

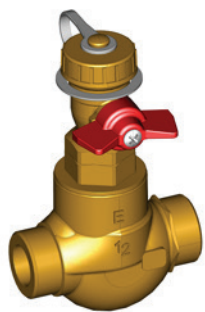
HerzCON

Direct connection for fan coils

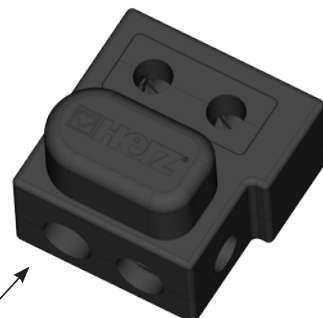
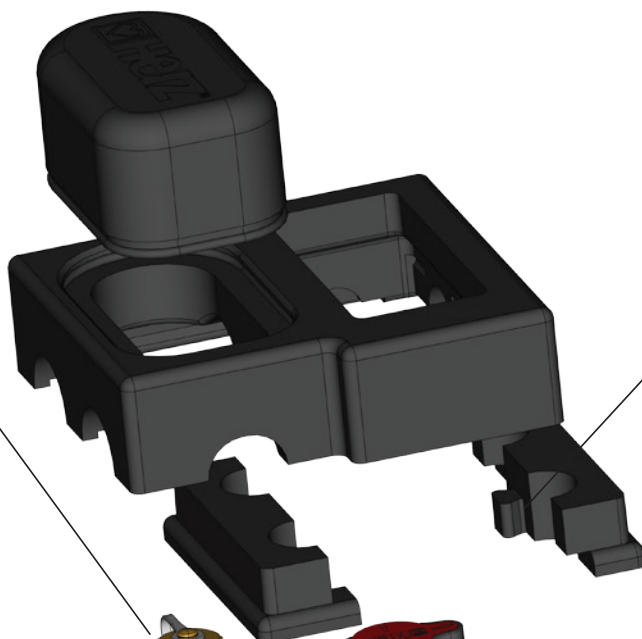


NEW

Assembling parts



The drain valve fitted to the strainer allows flushing without the need to remove the strainer basket.

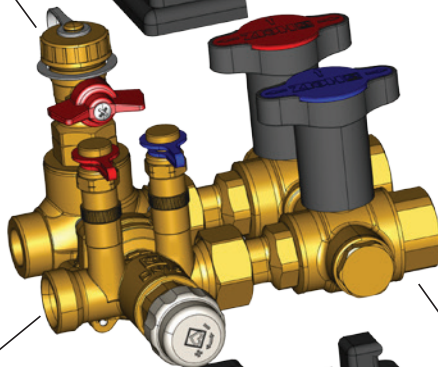


Isolation box

Fire behavior for insulation box

Method	Class
DIN EN ISO 11925-2 ¹	E
DIN 4102-1	E
FMVSS 302	Fulfilled
UL 94	HBF

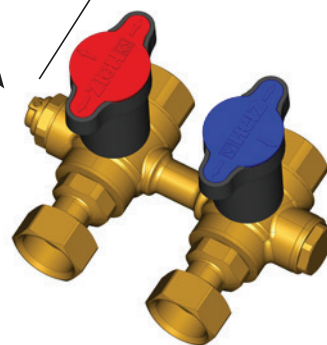
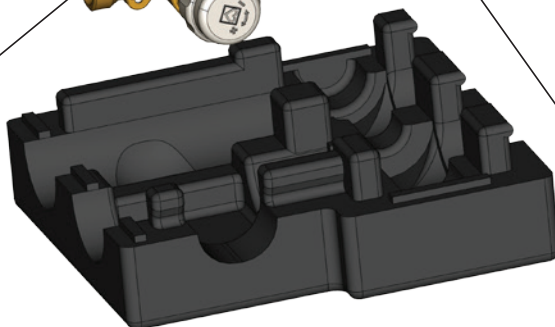
¹ Edge exposure, classification according to EN 13501-1



High Energy Efficiency.
Perfect control.
Very easy and fast commissioning.
One valve replaces three (DPCV, Balancing, Control) Optimization of pump head No required calculation and verification of the valve authority. Lower operational or maintenance costs due to less complaints/longer life-span of actuator.



Manual Air Vent



HERZ-Multifunction Ball Valve Block with red and blue "T" Handle Three-Port-Ball Valves.

T port of ball with full bore allows the draining or filling of full systems or part of the systems.



HerzCON is a simple and reliable direct connection for Fan Coil Units with 65 mm pipe centres.

Features & Benefits

- DN15 & 20 version designed with 65 mm centres
- Allows regulating, flushing and isolating operations to be undertaken
- Flushing bypass included as recommended by BSRIA BG29/2011
- Fully assembled and tested at the factory
- All components constructed from DZR Brass
- 5 year HERZ warranty
- Known envelope dimensions
- Reduction in on-site labour, time and cost
- Fast connection (only four connections are required)
- Reduces need for pre-fabrication area
- Reduced possibility of incorrect installation
- No differentiation between heating and chilled systems
- Insulation box included

Modern system designers are always looking for cost effective ways to improve commissioning and maximize efficiency. Valve manufacturers have developed various products over the years aimed at improving energy efficiency and saving installation costs. Installers have also adopted various methods of pre-fabrication in a bid to reduce installation and commissioning costs.

With today's emphasis on saving energy, designers are looking to cut costs to a minimum by utilising variable volume heating and cooling systems. The use of Dynamic Balancing Valves such as Pressure Independent Balancing Control Valves, ensures that these issues are overcome and flow rates are controlled constantly, as required by modern room temperature control systems.

The BSRIA guide to Energy Efficient Pumping Systems BG 12 / 2011 clearly indicates that significant energy savings can be made by utilizing Pressure Independent Balancing Control Valves (PIBCV) on terminal units in Variable Volume Systems.

