

HERZ - Distributors for cooling / heating systems

Made from heat-insulating, temperature-resistant plastic, dimensions 1"
UNI - MINI

Normblatt für 1 873X XX, Ausgabe 1123

☒ Table of contents

| | |
|--|----|
| • General information | 2 |
| • Function principle of components..... | 3 |
| • Dimensions and components 1 8732 03-12..... | 4 |
| • Dimensions and components 1 8733 03-12..... | 5 |
| • Dimensions and components 1 8735 52 - 1 8735 53..... | 6 |
| • Dimensions and components 1 8735 62 - 1 8735 63..... | 8 |
| • Spare parts..... | 10 |
| • HERZ standard diagrams..... | 12 |

GENERAL INFORMATION

☑ Description of HERZ - Distributors for cooling / heating systems

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

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

- due to a modular design there is more flexibility - it can be easily expanded with more circuits,
- made of extremely durable heat and sound insulation composite Polyamide reinforced with specially treated glass fibers,
- condensation is minimised when used in cooling systems,
- high flow is possible,
- easy to use and maintain,
- reliable design and long service life,
- easy installation,
- compatibility with other HERZ products,
- integrated air vent and drain valve.

☑ Material and construction

| | |
|----------------------|-------------------------|
| Manifold distributor | PA6 30% GF |
| Thermostatic valves | Brass, CW614N |
| Brackets | steel |
| Clamps | PA6 30% GF (RED / BLUE) |

☑ Operating data

| | |
|----------------------------|-------|
| Max. operating pressure | 6 bar |
| Max. operating temperature | 60 °C |
| Min. operating temperature | -5 °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 - 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.

☑ Field of application

HERZ - Distributors are used in floor, wall or ceiling cooling / heating systems. The flow of each individual heating circuit can be adjusted and regulated when using Flow Meters. The manifolds are each closed on one side with a plug. The distributor connection is flat-sealing with a freely-rotating union nut G1 1/4" on the distributor. Manifold outlets have a G 3/4 Eurocone connection.

☑ Assembly instruction

The HERZ - Distributors for cooling / heating systems can be mounted using the supplied brackets distribution directly to a wall or in a distributor cabinet. The manifold can be additionally extended to a larger number of circuits due to its modular design. 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.

☑ Brass

HERZ uses top-quality brass that responds to the latest European norms EN 12164 and EN 12165. Components of HERZ - plastic distributors for floor heating systems are made from 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.

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

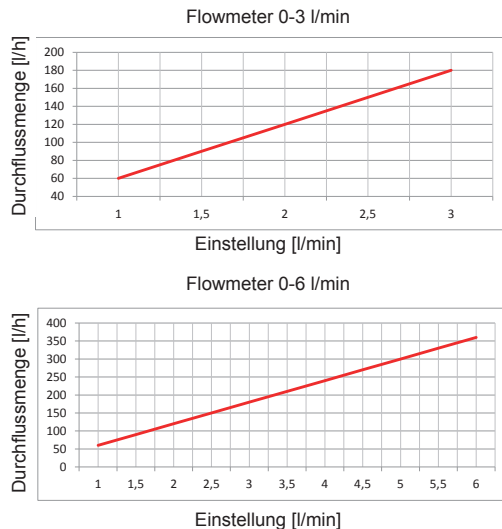
FUNCTION PRINCIPLE OF COMPONENTS

Flow meter

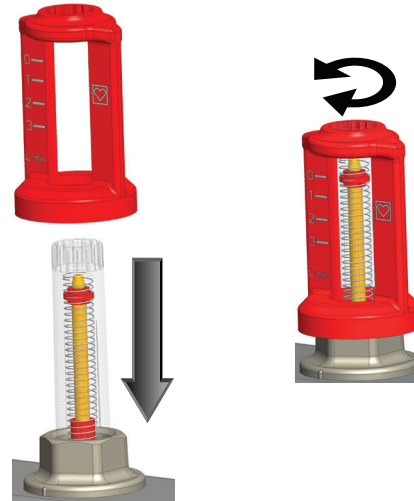
Flow meter valves

The factory setting is partially open. 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]



Setting procedure



NOTE! Flowmeters are not shut-off devices. Unfilled heating circuits must be closed with a cap at the outlet. .

Drain valves

On the return manifold, a drain valve with connection thread G1/4 is provided. A hose connection 1620601 can be used additionally. The handwheel is operated (rotate counter-clockwise) and close (rotate clockwise) the drain valve.

