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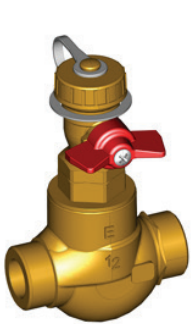
# HerzCON

Direct connection for fan coils

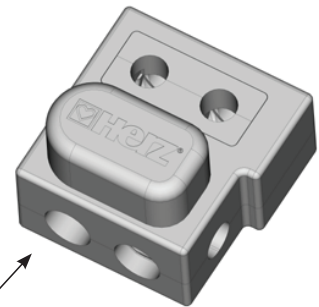
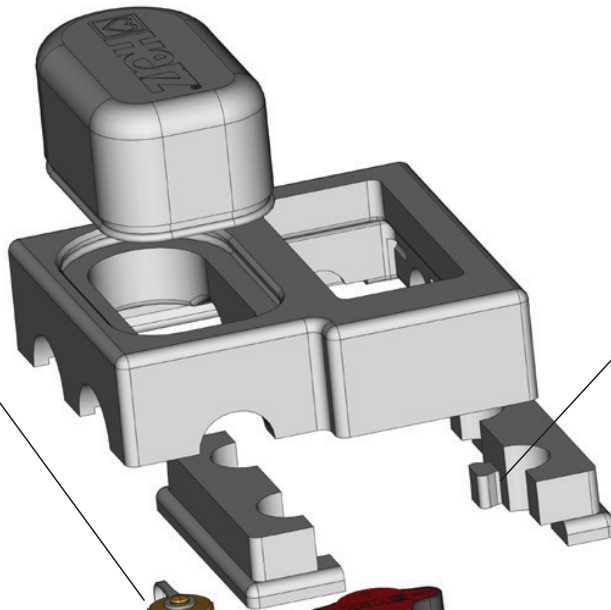


**NEW**

☑ Assembling parts



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

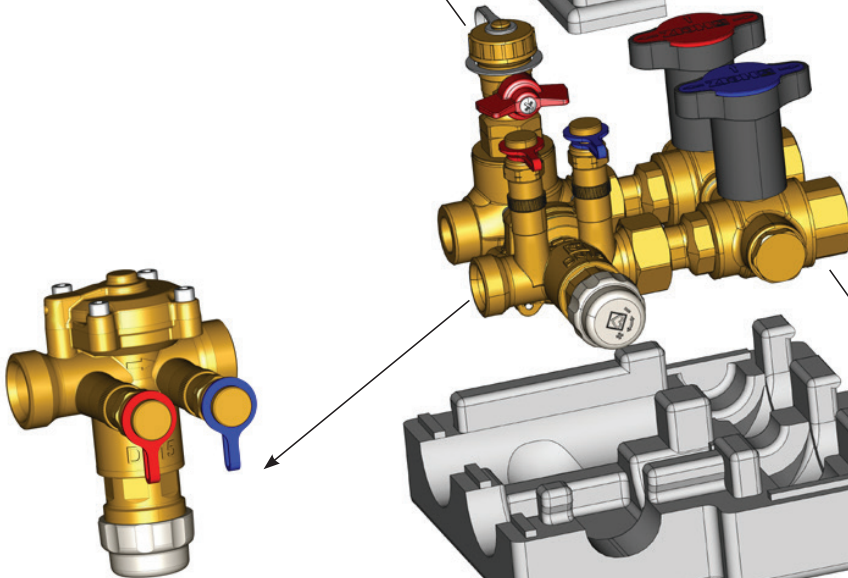


**Isolation box**

Fire behavior for insulation box

Method	Class
DIN 4102-16	B1
BS 476- 6/7	0
FMVSS 302	Fulfilled
UL 94	HF 1

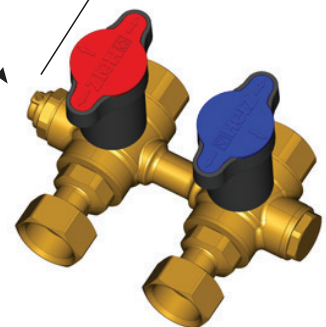
<sup>1</sup> Edge exposure, classification according to EN 13501-1



