

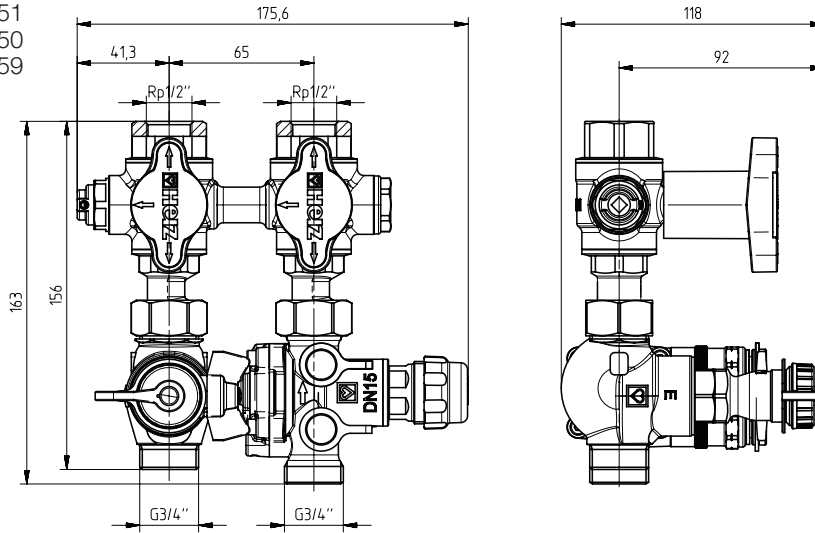
HerzCON

Simple and reliable connection for Fan-coils and terminal units with insulation box

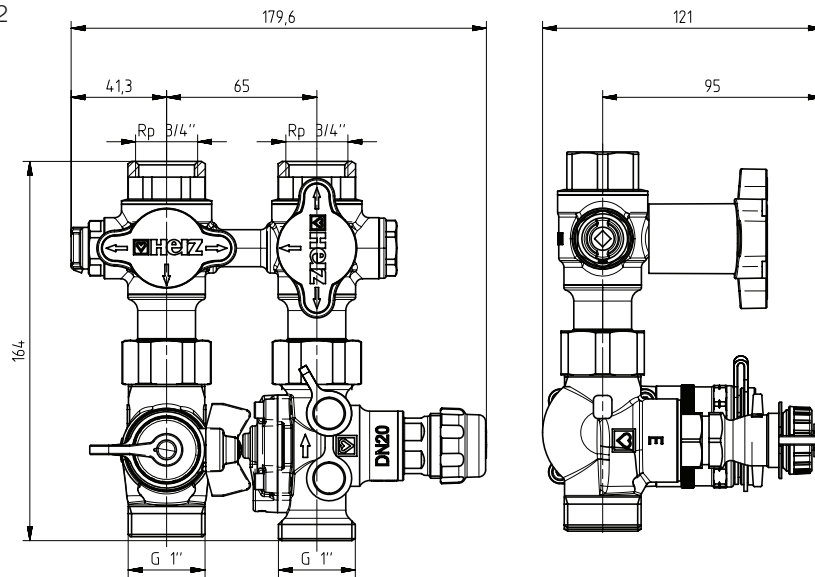
Data sheet **HerzCON**, Issue 1016

Dimensions in mm

- DN 15 1 **4600** 51
- DN 15LF 1 **4600** 50
- DN 15MF 1 **4600** 59



- DN 20 1 **4600** 52



☑ Technical data

Max. operating pressure	16 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 (see also chapter: Accessories and spare parts).

☑ 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. [%].

☑ kvs values

	PIBCV	Normal Function	Bypass Function
DN 15	0,94 m³/h	0,68	1,14
DN 20	1,71 m³/h	1,56	1,14

☑ Application

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 or modulating 0 – 10 V DC actuators 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 Connect-4 unit also permits flushing and isolating operations to be undertaken.

This means there is no product differentiation between heating and chilled, 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.

☑ Components

4006	HERZ-Pressure Independent Balancing Control Valve (PIBCV) HERZ- Multifunctionalball valve HERZ-Strainer
2512	HERZ-Blow down Drain Valve

☑ Accessories and spare parts

1 4006 ..	HERZ-Pressure Independent Balancing Control Valve (PIBCV)
1 0284 ..	test point for HERZ-Valves
1 7708 ..	HERZ actuating drive for two-point or pulse control; NC
1 7709 ..	HERZ actuating drive for two-point or pulse control; NO
1 7990 ..	HERZ actuating drive for continuous control
1 0273 09	screw plug 1/4

☑ Tips

The HerzCON must be installed for the correct application using clean fittings. A HERZ strainer is fitted to prevent impurities.

EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection.

☑ Pre-setting

The valve setting is clearly shown in percent. The preset value can be easily adjusted. The preset PIBCV can be isolated at any time or adjusted to the required flow rate.

☑ Fire Behavior

Fire Behavior for insulation box

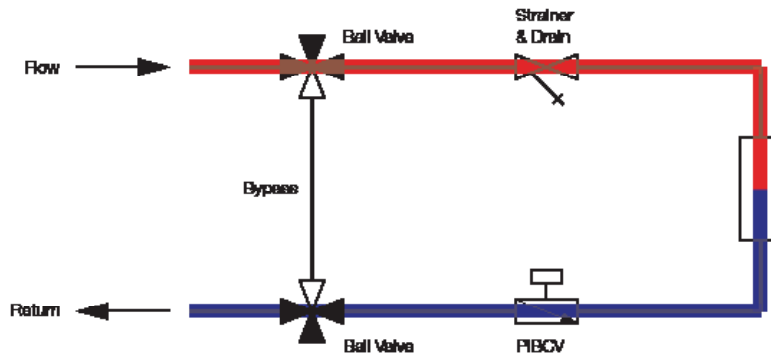
Method	Class
DIN EN ISO 11925-2 ¹	E
DIN 4102-1	E
FMVSS 302	Fulfilled
UL 94	HBF

¹ Edge exposure, classification according to EN 13501-1

☑ Operations

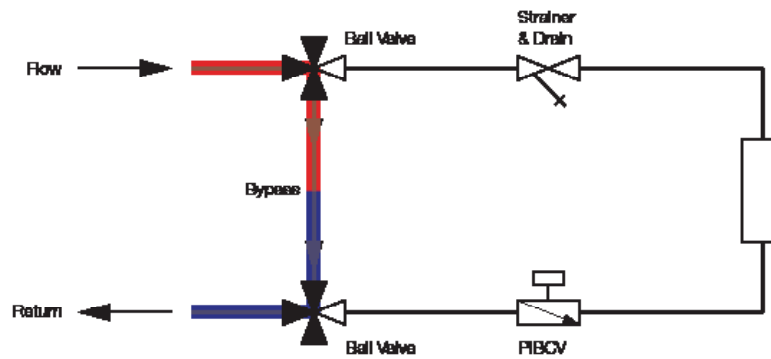
Normal Operation

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.



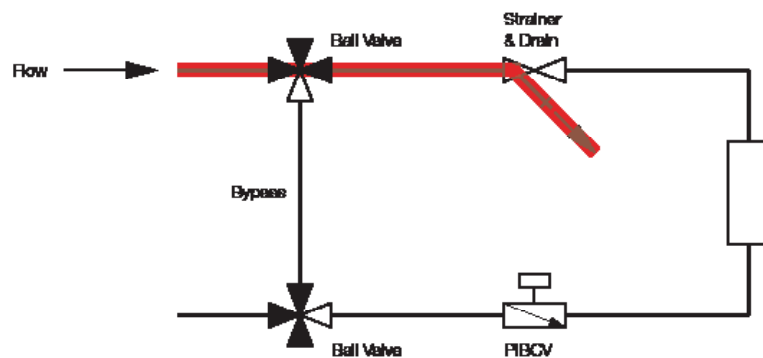
Bypass Operation

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.



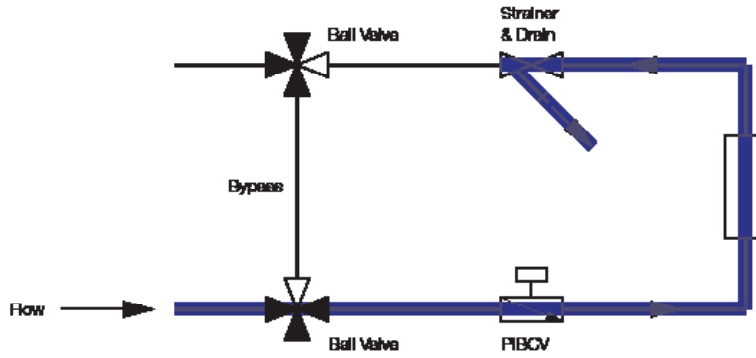
Forward flush Operation

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.

