

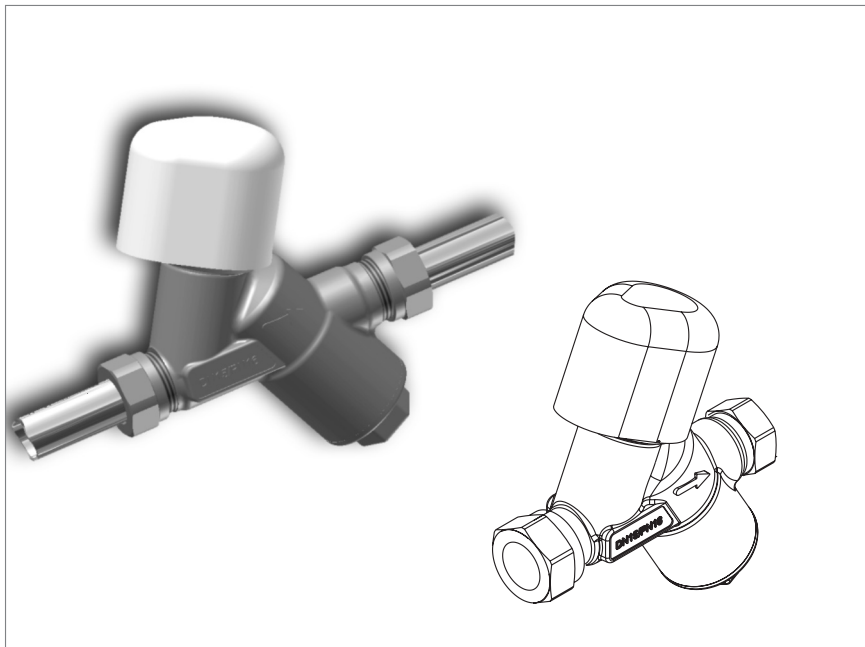
# Frese EVA BASIC - 2 way Automatic Balancing Valve

## Application

**Frese EVA BASIC is a valve particularly designed for the balancing of cooling and heating units, cooling ceilings/beams and fan coil units.**

**With its simple on/off control the valve can be used for many different applications and at the same time ad-vantage is derived from the dynamic control principles.**

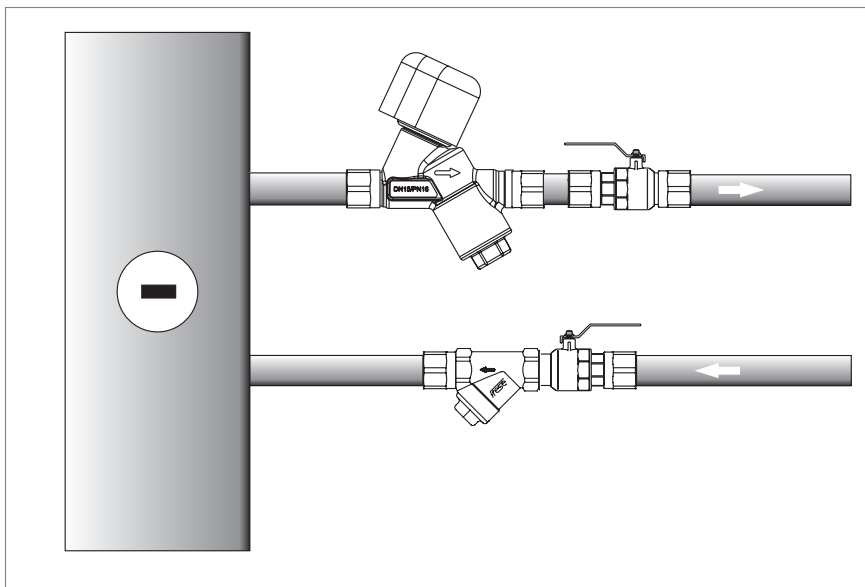
**By means of Frese EVA BASIC the optimum flow rate is ensured in each control area. This flow rate is maintained in spite of pressure fluctuations in the system.**



*Frese EVA BASIC male/male for couplings and actuator - here shown with press couplings and compression couplings respectively.*

## Advantages

- No requirement on pipe lengths before and after the valve.
- Small compact product.
- Time consuming adjustment of the system is eliminated.
- The valve automatically ensures hydraulic balance regardless of pressure fluctuations in the system.
- On/off function for electrically operated actuator (normally closed).
- The valve can be easily fitted into the system by means of the wide union programme.



