

# Frese Modula/C Complete solutions for balancing and temperature control

## Application

The Frese Modula is a compact and versatile valve system that combines the Frese range of automatic flow, pressure and temperature control valves with the isolation, flushing, draining and measurement components within a prefabricated, tested and ready to install terminal connection assembly.

The Frese Modula integrates one of the following Frese pressure independent solutions:

- Frese Alpha (Dynamic balancing valve).
- Frese Eva (Combined dynamic balancing and 2 port on/off valve).
- Frese Optima (Pressure independent, control valve PICV).

With isolation valves, strainer, drain/hose connection & P/T plug.

## Features

- Available in 1/2", 3/4" and 1" end connections.
- Patented Frese Alpha, Frese Eva or Frese Optima technology.
- Compact 80mm supply/return centres,
- Integrated union joints for easy valve alignment.
- 3/4" T-handle ball-valves for flow, return and bypass. Full port valves on flow and return.
- Spindle extensions available.
- Combinations with strainer, drain/hose connection, P/T plug available.
- Construction site oriented packaging.

## Benefits

All benefits from the use of Frese Alpha, Frese Eva and Frese Optima valves (see corresponding technotes) and furthermore:

### Design

- Minimized design time and risks due to complete solution.
- Guaranteed performance of the complete system.
- Compact design for limited available space.

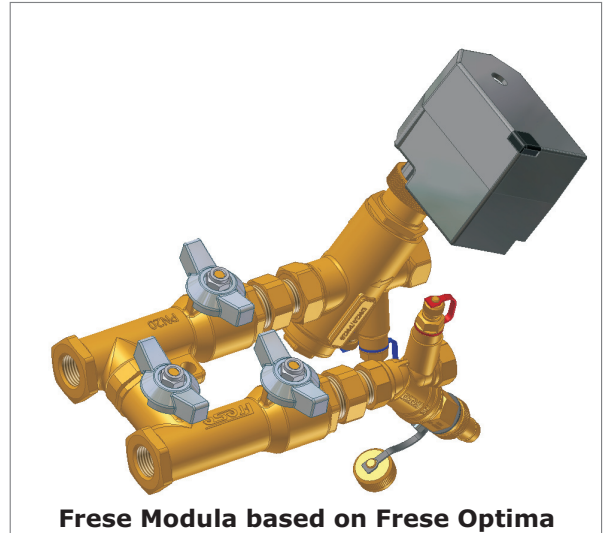
### Installation

- Minimized installation and commissioning costs.
- Allows easy flushing and coil isolation.
- Easy lagging of spindle extensions.
- Simple attachment to existing hangers.

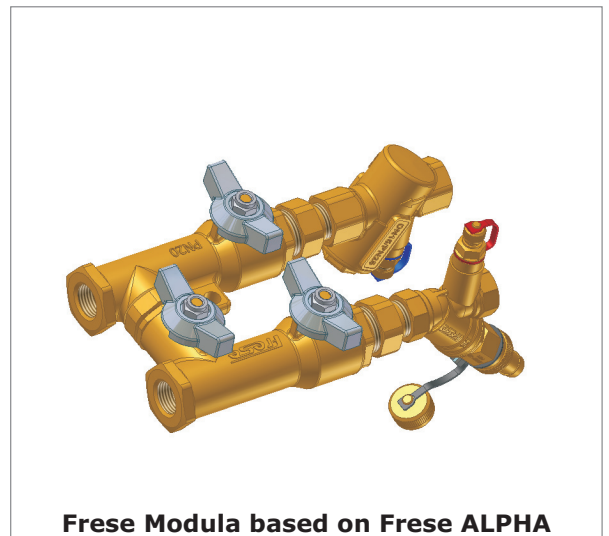
### Operation

- High comfort with minimized operation and maintenance costs.

