

HERZ - Brass distributors for heating and cooling systems

Rod-type panel distributor

Datasheet 1 853X XX, Issue 0223

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HERZ - Brass distributors for heating and cooling systems

General information

Description of HERZ - Distributors for heating and cooling systems

HERZ - Distributors for heating and cooling systems are high quality products that are assembled and pressure tested during the manufacturing process under constant quality control.

Advantages of HERZ - Distributors for heating and cooling systems are:

- all integrated components are the result of our own development
- possibility of high pressure, high or low temperature and high flow of medium
- easy to use and maintain
- reliable design and long service life
- permanent quality control of production in our own factories
- easy installation
- possibility from 2 to 16 heating circuits
- compatibility with other HERZ products
- air vent and drain valve integrated
- flow meters 3 l/min and 6 l/min

Field of application

HERZ - Distributors are used in floor heating systems, wall heating/cooling or ceiling heating/cooling systems. If brass distributors are used in cooling systems, it is recommended to use insulation to prevent condensation. When using a version with flow meter the individual heating circuits can be regulated. An adjustment of the flow volume is also possible by the shut-off valves. The distributor bars are each closed on one side with a plug. Distributor input is female threaded G1" (DN 25), G5/4" (DN 32) so it is possible to connect distributor with threaded pipes or with an adapter for HERZ PIPEFIX. We recommend to use HERZ shut-off valves or HERZ ball valves.

Assembly instruction

The HERZ - Distributors for floor heating systems can be mounted using the supplied brackets directly to a wall or in a distributor cabinet. The mounting position is arbitrary. Distributor bars with flow meter must always be used in the supply flow. The factory setting is fully open and can be adjusted by using the supplied adjusting key turned clockwise. The set amount of flow volume can be read directly at the inspection glass. HERZ-Cabinets must be ordered separately, see separate data sheet, product code 1 **8569** XX.

Maintenance instruction

No mineral oil lubricant may be used for the maintenance of valves. Usage of these materials will damage sealing elements. Silicone-based lubricant are allowed. To avoid sticking of thermostatic valves monthly operating is recommended.

Disposal instruction

The disposal of HERZ - Distributors for floor heating systems must not endanger the health or the environment. National legal regulations for proper disposal of the HERZ - Distributors for floor heating systems have to be followed.

☒ **Models:**

1 8531 0X, 1X	Supply flow distributor rod G1" with shut-off valves Return flow distributor rod G1" with thermostatic valves
1 8531 4X, 5X	Supply flow distributor rod G5/4" with flowmeter 0 – 6 l/min Return flow distributor rod G5/4" with thermostatic valves
1 8532 XX	Supply flow distributor rod G1" with flowmeter 0 – 3 l/min Return flow distributor rod G1" with thermostatic valves
1 8533 XX	Supply flow distributor rod G1" with flowmeter 0 – 6 l/min Return flow distributor rod G1" with thermostatic valves
1 8534 XX	Supply flow distributor rod G1" with shut-off valves Return flow distributor rod G1" with shut-off valves

☒ **Material and construction**

Rod distributor:	Brass, CW614N, EN 12164
Shut-off valves:	Brass, CW614N, EN 12164
Thermostatic valves:	Brass, CW614N, EN 12164
Sealings:	EPDM
Caps:	Plastic PP
Springs:	Stainless steel X7, CrNiAl 17 7
Internal threaded side connection:	G 1" (DN 25), G 5/4" (DN 32) acc. to ISO 228-1
External threaded bottom connection:	G 3/4" acc. to ISO 228-1

HERZ uses top-quality brass that responds to the latest European norms EN 12164 and EN 12165. Components of HERZ - Distributors for floor heating systems are made from brass due to its good strenght, excellent corrosion resistance and variety of other properties.

Pursuant to Article 33 of the REACH Regulation (EC No. 1907/2006), we are obliged to point out that the material lead is listed on the SVHC list and that all brass components manufactured in our products exceed 0.1% (w / w) lead (CAS: 7439-92-1 / EINECS: 231-100-4). Since lead is a component part of an alloy, actual exposure is not possible and therefore no additional information on safe use is necessary.

☒ **Operating data**

Max. operating pressure without flowmeter	10 bar
Max. operating pressure with flowmeter	6 bar
Test pressure with flowmeter	10 bar at t = 20 °C
Max. operating temperature without flowmeter:	110 °C
Max. operating temperature with Flowmeter:	70 °C
Min. operating temperature:	0 °C

Medium:

Heating water quality according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection. Please note that EPDM gaskets will be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals in the valves that use EPDM seals. The HERZ - Distributor for floor heating systems is not suitable for usage of aggressive medium (such as: acids, alkalis, combustible and explosive gases) because it can destroy sealing components.

The actually permissible operating data depends on the pipes or clamp connections used.

Example: if plastic pipe connections are used the bottom operation data is allowed (if approved by pipe manufacturer).

Max. operating temperature	70°C
Max. operating pressure	6 bar

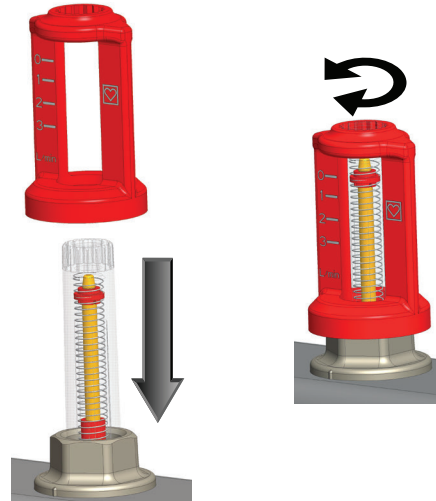
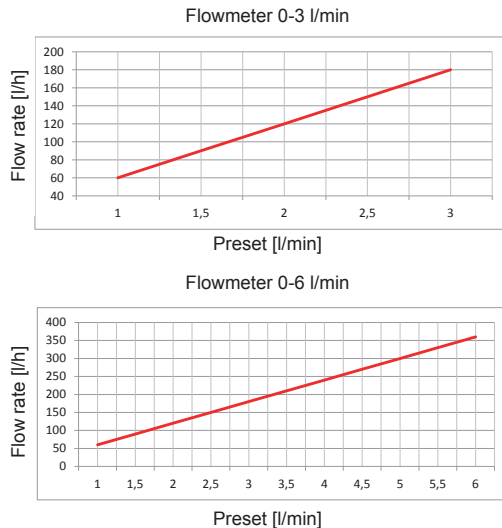
Higher operating pressure is permitted only after written approval by HERZ. When using HERZ compression unions for copper and steel pipes, the permissible temperature and pressure ratings according to EN 1254-2:1998

Function principle of components

Flowmeter valves

The factory setting is fully open and be adjusted by using the supplied adjusting key. The set amount of flow volume can be read directly at the inspection glass. To adjust the flow volume use plastic adjustment key on top of the knurl and rotate clockwise or counter-clockwise.

Conversion table [l/min] --> [l/h]



Drain valves

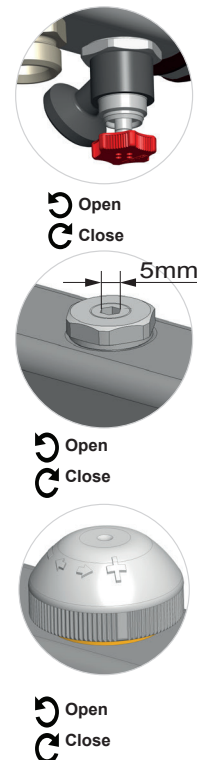
Direction of the distributor flow is evident from the handle color on the drain valves (red: supply / blue: return). On the supply and return rod, a drain valve with connection thread G3/4 is provided. A hose connection 1 6206 01 can be used additionally. The handwheel is operated by hand to open (rotate counter-clockwise) and close (rotate clockwise) the drain valve. The valve is used for filling and emptying. After use, close the valve. Under no circumstances should the valve be permanently open and integrated in the distribution system.

