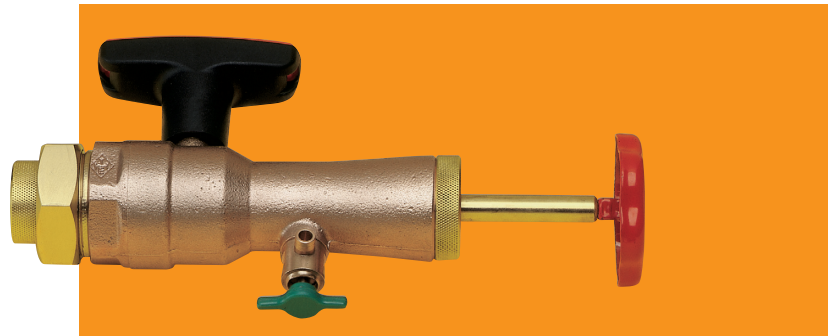


Installation and operating instructions



To be precise.



Installation and operating instructions

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Thermostatic valve

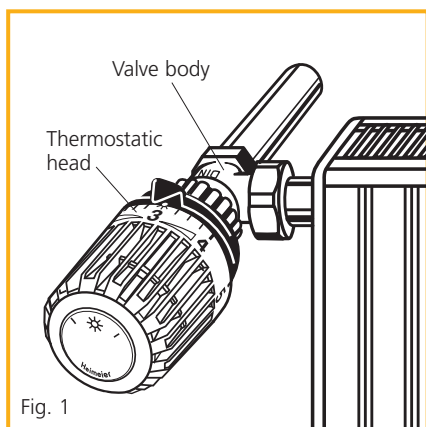


Fig. 1

Thermostatic valve

The thermostatic valve consists of a controller (thermostatic head) and an actuator (valve body) (fig. 1). HEIMEIER thermostatic valves are CEN certified and tested according to DIN EN 215 part 1 and HD 1215 part 2 (D and F series). They conform to high standards and are maintenance-free when installed and operated appropriately.

Pipes should be rinsed before putting the heating system into operation. When filling the system, the thermostatic valves

should be fully opened, so that no dirt particles block the valve seat.

During construction, the protection cap makes it possible to open and close the thermostatic valve body (fig. 2).

For safety reasons, if a radiator is dismantled, the thermostatic valve body should be closed with a locking cap (see brochure "Thermostatic valve bodies").

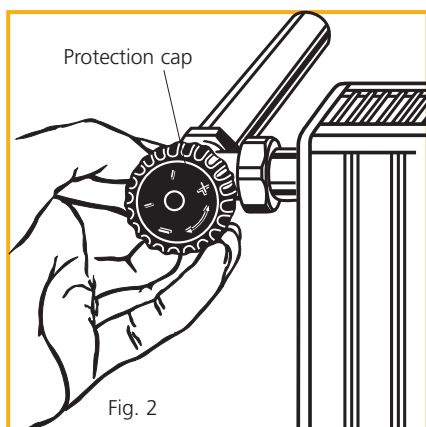


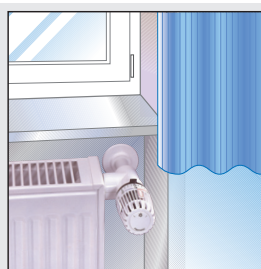
Fig. 2

Heat transfer medium

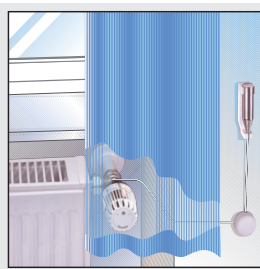
To avoid damage and the formation of scale deposit in the hot water heating system, the composition of the heat transfer medium should be in accordance with the VDI guideline 2035. For industrial and long-distance energy systems, see the applicable codes VdTÜV and 1466/AGFW 5/15. Any mineral oils contained in the heat transfer medium and lubricants containing mineral oil can have seriously negative effects on the source apparatus and usually lead to the disintegration of EPDM seals.

When using nitrite-free frost and corrosion resistance solutions with an ethylene glycol base, pay close attention to the details outlined in the manufacturers' documentation, particularly details concerning concentration and specific additives.

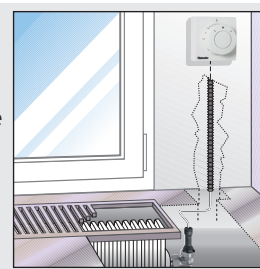
Notes on installation



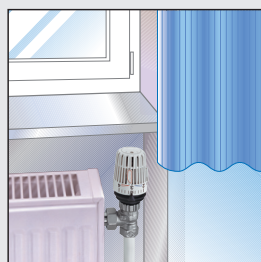
Correct
Air in the room can circulate freely around the thermostatic head.



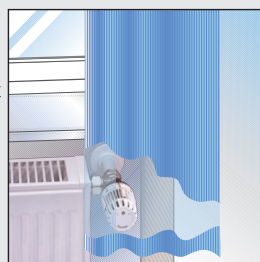
Correct
The remote sensor makes it possible to read the air temperature in the room unhindered.



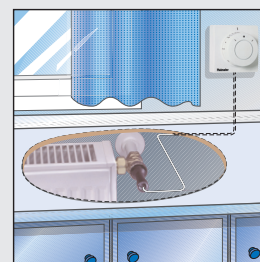
Underfloor convector



Incorrect
The thermostatic head with built-in sensor should not be installed vertically.



Incorrect
The thermostatic head with built-in sensor should not be covered by curtains.



