

Distributor for Floor Heating Systems

Standard Sheet for

8512

Edition 0700 (1299)

Dimension 1 1/4"

- 2-way, 3-way, and 4-way distributors with O-ring seal in the distributor coupling area, suitable for combination
- circuit control and shutoff valves, straight and angle models
- end caps and plugs
- double nipples for the connection of shutoff valves with female thread
- HERZ-compression unions for pipe connection for copper, thin-walled steel, and plastic pipes
- electronic control systems and HERZ-thermostats

System Components

- 1 **8512 93** **2-way distributor set, nickel-plated with O-ring seal**
consisting of 1 intake distributor and 1 return collector with 2 branch-offs each, as well as 2 seals
- 1 **8513 93** **3-way distributor set, nickel-plated with O-ring seal**
consisting of 1 intake distributor and 1 return collector with 3 branch-offs each, as well as 2 seals
- 1 **8514 93** **4-way distributor set, nickel-plated with O-ring seal**
consisting of 1 intake distributor and 1 return collector with 4 branch-offs each, as well as 2 seals

Distributors Dimension 1 1/4"

Distributor connection with union nut Rp 1 1/4",
Pipe connections G 3/4

- 1 **8510 61** **HERZ-AS-circuit control valve, straight model**
nickel-plated, pre-setting by telescoping flow restriction cone, grey hand-wheel disk
- 1 **8510 60** **HERZ-shutoff valve, straight model**
nickel-plated, with O-ring soft seal, white hand-wheel disk
- 1 **8514 61** **HERZ-AS-circuit control valve, angle model**
nickel-plated, pre-setting by telescoping flow restriction cone, grey hand-wheel disk
- 1 **8514 60** **HERZ-shutoff valve, angle model**
nickel-plated, with O-ring soft seal, white hand-wheel disk

Circuit Control Valves and Shutoff Valves Socket x Male Thread Dimension 1 1/4"

The distributor branch-offs have G 3/4 male threads. Connection to the pipes is established by means of HERZ-compression unions for copper, thin-walled steel or plastic pipes.

- 6274** HERZ-compression union for copper and thin-walled steel pipes,
- 6275** HERZ-compression union with soft seal for copper and thin-walled steel pipes, particularly suitable for hard pipe surfaces (nickel-plated or high-grade steel pipes).
- 6098** HERZ-plastic pipe connection for PE-X-, PB-, and plastic composite pipes.

For dimensions and order numbers refer to the HERZ catalogue.

Pipe Connections G 3/4

HERZ-compression unions establish an absolutely tight and secure connection to copper, thin-walled steel, and plastic pipes. Take into account the instructions for installation.

HERZ-Compression Unions

HERZ-distributors are suitable for:

Max. operating temperature 110 °C
Max. operating pressure 10 bar

The actually permissible operating data (max. temperature and pressure) depend on the pipes and compression unions used.

Hot water purity according to ÖNORM H 5195 and/or VDI-guideline 2035.

For the plastic pipe connections, the following values are applicable if approved by the manufacturer:

Max. operating temperature 80 °C
Max. operating pressure 4 bar

Any higher operating pressure is subject to the written consent of HERZ-Armaturen.

When using HERZ compression unions for copper and steel pipes take into account the permissible temperature and pressure ratings according to EN 1254-2: 1998, as shown in table 5.

Operating Data

Distributors

Plastic Pipe Connections

Compression Unions

We reserve the right to make modifications necessitated by technological progress

HERZ Armaturen

Richard-Strauss-Straße 22 • A-1230 Wien



| | |
|-----------|---|
| 1 8521 54 | End cap with draining and bleeding function, nickel-plated, R 1 1/4". |
| 1 8525 52 | Plug , nickel-plated for pipe connection G 3/4. |
| 1 8514 54 | Spacer nickel-plated, for the installation of angle valves in case of vertical pipe routing, R 1 1/4". |
| 1 8510 54 | Double nipple nickel-plated, for the connection of shutoff valves with female thread to the connection sockets of distributors and return collectors, Rc 1 x G 1 1/4. |
| 1 8522 00 | Holding brackets for distributor installation galvanised, 2 offset holding brackets with sound-insulated screw clips and fastening material |
| 1 8522 20 | Holding brackets , distributor cabinet version galvanised, with a distance between pipe centres of upper and lower distributor of 200 mm, for the installation of distributors in the HERZ-distributor cabinet. |
| 1 6600 00 | HERZ-AS pre-setting key with blue shaft for HERZ-AS circuit control valves |
| 1 6615 00 | 4-mm Allen key for matching the heating circuits |
| 1 6625 00 | HERZ-multi-purpose key for draining and bleeding |
| 1 6206 01 | Hose connection R 1/2" in brass, for draining and filling |

