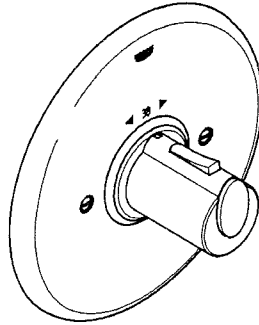
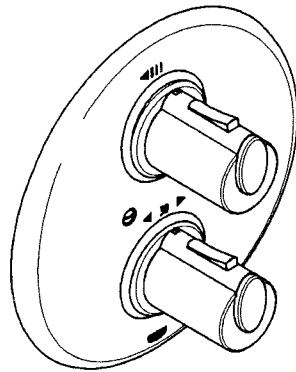


34 160



34 161  
34 162



Grohtherm 1000

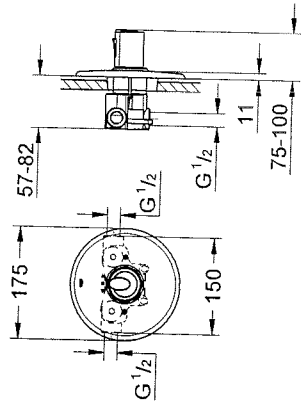
## Grohtherm 1000

<b>D</b> .....1	<b>I</b> .....9	<b>N</b> .....17	<b>GR</b> .....25	<b>TR</b> .....33	<b>BG</b> .....41	<b>RO</b> .....49
<b>GB</b> .....3	<b>NL</b> .....11	<b>FIN</b> .....19	<b>CZ</b> .....27	<b>SK</b> .....35	<b>EST</b> .....43	<b>RUS</b> .....51
<b>F</b> .....5	<b>S</b> .....13	<b>PL</b> .....21	<b>H</b> .....29	<b>SLO</b> .....37	<b>LV</b> .....45	
<b>E</b> .....7	<b>DK</b> .....15	<b>UAE</b> .....23	<b>P</b> .....31	<b>HR</b> .....39	<b>LT</b> .....47	

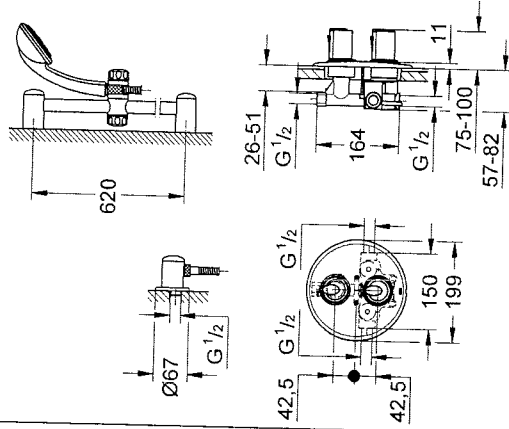
94.665.131/AM 205984/05.06

**GROHE**  
ENJOY WATER®

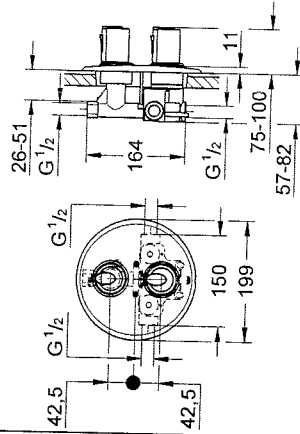
34 160



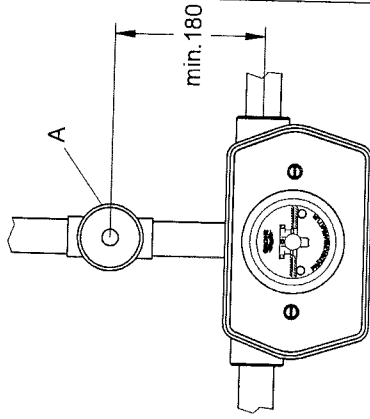
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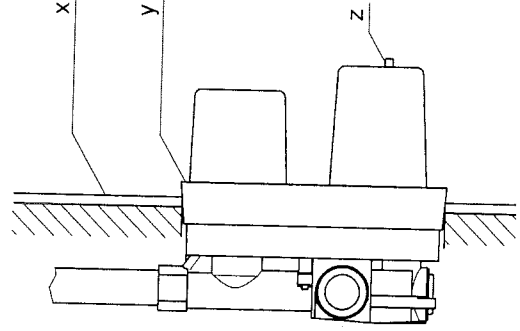
34 161



