

Frese MODULA Bypass Unit

Description

Frese MODULA is a compact and versatile valve system that combines the Frese range of dynamic flow, pressure and temperature control valves with isolation, flushing, draining and measurement components within a prefabricated, tested and ready to install terminal bypass unit.

Frese MODULA integrates one of the following Frese valve solutions:

- Frese OPTIMA Compact (Pressure Independent Control Valve - PICV)
- Frese ALPHA (Dynamic Flow Limiting Valve)
- Frese SIGMA Compact (Externally Adjustable Dynamic Flow Limiting Valve)
- Frese EVA (combined Dynamic Flow Limiting and 2 Port On/off Valve)
- Frese PV Compact (Adjustable Differential Pressure Control Valve)
- Frese STBV range (Adjustable Manual Balancing Valve)

Each unit can be supplied with isolation valves, strainer, drain/hose connection & P/T plug.

Benefits

The Frese MODULA Bypass Unit combines the many benefits of the Frese OPTIMA Compact, ALPHA, SIGMA Compact, EVA, PV Compact and STBV range in addition to:

Installation benefits

- Compact design for limited space availability
- Minimized installation and commissioning costs
- Allows easy flushing and coil isolation
- Easy lagging of spindle extensions

Operation benefits

- High comfort with minimized operation and maintenance costs
- Efficient flow, temperature and pressure control
- 5 modes of operation (see pages 6 and 7)

For further information on the Frese OPTIMA Compact, ALPHA, SIGMA Compact, EVA, PV Compact and STBV solutions, please refer to the relevant Technotes.



Features

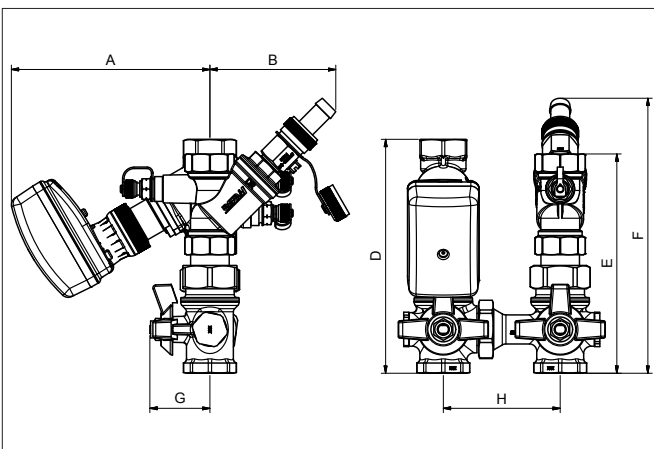
- Available in DN15, DN20 and DN25
- Available with 80 mm, 130 mm or 170 mm supply/return centres
- Integrated union joints for easy valve alignment
- Two T-handle isolation valves for flow, return and bypass
- Full flow valves on flow and return
- Spindle extensions available
- Combinations with strainer, drain/hose connection, P/T plug available
- PT point on the flow for measuring the DP across the terminal unit

Frese MODULA Bypass Unit

Technical data

Material:	DZR Brass, CW602N
Filter:	Stainless Steel
O-rings:	EPDM
Pressure class:	PN20
Mesh:	32 (0.5 mm)
Medium temperature range:	0°C to 120°C

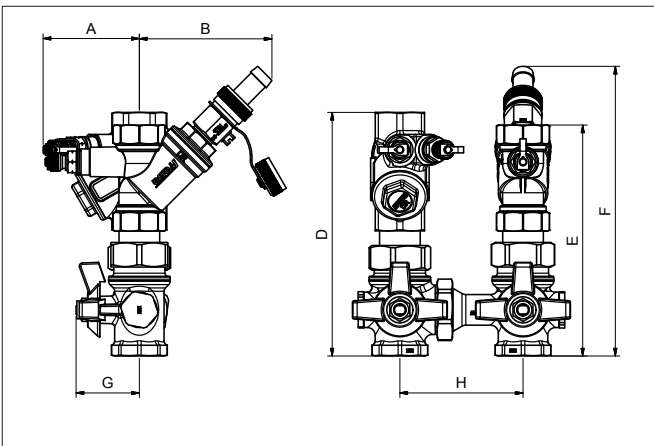
Dimensions



Frese OPTIMA Compact MODULA

mm	DN15	DN20	DN25	DN25L
A	117	117	120	135
B	74	86	92	92
D*	155/ 175	160/ 180	164/ 184	181/201
E	136	150	165	165
F	176	188	204	204
G*	41/ 88			
H	80/130/170			