Shut-off valves

The shut-off valves are operated with an Allen wrench size 5mm. Close the valve turning the wrench clockwise until it stops. Open the valve with rotating wrench counter-clockwise.

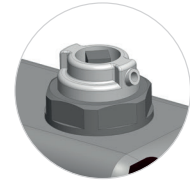
Thermostatic valves

Are opened by spring force and can be closed with protective cap, manual drive or thermal actuator. Protective caps are mounted on the thermostatic valves as mechanical protection during construction. These are to be replaced after commissioning by suitable electrical or mechanical drives. The thermostatic upper parts can be equipped with a manual drive 1 9102 80 or thermal actuators, these must be ordered separately. Thermal actuators are available in 24V or 230V, NC (normally closed) or NO (normally open) available. The thermal drives can be operated by means of room temperature control or radio control. Room temperature control or wireless control are described in separate data sheets, product code see accessoires.



Airvent valves

On the supply and return rod, an air valve is mounted in each case. The valves can be operated with the HERZ-universal key 1 **6625** 00.



Brackets

The HERZ rod distributors can be mounted using the supplied brackets distribution directly to a wall or in a distributor cabinet. The mounting position is arbitrary.



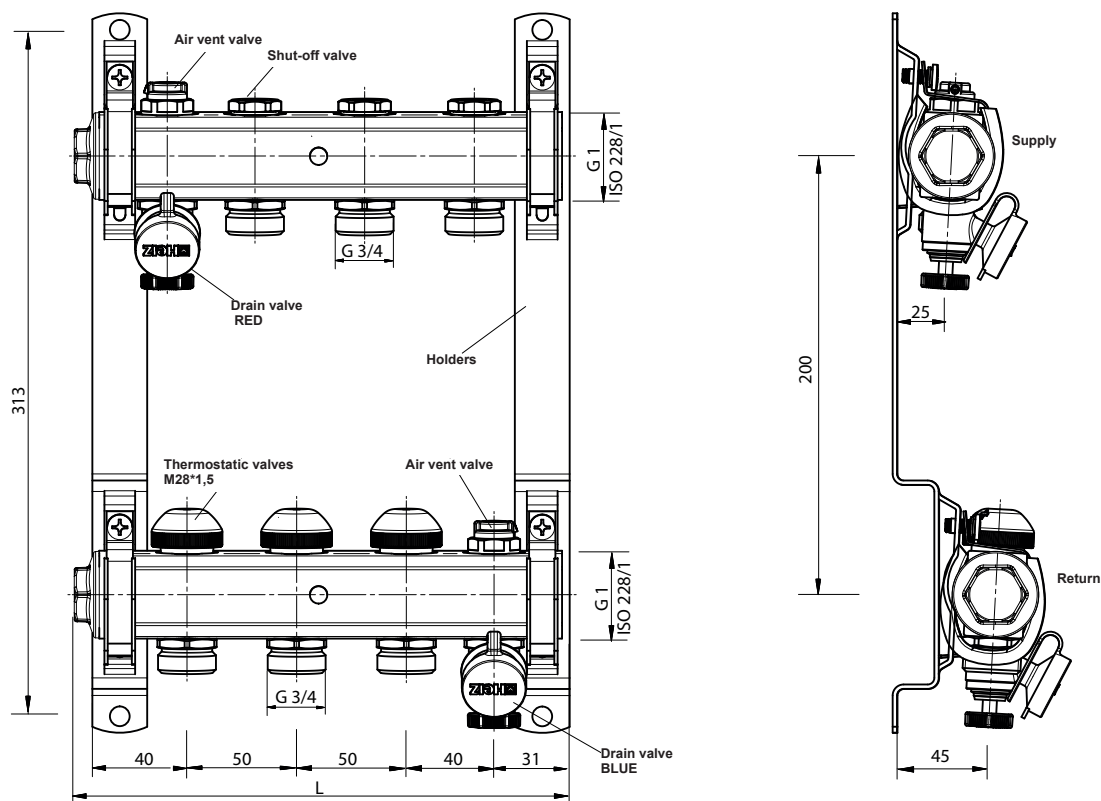
Note !

Thermostatic valves and flowmeters are not shut-off devices. Unoccupied outlets and unfilled heating circuits must be closed with a cap at the outlet.

HERZ - Brass distributors for heating and cooling systems shut-off valves / thermostatic valves

Datasheet 1 8531 0X, 1X

☑ Dimensions and components



Order Nr.	Outlets	L [mm]	Distributor cabinet **
1 8531 03*	3	221	1 8569 03
1 8531 04	4	271	
1 8531 05	5	321	1 8569 04
1 8531 06	6	371	1 8569 05
1 8531 07	7	421	1 8569 10
1 8531 08	8	471	
1 8531 09	9	521	1 8569 15
1 8531 10	10	571	
1 8531 11	11	621	
1 8531 12	12	671	1 8569 20
1 8531 13	13	721	
1 8531 14	14	771	
1 8531 15	15	821	1 8569 25
1 8531 16	16	871	

*1 8531 03 is shown on the drawing above.

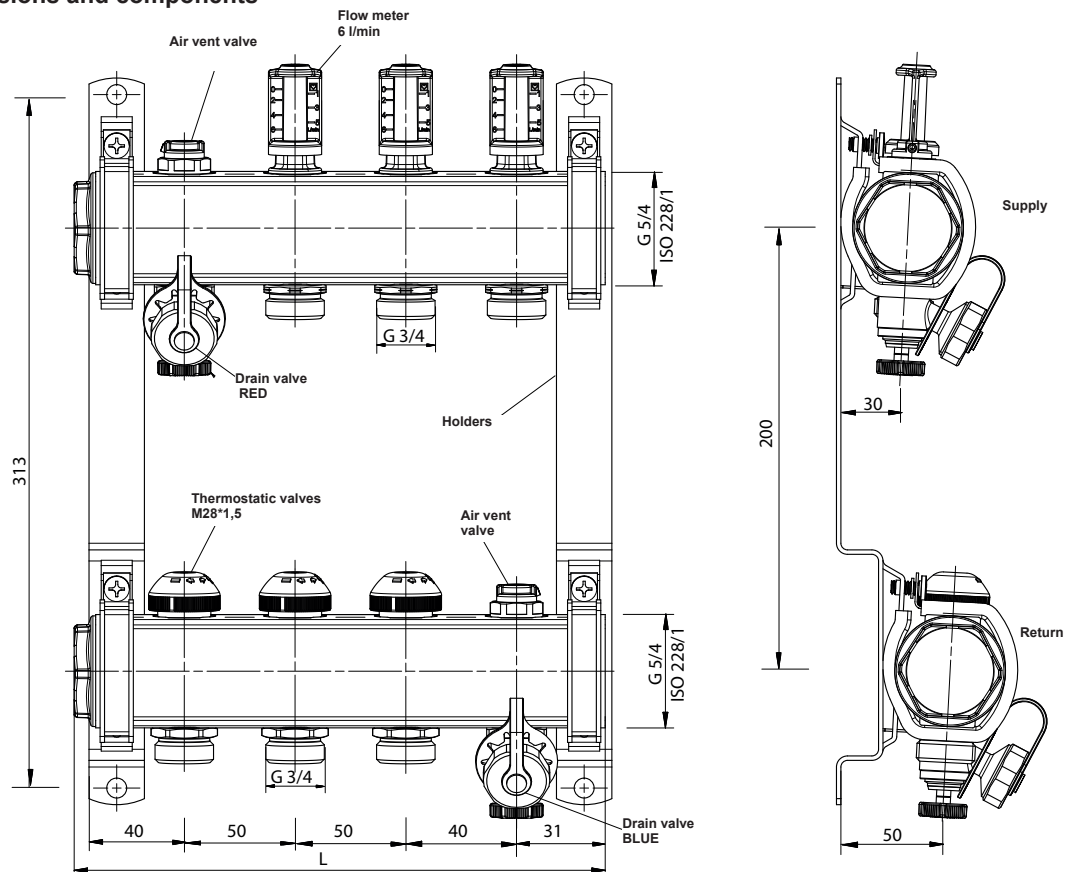
**Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ - Brass distributors for heating and cooling systems