1



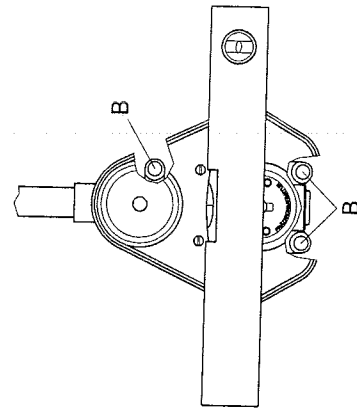
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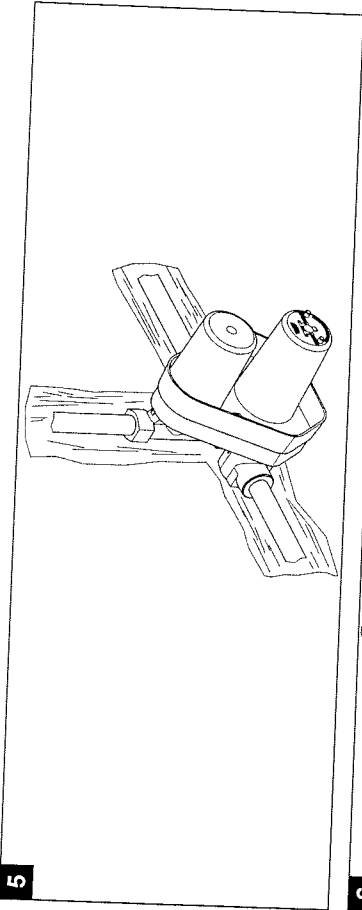
2

a	b	c
1/2"		29 800
ø 15mm		29 801
3/4"		29 802
ø 18mm		29 803
ø 22mm		29 804

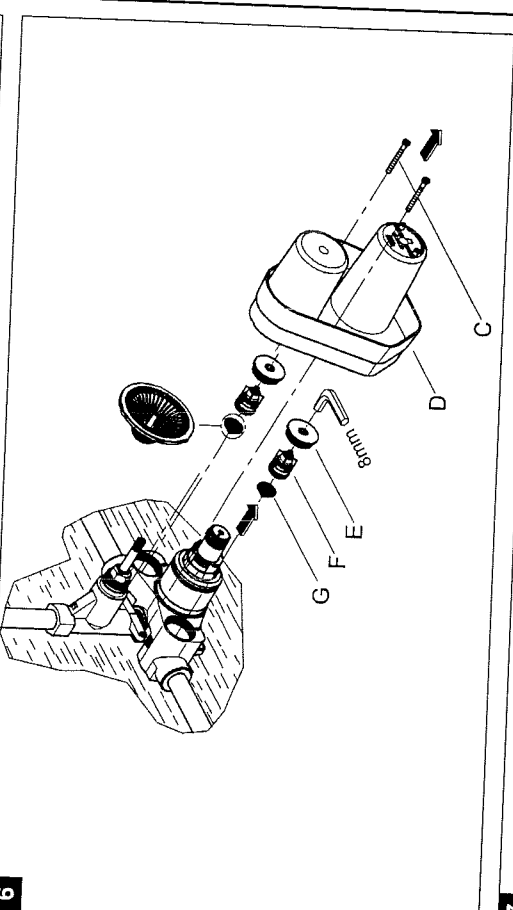
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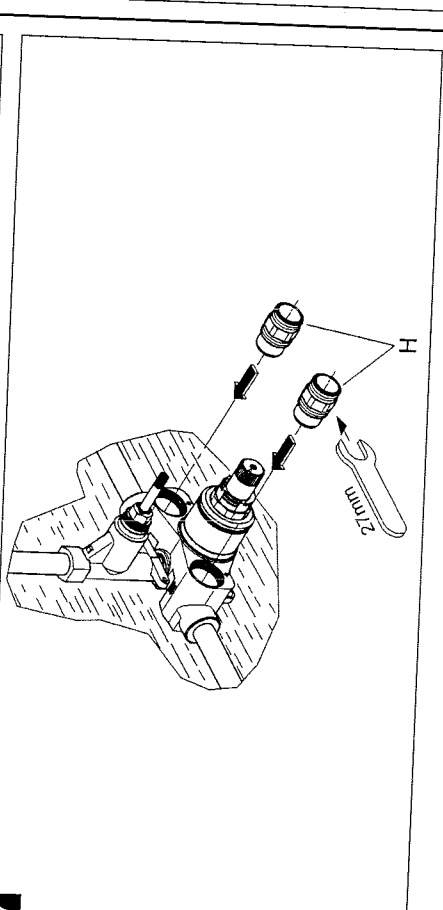
Bitte diese Anleitung an den Benutzer der Armatur weitergeben.  
Please pass these instructions on to the end user of the fitting.  
S.v.p remettre cette instruction à l'utilisateur de la robinetterie!