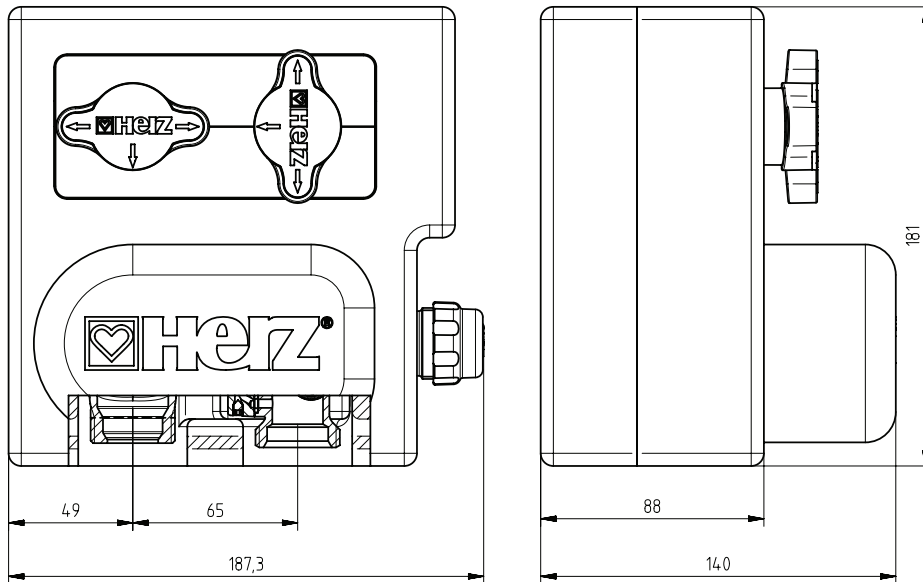


Backflush Operation

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.

