GROHTHERM 1000 SPECIAL
DESIGN + ENGINEERING
GROHE GERMANY

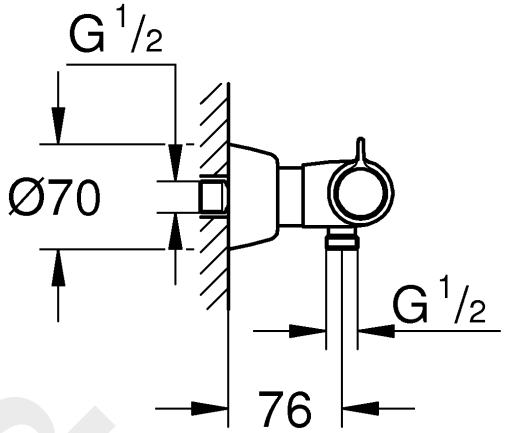
99.1125.031/ÄM 242159/07.18

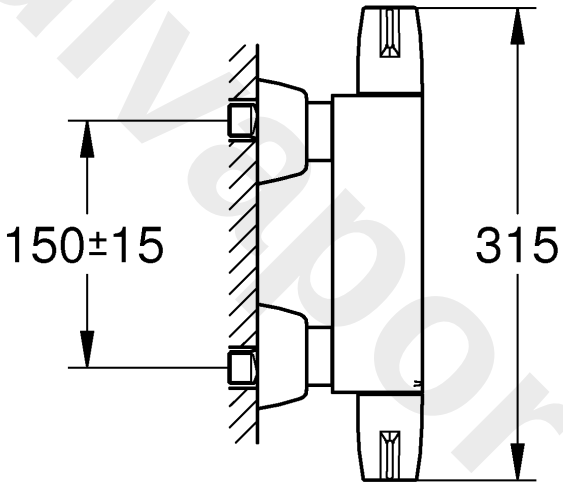
www.grohe.com

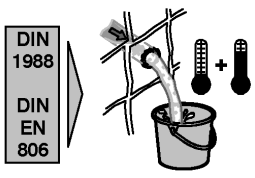
Pure Freude an Wasser

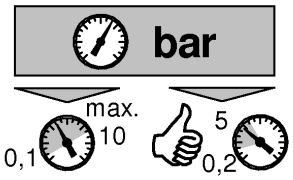
GROHE

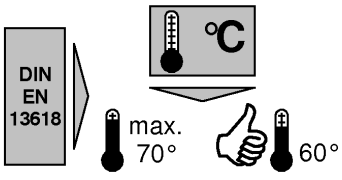
34 725

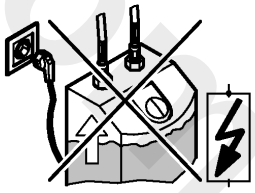




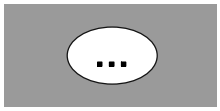






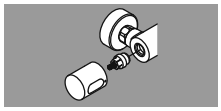


1 - 2

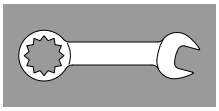


3

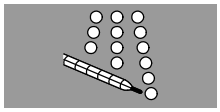
3



4



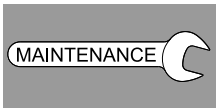
4 - 5



5

6

7



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 41 °C. It is generally recommended that the temperature of shower-systems should not exceed 38 °C in nurseries and specific areas of care centres. Applicable standards (e. g. EN 806-2) and technical regulations for drinking water (e. g. Water Supply Regulations 1999) must be observed.

To comply with Department of Health -Water Systems Health Technical Memorandum 04-01 a risk assessment should be undertaken to establish the correct TMV is being installed. TMV Type 3 should be installed and maintained as stated in the relevant Department of Health Documents.

TMVs and associated components should be serviced, including descaling and decontamination at recommend intervals (refer to Department of Health -Water Systems Health Technical Memorandum 04 01).