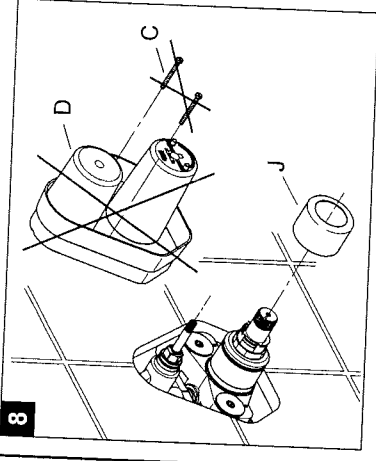
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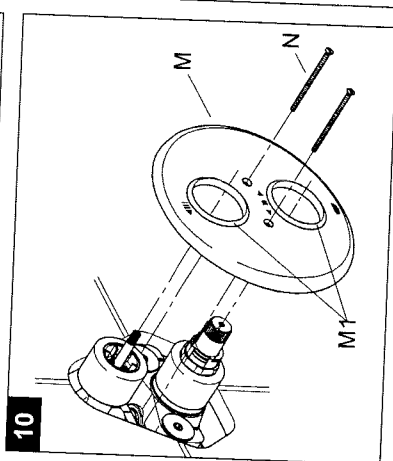
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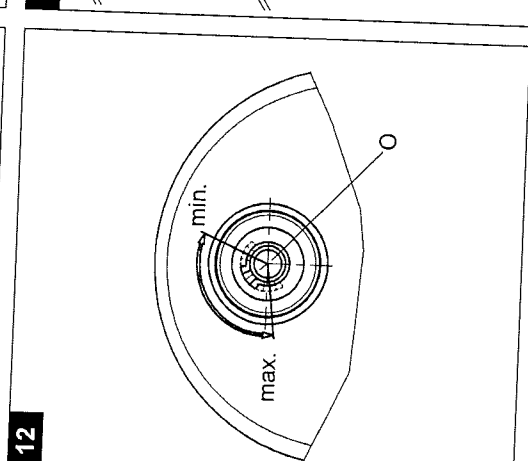
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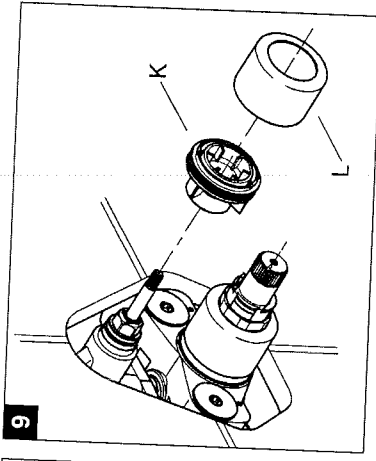
