Renovation of heating systems

HERZ thermostatic control and regulating valves
From old to new!

The correct identification of valve fittings is the essential prerequisite for a correct and economical plant renovation. Which replacement and retrofit parts are required / available? This comprehensive guide provides all the answers and practical support for the conversion of manual control valves to HERZ thermostatic valves and HERZ thermostatic heads - especially for the target groups of maintenance engineers, plant supervisors as well as project and building technicians.

An important factor in all renovation work is, in addition to the structural conditions, to consider the hydraulics of the system.

Thermostatic valves always have a higher flow resistance and thus a lower kv value than manually operated radiator valves. Especially if a system is only partially modernized, it must be ensured by suitable measures, such as the regulation of the pipe system, that the heating medium is also distributed correctly. We recommend HERZ balancing valves, pre-settable HERZ RL-5 return valves and other regulating valves. Detailed information can be found in the current HERZ product range. Often neglected, but both economically and ecologically sensible: the calculation of the existing pipe network with the new resistance values.

After all, the core of energy-efficient buildings is a building services system that is economical and comfortable with operation and maintenance.

Main focus:

| HERZ Armaturen product range                  | Page 3       |
| Overview of HERZ manual and TS valves        | Page 4-5     |
| HERZ special items for conversion            | Page 6       |
| The conversion of the individual HERZ valve bodies | Page 6-7   |
| History of HERZ-TS thermostatic valves       | Page 8       |
| Overview of regulating and thermostatic valves | Page 9      |
| Overview of thermostatic heads               | Page 10-12   |
| Overview of valves                           | Page 15       |
For the modernization of heating systems, various HERZ series TS-90 thermostatic valves are available:

- TS-90 thermostatic valve
- TS-90-kv thermostatic valve with fixed, graded kv values
- TS-90-V thermostatic valve with continuous concealed presetting
- TS-98-V thermostatic valve with continuous presetting and readout

Combined with HERZ thermostatic heads with a fixed sensor, remote sensor or remote setting, the result is optimal room temperature control – simply for well-being. When modernizing heating systems, it should always be borne in mind that not every radiator is automatically equipped with a return valve. In principle, we recommend the installation of such valves (in accordance with ÖNORM H 5150), since this also gives the possibility of hydraulic balancing and, in the case of repair work, the radiator can be dismantled even if the system is under pressure. All current models can be found in the HERZ product range and at www.herz.eu.

PRACTICAL TIP: HEART TS - Preset calculator & valve selection

Calculator for presetting:
An article overview is displayed based on the selection options DN10, DN15 or DN20.

For the selected item (e.g. HERZ TS-98-V) enter now the value for the pressure loss (kPa) and the flow rate (l / h). After entering the two parameters, the default value is automatically displayed. As additional information, both the dimension and the kv value can be seen.

Valve selection for calculating the kv value:
You want to plan correctly in advance and look for the optimal valve. After entering pressure loss and flow (optionally with DN 10, DN15, DN20 and DN25), there are two options to choose from:

- Pre-settable valves:
  You will receive an overview of suitable pre-settable valves. Item details are available by direct selection.

- Fixed kv valves:
  Alternatively, it is also possible to retrieve a proposal for suitable valves with a fixed kv value. These valves are used e.g. in district heating applications. Again, all article details are available with a click.
## Overview HERZ manual regulating valves and thermostatic valves (TS)

### HERZ AS before 1965

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6123</td>
<td>yellow, handwheel cream</td>
</tr>
<tr>
<td>6124</td>
<td>Indicator black with screw</td>
</tr>
<tr>
<td></td>
<td>Spindle with square</td>
</tr>
</tbody>
</table>

### HERZ AS 1965 - 1978

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6123</td>
<td>yellow, handwheel cream</td>
</tr>
<tr>
<td>6124</td>
<td>Indicator black smooth with</td>
</tr>
<tr>
<td></td>
<td>screw</td>
</tr>
</tbody>
</table>

### HERZ AS-T 1978 - 1992

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6823</td>
<td>nickel plated, handwheel gray</td>
</tr>
<tr>
<td>6824</td>
<td>Indicator anthracite matt</td>
</tr>
</tbody>
</table>