Accessories
to be ordered separately

| | |
|-----------|--|
| 1 6403 02 | Thermostatic upper part Spare upper part for return collector, body mark Δ |
| 1 6413 02 | Shutoff upper part Spare upper part for intake distributor, body mark Δ |

Spare Parts

| Heating circuits | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------|---|---|---|---|---|---|---|---|----|----|----|
| 8512 | 1 | | | 1 | | | | | 1 | | |
| 8513 | | 1 | | 1 | 2 | 1 | | 3 | | 1 | |
| 8514 | | | 1 | | | 1 | 2 | | 2 | 2 | 3 |

Combination of Distributors

Floor heating systems with copper, thin-walled steel or plastic pipes and thermostatic control.

Field of Application

The end cap has bleeding facilities. For bleeding use HERZ-multi-purpose key 1 6625 00.

Bleeding

The end cap is equipped with a draining valve with G 3/4 connection thread for attaching a hose connection (1 6206 01). The draining valve is operated by means of HERZ-multi-purpose key 1 6625 00.

Draining

The distributor entry is equipped with a union nut suitable for connecting

- HERZ-circuit control and shutoff valves (directly)
- shutoff valves with female thread by means of double nipple
- threaded pipes

Connection to the Main Circuit Line

The distributors are mounted either directly onto the wall or inside a distributor cabinet by means of offset holding brackets with sound-insulated screw clips.

Mode of Installation

The O-ring is located in a protected position in an annular groove, thus providing a lasting and reliable seal. The O-ring provides a tight seal thanks to its elasticity. It is sufficient to gently tighten the union nut. The opposite contact surface is protected by a plastic cap up to installation.

The O-Ring Sealing System

- Introduce the O-ring into the groove. Using silicone grease improves adhesion and makes installation easier.
- Remove the protective cap from the next part to be installed.
- Join the two parts.
- Tighten union nut up to the stop. After doing so, the connection is already tight.
- Slightly re-tighten union nut for safety reasons (e.g. dismantling by unauthorised persons).

Installation Coupling of Distributors

Dirt entails the risk of leaks. The sealing surfaces must be kept clean and must not be damaged.

The following optionsDuring installation of the end cap, the following must be taken into account:
For bleeding and draining use HERZ-multi-purpose key 1 **6625** 00, or an Allen key for draining only.
A distance of 50 mm between the end cap and the distributor cabinet is needed for applying the multi-purpose key.

Use of End Caps

The following options are available for hydraulic balancing or shutting off the distributors:

- HERZ-AS-Strangreguliertventil mit Voreinstellung durch ausfahrbaren Drosselkegel.
- HERZ-shutoff valve with O-ring soft seal.

When using angle valves in case of vertical pipe routing, use spacer 1 **8514** 54.

Circuit Control Valves and Shutoff Valves

Pre-setting by means of a telescoping flow-restriction cone permits to limit the flow rate while the full main spindle lift is available at any time. For pre-setting use pre-setting key 1 **6600** 00 (blue shaft).

The inside flow restriction cone is adjustable by means of the pre-setting spindle. The flow restriction cone is flexibly attached to the pre-setting spindle in order to prevent undesired changes of the flow rate due to the effects of foreign bodies.

For actuating the pre-setting refer to Standard Sheet HERZ-AS.

Pre-setting of HERZ-AS-Circuit Control Valve

Matching of the individual heating circuits is performed by adjusting the valves (upper parts) at the intake distributor which can be opened or closed by means of a 5-mm Allen key (1 **6614** 00).

