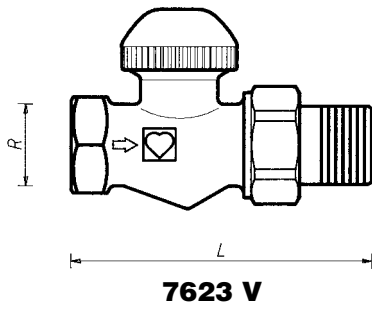


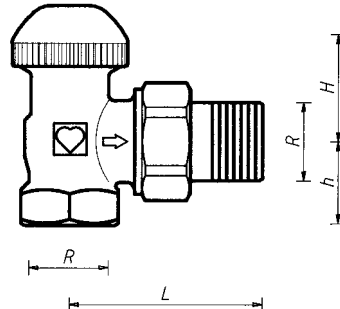
HER Z-TS-98-V

Standard Sheet
7623V/7624V/7628V
7658V/7659V
 Edition 1000 (0999)

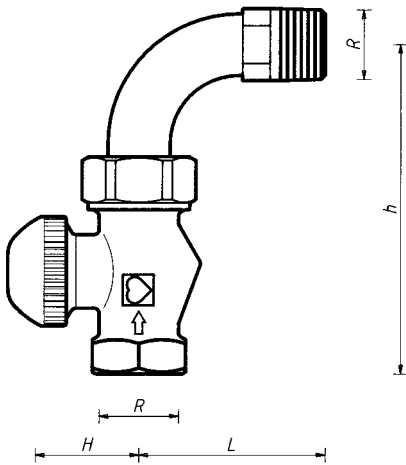
Valve Lower Parts with Continuous Pre-Setting with Readout



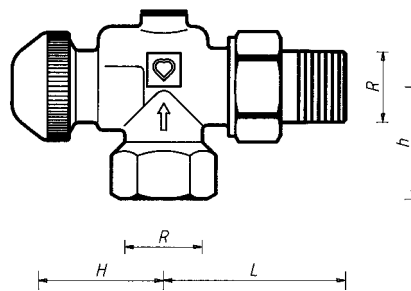
7623 V



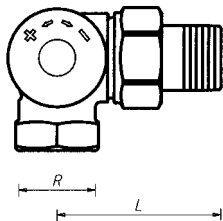
7624 V



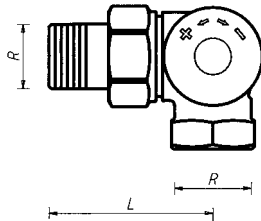
7623 V + 6249



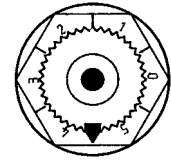
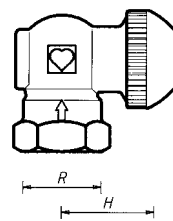
7628 V



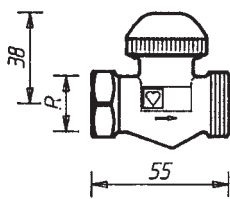
7658 V



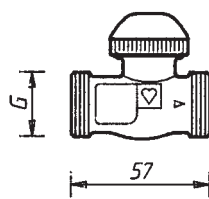
7659 V



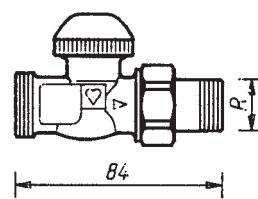
HERZ-TS-98-V
 Thermostatic upper part



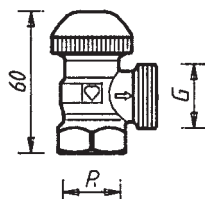
1 7723 71



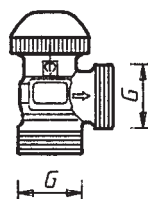
1 7737 67



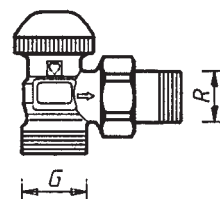
1 7733 67



1 7724 71



1 7724 42



1 7738 67

Special Models

R = R 1/2"
 G = G 3/4

We reserve the right to make modifications necessitated by technological progress.