Application

DO8 Designation of this product is High pressure only (HP – S). The maximum operation temperature of the valve is 41°C.

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

Conditions for use of the TMV Type 3

Supply	Operating range	
Pressure:	Limits	recommended
- Static	≤ 1 MPa (≤ 10 bar)	≤ 1 MPa (≤ 10 bar)
- Dynamic	≥ 0,005 MPa (≥ 0,5 bar)	0,1 to 0,5 MPa (1 to 5 bar)
Temperature:	41 °C	38 °C
- Hot	≤ 90 °C	55 to 65 °C
- Cold	≤ 25 °C	15 to 20 °C

Hot water temperature at supply connection min. 2 °C higher than mixed water temperature

Minimum flow rate= 5 l/min

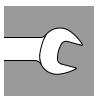
If static pressure exceeds 5 bar, a pressure reducing valve must be fitted.

The fitting of isolation valves is required and identify the preferred location.

The fitting of strainers is recommended and identify the preferred location.

The thermostatic mixing valve shall be installed with the correct backflow prevention device, if required.

Note: It is advised that valves operating outside of the conditions stated above cannot be guaranteed to operate as TMV Type 3 valves to DO8.



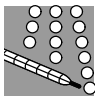
Installation

The projection can be increased by 30mm with an extension, see Replacement Parts, page 1, Prod. no. 46 238.

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

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

When using this thermostatic compact cartridge, the Cool Touch function is no longer available.



Adjusting

Temperature adjustment, see page 2 Figs. [1] to [3].

For temperature range adjustment, see page 3 Figs. [1] to [3].

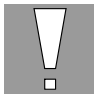
With this thermostat fitting, the hot water end stop can be set to between 35 °C and 41 °C.

The maximum mixed water temperature can be 2 °C above the recommended maximum set mixed water temperature. The mixed water temperature must never exceed 41 °C. 41 °C is the maximum mixed water temperature for HP -S shower control valves and takes account of allowable temperature tolerances. It is not a safe bathing temperature for adults or children. 37 °C is the maximum recommended temperature for children/babies under 18 months, 39 °C is the maximum recommended temperature for adults/children over 18 months.

Thermal disinfection, see page 3.

For thermal disinfection, release handle is required, Prod. no.: 47 994.

1. Push release handle onto temperature control handle up to the stop; only one position is possible. Observe handle position and hole.
2. Turn temperature control handle to the hot water end stop.
3. Remove release handle.
4. Open valve and let hot water run. The flushing time during the thermal disinfection depends on the water temperature. National standards must be observed.
5. Turn back temperature control handle. The release jumps back automatically.



Following thermal disinfection, check whether the previously-set maximum outlet temperature is achieved again.

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.

Commissioning
Thermostatic mixing valves shall be installed as stated in the installation manual with allowable access for maintenance and commissioning. When commissioning the thermostatic mixing valve check the following:

- The designation of the thermostatic mixing valve matches the application.
- The supply pressures are within the valves operating range.
- The supply temperatures are within the valves operating range.
- Isolating valves are not provided but should be installed.
- If all these conditions are met, proceed to set the temperature as stipulated in the installation instructions.
- When commissioning or testing is due the following performance checks shall be carried out.
  - Measure and record the mixed water temperature at the outlet.
  - 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 4°C (HP-S). 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.

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 manufacturers' instructions.

Maintenance

Refer to Department of Health - Water Systems Health Technical Memorandum 04-01.

To comply with the requirements of current NHS Guidelines TMV Type 3 should be tested against the original performance results 6 to 8 weeks after installation. If the temperatures have remained set to within 2 °C and the failsafe function is operating correctly, then a six-month cycle of performance testing can be implented.

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

Shut off the hot and cold water supply.

Non-return valve, see page 6.
Performance check should be carried out at routine maintenance times. Drain the fitting before disassembling.

1. Check the set temperature using a hand held digital thermometer.
2. Carry out cold water fail safe shut off test.
3. If there is no significant change to the set outlet temperature (2 °C or less change from the original settings) the failsafe shut off is functioning, then the valve is working correctly and no further service is required.