HerzCON has been designed to give a simple connection to fan-coils, or other terminal units, and utilises the HERZ 4006 SMART Pressure Independent Balancing Control Valve with HERZ Multifunctional Ball Valve and a HERZ strainer with HERZ Drain valve 2512. On/off, 3-Point or modulating 0 – 10 V DC Actuating or Motoric drives can be fitted and integrated to a BMS if required.

The unit allows pressure independent control ensuring full stroke regardless of pressure fluctuations, while guaranteeing a constant flow rate to the terminal unit maximising energy efficiency for the system. The HerzCON unit also permits flushing and isolating operations to be undertaken.

This means there is no product differentiation between heating and chilled systems, one unit does both applications. The drain cock fitted to the strainer allows flushing without the need to remove the strainer basket and also allows the strainer basket to be cleaned in-situ.

HerzCON technical data

Max. operating pressure	25 bar
Min. operating temperature	- 20 °C
Max. operating temperature	130 °C
Lift	4 mm

The integrated control unit together with the actuating drive is responsible for modular control. Various actuating drives might be used.

Materials

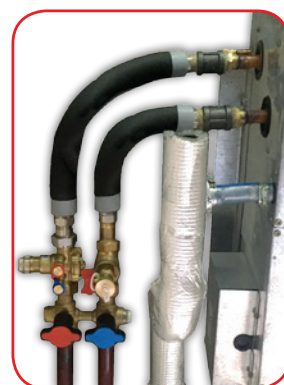
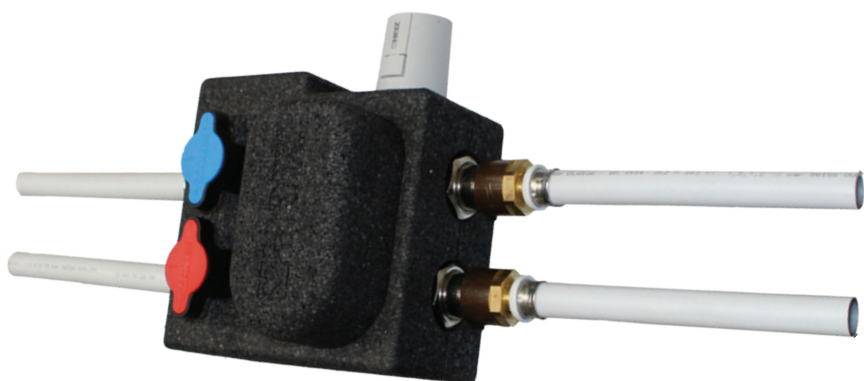
Body: dezincification-resistant brass
Membranes and O-rings: EPDM

Water purity in accordance with the ÖNORM H 5195 and VDI 2035 standards.

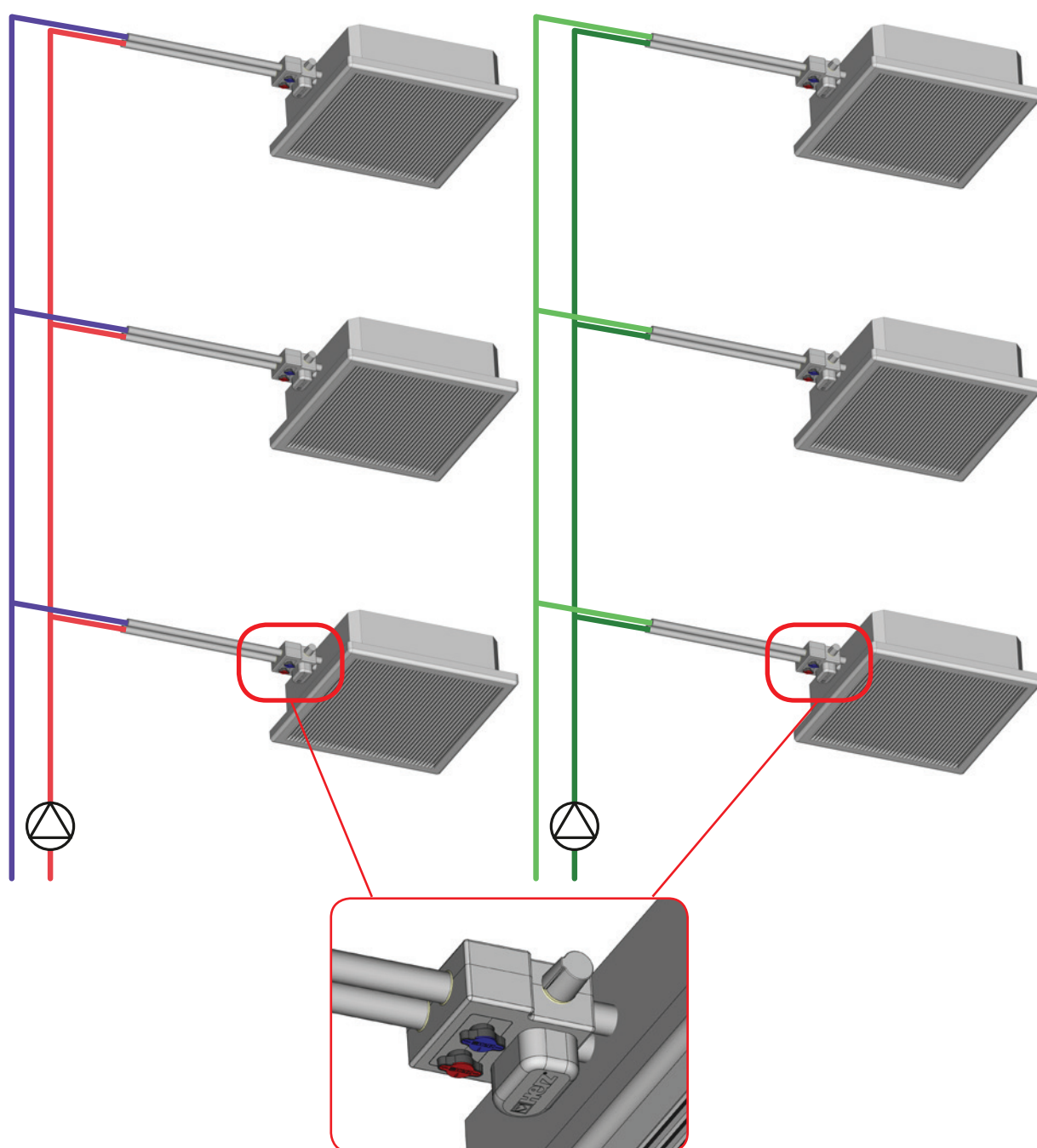
Ethylene and propylene glycol can be mixed to a ratio of 25 - 50 vol. [%].