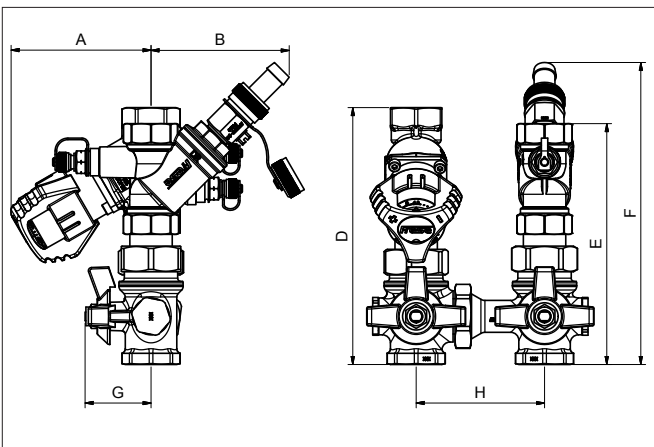
*) Std Handle/**Ext Handle**



Frese ALPHA MODULA

mm	DN15	DN20	DN25
A	63/ 102 (1"PT/2"PT)		
B	74	86	92
D	157	158	167
E	136	150	165
F	176	188	204
G*	41/ 88		
H	80/130/170		

*) Std Handle/**Ext Handle**



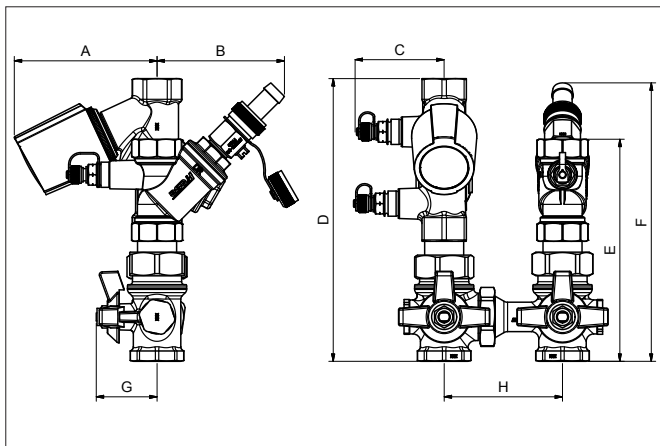
Frese SIGMA Compact MODULA

mm	DN15	DN20	DN25
A	87	87	110
B	74	86	92
D	155	160	166
E	136	150	165
F	176	188	204
G*	41/ 88		
H	80/130/170		

*) Std Handle/**Ext Handle**

Frese MODULA Bypass Unit

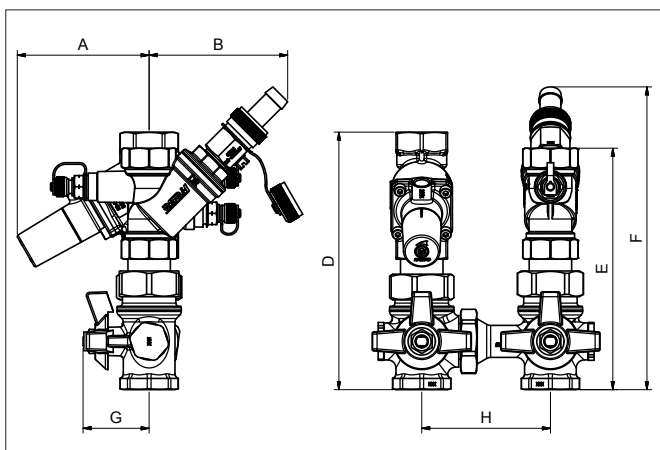
Dimensions



Frese EVA MODULA

mm	DN15	DN20	DN25
A	97		
B	74	86	92
C	61		
D	182	191	202
E	136	150	165
F	176	188	204
G*	41/88		
H	80/130/170		

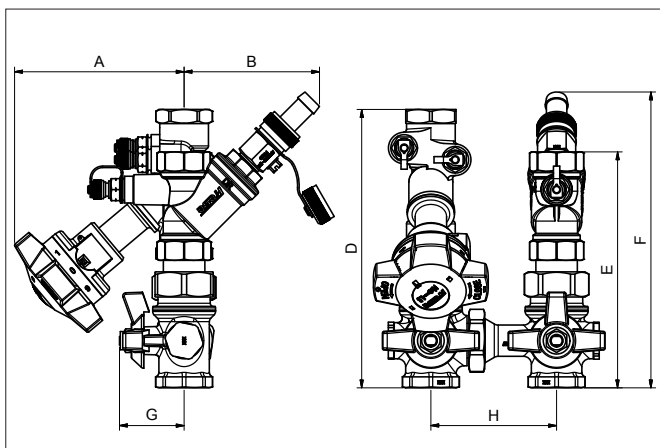
*) Std Handle/**Ext Handle**



Frese PV Compact MODULA

mm	DN15	DN20	DN25
A	82	82	134
B	74	86	92
D	155	160	166
E	136	150	165
F	176	188	204
G*	41/88		
H	80/130/170		

*) Std Handle/**Ext Handle**



Frese STBV MODULA

mm	DN15	DN20	DN25
A	112	108	125
B	74	86	92
D	167	177	183
E	136	150	165
F	176	188	204
G*	41		
H	80/130/170		

*) Only std. handle possible

Frese MODULA Bypass Unit

Product Code Builder

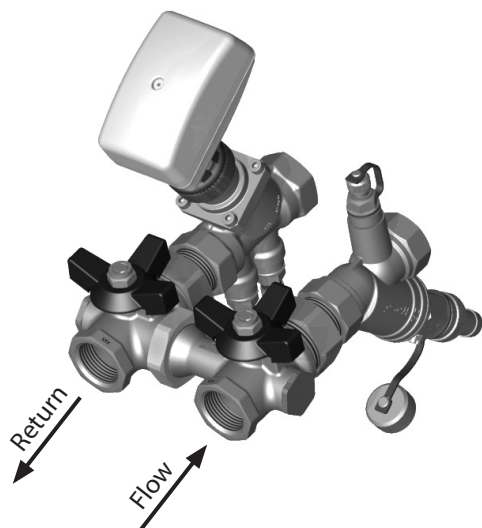
58							Frese MODULA									
2							Frese ALPHA									
3							Frese EVA									
7							Frese OPTIMA Compact									
8							Frese SIGMA Compact									