Checks of the internal valve.

1. Isolate the hot and cold water supplies to the valve.
2. Remove the valve body.
3. Check and clean the check valves and strainers with clean water.
4. Remove the thermostatic element from the valve body. Clean with clean water. Make note of the orientation of all parts and wash in clean water.
5. Using WRAS approved silicone based waterproof lubricant the O Seal on the external surface and re-assembly the valve.
6. Check valve performance stated above.

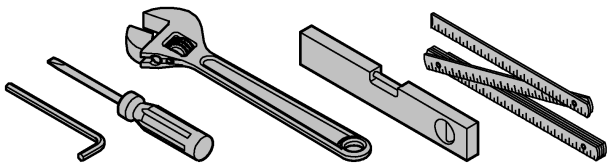
Thermostatic compact cartridge
Readjustment is necessary after every maintenance operation on the thermostatic compact cartridge (see Adjusting).

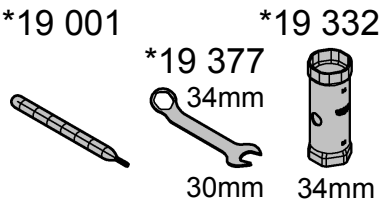
Replacement parts

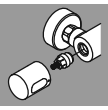
See page 1 (* = special accessories).

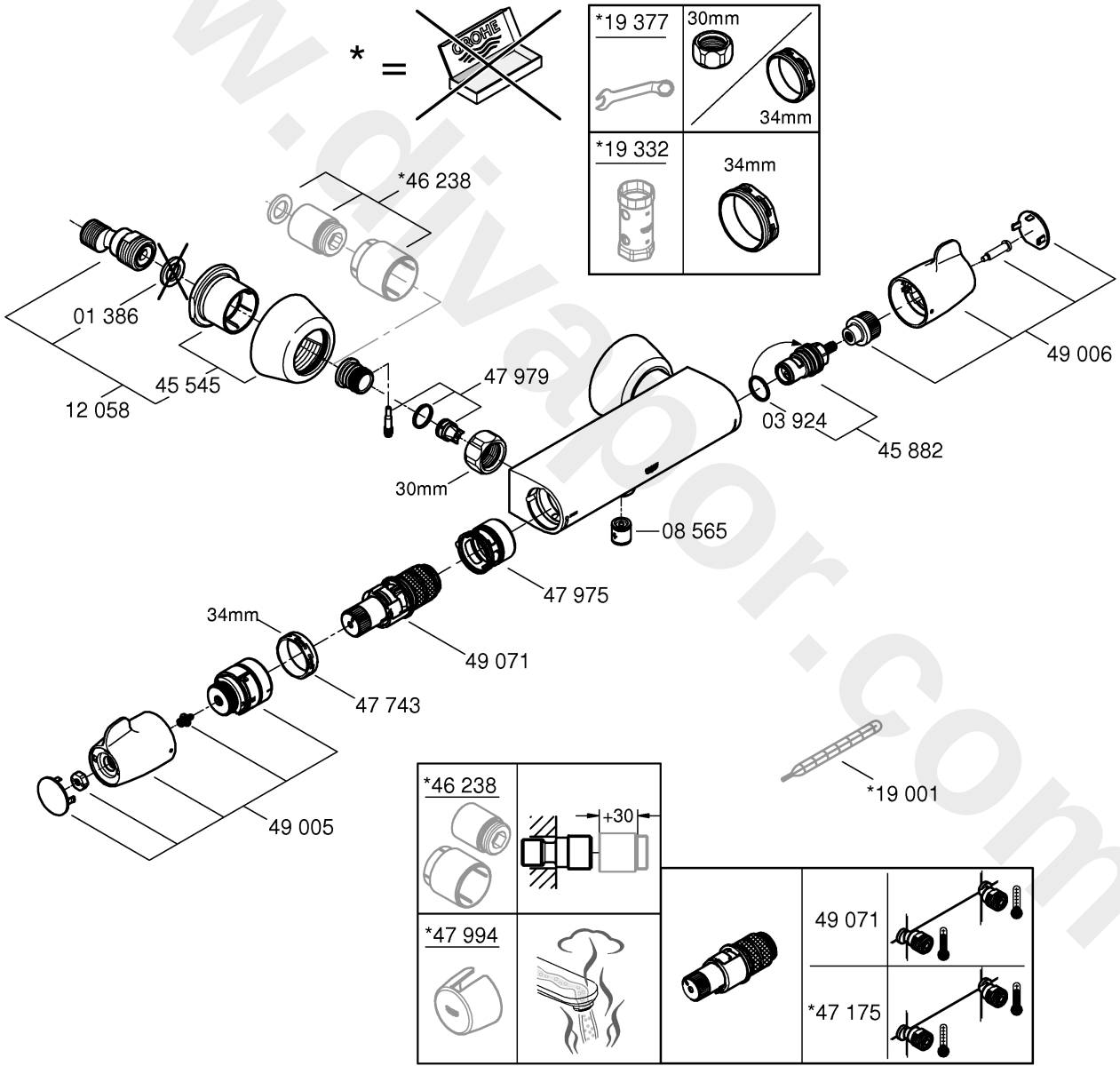
Care

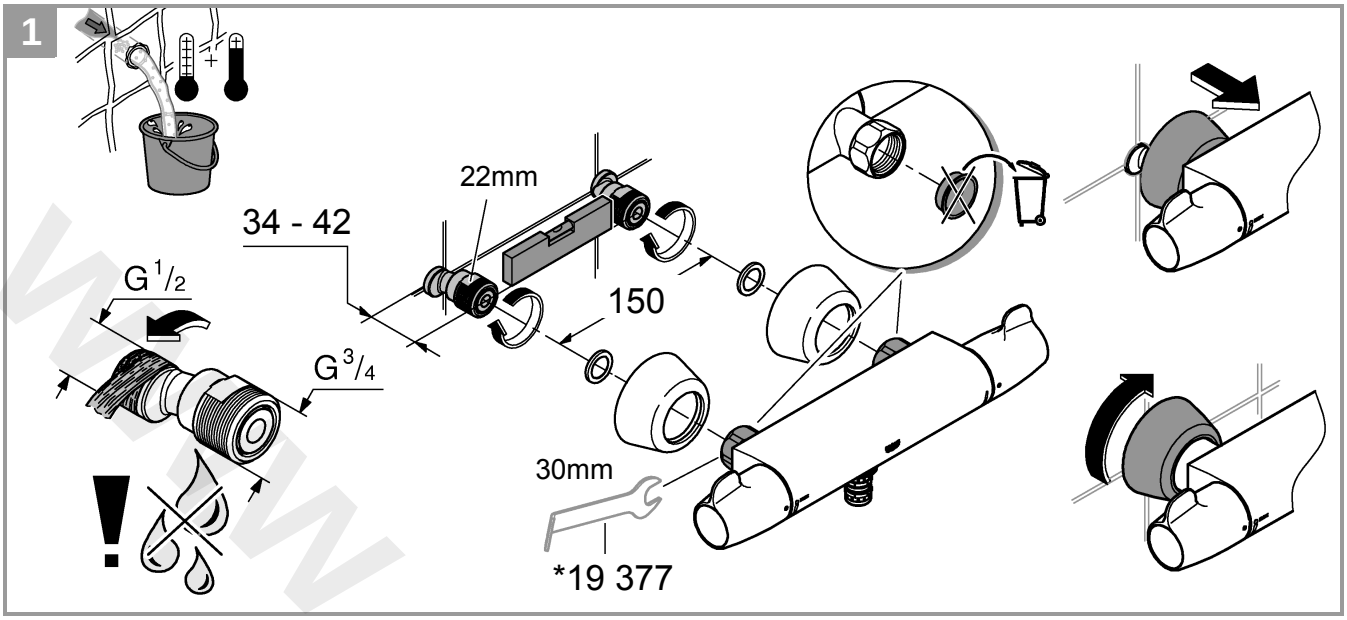
For directions on care, refer to the accompanying Care Instructions.