Built-in cabinet

General notes

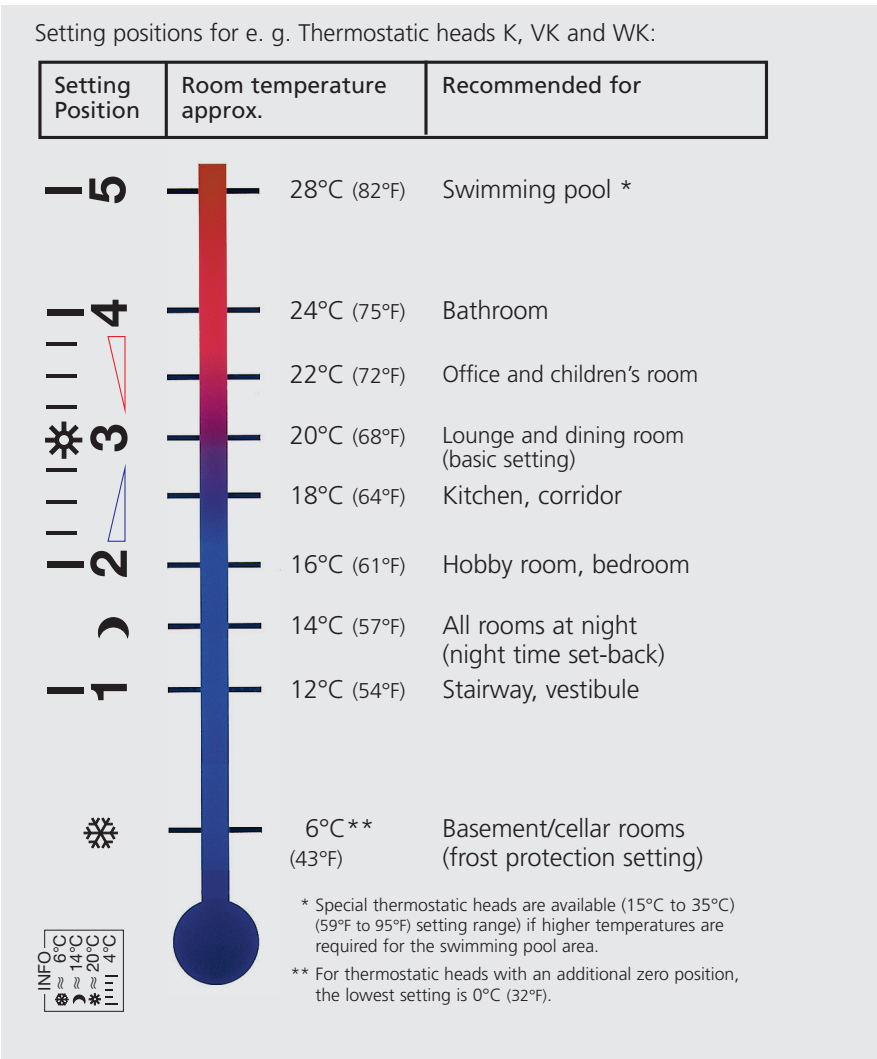
Faults – Causes – Remedial action

Fault	Possible cause	Remedial action/comment
The radiator does not heat up or does not become sufficiently hot	<ul style="list-style-type: none"> – The setting on the thermostatic valve is lower than the current room temperature – Air in the radiator – The heating system does not supply sufficient energy, or supplies no energy 	<ul style="list-style-type: none"> – External heat influences lead to a rise in room-temperature, which causes the thermostatic valve to choke or block the watersupply to the radiator – Vent the radiator – Check the heating curve, circulating pump, time program, boiler etc.
The radiator remains warm when the thermostatic valve is closed	<ul style="list-style-type: none"> – Continuous airing of the room (with tilted windows) and low outside temperatures causes the room temperature to fall below the lowest setting on the thermostatic valve – The valve seat is dirty, and the thermostatic head cannot close – The maximum permitted differential pressure at which the valve will still close has been exceeded – If valve bodies are retrofitted without a T-label, these valves will not close 	<ul style="list-style-type: none"> – Air the room briefly but thoroughly – Remove dirt particles – Reduce the pump pressure – Only HEIMEIER manual valves with a "T"-label, and manual valves with a connector thread for the thermostatic head on the body can be converted.
The thermostatic head cannot be twisted, or can only be twisted partially	<ul style="list-style-type: none"> – The thermostatic head has been restricted or blocked internally, i.e. it is fixed at one temperature, or at the setting range above or below that temperature, and cannot be altered externally 	<ul style="list-style-type: none"> – Cancel the restricting or locking function (see page 18)
The room temperature is significantly below the set temperature	<ul style="list-style-type: none"> – The thermostatic valve with built-in sensor has been covered by curtains, radiator covers, etc. – The thermostatic valve with built-in sensor has been installed vertically – The nominal capacity of the radiator is too low in relation to the room – The heating system is not supplying enough energy 	<ul style="list-style-type: none"> – Ensure that the air in the room can circulate freely around the thermostatic valve, or install a remote sensor or remote dial – Install a remote sensor or remote dial – Check the heating curve or modify the radiator capacity – Check the heating curve, circulating pump, time program, heat generating device etc.
The room temperature is significantly higher than the set temperature	<ul style="list-style-type: none"> – The thermostatic valve does not register the room temperature, but is affected by colder air, e. g. draughts – Outside heat influences can lead to an increase in the room temperature, although the thermostatic valve has blocked the water supply to the radiator 	<ul style="list-style-type: none"> – Ensure that only air in the room is circulating around the thermostatic valve – Thermostatic valves use the free heating input for warmth and therefore save energy
Noises in the thermostatic valve	<ul style="list-style-type: none"> – Differential pressure is too high – Air in the heating system – Water is flowing through the radiator in the wrong direction 	<ul style="list-style-type: none"> – Reduce the pump pressure or check the water-distribution – Vent the system and refill with water – Correct the flow direction or install the appropriate valve. – If any questions arise regarding the increased or reduced output of the radiator in relation to through-flow, ask the radiator manufacturer for information.
Leaks in the thermostatic valve	<ul style="list-style-type: none"> – Connecting parts such as the compression ring, compressionringnut, the cone or the connecting nut have not been greased – Valve spindle seal is defective 	<ul style="list-style-type: none"> – Grease the connecting parts – Replace the outer O-ring. It is not necessary to drain off the system

Setting the temperature

Recommended room temperatures

The following temperature settings are recommended for the corresponding rooms, with cost-efficient heating in mind:



Setting the temperature

The desired room temperature can be set by turning the thermostatic head (right = cooler, left = warmer). The arrow must be pointing to the appropriate setting position (number, bar, symbol).

All HEIMEIER thermostatic heads are set in a climatic chamber, free of external influences such as heat build-up, sunshine, etc. Therefore the number 3 corresponds to a temperature of approx. 20°C (68°F). The difference between the numbers is approx. 4°C (7°F) (Thermostatic head B approx. 3°C (5°F)), from bar to bar approx. 1°C (2°F).

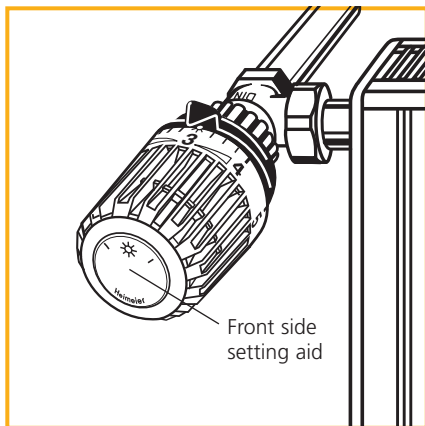
We recommend a setting at number 3, which corresponds to the basic setting of approx. 20°C (68°F) room temperature. Settings above number 4 should be avoided if a lower setting provides sufficient comfort, since an increase of 1°C (2°F) in the room temperature requires approx. 6 % more energy.

The thermostatic head model K is also available with a staggered/restricted setting range (art. no. 6120-...500). The lower setting value at number 1 corresponds to a temperature of approx. 6°C (43°F) and acts as a frost protection setting. The temperature difference to number 2 is approx. 2°C (4°F), and to the

next number up, approx. 4°C (7°F). Number 3 therefore corresponds to a temperature of approx. 12°C (54°F). The highest setting value is configured in 1°C (2°F) steps between 15°C and 25°C (59°F – 77°F). This is achieved by turning the thermostatic head to the left until it stops.

General notes

Setting the temperature



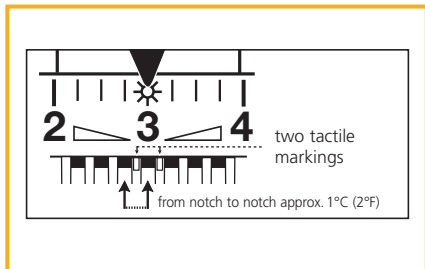
Front side setting aid

For thermostatic heads K, VK, WK and F the front side of the thermostatic head acts as a setting aid if the circular script is difficult to read, or can be used as a setting guide from a greater distance. The setting at the number to the left or right of * corresponds to a roomtemperature of 16°C (61°F) or 24°C (75°F).



Brief information

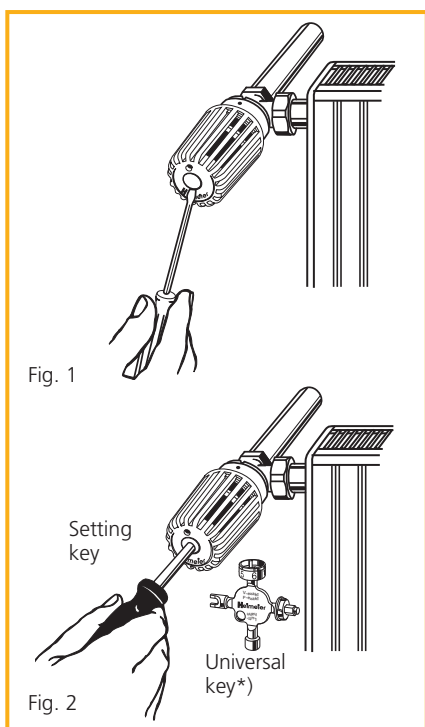
The most important settings are shown in abbreviated form as INFO on the thermostatic heads K, VK, WK and F.



Setting aid for persons with a visual impairment

The thermostatic heads K, VK and WK have a setting aid for persons with a visual impairment. If the thermostatic head is turned in such a way that the tactile markings are opposite the setting arrow, a temperature of approx. 20°C (68°F) has been set. Any temperature can be set starting at this basic setting and

feeling and counting the notches and turning the thermostatic head to the desired setting position at which the notch is opposite the setting arrow. The distance from notch to notch on the thermostatic head is approx. 1°C (2°F).



Temperature setting, thermostatic head B

Lever out the closing plug with a small screwdriver (fig. 1).

The desired roomtemperature can be set with the setting key (art no. 2500-00.253) or the universal key*) (art. no. 0530-01.433) in a range of 8°C to 26°C (46°F to 79°F) (fig. 2).

The number corresponding to the setting value can be read in the window. Number 3 corresponds to a temperature of approx. 20°C (68°F). The difference in temperature between the numbers is approx. 3°C (5°F).

Push the closing plugs back until they click into place.

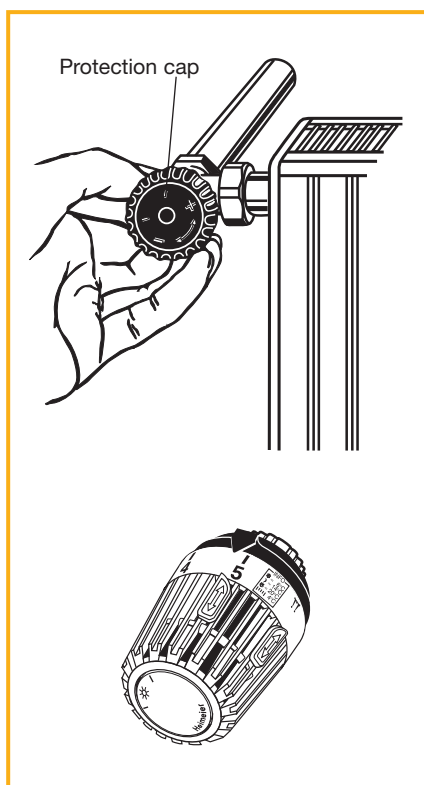
*) Alternative to setting key article no. 2500-00.253 for adjusting thermostatic head B. Also for V-exakt/F-exakt thermostatic valve body, Regulux lockshield, Vekolux double connection fitting and radiator air vent.

Thermostatic heads K, DX and D, remote sensor

Thermostatic valves should be installed in such a way that they control the room temperature, and that the room air is able to circulate around them unhindered. This will not be the case if thermostatic heads with integrated sensors are covered by curtains, radiator covers etc.,

if they are installed vertically or in narrow corners, or if they are affected by cold air, e. g. draughts.

In these cases, it is necessary to install a thermostatic head with a remote sensor (or a remote dial).



Installation of thermostatic heads K, DX and D

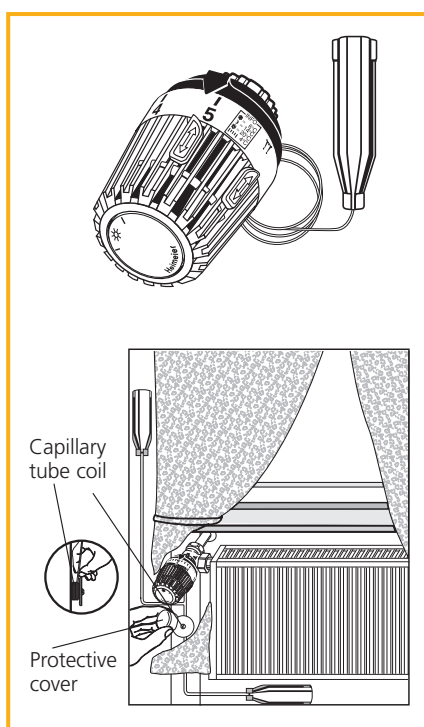
Remove the protection cap from the thermostatic valve body.