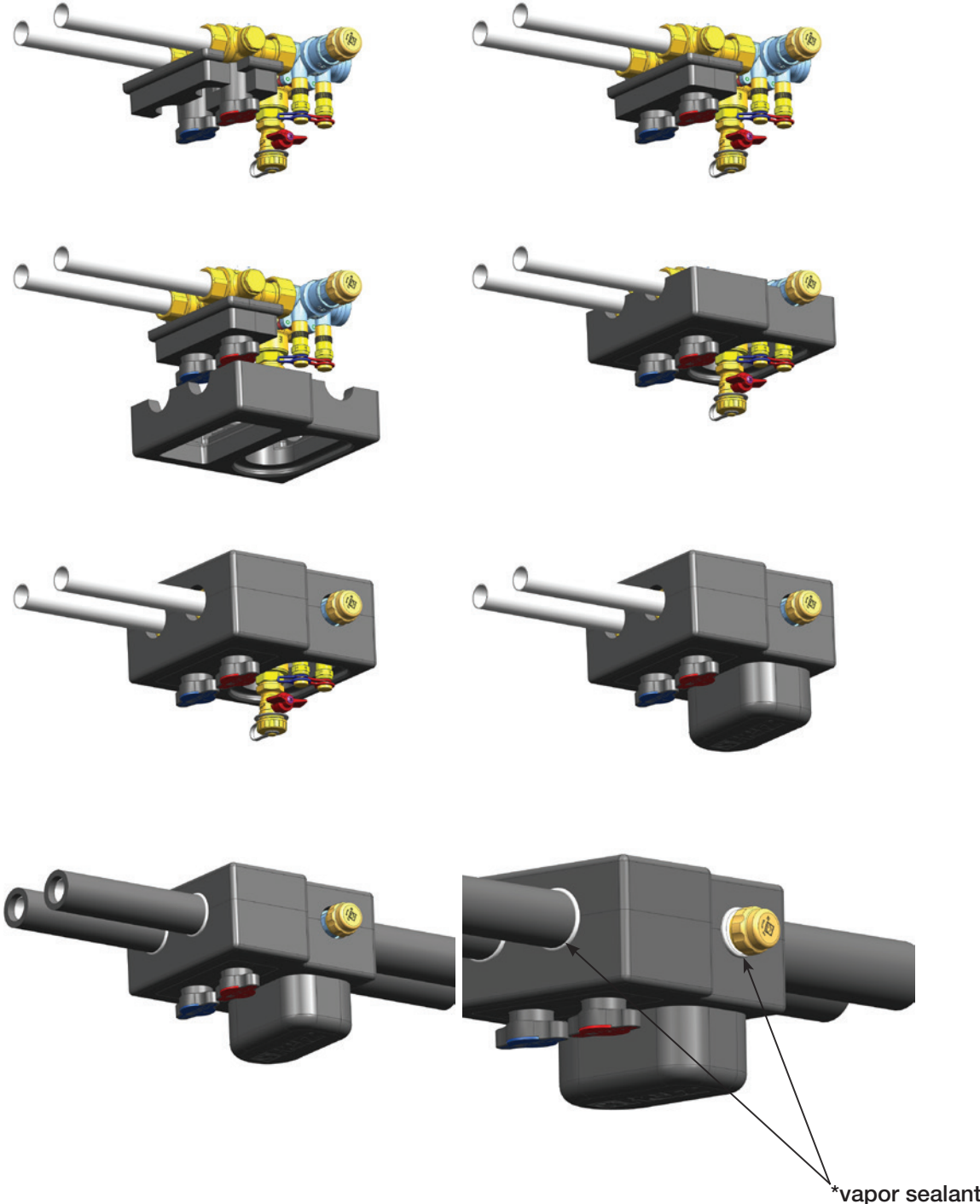


Dimensions in mm of the insulation box

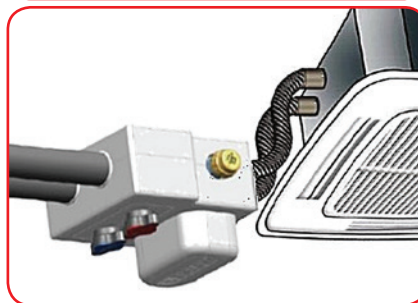