flow meter 6 l/min / thermostatic valves

Normblatt 1 8531 4X, 5X

☑ Dimensions and components



Order Nr.	Outlets	L [mm]	Distributor cabinet **
1 8531 42	2	171	1 8569 03
1 8531 43*	3	221	
1 8531 44	4	271	
1 8531 45	5	321	1 8569 04
1 8531 46	6	371	1 8569 05
1 8531 47	7	421	1 8569 10
1 8531 48	8	471	
1 8531 49	9	521	1 8569 15
1 8531 50	10	571	
1 8531 51	11	621	
1 8531 52	12	671	1 8569 20
1 8531 53	13	721	
1 8531 54	14	771	
1 8531 55	15	821	1 8569 25
1 8531 56	16	871	

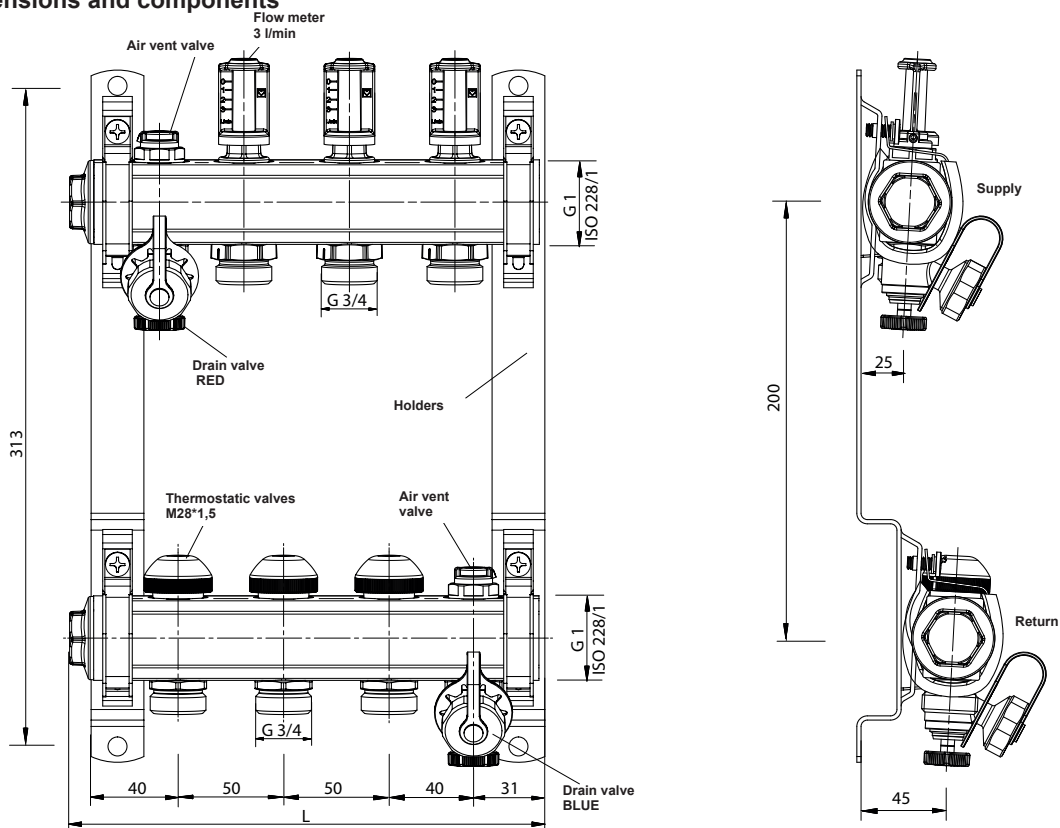
*1 8531 43 is shown on the drawing above.

**Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ - Brass distributors for heating and cooling systems

Datasheet 1 **8532** XX

♥ Dimensions and components



Order Nr.	Outlets	L [mm]	Distributor cabinet **
1 8532 03*	3	221	1 8569 03
1 8532 04	4	271	
1 8532 05	5	321	1 8569 04
1 8532 06	6	371	1 8569 05
1 8532 07	7	421	1 8569 10
1 8532 08	8	471	
1 8532 09	9	521	1 8569 15
1 8532 10	10	571	
1 8532 11	11	621	
1 8532 12	12	671	
1 8532 13	13	721	1 8569 20
1 8532 14	14	771	
1 8532 15	15	821	1 8569 25
1 8532 16	16	871	

*1 8532 03 is shown on the drawing above.

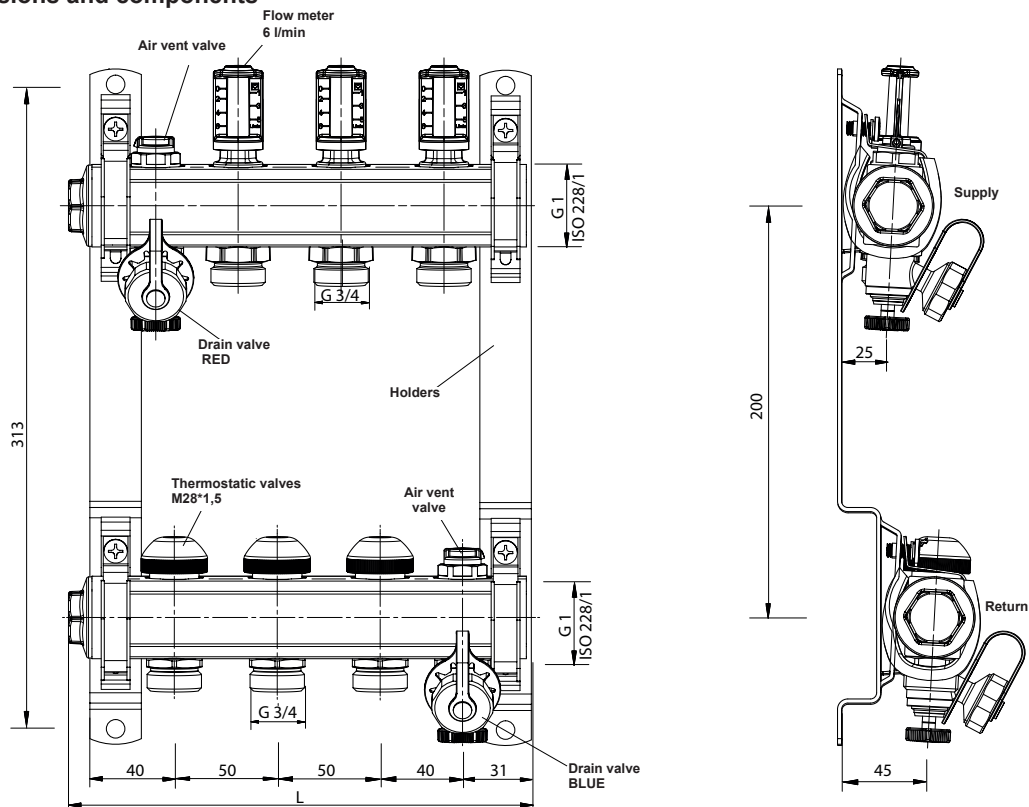
**Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ - Brass distributors for heating and cooling systems