Matching of Heating Circuits

Double nipples permit to connect any shutoff valve with female thread to the connection sockets of the distributors, including circuit control valves, slide valves, and ball valves.

Valve Connection with Double Nipple

When using circuit control valves STRÖMAX-GM or STRÖMAX-M with the HERZ-measuring computer 1 **8902** 00, differential pressure measurement can be performed through the valve.

Differential Pressure Measurement

Any HERZ-thermostat with remote operation, as well as the components of the electronic control systems HERZ-RTC (room temperature computer, DDC-actuating drives) and HERZ-RTR (room thermostats, thermal actuators) can be used to control the thermostatic upper parts.

The thermostatic upper parts are supplied with a protective cap for building work. This cap serves for protection and operation during the installation phase (pipe flushing). In the exceptional case that no thermostat is installed, a HERZ-hand wheel must be used for operation.

Thermostatic Operation

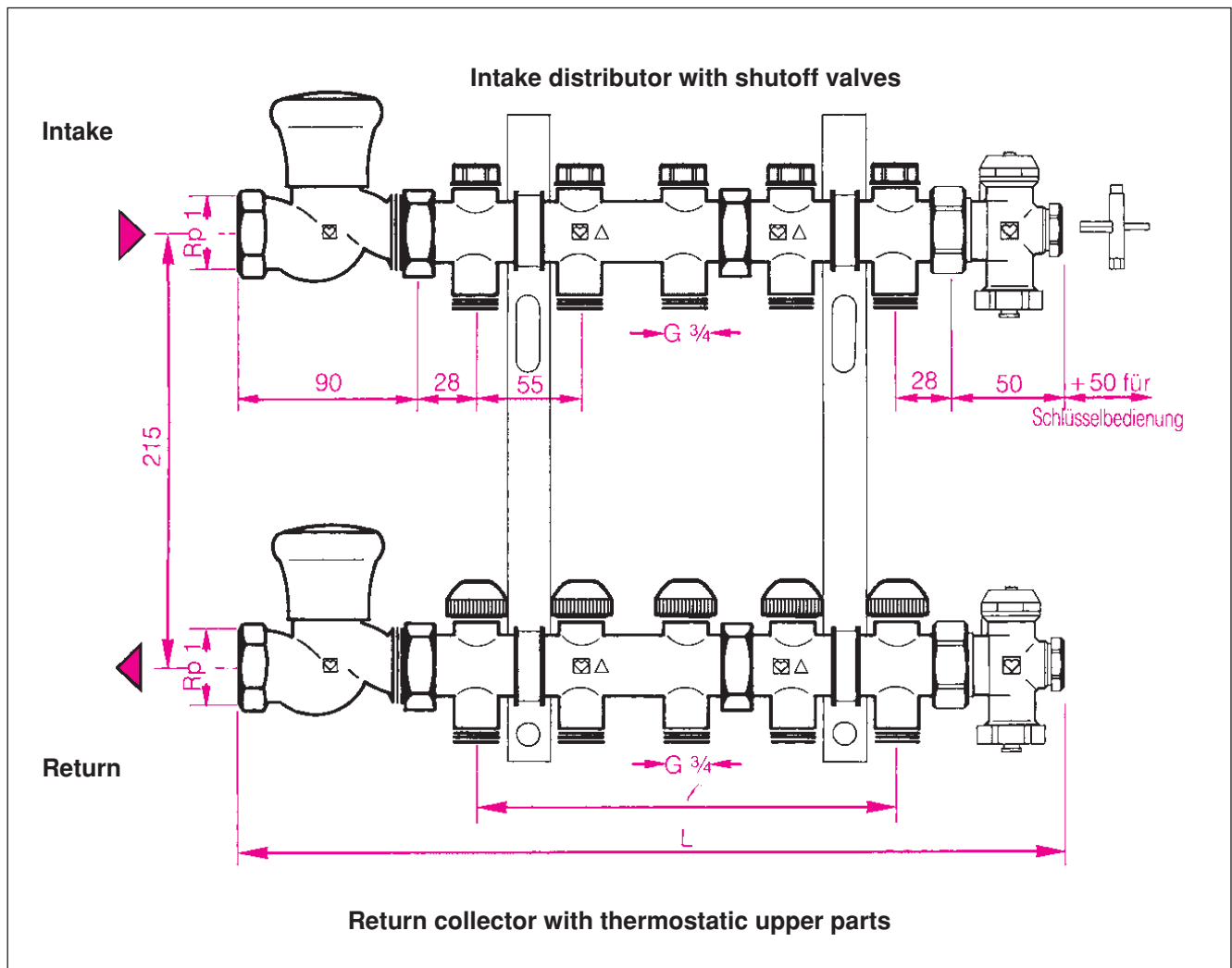
A separate Standard Sheet is available for distributor cabinets.