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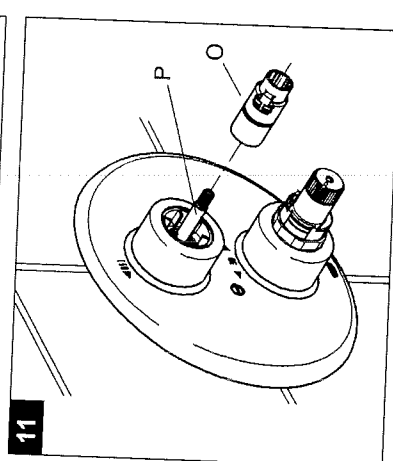
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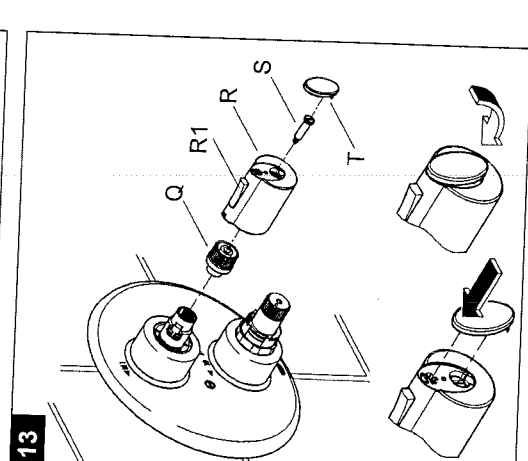
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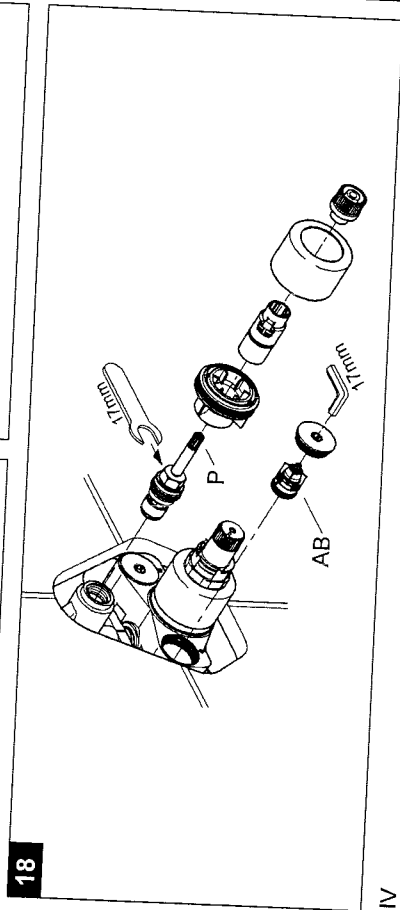
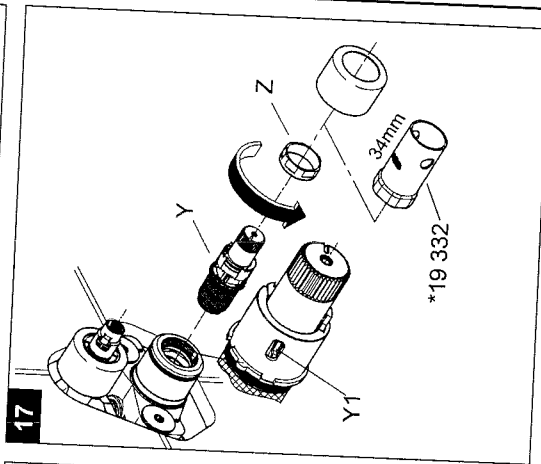