Thermostatic valves

Opened by spring force and can be closed with the 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 24 V or 230 V, 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, see accessoires for product codes.

NOTE: Thermostatic valves are NOT isolation devices! Unfilled heating circuits must be closed with a cap at the outlet.

Air vent valves

On the supply manifold, an air vent is mounted in each case.

Brackets

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

Housing

HERZ uses extremely durable heat and sound insulation composite Polyamide reinforced with specially treated glass fibers. Construction of the HERZ distributor has a modular design, therefore an expansion of heating circuits of is possible. Material has excellent temperature resistant properties. The material also has heat-insulating properties, therefore the condensation in a cooling system is reduced.

Clamp

Modular designed housings are connected with clamps. Direction of the distributor flow is evident from the clamp color (red: supply / blue: return)..

Outlet connections

UNI -MINI

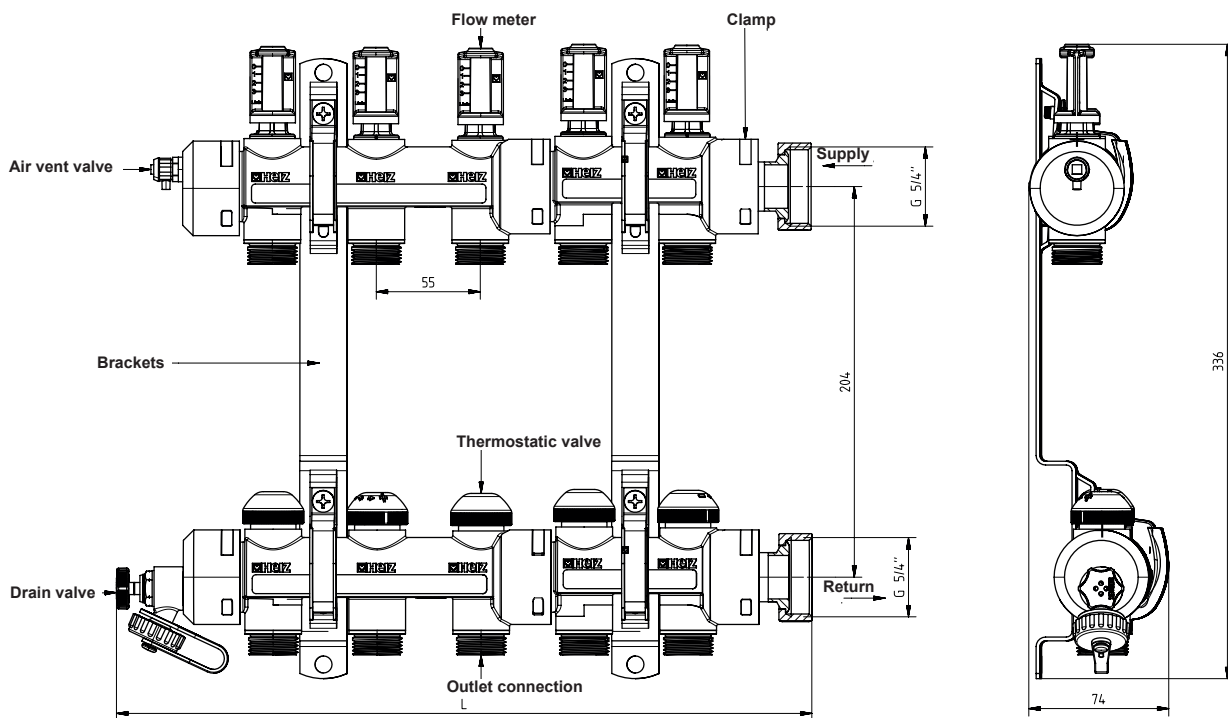
Eurocone 3/4"

HERZ - Distributors for cooling / heating systems

Flow meter 3 L/min / Thermostatic valves

Datasheet 1 8732 XX

☑ Dimensions and components



Return flow

Supply flow

Outlet connections

Side connections RF/SF

Axial distance (return / supply)