**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.**

**Features & Benefits**

- DN15 to DN32 versions are available for connection to FCU.
- 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	16/25 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**

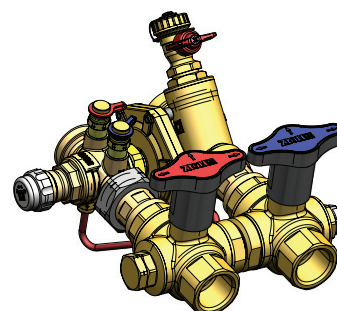
Body: dezincification-resistant brass  
 Membranes and O-rings: EPDM

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

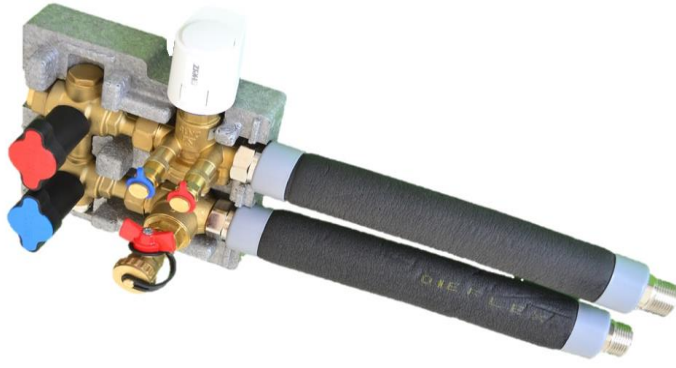
Ethylene and propylene glycol can be mixed to a ratio of 25 - 50 vol. [%].



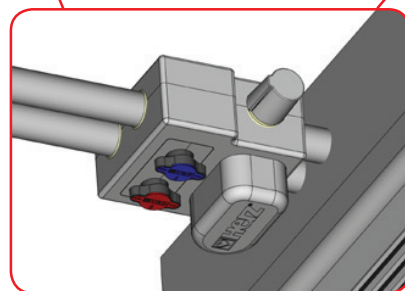
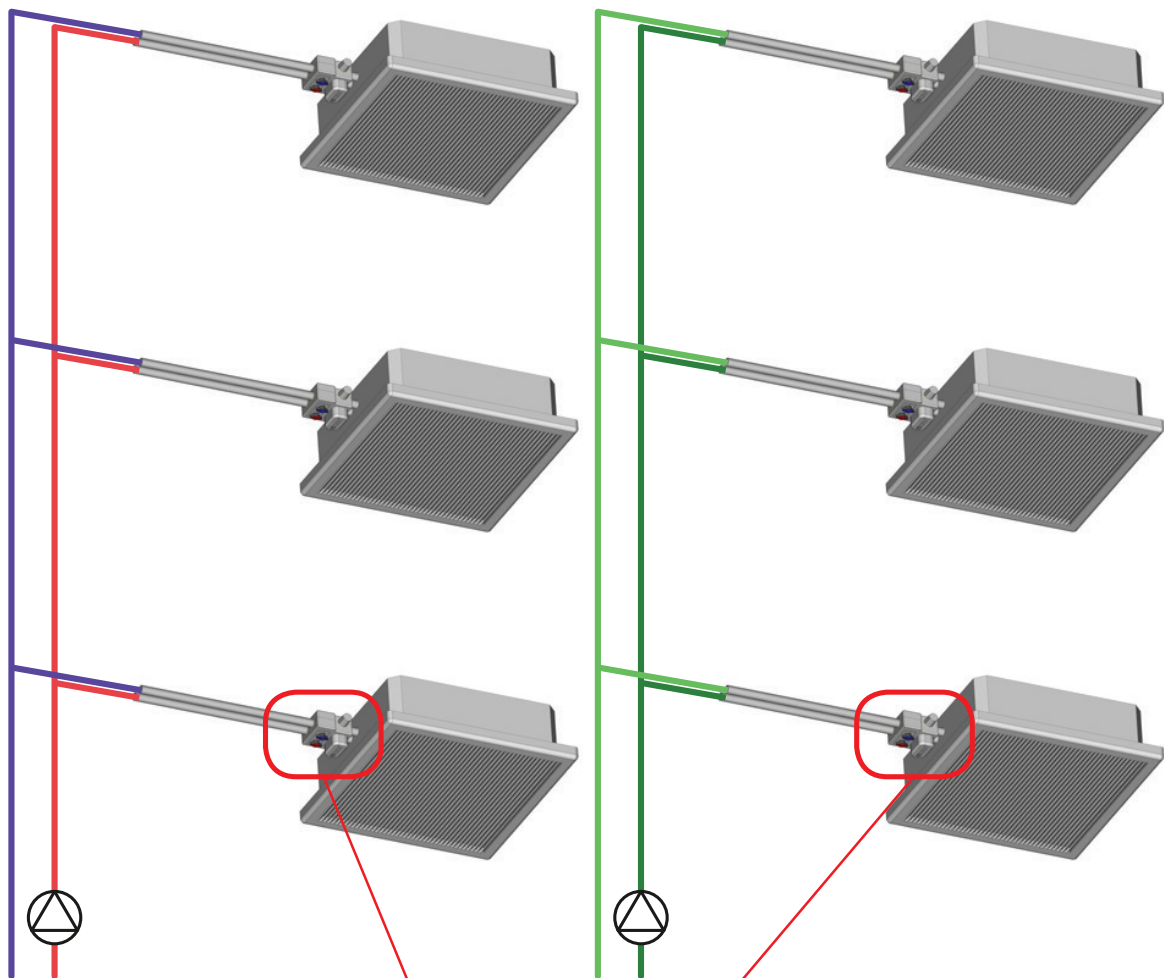
**DN15 & DN20**