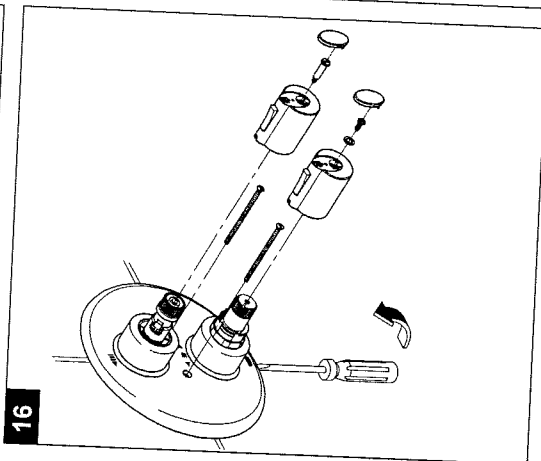
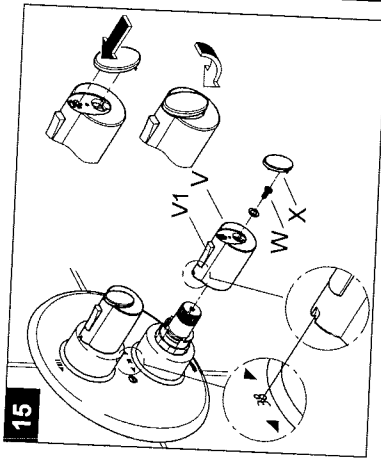
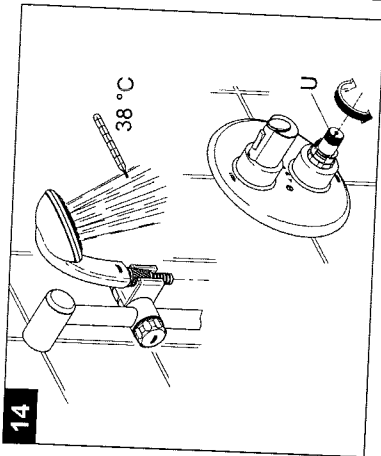
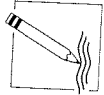
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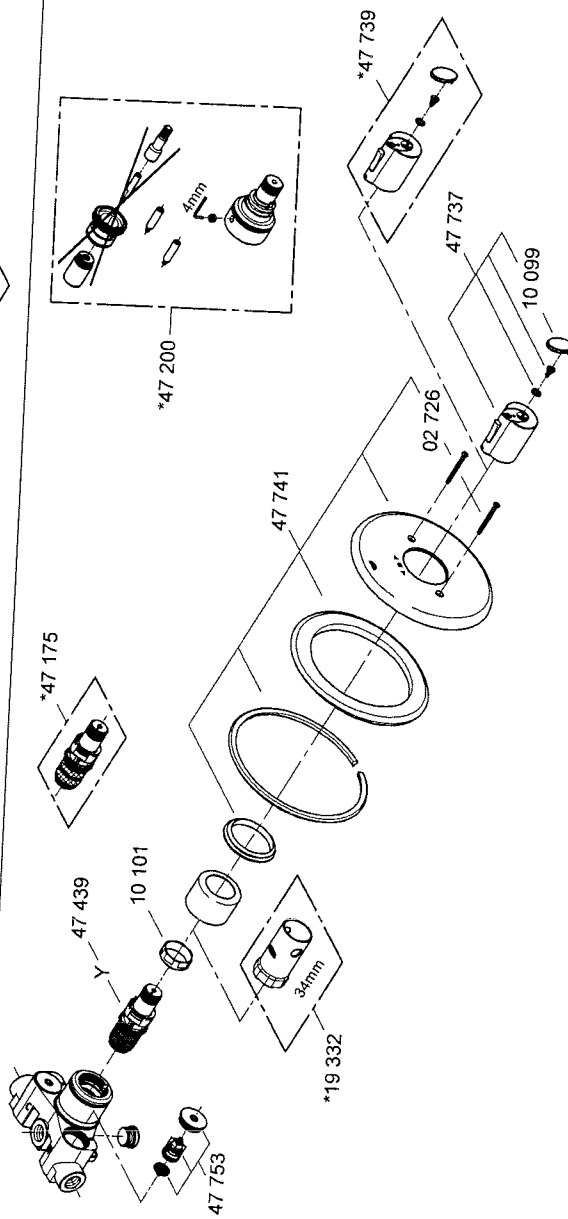
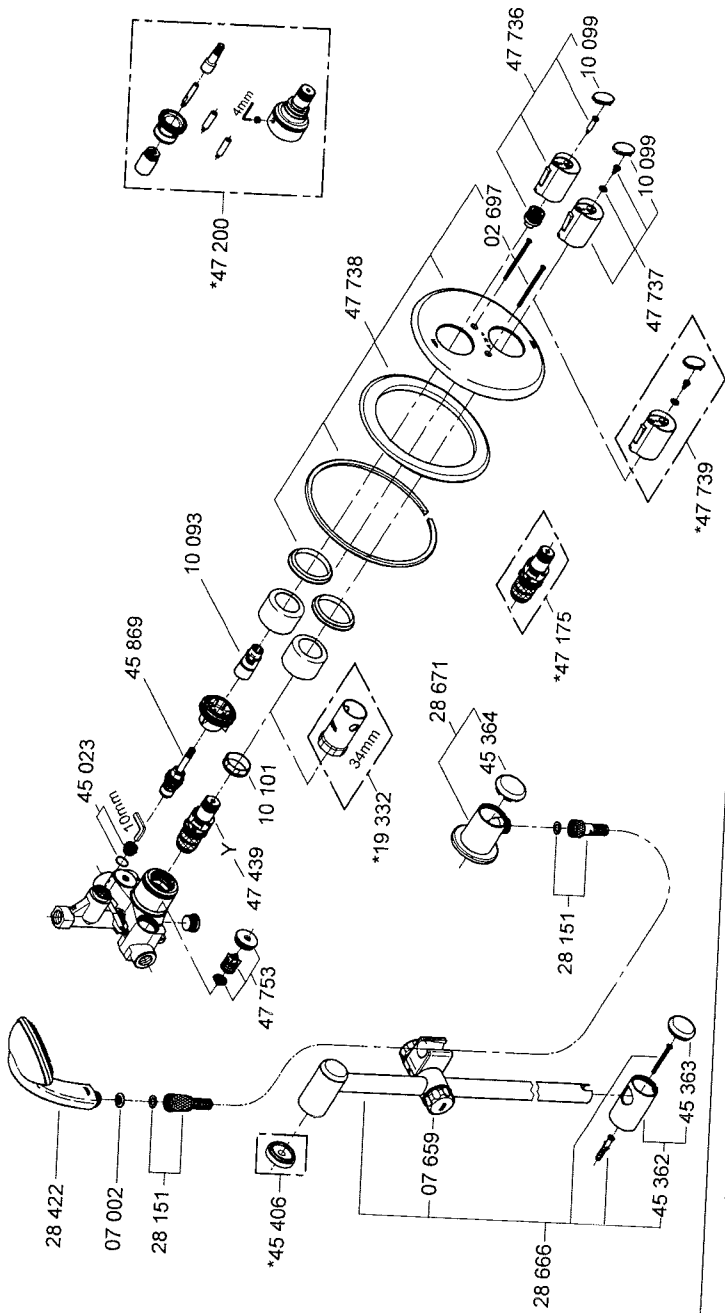