Art. No.	Designation	DN	R	Ø	L	H	h	Order No.
7623 V	Dimensional Series F Straight valve	10	3/8"	12	75	27	—	1 7623 65
		15	1/2"	15	83	27	—	1 7623 67
7624 V	Dimensional Series F Angle valve	10	3/8"	12	49	27	20	1 7624 65
		15	1/2"	15	54	23	23	1 7624 67

Dimensions in mm for Standard Series EN 215 T 2 HD 1215

Art. No.	Model	R	Ø	L	H	h	Order No.
7623 V + 6249	EN 215 F Straight valve with elbow	3/8"	12	40	27	84	Valve and elbow must be ordered separately
		1/2"	15	54	27	94	
7628 V	Reverse angle model	3/8"	12	49	35	27	1 7628 65
		1/2"	15	55	35	29	1 7628 67
7658 V	AB	1/2"	15	53	26	31	1 7658 67
7659 V	CD	1/2"	15	53	26	31	1 7659 67

Dimensions in mm for HERZ-Series

All models are nickel plated and supplied with an orange screw cap.
Universal models with special socket for threaded pipe connection and compression union:

7623 V	3/8"–1/2"	Straight valve, series F
7624 V	3/8"–1/2"	Angle valve, series F
7628 V	3/8"–1/2"	Reverse angle model
7658 V	1/2"	3-axis valve "AB", radiator to the right of the intake valve
7659 V	1/2"	3-axis valve "CD", radiator to the left

Universal models in straight and angle versions are also available for dimension series "D".

Models and Versions

HERZ-TS-98-V

HERZ-3-D-V

HERZ TS-98-V-valves in special versions, dimension 1/2"

1 7623 71	Straight model, universal socket x male thread G3/4, with cone seal
1 7637 67	Straight model, 2 x male thread G 3/4, cone seal
1 7633 67	Straight model, radiator connection with cone seal, pipe connection male thread G 3/4
1 7624 71	Angle model, universal socket x male thread G 3/4, with cone seal
1 7624 42	Angle model, 2 x male thread G 3/4, cone seal
1 7638 67	Angle model, radiator connection with cone seal, pipe connection male thread G 3/4
1 7648 67	Angle model, special version, radiator connection with cone seal, pipe connection male thread G 3/4

HERZ TS-98-V-valves in special versions

HERZ-TS-90	Valves without pre-setting function
HERZ-TS-90-E	Valves with reduced resistance for one-pipe systems
HERZ-TS-E	Valves with maximum flow for one-pipe systems
HERZ-TS-90-V	Valves with continuous, concealed pre-setting
HERZ-TS-90-kv	Valves with fixed kv-values for district heating systems

Separate standard sheets are available for these models.

Other Models

Maximum operating temperature 110 °C
Maximum operating pressure 10 bar
Heating water purity according to Austrian standard ÖNORM H 5195 and/or VDI-guideline 2035.

When using HERZ compression unions for copper and steel pipes take into account the permissible temperature and pressure ratings according to EN 1264-2: 1998 specified in Table 5.

A maximum operating temperature of 80 °C and maximum operating pressure of 4 bar applies for plastic pipe connections, if permitted by the pipe manufacturer.

Operating Data

HERZ Compression Unions

Water heating systems in which hydraulic balancing via return valves is not possible or not desired.

Field of Application

Iron pipe connection 6210, with cone seal, installed.
It is recommended that the HERZ assembly key 6680 be used.