9							Frese PV Compact									
10							Frese STBV									
1							DN15 - 80mm		4		DN15 - 130mm		7		DN15 - 170mm	
2							DN20 - 80mm		5		DN20 - 130mm		8		DN20 - 170mm	
3							DN25L - 80mm		6		DN25L - 130mm		9		DN25L - 170mm	
A							DN25 - 80mm		B		DN25 - 130mm		C		DN25 - 170mm	
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									
9							Strainer extended with 1" P/T-plug + drain, hose and extension handle									
10							Extended T-piece with 1" P/T-plug + drain, hose 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)									
J							Strainer extended with 1" P/T-plug + drain, hose and extension handle (Left hand mount)									
K							Extended T-piece with 1" P/T-plug + drain, hose and extension handle (Left hand mount)									
X							Coupling with male connection loosely mounted on right side. Standard handles									
Y							Coupling with male connection loosely mounted on right side. Extension handles									
1							1" P/T Plugs on valve									
2							2" P/T Plugs on valve									
3							Plug									
4							Without P/T Plugs on valve									
L							Low									
H							High									
A							2,5 mm stroke (for OPTIMA Compact)			Kvs (for STBV)						
C							5,0 mm stroke (for OPTIMA Compact)									
D							5,5 mm stroke (for OPTIMA Compact)									
58	X	X	X	X	X	X										