11



13







## Application

Thermostat mixers are designed for hot water supplies from pressurised storage heaters and offer the highest temperature accuracy when used in this way. Given sufficient output (min. 18 kW or 250 kcal per min), electric or gas-fired instantaneous heaters are also suitable.

Thermostat mixers cannot be used in conjunction with low-pressure storage heaters (displacement heaters).

All thermostat mixers are adjusted at the factory at a flow pressure of 3 bar on both sides.

A shutoff device (A) must be installed after the mixed water outlet of concealed thermostatic mixer (34 160), see fig. [1].

For an order number index to the various installation components for the concealed mixer, see fig. [2].

a = Size of union  
b = Part  
c = Part No.

When this model is used as a central thermostat, standard mixers can be installed at the draw-off points, in this case, the thermostat mixer supplies hot water to which cold water can be added.

The built-in thermostat with stop-valve (34 161 / 34 162) only shuts off the upper outlet. An additional stop valve must be fitted if the lower outlet is used, see fig. [2].

## Technical Data

Minimum flow pressure without downstream resistances	0.5 bar
Minimum flow pressure with downstream resistances	1 bar
Max. operating pressure	10 bar
Recommended flow pressure	1 - 5 bar
Test pressure	16 bar
Flow rate at 3 bar flow pressure	
34 160	approx. 35 l/min
34 161	approx. 24 l/min
Max. water temperature at hot water inlet	80 °C
Recommended max. flow temperature (for energy saving)	60 °C
Safety stop	38 °C
Hot water temperature at supply connection min. 2 °C higher than mixed water temperature.	
Hot water connection - W - (-H-)	left
Cold water connection - K - (-C-)	right
Minimum flow rate	5 l/min

At a flow pressure over 5 bar it is recommended that a pressure reducing valve be fitted in the supply line.

## Prevention of frost damage

When the domestic water system is drained, the thermostat mixers must be drained separately, since non-return valves are installed in the hot and cold water connections. The complete thermostat assembly and non-return valves must be unscrewed and removed.

## New installations

- Prepare wall ready for mixer.  
Drill holes for thermostat mixer and chase-out grooves for pipelines.

Observe the installation depth in accordance with the instructions given on the mounting template, see also fig. [3].

x = Face of tiles  
y = Front face of mounting template  
z = Resting point for spirit level

- Align the mixer horizontally, vertically and parallel to the wall, see fig. [4] (place a spirit level on the cams or face of the mounting template).

- Install concealed thermostat mixer module in wall and connect pipelines, see fold-out page III fig. [5].

The housing is provided with pre-drilled holes (B) to facilitate mounting the fitting to the wall, see fold-out page I fig. [4].

- Do not solder the connections between the pipelines and housing, otherwise the built-in non-return valves may be damaged.

- Seal the open outlet with screw plug.

### Note!

- The hot water supply must be connected on the left (marked W (H) on housing) and the cold water supply on the right (marked K (C) on housing), as viewed from the operating position.