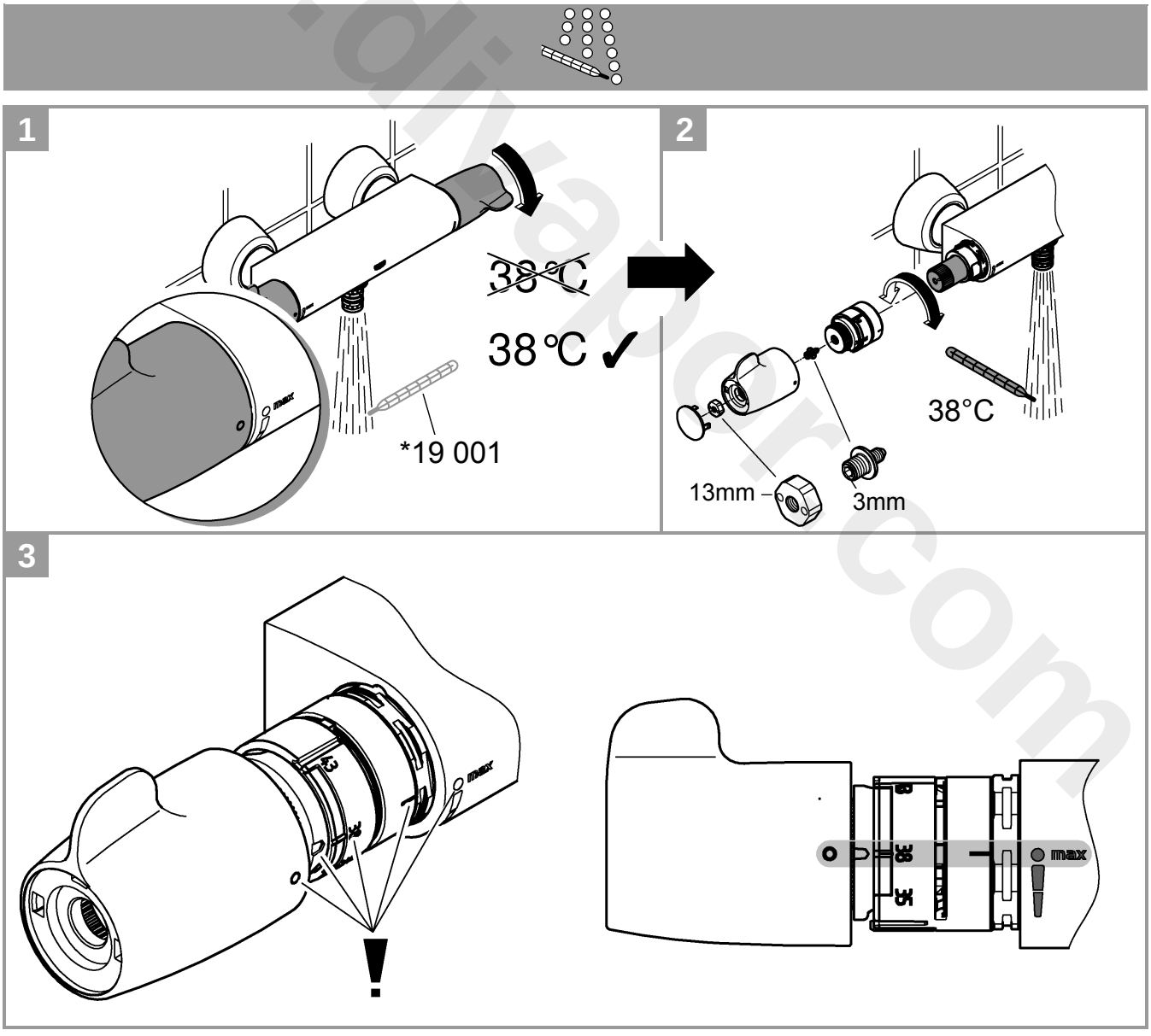






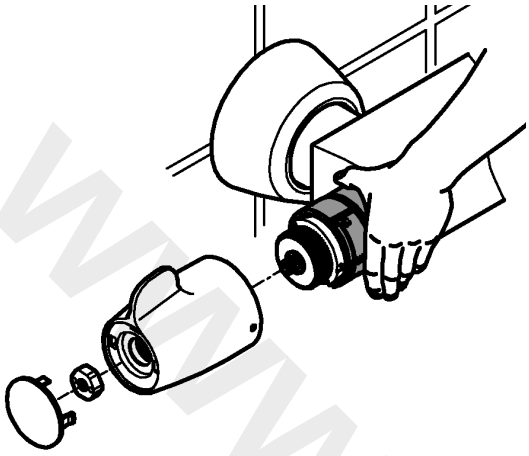