*Frese EVA BASIC - installed in the return side of the cooling-/heating surfaces.*

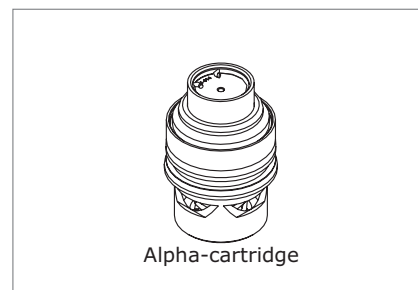
## Function Cartridges

Balancing occurs by means of a flow rate cartridge, in which the differential pressure is kept constant across the orifice.

In the wanted control range the pump supplies sufficient differential pressure to

influence the spring and diaphragm of the flow rate cartridge.

Consequently, the flow rate is kept constant in spite of pressure fluctuations, if any, in the system.

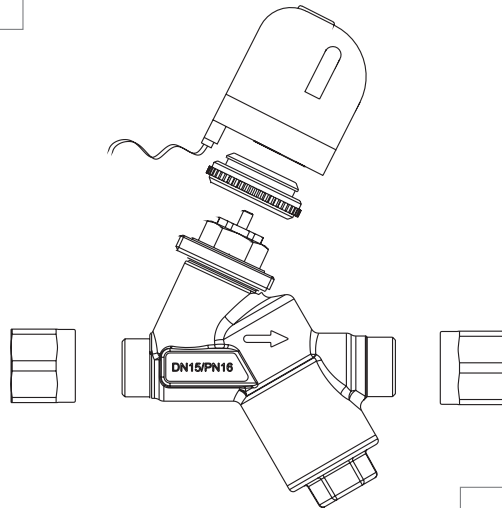



Alpha-cartridge

# Frese EVA BASIC - 2 way Automatic Balancing Valve

## Product programme

Frese EVA BASIC DN15	
Kv 1,65	48-5554

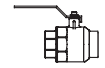


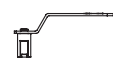
	Actuator on/off, normally closed
24V	48-5515
230V	48-5518


	Extension piece for actuator
h= 20 mm	48-5557


Flow rate cartridge	
See cartridge catalogue	

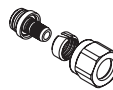
Strainer F/F, 32 mesh	
DN15	41-1132


Ball valve M/M w. Handle	
DN15	38-5020

Spindle extention	
DN15	46-1072

	Compression coupling
07-0094	DN15 to Ø15 mm
Smaller dimensions on request	

	PEX coupling
31-2021	DN15 to Ø12 x 2 mm
31-2011	DN15 to Ø14 x 2 mm
31-2031	DN15 to Ø15 x 2,5 mm
31-2041	DN15 to Ø16 x 2 mm

	AluPEX coupling
31-2411	DN15 to Ø14 x 2 mm
31-2441	DN15 to Ø16 x 2 mm

	Press coupling
31-2831	DN15 to Ø15 mm

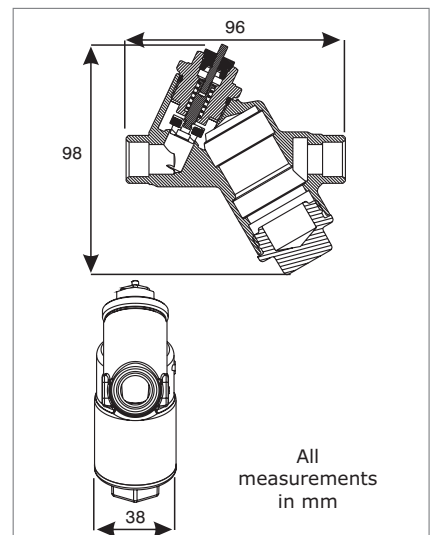
## Technical data

Valve housing:	Hot forged brass
O-rings:	EPDM
Pressure rating:	PN16
Temperature of the medium:	0 to + 95°C
Ambient temperature:	0 to + 50°C
Pressure range (cartridges):	7 - 410 kPa
Flow range:	See Cartridge Catalogue

Glycolic mixtures in any solution are applicable (both ethylene and propylene).