Order number	Valve size	Flowrate range (l/s)
1 4600 51	DN 15	0.045 - 0.099
1 4600 50	DN 15LF	0.013 - 0.030
1 4600 59	DN 15MF	0.029 - 0.061
1 4600 52	DN 20	0.094 - 0.205





Example for installation



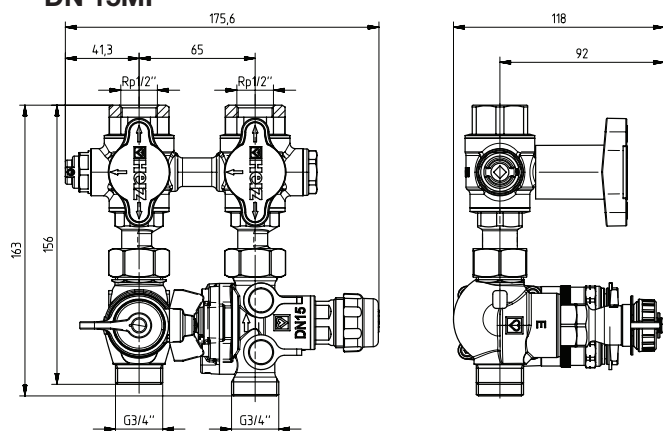
Application example for heating and cooling

☑ Dimensions in mm:

