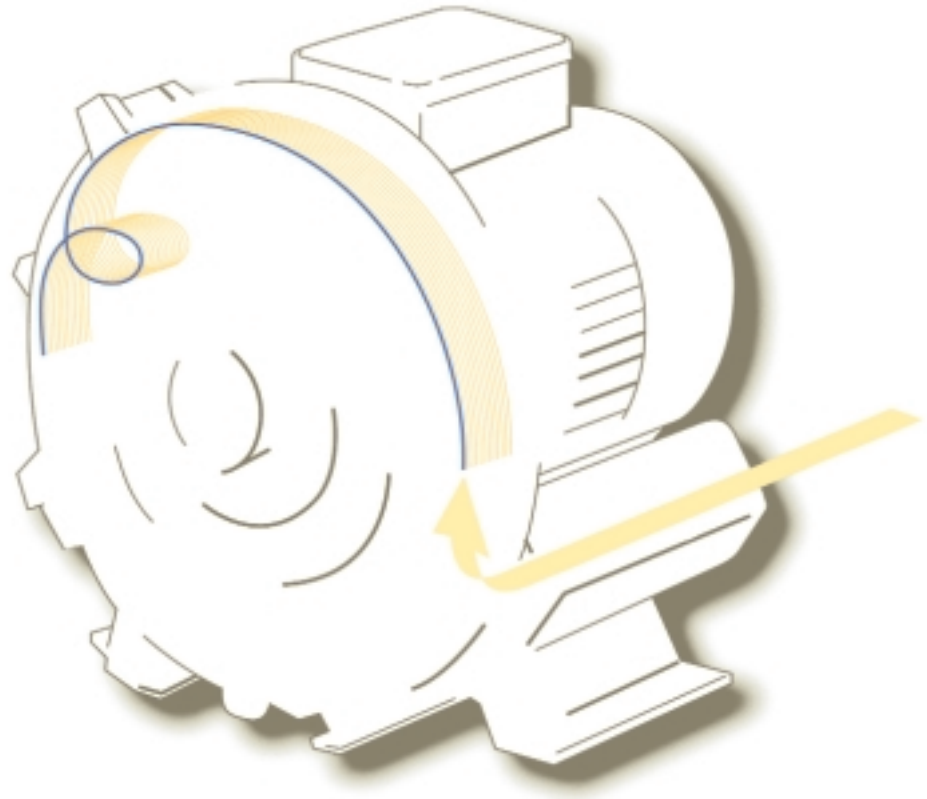


G_Series

Gas ring compressors

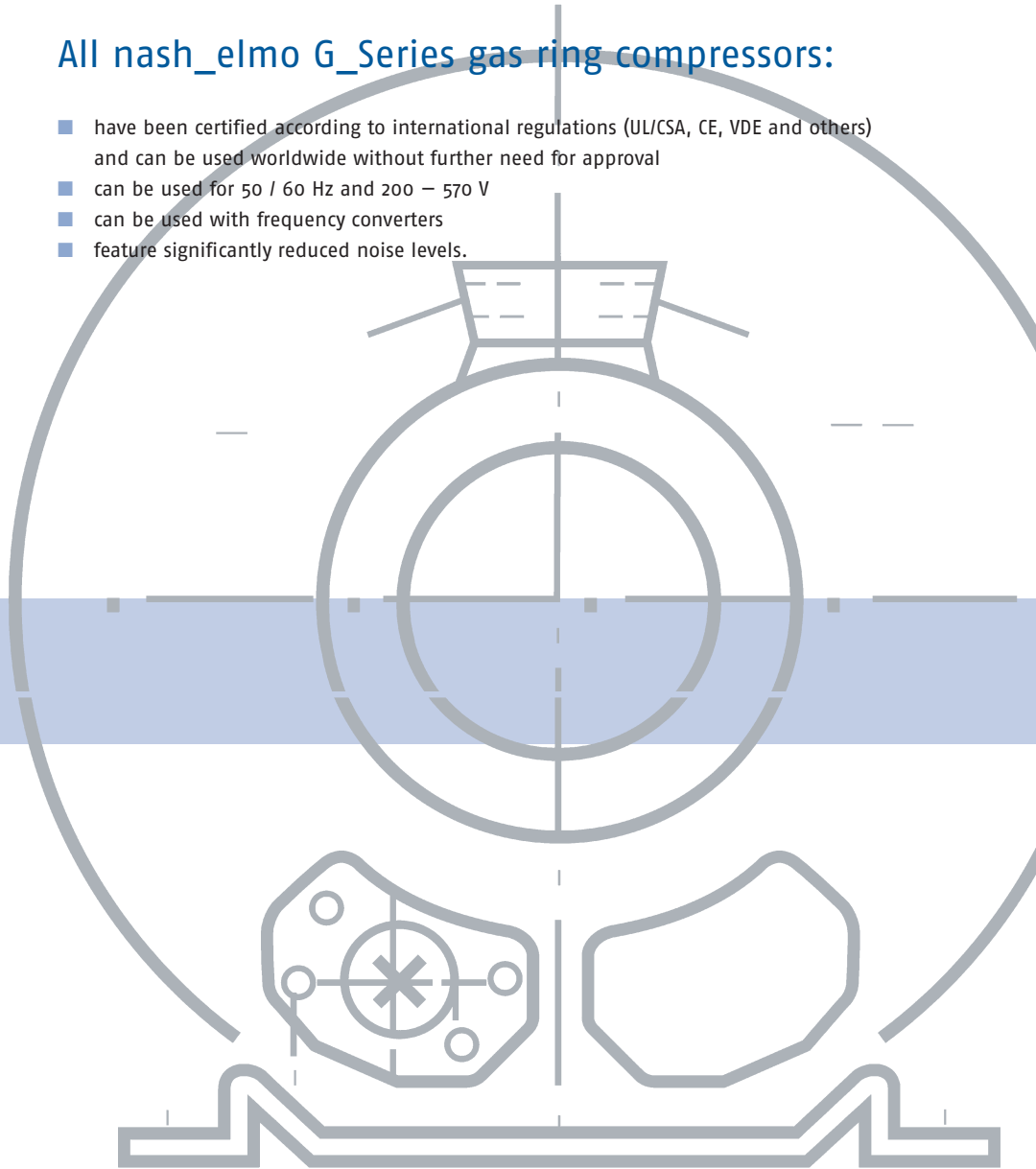


The G_Series

- G_100 (2BH100)
- G_200 (2BH1)
- G_400 (2BH7)

All nash_elmo G_Series gas ring compressors:

- have been certified according to international regulations (UL/CSA, CE, VDE and others) and can be used worldwide without further need for approval
- can be used for 50 / 60 Hz and 200 – 570 V
- can be used with frequency converters
- feature significantly reduced noise levels.