flow meter 6 l/min / thermostatic valves

Datasheet 1 8533 XX

☑ Dimensions and components



Order Nr.	Outlets	L [mm]	Distributor cabinet **
1 8533 03*	3	221	1 8569 03
1 8533 04	4	271	
1 8533 05	5	321	1 8569 04
1 8533 06	6	371	1 8569 05
1 8533 07	7	421	1 8569 10
1 8533 08	8	471	
1 8533 09	9	521	1 8569 15
1 8533 10	10	571	
1 8533 11	11	621	
1 8533 12	12	671	1 8569 20
1 8533 13	13	721	
1 8533 14	14	771	
1 8533 15	15	821	1 8569 25
1 8533 16	16	871	

*1 8533 03 is shown on the drawing above.

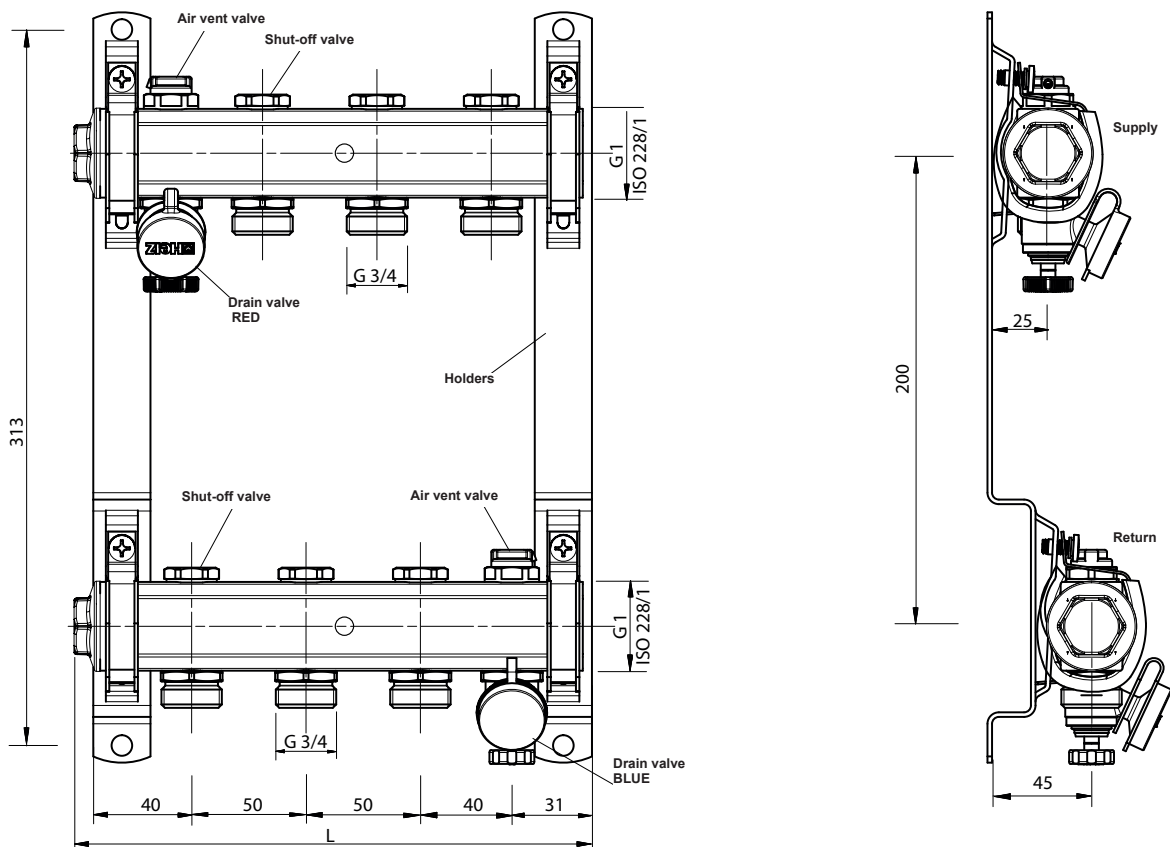
**Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ - Brass distributors for heating and cooling systems

shut-off valves / shut-off valves

Datasheet 1 8534 XX

Dimensions and components



Order Nr.	Outlets	L [mm]	Distributor cabinet **
1 8534 03*	3	221	1 8569 03
1 8534 04	4	271	
1 8534 05	5	321	1 8569 04
1 8534 06	6	371	1 8569 05
1 8534 07	7	421	1 8569 10
1 8534 08	8	471	
1 8534 09	9	521	1 8569 15
1 8534 10	10	571	
1 8534 11	11	621	
1 8534 12	12	671	1 8569 20

*1 8534 03 is shown on the drawing above.

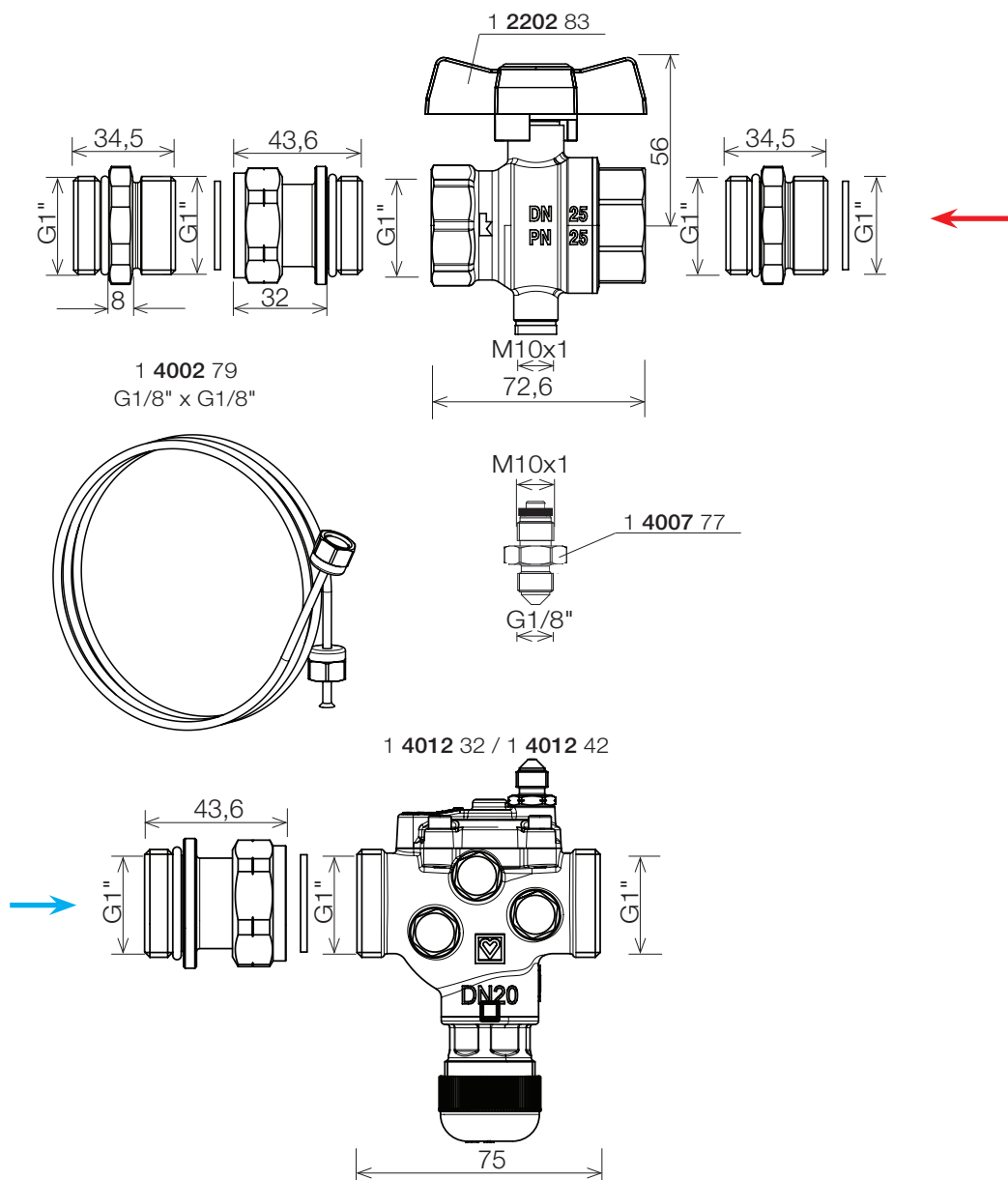
**Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ Dynamic Regulation Set

