HERZ- Compact Connect 4 H

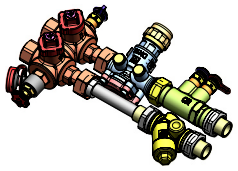
Simple and reliable connection for Fan-coils and terminal units

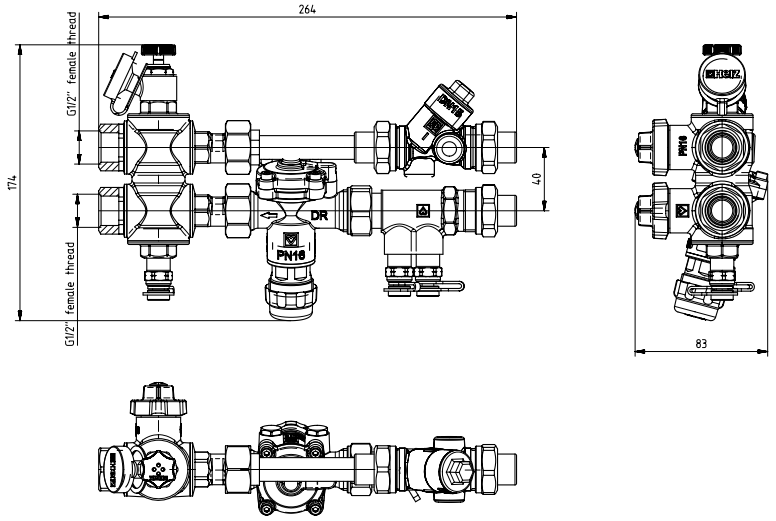
Data sheet **Compact Connect 4 H,** Issue 0120

Dimensions in mm

RH version
Flow on Right, Return on Left

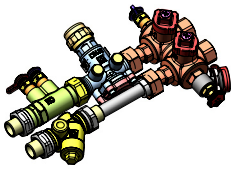
DN 15ULF	1 **4600** 38
DN 15LF	1 **4600** 30
DN 15MF	1 **4600** 39
DN 15	1 **4600** 31





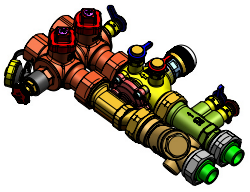
LH version
Flow on Left, Return on Right

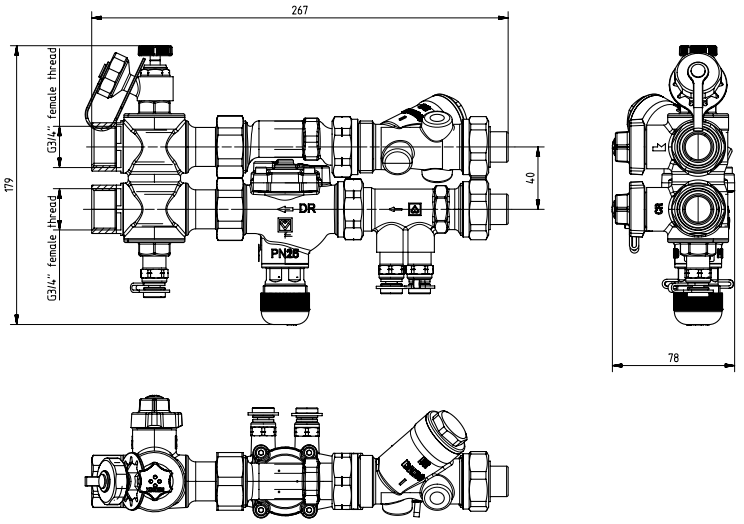
DN 15ULF	1 **4700** 08
DN 15LF	1 **4700** 00
DN 15MF	1 **4700** 09
DN 15	1 **4700** 01



RH version
Flow on Right, Return on Left

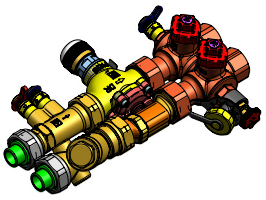
DN 20	1 **4600** 36
DN 20 HF	1 **4600** 37