**DN25 & DN32**

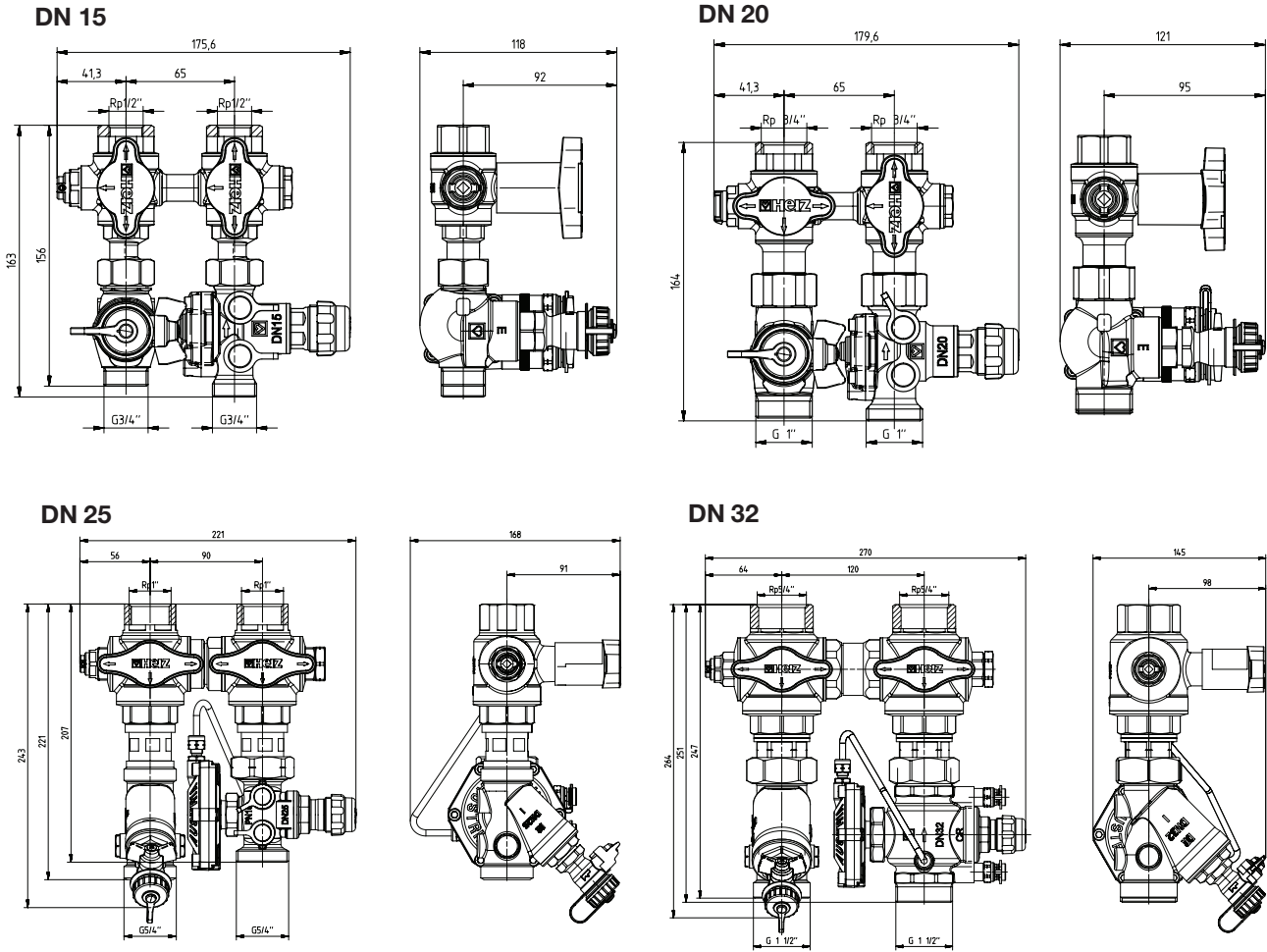


Example for installation

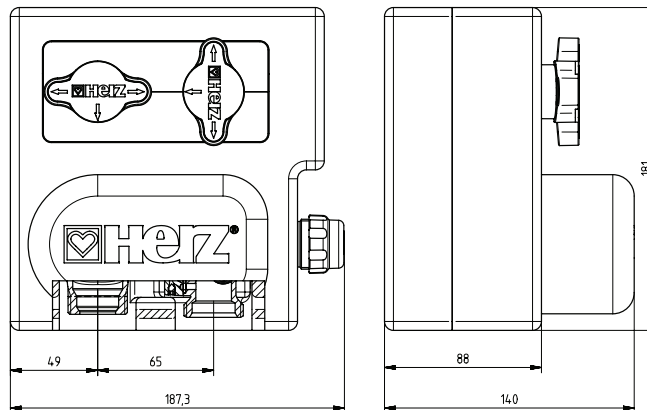


Application example for heating and cooling

☑ Dimensions in mm:



Isolating box



☑ kvs values

	PIBCV	Normal Function	Bypass Function
DN 15	0,94 m <sup>3</sup> /h	0,68	1,14
DN 20	1,71 m <sup>3</sup> /h	1,56	1,14