Thermostatic valve

Flow meter 3 l/min

3/4" Eurocone

1 1/4" flat sealing with freely-rotating union nut

204 mm

| Order Nr. | Outlets | Nr. of brackets | L [mm] | Distributor cabinet* |
|-----------|---------|-----------------|--------|----------------------|
| 1 8732 03 | 3 | 2 | 260 | 1 8569 03 |
| 1 8732 04 | 4 | | 310 | |
| 1 8732 05 | 5 | | 370 | |
| 1 8732 06 | 6 | | 420 | |
| 1 8732 07 | 7 | | 480 | |
| 1 8732 08 | 8 | 3 | 530 | 1 8569 15 |
| 1 8732 09 | 9 | | 580 | |
| 1 8732 10 | 10 | | 630 | |
| 1 8732 11 | 11 | | 690 | |
| 1 8732 12 | 12 | | 740 | |
| | | | | 1 8569 20 |

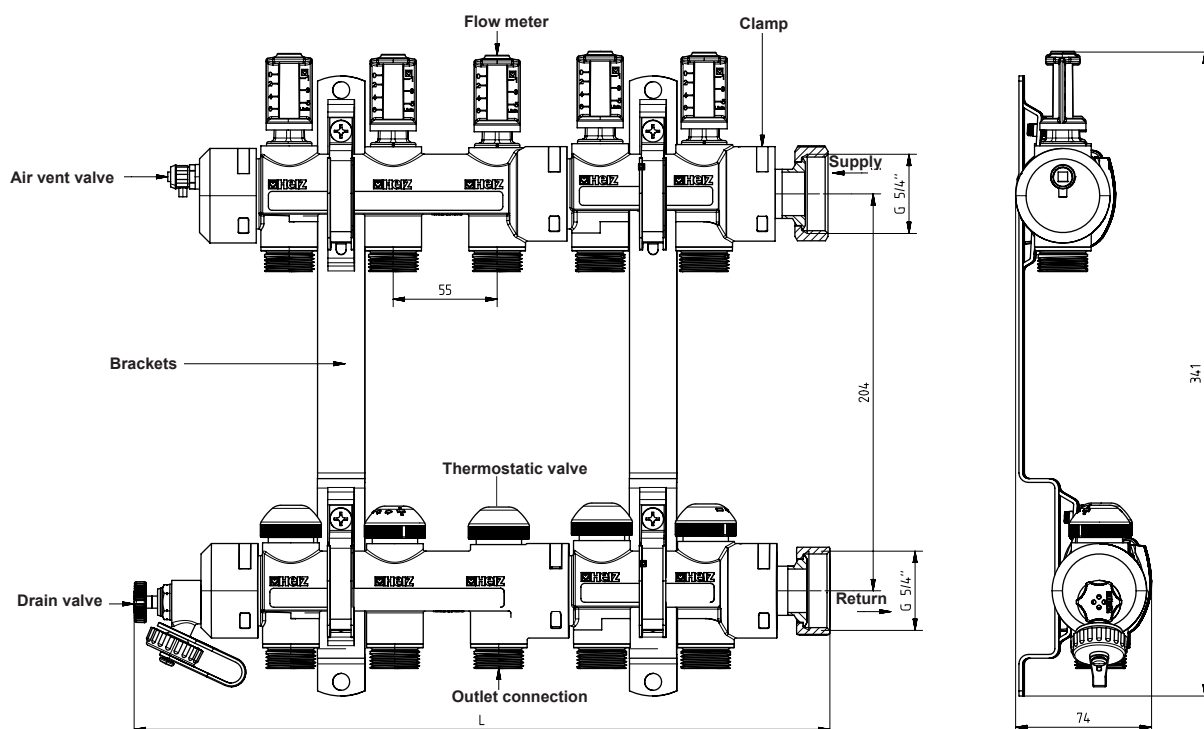
*Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ - Distributors for cooling / heating systems

Flow meter 6 L/min / Thermostatic valves

Datasheet 1 8733 XX

☑ Dimensions and components



Return flow

Supply flow

Outlet connections

Side connections RF/SF

Axial distance (return / supply)

Thermostatic valve

Flow meter 6 l/min

3/4" Eurocone

1 1/4" flat sealing with freely-rotating union nut

204 mm

| Order Nr. | Outlets | Nr. of brackets | L [mm] | Distributor cabinet* |
|-----------|---------|-----------------|--------|----------------------|
| 1 8733 03 | 3 | 2 | 260 | 1 8569 03 |
| 1 8733 04 | 4 | | 310 | |
| 1 8733 05 | 5 | | 370 | |
| 1 8733 06 | 6 | | 420 | |
| 1 8733 07 | 7 | | 480 | |
| 1 8733 08 | 8 | 3 | 530 | 1 8569 15 |
| 1 8733 09 | 9 | | 580 | |
| 1 8733 10 | 10 | | 630 | |
| 1 8733 11 | 11 | | 690 | 1 8569 20 |
| 1 8733 12 | 12 | | 740 | |