Example of product code: **587-12-1-LA**

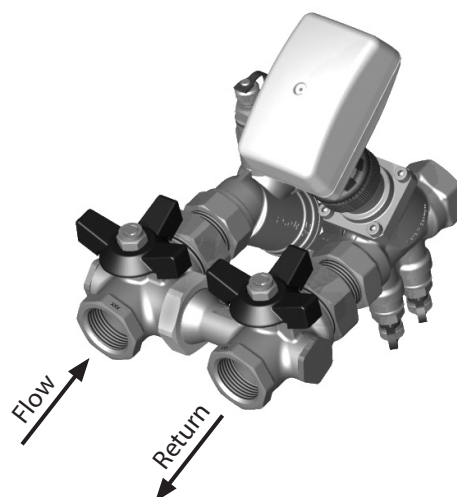
Frese MODULA Bypass Unit

Versions

Right hand version

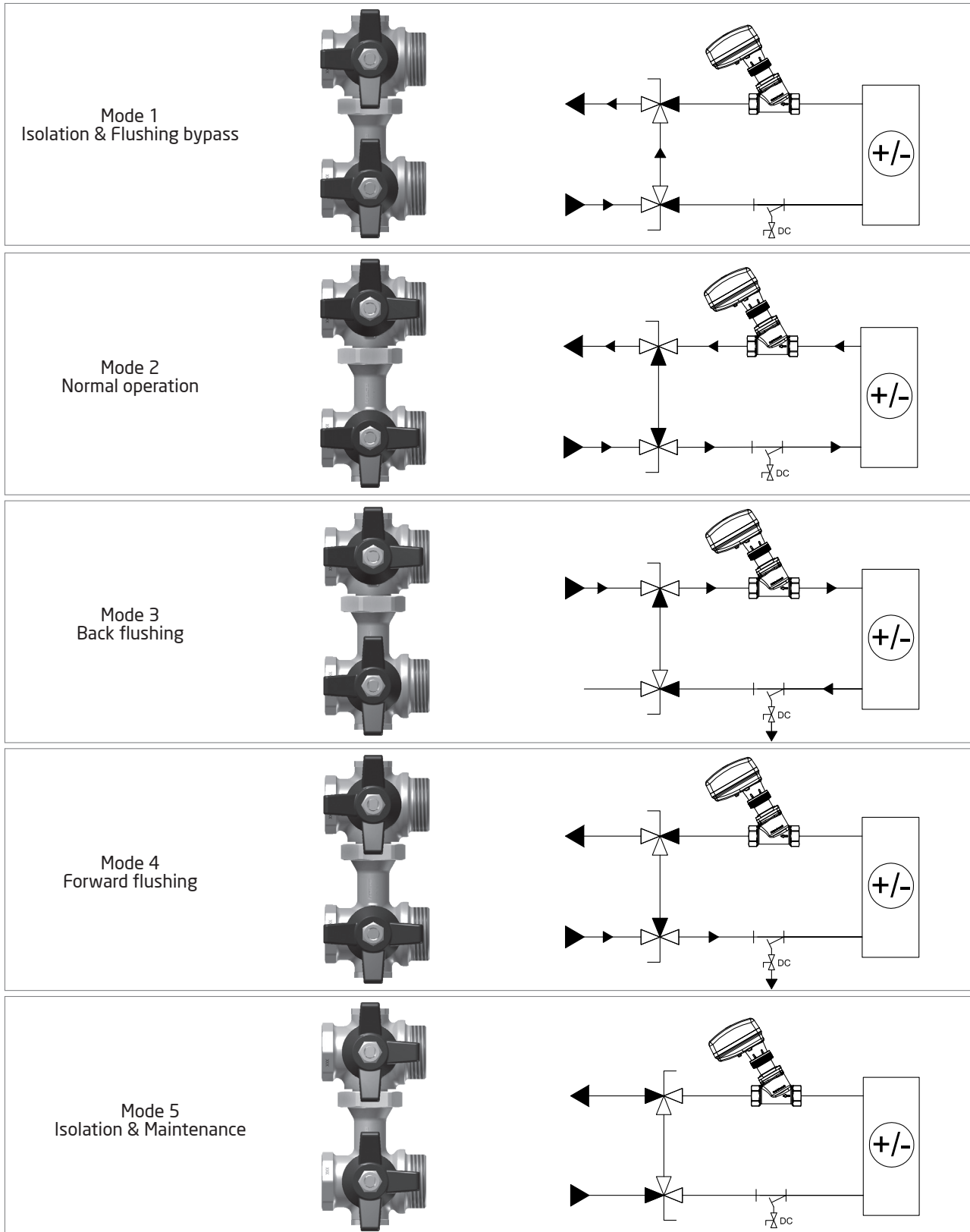


Left hand version




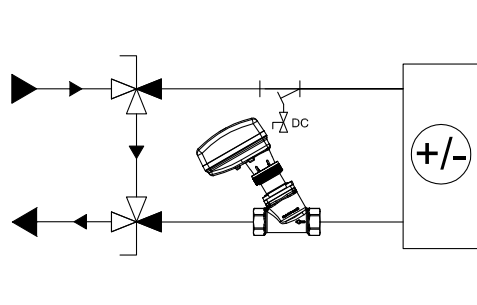