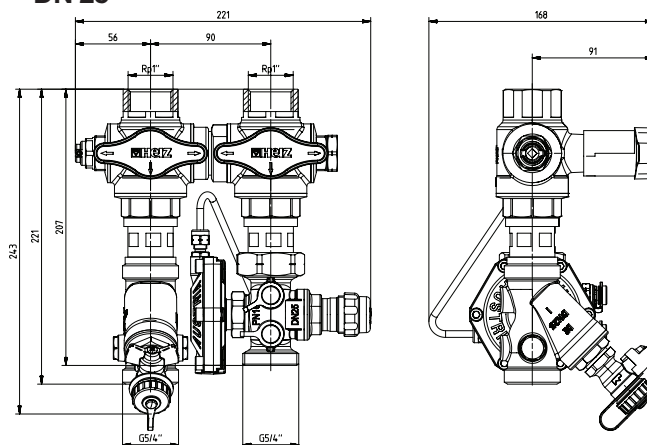
DN 15

DN 15LF

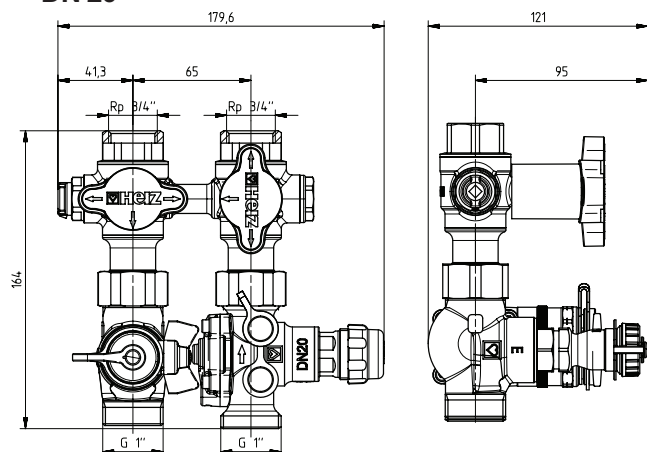
DN 15MF



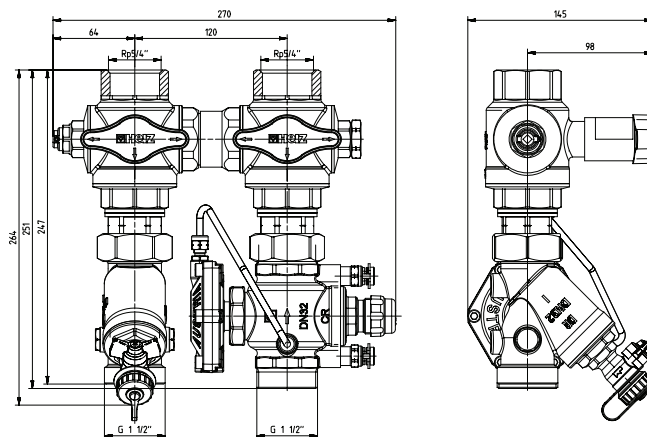
DN 25



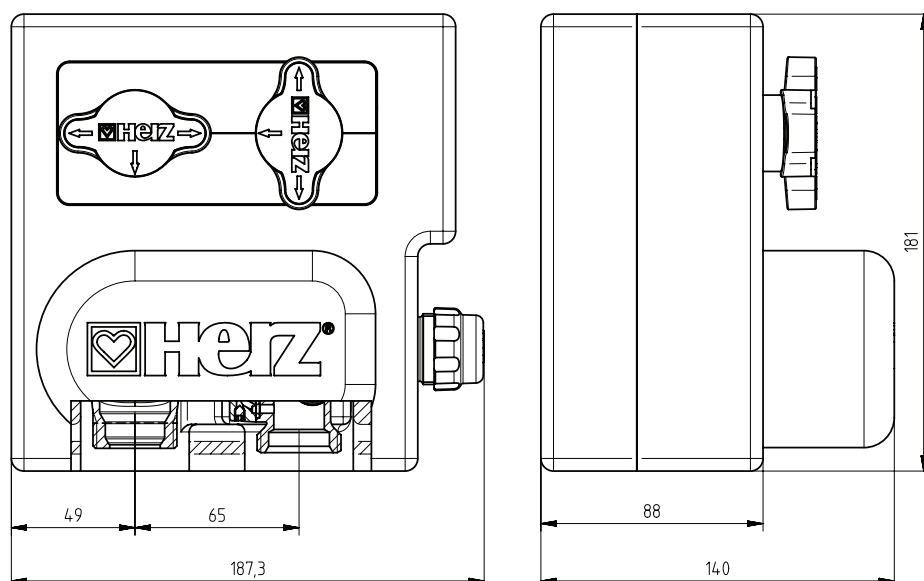
DN 20



DN 32



**Isolating
box**



☑ Operations

Normal Operation

For normal operation the bypass is closed, strainer drain valve is closed, Ball valves are in the position as showed in the scheme, PIBCV preset to flow rate.

Bypass Operation

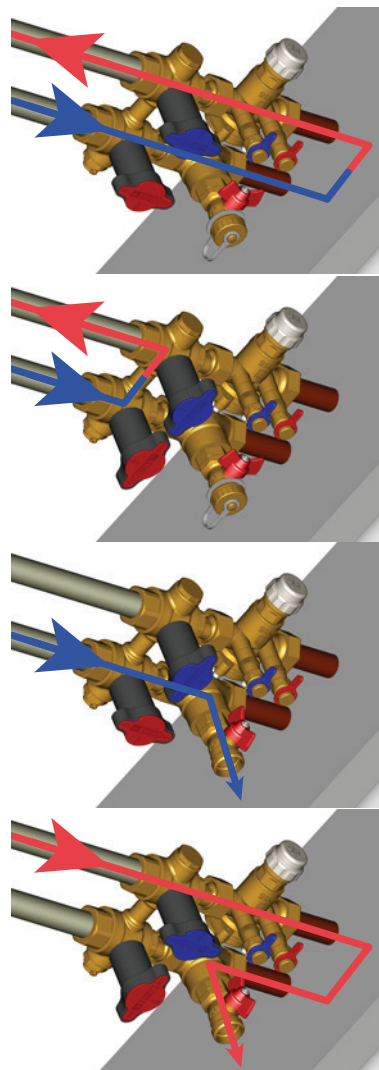
For the normal flushing method the bypass is open, PIBCV is closed, strainer drain valve closed, Ball valves are in the position as showed in the scheme.

Forward flush Operation

For forward flushing operation the bypass is closed, ball valve in the supply is open, strainer drain valve is open, ball valves are in the position as showed in the scheme and flushing through the strainer to atmosphere.

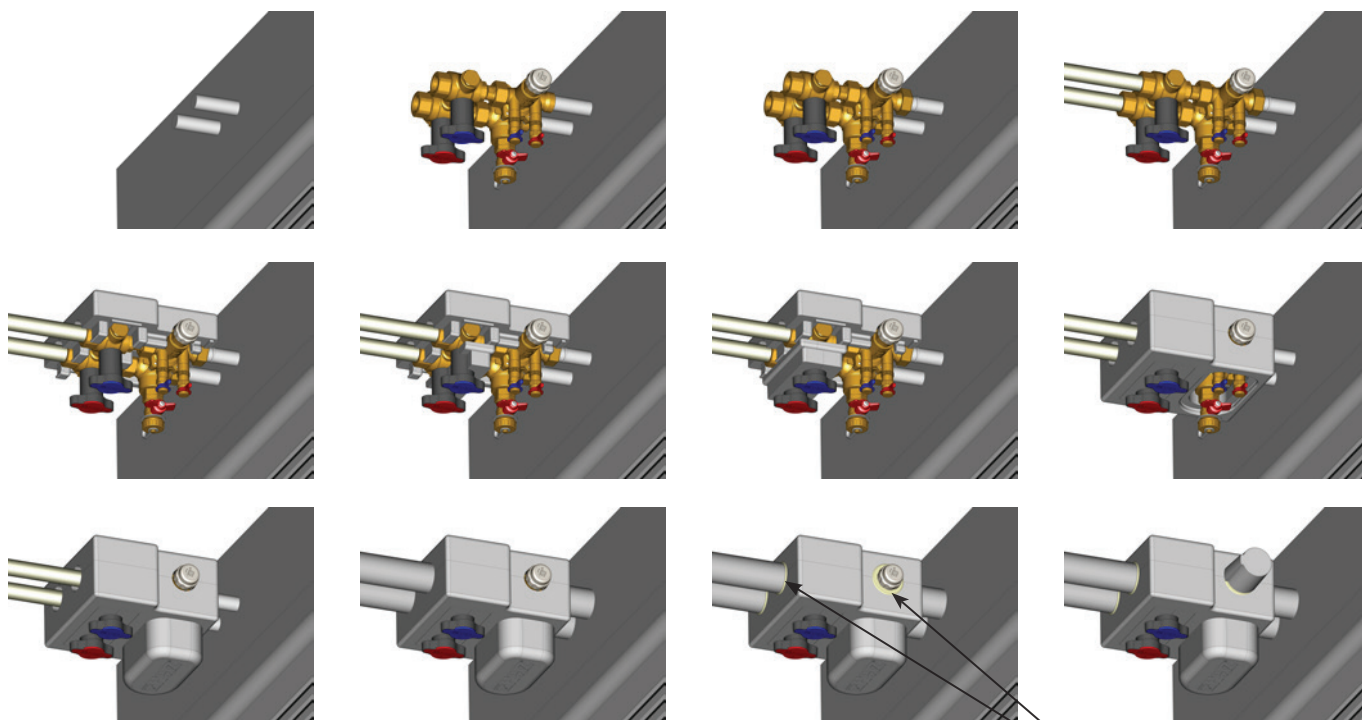
Backflush Operation

For Backflush operation the bypass is closed, strainer drain valve is open, ball valves are in the position as showed in the scheme and PIBCV is open. Flushing through ball valve, PIBCV, FCU and strainer to atmosphere.