The use of strainer is recommendable

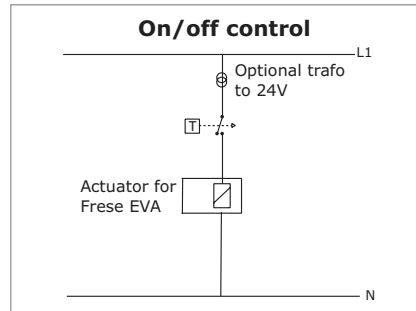
Weight = 0.431 Kg  
 Height incl. actuator = 135 mm  
 Stroke = 2.5 mm



# Frese EVA BASIC- 2 way Automatic Balancing Valve

## Electric Diagram, on/off actuator

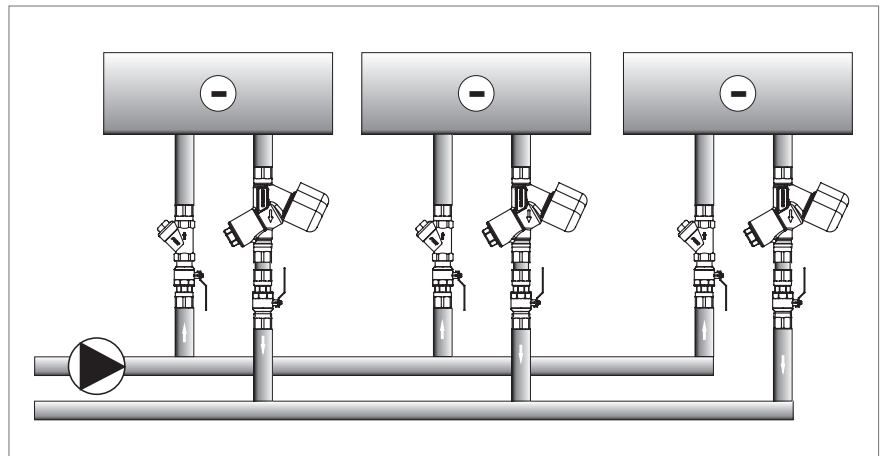
The valve is "normally closed".  
The power consumption of the



## Application Examble

The system is easily adjusted by adjusting the pump in accordance with the differential pressure required across the critical valve.

When this differential pressure is achieved, the system will automatically be balanced. Min. differential pressure = the lower limit of the operating range of the valve. See cartridge catalogue for required min. differential pressure.



# Frese EVA BASIC - 2 way Automatic Balancing Valve

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## Technical specifications

The valve should be made of hot forged brass and should operate by means of a flow rate cartridge, that is readily accessible without dismantling the valve from the piping system.

The pressure range of the valve should be PN16.

With the actuator fitted the valve should operate in the temperature range between 0°C and 50°C (ambient temperature).

Product programme	Frese no.
Frese EVA BASIC Kv 1.65	48-5554

Product programme	Frese no.
<b>Actuators</b>	
Actuator 24V	48-5515
Actuator 230V	48-5518
Extension piece	48-5557
<b>Flow rate cartridge</b>	see cartridge catalogue
<b>Compression coupling</b>	
DN 15 to Ø15mm	07-0094
(smaller dimensions on request)	
<b>PEX-coupling</b>	
DN 15 to Ø12 x 2mm	31-2021
DN 15 to Ø14 x 2mm	31-2011
DN 15 to Ø15 x 2,5mm	31-2031
DN 15 to Ø16 x 2mm	31-2041
<b>AluPEX coupling</b>	
DN 15 to Ø14 x 2mm	31-2411
DN 15 to Ø16 x 2mm	31-2441
<b>Press coupling</b>	
DN 15 to Ø15mm	31-2831
<b>Strainer DN 15</b>	41-1132
<b>Ball valve m/m w. handle DN 15</b>	11-5230
Spindle extention	46-1006