### HERZ AS-T-90 from 1992

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6823</td>
<td>9x nickel plated, handwheel white</td>
</tr>
<tr>
<td>6824</td>
<td>9x Indicator white</td>
</tr>
</tbody>
</table>

### HERZ ID 1965 - 1970

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6023</td>
<td>yellow, handwheel cream,</td>
</tr>
<tr>
<td></td>
<td>round with screw</td>
</tr>
</tbody>
</table>

### HERZ GP 1970 - 1978

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5023</td>
<td>yellow, handwheel cream</td>
</tr>
<tr>
<td>5024</td>
<td>8-sided</td>
</tr>
</tbody>
</table>
**HERZ TS from 1982**

- 7123: yellow,
- 7124: Head thread at the top
- 7123 L: nickel

**HERZ TS-90 from 1992**

- nickel-plated, protective cap white head mounting thread on the Body, 5 versions
  - TS-90, TS-90-V
  - TS-90-KV, TS-90-E
  - TS-90-H

**HERZ GP-T 1978-1992**

- 5823: nickel plated, handwheel gray
- 5824: 8-sided

**HERZ GP from 1992**

- 5523: nickel-plated, white handwheel with screw, with or without presetting, one-piece

**HERZ TS 1971-1972**

- 7123: yellow, head mounting thread on the Body, upper part round with two flats
- 7124: and with hexagon

**HERZ TS 1973-1977**

- 7123: yellow or nickel plated, Head mounting thread on the body, upper part round with two flats
- 7124: and with hexagon
HERZ special items for conversion

In addition to the regular product range, we offer special items for the conversion of heating systems. The straight and angle design of the TS-90, TS-90-V, TS 98-V and TS-FV series are also available in the D series. For order numbers see delivery program. Additional TS-90-kv in 3/8" angle and straight form, construction dimension D:

<table>
<thead>
<tr>
<th>Type</th>
<th>Straight form</th>
<th>Angle type</th>
<th>Long threaded bush</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1 7773 69</td>
<td>1 7774 69</td>
<td>1 6218 00</td>
</tr>
<tr>
<td>C</td>
<td>1 7773 79</td>
<td>1 7774 79</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1 7773 89</td>
<td>1 7774 89</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>1 7773 99</td>
<td>1 7774 99</td>
<td></td>
</tr>
</tbody>
</table>

Note: Special items are not in stock - please plan longer delivery times.

The conversion of the individual HERZ valve types

Note: The following section describes the installation of TS 90 valves. However, it can always be selected from 5 TS of all series (TS-90, TS-90-kv, TS-90-V, TS-98-V and TS-FV).

HERZ AS before 1965 (page 4)
Due to the age of these valves, a conversion adapter is not provided. The installed valves are to be exchanged:
- Straight model: Exchange for TS-90 construction series D.
- Angle model: Swap against TS-90 with the longer tailpiece (see selection table) installed.

HERZ AS 1965 to 1978 (page 4)
Due to the age of these valves, a conversion adapter is not provided. The installed valves are to be exchanged:
- Straight model: Swap against TS-90 with the longer tailpiece 1 (see selection table) installed.
- Angle model: Exchange for TS-90 with the longer tail piece (see selection table) installed.

HERZ AS-T 1978 - 1992 (Page 4)
If valve replacement is necessary due to damaged valves, the TS-90 models are easy to install as a replacement. If the valves to be modernized were installed after 1983, even the tail piece can remain installed because the same cone angle is present.

If no TS-90 models are to be used, the thermostatic insert 1 6376 00 (3/8 "-1/2") or 1 6376 02 (3/4 ") can be installed in the existing body.

HERZ AS-T 90 from 1992 (page 4)
Modification of these models is to be carried out on TS-90 using the standard TS-90 inserts without draining the installation using the HERZ CHANGEFIX replacement unit.

HERZ ID 1965 - 1970 (page 4)
Due to the age of these valves, a conversion adapter is not provided. The installed valves are to be exchanged:
- Straight and angle Models: Swap against TS-90 where the longer tail piece (see selection table) is to be installed.

HERZ GP 1970 - 1978 (Page 4)
These models cannot be fitted with a conversion adapter to accommodate standard TS-90 inserts.
To simplify later service work, a valve exchange must be made on TS-90 valves.
- Straight and Angle Models: Swap against TS-90 with the tail piece (see selection table) installed.

