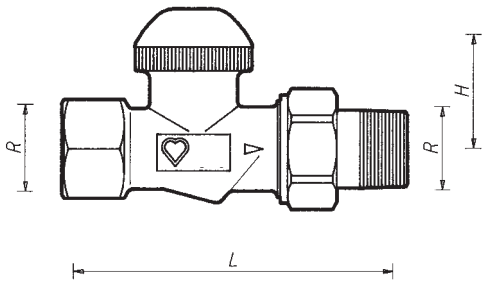
HERZ-TS-90-kv

Thermostatic Valves with Fixed kv-Values

Standard Sheet for

7713–7718

Edition 1000 (0999)



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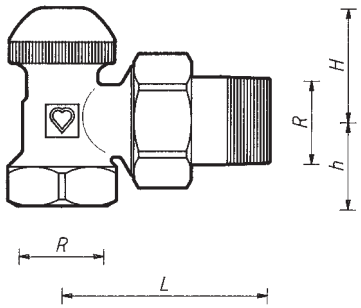

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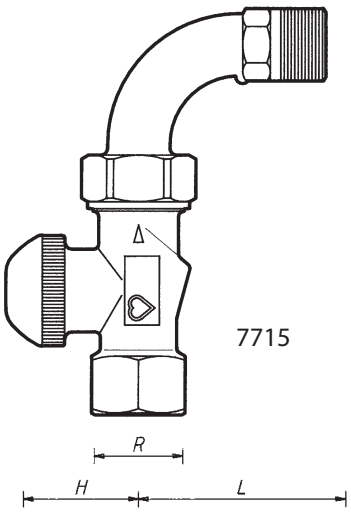

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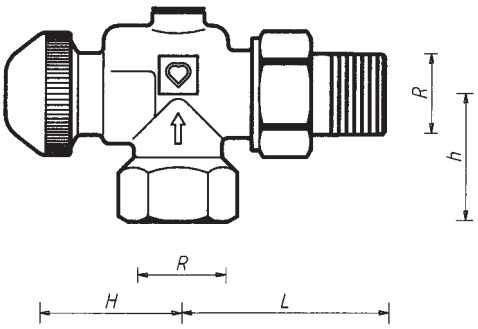

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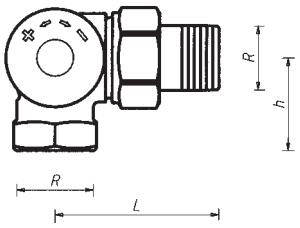

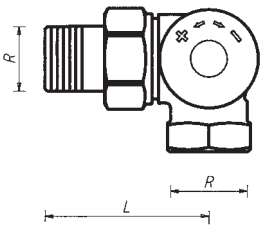

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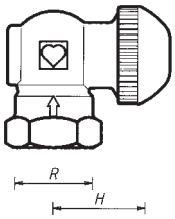

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011
EN 215
tested and registered

certificated products
1 **7723** 96
1 **7724** 96

Art.-No.	Designation	DN	R	Ø	L	H	h
7713 7723	Straight valve EN 215, series D	15	1/2"	15	95	27	—
7714 7724	Angle Valve EN 215, series D	15	1/2"	15	58	23	26
7715	Straight valve with elbow	15	1/2"	15	54	27	107
7716 7758	3-axis valve "AB"	—	1/2"	15	53	26	31
7717 7759	3-axis valve "CD"	—	1/2"	15	53	26	31
7718 7728	Reverse Angle Valve	—	1/2"	15	55	35	29

Dimensions in mm

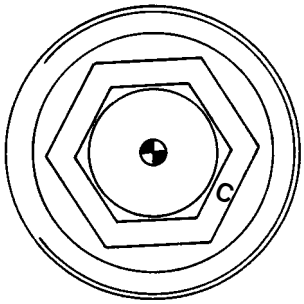
We reserve the right to make modifications necessitated by technological progress.

HERZ Armaturen

Richard-Strauss-Straße 22 · A-1230 Wien

Markings of Valves and k_V-Inserts

The different k_V-inserts are marked by a letter code at the upper part and by colour rings at the valve exterior. The k_V-inserts can be changed under pressure by means of the HERZ changing tool.



k_V-value	Article Number	Letter	Colour Ring
0.06	1 **6365** 69	B	blue
0.12	1 **6365** 79	C	green
0.25	1 **6365** 89	D	yellow
0.5	1 **6365** 99	E	white
0.6	1 **6390** 91	none	none

Models

All models are nickel plated with a white screw-cap and are universal models with special socket for threaded pipe and compression union.

All valves can be supplied with 5 different k_V-inserts.

When placing orders add the figure corresponding to the k_V-value identification character to the article number.
An example: HERZ-TS-90, straight valve with k_V 0.06 = Art.-No. 7713 B = order number 1 **7713** 69.