☑ Installation

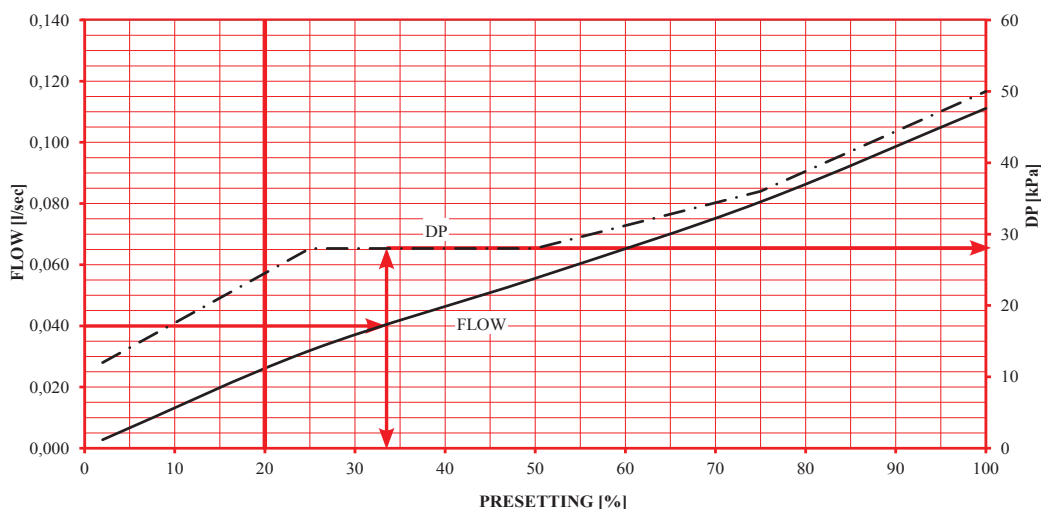
The unit is supplied in an insulated box, totally vapor sealed for chilled water circuits. Install the Insulation box, as shown in the following figures.



*vapor sealant

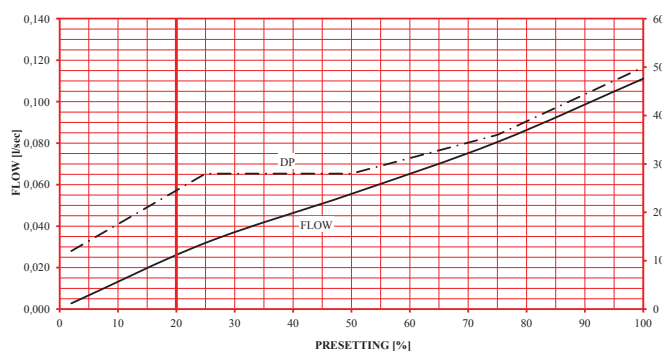
Pre-setting example

To select the correct setting and the required minimum differential pressure at the desired flow rate, follow the steps shown in the diagram. The setting % for a specified flowrate shown on the left of the chart can be read from the solid line and the minimum DP for that particular setting can be read from the dotted line and the corresponding DP on the right side of the chart.