Before installing, check that the thermostatic head is turned to number 5.

Position the thermostatic head onto the thermostatic body, screw on and tighten with a rubber jawed wrench (approx. 20 Nm).

Ensure that the setting arrow is pointing upwards.

Then set the thermostatic head to number 3.



Installation of remote sensor

When installing the remote sensor, ensure that it is not covered by covers, curtains etc., and that it is not affected by direct sunlight or cold air.

First fit the connecting part with fastening devices (dowel, screws).

Then place the remote sensor in the bracket and use this to press it into the connecting part until it clicks into place. Then lay the capillary tube.

Roll up any capillary tube which is not needed to the attached capillary tube coil and cover with the protection cap (see fig.).

Installation

Thermostatic head K with theft protection

The HEIMEIER thermostatic heads K with theft protection are used for individual-room temperature control in public buildings, schools etc. which are used by a large number of members of the public. Two different systems are available:

Theft protection from two screws (can be re-used) and theft protection from a security ring (can only be reused after the locking ring, which should be destroyed, has been replaced).

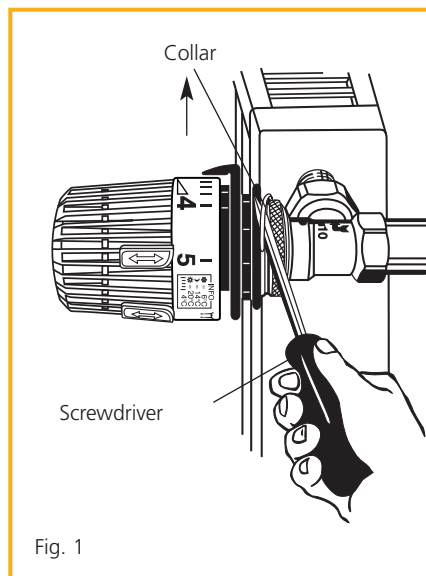


Fig. 1

Theft protection with a security ring

Remove the protection cap from the thermostatic valve body.

Before installing, check that the thermostatic head is turned to number 5.

Position the thermostatic head onto the thermostatic body, screw on and tighten with a rubber jawed wrench.

Ensure that the setting arrow is pointing upwards.

Then set the thermostatic head to number 3.

When installation has been completed, remove the collar from the security ring in the direction of the arrow with a screw driver (fig. 1).

The security ring can now be turned in any direction without the locking ring under the security ring coming loose.

It is only possible to dismantle the thermostatic head after the theft protection (locking ring with security ring) has been destroyed with water pump pliers or a pipe wrench.

The destroyed theft protection should then be carefully levered off the lower part of the head and replaced with a new theft protection (art. no. 6020-00.347), which is simply pressed onto the lower part of the head.

The thermostatic head should then be fully functional and can be re-installed.



Fig. 2

Theft protection from two screws

Remove the protection cap from the thermostatic valve body.

Before installing, check that the thermostatic head is turned to number 5.

Position the thermostatic head onto the thermostatic body, screw on and tighten with a rubber jawed wrench.

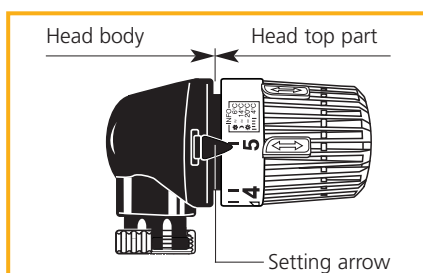
Ensure that the setting arrow is pointing upwards.

To ensure against theft, tighten the safety screws (fig. 2) with a hexagonal socket head wrench SW 2.

Then set the thermostatic head to number 3.

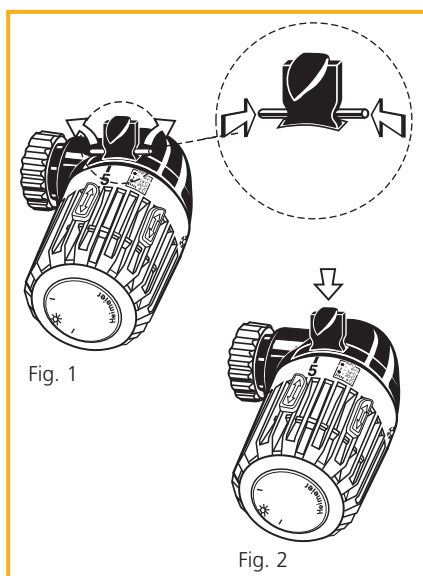
It is only possible to dismantle the thermostatic head after the safety screws have been loosened with the hexagonal socket head wrench SW 2.

Thermostatic head WK



The HEIMEIER thermostatic head WK is designed to be installed onto radiators with integrated valves which have a thermostatic insert with a connector thread M 30 x 1.5.

The thermostatic head can be adjusted to be installed on the left or right hand side of the radiator.

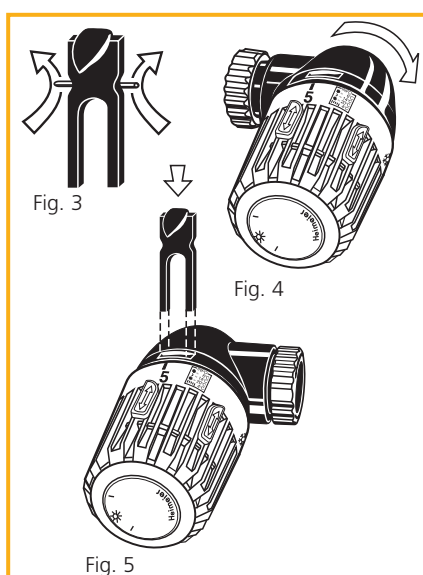


Installation on the right hand side of the radiator

Remove the securing pins on the setting arrow (fig. 1).

Press in the setting arrow until it clicks into place (fig. 2).

Turn the thermostatic head to number 5, place it horizontally onto the thermostatic insert, screw it on and tighten with a rubber jawed wrench (max. 15 Nm). Counter hold if necessary.



Installation on the left hand side of the radiator

Turn the thermostatic head to number 5, pull out the setting arrow and remove both securing pins (fig. 3).

Turn the head body by 180° until it stops (fig. 4).

Set the setting arrow to number 5 and press it on until it clicks into place (fig. 5).

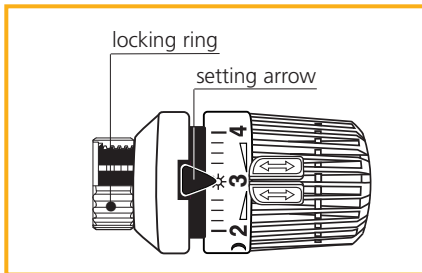
Place the thermostatic head horizontally onto the thermostatic insert of the radiator, screw on and tighten with a rubber jawed wrench (max. 15 Nm). Counter hold if necessary.

Note

- By pressing in and clicking the setting arrow into place, the installation-position (left/right) is set and secured. It is then no longer possible to change this position.
- Check that the seat is secure before installing the thermostatic insert (starting torque approx. 35 Nm).
- It is not permitted to use adaptors for installation onto thermostatic inserts which do not have an M 30 x 1.5 connector thread.

Installation

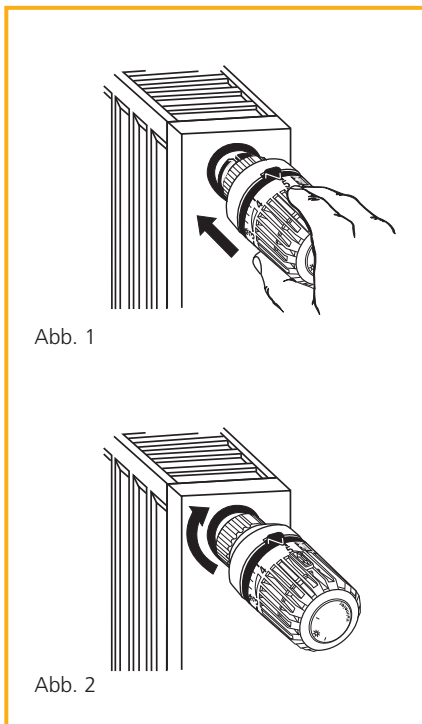
Thermostatic head VK



The HEIMEIER thermostatic head VK is designed for installation on radiators with integrated valves with a thermostatic insert for a clamping joint. Installation is carried out directly, i.e. without an adaptor. The thermostatic head VK can be instal-

led in several positions, which each have an angle difference of 90° between them:

For example, with the setting arrow pointing upwards or towards the front.



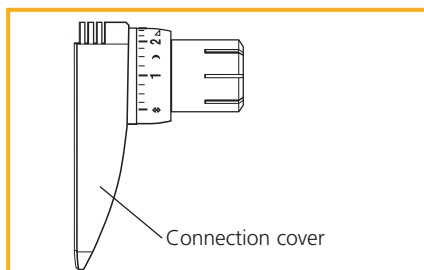
Installation

Before mounting check that the thermostatic head is set to number 5 and that the locking ring is screwed right back.

Position the thermostatic head with the setting arrow on the valve insert, e.g. to the top or to the front, and push until it audibly clicks into place (Fig. 1).

Tighten up the locking ring firmly (approx. 10 Nm). In doing so see that the thermostatic head is set in place to the limit stop, push further if necessary (Fig. 2).