Distributor Cabinet

| Characteristic | Turn | k _v -Value | |
|----------------|------|-----------------------|-----------------|
| | | 2[K]-deviation | completely open |
| 1 | 0,25 | 0,12 | 0,12 |
| 2 | 0,5 | 0,31 | 0,32 |
| 3 | 1 | 0,4 | 0,46 |
| 4 | 1,5 | 0,53 | 0,66 |
| 5 | 2 | 0,7 | 1,1 |
| 6 | 2,5 | 0,8 | 1,65 |
| 7 | 3 | 0,85 | 2,11 |
| 8 | 3,5 | 0,87 | 2,43 |
| 9 | 4 | 0,88 | 2,65 |

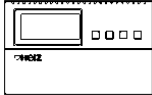

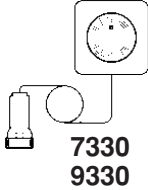
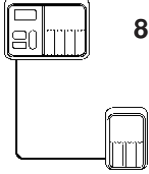
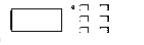




Diagrams k_v-Values

Dimensions in mm




| | | | | | | | | |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|---|
| Number of branch-offs | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Total depth = 88 mm including holding bracket and shutoff valve |
| 1 | 55 | 110 | 165 | 220 | 275 | 330 | 385 | |
| Total length | 251 | 306 | 361 | 416 | 471 | 526 | 581 | |

Connection System for Floor Heating Systems, Dim. 1 1/4"

| Thermostatic Operation | | | Hand Wheel |
|---|--|--|--|
| Continuous Control | | Two-Point or Pulse Control | |
| <p>HERZ-RTC</p>  <p>7940</p>  <p>DCC Actuating Drive</p> <p>7990</p> | <p>HERZ-Thermostats</p>  <p>7330 9330</p>  <p>8330</p> | <p>Room Thermostats</p>  <p>7791</p>  <p>7790</p> <p>Thermal Actuators</p>  <p>7710</p> |  <p>9102</p>  <p>7102</p> |

Circuit Control and Shutoff Valves



1 8510 61
with Pre-setting Function
1 8510 60
with O-Ring Soft Sealing



1 8514 61
with Pre-setting Function
1 8514 60
with O-Ring Soft Seal



8514

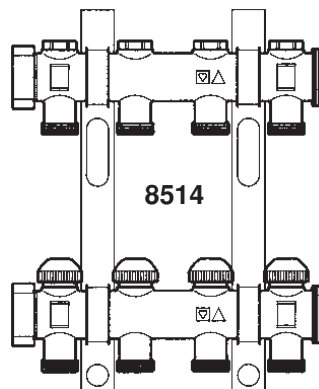
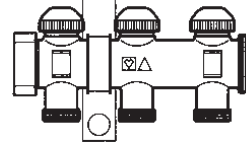
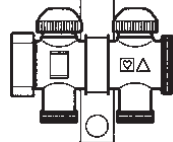
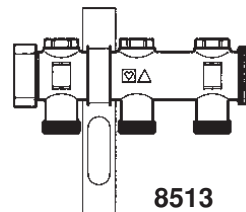
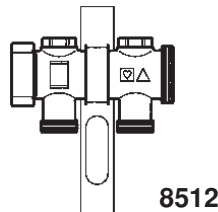
Spacer



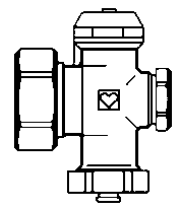
Rc 1 G 1 1/4 8510

Double Nipple

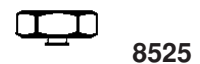
Distributors and Holding Brackets



End Cap



8521



Pipe Connections G 3/4"