Radiator Connection

To be used instead of the radiator connection and on the male thread G 3/4:

6210	1/2"	Iron pipe connection, lengths 26 or 35 mm
6211	1/2"	Reducing connection, 1/2" x 3/8"
6213	3/8"	Reducing connection 3/8" x 1/2"
6218	3/8"-1/2"	Long threaded bush, without nut, can be shortened to compensate for differences in structural dimensions, lengths 3/8" x 40; 1/2" x 39, 42 and 76 mm
6218	1/2"	Threaded bush, without nut, lengths 36, 48 and 76 mm
6235	3/8"-1/2"	Soldering connection, 3 x 8" x12; 1/2" x 12, 15 and 18 mm
6249	3/8"-1/2"	Iron pipe connection elbow, without nut, with cone seal
6274	G 3/4	Compression union for copper and thin-walled steel pipes, for external pipe diameters 8,10,12,14,15,16 and 18 mm
6275	G 3/4	Compression union with soft seal for copper and thin-walled steel pipes, particularly suitable for hard special steel pipes and pipes with hard galvanised surfaces. For external pipe diameters 12,14 and 15 mm
6098	G 3/4	Compression union for PE-X-, PB and plastic composite pipes.

To be used at the socket side of the valve:

6219	1" x 1/2"	Reduction socket, brass version, for pipe-valve connection, female thread (pipe) x male thread (valve), 1" x 1/2", 1 1/4" x 1/2"
6066	M 22 x 1,5	Plastic pipe connection for PE-X-, PB and plastic composite pipes, to be used with adapter 1 6272 01 (R 1/2 x M 22 x 1.5)
6098	G 3/4	Plastic pipe connection for PE-X-, PB and plastic composite pipes, to be used with adapter 1 6266 01 (R 1/2 x G 3/4).

For pipe dimensions of plastic pipe connections please refer to Herz catalogue.

Further Connecting Options

The universal models are equipped with special sockets offering the option of connecting either a threaded pipe or a calibrated soft-steel or copper pipe, the latter two by means of a compression union. The compression union must be ordered separately.

When using R = 1/2" valves for external pipe diameters of 10, 12, 14, 16, and 18 mm, use adapter Art. No. 6272 between valve and compression union.

Pipe Ø D mm		12	10	12	14	15	16	18
Valve	R =	3/8"	1/2"					
Adapter	Order No.		1 6272 01	1 6272 01	1 6272 01		1 6272 01	1 6272 11
Compression Union	Order No.	1 6292 00	1 6284 00	1 6284 01	1 6284 03	1 6292 01	1 6284 05	1 6289 01

We suggest using support sleeves for the installation of soft steel or copper pipes with compression union. For perfect compression union installation, it is imperative to lubricate the thread of the locking nut as well as the olive with oil. We refer to our instructions for installation.

Pipe Connection

Presetting is performed by means of a flow restrictor downstream of the valve seat enclosing the seat seal. This flow restrictor is continuously adjustable from outside. It does not obstruct the working lift of the valve spindle.

Presetting can be performed manually by means of the orange presetting button, by setting the pointer on the presetting button to the figure on the scale of the upper part obtained by calculation or from the HERZ standard diagram.

For convenient presetting, the HERZ-TS-98 setting key (1 **6819** 98) is available. which engages with the teeth of the presetting button.

Presetting Function

HERZ-TS-90 valves are available in four series with different upper parts.

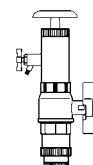
- HERZ-TS-90 – standard version
- HERZ-TS-90-k_v – thermostatic valves with fixed k_v-values
- HERZ-TS-90-V – thermostatic valves with continuous presetting
- HERZ-TS-98-V – thermostatic valves with continuous presetting and readout

If it turns out, while the heating system is in operation that another upper part is to be preferred for individual control of volume flows through the radiator, the HERZ-tool makes replacing of the upper part easy, even while the heating system is on.

The seat seal can be cleaned in the same way. This is an easy way of removing defects in radiator thermostatic valves, caused, e.g., by foreign substances such as dirt, welding or soldering residues.

When working with the HERZ changing tool follow the instructions enclosed with this device.

Compatible with HERZ-TS-90 Changing the Upper Part of a Thermostatic Valve



1. Remove HERZ thermostatic head, handwheel or screw cap.
 2. Directly set the orange setting button (set between 4 and 5 by the manufacturer) to the desired presetting step 1–6 (0) either manually or by means of the setting key (1 **6819** 98).
 3. Install HERZ thermostatic head or handwheel.
- The value set is thus secured.