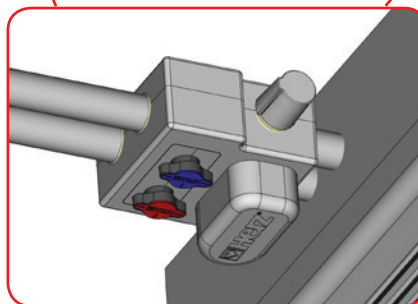
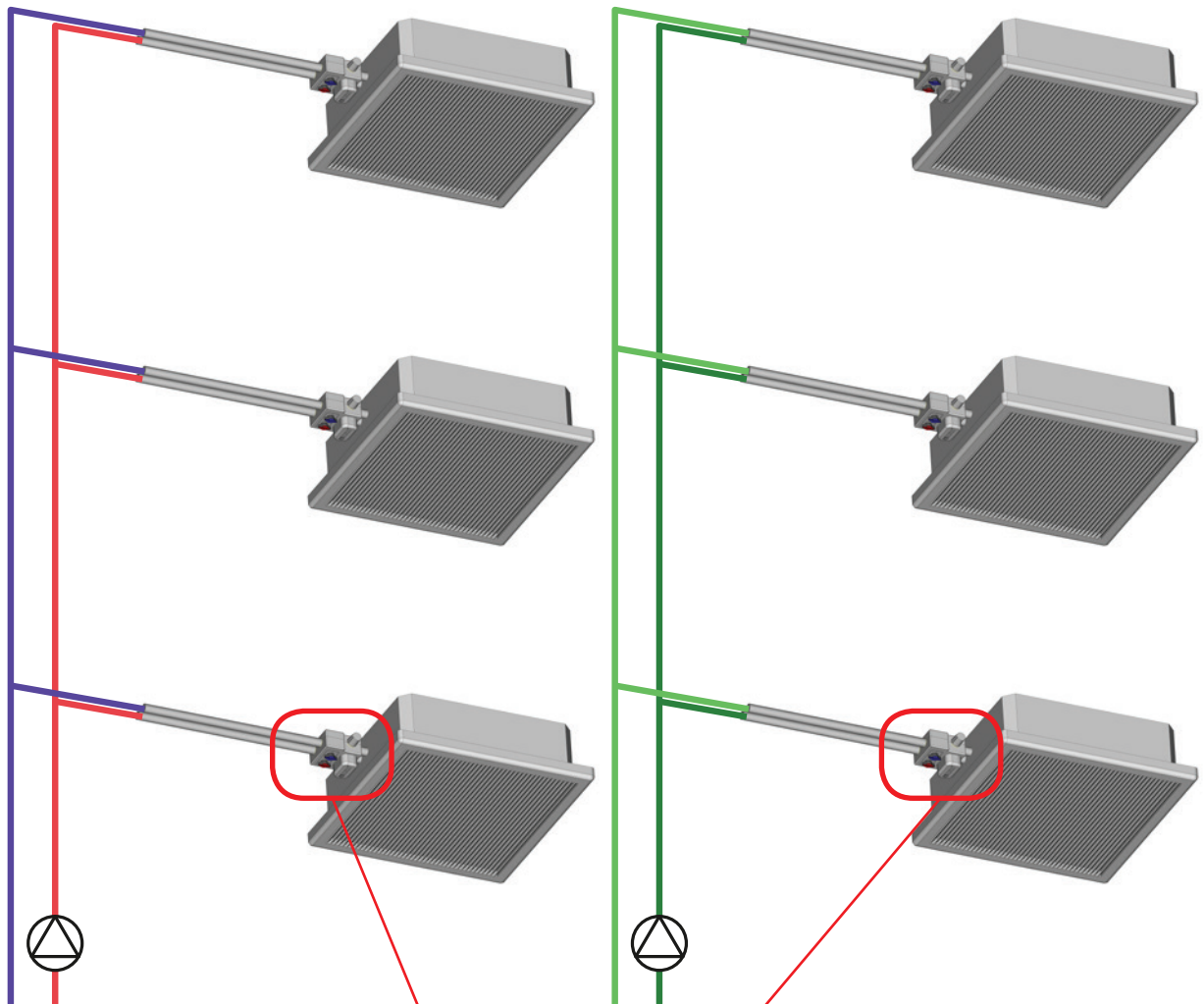