If no TS-90 models are to be used, the thermostatic insert 1 6376 00 (3/8 "-1/2") or 1 6376 02 (3/4 ") can be installed in the existing body.
HERZ GP-T 1978 - 1992 (Page 5)
If valve replacement is necessary due to damaged valves, the TS-90 models are easy to install as a replacement. If the valves to be modernized were installed after 1983, even the threaded sleeve can remain installed because the same cone angle is present.

If no TS-90 models are to be used, the thermostatic insert 1 6376 00 (3/8" - 1/2") or 1 6376 02 (3/4 "") can be installed in the existing body.

HERZ GP from 1992 (page 5)
The conversion to thermostatic valves and body replacement is not possible due to the crimped upper part. Damaged valves must be replaced with a TS-90 or GP valve.

HERZ TS 1971 to 1972 (Page 5)
These models cannot be fitted with a conversion adapter to accommodate standard TS-90 inserts. To simplify subsequent service work, a valve exchange must be carried out on TS-90 valves.

Valve replacement:
- Straight model: Swap against TS-90 with the tail piece (see selection table) installed.
- Angle model: Exchange for TS-90, with the new valves being the same size.

HERZ TS 1973 to 1977 (Page 5)
These models cannot be fitted with a conversion adapter to accommodate standard TS-90 inserts. To simplify subsequent service work, a valve exchange on TS-90 valves is required.

Valve replacement:
- Straight model: Swap against TS-90 with the longer threaded bushing (see selection table) installed.
- Angle model: Exchange for TS-90, with the new valves being the same size.

Operation of these thermostatic heads is only possible with the current HERZ thermostatic head 1 7235 01.

HERZ TS 1978 to 1991 (Page 5)
If valve replacement is necessary due to damaged valves, the TS-90 models are easy to install as replacements. If the valves to be modernized were installed after 1983, even the tail piece can remain installed because the same cone angle is present.

If no TS-90 models are to be used, the thermostatic insert 1 6376 00 (3/8" - 1/2") and 1 6376 02 (3/4 "") can be installed in the existing body.

HERZ TS-90 from 1992 (page 5)
The conversion to current TS-90 inserts is possible with the help of the HERZ CHANGEFIX (replacement unit) 1 7780. A conversion to pre-settable upper parts (TS-98-V, TS-90-V, TS-99-FV is only possible with 1/2 " valves, or with pre-settable valves DN10 and DN20.

Valve equipment with thermostatic heads
In the case of equipment with manual regulating valves, the position of the handwheel was not critical for the functioning of the heating system - the mere fact that adjustment could be achieved was quite sufficient. This is different with thermostatic heads: The room temperature can only be optimally regulated if the room air can pass unhindered to the sensor. Often, however, heavy curtains and / or furniture hinder air circulation or heat-emitting devices affect the scheme. If a thermostatic head with a fixed sensor cannot be mounted in a horizontal position and as freely accessible as possible, the room temperature is only regulated inaccurately.
History HERZ-TS thermostatic valves

**1971 - 1972**

No spare parts available anymore.

**1973 - 1977**

HERZ-TS and HERZ-TS-L (luxury version, nickel-plated), no spare parts available, thermostatic head 1723501 can be used.

**1978 - 1991**

HERZ-TS and HERZ-TS-L (luxury version, nickel-plated), from 1985 all valves were nickel-plated. Connection thread for thermostatic head M 28 x 1.5 on upper part, upper part with hexagon O-ring screw, spindle Ø 2.2 mm Replacement upper part 1637600 for dim. 3/8” and 1/2”, 1637602 for Dim 3/4”. Manual operation and all Thermostatic heads from the current product range possible.

**1991 - heute**

HERZ-TS-90
nickel-plated version, connection thread for thermostatic head on valve body M 28 x 1.5, upper part with hexagon O-ring screw, spindle Ø 3 mm

Spare Parts:
O-ring set 1689000
Upper parts 3/8” 1639090, 1/2” 1639091, 3/4” 1639092, 1” 1639093

Manual operation and all thermostatic heads from the current product range possible.