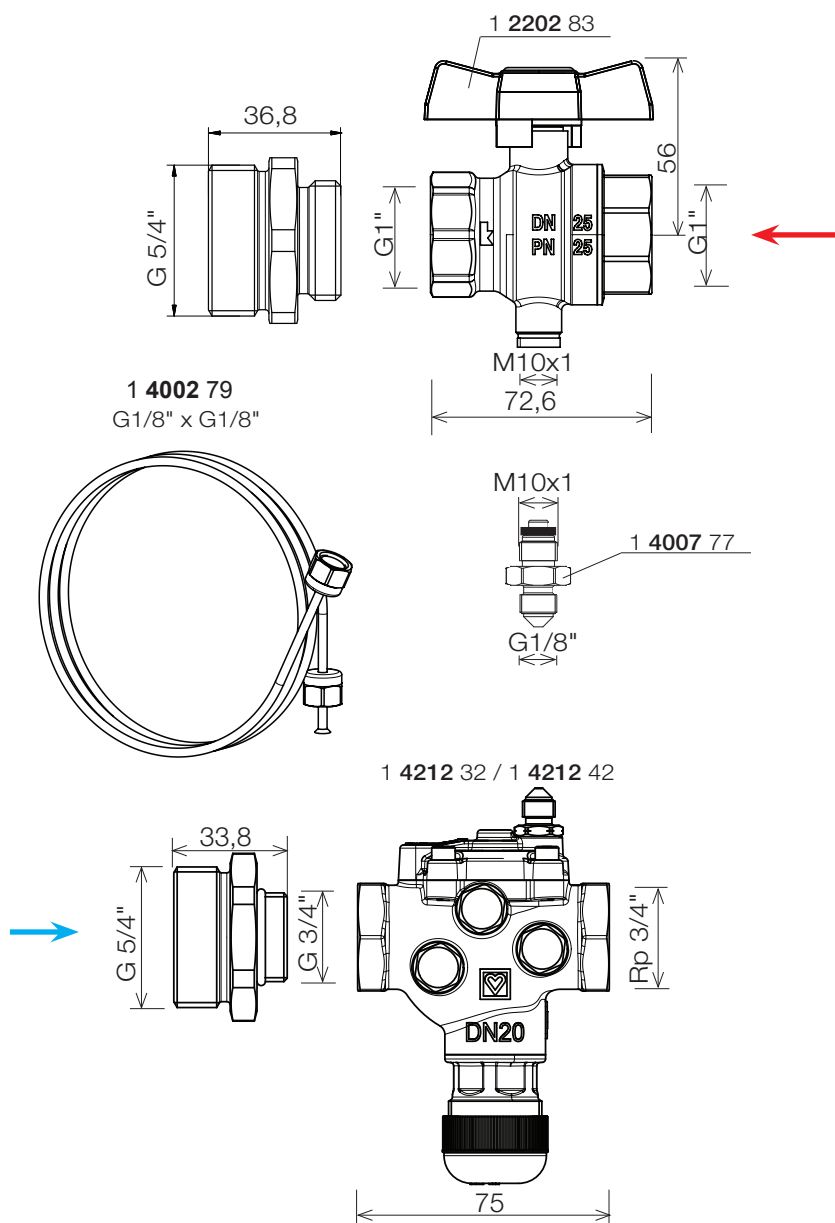
*Minimum size for distributor cabinet. By using shut-off valves the size of distributor cabinet has to be dimensioned larger.

HERZ Dynamic Regulation Set

for HERZ floor heating distributor UNI-MINI

Data sheet 1 8735 52 - 1 8735 53

☑ Dimensions and components



☑ Operating data

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

PN 6
- 5 °C (water 2 °C)
60 °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 **8735** 52/53 can be connected directly to the HERZ floor heating distributor UNI-MINI. HERZ floor heating distributor UNI-MINI 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 floor heating distributor UNI-MINI. The differential pressure control valve **4212** is installed in the return flow of the distributor with an adapter G5/4"xG3/4" (flat seal x o-ring seal). The direction of flow is indicated by an arrow on the body of the differential pressure controller. The impulse line 1 **4002** 79 is installed using an M10 x G1/8" nipple 1 **4007** 77 (included in the delivery) between the differential pressure control valve **4212** and the ball valve 1 **2202** 83 in the flow. The ball valve is connected to the HERZ floor heating distributor UNI-MINI with an adapter G1" o-ring seal x G5/4" flat seal. The assembly must be carried out with the appropriate tools suitable for the union nut of the distributor, adapter and ball valve (Sw).

