## G-BH2 VELOCIS

### **The side channel revolution**

Volume flow up to 850 m<sup>3</sup>/h and differential pressure up to 1,100 mbar. 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 without fail 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 1,000 mbar. They deliver 20,000 operating hours without fail and are virtually maintenance free.

## G-SAH

### **Double stage side channel blowers**

Capacities up to 110 m<sup>3</sup>/h, differential pressure up to 430 mbar. Integral silencer and suction mesh. High efficiency, low noise level.

## G-SAP

### **Single stage side channel blowers**

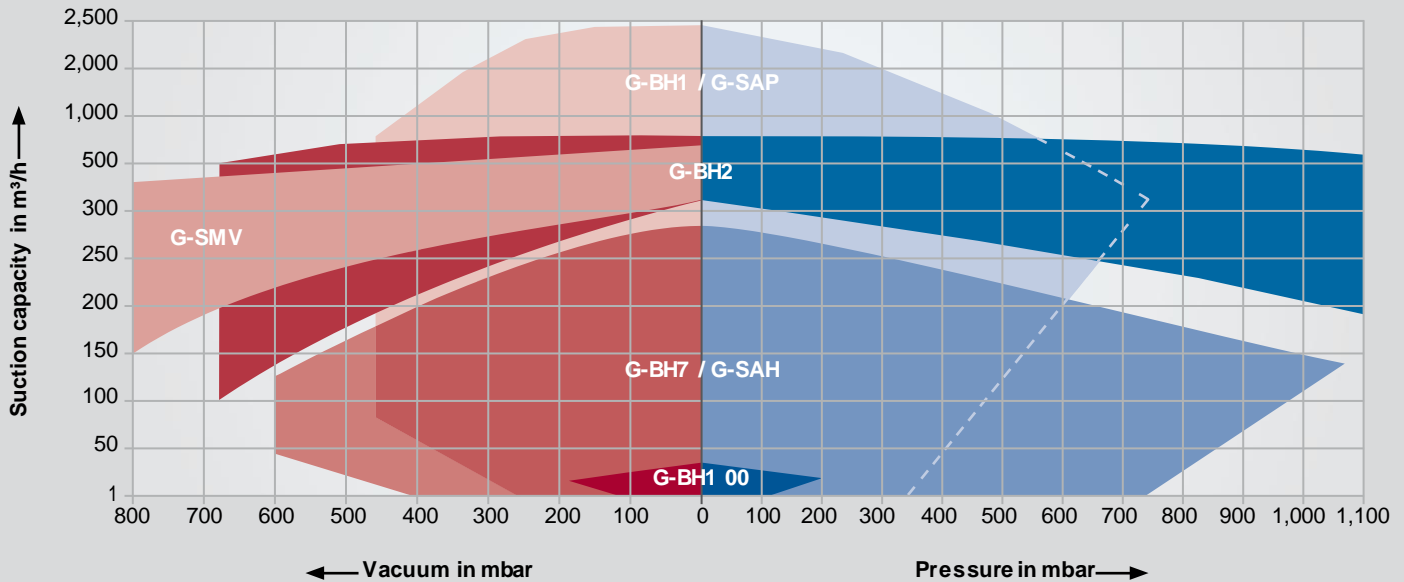
Capacities up to 540 m<sup>3</sup>/h, differential pressure up to 350 mbar. Integral silencer and suction mesh. High efficiency, low noise level.

## G-SMV

### **Multi stage side channel vacuum pump**

Capacities ranging from 300 m<sup>3</sup>/h to 560 m<sup>3</sup>/h and ultimate vacuum of 200 mbar (abs.).

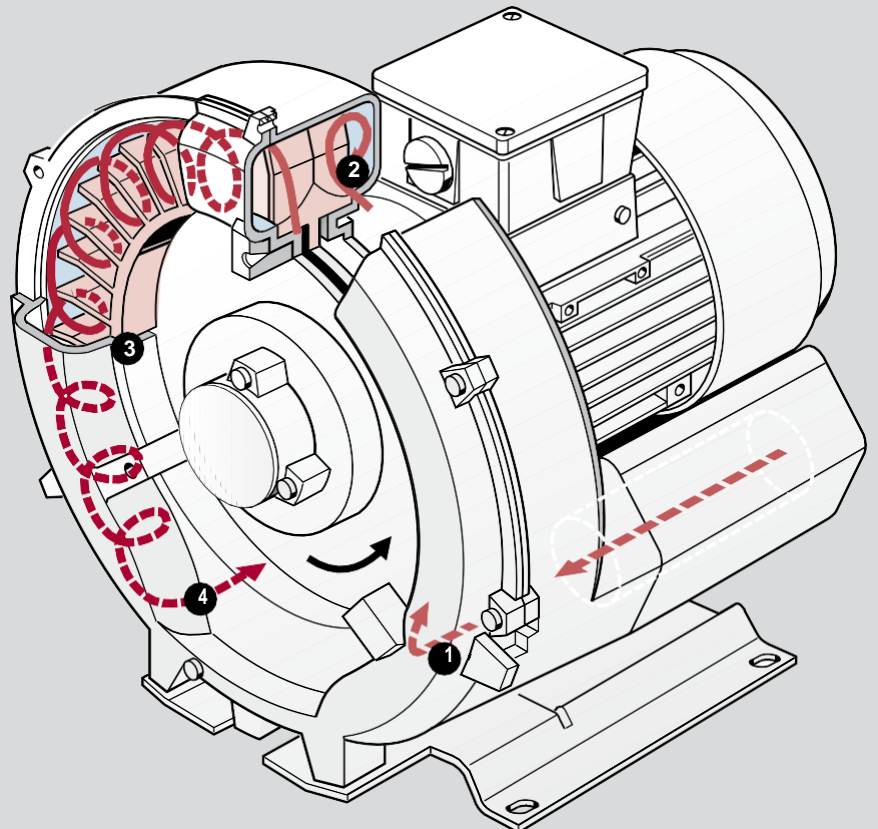
# Technical specifications



## 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.





Technologies for all vacuum  
and pressure applications



F-Series Radial



G-Series Side Channel



L-Series Liquid Ring



V-Series Rotary Vane



R-Series Rotary Lobe



C-Series Claw



S-Series Screw



X-Series Systems

[www.gd-elmorietschle.com](http://www.gd-elmorietschle.com)  
[er.de@gardnerdenver.com](mailto:er.de@gardnerdenver.com)

Gardner Denver  
Schopfheim GmbH  
Roppenbachstraße 58  
79650 Schopfheim - Germany  
Ph. +49 7822 392-0  
Fax +49 7822 392-300

Gardner Denver  
Deutschland GmbH  
Industriestraße 26  
97616 Bad Neustadt - Germany  
Ph. +49 9771 6888-0  
Fax +49 9771 6888-4000