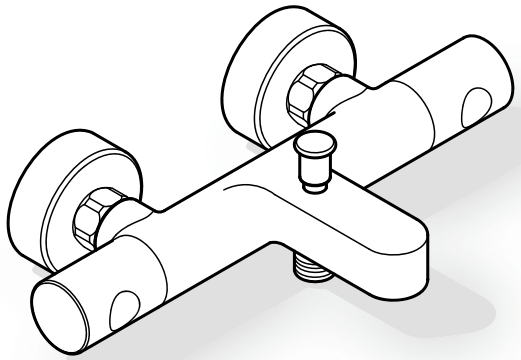
DESIGN + ENGINEERING
GROHE GERMANY

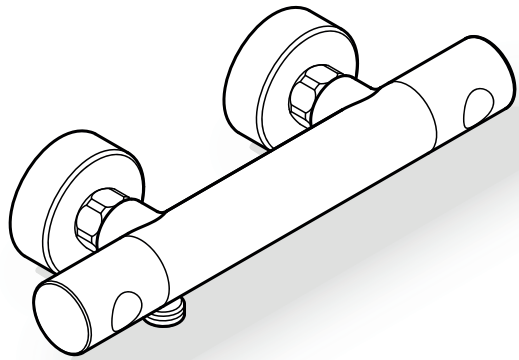
99.829.131/ÄM 250521/06.22

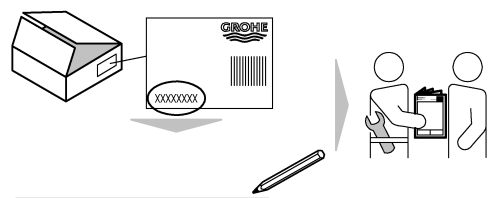
www.grohe.com

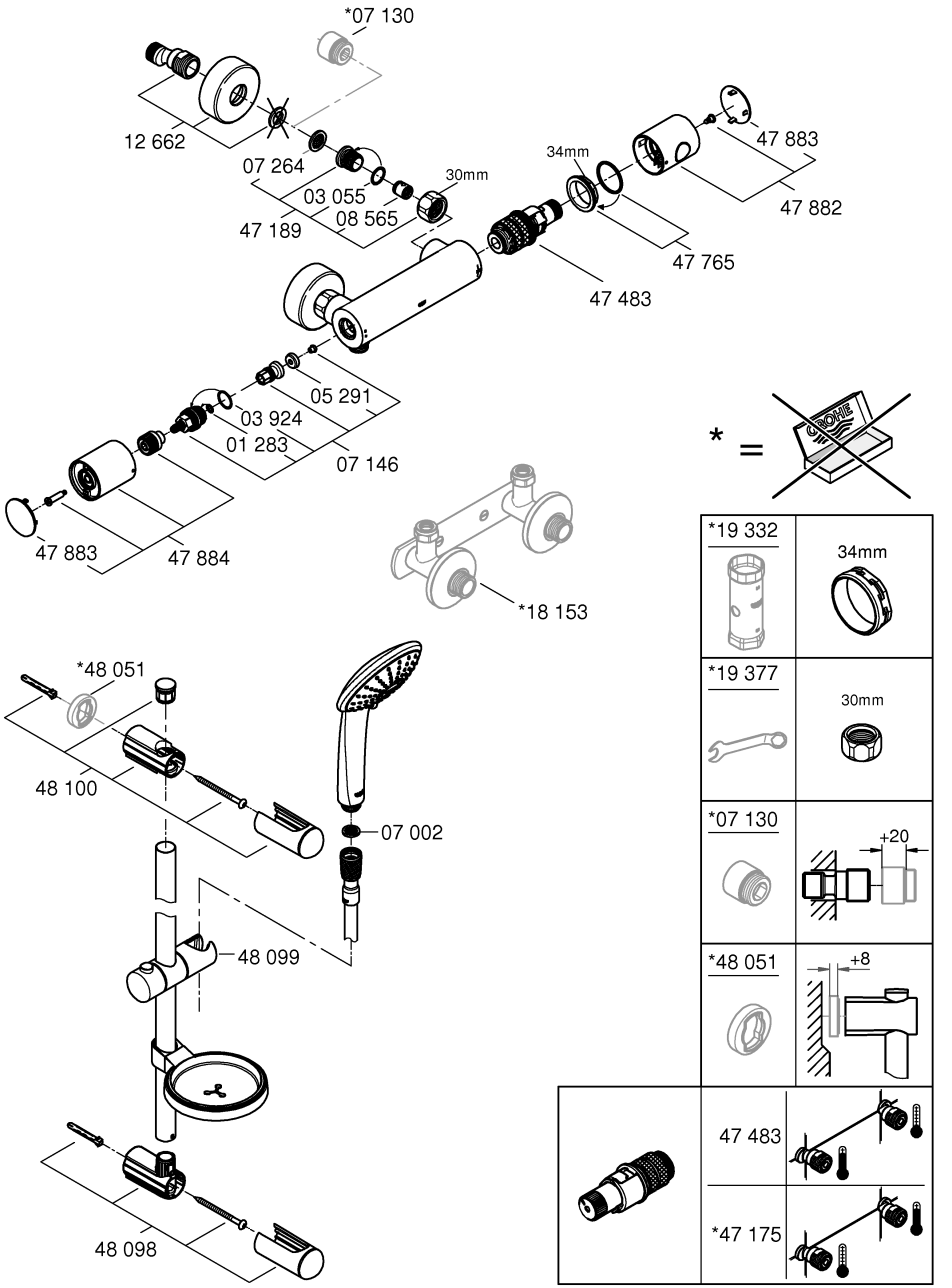
Pure Freude an Wasser

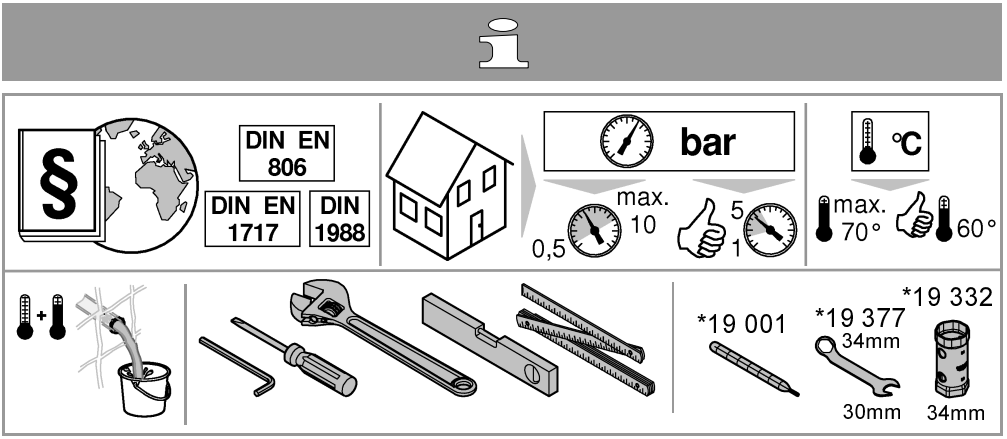