DN 25	1,9 m <sup>3</sup> /h	3,4	1,14
DN 32	2,5 m <sup>3</sup> /h	5,9	1,14

## ☑ 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

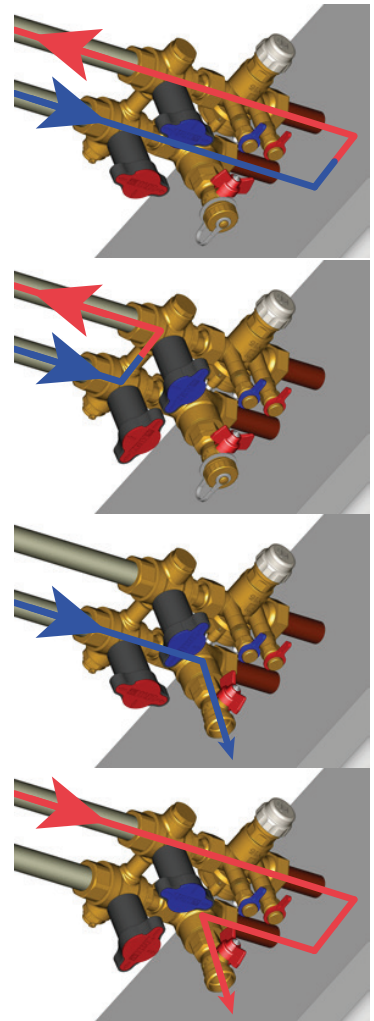
For the normal flushing method the bypass is open, PIBCV is closed, strainer drain valve closed, Ball valves are in the position as showed in the scheme.