Thermostatic head VD



The HEIMEIER thermostatic head VD combines perfect technology with a new design. It has been specially designed for installation on radiators with integrated valves with M 30 x 1.5 connecting three-

ads on the thermostatic insert. Its new type of construction blends harmoniously with the radiator, creating a single integrated unit.

Installation

Unscrew the protection cap from the thermostatic insert.

Before installing, check that the thermostatic head is turned to number 5.

Position the thermostatic head onto the thermostatic insert and screw on.

Ensure that the setting arrow is pointing upwards (fig. 1).

Firmly tighten the locking ring with a rubber jawed wrench (approx. 15 Nm).

Position the connection cover (fig. 2).

Position the fastening screw in front of the thread of the cover bracket. Adjust the cover and screw into place with a screwdriver (fig. 3). Then tighten the fasteningscrew by approx. 1/2 turns.

Insert the cap so that it is aligned with the surface (fig. 4). Set the thermostatic head to number 3.

Depending on the particular construction, the width of the side trim needs to be taken into account for type 11 radiators.

Technical changes made by the radiator manufacturer should also be taken into account.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Thermostatic head B

The HEIMEIER thermostatic head B is used for individual room temperature control in public buildings, schools etc. which are used by a large number of members of the public. The protection

cap of this theft protected thermostatic head can be turned continuously, and the set setting value cannot be changed to lower or higher temperatures without a special tool.

Installation

Remove the protection cap from the thermostatic valve body. Leverout the closing plugs with a small screwdriver (fig. 1).

Open the thermostatic head through opening which is now available with settingkey art. no. 2500-00.253 or the universal key*) art. no. 0530-01.433 by turning to the left until it stops (fig. 2).

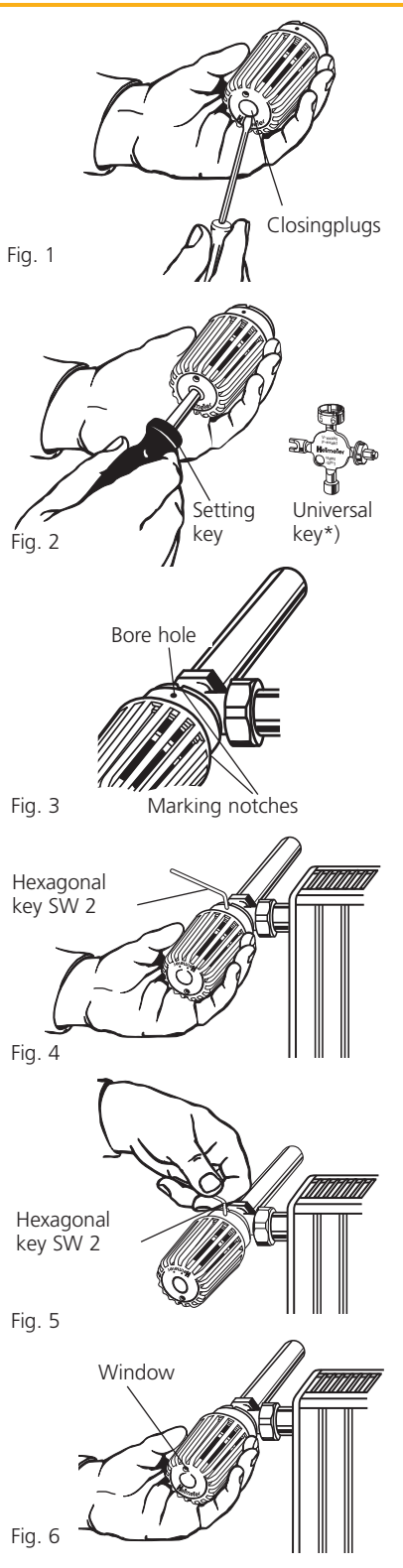
Screw on the thermostatic head by turning to the right on the valve body. Continue to turn the hand wheel cap beyond the point where resistance is felt until the bore hole at the side is aligned with one of the two marking notches on the fasteningnut. The location of the locking screws in the fastening nut is identical to the marking notches (fig. 3).

Tighten the thermostatic head by inserting the hexagonal socket head wrench SW 2 Art.no. 6040-02.256 (fig. 4).

Tighten the safety screw in the fastening nut with the hexagonal key SW 2 until it stops. The hand wheel cap can now be turned in any direction without changing the set setting value (fig. 5).

To read the setting value more clearly, turn the hand wheel cap so that the window points upwards (fig. 6).

*) As an alternative to the setting key art. no. 2500-00.253 for adjusting thermostatic head B. Also for the V-exakt/ F-exakt thermostatic valve body, Regelux lockshield, Vekolux double connection fitting and radiator air vent.



Dismantling the thermostatic head

If it is necessary to dismantle the thermostatic head, turn the handwheel until the bore hole on the side is aligned with one of the two marking notches on the fasteningnut (fig. 3).

Loosen the safety screw with the hexagonal key SW 2 (art. no. 6040-02.256) (fig. 5).

Unscrew the thermostatic head by inserting the hexagonal key and turning to the left (fig. 4).

Thermostatic head F

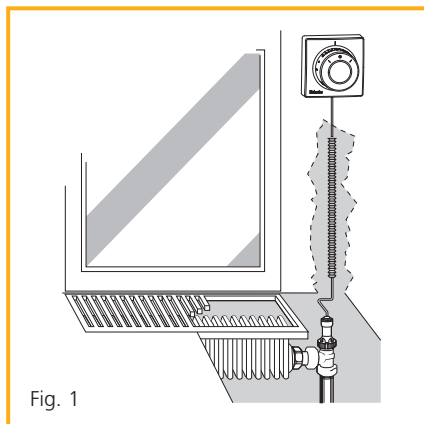


Fig. 1

Thermostatic valves should be installed in such a way that they control the room air temperature, and that the air is able to circulate around them unhindered. This will not be the case if thermostatic heads with integrated sensors are covered by curtains, radiator covers etc., if they are installed vertically or in narrow corners, or if they are affected by cold air, e. g. draughts.

In these cases, it is necessary to install a remote dial (or a thermostatic head with a remote sensor).

The remote dial should be installed in such a way that it is not covered by a cover, curtains, etc.

The capillary tube can be laid onto plaster or in a Ø 23 mm conduit (fig. 1).

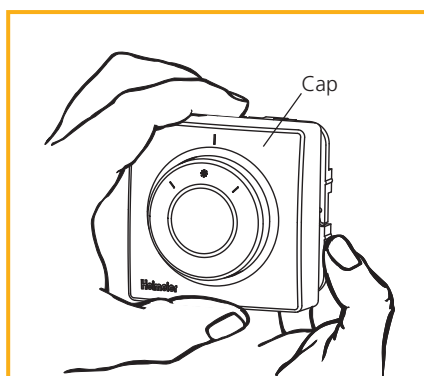


Fig. 2

Installing the thermostatic head

Remove the cap from the base plate (fig. 2).

Install the base plate with the directional mark pointing upwards onto an even wall or a flushbox using the fixing-materials supplied.

Measure the capillary tube to be laid. Coil up the remaining capillary tube on the front side of the base plate.

Warning: When installing onto an even wall, ensure that the capillary tube is run out through one of the available chases (fig. 3).

Firmly press on the cap with the setting mark pointing upwards until it clicks into place (fig. 4).

To install the capillary tube in a conduit, see page 14.

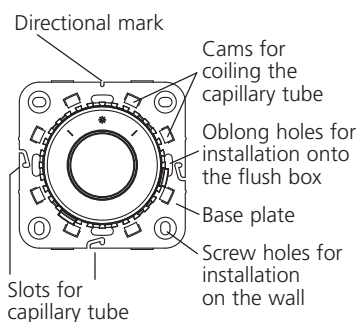


Fig. 3

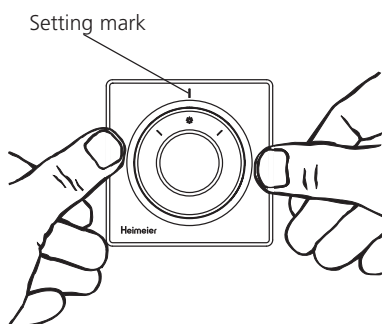
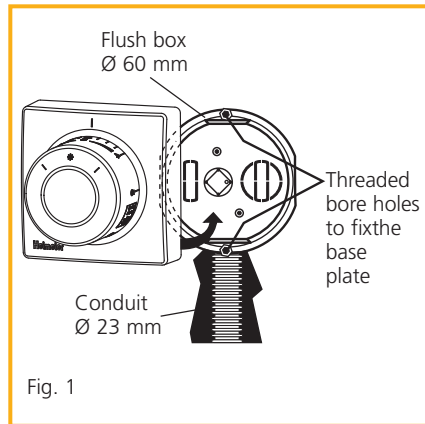


Fig. 4

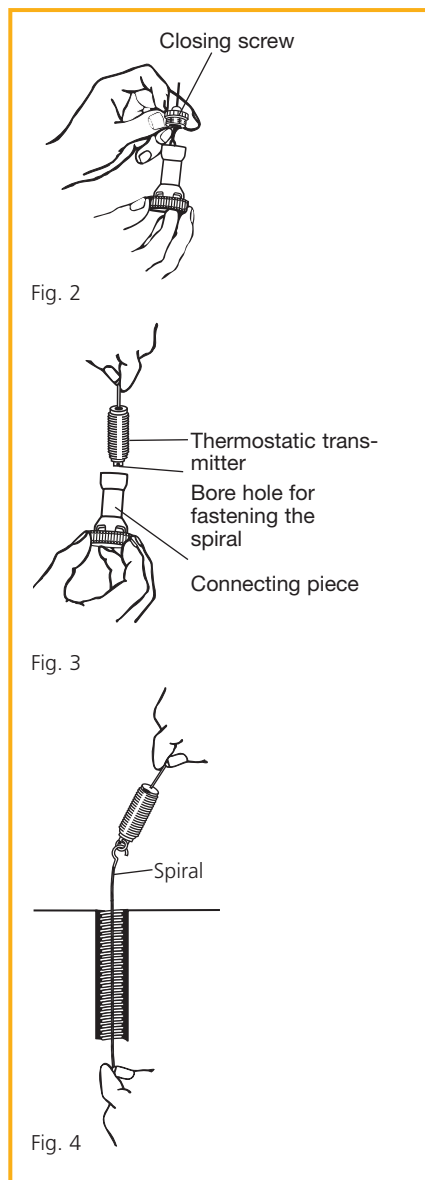
Installation

Thermostatic head F



Installation onto a flush box with a conduit

Here, a flush box with $\varnothing 60$ mm and a conduit with $\varnothing 23$ mm should be used (fig. 1).