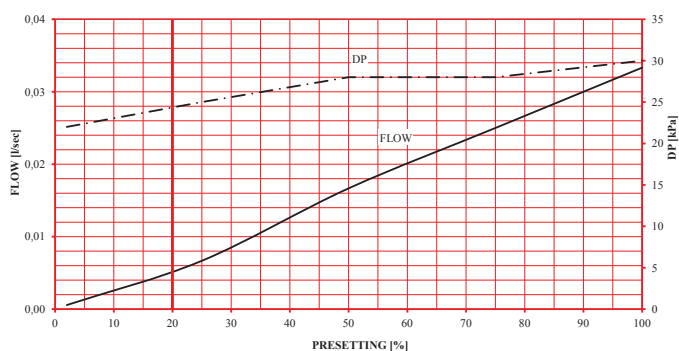


HERZ Diagrams

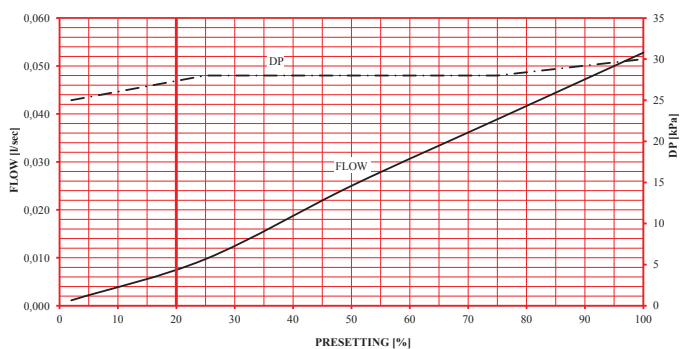
DN 15



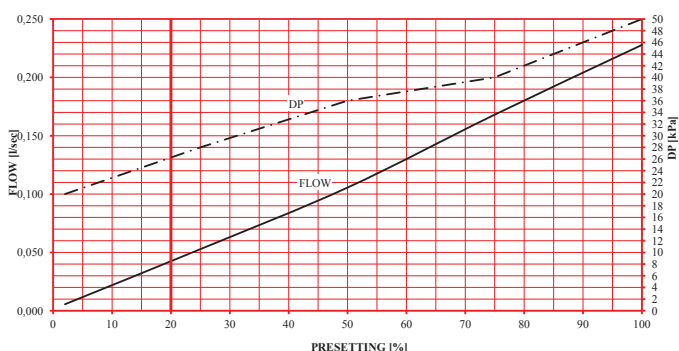
DN 15LF



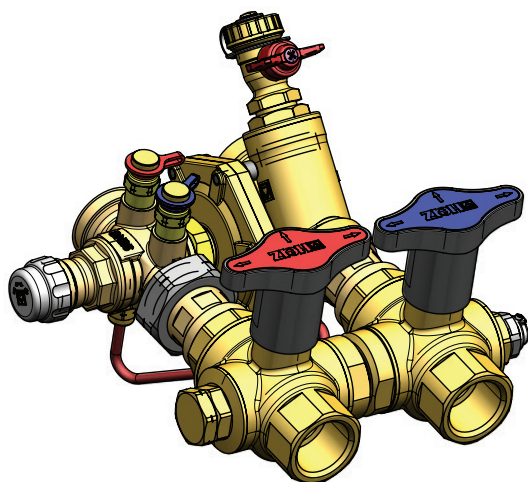
DN 15MF



DN 20



flowrate shown on the solid line —————
 minimum DP shown on the dotted line - - - - -
 Accuracy < ± 5%



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Features & Benefits

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- Allows regulating, flushing and isolating operations to be undertaken
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- Fully assembled and tested at the factory
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- Known envelope dimensions
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Materials

Body: dezincification-resistant brass
Membranes and O-rings: EPDM

Water purity in accordance with the OeNORM H 5195 and VDI 2035 standards.

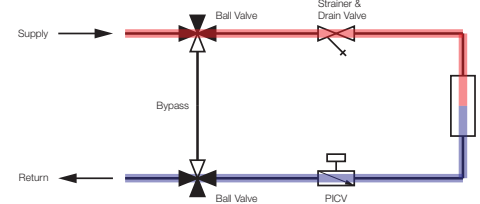
Ethylene and propylene glycol can be mixed to a ratio of 25 - 50 vol. [%].

Order number	Valve size	Flowrate range (l/s)
1 4600 53	DN 25	0.028 - 0.520
1 4600 54	DN 32	0.056 - 0.690

Operations

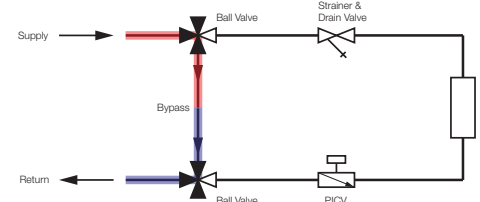
Normal Operation

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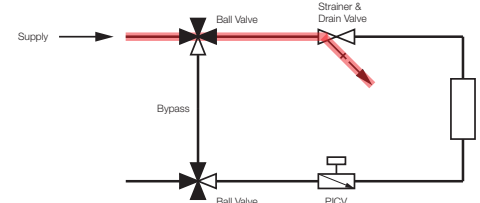
Bypass Operation

For the normal flushing method the bypass is open, PIBCV is closed, strainer drain valve closed, Ball valves are in the position as showed in the scheme.