Order numbers

Artikel-No.	R	Design Type	Order No.	Identification character				
				B	**C**	**D**	**E**	**F**
7713	1/2"	Straight valve EN 215, series D	1 **7713**	69	79	89	99	
7723			1 **7723**					96
7714	1/2"	Angle valve EN 215, series D	1 **7714**	69	79	89	99	
7724			1 **7724**					96
7715	1/2"	Straight valve with elbow	1 **7715**	69	79	89	99	96
7716	1/2"	3-axis valve "AB"	1 **7716**	69	79	89	99	
7758			1 **7758**					91
7717	1/2"	3-axis valve "CD"	1 **7717**	69	79	89	99	
7759			1 **7759**					91
7718	1/2"	Reverse Angle Model	1 **7718**	69	79	89	99	
7728			1 **7728**					91

Operating Data

Maximum operating pressure: 110 °C
Maximum operating temperature 10 bar

Hot water purity in conformity with ÖNORM H 5195 or VDI-guideline 2035.

Compression Union

When using HERZ compression unions for copper and steel pipes, observe the permissible temperatures and pressures as specified in EN 1254-2:1998 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.

Instructions for Installation

Use clean heating water only in order to prevent clogging of the apertures. A fine filter and/or suspended particle separator must be provided by the customer.

Field of Application

Water heating systems, that guarantee exact limitation and adjustment of the flow rate to the individual radiator.

Radiator Connection

Iron pipe connection 6210 or iron elbow pipe connection 6251, cone seal, fitted.
It is recommended that the HERZ assembly key 6680 be used.

Other Connecting Options

Please refer to the HERZ Catalogue for order numbers.

To be used instead of the radiator connection

6210	1/2"	Iron pipe connection, lengths 26 mm and 35 mm
6211	1/2"	Reducing connection, 1/2" x 3/8"
6218	1/2"	Long threaded bush, without nut, can be shortened to compensate for differences in structural dimensions, lengths 39, 42 and 76 mm
6218	1/2"	Threaded bush, without nut, lengths 36, 48 and 76 mm
6235	1/2"	Soldering connection for pipe external diameters 12, 15 and 18 mm.
6274	G 3/4	Compression union for copper and thin-walled steel pipes, pipe external diameters 8, 10, 12, 14, 15, 16, 18 mm
6275	G 3/4	HERZ 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 pipe external diameters 12, 14, 15 mm.
6098	G 3/4	HERZ compression union for PE-X-, PB and plastic composite pipes.

For use on the socket side of the valve:

6219	1/2"	Reduction socket, brass, for connecting pipe and valve, 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, for use 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, for use with adapter 1 **6266** 01 (R 1/2 x G 3/4).

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

Pipe Connection Universal Models

The universal models are equipped with special sockets permitting connection of a threaded pipe or of a calibrated soft-steel or copper pipe, the latter by means of a compression union. The compression Union must be ordered separately.

Use adapter, Art. No. 6272 between valve and compression with valves for external pipe diameters 10, 12, 14, 16 or 18 mm.

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

We recommend use of support sleeves for the installation of soft steel or copper pipes with compression unions. For perfect installation, it is imperative to lubricate the thread of the locking nut (male thread and female thread) as well as the olive itself with silicon oil. We refer to our instructions for installation.

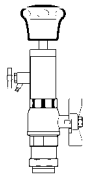
Special Design Features

Changing the Upper Part of a Thermostatic Valve

The upper part of the HERZ thermostatic valve can be changed under pressure using the HERZ changing tool for the purpose of:

- Equipping the valve with another thermostatic valve upper part with fixed, stepped k_V-values or with pre-adjustable upper part. This allows volume flows through the radiator to be individually adjusted to requirements.
- Cleaning the seat seal at the spindle and/or changing the upper part of the valve. Thus any problems with radiator valves caused e.g. by foreign sustances such as dirt, welding and soldering residues can be easily resolved.

When using the valve with the new upper part follow the instructions enclosed with the HERZ changing tool.



Spindle Seal

An O-Ring is used as a spindle seal. It is located in a brass chamber which can be changed during operation. The O-Ring keeps maintenance requirements at a minimum and permits smooth valve operation over a long period of time.

Changing the O-Ring

1. Dismantle the HERZ thermostatic and/or the HERZ-TS-handwheel.
2. Then unscrew the O-Ring chamber including the O-Ring and replace it with a new one. When doing this use a wrench to hold the upper part. During dismantling the valve is completely open and therefore sealed tight. However, a few drops of water may leak out.
3. For re-assembly, follow the above toward upstream steps in reverse sequence. When installing the HERZ-TS handwheel, turn to make sure that the valve closes.

Article number for O-Ring set: 1 **6890** 00

HERZ-TS-90 O-Ring-Chamber

HERZ-Thermostatic Valve

The screw cap is 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.

Nominal Lift

Setting the nominal lift with the 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 anti-clockwise until the setting mark "–" is at the position marked under item 2.

Installation

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). The HERZ thermostatic head should be in a horizontal position if possible in order to permit optimum room temperature control with minimum interference.

Important for 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 properly sense the room temperature and consequently cannot 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.

Summer Setting

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.