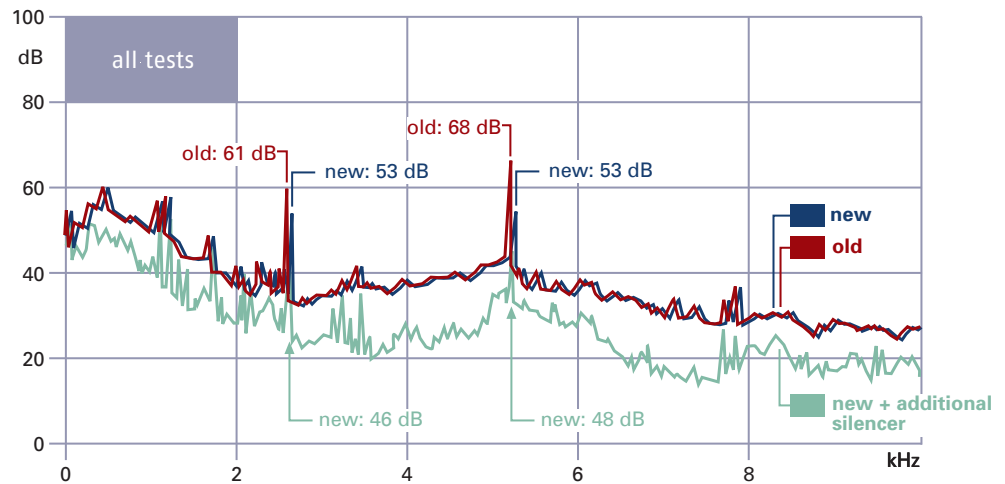
The new face of a classic

Some technologies are so good that it's hard to improve them. Gas ring compressors from nash_elmo are such an example. They've proven their reliability in service for many decades, performing flawlessly day in and day out with virtually no down time. Existing noise levels have been lower than that of most other vacuum pumps and compressors.

Some would rest on their laurels, but not nash_elmo. The growing demands on our customers from globalization must be taken into account when designing products. New, more stringent noise emission laws on the national and international level must be considered.

nash_elmo has met these challenges.

Improved operating noise level



Hose connected to discharge side; discharge side throttled; 50 Hz

In recent years, noise has been judged using subjective criteria that try to take into account the impact certain noise frequencies have on human beings. The focus lies on the sensation a person experiences when listening to a noise, on his reactions to modulations in the noise level and on his feelings when a noise is „sharp“. If one examines annoying and intense noise emissions, tonal peaks are found that can be easily identified when analyzing sound curves.

nash_elmo has put together a team of experts on psycho-acoustics from industry and universities and a three-stage approach to reducing unpleasant noise has been chosen:

- The tonal peaks of our products have been reduced by 10 dB
- Additional silencers result in a noise reduction of up to 8 dB(A)
- Sound protection hoods with a reduction of 10 dB(A) and 20 dB in tonal peaks

This noise reduction program ensures that the noise limits to be set by legislation are already fully complied with.

Gas ring compressors for worldwide usage with wide voltage range motor and UL/CSA approval.

Companies that sell their machines to non-European countries often must make technical modifications and perform tedious testing.

- The main differences are 50 or 60 Hz and varying local voltages.
- In addition to local and European certifications, further demands have to be met on the international level – the machines must have UL (Underwriter Laboratories) and CSA (Canadian Standard Association) approval if they are to be used worldwide.

Until now, our customers had to purchase various models of a machine, each with different electrical characteristics. With the new G_Series gas ring compressors this is no longer necessary: all machines can operate in both 50 and 60 Hz environments and support all common voltages.*

You will benefit from these features: ordering the right quantities for different export markets is much easier, as fewer variations are needed – and you can reduce your stocking levels as most machines are available ex stock Bad Neustadt, Germany.

Make the most of globalization with G_Series gas ring compressors from nash_elmo.

* does not apply to ATEX machines

ATEX certification

Since July 1, 2003, it is compulsory by law to design explosion-proof machines according to ATEX 94/9 EG. ATEX also includes non-electric equipment with potential ignition sources. All G_200 and G_400 gas ring vacuum compressors are available in ATEX certified versions for the categories 3 D, 3 G, 3/2 D and 3/2 G. The compressors are manufactured according to temperature class T3 with a max. (surface) temperature of 125°C (275°F), and comply with protection class IP 55. Equipment of category 3/2 D (inside category 3, outside category 2) conforms to protection class IP 65.

Frequency converters

G_200e

Integrated frequency converter for high volume flows and/or automatic adjustment to variable loads.



G_400e

With integrated frequency converter.