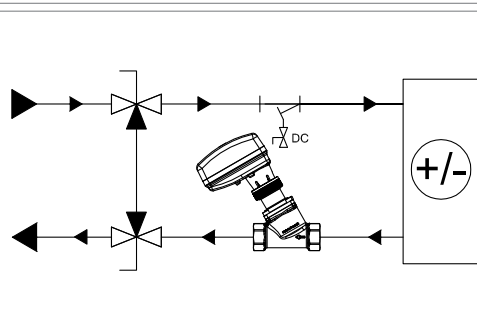

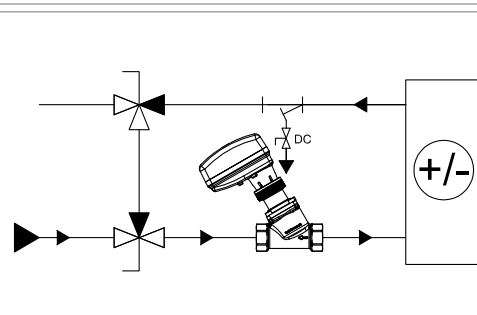

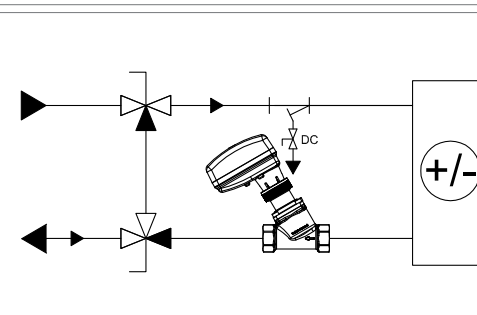
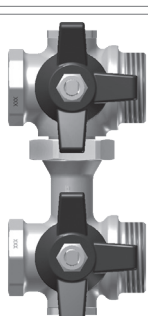
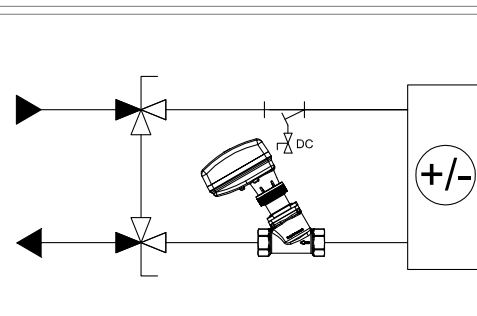
Frese MODULA Bypass Unit

