



## Frese OPTIMA Compact

### Pressure Independent Balancing & Control Valve

The Frese OPTIMA Compact is the second generation of pressure independent balancing and control valves from Frese.

The OPTIMA Compact is an automatic flow, pressure and temperature control valve for heating and cooling systems that combines the functions of an externally adjustable automatic balancing valve, a differential pressure control valve and a full authority modulating control valve in one single, compact valve housing.

The Frese OPTIMA Compact provides modulating control with full authority regardless of any fluctuations in the differential pressure of the system making it possible to achieve 100% control of the water flow in the building. In addition, the correct application of the Frese OPTIMA Compact can also significantly reduce pump energy consumption and improve the efficiency of other hydronic system components as well as providing high levels of comfort for end users due to high precision temperature control.

The valve operates by adjusting automatically to the pre-set flow under fluctuating pressure conditions whilst also providing full modulating control. To achieve the design flow rate, the valve is set using the simple pre-setting scale on top of the valve to the required set point, which can be determined using the official Frese flow graphs or the Frese APP.



**Max differential pressure:**  
800 kPa

**Operating temperature:**  
0 – 120°C

**Dimensions:**  
DN10 – DN50

**Flow rate:**  
Up to 11,500 l/h

**Material:**  
DN10-DN32 DZR Brass  
DN40-DN50 Ductile Iron

**Static pressure:**  
PN25

### 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



INNOVATION

MANUFACTURING  
EXCELLENCE

CUSTOMER  
FOCUS



## Frese OPTIMA Compact 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 OPTIMA Compact pressure independent balancing and control valve is the perfect solution for accurate and efficient control of primary and secondary terminal units in variable volume heating and cooling systems.

Typical applications include fan coil units, chilled beams, plate heat exchangers and air handling units.

Manufactured from DZR and Ductile Iron, the Frese OPTIMA Compact is available in sizes DN10 to DN150, controlling flow rates from 0.008 l/s (30 l/h) to 54 l/s (195,000 l/h), with a range of actuators suitable for both modulating and on/off control.

### Applications

- Fan Coil Units
- Chilled Beams
- Radiant Panels
- Underfloor Heating
- Plate Heat Exchangers
- Air Handling Units