for HERZ brass distributor DN25

Data sheet 1 8635 52 - 1 8635 53

☑ Dimensions and components



☑ Operating data

Max. operating pressure
Min. operating temperature
Max. operating temperature

PN16 (note the max. pressure in the system)
2 °C
130 °C (note the max. temperature in the system)

Application

HERZ Dynamic Regulation Set was developed for use in hydraulic balancing and for the adjustment and control of heating and cooling circuits. With changing hydraulic operations, the differential pressure at the distributor and thus the flow range of each heating circuit is kept constant. The maximum flow range can be adjusted. Zone control can be implemented with the mounting of an actuator. HERZ Dynamic Regulation Set 1 **8635** 52/53 can be connected directly to the HERZ brass distributor DN25. HERZ brass distributor DN25 with HERZ Dynamic Regulation Set can be used for underfloor, wall and ceiling heating and cooling systems and in combination with radiators.

Medium

Heating water quality according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection. Please note that EPDM gaskets will be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals in the valves that use EPDM seals. The HERZ - Distributors for floor heating systems is not suitable for usage of aggressive medium (such as: acids, alkalis, combustible and explosive gases.) because it can destroy sealing components.

Brass

Pursuant to Article 33 of the REACH Regulation (EC No. 1907/2006), we are obliged to point out that the material lead is listed on the SVHC list and that all brass components manufactured in our products exceed 0.1% (w / w) lead (CAS: 7439-92-1 / EINECS: 231-100-4). Since lead is a component part of an alloy, actual exposure is not possible and therefore no additional information on safe use is necessary.

Assembly instruction

The Dynamic Regulation Set is suitable for direct connection to HERZ brass distributor. The differential pressure control valve **4012** is installed in the return flow of the brass distributor with a connection G 1", O-ring sealing. The direction of flow is indicated by an arrow on the body of the differential pressure controller. The capillary 1 **4002** 79 is installed using an M10xG1/8" nipple 1 **4007** 77 (included in the delivery) between the differential pressure control valve **4012** and the ball valve 1 **2202** 83 in the flow. The ball valve is connected to the HERZ brass distributor with an adapter G1" flat seal x G1" O-ring seal. The assembly must be carried out with the appropriate tools suitable for the union nut of a connection, adapter and ball valve (Sw).

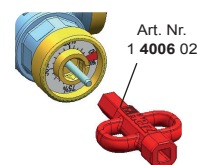
Maintenance instruction

According to EN 806-5 (point 6. Operation) valves should always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ Ball valves should be closed and opened periodically (at least twice a year, every 6 months). This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the valve.

Pre-setting

The valve setting is clearly shown in percent.

The differential pressure control valve **4012** is preset or shut off with the HERZ adjustment key (1 **4006** 02)



HERZ Table			Q _{max} - max. flow range with negligible resistance in the circuit *)		
1 8635 52 / 1 4012 32 (DN 20 LP) 1 8635 53 / 1 4012 42 (DN 20 HP)					
Pre-setting	DN 20 LP [l/h]	DN 20 HP [l/h]	Pre-setting	DN 20 LP [l/h]	DN 20 HP [l/h]
10%	50 - 420	50 - 580	55%	50 - 1365	50 - 1740
15%	50 - 550	50 - 750	60%	50 - 1450	50 - 1830
20%	50 - 650	50 - 900	65%	50 - 1520	50 - 1900
25%	50 - 765	50 - 1050	70%	50 - 1600	50 - 1950
30%	50 - 850	50 - 1200	75%	50 - 1670	50 - 2000
35%	50 - 945	50 - 1350	80%	50 - 1740	50 - 2020
40%	50 - 1050	50 - 1465	85%	50 - 1800	50 - 2040
45%	50 - 1165	50 - 1560	90%	50 - 1860	50 - 2060
50%	50 - 1270	50 - 1650	95%	50 - 1915	50 - 2080
*) additional resistance in the circuit reduces Qmax			100%	50 - 1950	50 - 2100