### 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.

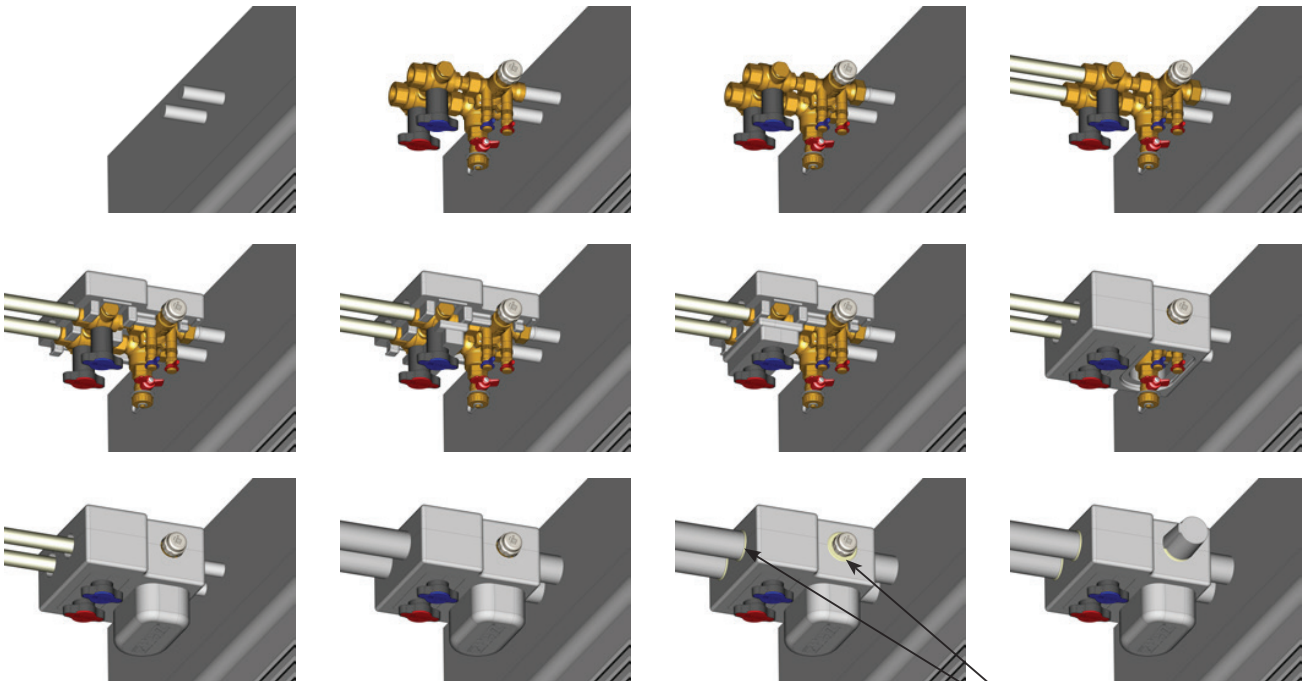
### Backflush Operation

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

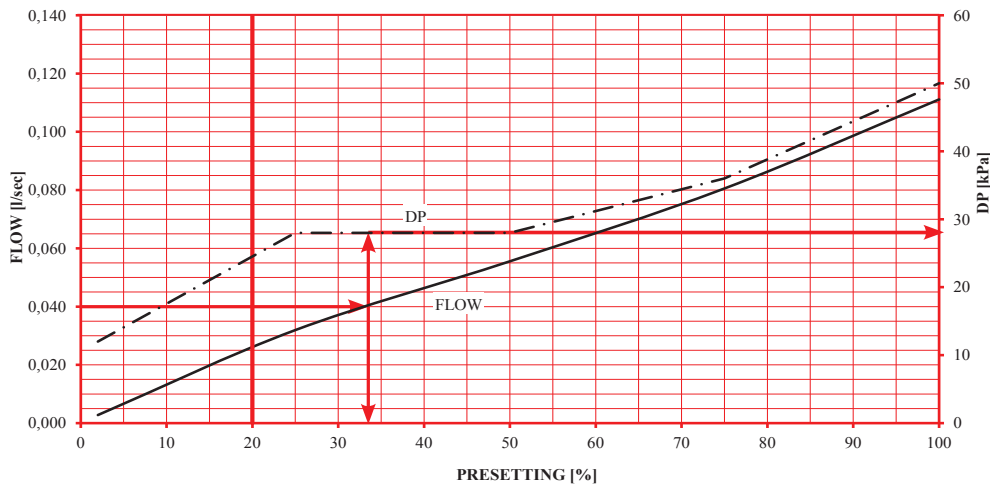
The unit is supplied in an insulated box, totally vapor sealed for chilled water circuits. Install the Insulation box, as shown in the following figures.