☑ Installation

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



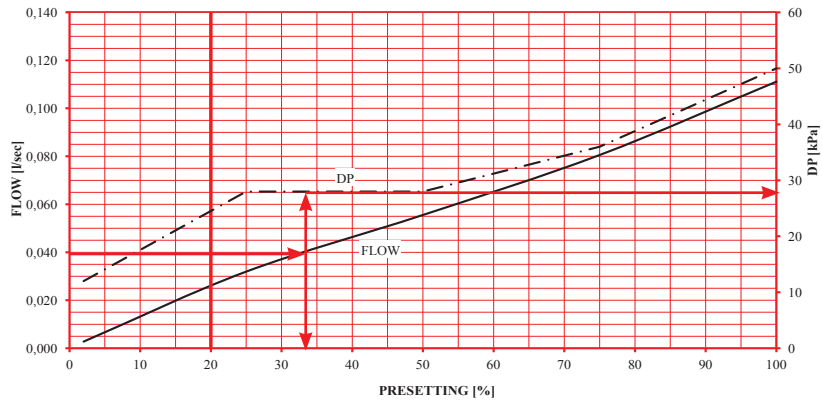
Example for Installation



Application example for heating and cooling

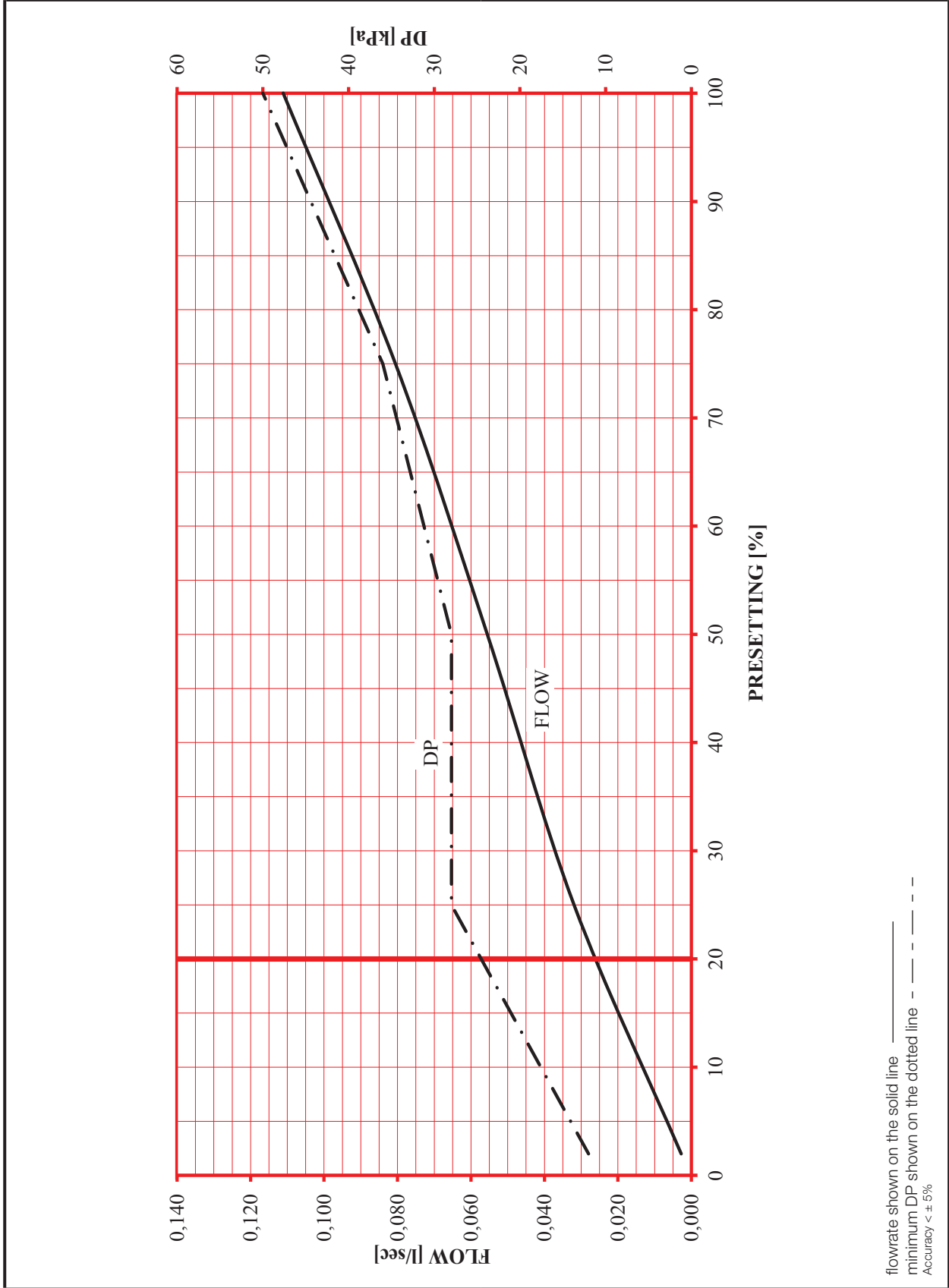
☑ Pre-setting example

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.