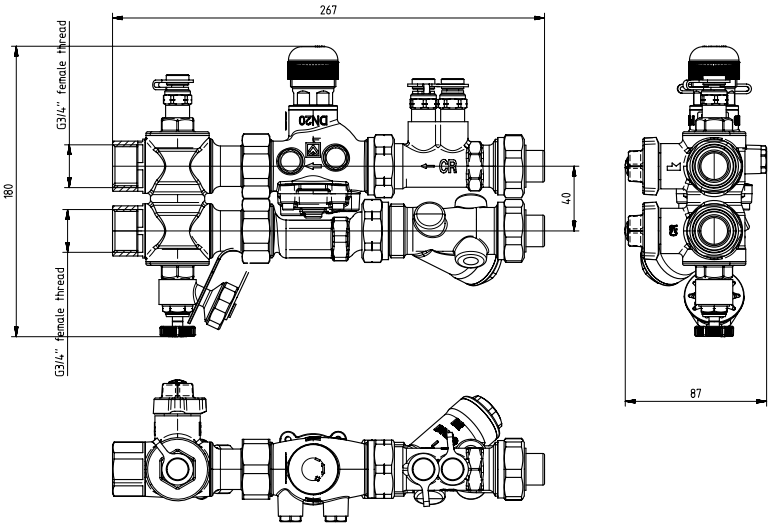




LH version
Flow on Left, Return on Right

DN 20	1 **4700** 06
DN 20 HF	1 **4700** 07





Technical data

Max. operating pressure:	16 bar
Min. operating temperature:	- 20 °C
Max. operating temperature:	130 °C
Stroke:	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 of PIBCVs

Dimension	FCE connection size	Order number with strainer		Integral orifice kvs	Flow rate
		LH Version	RH Version		
DN15 ULF	15 mm	1 **4700** 08	1 **4600** 38	0,19	0,003 - 0,013 l/s
DN15 LF	15 mm	1 **4700** 00	1 **4600** 30	0,52	0,013 - 0,030 l/s
DN15 MF	15 mm	1 **4700** 09	1 **4600** 39	1,06	0,029 - 0,061 l/s
DN15	15 mm	1 **4700** 01	1 **4600** 31	1,62	0,045 - 0,099 l/s
DN20	15 mm	1 **4700** 06	1 **4600** 36	3,39	0,094 - 0,362 l/s
DN20 HF	15 mm	1 **4700** 07	1 **4600** 37	NA	0,325 - 0,462 l/s

Application

HERZ Connect-4 has been designed to give a simple connection to fan-coils, or other terminal units, and utilses the HERZ 4006 SMART Pressure Independent Balancing Control Valve with HERZ multifunctional ball valve and an optional HERZ 4111 strainer. 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 version of Compact Connect-4 can be connected directly to a terminal unit copper tails with flow & return pipes side by side and the heating and chilled one above the other. The unit on the bottom, usually the chilled, should be extended beyond the heating unit to allow access to the flushing bypass ball valves.

Components

4006	HERZ-Pressure Independent Balancing Control Valve (PIBCV)
2414	HERZ- Multifunctionalball valve
4000	HERZ- Orifice plate
4111	HERZ-Strainer
0284	HERZ-Test point 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 control; either NC or NO
1 **7990** ..	HERZ actuating drive for continuous control, NC
1 **7711** ..	HERZ actuating drive for two-point or pulse control; either NC or NO
2 **0273** 09	screw plug 1/4

Tips

The HERZ Connect-4 must be installed for the correct application using clean fittings. A HERZ strainer (**4111**) 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.

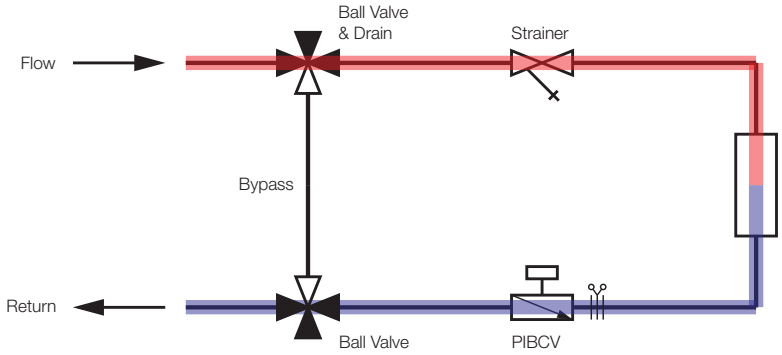
Pre-setting

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.