HERZ-TS Handwheel

In case that the lower part of a HERZ thermostatic valve is not equipped with a HERZ thermostatic head the HERZ-TS handwheel will replace the screw cap.

During assembly follow the enclosed instructions.

Accessories

1 **6680** 00 HERZ Assembly key for connections
1 **6807** 90 HERZ-TS-90 Assembly key
1 **7780** 00 HERZ Changing tool for thermostat upper parts

Handwheel

1 **7102** 80 HERZ-TS-90 Handwheel, Series 7000 with pre-setting and locking function.
1 **9102** 80 HERZ-TS-90 Handwheel, Series 9000 "Design"

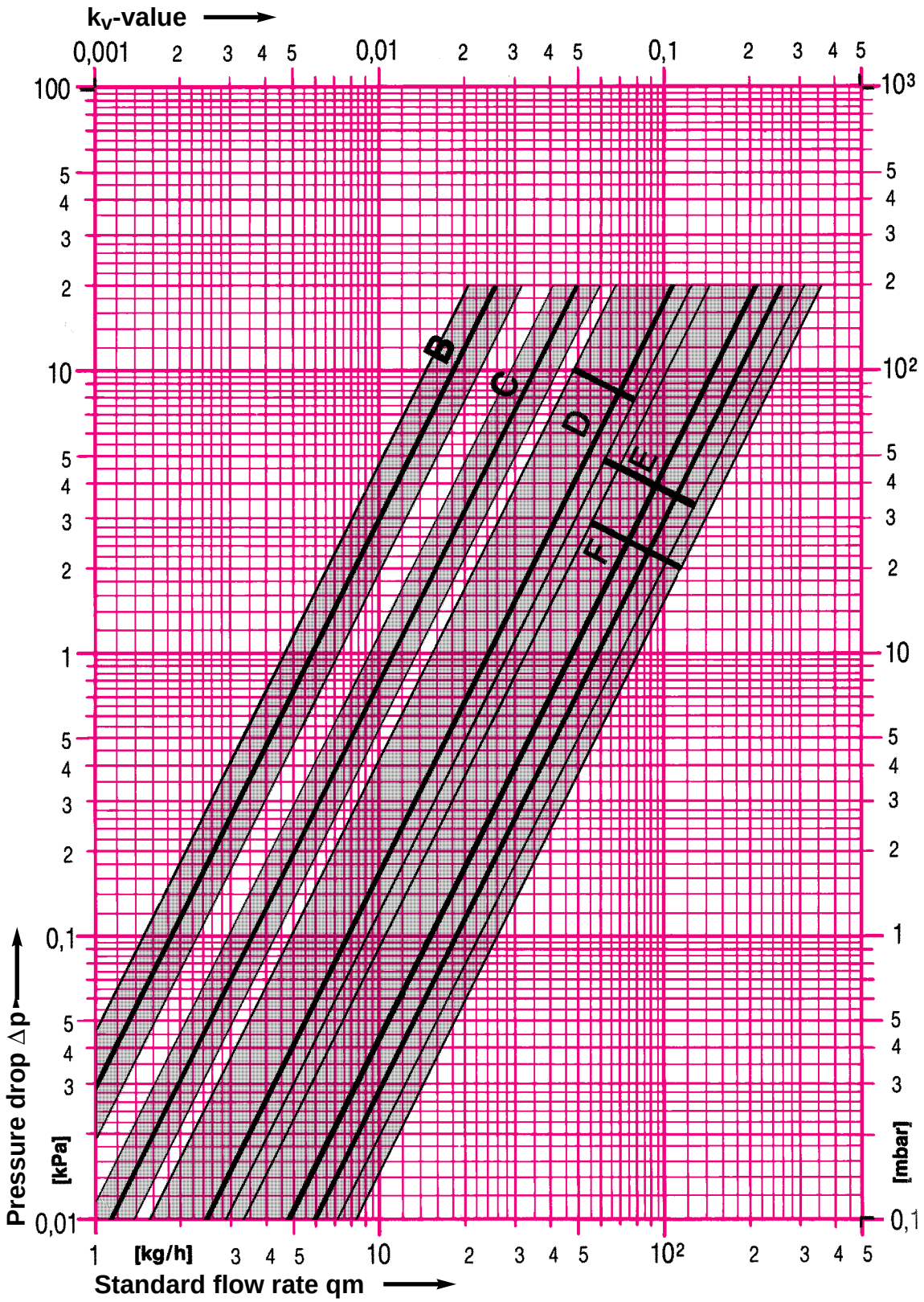
Spare Parts

1 **6365** Thermostatic upper part with fixed k_V-values. Please refer to the HERZ catalogue for order numbers
1 **6890** 00 HERZ-TS-90 O-Ring set

HERZ Standard Diagramm	HERZ-TS-90-k_V
Art. No. 7713 – 7718	Dim. DN 15 R = 1/2"

Pressure drop diagram with k_V-inserts 6365 B–F

The thick central lines show the pressure drop at 2 K proportional band.
The thin lines to the left show the value at 1 K, the lines to the right show the pressure drop at 3 K proportional band.



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