Note on actuators

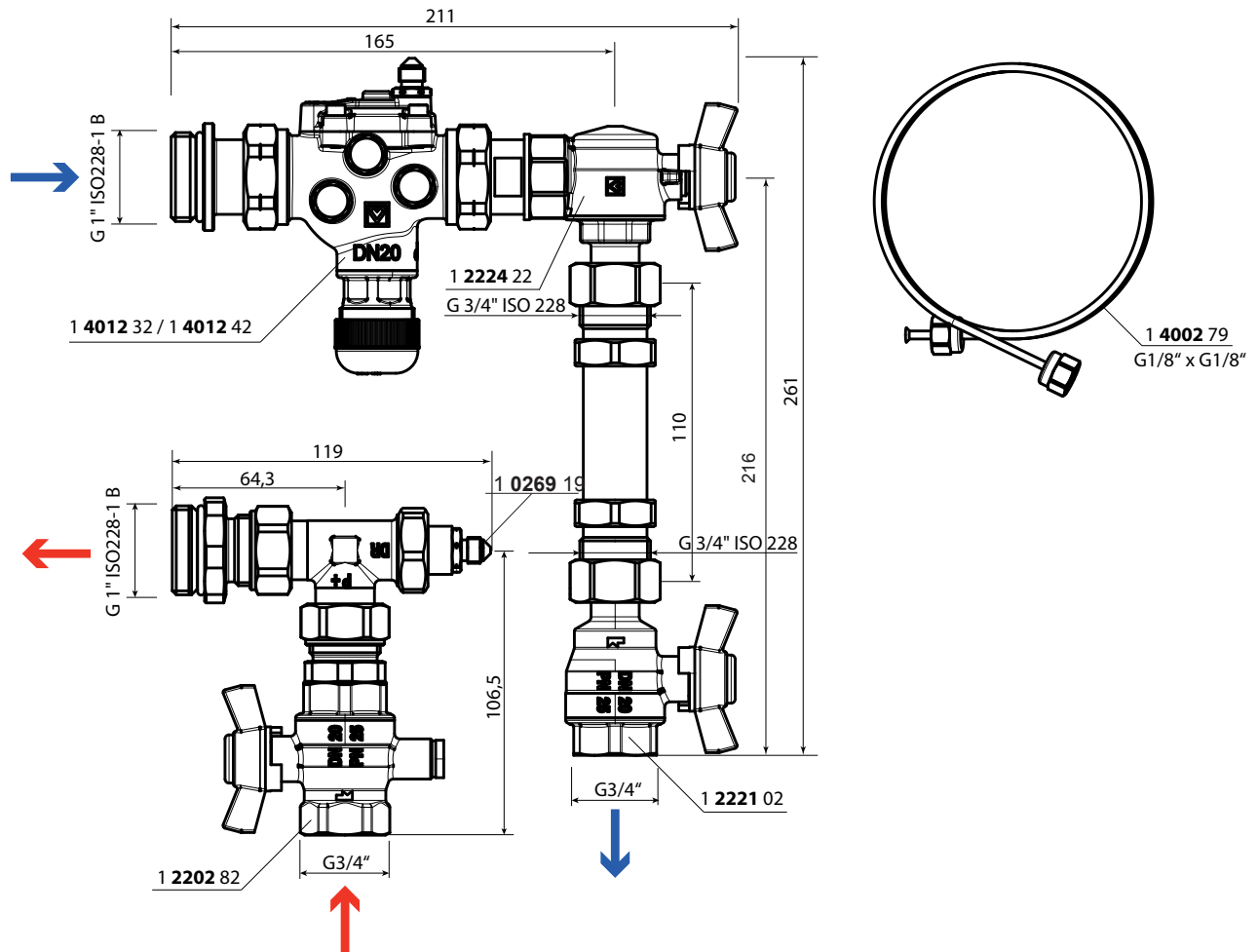
Actuating drives 1 **7708** 5X, 1 **7990** 31 or a geared motors 1 **7708** 4X can be installed for zone control.

HERZ Dynamic Regulation Set

with distance piece for heat meter for HERZ brass distributor DN25

Data sheet 1 8635 62 - 1 8635 63

☑ Dimensions and components



☑ Operating data

Max. operating pressure
Min. operating temperature
Max. operating temperature

PN6 (note the max. pressure in the system)
2 °C
90 °C (note the max. temperature in the system)

Application

HERZ dynamic regulation set with distance piece for heat meters was developed for use in hydraulic balancing and for the adjustment and control of heating and cooling circuits. With changing hydraulic conditions, the differential pressure at the distributor and thus the flow of each heating circuit is kept constant. The maximum flow range can be adjusted. Zone control can be implemented with the mounting of an actuator. The dynamic regulation set with distance piece for heat meter 1 **8635** 62/63 can be connected directly to the HERZ brass distributor DN25. HERZ brass distributor DN25 with HERZ dynamic regulation set can be used for underfloor, wall and ceiling heating and cooling systems and in combination with radiators.

Medium

Heating water quality according to ÖNORM H5195 or VDI-Standard 2035. The use of ethylene or propylene glycol in a mixing ratio 25- 50% is allowed. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection. Please note that EPDM gaskets will be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals in the valves that use EPDM seals. The HERZ - Distributors for floor heating systems is not suitable for usage of aggressive medium (such as: acids, alkalis, combustible and explosive gases.) because it can destroy sealing components.

Brass

Pursuant to Article 33 of the REACH Regulation (EC No. 1907/2006), we are obliged to point out that the material lead is listed on the SVHC list and that all brass components manufactured in our products exceed 0.1% (w / w) lead (CAS: 7439-92-1 / EINECS: 231-100-4). Since lead is a component part of an alloy, actual exposure is not possible and therefore no additional information on safe use is necessary.

Assembly instruction

The dynamic regulation set with distance piece for heat meters made of polyamide 66 (110 mm, G3/4") is suitable for direct connection to HERZ brass manifolds DN25.

The differential pressure control valve **4012** is installed in the return flow of the brass distributor with the screw connection G1" O-ring sealing x G1" flat sealing. The direction of flow is indicated by an arrow on the body of the differential pressure controller. The capillary 1 **4002** 79 is installed using a G1/4"xG1/8" nipple 1 **0269** 19 (included in the delivery) between the differential pressure controller and the T-piece in the flow. The T-piece is connected to the brass distributor with an adapter G1" O-ring seal x G3/4" flat seal.

The assembly must be carried out with the appropriate tools suitable for the union nut of a connection, adapter and ball valve (Sw).

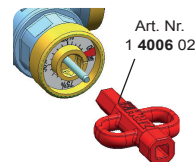
Maintenance instruction

According to EN 806-5 (point 6. Operation) valves should always be in their fully opened or closed position and actuated at regular intervals to ensure they remain operational. Therefore HERZ Ball valves should be closed and opened periodically (at least twice a year, every 6 months). This prevents the ball valve from blocking, reduces sediment deposition and reduces the possibility of corrosion inside the valve.

Pre-setting

The valve setting is clearly shown in percent.

The differential pressure control valve 4012 is preset or shut off with the HERZ adjustment key (1 **4006** 02)



HERZ Table			Q _{max} - max. flow range with negligible resistance in the circuit *)		
1 8635 62 / 1 4012 32 (DN 20 LP) 1 8635 63 / 1 4012 42 (DN 20 HP)					
Pre-setting	DN 20 LP [l/h]	DN 20 HP [l/h]	Pre-setting	DN 20 LP [l/h]	DN 20 HP [l/h]
10%	50 - 420	50 - 580	55%	50 - 1365	50 - 1740
15%	50 - 550	50 - 750	60%	50 - 1450	50 - 1830
20%	50 - 650	50 - 900	65%	50 - 1520	50 - 1900
25%	50 - 765	50 - 1050	70%	50 - 1600	50 - 1950
30%	50 - 850	50 - 1200	75%	50 - 1670	50 - 2000
35%	50 - 945	50 - 1350	80%	50 - 1740	50 - 2020
40%	50 - 1050	50 - 1465	85%	50 - 1800	50 - 2040
45%	50 - 1165	50 - 1560	90%	50 - 1860	50 - 2060
50%	50 - 1270	50 - 1650	95%	50 - 1915	50 - 2080
*) additional resistance in the circuit reduces Q _{max}			100%	50 - 1950	50 - 2100