Installing the capillary tube in the conduit

Unscrew the closing screw (fig. 2).

Remove the capillary tube with the thermostatic transmitter (fig. 3).

Push the spiral through the conduit and connect to the thermostatic transmitter. Pull the transmitter and the capillary tube with the spiral through the conduit (fig. 4).

Then put the individual parts back together again. Remove the protection cap from the thermostatic valve body. Turn the thermostatic head F to number 5. Position the connecting piece and tighten the locking ring with a rubber jawed wrench.

Marking, restricting or locking

Thermostatic head K, VK and WK

The thermostatic head is supplied ex works with two energy saving clips. The energy saving clips are initially installed to the right and left of the brief informa-

tion. They can be used to mark, restrict or lock the optimal temperature setting.

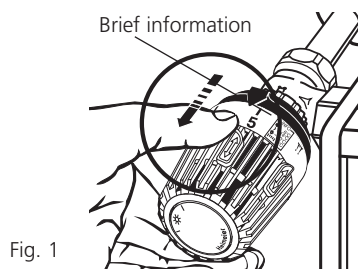


Fig. 1

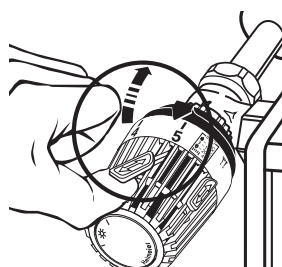
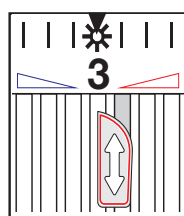
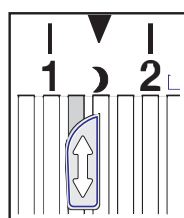


Fig. 2



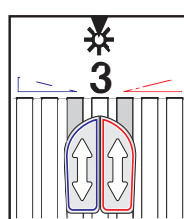
Red energy saving clip for upper marking/restriction e. g. 20°C (68°F)

Fig. 3



Blue energy saving clip for lower marking/restriction e. g. 14°C (57°F)

Fig. 4



Locking, e. g. 20°C (68°F)

Fig. 5

Marking the upper restriction of the temperature range

To do this, pull back the red energy saving clip with your thumb until it stops (fig. 1), lift up and remove (fig. 2). The thermostatic head will then be set to the required temperature, e. g. number 3 $\approx 20^{\circ}\text{C}$ (68°F). Then insert the red energy saving clip into the notch **on the right hand side** of number 3 (fig. 3), push it

forward and then **pull back** with your thumb until it stops.

Marking the lower restriction of the temperature range

To do this, pull back the blue energy saving clip with your thumb until it stops (fig. 1), lift up and remove (fig. 2). The thermostatic head will then be set to the required temperature, e. g. the moon symbol $\approx 14^{\circ}\text{C}$ (57°F). Then insert the blue energy saving clip into the notch **on**

the left hand side of the moon symbol (fig. 4), push it forward and then **pull back** with your thumb until it stops.

Restricting the upper temperature range

To do this, pull back the red energy saving clip with your thumb until it stops (fig. 1), lift up and remove (fig. 2). The thermostatic head will then be set to the required temperature, e. g. number 3 $\approx 20^{\circ}\text{C}$ (68°F). Then insert the red energy saving clip into the notch **on the right hand side** of number 3 (fig. 3) and **push forward** until it stops. Now, any

setting up to number 3 can be made by turning the thermostatic head. It is now no longer possible to set a temperature which is **above** number 3. To remove the restriction, pull back the energy saving clip with your thumb until it stops. Now any temperature can be set.

Restricting the lower temperature range

To do this, pull back the blue energy saving clip with your thumb until it stops (fig. 1), lift up and remove (fig. 2). The thermostatic head will then be set to the required temperature, e. g. the moon symbol $\approx 14^{\circ}\text{C}$ (57°F). Then insert the blue energy saving clip into the notch **on the left hand side** of the moon symbol (fig. 4) and **push forward** until it stops. Now, any setting up to the moon symbol

can be made by turning the thermostatic head. It is now no longer possible to set a temperature which is **below** the moon symbol. To remove the restriction, pull back the energy saving clip with your thumb until it stops. Now any temperature can be set.

Locking a setting

To lock a setting, pull back **both energy saving clips** with your thumb (fig. 1), lift up and remove (fig. 2). The thermostatic head will then be set to the required temperature, e. g. number 3 $\approx 20^{\circ}\text{C}$ (68°F). Then insert the red energy saving clip into the notch **on the right hand side** of number 3 (fig. 5) and push forward until it stops. Then insert the blue energy saving clip in the notch **on the**

left hand side of number 3 (fig. 5) and push forward until it stops. Now the thermostatic head can no longer be adjusted. To release the lock, pull back the red or blue energy clip, or if necessary, both energy clips, until they stop. Now it is again possible to make any setting.

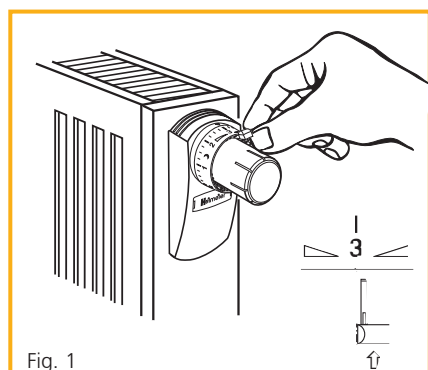
Operation

Marking, restricting or locking

Thermostatic head VD

The thermostatic head is supplied ex works with two energy saving clips. The energy saving clips are initially installed next to numbers 0 and 5. They can be

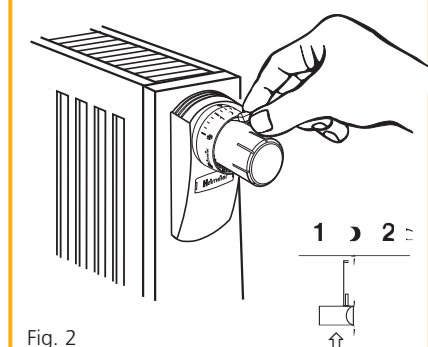
used to mark, restrict or lock the optimal temperature setting.



Marking the upper restriction of the temperature range

To do this, pull back the red energy saving clip until a slight resistance is felt, then lift up and remove. The thermostatic head will then be set to the required temperature, e. g. number 3 $\approx 20^{\circ}\text{C}$

(68°F). Then insert the red energy saving clip into the notch **on the right hand side** of number 3 (fig. 1), push forward and then **pull back** until a slight resistance is felt.



Marking the lower temperature range

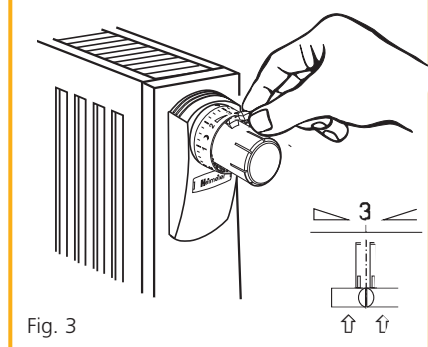
To do this, pull back the blue energy saving clip until a slight resistance is felt, lift up and remove. The thermostatic head will then be set to the required temperature, e. g. the moon symbol

$\approx 14^{\circ}\text{C}$ (57°F). Then insert the blue energy saving clip in the notch **on the left hand side** of the moon symbol (fig. 2), push forward and then **pull back** until a slight resistance is felt.

Restricting the upper temperature range

To do this, pull back the red energy saving clip until a slight resistance is felt, lift up and remove. The thermostatic head will then be set to the required temperature, e. g. number 3 $\approx 20^{\circ}\text{C}$ (68°F). Then insert the red energy saving clip into the notch **on the right hand side** of number 3 (fig. 1) and **push forward** until it stops. Now any setting

up to number 3 can be set by turning the thermostatic head. It is now no longer possible to set a temperature which is **above** number 3. To remove the restriction, pull back the energy clip until a slight resistance is felt. Now any temperature can be set.



Restricting the lower temperature range

To do this, pull back the blue energy saving clip until a slight resistance is felt, lift up and remove. The thermostatic head will then be set to the required temperature, e. g. the moon symbol $\approx 14^{\circ}\text{C}$ (57°F). Then insert the blue energy saving clip in the notch **on the left hand side** of the moon symbol (fig. 2) and **push forward** until it stops.

Now, any setting up to the moon symbol can be made by turning the thermostatic head. Settings which are **below** the moon symbol are now no longer possible. To remove the restriction, pull back the energy clip until a slight resistance is felt. Now any temperature can be set.

