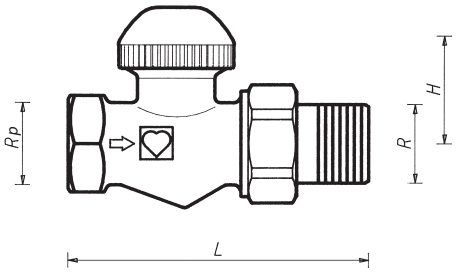
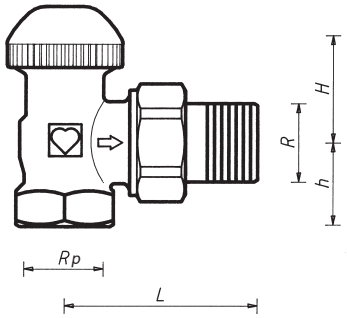
HERZ-TS-90-H

Thermostatic Valve M30x1,5

Data sheet for 7723 /7724 /7728 /7758 /7759, Issue 0921



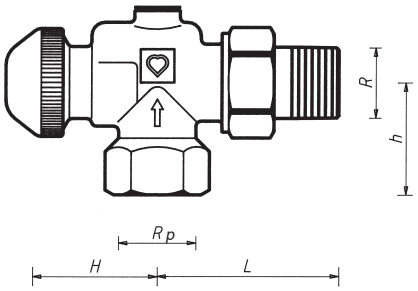
7723



7724

011
EN 215
checked and registered

Certified products:
1 7723 26
1 7724 26



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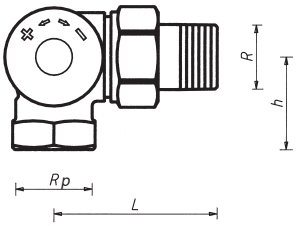
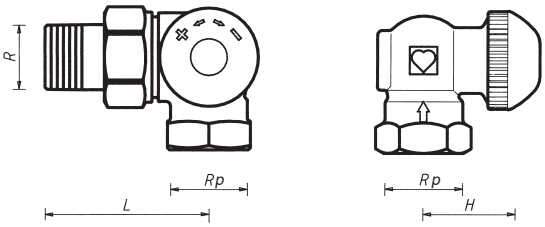
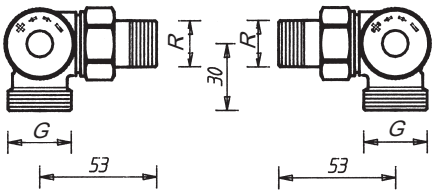


1 **7758** 26

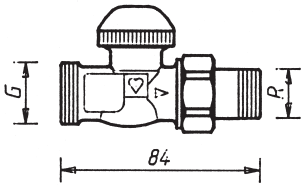


1 **7759** 26

Special models



1 **7745** 26 1 **7746** 26



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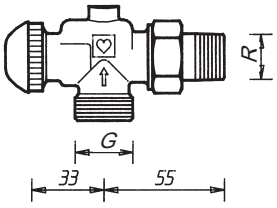
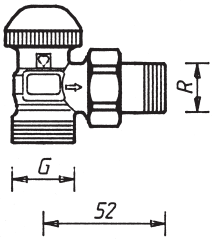


1 **7738** 26



1 **7734** 26

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

Dimensions in mm

Art. No.	Designation	DN	R	Ø	L	H	h	Order No.
7723	Dimensional series „D“ Straight model	15	1/2	15	95	27	-	1 **7723** 26
7724	Dimensional series „D“ Angle model	15	1/2	15	58	23	23	1 **7724** 26
7728	Reverse angle model		1/2	15	55	35	33	1 **7728** 26
7758	AB		1/2	15	53	26	31	1 **7758** 26
7759	CD		1/2	15	53	26	31	1 **7759** 26

Models

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

HERZ-TS-90-H

7723 **1/2** straight model dimensional series D
7724 **1/2** angle model dimensional series D
7728 **1/2** reverse angle model dimensional series D

HERZ-3-D-H

7758 **1/2** 3-axis valve „AB“, valve left of radiator
7759 **1/2** 3-axis valve „CD”, valve right of radiator

HERZ-TS-90-H valves in special versions

HERZ-TS-90-H valves in special versions, dimension 1/2

1 **7733** 26 Straight model, radiator connection with cone, pipe connection male thread G 3/4 with cone
1 **7734** 26 Angle model, radiator connection with cone, pipe connection male thread G 3/4 with cone
1 **7745** 26 3-axis valve „AB“, radiator connection with cone, pipe connection male thread G 3/4 with cone
1 **7746** 26 3-axis valve „BC“, radiator connection with cone, pipe connection male thread G 3/4 with cone
1 **7738** 26 Reverse angle model, radiator connection with cone, pipe connection male thread G 3/4 with cone

Operation data

Maximum operating temperature 120 °C
Maximum operating pressure 10 bar
Water purity in accordance with the ÖNORM H 5195 and VDI 2035 standards.

HERZ compression adapters

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. The plastic pipe connections are suitable for application classes 4 and 5 according to ISO 10508 (panel heating and radiator connection) and for pipes made of PE-RT (EN ISO 22391), PP (EN ISO 15874), PB (EN ISO 15876) und PE-X (EN ISO 15875). This results in a maximum operating temperature of 95 °C at 10 bar. It is up to the user to select the operating pressure and temperature for the respective pipe type so that the standard values and the permissible operating data of the manufacturer are adhered to.