Test the pipelines and concealed thermostat module connections for leaks.

## Flush pipelines thoroughly.

1. Remove screws (C) and mounting template (D), see fig. [6].
2. Close the hot and cold water supplies.
3. Remove screw plug (E).
4. Remove non-return valve (F) and filter (G).
5. Install flushing plugs (H) in non-return valve seat recesses, see fig. [7].
6. Open the hot and cold water supplies and flush pipes thoroughly.
7. Close the hot and cold water supplies and remove flushing plugs (H).
8. Install filter (G) and non-return valve (F), see fig. [6].
9. Install screw plug (E).
10. Reinstall mounting template (D).

Plaster and tile the wall, excluding the area occupied by the mounting template. Seal any apertures in the wall so that they are watertight to spray water.

- Tiles laid in mortar should be pointed so that the joint is tapered towards the outside.
- Seal prefabricated walls with a permanently plastic compound.

Do not remove the fitting template before final installation.

### Final installation

1. Remove the mounting template, see fold-out page III fig. [8].
2. Fit sleeve (J).
3. Install holder (K) and fit sleeve (L), see fig. [9].
4. Grease the seals (M1) with the special grease supplied and install escutcheon (M) with screws (N), see fig. [10].

If the thermostat has been installed at too great a depth, this can be adjusted by 27.5mm with an extension set (see fold-out page II, ref. No. 47 200).

**Installation of the flow control knob and adjustment of the economy stop**, see fold-out page III figs. [11] to [13].

- The flow rate is limited by the economy stop (O) supplied, see fig. [11].

To install the flow control knob, proceed as follows:

1. Close the ceramic headpart (P) by turning clockwise.
2. Install the economy stop (O) in the desired position. For possible settings, see fig. [12].
3. Fit splined adapter (Q), see fig. [13].
4. Install flow control knob (R) so that the button (R1) is at top.
5. Reinstall screw (S).
6. Fit cap (T).

If a higher rate is desired, the stop can be overridden by depressing the button (R1).

**Reversed connection** (hot on right - cold on left). Replace thermostatic compact cartridge (Y), see Replacement Parts, fold-out page II, Prod. no. 47 175 (1/2").

### Adjustment

**Installation of the thermostat knob and temperature adjustment**, see fold-out page IV figs. [14] and [15].

- Before the mixer is put into service if the mixed water temperature measured at the point of discharge varies from the specified temperature set on the thermostat.
  - After any maintenance operation on the thermoelement.
1. Open the shut-off valve and check the temperature of the water with a thermometer, see fig. [14].
  2. Turn the adjusting nut (U) clockwise or anticlockwise until the water temperature reaches 38 °C.
  3. Install temperature control handle (V) so that the button (V1) is at top, see fig. [15].
  4. Reinstall screw (W).
  5. Fit cap (X).

### Temperature limitation

The safety stop limits the temperature range to 38 °C. If a higher temperature is desired, the 38 °C limit can be overridden by depressing the button (V1), see fig. [15].

### Temperature limit stop

If the temperature limit stop should be 43 °C, use handel ref. No. 47 739 (see fold-out page II.)

### Prevention of frost damage

When the domestic water system is drained, thermostat mixers must be drained separately, since non-return valves are installed in the hot and cold water connections. The complete thermostat assemblies and non-return valves must be unscrewed and removed.

### Maintenance

Inspect and clean all parts, replace if necessary and grease with special valve grease.

### Shut off cold and hot water supplies.

**I. Thermostatic compact cartridge (Y)**, see fold-out page IV, fig. [16] and [17].

- Loosen screw ring (Z) using a 34mm tool.
- If necessary, lever out thermostatic compact cartridge (Y) via recess (Y1).
- Remove screw ring (Z).

Install in reverse order.

**Observe the correct installation position of the thermostatic compact cartridge (Y).**

Readjustment is necessary after every maintenance operation on the thermostatic compact cartridge (see Adjusting).

**II. Non-return valve (AB)**, see fold-out page IV fig. [16] and [18].

Reassemble in reverse order.

**III. Ceramic headpart (P)**, see fold-out page IV fig. [16] and [18].

Reassemble in reverse order.

**Observe the correct mounting positions!**

**Replacement parts**, see fold-out page II (\* = special accessories).

### Care

For directions on the care of this fitting refer to the accompanying Care Instructions.