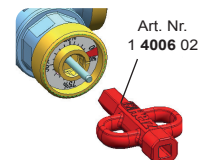
☑ Maintenance instruction

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 **4212** 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 8735 52 / 1 4212 32 (DN 20 LP) 1 8735 53 / 1 4212 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

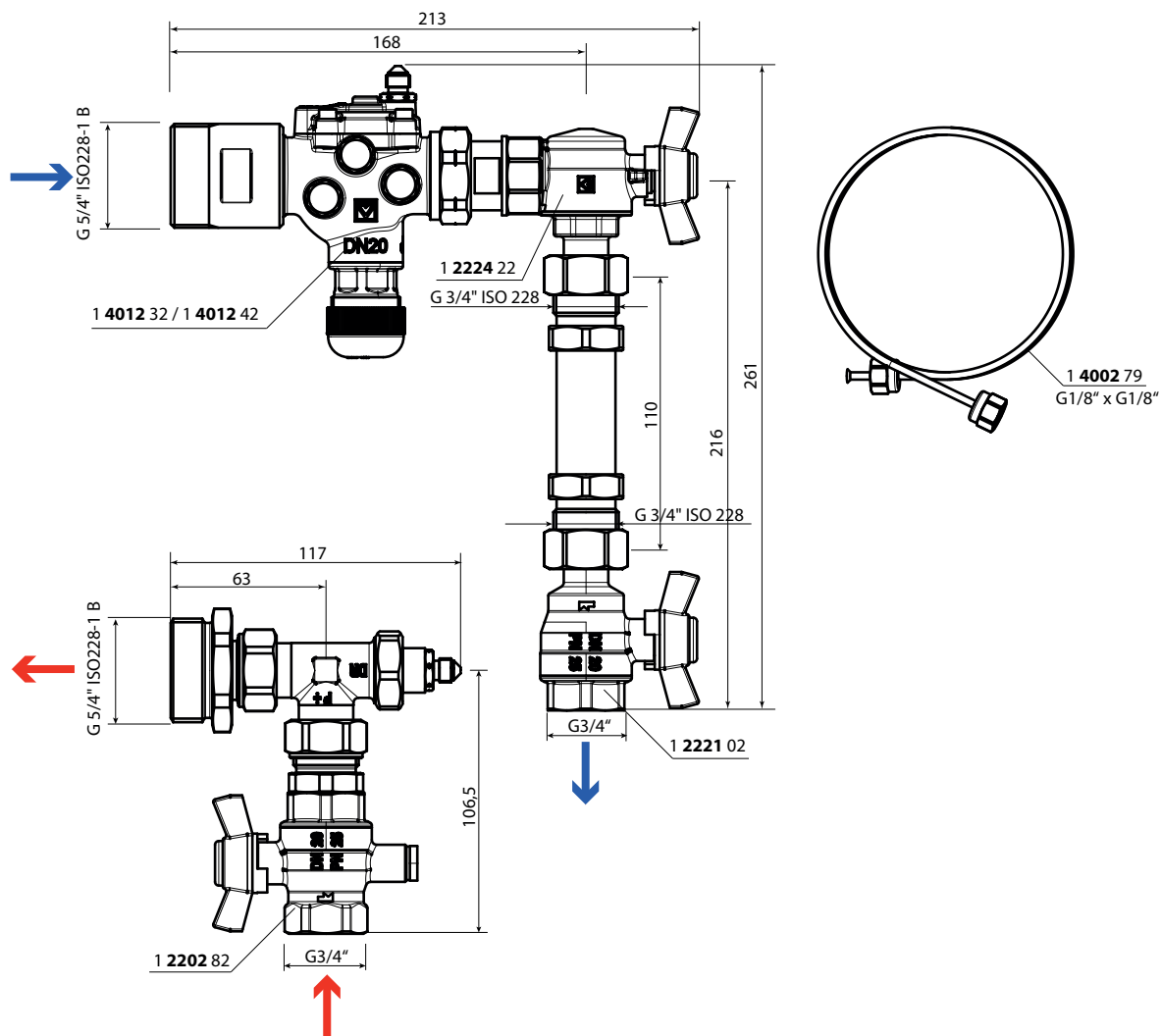
Actuating drives 1 **7708** 5X, 1 **7990** 31 or a geared motors 1 **7708** 4X can be installed for zone control.