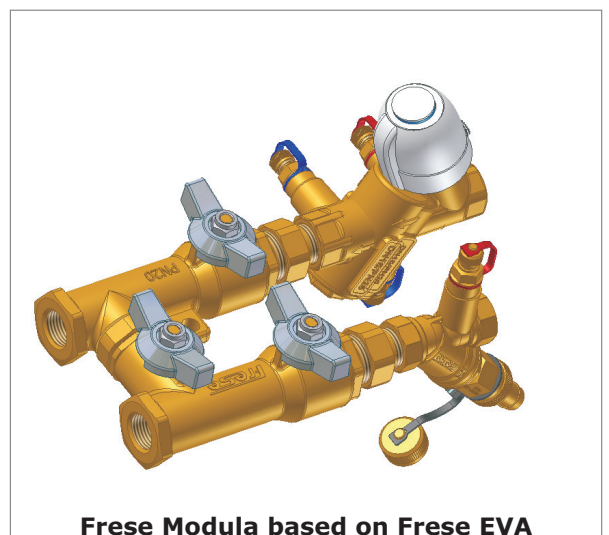
For a full understanding of ALPHA, EVA and Optima solutions please refer to the relevant Technotes.



**Frese Modula based on Frese Optima**



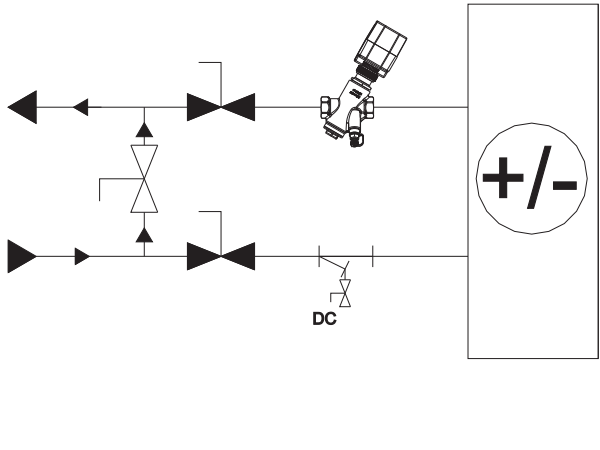
**Frese Modula based on Frese ALPHA**



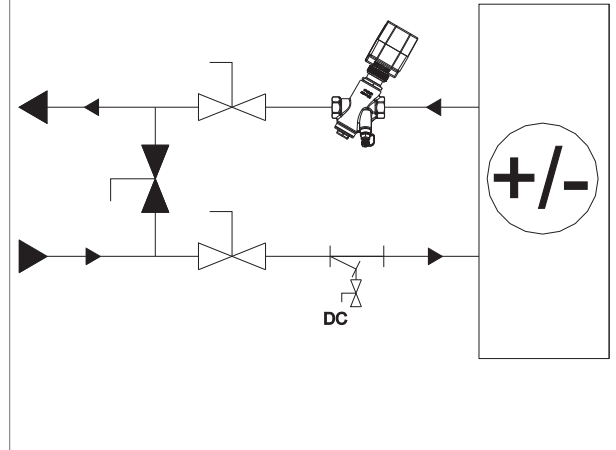
**Frese Modula based on Frese EVA**

**Frese Modula/C** Complete solutions for balancing and temperature control

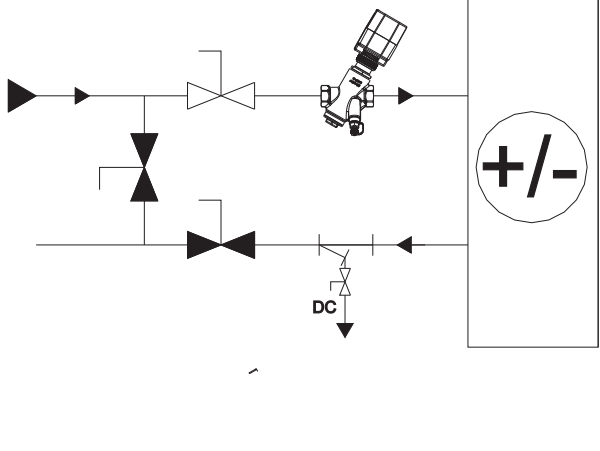
**Mode 1**  
Isolation & Flushing bypass