Setting Process



**HERZ-TS-98-V-
Setting Key** 1 **6819** 98

The spindle seal is a special sealing ring which keeps maintenance requirements at a minimum and ensures ease of valve operation over a long period of time. If the spindle seal is worn, the valve upper part is replaced which means simultaneous replacement of the seat seal which may also be damaged.

The presetting step is to be re-set after changing the upper part.

1. Remove the HERZ thermostatic head or the HERZ-TS handwheel.
2. Unscrew and remove the old upper part and replace it with a new one.
3. Replace HERZ thermostatic head or HERZ-TS handwheel.

The upper part can be changed by means of the HERZ changing tool while the heating system is under pressure. Follow the instructions for the HERZ changing tool.

Order Number for HERZ-TS-98-V Valve upper part: 1 **6367** 98

Spindle Seal



**HERZ-TS-98-V-
Valve Upper Part**

The screw cap is used for operation during the installation phase (pipe flushing). The thermostatic valve is formed by removing the screw cap and screwing in the HERZ thermostatic head without draining the heating system.

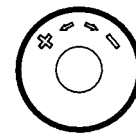
Adjustment of nominal lift by means of screw cap:

On the knurled part of the circumference of the screw cap there are two setting marks (webs) in alignment with the "+" and "-" marks.

1. Close the valve by turning the screw cap clockwise
2. Mark the position corresponding to the setting mark "+"
3. Turn the screw cap anticlockwise until the setting mark "-" is at the position marked according to item 2.

HERZ-Thermostatic Valve

Nominal Lift



In the exceptional case that the HERZ thermostatic valve lower part is not equipped with a HERZ thermostatic head, the HERZ-TS handwheel is used to replace the screw cap.

During installation, follow the instructions enclosed with the handwheel.

**HERZ-TS
Handwheel**



The lower part of the thermostatic valve is incorporated into the radiator intake with the flow in the direction of the arrow (arrow on the valve body). If possible, the HERZ thermostatic head should be in a horizontal position in order to permit optimum room temperature control and minimise interference.

Installation

Under no circumstances should the HERZ thermostatic head be exposed to direct sunlight or to the effects of equipment emitting relevant quantities of heat, e.g. TV sets. If the radiator is covered by curtains this will lead to the formation of a heat accumulation zone in which the thermostat cannot sense the room temperature and consequently is not in a position to properly control it. In such cases, use the HERZ thermostat with remote sensor or the HERZ thermostat with remote adjustment. For detailed information on the HERZ thermostats consult the individual standard sheets.

Important for Installation

After the end of the heating period open the valve completely by turning it in an anti-clockwise direction to prevent dirt deposits at the valve seat.

Summer Setting

- | | |
|------------------|--------------------------------------------------------------------------|
| 1 6680 00 | Assembly key for radiator connections |
| 1 6807 90 | HERZ-TS-90 Assembly key |
| 1 6819 98 | HERZ-TS-98-V Setting key |
| 1 7780 00 | HERZ Changing tool, changing tool for thermostat upper parts |
| 1 7102 80 | HERZ-TS-90 Handwheel, Series 7000 with pre-setting and locking function. |
| 1 9102 80 | HERZ-TS-FV Handwheel, Series 9000 "Design" |

Accessoires

Handwheels

- | | |
|------------------|---------------------------------|
| 1 6367 98 | HERZ-TS-98-V Thermostatoberteil |
|------------------|---------------------------------|