Locking a setting

To lock a setting, pull back **both energy saving clips** until a slight resistance is felt, lift up and remove. The thermostatic head will then be set to the required temperature, e. g. number 3 $\approx 20^{\circ}\text{C}$ (68°F). Then insert the red energy saving clip into the notch **on the right hand side** of number 3 (fig. 3) and push forward until it stops. Then insert the blue energy saving clip in the notch **on the**

left hand side of number 3 and push forward until it stops. Now the thermostatic head can no longer be adjusted. To remove the lock, pull back the red or the blue energy saving clip, or if necessary, both energy saving clips, until a slight resistance is felt. Now it is again possible to make any setting.

Hidden restriction or locking of a setting

With the stop pins which can be removed from the inside of the connection cover, a hidden limitation or locking, as already described, can be carried out. Ensure that the stop pins click into place

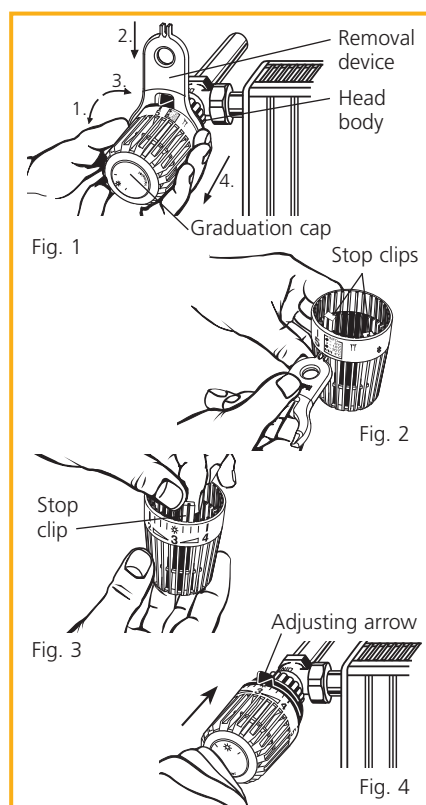
in the required notch when they are pushed forward until they stop. It is then no longer possible to pull back the stop pins.

Hidden restriction or locking

Thermostatic heads K and VK

The thermostatic head is supplied ex works with two stop clips. These are initially installed on the right hand side of number 5 and on the left hand side of the frost protection setting ☼.

They can be used to make a hidden restriction, or lock the optimal temperature setting. First remove the energy saving clips (see page 15).



Restricting the upper temperature range

Set thermostatic head to number 5. Insert the removal device (art. no. 6000-00.138) above the adjusting arrow between the graduation cap and the head body.

Rotate the graduation cap clockwise beyond a perceptible resistance.

Before withdrawing the graduation cap set the thermostatic head to the required temperature, e.g. number 3 $\approx 20^\circ\text{C}$.

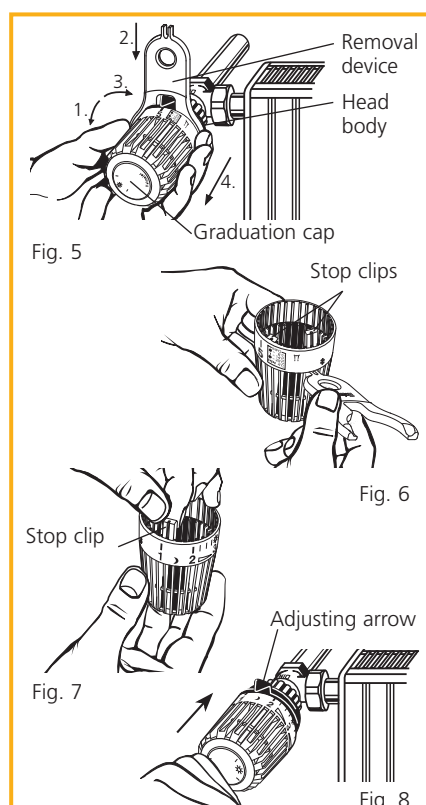
Withdraw graduation cap (fig. 1).

Slide up the stop clip from the **right** hand position next to number 5 with the removal device and extract it (fig. 2).

Afterwards slide the stop clip onto the 2nd web on the **right** next to number 3 until it clicks into place (fig. 3).

Put on the graduation cap again so that the number 3 lines up with the adjusting arrow. Press the graduation cap down firmly until it clicks into place (fig. 4).

Now all settings up to number 3 can be made by turning the thermostatic head. Settings **above** number 3 are no longer possible.



Restricting the lower temperature range

Set thermostatic head to number 5. Insert the removal device (art. no. 6000-00.138) above the adjusting arrow between the graduation cap and the head body.

Rotate the graduation cap clockwise beyond a perceptible resistance.

Before withdrawing the graduation cap set the thermostatic head to the required temperature, e.g. moon symbol $\approx 14^\circ\text{C}$.

Withdraw graduation cap (fig. 1).

Slide up the stop clip from the **left** hand position next to the frost protection position ☼ with the removal device and extract it (fig. 6).

Afterwards slide the stop clip onto the 2nd web on the **left** next to the moon symbol until it clicks into place (fig. 7).

Put on the graduation cap again so that the moon symbol lines up with the adjusting arrow. Press the graduation cap down firmly until it clicks into place (fig. 8).

Now all settings up to the moon symbol can be made by turning the thermostatic head. Settings **below** the moon symbol are no longer possible.

Combined upper and lower restriction of the temperature range

It is possible to combine the upper and lower restriction in one operation. To do this, the thermostatic head should be set at the required upper or lower temperature before the cap with graduation is

removed. When the restriction has been set, position the cap with graduation at the same setting.

To reset the basic position if the regulating head has been adjusted, see page 20.

Operation

Hidden restriction or locking

Thermostatic heads K and VK

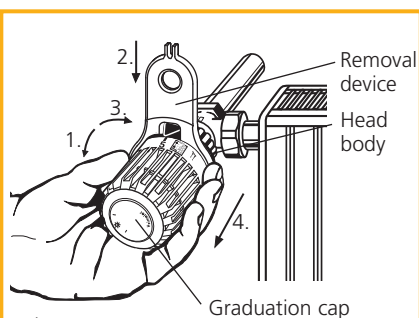


Fig. 1

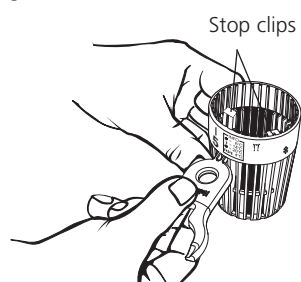


Fig. 2

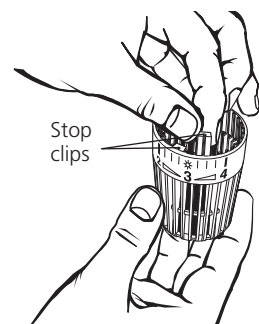


Fig. 3

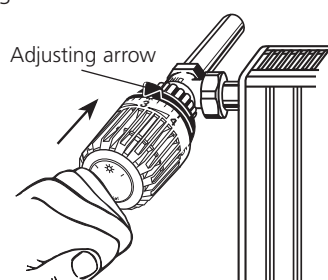


Fig. 4

Locking a setting

Set thermostatic head to number 5.
Insert the removal device (art. no. 6000-00.138) above the adjusting arrow between the graduation cap and the head body.

Rotate the graduation cap clockwise beyond a perceptible resistance.

Before withdrawing the graduation cap set the thermostatic head to the required temperature, e.g. number 3 $\approx 20^{\circ}\text{C}$.

Withdraw graduation cap (fig. 1).

Slide up the stop clips from the **right** hand position next to number 5 and from the **left** hand position next to the frost protection position \star with the removal device and extract them (fig. 2).

Afterwards slide one stop clip onto the 2nd web on the **left** next to number 3 and the other one on the 2nd web on the **right** next to number 3 until they click in place.

Put on the graduation cap again so that the number 3 lines up with the adjusting arrow. Press the graduation cap down firmly until it clicks into place (fig. 4).

The thermostatic head can no longer be adjusted.

Releasing a hidden restriction or lock

To do this, remove the stop clips from the current restriction or locking positions and insert them into their original positions on the 2nd web on the right hand side of number 5 and the 2nd web on the left hand side of the frost protection setting \star .

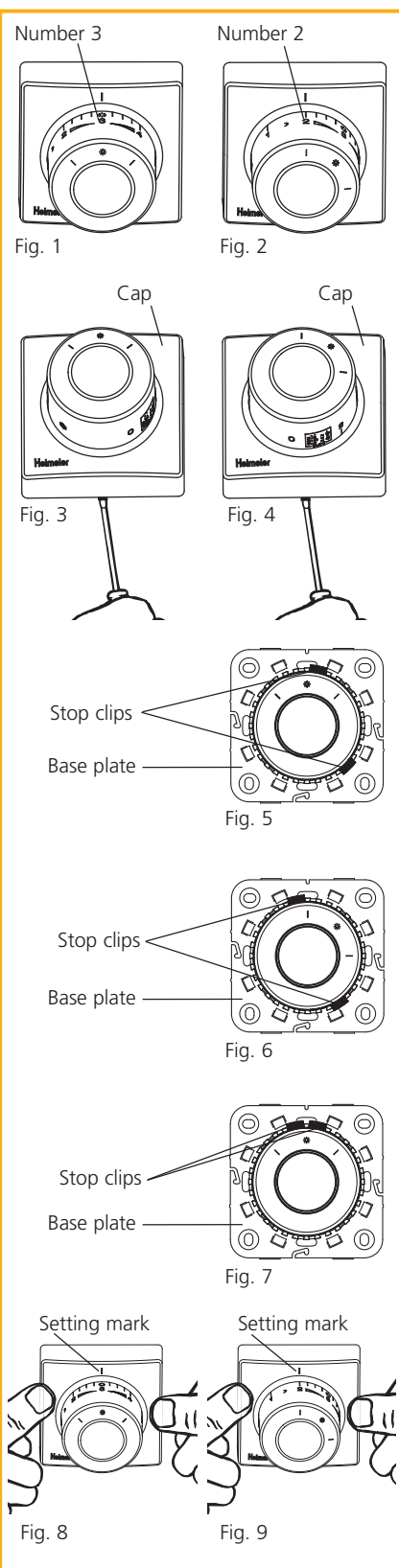
To reset the basic position if the regulating head has been adjusted, see page 20.