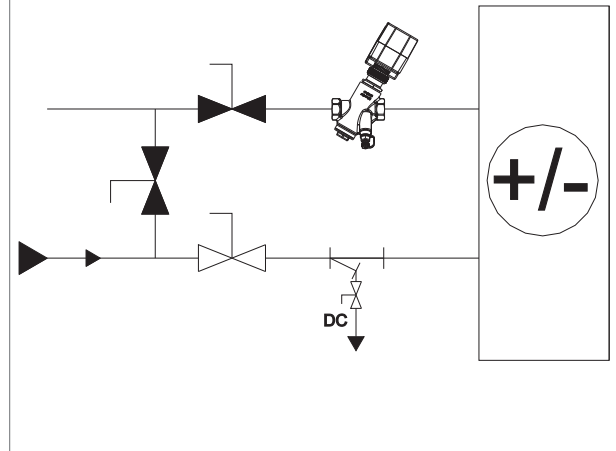
**Mode 2**  
Normal Operation



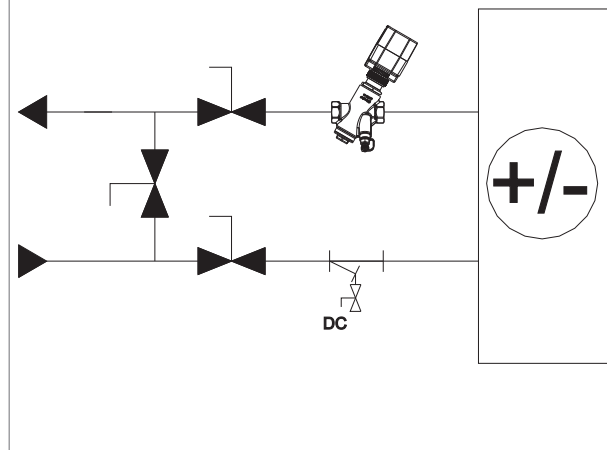
**Mode 3**  
Back Flushing



**Mode 4**  
Forward Flushing



**Mode 5**  
Isolation & Maintenance



# Frese Modula/C Complete solutions for balancing and temperature control

## Modula II kit configuration table

|    |       |                            |            |               |           |      |  |
|----|-------|----------------------------|------------|---------------|-----------|------|--|
|    |       |                            |            |               |           | 55   | Modula II Kit  |
|    |       |                            |            |               |           | 1    | Optima   |
|    |       |                            |            |               |           | 2    | ALPHA  |
|    |       |                            |            |               |           | 3    | EVA High Flow  |
|    |       |                            |            |               |           | 4    | EVA Basic High Flow  |
|    |       |                            |            |               |           | 1    | DN 15  |
|    |       |                            |            |               |           | 2    | DN 20  |
|    |       |                            |            |               |           | 3    | DN 25  |
|    |       |                            |            |               |           | 1    | T-Piece with 1" P/T-Plug + drain and hose                                      |
|    |       |                            |            |               |           | 2    | T-Piece with 1" P/T-Plug + drain, hose and extension handle                    |
|    |       |                            |            |               |           | 3    | Strainer with 1" P/T-Plug + drain and hose                                     |
|    |       |                            |            |               |           | 4    | Strainer with 1" P/T-Plug + drain, hose and extension handle                   |
|    |       |                            |            |               |           | 5    | T-Piece with 1" P/T-Plug/Plug  |
|    |       |                            |            |               |           | 6    | T-Piece with 1" P/T-Plug/Plug and extension handle                             |
|    |       |                            |            |               |           | 7    | Strainer with 1" P/T-Plug/Plug   |
|    |       |                            |            |               |           | 8    | Strainer with 1" P/T-Plug/Plug and extension handle                            |
|    |       |                            |            |               |           | A    | T-Piece with 1" P/T-Plug + drain and hose (Left hand mount)                    |
|    |       |                            |            |               |           | B    | T-Piece with 1" P/T-plug + drain, hose and extension handle (Left hand mount)  |
|    |       |                            |            |               |           | C    | Strainer with 1" P/T-plug + drain and hose (Left hand mount)                   |
|    |       |                            |            |               |           | D    | Strainer with 1" P/T-plug + drain, hose and extension handle (Left hand mount) |
|    |       |                            |            |               |           | E    | T-piece with 1" P/T-Plug/Plug (Left hand mount)                                |
|    |       |                            |            |               |           | F    | T-piece with 1" P/T-Plug/Plug and extension handle (Left hand mount)           |
|    |       |                            |            |               |           | G    | Strainer with 1" P/T-Plug/Plug (Left hand mount)                               |
|    |       |                            |            |               |           | H    | Strainer with 1" P/T-Plug/Plug and extension handle (Left hand mount)          |
|    |       |                            |            |               |           | 1    | 1" P/T Plug on valve   |
|    |       |                            |            |               |           | 2    | 2" P/T Plug on valve   |
|    |       |                            |            |               |           | 3    | Plug   |
|    |       |                            |            |               |           | L    | Low Flow   |
|    |       |                            |            |               |           | H    | High Flow  |
|    |       |                            |            |               |           | 4    | Low Pressure   |
|    |       |                            |            |               |           | 5    | High Pressure  |
|    |       |                            |            |               |           | XXXX | Flow in l/sec. (X.XXX)   |
| 55 | X     | X                          | X          | X             | X         | XXXX |  |
|    | Valve | Size Modula II combination | Valve plug | Flow/Pressure | Cartridge |      |  |