Field of application

Water heating systems

Radiator connections

Iron pipe connection **6210** with cone seal, mounted.
It is recommended to use HERZ assembly key **6680**.

Further connecting options

Order numbers can be found in the HERZ Product Range.

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

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 36, 39, 42, 48 bzw. 76 mm.
6235	1/2	Soldering connection for pipe external diameters,1/2 x 12, 15 bzw. 18.
6249	1/2	Connection elbow for iron pipes, without nut, with cone seal.
6274	G 3/4	Compression union for copper and thin-walled steel pipes, external pipe diameters 8,10, 12, 14, 15, 16, 18. 8,10,12,14,15,16,18 mm
6276	G 3/4	Compression adapter with soft seal for copper pipes. For external pipe diameters 12, 15 und 18 mm.
6098	G 3/4	Plastic pipe connections G 3/4 for PE-X, PB- und aluminium composite pipes, consisting of spigot, olive and union nut G 3/4 with cone.

For use on the socket side of the valve:

6219	1/2 – 3/4	Reduction socket, brass, for connecting pipe and valve, female thread (pipe) x male thread (valve) G1 x R1/2, G1¼ x R1/2, G1 x R3/4, G1¼ x R3/4.
6066	M 22 x 1,5	Plastic pipe connection for PE-X-, PB and plastic composite pipes, for use with adapter 1 **6272** 01 (G 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 (G 1/2 x G 3/4).

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

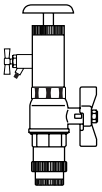
Pipe connecting, universal models

The universal models are equipped with special sockets offering the option of connecting either a threaded pipe or calibrated soft-steel or copper pipe, the latter two by means of a compression union.The compression union must be ordered separately.
When using Rp = 1/2 valves for external pipe diameters of 10, 12, 14, 16 and 18 mm use adapter Art. No. 6272 between valve and the compression union.

Pipe Ø D mm		12	10	12	14	15	16	18	18
Valve	Rp =	3/8	1/2						3/4
Adapter	Ord. No.		1 **6272** 01	1 **6272** 01	1 **6272** 01		1**6272** 01	1 **6272** 11	
Comp. union	Ord. No.	1 **6292** 00	1 **6284** 00	1 **6284** 01	1 **6284** 03	1 **6292** 01	1 **6284** 05	1 **6289** 01	1 **6292** 02

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 thermostat valve

1 **7780** 98 HERZ Changefix Tool for HERZ thermostatic inserts.

The HERZ thermostatic valve upper part can be exchanged under pressure with the HERZ exchange device Changefix „H“ for :

- Equipping the valve with another thermostatic valve upper part with fixed, stepped kv-values or with pre-adjustable upper part. This allows for adaption of the volume flows trought the individual radiators to actual requirements.
- Cleaning the seal at the spindle and/or changing the upper part of the valve. These are easy methods of removing defects in radiator thermostat valves, caused e. g. by foreign substances such as dirt, welding and soldering residues.

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

Spindle seal

HERZ-TS-90 O-Ring-Chamber

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

Changing the O-Ring

1. Dismantle the HERZ thermostatic head and/or the HERZ-TS-handwheel.
2. Then, the O-Ring chamber, including the O-Ring, is unscrewed and replaced with a new one. During this change, 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-assembley follow the above steps in reverse sequence. When installing the HERZ-TS handwheel, make sure that the valve closes by turning.

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

HERZ Thermostatic valve

Nominal lift

The screw cap serves 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.

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 Installation 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.

Important for installation

Under no circumstances should the HERZ thermostatic head be exposed to direct sunlight or to the Important for Installation 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 properly and consequently cannot control it. In such cases, use the HERZ thermostat with remote sensor

1 **9430** 98, 1 **9460** 98 or the HERZ thermostat with remote adjustment 1 **9352** 98, 1 **9330** 98, 1 **9355** 98, 1 **9358** 98.

For detailed information on the HERZ thermostats „H“ consult the individual standard sheets.

Summer setting

After the end of the heating period open thermostats or handwheels completely by turning anti- Summer Setting clockwise, this prevents dirt particles accumulating at the valve seat.

HERZ-TS-90-H hand wheel

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

1 **9102** 98 HERZ-TS-90-H hand wheel, series 9000 „Design“.

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** 98 HERZ Changefix tool for thermostatic inserts

Spare parts

1 **6398** 91 Upper thermostatic insert
1 **6890** 00 HERZ-TS-90 O-Ring set

Proportional band

P-difference [K]	0,5	1	1,5	2	2,5	3	3,5	4
kv-value	0,15	0,31	0,46	0,60	0,75	0,81	0,82	0,83

Article number thermostatic valve	Article number thermostatic head	Nominal flow valve DN15 l/h
1 7724 26 1 7723 26	1 7260 98	195
	1 7260 18	195
	1 7060 18	195
	1 7060 28	190
	1 9200 38	195
	1 9230 98	213
	1 9260 98	213
	1 9860 98	213

Disposal

Local and currently applicable legislation must be observed for disposal.

Material

HERZ uses top-quality brass that responds to the latest European norms EN 12164 and EN 12165. 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.

HERZ-Standard diagram	HERZ-TS-90-H
Art. No. 7723 – 7759	Dim. DN 15 R = 1/2

Valve dimensioning [Δ p] must be performed in accordance with the “VDMA-Instruction Sheet for Planning and Hydraulic Balancing of Heating Systems with Thermostatic Radiator Valves.”.