Hidden restriction or locking

Thermostatic head F

The thermostatic head F is supplied from the factory with two stop clips. These are within the cap fitted initially on the right next to number 5 and on the left next to

number 0. They can be used for hidden limitation or locking of the optimal temperature setting.



Upper limitation of the temperature range

Set the thermostatic head to the required temperature, e.g. number 3 * $\approx 20^{\circ}\text{C}$ (68°F) (Fig. 1).

Lift up the cap from the base plate with a screwdriver (Fig. 3).

Remove the stop clip from the position on the **right** hand side of number 5 and then push it on the 1st web on the **right** hand side of number 3 (Fig. 5).

Firmly press up the cap with setting mark pointing upwards onto the base plate until it clicks in (Fig. 8).

Settings up to number 3 are now possible by turning the thermostatic head. Settings **above** number 3 are no longer possible.

Lower limitation of the temperature range

Set the thermostatic head to the required temperature, e.g. number 2 $\approx 16^{\circ}\text{C}$ (61°F) (Fig. 2).

Lift up the cap from the base plate with a screwdriver (Fig. 4).

Remove the stop clip from the position on the **left** hand side of number 0 and then push it on the 1st web on the **left** hand side of number 2 (Fig. 6).

Firmly press up the cap with setting mark pointing upwards onto the base plate until it clicks in (Fig. 9).

Settings down to number 2 are now possible by turning the thermostatic head. Settings **under** number 2 are no longer possible.

Combined upper and lower limitation of the temperature range

It is possible to combine the upper and lower limitation in one operation.

While doing so the thermostatic head should be set to the required temperature before removing the cap.

Locking a setting

Set the thermostatic head to the required setting, e.g. number 3 * $\approx 20^{\circ}\text{C}$ (68°F) (Fig. 1).

Lift up the cap from the base plate with a screwdriver (Fig. 3).

Remove the stop clips from the positions on the **right** hand side of number 5 and on the **left** hand side of number 0. Then push one stop clip on the 1st web on the **left** hand side of number 3 and the

other on the 1st web on the **right** hand side of number 3 (Fig. 7).

Firmly press up the cap with setting mark onto the base plate until it clicks in (Fig. 8).

The thermostatic head can no longer be adjusted.

Operation

Basic setting

Thermostatic heads K and VK

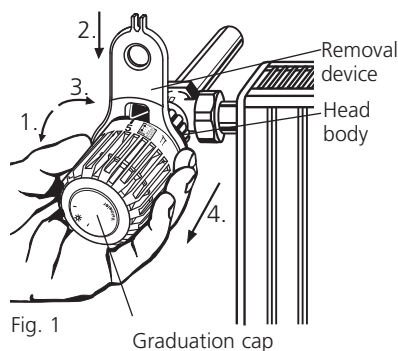


Fig. 1
Graduation cap

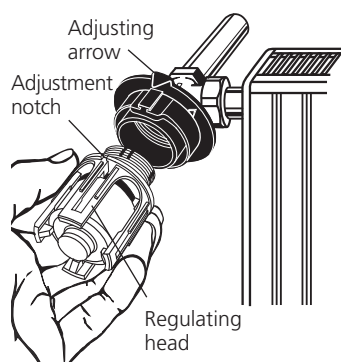


Fig. 2
Regulating head

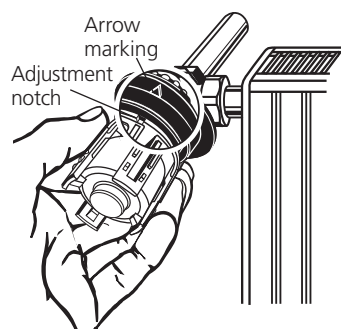


Fig. 3
Arrow marking
Adjustment notch

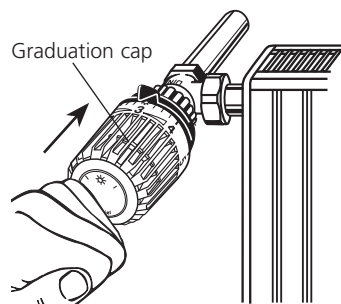


Fig. 4
Graduation cap

If the graduation cap is to be adjusted after dismounting, or if the graduation cap has been put on wrongly, the thermostatic head must be reset to the basic position.

If necessary, release restricting or locking with the economy clips (see page 15).

Set thermostatic head to number 5. Insert the removal device (art. no. 6000-00.138) above the adjusting arrow between the graduation cap and the head body. Rotate the graduation cap clockwise beyond a perceptible resistance (fig. 1).

If necessary, release hidden restricting or locking (see page 18).

Afterwards screw the complete regulating head out anticlockwise.

Put the regulating head on to the head body so that the adjustment notch and adjusting arrow are opposite one another (fig. 2) and afterwards lightly screw in clockwise until it stops.

Turn back the regulating head anticlockwise until the adjustment notch points to the arrow marking on the head body (fig. 3).

Put on the graduation cap again so that the number 3 lines up with the adjusting arrow. Press graduation cap down firmly until it clicks into place (fig. 4).

Precision presetting or finest presetting

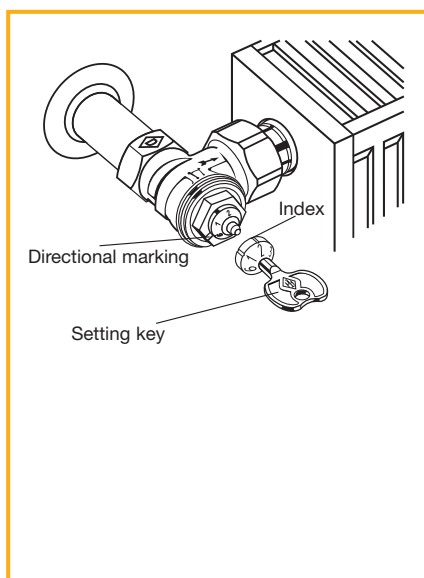
V-exakt/F-exakt thermostatic valve body

To guarantee even hot water distribution and warming of the radiators, a hydraulic balance within the heating system is necessary.

HEIMEIER offers several possibilities, e. g.:

1. V-exakt thermostatic valve bodies with precision presetting

2. F-exakt thermostatic valve bodies with finest presetting
3. Regulux lockshield
4. Balancing valves



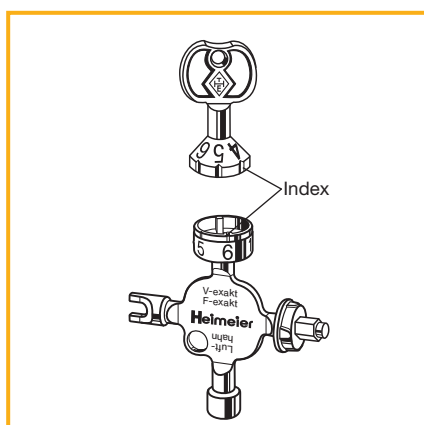
Operation of the presetting or finest presetting

The precision presetting/finest presetting of the V-exakt/F-exakt thermostatic valve bodies can be selected from 1; 2; 3; 4; 5 and 6. Setting 6 corresponds to the normal setting (manufacturer's setting).

There is a flow range hidden behind every setting value, which has a gap-free connection to the next range. It is therefore not necessary, and not permitted, to make intermediary settings.

With the key, only a specialist can create or change the setting. It is not possible for an unqualified person to tamper with the settings without a tool.

- Position the setting key onto the valve insert and turn until it clicks into place.
- Turn the index of the required setting value to the directional marking of the valve body.
- Remove the key. The setting can be read on the valve insert from the adjustment direction.



Setting key

for precision presetting and finest presetting

Art. no. **3501-02.142**

Universal key

as an alternative to the setting key for adjusting V-exakt/F-exakt. Also for thermostatic head B (temperature setting), thermostatic head K (for pushing out the stop clips), Regulux lockshield,

Vekolux double connection fitting and radiator air vent.
Art. no. **0530-01.433**

Retrofitting instructions

Thermostatic valve bodies with boss marking

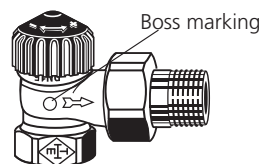
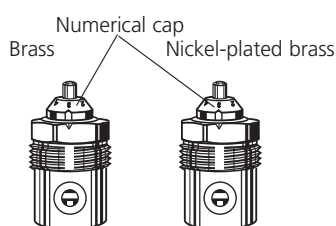


Fig. 1



V-exakt
Thermostatic inserts

Fig. 2

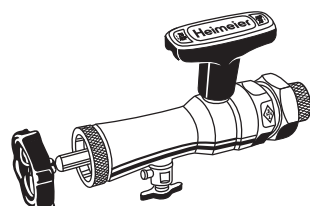
Since 1994, the body of the Standard, V-exakt and F-exakt valve bodies and the Mikrotherm manual radiator valves in nominal widths NW 10 and NW 15 have been manufactured to the same design. All valve bodies have the same seat diameter. An external indication that the design is the same is the notch which has been cast onto one side of the body (fig. 1). All valve bodies which have this mark can be retrofitted.

