

G-Series Side Channel



**Elmo
Rietschle**
A Gardner Denver Product





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

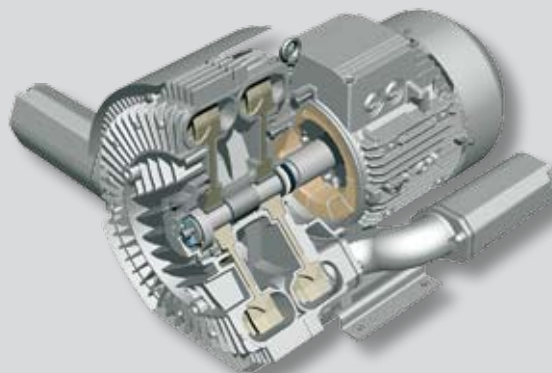
Some technologies are so good that it is hard to improve them. Side channel blowers from Elmo Rietschle are such an example. They have proven their reliability in service for many decades, performing flawlessly day in and day out with virtually no down time. Noise levels have been lower than that of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

Our side channel blowers are available in a wide selection for performance ranges up to 3,000 m³/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 m³/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 m³/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 m³/h, differential pressure up to 430 mbar. Integral silencer and suction mesh. High efficiency, low noise level.

G-SAP

Single stage side channel blowers

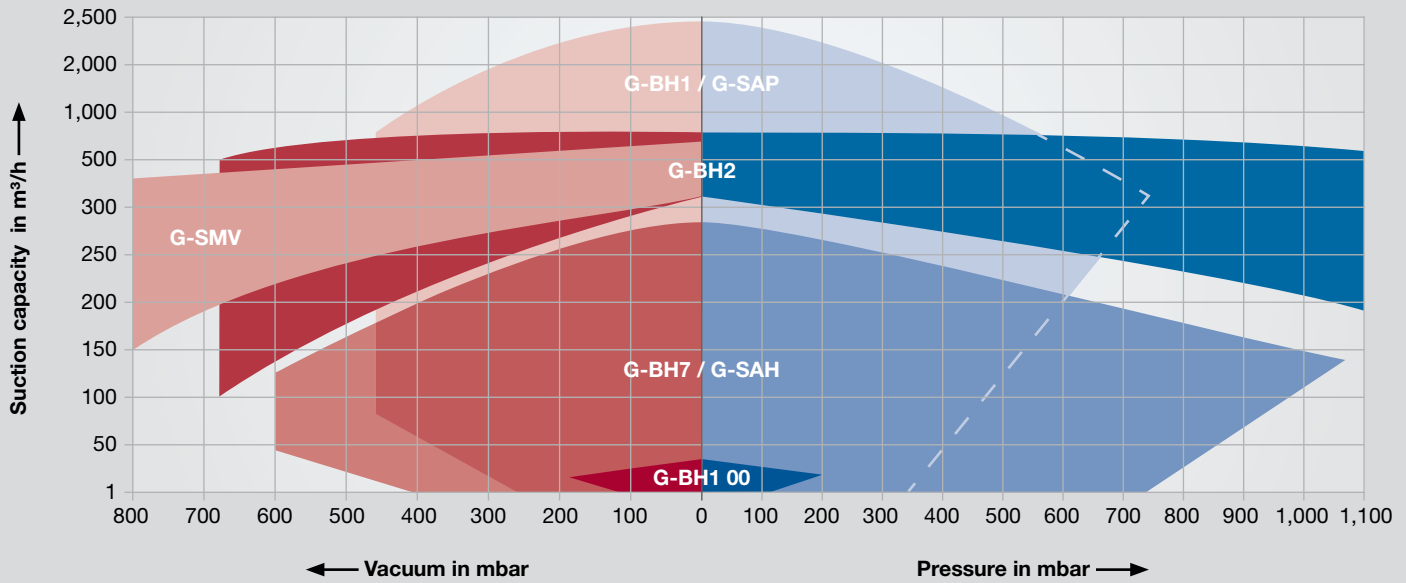
Capacities up to 540 m³/h, differential pressure up to 350 mbar. Integral silencer and suction mesh. High efficiency, low noise level.

G-SMV

Multi stage side channel vacuum pump

Capacities ranging from 300 m³/h to 560 m³/h and ultimate vacuum of 200 mbar (abs.).

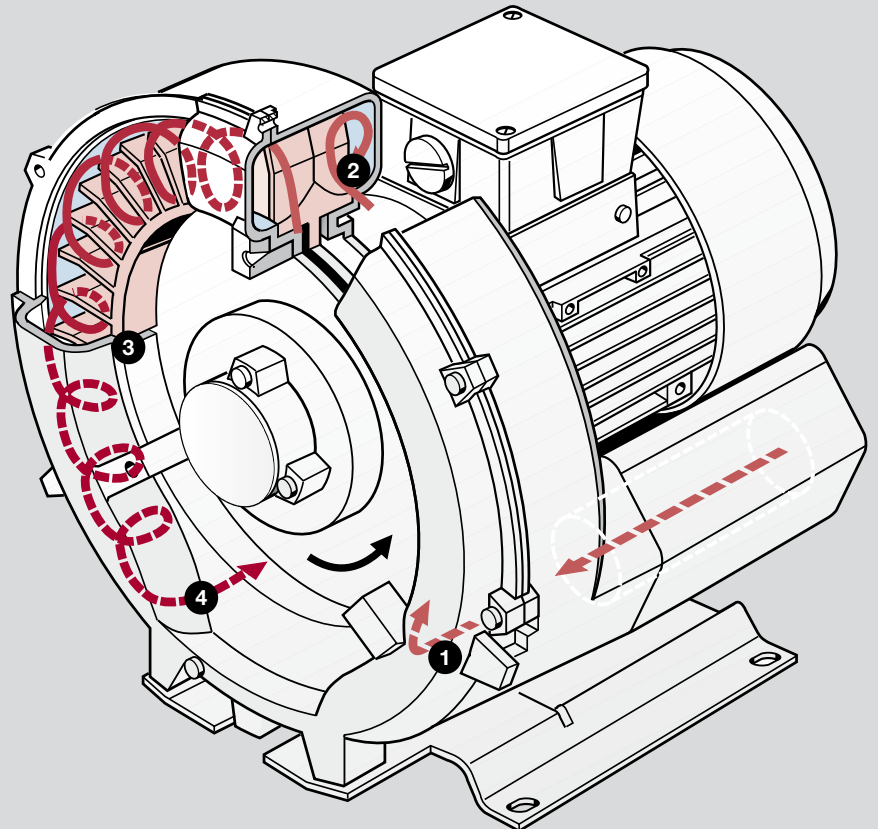
Technical specifications



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

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**Gardner
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Elmo Rietschle is a brand of the
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