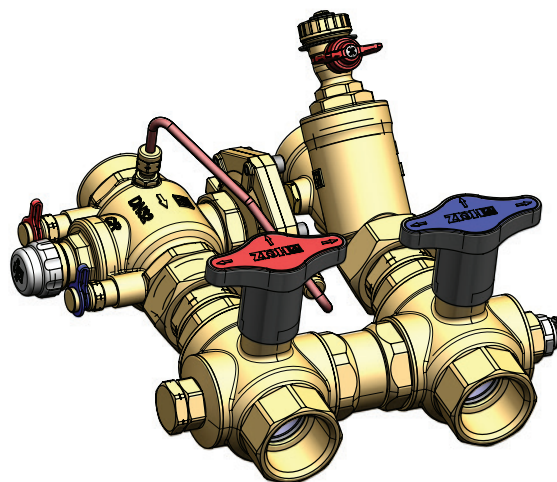
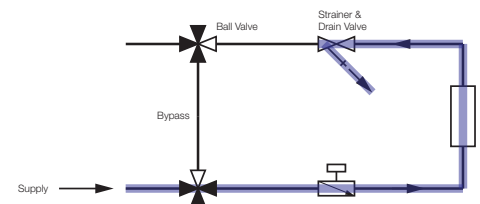
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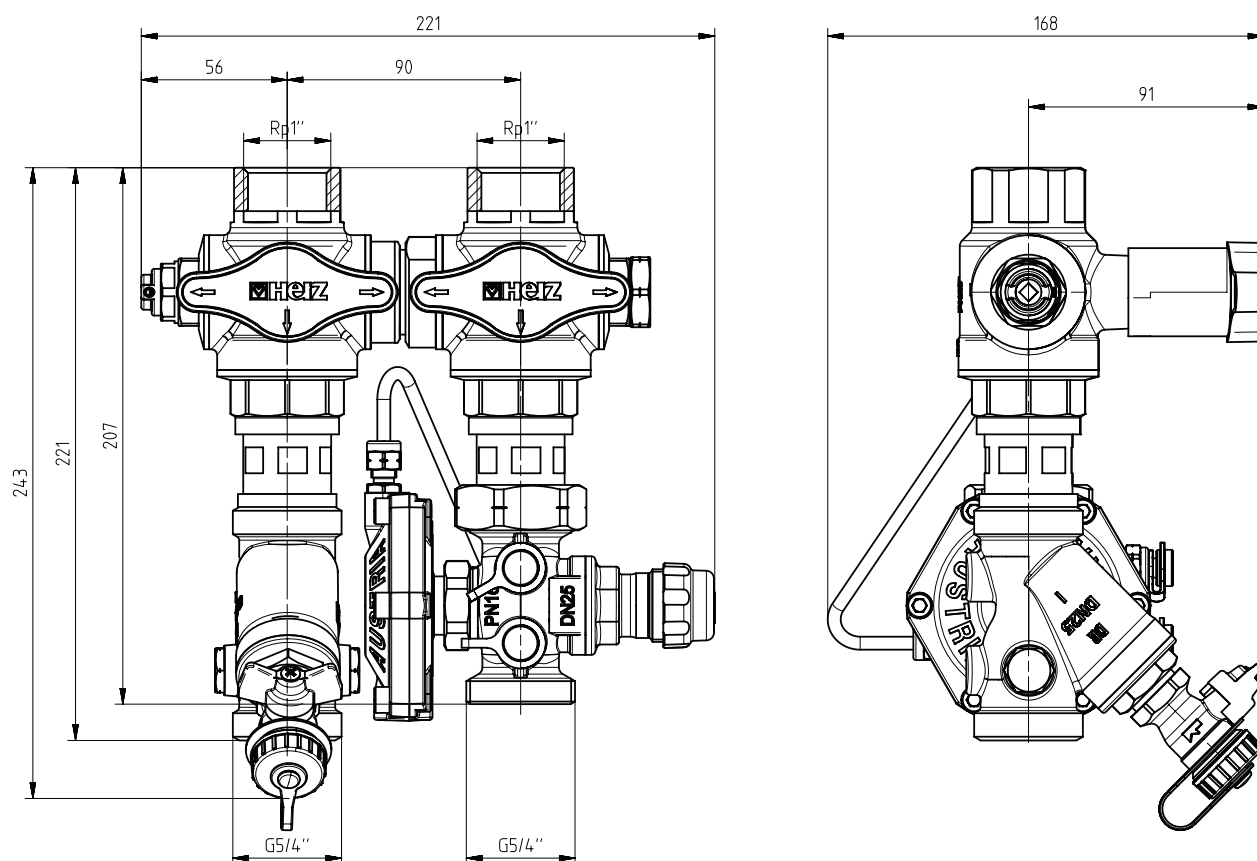
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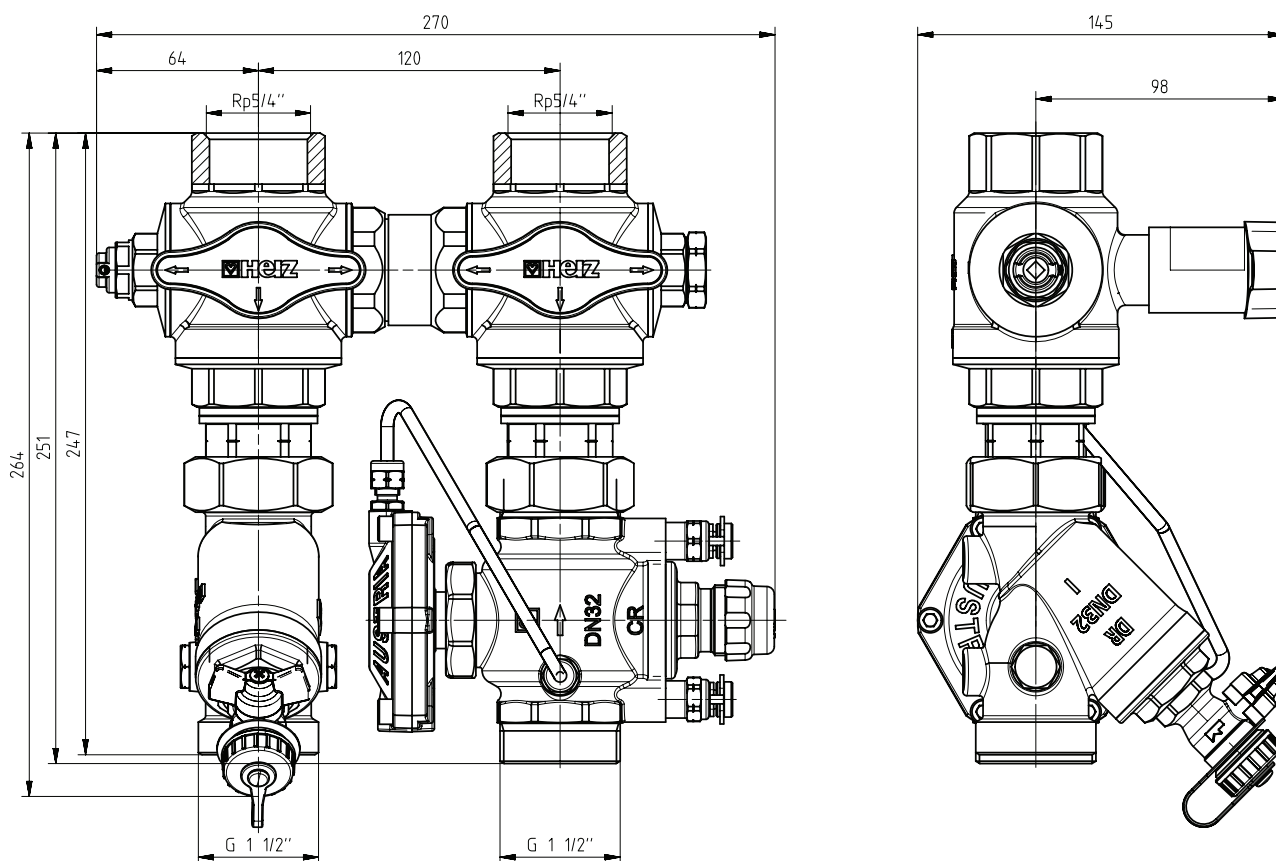