<table>
<thead>
<tr>
<th>Valve</th>
<th>Year</th>
<th>Merkmale</th>
<th>Characteristics</th>
<th>Seal</th>
<th>Kit</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS 6123</td>
<td>before</td>
<td>Valve yellow, Handwheel cream markings black</td>
<td>Red O-ring box 1 6710.00</td>
<td>Seal under pressure exchangeable; Valve must be fully opened</td>
<td>Cannot be thermostatic</td>
<td></td>
</tr>
<tr>
<td>AS 6123</td>
<td>1965-1978</td>
<td>Valve yellow, Handwheel cream markings black</td>
<td>Red O-ring box 1 6710.00</td>
<td>Seal under pressure exchangeable; Valve must be fully opened</td>
<td>Cannot be thermostatic</td>
<td></td>
</tr>
<tr>
<td>AS-T 6823</td>
<td>1978-1992</td>
<td>Valve nickel-plated, Handwheel gray markings anthra-cite</td>
<td>Dim. 3 1/2, 3/4; O-ring box yel-low 1 6810.00</td>
<td>Seal under pressure exchangeable; Valve must be fully opened</td>
<td>Can be thermostatic with adapter 1 6376 00 for 3/8 and 1/2 and 1 6376 02 for 3/4; system must be drained</td>
<td></td>
</tr>
<tr>
<td>ID 6023</td>
<td>1965-1970</td>
<td>Valve yellow, Handwheel cream round</td>
<td>O-Ring-Set 1 6705.00</td>
<td>Seal under pressure exchangeable; Valve must be fully opened</td>
<td>Cannot be thermostatic</td>
<td></td>
</tr>
<tr>
<td>GP 5023</td>
<td>1970-1978</td>
<td>Valve yellow, Handwheel white marking white</td>
<td>Top 1 6310 xx</td>
<td>Top under pressure using the Lock 1 7780 00 exchangeable</td>
<td>Can be thermostatic with current thermostatic tops. Under pressure: only with lock 1 7780 00</td>
<td></td>
</tr>
<tr>
<td>GP-T 5823</td>
<td>1978-1992</td>
<td>Valve nickel-plated, Handwheel gray 8-sided</td>
<td>O-Ring-Set 1 6705.00</td>
<td>Seal under pressure exchangeable; Valve must be fully opened</td>
<td>Can be thermostatic with adapter 1 6376 00 for 3/8 and 1/2 and 1 6376 02 for 3/4; system must be drained</td>
<td></td>
</tr>
<tr>
<td>TS alt 7123</td>
<td>1971-1978</td>
<td>Valve yellow, thermostat insert with pressure pin Ø 2.2 mm, stroke 4 mm</td>
<td>no sealing set available</td>
<td>no spare tops available</td>
<td>Replacement thermostatic head 1 7323 01 (1973-1977)</td>
<td></td>
</tr>
<tr>
<td>TS alt 7623</td>
<td>1978-1991</td>
<td>Valve nickel-plated, Handwheel white</td>
<td>no sealing set available</td>
<td>no spare tops available</td>
<td>Spare upper part: adapter 1 6376 00 for 3/8 “and 1/2” and 1 6376 02 for 3/4 “; system must be drained</td>
<td></td>
</tr>
<tr>
<td>TS-90</td>
<td>1991</td>
<td>Valve nickel-plated, thermostat insert with pressure pin Ø 3 mm</td>
<td>O-ring screw 1 6890.00</td>
<td>Seal under pressure exchangeable; slight water leakage</td>
<td>For the replacement of the upper part current thermostatic parts can be used. Under pressure: only with changefix tool 1 7780 00</td>
<td></td>
</tr>
<tr>
<td>TS-90-V</td>
<td>1991</td>
<td>Valve nickel-plated, thermostat insert with pressure pin Ø 3 mm</td>
<td>O-ring screw 1 6890.00</td>
<td>Seal under pressure exchangeable; slight water leakage</td>
<td>For the replacement of the upper part current thermostatic parts can be used. Under pressure: only with lock 1 7780 00</td>
<td></td>
</tr>
<tr>
<td>TS-90-E</td>
<td>1996</td>
<td>Nickel-plated valve, thermostat insert with pressure pin Ø 3 mm; with low resistance</td>
<td>O-ring screw 1 6890.00</td>
<td>Seal under pressure exchangeable; slight water leakage</td>
<td>Upper part replacement: insert 1 6376 02; Under pressure: only with CHANGEFIX 1 7780 00</td>
<td></td>
</tr>
<tr>
<td>TS-E</td>
<td>1996</td>
<td>Nickel-plated valve, thermostat insert with pressure pin Ø 3 mm; with low resistance</td>
<td>O-ring screw 1 6890.00</td>
<td>Seal under pressure exchangeable; slight water leakage</td>
<td>Upper part replacement: insert 1 6376 03; not exchangeable under pressure</td>
<td></td>
</tr>
</tbody>
</table>
Overview thermostatic inserts (Herz thermostatic valves from year of construction 1990)