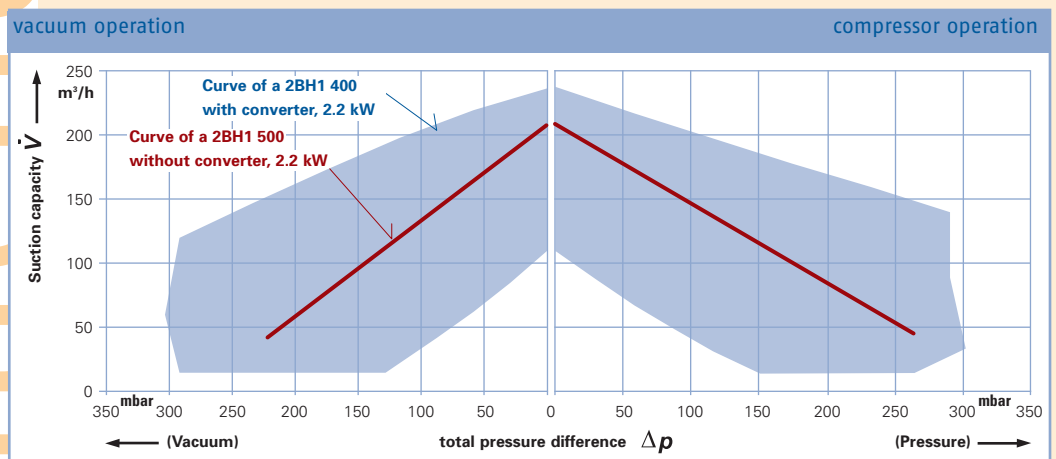


Frequency converter – the new dimension

A frequency converter is used for analogue or digital machine performance control. This is a great advantage for applications with variable loads. The integrated process control system provides constant pressure or vacuum.

All gas ring vacuum compressors equipped with a frequency converter have a higher suction capacity or differential pressure than the standard versions. In many cases a smaller pump with a lower nominal performance may be used.

Example:



The frequency converters that are available for the G_200e and G_400e versions are mounted directly on the compressor housing; they also come as stand-alone kits.

- UL / CSA approval
- EMC compliance
- RFI filter class B

Product overview



G_100 gas ring vacuum pumps and compressors – the smallest gas ring compressor on the market

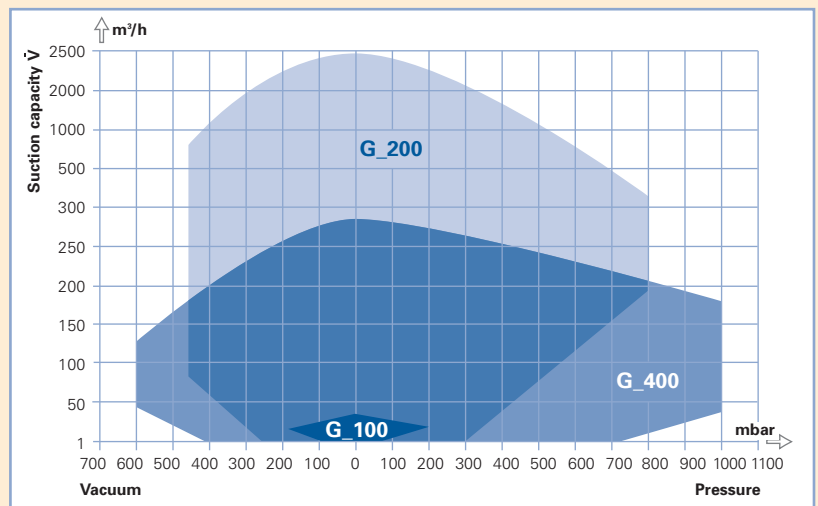
With a height and width of approx. 125 mm and a depth of approx. 60 mm, the G_100 compressors have the size of a CD and are the smallest gas ring vacuum compressors available on the market. Furthermore, the adjustable volume flow of the compressors makes sure that only the exact performance required is actually being supplied – not more.

These compressors are employed primarily in fine mechanical and medical technology applications. Due to their robust and built-to-last design, they are also used in other industries such as mechanical engineering.



G_200 gas ring vacuum pumps and compressors – classics with innovative technology

With their high inlet volume flow (up to 2.500 m³/h) at a low differential pressure (up to 780 mbar), our low noise G_series allrounders have convinced customers all over the world. They are reliable, low-maintenance and durable, and therefore first choice even for the harshest applications in mechanical engineering.