Operations

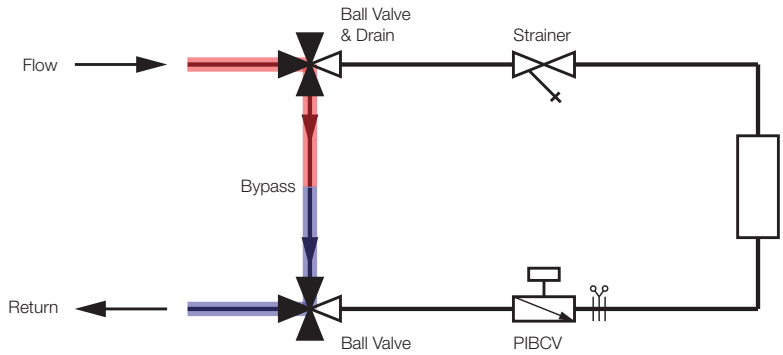
Normal operation

For normal operation the Bypass is closed, Drain Valve is closed, Ball valves are in the position as showed in the scheme, PIBCV preset to flow rate.



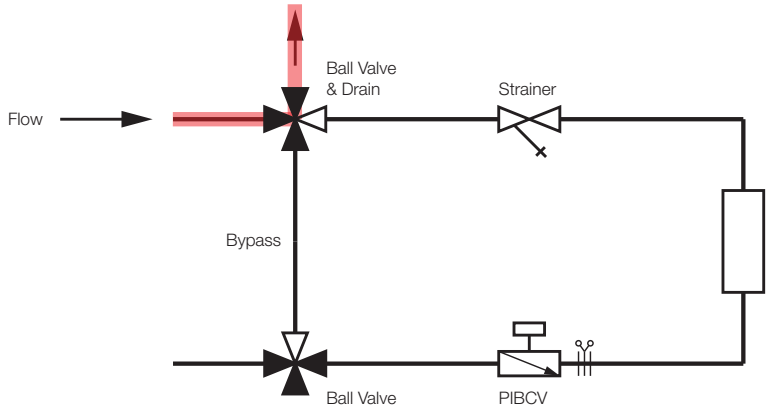
Bypass Operation

For the normal flushing method the Bypass is open, PIBCV is closed, Drain Valve closed, Ball valves are in the position as showed in the scheme.



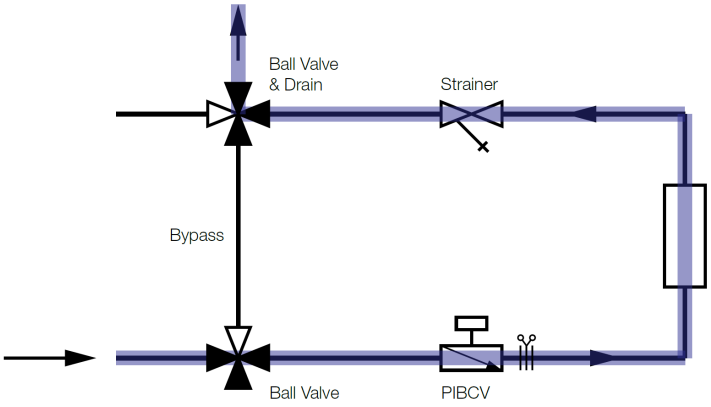
Forward flush Operation

For forward flushing operation the Bypass is closed, Drain Valve is open, Ball valves are in the position as showed in the scheme and flushing through the Drain valve to atmosphere.