Plug

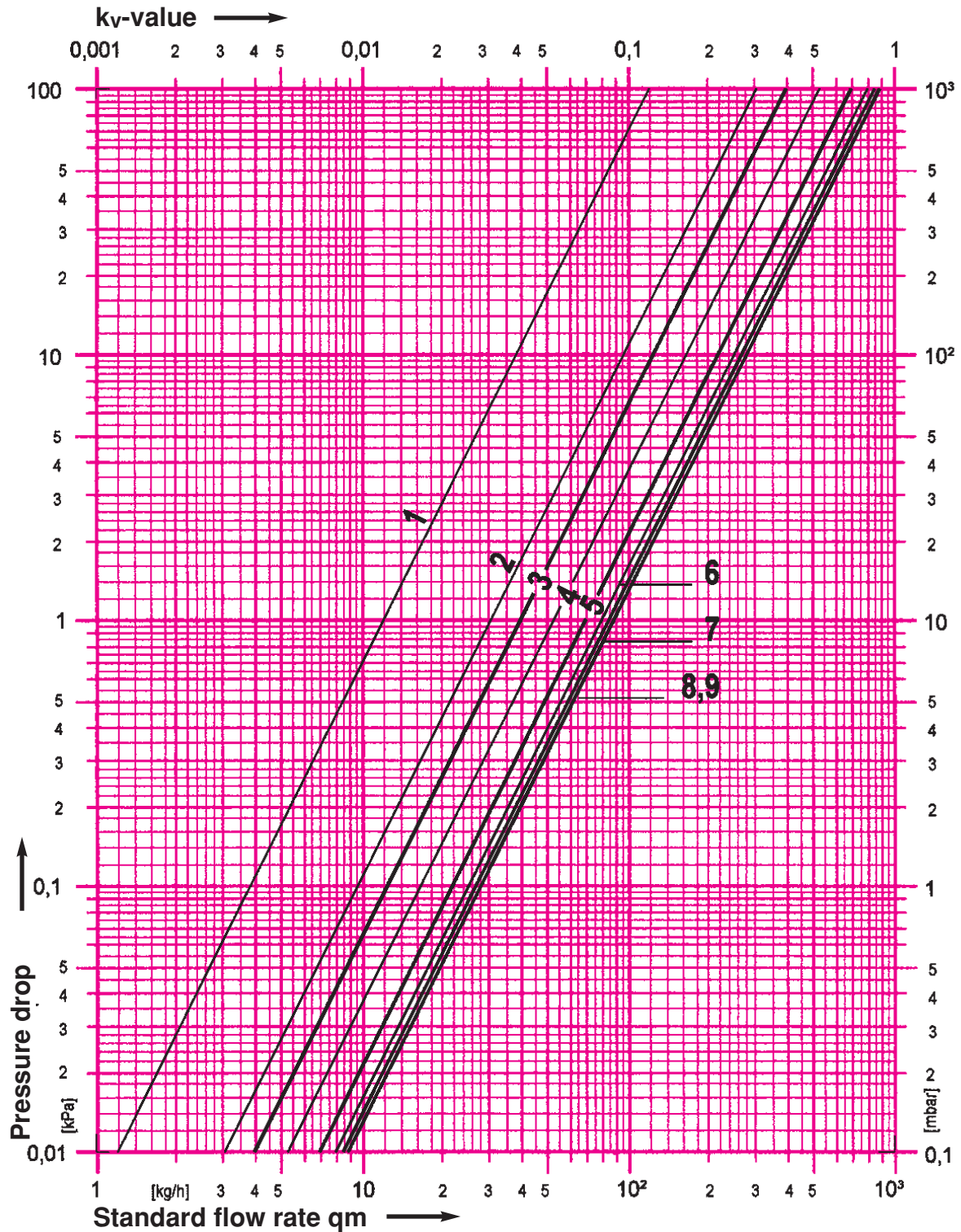
HERZ-Standard Diagram

Distributor for Floor Heating Systems

Art. No. **8512-8514**

Dim. DN 32 R = 1 1/4"

Intake and return of a heating circuit in thermostatic operation 2 Kp-deviation



We reserve the right to make modifications.