HERZ Dynamic Regulation Set

with distance piece for heat meter for HERZ floor heating distributor UNI-MINI

Data sheet 1 8735 62 - 1 8735 63

☑ Dimensions and components



☑ Operating data

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

PN 6
- 5 °C (water 2 °C)
60 °C (note the max. temperature in the system)

☑ Application

HERZ Dynamic Regulation Set with distance piece 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 with distance piece 1 **8735** 62/63 can be connected directly to the HERZ floor heating distributor UNI-MINI. HERZ floor heating distributor UNI-MINI with HERZ Dynamic Regulation Set with distance piece was developed 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 made of polyamide 66 (110 mm, G3/4") is suitable for direct connection to HERZ floor heating distributor UNI-MINI. The differential pressure control valve **4012** is installed in the return flow of the distributor with an adapter G5/4"xG1" (flat seal x flat seal). The direction of flow is indicated by an arrow on the body of the differential pressure controller. The impulse line 1 **4002** 79 is installed using an G1/4" x G1/8" nipple 1 **4007** 77 (included in the delivery) between the differential pressure control valve **4012** and the T-piece installed in the flow. The T-piece is connected to the HERZ floor heating distributor UNI-MINI with an adapter G3/4" flat seal x G5/4" flat seal. The assembly must be carried out with the appropriate tools suitable for the union nut of the distributor, adapter and ball valves (Sw).

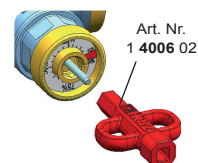
☑ Maintenance instruction

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 **4212** 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 8735 52 / 1 4012 32 (DN 20 LP) 1 8735 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 Q _{max} | | | 100% | 50 - 1950 | 50 - 2100 |

☑ Note on actuators

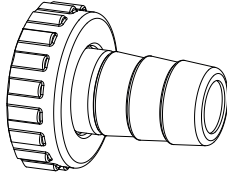


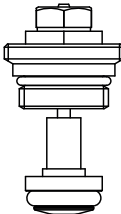


Actuating drives 1 **7708** 5X, 1 **7990** 31 or a geared motors 1 **7708** 4X can be installed for zone control.

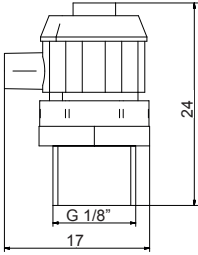
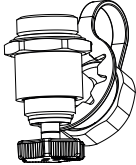
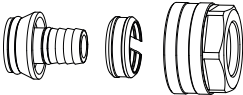


HERZ - Distributors for cooling / heating systems

Made from heat-insulating, temperature-resistant plastic, dimensions 1"