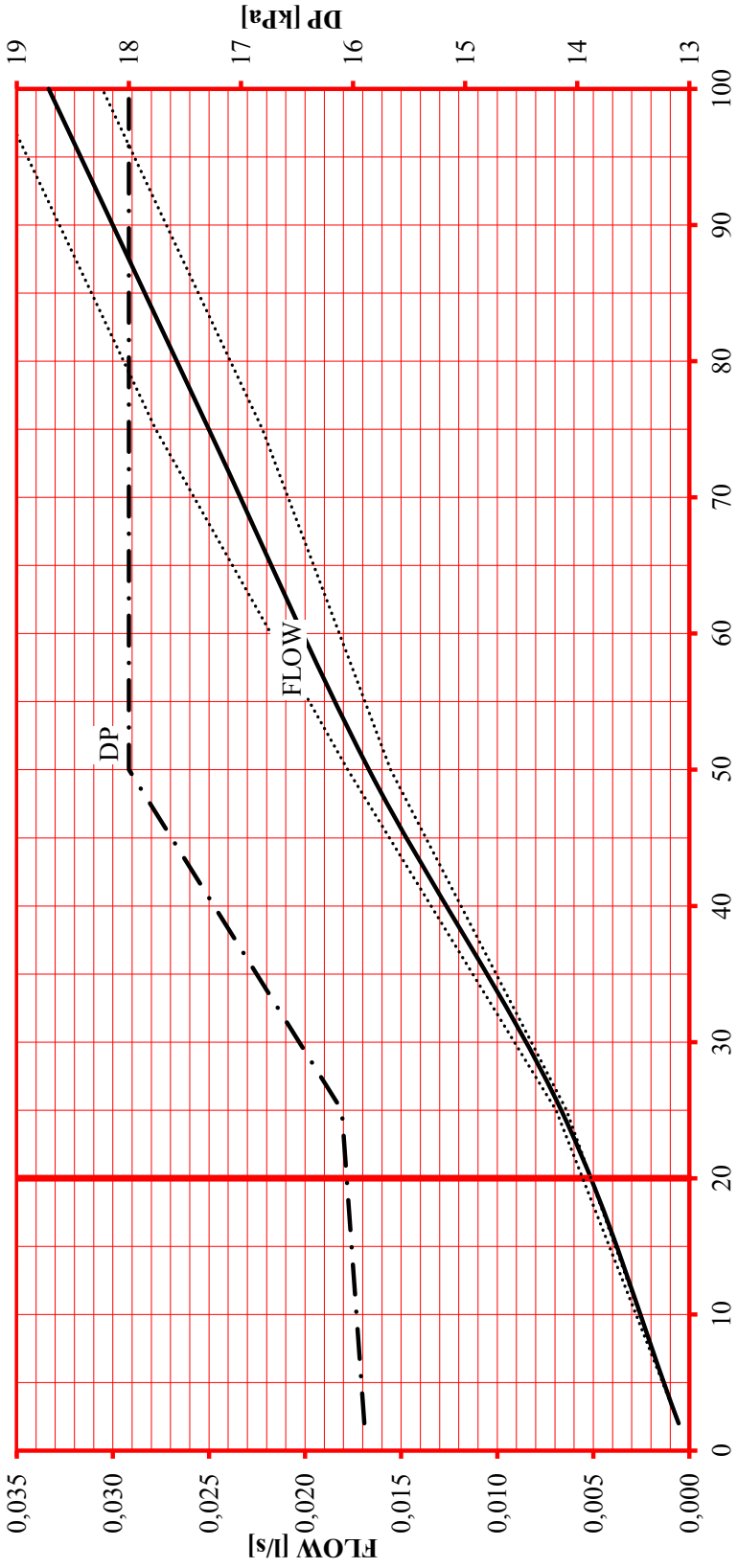


Backflush operation

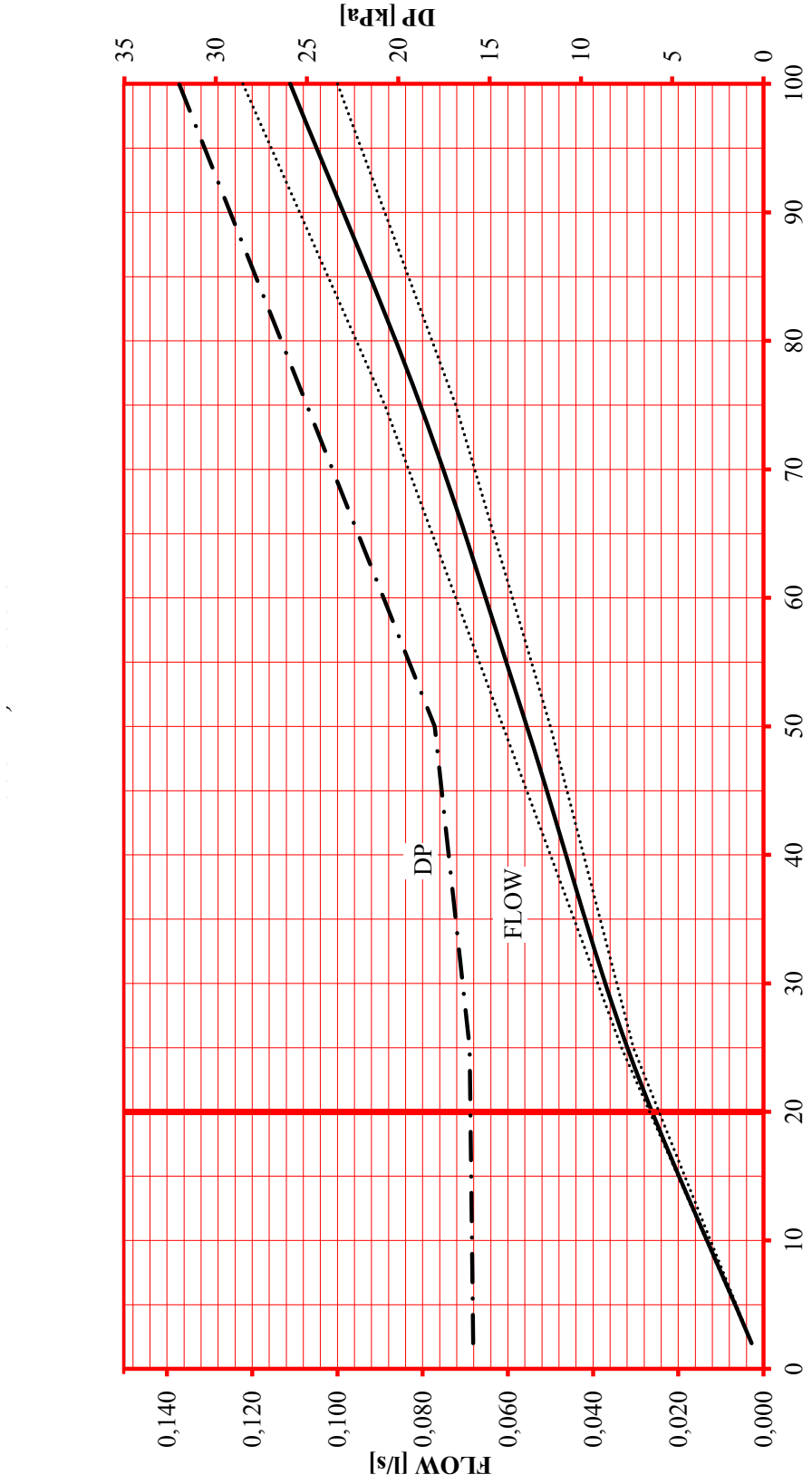
For Backflush operation the Bypass is closed, Drain Valve is open, Ball valves are in the position as showed in the scheme and PIBCV is open. Flushing through Ball valve, PIBCV, FCU, strainer and drain valve to atmosphere. During backflush operation remove the mesh from the strainer.



HERZ standard diagram	1 **4600** 38 / 30
DN15 ULF / DN15 LF	1 **4700** 08 / 00



HERZ standard diagram	1 **4600** 39 / 31
DN15 / DN15 MF	1 **4700** 09 / 01



HERZ standard diagram	1 **4600** 37 / 36
DN20 / DN20 HF	1 **4700** 07 / 06