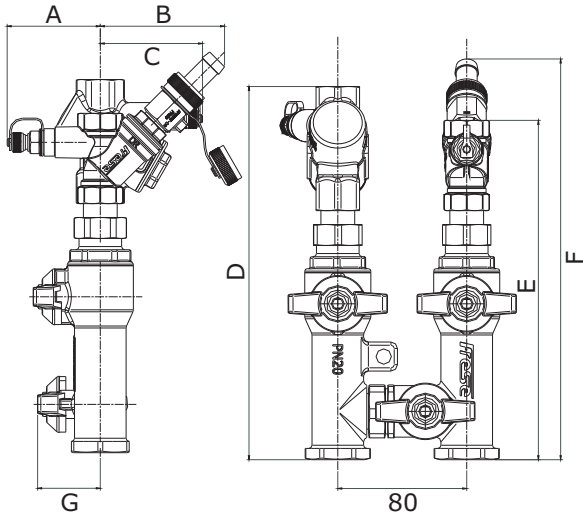
You have now completed Modula Kit 55 and should end up with a combination selection of six items. Example of order combination will hence be: **55-1-1-2-1-L-XXXX**

### Specification text Frese Modula

The valve system shall combine an dynamic balancing valve with a fixed 80mm distance supply/return component. The balancing valve can also be a combination valve for dynamic balancing and control. Frese ALPHA, Frese EVA, Frese ALPHA cartridges, Frese OPTIMA (see corresponding technote).

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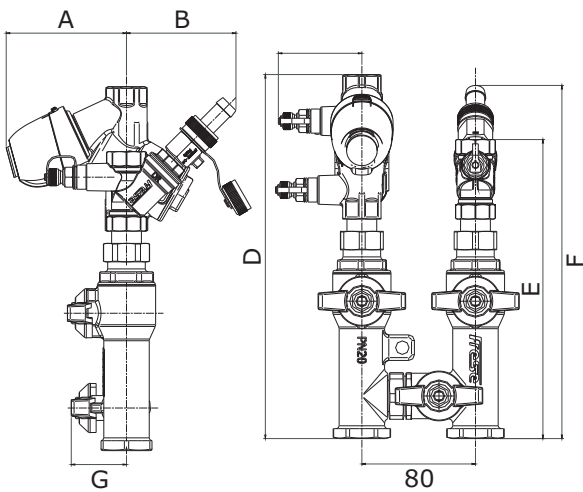
**Frese MODULA with Frese ALPHA**



**Modula - ALPHA**

|          | DN 15  | DN 20  | DN 25  |                                |
|----------|--------|--------|--------|--------------------------------|
| <b>A</b> | 58     | 62     | 66     |                                |
| <b>B</b> | 79     | 87     | 97     |                                |
| <b>C</b> | 63/102 | 63/102 | 63/102 | 1" PT/2" PT                    |
| <b>D</b> | 231    | 231    | 239    |                                |
| <b>E</b> | 211    | 230    | 257    |                                |
| <b>F</b> | 249    | 266    | 293    |                                |
| <b>G</b> | 41/88  | 41/88  | 41/88  | Std Handle / <b>Ext handle</b> |