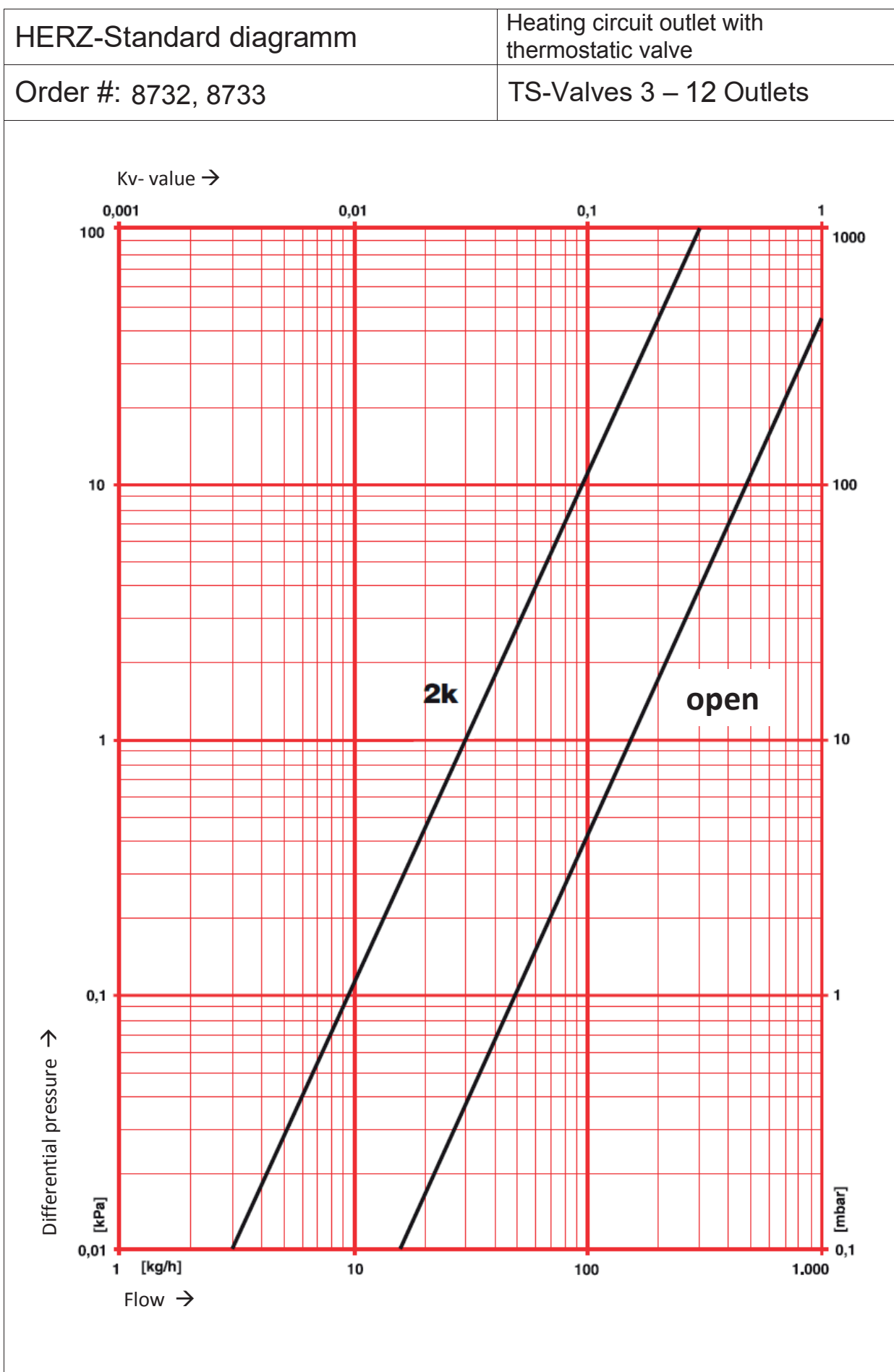
UNI - MINII

SPARE PARTS

| Illustration | Description | Item number | Suitable with |
|---|---------------------------|-------------|------------------------|
|  | Hose connection | 1 6206 01 | 1 8732 XX 1 8733 XX |
|  | Thermal Actuator 24V NC | 1 7708 52 | 1 8732 XX 1 8733 XX |
| | Thermal Actuator 230V NC | 1 7708 53 | 1 8732 XX 1 8733 XX |
|  | Hand wheel | 1 9102 80 | 1 8732 XX 1 8733 XX |
|  | Upper thermostatic insert | 1 6376 13 | 1 8732 XX 1 8733 XX |
|  | Flow meter 3 l/min | 3 F900 33 | 1 8732 XX |
|  | Flow meter 6 l/min | 3 F900 36 | 1 8733 XX |

| Illustration | Description | Item number | Suitable with |
|---|--|-------------|------------------------|
|  | Air vent | 1 6376 15 | 1 8732 XX 1 8733 XX |
|  | Drain valve BLUE | 1 0276 10 | 1 8732 XX 1 8733 XX |
|  | Plastic pipe connections G 3/4 | 1 6098 XX | 1 8732 XX 1 8733 XX |
|  | HERZ - Ball valve with T-handle RED, straight model DN25 G5/4\" x G1\" | 1 2408 23 | 1 8732 XX 1 8733 XX |
|  | HERZ - Ball valve with T-handle RED, angle model DN25 G5/4\" x G1\" | 1 2428 23 | 1 8732 XX 1 8733 XX |

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HERZ-Standard diagram

Heating circuit outlet with
flow meter

Order #: 8672, 8733

Flowmeter