Note on actuators

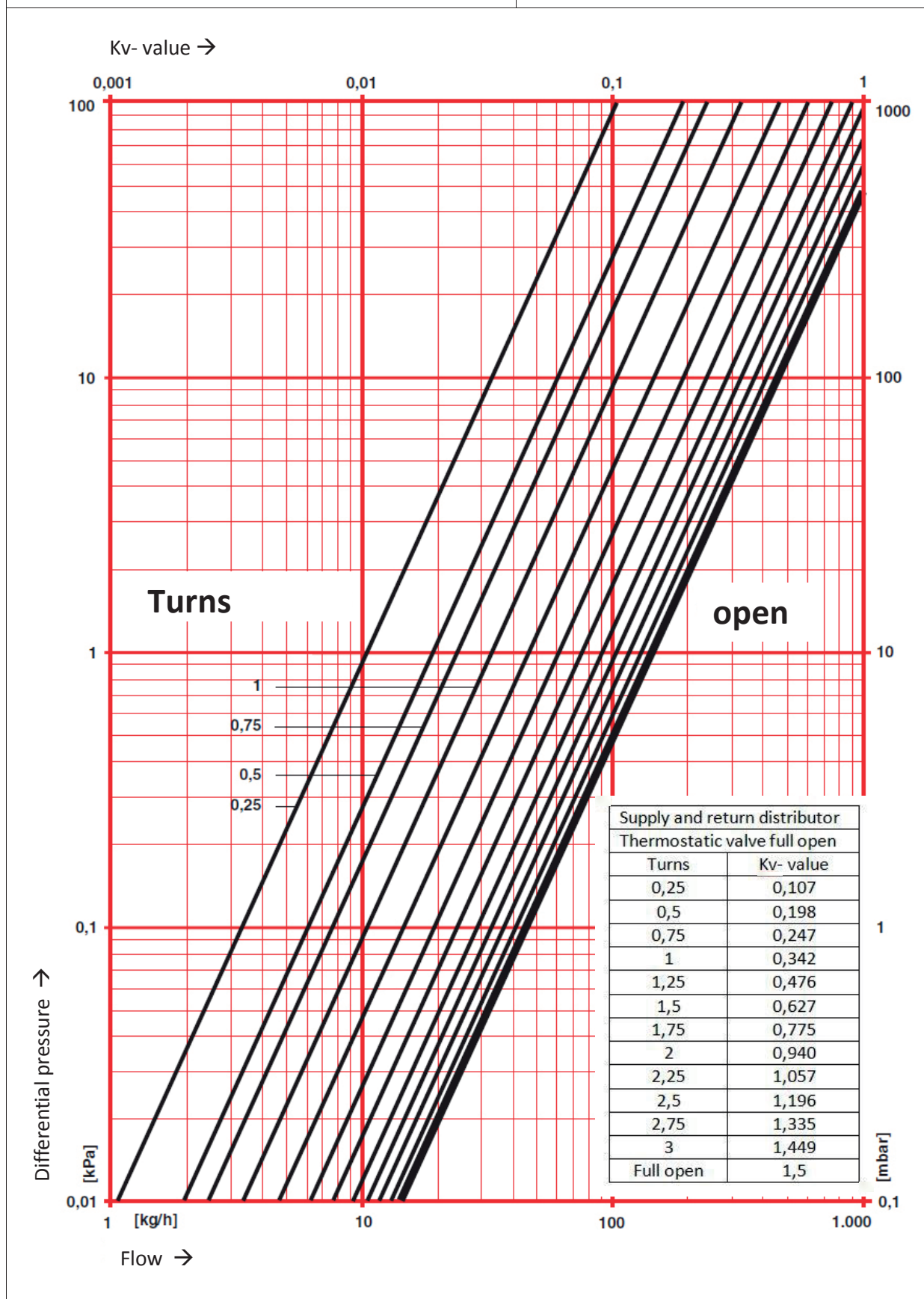
Actuating drives 1 **7708** 5X, 1 **7990** 31 or a geared motors 1 **7708** 4X can be installed for zone control.

HERZ-Standard diagram

Distributor for floor heating

Order #: 8531, 8534

Shut-off valves 3 – 12 Outlets

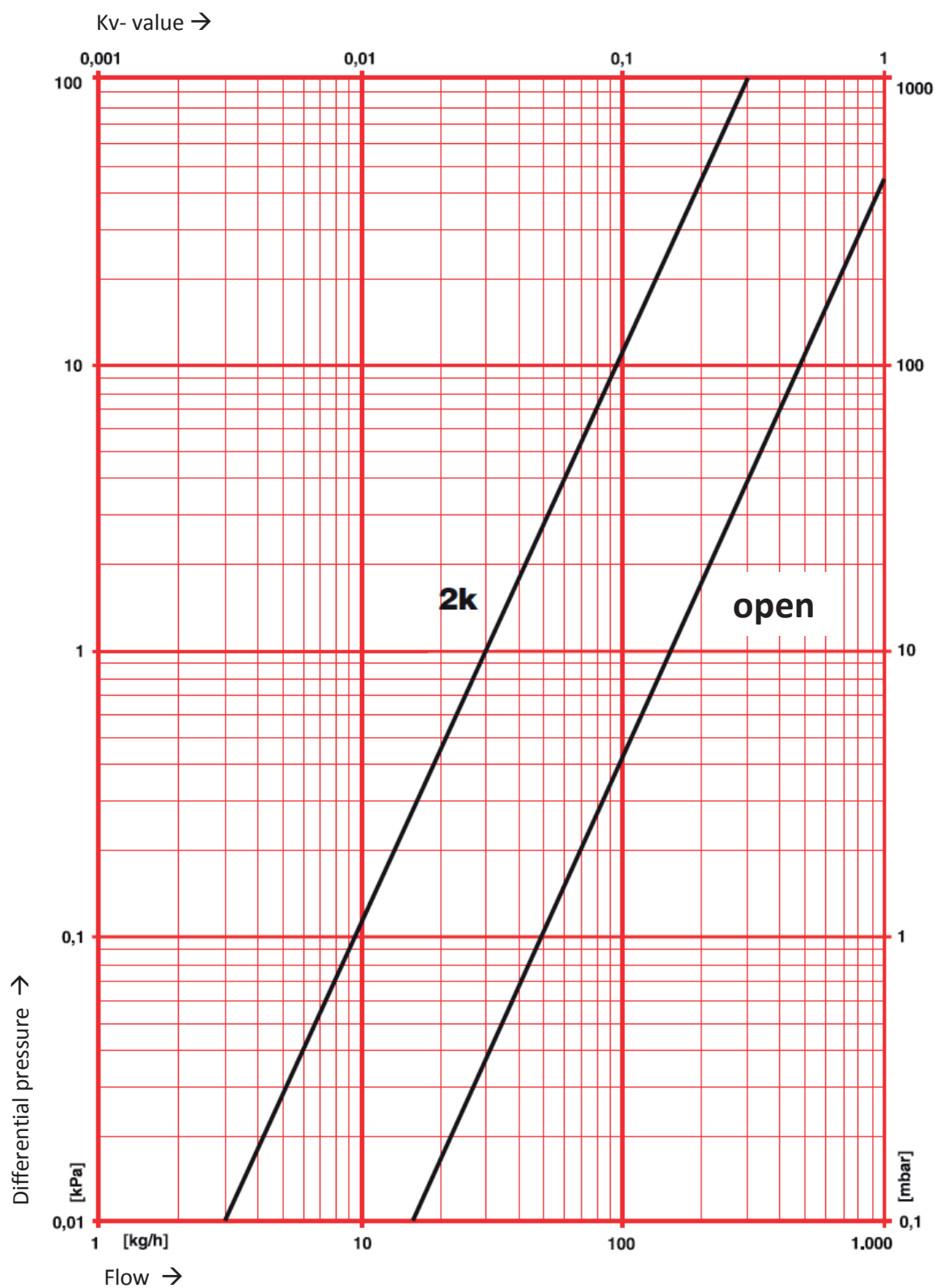


HERZ-Standard diagramm

Distributor for floor heating

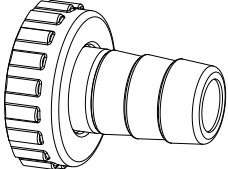
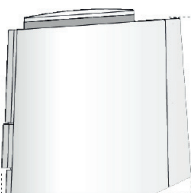