Thermostatic inserts TS-90

Thermostatic insert TS-90, 1 6390 90 (3/8")
Protective cap white
Thread M 17 x 1.5
for TS-90, AS-T-90 (3/8") from year 1991, replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic insert TS-90, 1 6390 91 (1/2")
Protective cap white
Thread M 17 x 1.5
for TS-90, HERZ-3000, VUA, VTA (2-pipe), AS-T-90 (1/2") from year 1991, replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic insert TS-90, 1 6390 92 (3/4")
Protective cap white
Thread M 17 x 1.5
for TS-90, VUA, VTA (1-pipe), AS-T-90 (3/4") from year 1991, replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic insert TS-90, 1 6390 93 (1")
Protective cap white
Thread M 20 x 1.5
for TS-90, replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic insert TS-90-V

Thermostatic insert TS-90-V, 1 6367 97 (3/8", 1/2", 3/4")
Protective cap red
Thread 17x1.5 mm
Presetting with key 1 6809 67
for TS-90-V, HERZ-3000, VUA, VTA (2-pipe), AS-T-90 (3/8", 1/2") from year 1991, replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic insert TS-98-V

Thermostatic insert TS-98-V, 1 6367 98 (3/8", 1/2", 3/4")
Protective cap orange
Thread 17x1.5 mm
Presetting with key 1 6819 98
for TS-98-V, HERZ-3000, VUA, VTA (2-pipe), AS-T-90 (3/8", 1/2") from year 1991, replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic insert TS-99-FV

Thermostatic insert TS-90-V, 1 6367 99 (3/8", 1/2")
Protective cap purple
Thread 17x1.5 mm
Presetting with key 1 6819 98
for TS-FV, HERZ-3000, VUA, VTA (2-pipe), AS-T-90 (3/8", 1/2") from year 1991, replacement under pressure with CHANGEFIX 1 7780 00
Thermostatic inserts with fixed kv values

**Thermostatic insert TS-90**

- **1 6365 69 (1/2")**
  - Blue protective cap
  - Thread M 17x1.5 mm
  - Marking on the upper part “B”
  - Label on valve colour ring “Blue”
  - Kv = 0.06
  - for TS-90 (1/2"), exchange under pressure with CHANGEFIX 1 7780 00

**Thermostatic insert TS-90**

- **1 6365 79 (1/2")**
  - Protective cap green
  - Thread M 17x1.5 mm
  - Marking on the upper part “C”
  - Label on valve colour ring “Green”
  - Kv = 0.12
  - for TS-90 (1/2"), exchange under pressure with CHANGEFIX 1 7780 00

**Thermostatic insert TS-90**

- **1 6365 89 (1/2")**
  - Protective cap yellow
  - Thread M 17x1.5 mm
  - Marking on the upper part “D”
  - Label on valve colour ring “yellow”
  - Kv = 0.25
  - for TS-90 (1/2"), exchange under pressure with CHANGEFIX 1 7780 00

**Thermostatic insert TS-90**

- **1 6365 99 (1/2")**
  - Protective cap white
  - Thread M 17x1.5 mm
  - Marking on the upper part “E”
  - Marking on valve colour ring “White”
  - Kv = 0.5
  - for TS-90 (1/2"), exchange under pressure with CHANGEFIX 1 7780 00

**Thermostatic insert TS-90-E**

- **1 6379 02 (1/2")**
  - Protective cap white
  - Thread M 20 x 1.5 mm
  - for TS-90-E (1/2"), replacement under pressure with CHANGEFIX 1 7780 00