G_400 gas ring vacuum pumps and compressors – Unsurpassed at highest differential pressure

Our revolutionary G_400 compressors can create pressure differences of up to 1.000 mbar – more than any other gas ring compressor! So far, the systems used to reach these differential pressure ranges were much louder and larger – or subject to wear. Now the advantages of wear-free operation coupled with a low noise level can also be used in the most demanding applications.



Typical applications for gas ring compressors

Medical

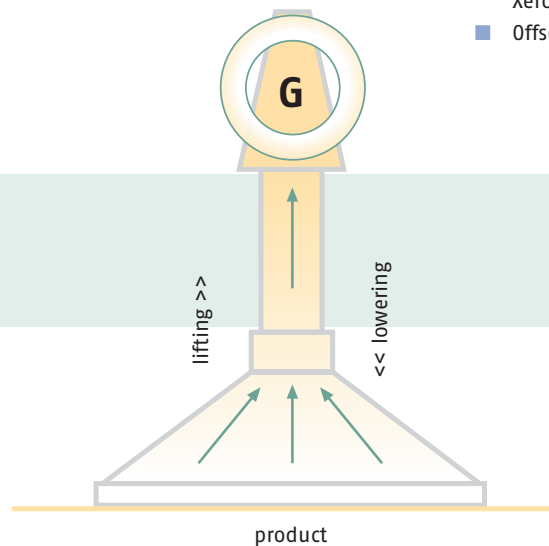
Our smallest gas ring compressors, the G_100 series, are ideally suited for applications in this area. Their small size, their low noise level and their reliability during continuous operation give them a decisive advantage.

- ventilator machines
- air beds
- protective clothing
- dental offices and clinics
- central vacuum equipment

Printing industry

Due to the very special properties of paper many processes in this industry can only be carried out using suction and discharge air. The most important tasks are lifting, holding and transporting the paper.

- Paper cutting tables
- Screen printing equipment
- Powder coating on printing machines
- Turning bars / turning tables
- Book binding machines
- Digital printing and high-performance Xerox machines
- Offset printing



Plastics industry

Dust particles occurring in plastics processing cannot harm the robust G_Series machines. They have proven their reliability under the most difficult circumstances.

- EPS foaming
- pneumatic conveying
- drying
- handling of parts (chucking)

Packaging industry

There are many processes in the packaging industry that can be automated with the help of suction and discharge air.

- opening and inflating packaging material
- transporting packages and products
- attaching self-adhesive labelling
- carton assembly: a vacuum gripper is used to take folding box boards off the pile and fold them



nash_elmo



nash_elmo

In July 2002, Nash Engineering Company (Connecticut) and "elmo vacuum technology" GmbH, a Siemens subsidiary in Nuremberg, Germany, united to form "nash_elmo Industries" – a new company with over 1.200 employees.

nash_elmo is the global leader in vacuum technology. Each of the two companies can take pride in over 100 years of experience and know-how in this sector. Almost in parallel, both made history in the vacuum industry – The Nash Engineering Company on one side of the Atlantic, and elmo vacuum technology on the other – with the development of liquid ring vacuum pumps and gas ring vacuum compressors.

With manufacturing facilities in America, Germany and China and sales departments all over the world we are represented worldwide. As you can see, wherever you are in need of an expert in vacuum technology – we are there for you.

In our company, we combine decades of knowledge and experience of practically all industrial sectors with global leadership in technology.

We can probably do more for you than you think. Vacuum technology is the ideal solution to accelerate your processes and, at the same time, make them more cost-efficient. If you are already using vacuum technology, why don't you let us check the profitability of your pump or compressor type. We are quite confident you will be surprised.

nash_elmo

Our product range



L_Series

Liquid ring vacuum pumps and compressors

D_Series

Dry pumps

V_Series

Vane pumps

G_Series

Gas ring compressors

F_Series

Radial fans

S_Series

Standardized systems

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