GROHE

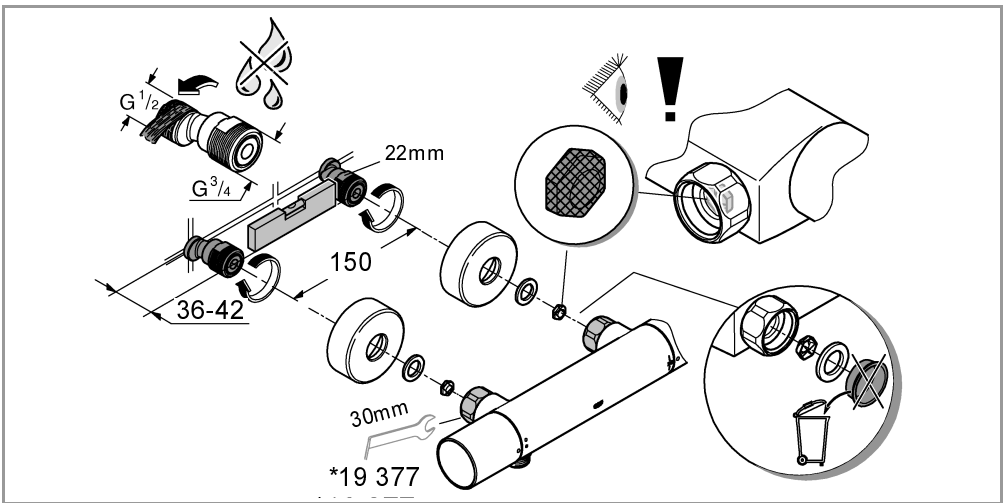


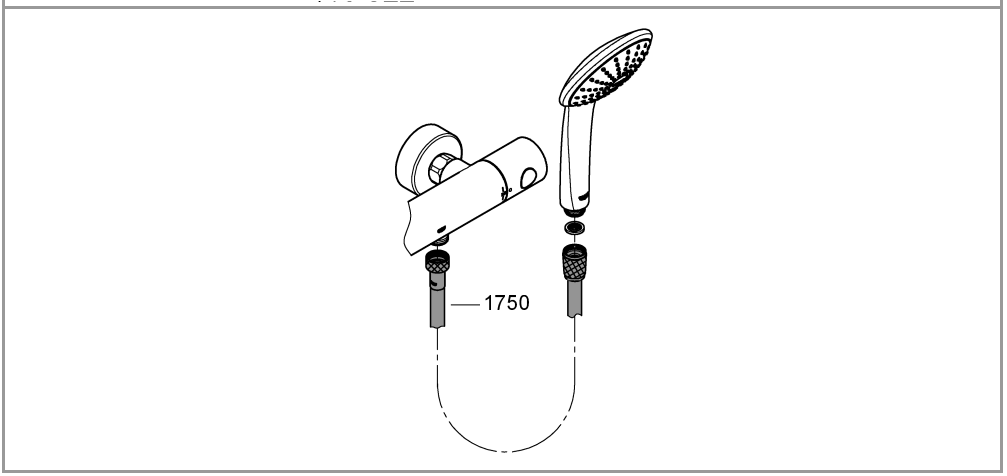


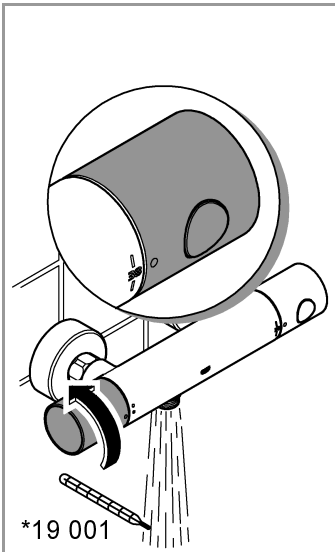



*07 130
12 662
07 264
03 055
08 565
47 189
30mm
34mm
47 883
47 882
47 765
47 483
05 291
03 924
01 283
07 146
47 883
47 884
*18 153
*48 051
48 100
07 002
48 099
48 098
* =
*19 332
34mm
*19 377
30mm
*07 130
+20
*48 051
+8
47 483
*47 175


§
DIN EN 806
DIN EN 1717
DIN 1988
bar
max. 10
0,5
5
1
°C
max. 70°
60°
*19 001
*19 377
34mm
30mm
*19 332
34mm

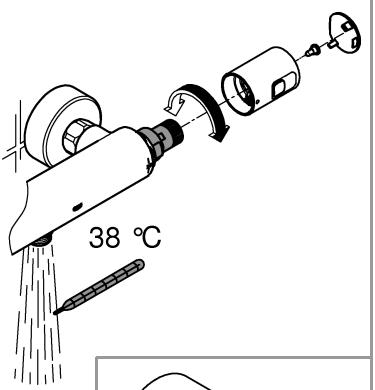

G 1/2
G 3/4
22mm
150
36-42
30mm
*19 377
!