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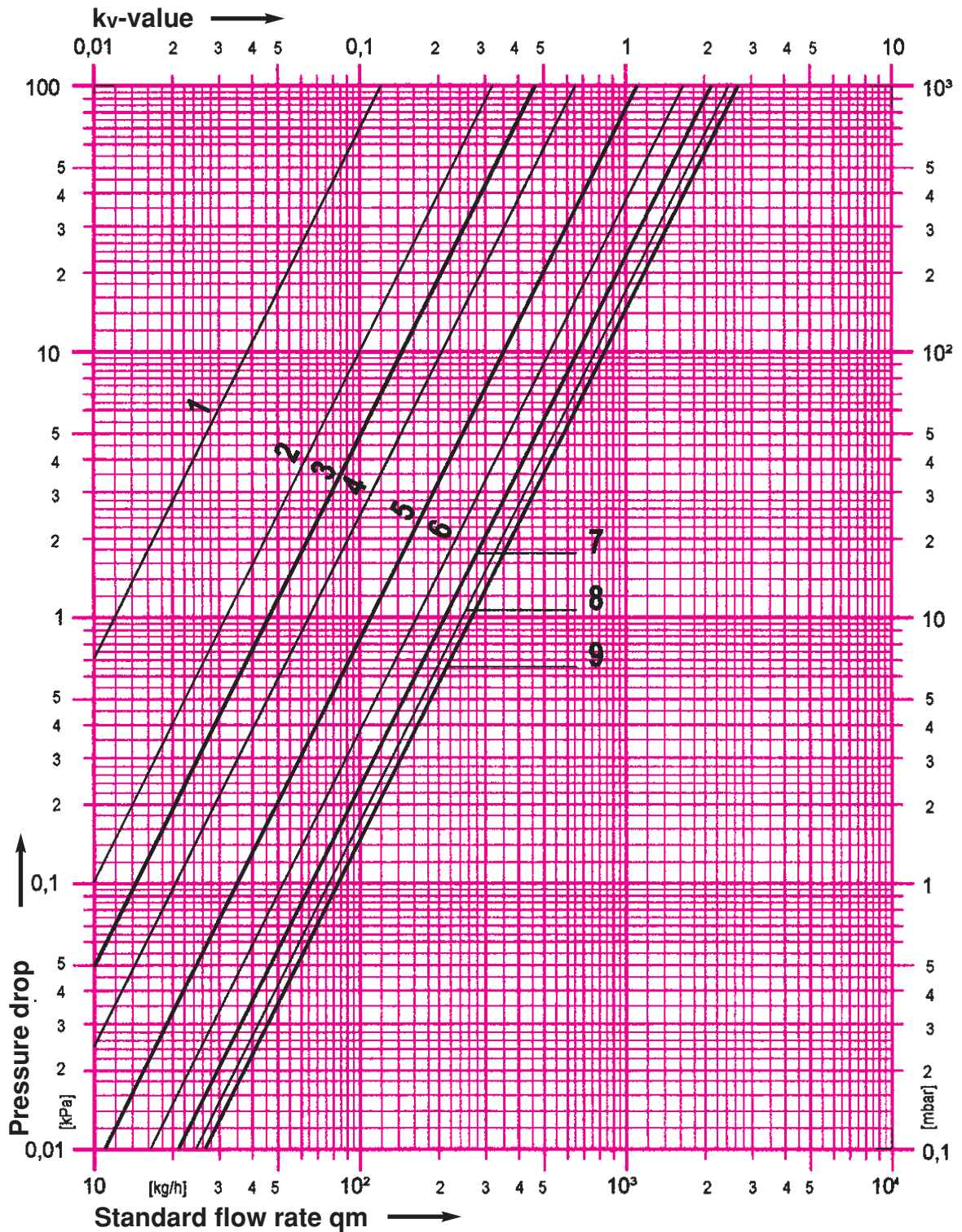
HERZ-Standard Diagram

Distributor for Floor Heating Systems

Art. No. **8512-8514**

Dim. DN 32 R = 1 1/4"