Dimensions in mm:

DN 25

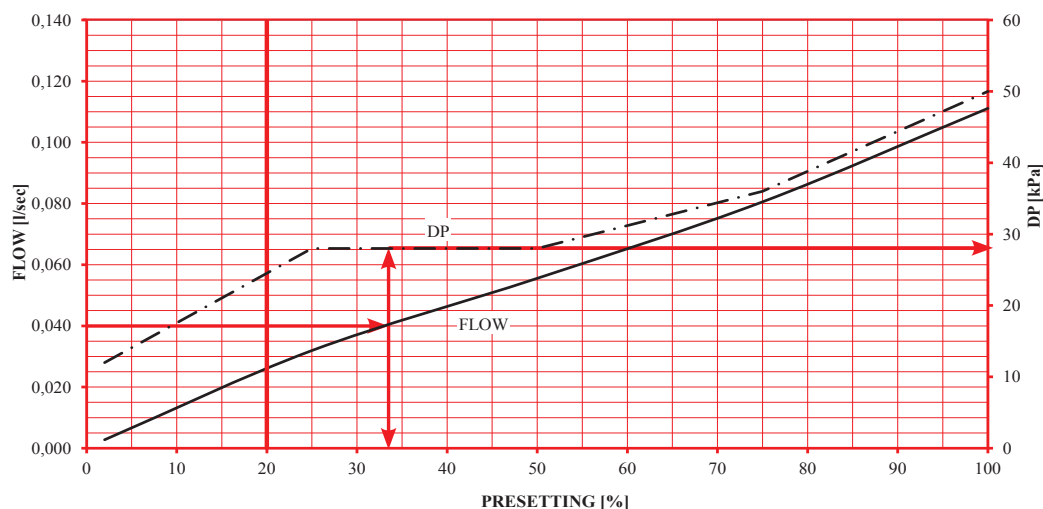


DN 32



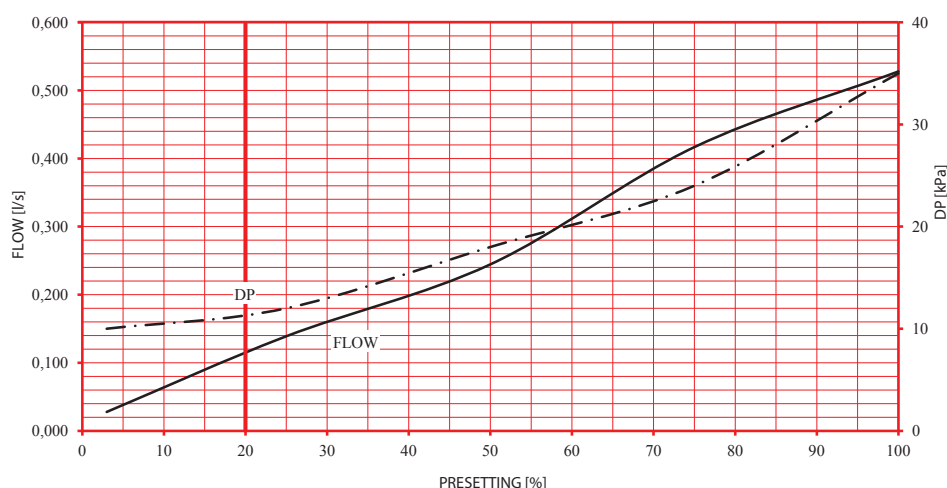
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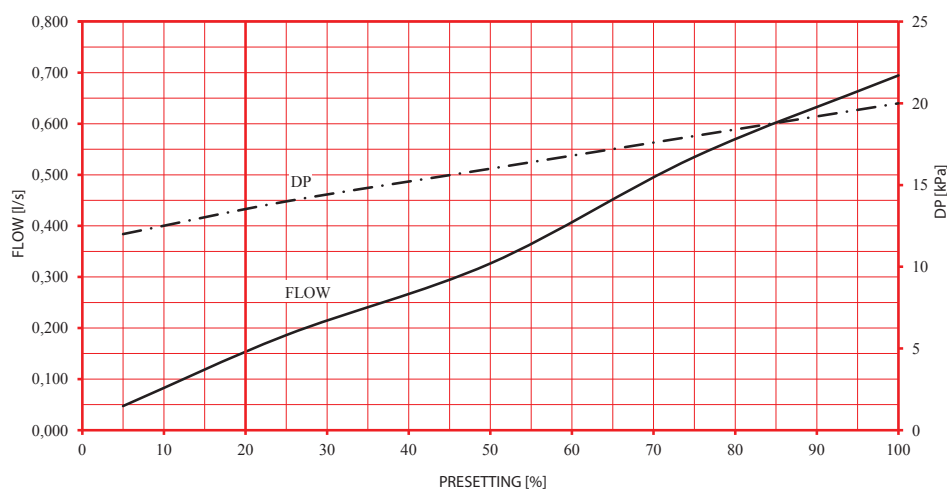


HERZ Diagrams

DN 25



DN 32



flowrate shown on the solid line —————
 minimum DP shown on the dotted line - - - - -
 Accuracy < ± 5%

Please note: all diagrams are indicative in nature and do not claim to be complete. All specifications and statements within this document are according to information available at the time of printing and meant for informational purpose only. Herz Armaturen reserves the right to modify and change products as well as its technical specifications and/or its functioning according to technological progress and requirements. It is understood that all images of Herz products are symbolic representations and therefore may visually differ from the actual product. Colours may differ due to printing technology used. In case of any further questions don't hesitate to contact your closest HERZ Branch-office.

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