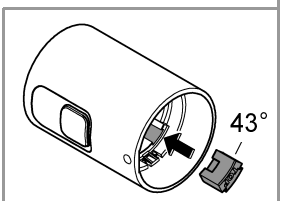

1750

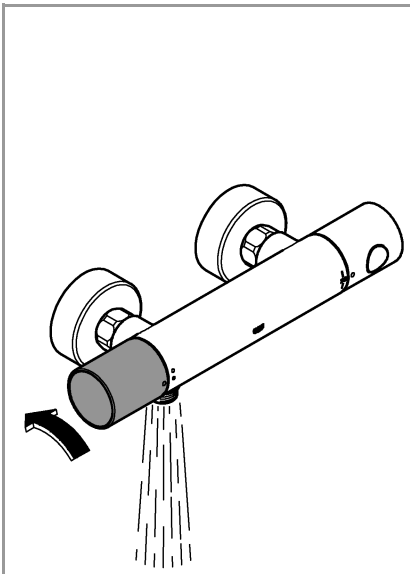


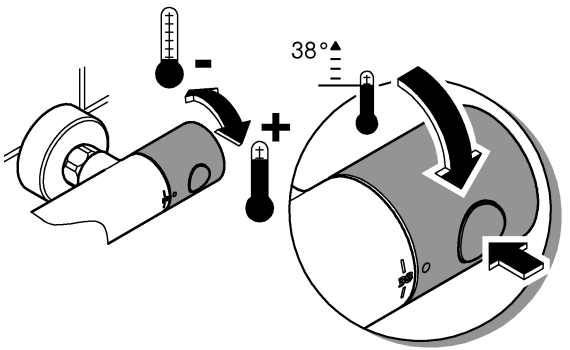
~~38 °C~~

38 °C ✓

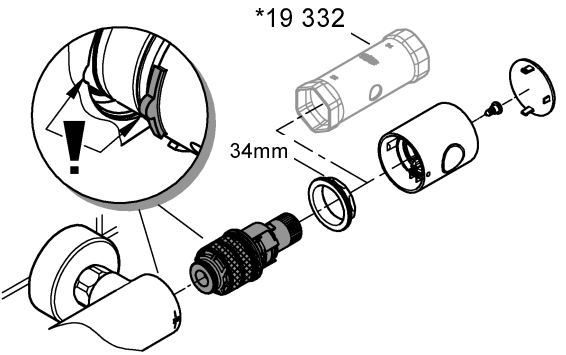


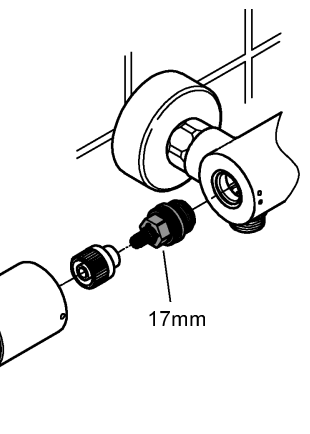


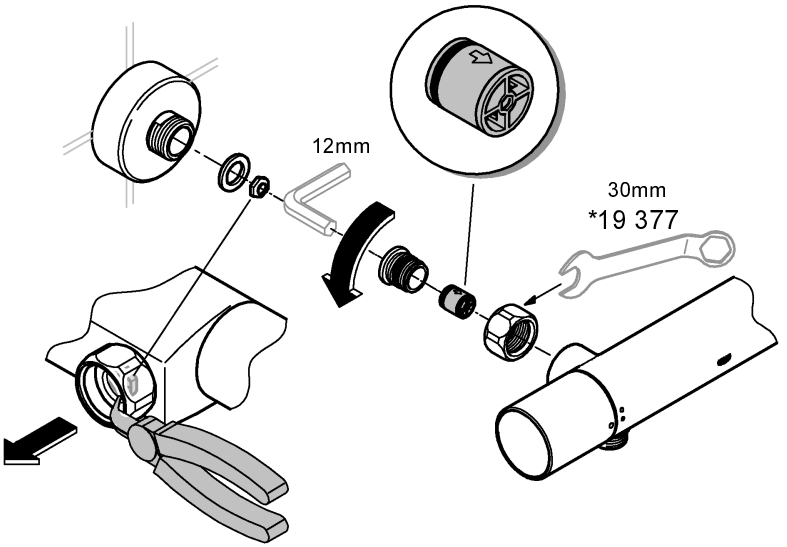


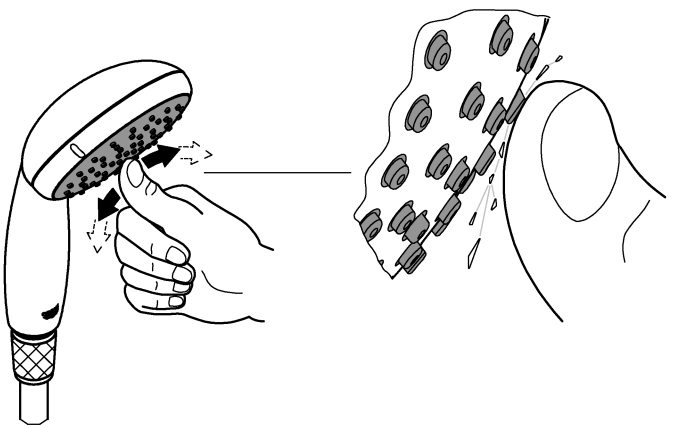


SERVICE






12mm
30mm
*19 377



GB

Safety notes

Protection against scalding

It is recommended that near points of discharge with particular sensitivity to the outlet temperature (hospitals, schools, nursing and retirement homes) thermostatic devices should be installed which can limit the water temperature to 43 °C. The product includes an appropriate temperature end stop. It is generally recommended that the temperature of shower-systems should not exceed 38 °C in nurseries and specific areas of care centres. Use Grohtherm Special thermostats with special handle to facilitate thermal disinfection and appropriate safety end stop. Applicable standards (e. g. EN 806-2) and technical regulations for drinking water must be observed.

Application

Thermostat mixers are designed for hot water supply via pressurised storage heaters and, utilised in this way, provide the best temperature accuracy. With sufficient power output (from 18 kW or 250 kcal/min), electric or gas instantaneous heaters are also suitable.

Thermostats **cannot** be used in conjunction with non-pressurised storage heaters (displacement water heaters).

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

Should temperature deviations occur on account of special installation conditions, the thermostat must be adapted to local conditions (see Adjusting).

Specifications

Safety stop38 °C
Hot water temperature at supply connection min. 2 °C higher than mixed water temperature
Thermal desinfection possible
Minimum flow rate= 5 l/min
If static pressure exceeds 5 bar, a pressure reducing valve must be fitted.

Recommendations of use of thermostatic mixing valves for compliance with the Kiwa UK TMV Type 2 certification Scheme.

EN 1111: 2017 Table 1 Conditions for the use of the thermostatic mixing valves.
Valves to EN 1111 are designated for High pressure shower or bath/tub use as appropriate HP-S-T.