Intake and return of a heating circuit, thermostatic upper part completely open



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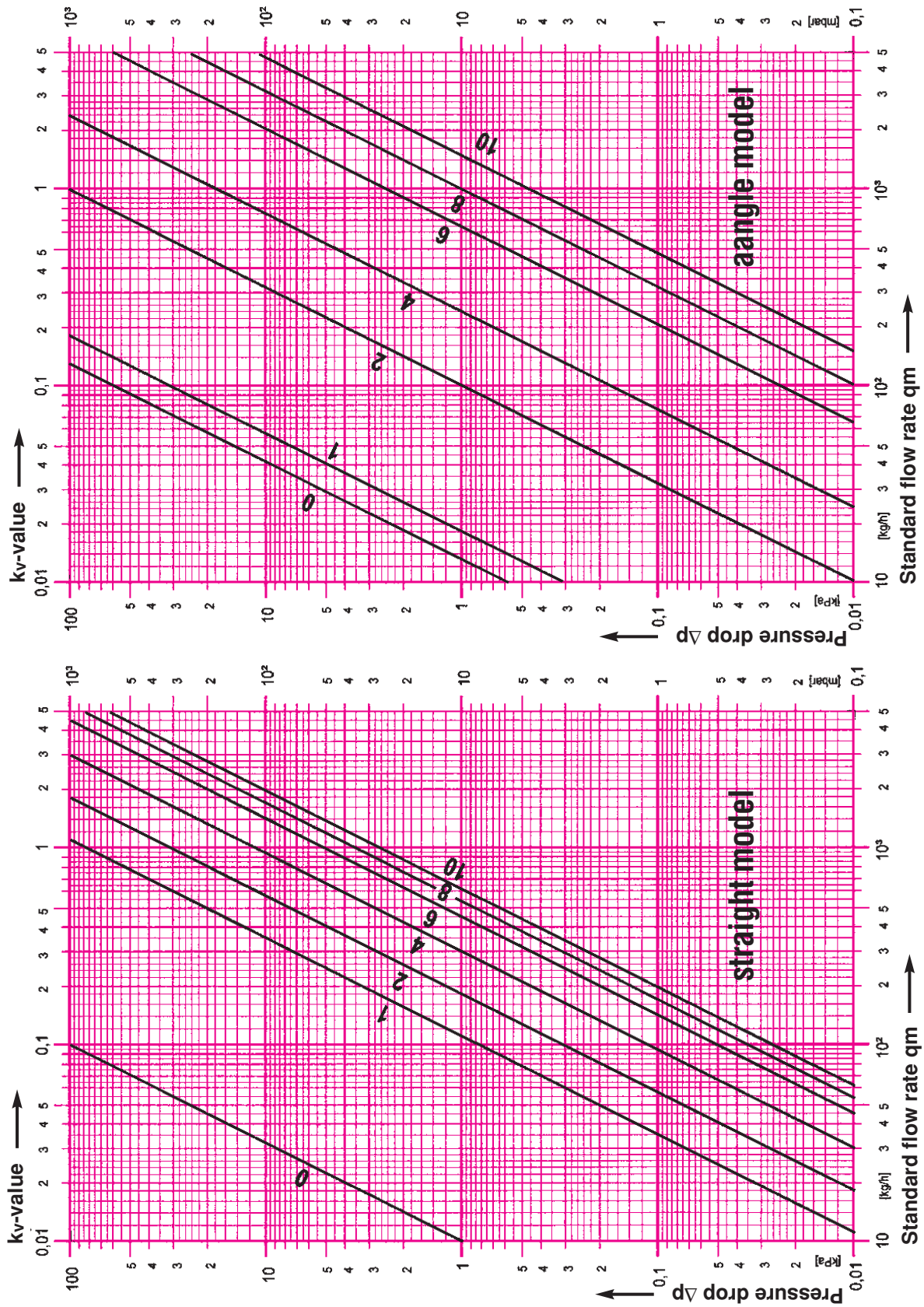
HERZ-Standard Diagram

Circuit Control and Shutoff Valves

Art. No. **8510 • 8514**

Dim. R = 1 1/4"

For shutoff valves **without pre-setting, characteristic 10** is applicable.



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