



Mass flow controller VEFC



Highlights

- Very compact, width of only 24 mm
- Dynamic, directly controlled piezo valve for inert gases
- Flexible thanks to customisable control parameters
- Digitised, specified flow rate remains stable despite disturbance variables
- Excellent value for money

The VEFC for inert gases is very compact and has all the advantages of piezo valves: maximum dynamic response, infinite precision, very low power consumption and heat generation, stable flow rate without the need for manual adjustment. All that at a very attractive price/performance ratio.

Extremely compact

At 24 x 109 x 92 mm (W x L x H), the mass flow controller is one of the most compact on the market and has a flow rate of 200 l/min. Additional variants, for example with 100 l/min, are being planned.

Everything under control

VEFC is digitalised. This keeps the flow rate constant and eliminates the need for manual adjustment. It only takes milliseconds to precisely adjust the flow rates and their settings, and be tamper-proof. This gives you

maximum flexibility in your production processes. The VEFC also provides you with the flow rate and output pressure at the same time, allowing you to continuously monitor the process.

The favourable alternative for the semiconductor industry

The mass flow of inert gases such as nitrogen must be reliably controlled, especially in the semiconductor industry, in order to avoid defects on wafers. With its focus on inert gases without media separation, VEFC is ideal

for controlling nitrogen in load ports or EFEMs – and at an unbeatable price.



Additional information:

Product page

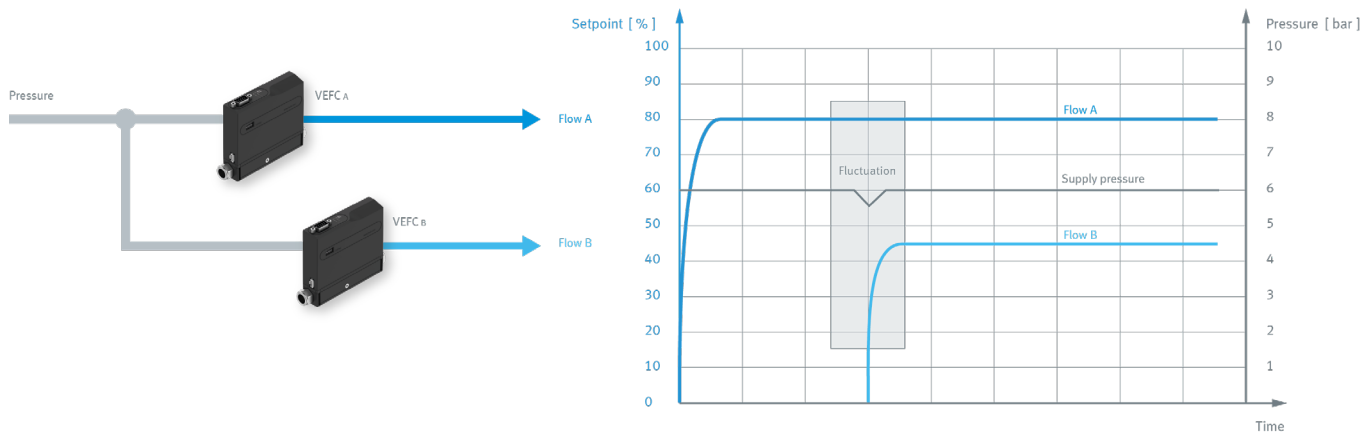
> www.festo.com/catalogue/vefc



Using the differential pressure method

The mass flow controller VEFC works with the differential pressure method. In combination with piezo technology, flow rates can

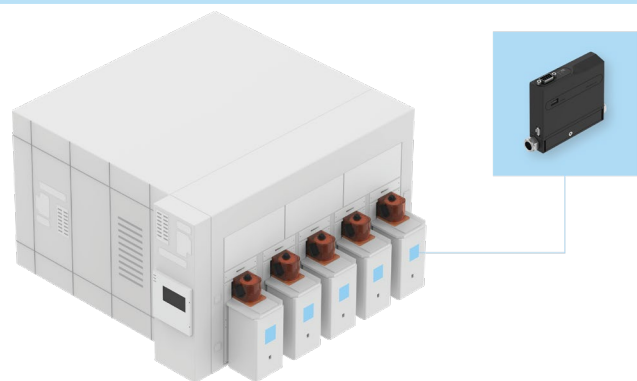
be controlled very quickly, dynamically and insensitively to pressure fluctuations.



Economical, reliable and precise N₂ purging

A wide variety of flows can be regulated in the individual purge steps with VEFC in the load port. It ensures that only the absolutely necessary amount of nitrogen is used, whether during pre-blowing, pre-purge, process purge and post-purge.

This saves nitrogen and shortens the process time until the dry shielding gas atmosphere is reached.



Technical data

| VEFC | |
|-----------------------|--|
| Media | Compressed air 7.4.4./CDA, inert gases (N ₂ , Ar, etc.) |
| Standard conditions | DIN 1343; SEMI E12 corresponding – N ₂ equivalent |
| Flow rate | 200 slm at a differential pressure of 0.3 MPa; 100 slm in the planning |
| Supply pressure | 0.6 MPa |
| Accuracy of flow rate | ± 2.5 % FS |
| Repetition accuracy | ± 0.75 % FS |
| Reaction time | < 100 ms |
| Electrical connection | Analogue, RS485 |
| Valve technology | Piezo technology |
| Measuring principle | Differential pressure |
| Pneumatic connection | Rc1/4, G1/4, QS or external thread with metal seal on the front |
| Operating voltage | 24 V |
| Protection class | IP20 |