Modes of Operation - Right Hand Version



Frese MODULA Bypass Unit

Modes of Operation - Left Hand Version

<p>Mode 1 Isolation & Flushing bypass</p>		
<p>Mode 2 Normal operation</p>		
<p>Mode 3 Back flushing</p>		
<p>Mode 4 Forward flushing</p>		
<p>Mode 5 Isolation & Maintenance</p>		

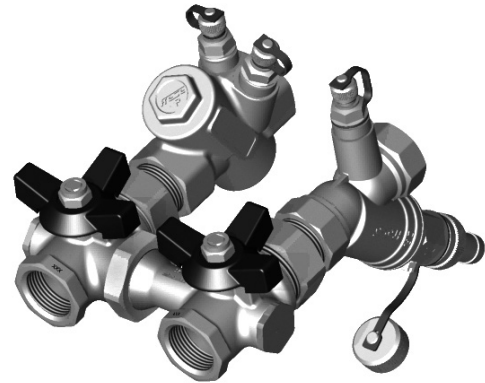
Frese MODULA Bypass Unit

MODULA Types (shown with standard handles)

Frese OPTIMA Compact MODULA



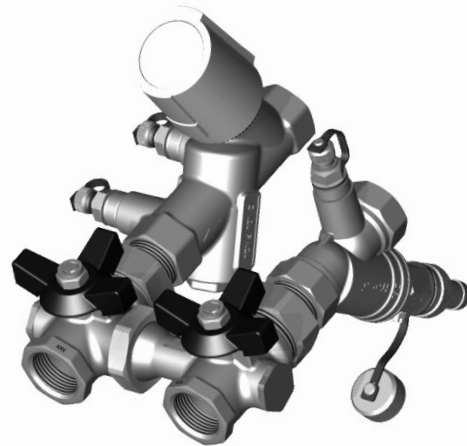
Frese ALPHA MODULA



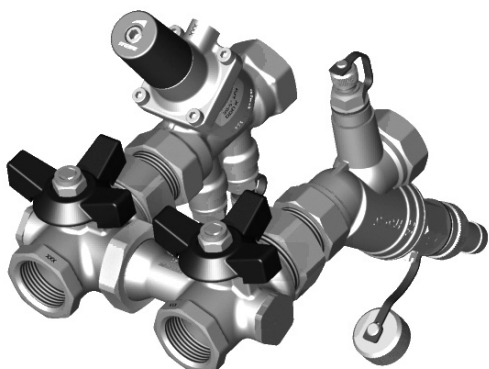
Frese SIGMA Compact MODULA



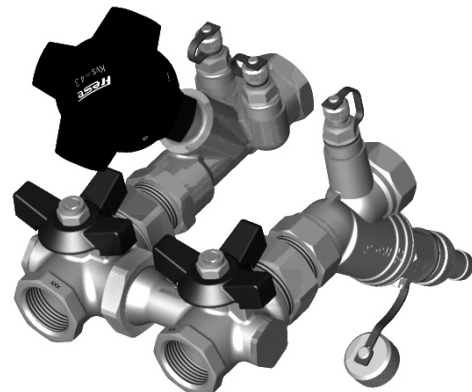
Frese EVA MODULA



Frese PV Compact MODULA




Frese STBV MODULA



Frese MODULA Bypass Unit

Accessories

Frese MODULA insulation covers for Frese MODULA with Frese OPTIMA Compact pressure independent control valves only.

	Frese MODULA type	Frese MODULA dimension	Insulation Covers Frese no.
	Right	DN15 DN20 DN25	38-0865
	Left		38-0866
	Right	DN25L	38-0867
	Left		38-0868

For more details please refer to the Frese MODULA Insulation Covers technote.

Specification Text - Frese MODULA

The valve system shall combine a dynamic or a static balancing valve with a fixed 80 mm, 130 mm or 170 mm distance supply/return component.

The bypass unit shall have two integral isolation valves and a PT Drain or PT strainer on the supply side.

The bypass unit shall have a pressure class of PN20.

The medium temperature range shall be 0°C to 120°C.

All material shall be DZR brass, CW602N.

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