Table 1:

	Recommended limits for the correct operation
Dynamic pressure	0.1 MPa ≤ P ≤ 0.5 MPa (1 bar ≤ P ≤ 5 bar)
Static pressure	1 MPa (10 bar) max
Hot water temperature	55°C ≤ T ≤ 65°C
Cold water temperature	T ≤ 25°C
Note: It is advised that valves operating outside of the conditions stated above cannot be guaranteed to operate as TMV Type 2 valves to EN 1111	

Table 2:

Mixed water temperature	**Mixed water temperature °C at point of charge**
Shower	41 max
Washbasin	41 max
Bath/Tub	46 max

Installation of the thermostatic mixing valves.

1. The installation shall comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.
2. The thermostatic mixing valve shall be installed with the correct backflow prevention device, if required.
3. Isolation valves must be fitted to both hot and cold inlet supplies and they should be fitted in an accessible position.
4. Strainers are supplied with the product and should be installed as shown in the installation manual.
5. Thermostatic mixing valves shall be installed as stated in the installation manual with allowable access for maintenance and commissioning.
6. Commissioning of the valve.

When commissioning the thermostatic mixing valve check the following:

a. The thermostatic mixing valve and its designation are appropriate and matches its application, see https://www.kiwa.com/gb/en/products/tmv-testing/ or https://www.kiwa.com/gb/en/about-kiwa/tmvs-certificate-search/

b. The supply pressures are within the valves operating range.

c. The supply temperatures are within the valves operating range.

d. Isolating valves are not provided but should be installed.

e. If all these conditions are met, proceed to set the temperature as stipulated in the installation instructions.

f. It is a requirement that Type 2 approved valves shall be verified against the original set temperature results once a

year.

g. When commissioning or testing is due the following performance checks shall be carried out.

1. Measure and record the mixed water temperature at the outlet.
2. Isolate the cold water supply to the TMV, wait for at least five seconds, if water is still flowing check that the temperature is below 46°C. If there is no significant change to the set outlet temperature (±2°C or less change from the original settings) and the fail-safe shut off is functioning, then the valve is working correctly and no further service work is required. Note, if there is residual flow during the commissioning or annual verification (cold water supply isolation test), then this is acceptable providing the temperature of the water seeping from the valve is no more than 2°C above the designated maximum mixed water outlet temperature setting of the valve.
3. Temperature readings should be taken at the normal flow rate after allowing the system to stabilise. Any TMV that has been adjusted or serviced must be re-commissioned and re-tested in accordance with the manufactures' instruction.

Note:

1. If the TMV's are supplied from storage cistern by gravity then the supply pressure should be verified to ensure the conditions of use are appropriate.
2. The maximum mixed water temperature can be 2°C above the recommended maximum set mixed water temperature.The mixed water temperature must never exceed 46°C. 46°C is the maximum mixed water temperature from the bath tap and takes account of allowable temperature tolerances in thermostatic mixing valves and temperature losses in metal baths. It is not a safe bathing temperature for adults or children. 37°C is the maximum recommended temperature for children/babies under 18 months, 40°C is the maximum recommended temperature for adults/children over 18 months.

Installation

The projection can be increased by 20mm with an extension, see Replacement Parts, Prod. no. 07 130.

Reversed connection (hot on right - cold on left).

Replace thermostatic compact cartridge, see Replacement parts, Prod. no.: 47 175 (1/2").

Installation of the shower rail

When installing e.g. on plasterboard walls (not solid walls) it must be assured that an appropriate reinforcement is in place

to ensure sufficient strength.

For better fixing into dry-lined walls a mounting frame can be used, see Replacement Parts, Prod. no.: 18 153.

Adjusting

Temperature adjustment

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. For this purpose, the mixer must be removed from the wall.

Maintenance

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

Shut off the hot and cold water supply.

Thermostatic compact cartridge

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

Shower

The function of the SpeedClean nozzles is guaranteed for a period of five years.

Thanks to the SpeedClean nozzles, which must be regularly cleaned, limescale deposits on the rose can be removed by simply rubbing with the fingers

Replacement parts

* = special accessories

Care

For directions on care, refer to the accompanying Care Instructions.