Thermostatic adaptation of HERZ regulating valves

**Ventiloberteil zur Umrüstung von HERZ-AS-T und GP-T Ventilen ab Baujahr 1978, auf thermostatischen Betrieb,**

- **1 6376 00 (3/8", 1/2")**
  - Gewinde M 19 x 1,0 mm

**Ventiloberteil zur Umrüstung von GP-T und HERZ-AS-T ab Baujahr 1978, auf thermostatischen Betrieb,**

- **1 6376 02 (3/4")**

**TS-E**

- **1 6379 03 (1/2"-1")**
  - Bauschutzkappe weiß
  - Gewinde M 28 x 1,5 mm
  - für TS-E (1/2”-1”), Austausch unter Druck nicht möglich

**TS-D**

- **1 6379 00 (3/8", 1/2")**
  - Gewinde M 20 x 1,5 mm

**TS-98-VH**

- **1 6398 98**
  - Bauschutzkappe hellgrau
  - Gewinde M 17x1,5 mm für TS-98-VH (3/8", 1/2")
  - Austausch mit Changefix
  - Gewinde M 30 x 1,5 mm
## Selection table Fix kv

### Temperature difference = 20 K

<table>
<thead>
<tr>
<th>Heating Output (W)</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>400</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
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<td>500</td>
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<td>C</td>
<td>C</td>
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<td>C</td>
<td>C</td>
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<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>1200</td>
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<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
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<td>D</td>
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### Code letter

- **B**: 0.06
- **C**: 0.12
- **D**: 0.25
- **E**: 0.50

### k_v at \( x_p = 2 \)

- **1 77xx 69**: Blue
- **1 77xx 79**: Green
- **1 77xx 89**: Yellow
- **1 77xx 99**: White

### Order number

- **1 77xx**: Code letter and order number
**Service for HERZ AS-T**

1. The valve must be fully opened by turning it to the left until it stops. Remove handwheel.

2. Loosen the O-ring guide nut and remove the O-ring with the Klingerit seal (hold the upper part).

3. Clean the spindle and O-ring guide nut (use the O-ring box cutter). Sharp-edged objects will damage the Sealing surfaces!

4. Ready-to-mount greased O-ring with Klingerit gasket in the box remove.

5. Mount sealing elements in the following order:
   1. Klingerit seal
   2. O-ring
   3. O-ring guide nut

6. Tighten O-ring guide nut moderately and replace handwheel

**Service for HERZ GP-T**

1. Close the valve.
2. Mark the preset value.
3. Pull off handwheel.

4. Firmly open the valve with the grooved end of the key wrench until it stops.

5. O-ring chamber with grooved loosen key by turning counter-clockwise and unscrew.

6. Fit new O-ring chamber and tighten firmly with key.

7. Close the valve.
8. Set the handwheel at the marked value, with value 7 for non-pre-set valves.

For non-preset valves, items 1 and 2 are omitted.

When valves are greased, always only use silicone-based greases. Bicycle oils, MoS₂ or similar destroy the sealing rings.
Overview of valves

60s
- HERZ AS
  - HERZ AS
  - HERZ ID

70s
- HERZ AS
- HERZ AS-T
- HERZ GP
- HERZ TS

80s
- HERZ AS-T
- HERZ GP-T
- HERZ TS

90s
- HERZ AS-T
- HERZ AS-T-90
- HERZ GP-T
- HERZ GP
- HERZ TS-90

siehe Seite 8
Thermostatic valve exchange without system draining

HERZ CHANGEFIX
Replacement device for HERZ thermostatic valve body parts
with connection thread M 28 x 1.5
EAN 90 04174
Order-number 71260 9 1 7780 00

HERZ CHANGEFIX
Replacement device for HERZ thermostatic valve body parts “H”
with connection thread M 30 x 1.5
74160 9 1 7780 98

Seal kit
Replacement seal set for HERZ CHANGEFIX
71270 8 1 7780 04

Pressure Measurement Accessories
for measuring the differential pressure or the static pressure at
closed valve using HERZ measuring instruments 1 8900 and 1 8903
71280 7 1 7781 00

Cleaning Brush Set
for the valve seat cleaning in the course of the replacement of parts
73240 9 1 7781 01