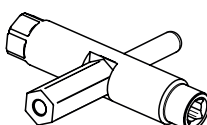
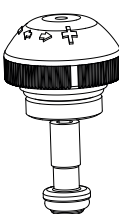
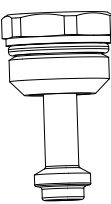
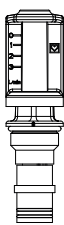
Order #: 8531, 8532, 8533

TS-Valves 3 – 12 Outlets



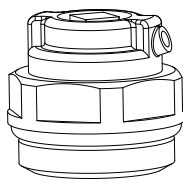
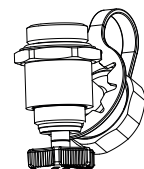
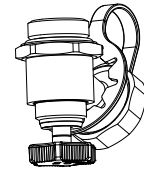
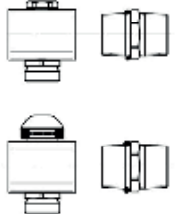
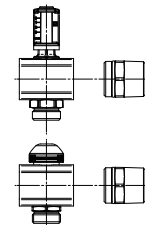
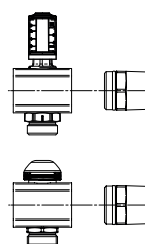


HERZ - Brass distributors for heating and cooling systems

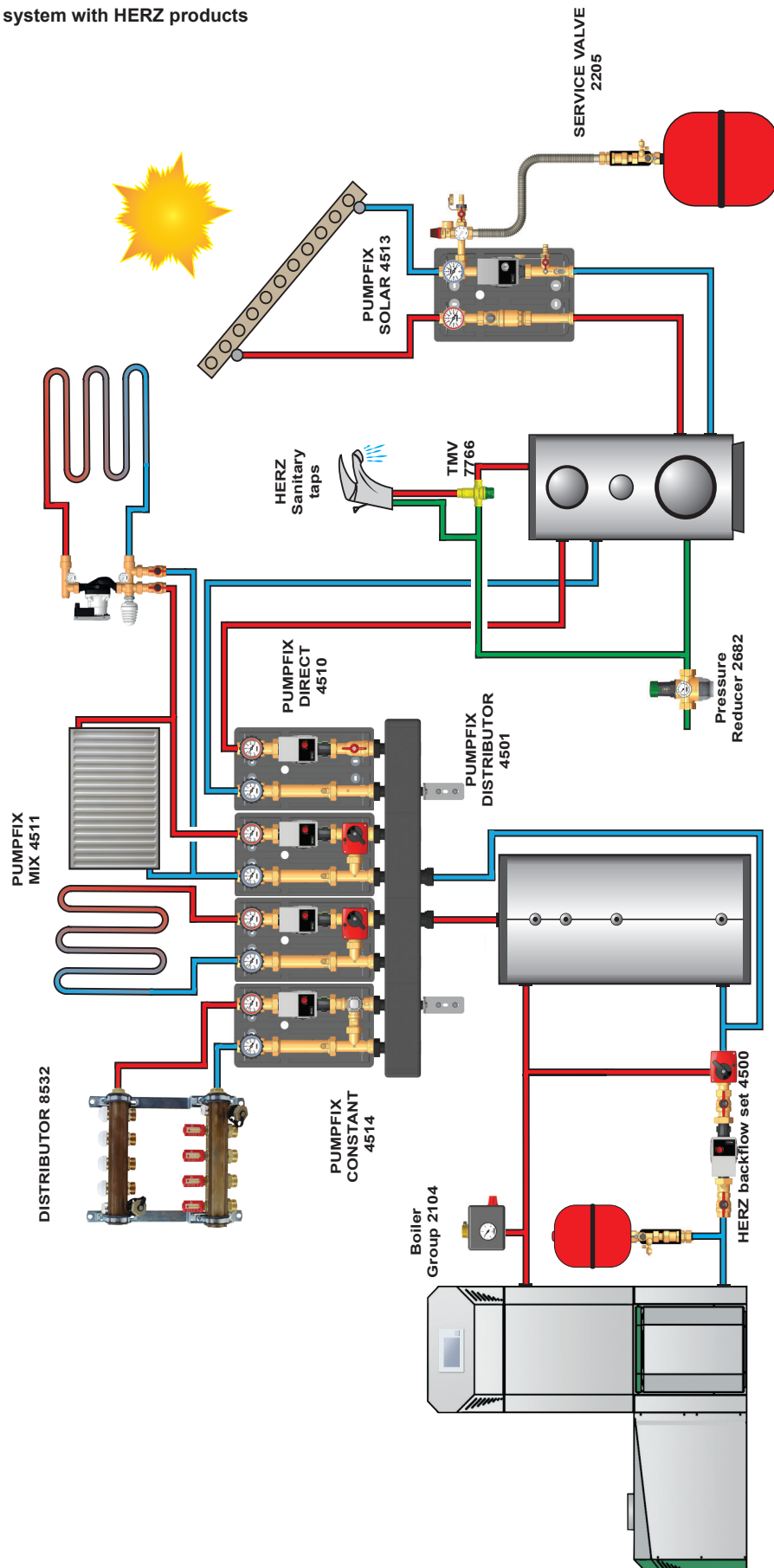
SPARE PARTS

Illustration	Description	Item number	Suitable with
	Hose connection	1 6206 01	1 8531 XX 1 8532 XX 1 8533 XX 1 8534 XX
	Thermal Actuator 24V NC	1 7708 52 1 7711 12*	1 8531 XX 1 8532 XX 1 8533 XX
	Thermal Actuator 230V NC	1 7708 53 1 7711 01	1 8531 XX 1 8532 XX 1 8533 XX
	Manual Drive	1 9102 80	1 8531 XX 1 8532 XX 1 8533 XX
	Universal key	1 6625 00	1 8531 XX 1 8532 XX 1 8533 XX 1 8534 XX
	Thermostatic valve	1 6403 31	1 8531 XX 1 8532 XX 1 8533 XX
	Shut-off valve	1 4020 59	1 8531 XX 1 8534 XX
	Flow meter 3 L/min for distributor 8532 manufactured as of 2005, including lower part.	3 F900 23	1 8532 XX

* use with adapter for floor heating distributor 1 7711 27

	Flow meter 6 L/min for distributors 8532, 8533 manufactured as of 2005, including lower part.	3 F900 26	1 8533 XX
	Flowmeter 6 l/min for distributor 8531 manufactured as of 2005, including lower part.	3 F900 56	1 8531 4X, 5X
	Air vent valve	1 4020 59	1 8531 XX 1 8532 XX 1 8533 XX 1 8534 XX
	Drain valve RED	1 8535 54	1 8531 XX 1 8532 XX 1 8533 XX 1 8534 XX
	Drain valve BLUE	1 8535 55	1 8531 XX 1 8532 XX 1 8533 XX 1 8534 XX
	HERZ single outlet set with upper thermostatic insert Dimension G 1", for extension of 1 8531 XX	1 8531 93	1 8531 XX
	HERZ single outlet set with flow meter regulating insert (3 l/min) Dimension G 1", for extension of 1 8532 XX	1 8532 93	1 8532 XX
	HERZ single outlet set with flow meter regulating insert (6 l/min) Dimension G 1", for extension of 1 8533 XX	1 8533 93	1 8533 XX

☒ Example of system with HERZ products



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