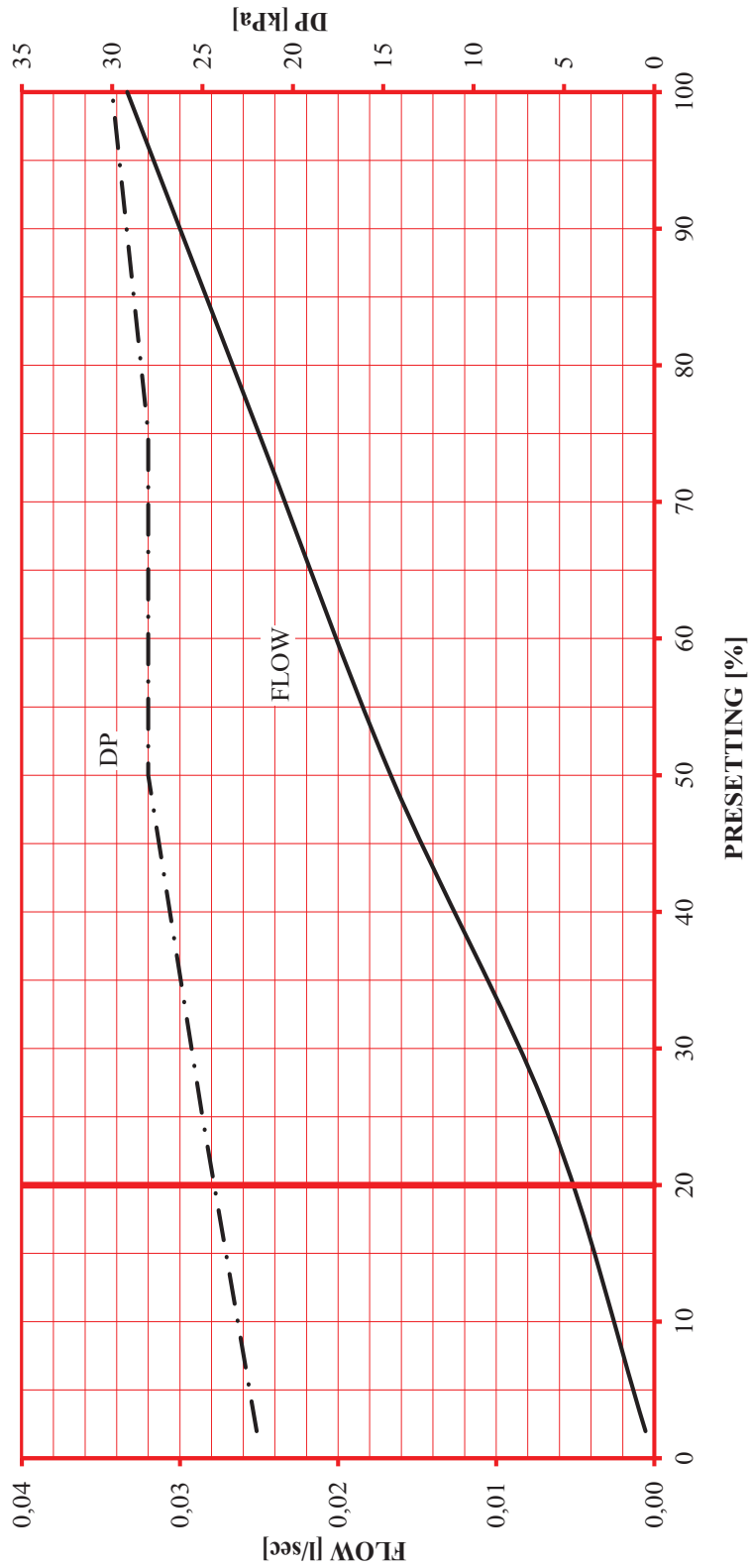


Please note: all diagrams are indicative in nature and do not claim to be complete. All specifications and statements within this document are according to information available at the time of printing and meant for informational purpose only. Herz Armaturen reserves the right to modify and change products 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.