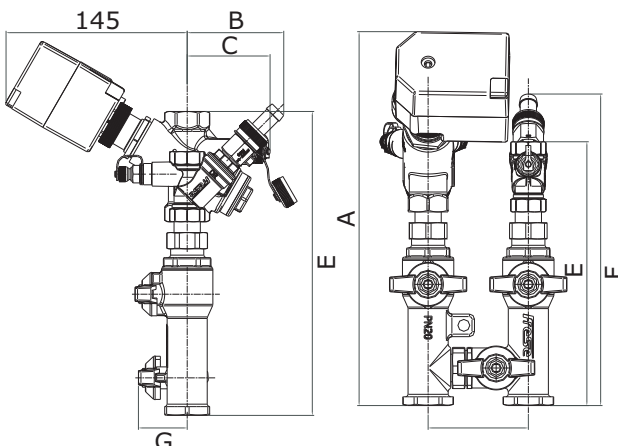
**Frese MODULA with Frese EVA**



**Modula - EVA**

|          | DN 15 | DN 20 | DN 25 |                                |
|----------|-------|-------|-------|--------------------------------|
| <b>A</b> | 85    | 85    | 85    |                                |
| <b>B</b> | 79    | 87    | 97    |                                |
| <b>C</b> | 59/98 | 59/98 | 59/98 | 1" PT/2" PT                    |
| <b>D</b> | 256   | 256   | 264   |                                |
| <b>E</b> | 211   | 230   | 257   |                                |
| <b>F</b> | 249   | 266   | 293   |                                |
| <b>G</b> | 41/88 | 41/88 | 41/88 | Std Handle / <b>Ext handle</b> |

**Frese MODULA with Frese OPTIMA**

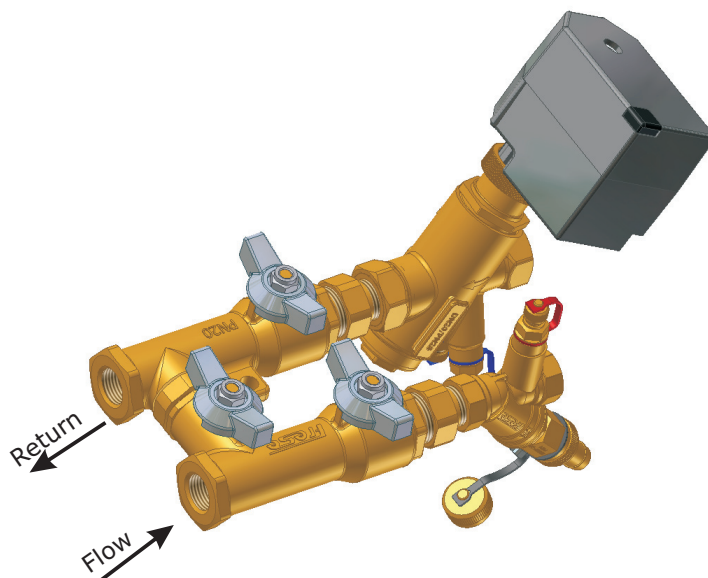


**Modula - OPTIMA**

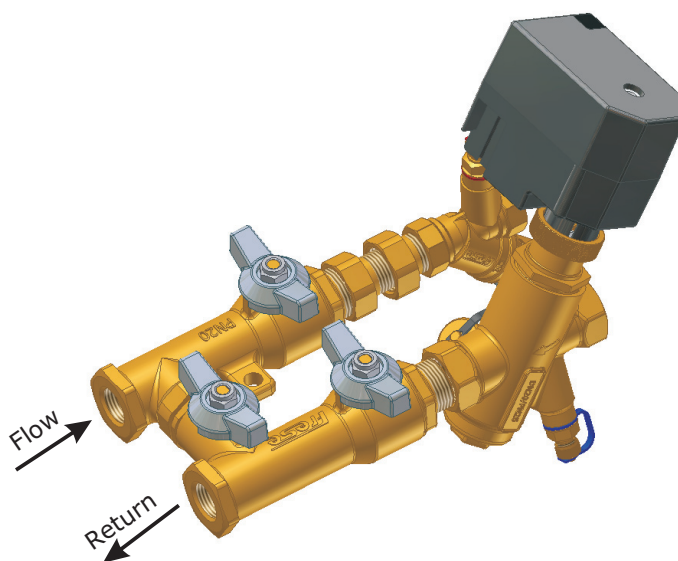
|          | DN 15  | DN 20  | DN 25  |                                |
|----------|--------|--------|--------|--------------------------------|
| <b>A</b> | 298    | 298    | 311    |                                |
| <b>B</b> | 79     | 87     | 97     |                                |
| <b>C</b> | 66/100 | 66/100 | 56/100 | 1" PT/2" PT                    |
| <b>D</b> | 243    | 243    | 251    |                                |
| <b>E</b> | 211    | 230    | 257    |                                |
| <b>F</b> | 249    | 266    | 293    |                                |
| <b>G</b> | 41/88  | 41/88  | 41/88  | Std Handle / <b>Ext handle</b> |

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**Right hand version Optima**



**Left hand version Optima**



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