By replacing the inserts, e. g. the Standard thermostatic valve bodies can be retrofitted in V-exakt or F-exakt thermostatic valve bodies with precision presetting or finest presetting.

It is necessary to make this replacement e. g. when the demands made on the valve bodies change due to subsequent

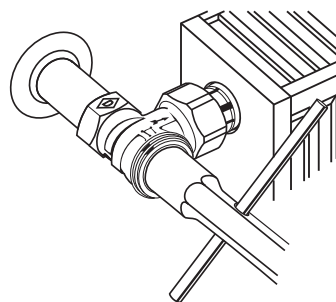
changes to the existing heating system, e. g. when a connection to a district heating network is established.

The individual thermostatic inserts can be identified by their different numerical caps (V-exakt: brass; F-exakt: brass nickel-plated) (fig. 2).



Fitting tool
Art. no. 9721-00.000

Fig. 3



Box spanner
Art. no. 2001-00.258

Fig. 4

Installation

The replacement insert can be fitted quickly and cheaply with the fitting tool, without draining off the heating system (fig. 3). For information about this, see page 24.

The thermostatic valve insert should always only be loosened or tightened with a special key SW 19 (fig. 4) (starting torque 35 Nm).

Mikrotherm manual radiator valve

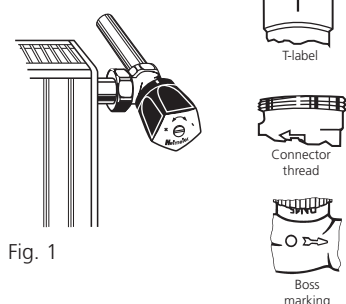


Fig. 1

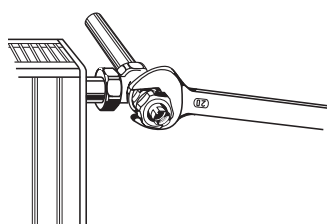


Fig. 2

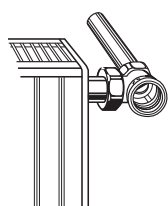


Fig. 3

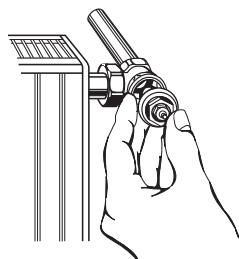


Fig. 4

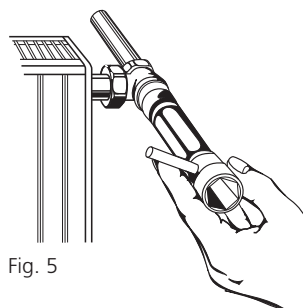


Fig. 5

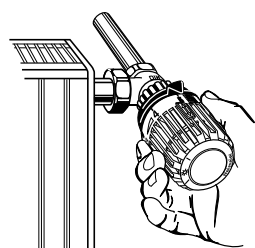


Fig. 6

All HEIMEIER Mikrotherm manual radiator valves with a T label and with a connecting thread for the thermostatic head on the body (fig. 1) can be converted to a thermostatic valve.

Manual valves with a connecting thread for the thermostatic head on the body from the 1988 series onwards, as well as those with boss markings on the body

from the April 1994 series onwards can also be converted to a thermostatic valve with a fitting device without draining the system.

For this, please ask for separate operating instructions.

Installation

Open the manual valve, and drain off the risers and the system. Unscrew the fastening screw and remove the hand wheel cap.

Loosen the insert with an open-jawed spanner SW 20 and unscrew (fig. 2).

Clean all traces of dirt deposits and grit from the valve seat.

Do not clean with a hard or abrasive object (fig. 3).

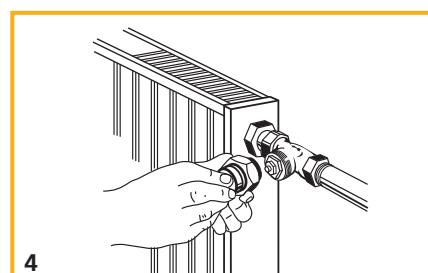
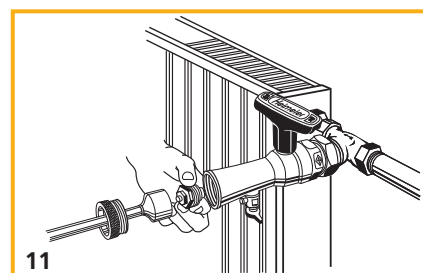
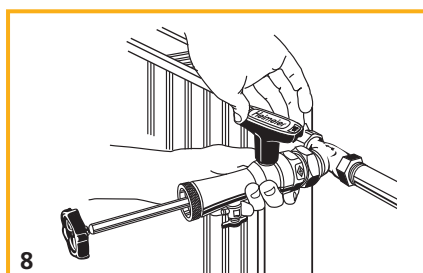
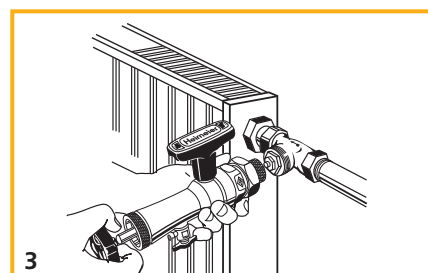
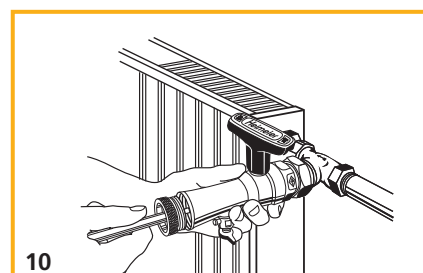
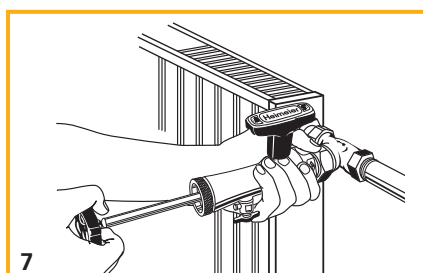
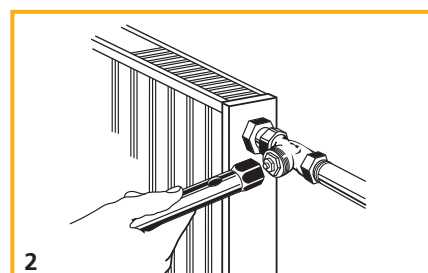
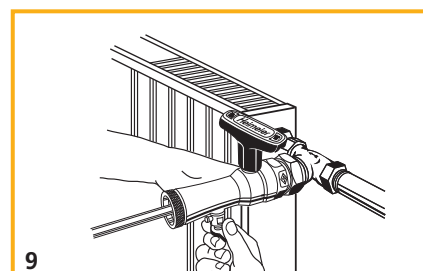
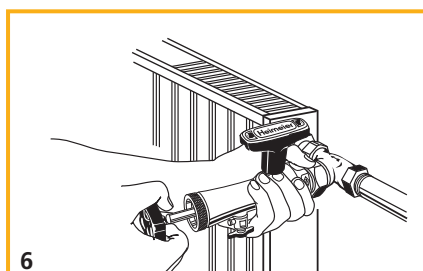
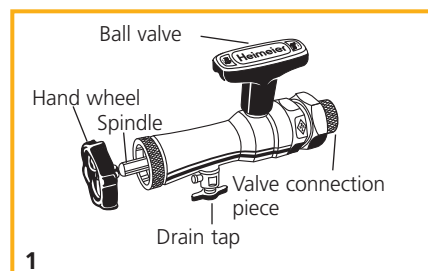
Screw in the thermostatic insert (fig. 4).

Tighten with a box spanner SW 19 (fig. 5). Box spanner art. no. 2001.00.258.

Install the thermostatic head (K, D, F, B) (fig. 6).

Retrofitting instructions

Fitting tool



Fitting tool for replacing thermostatic inserts (replacement inserts) from the end of 1982 series onwards (connection thread for thermostatic heads on the body), as well as replacement inserts with presetting from the new series at the start of 1985 onwards.

1. Unscrew the thermostatic head from the thermostatic valve body.
2. Lightly loosen the thermostatic insert (kvs replacement) with a box spanner SW 19.
3. Screw the fitting tool onto the thermostatic valve body.
4. For narrow radiator niches and covers, first screw the valve connection piece with the thermostatic valve body into place.
5. Screw the valve connection piece into place with the fitting tool.
6. Close the drain tap. Open the ball valve and push in the spindle of the fitting tool until it clicks into the thermostatic insert.

7. Turn the hand wheel on the fitting tool to the left until the thermostatic insert has been loosened from the body and slowly pull it back until it stops.

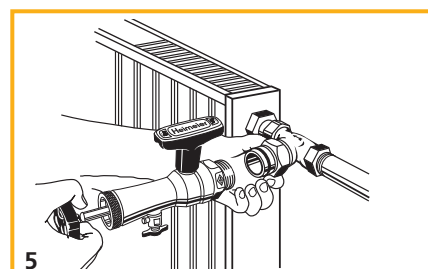
8. Close the ball valve.

9. Open the drain tap and catch any water which runs out.

10. Open the screw of the fitting tool below the hand wheel.

11. Remove the dismantled thermostatic insert from the fitting tool and replace with a new one. Install the new thermostatic insert by following the above procedure in reverse.

When the new thermostatic insert has been installed, drain off the fitting tool. Then unscrew the fitting tool from the thermostatic valve body and tighten the insert with the box spanner SW 19. Screw on the thermostatic head.



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