\*vapor sealant

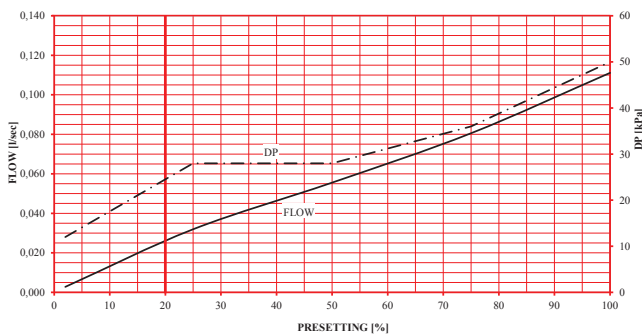
### Pre-setting example

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.

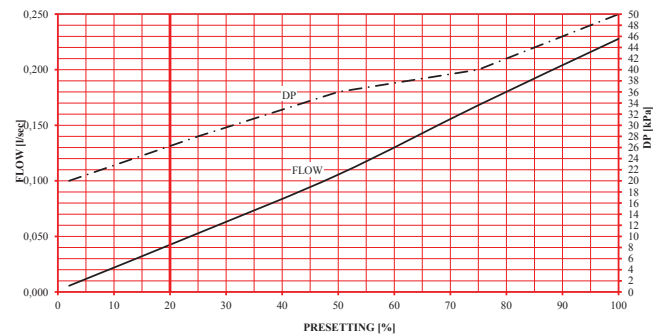


### HERZ Diagrams

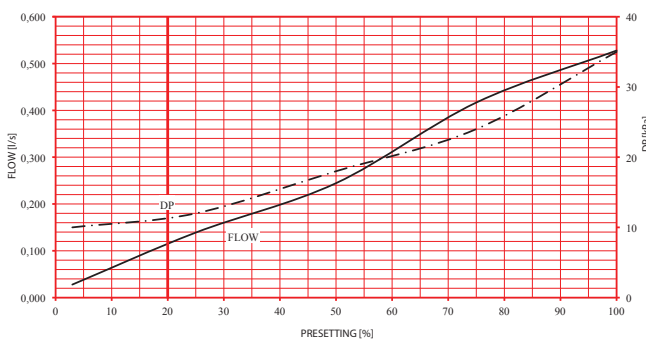
DN 15



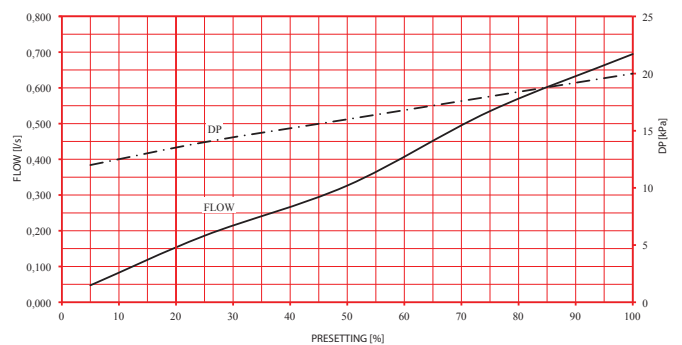
DN 20



DN 25



DN 32



flowrate shown on the solid line —————  
 minimum DP shown on the dotted line - - - - -  
 Accuracy <math>\pm 5\%</math>