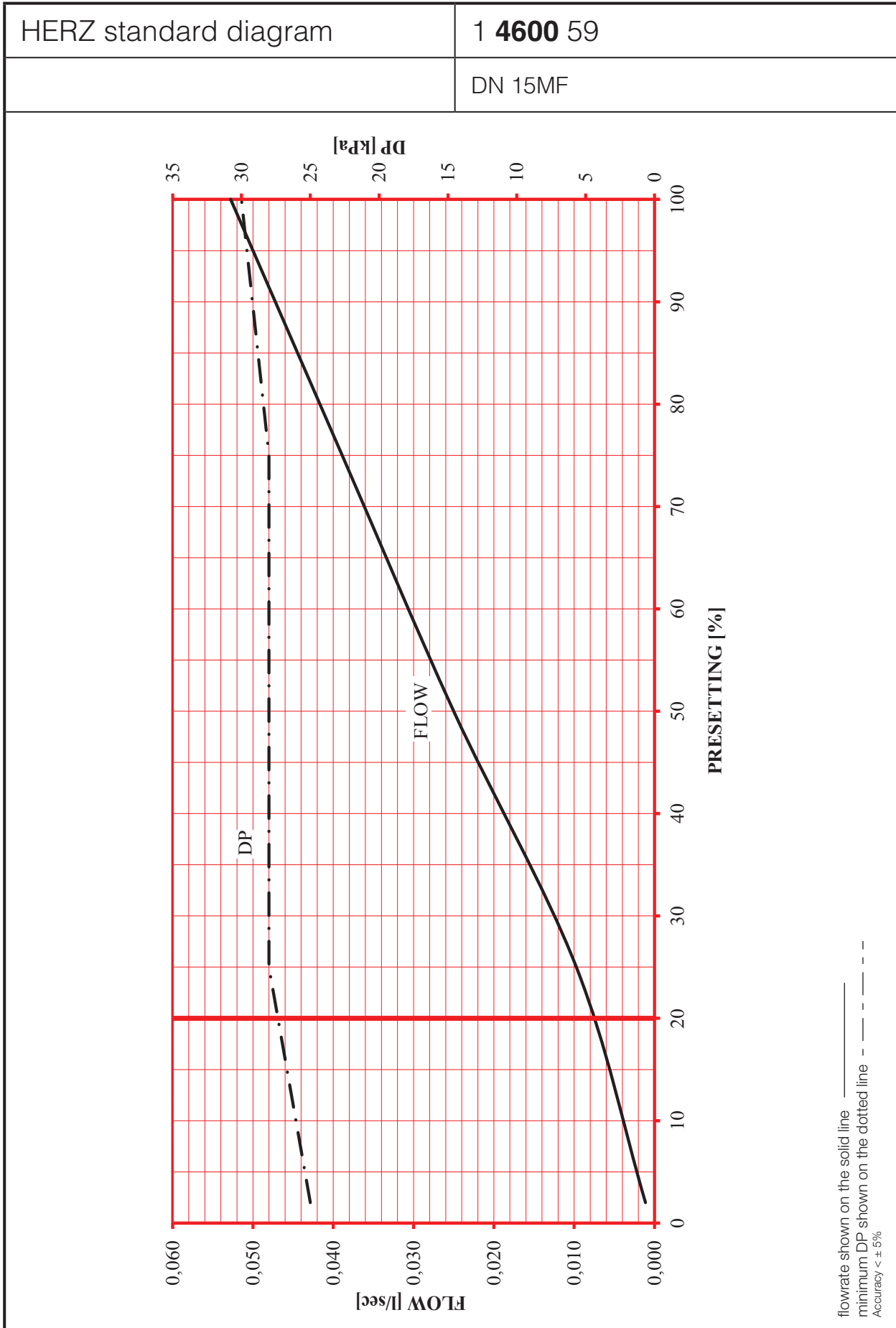
HERZ standard diagram	1 4600 51
	DN 15



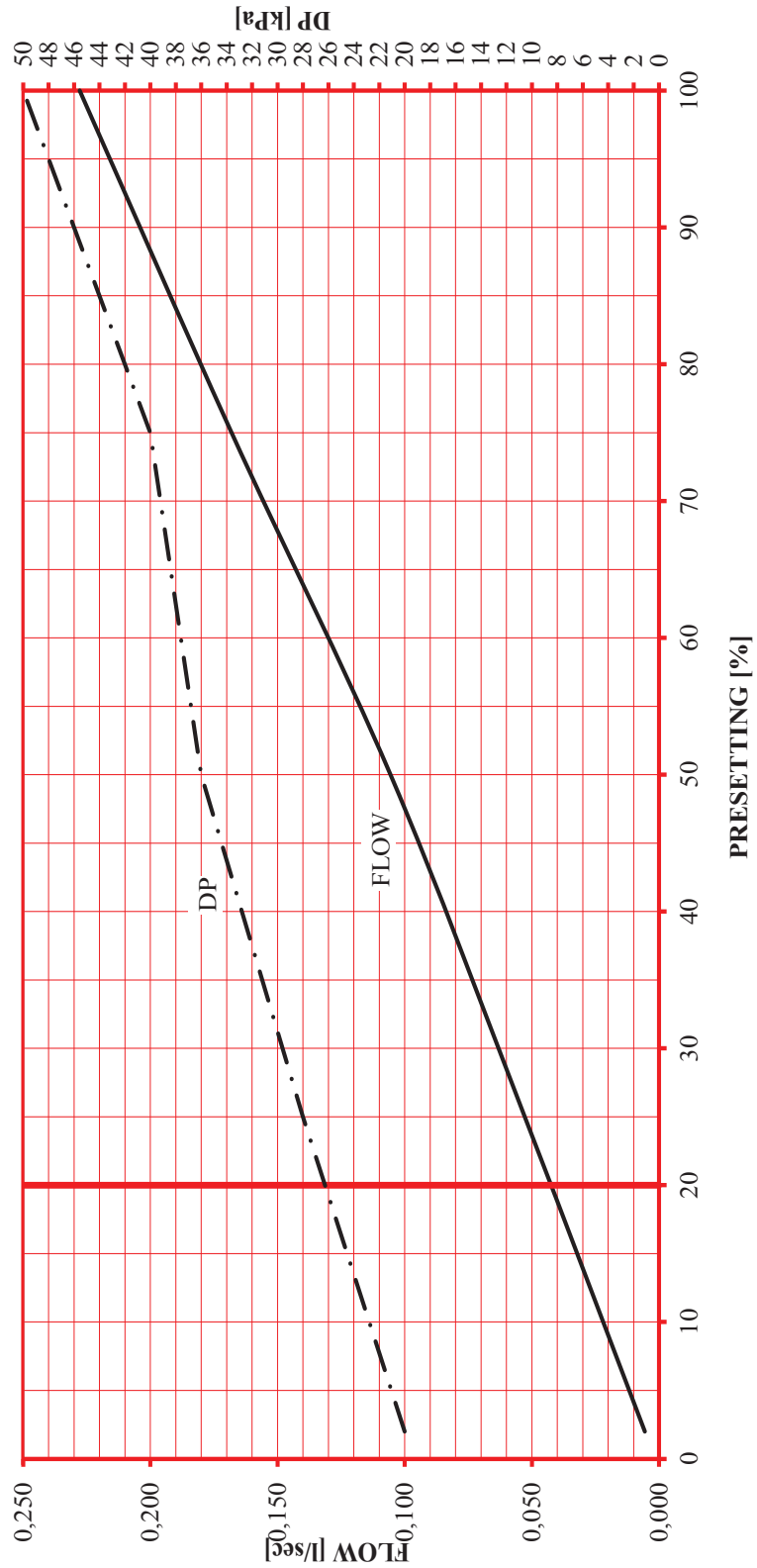
HERZ standard diagram	1 4600 50
DN 15LF	



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



HERZ standard diagram	1 4600 52
	DN 20



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