Spare Parts

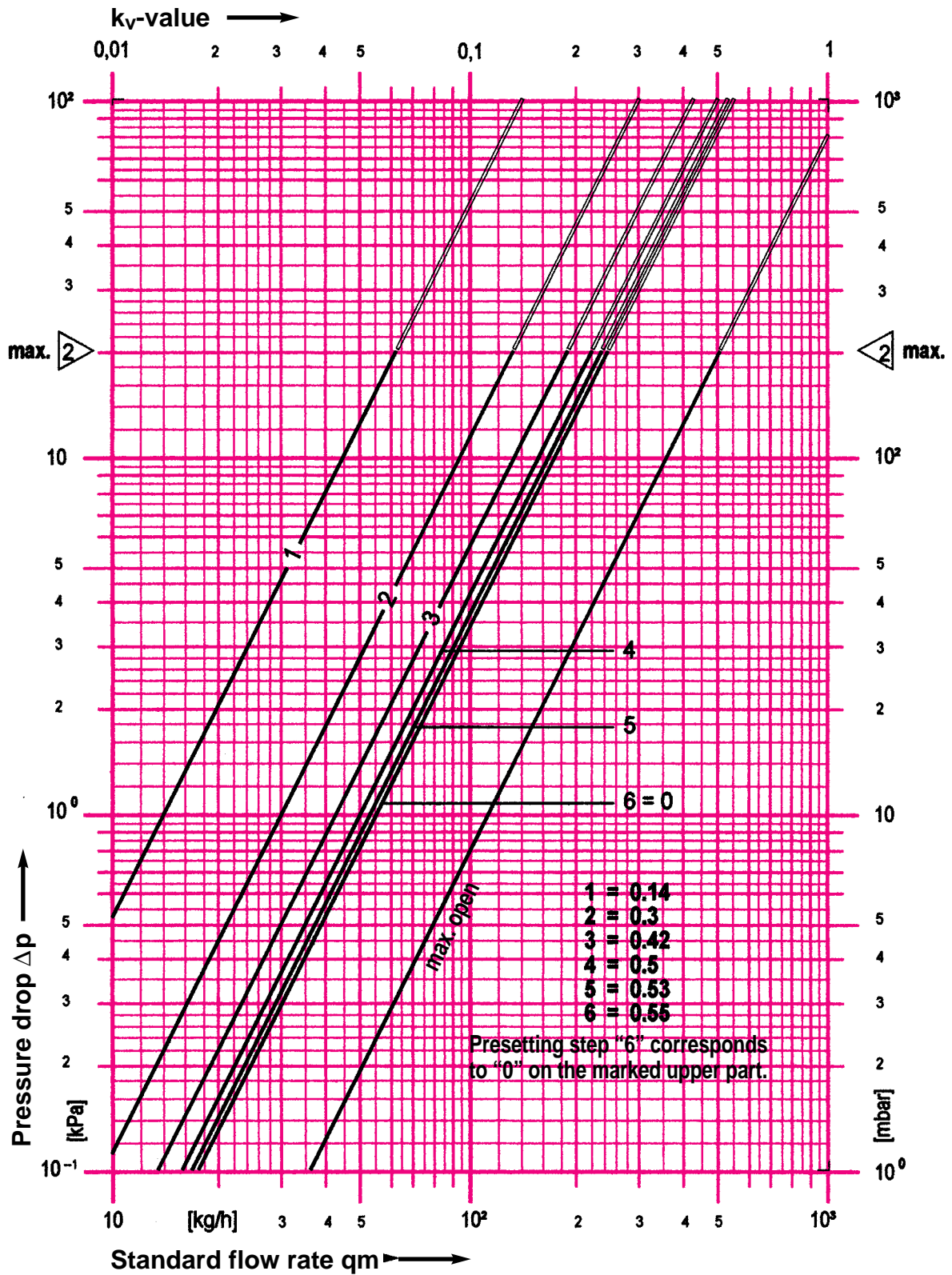
HERZ Standard Diagram

HERZ-TS-98-V

Art. No. 7623 V – 7659 V

Dim. DN 10 R = 3/8" · DN 15 R = 1/2"

Valve dimensioning (Δp) must be performed in accordance with the "VDMA-Instruction Sheet for Planning and Hydraulic Balancing of Heating Systems with Thermostatic Radiator Valves."



The data specified are for a static pressure of 2.5–10 bar.

We reserve the right to make modifications.

HERZ Armaturen

Richard-Strauss-Straße 22 • A-1230 Wien

