



Frese ALPHA cartridge

Flow Limiting Valve

Frese ALPHA dynamic balancing valves are specially designed to automatically balance heating and cooling systems. Frese ALPHA valve with integrated cartridge limits flow to a specific rate, even under fluctuating pressure conditions.

The innovative design features a replaceable cartridge for improved maintenance and greater flexibility. A high-quality rubber diaphragm between the piston and housing also eliminates friction, noise and leakage, which would otherwise affect valve accuracy.

The cartridge design ensures that any impurities do not remain inside the cartridge. Two differential pressure ranges are available: 350 kPa and 600 kPa. The calculated flow rate then determines cartridge choice.

The dynamic cartridge design guards against overflow and allows for optimum balance in both heating and cooling systems.

All Frese ALPHA cartridges are designed and manufactured for long and maintenance-free operation.



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Cartridge material:
DZR Brass CW602N
AISI 304 (Wafer cartridges)

O-rings:
EPDM 281

Spring:
Stainless Steel 1.4310

Diaphragm:
HNBR (Low pressure cartridges)
HNBR reinforced (High pressure cartridges)

Max differential pressure:
600 kPa

Operating temperature:
-20°C to +120°C

Flow rate:
25 l/h to 45,000 l/h

For cooling and heating applications

Frese

Innovative solutions from Frese balance global HVAC systems accurately and efficiently. From cooling systems in the Middle East to heating systems in Scandinavia, our products transform state of the art technology into everyday solutions.

KNOWLEDGE

QUALITY

Product info



Frese app



INNOVATION

MANUFACTURING
EXCELLENCE

CUSTOMER
FOCUS



Frese ALPHA for HVAC applications

For over 25 years, Frese has specialised in the design and manufacture of dynamic, pressure independent flow solutions for heating and cooling applications in a wide variety of market sectors including commercial office developments, hotels, educational establishments, sports complexes and residential buildings.



The Frese ALPHA dynamic balancing valve is the perfect solution for accurate and efficient distribution of flow in both heating and cooling systems. Typical applications include fan coil units, underfloor heating circuits, air handling units and plant equipment.

Manufactured from DZR and Ductile Iron, the Frese ALPHA range is available in sizes DN15 to DN800 suitable for flow rates from 0.007 l/s to 1,062 l/s.

The ALPHA dynamic balancing valve works independently therefore it can be installed in either single or multiple parallel distribution lines.

Furthermore, the independent nature of the valve provides total system flexibility with no re-commissioning required should the system be extended. In addition, it is also possible to use back flush processes with the ALPHA dynamic balancing valve if necessary.

Applications

- Fan Coil Units
- Underfloor Heating Systems
- Air Handling Units
- Plant Equipment