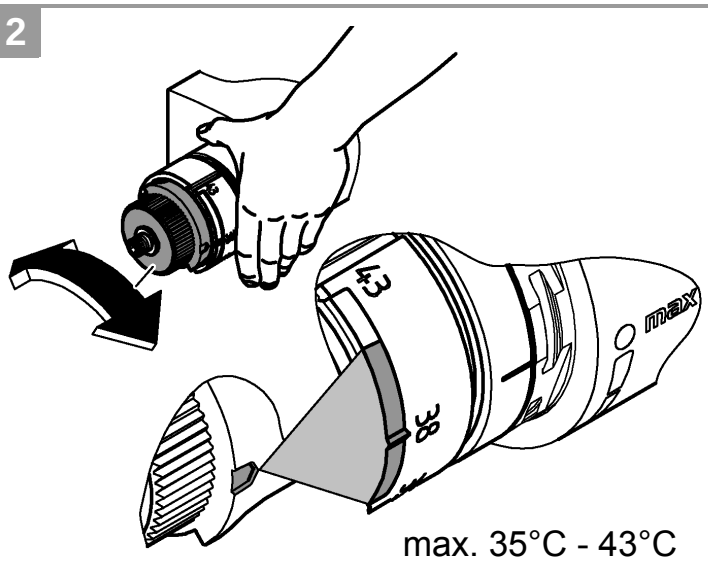


max.

1



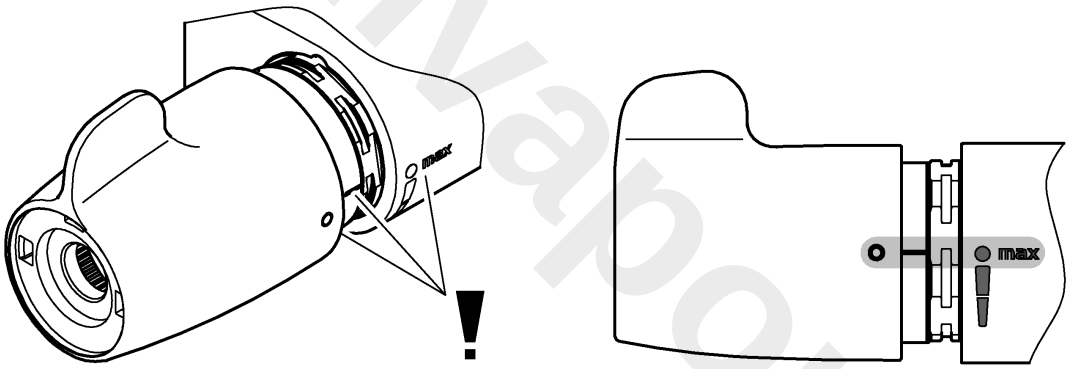
2

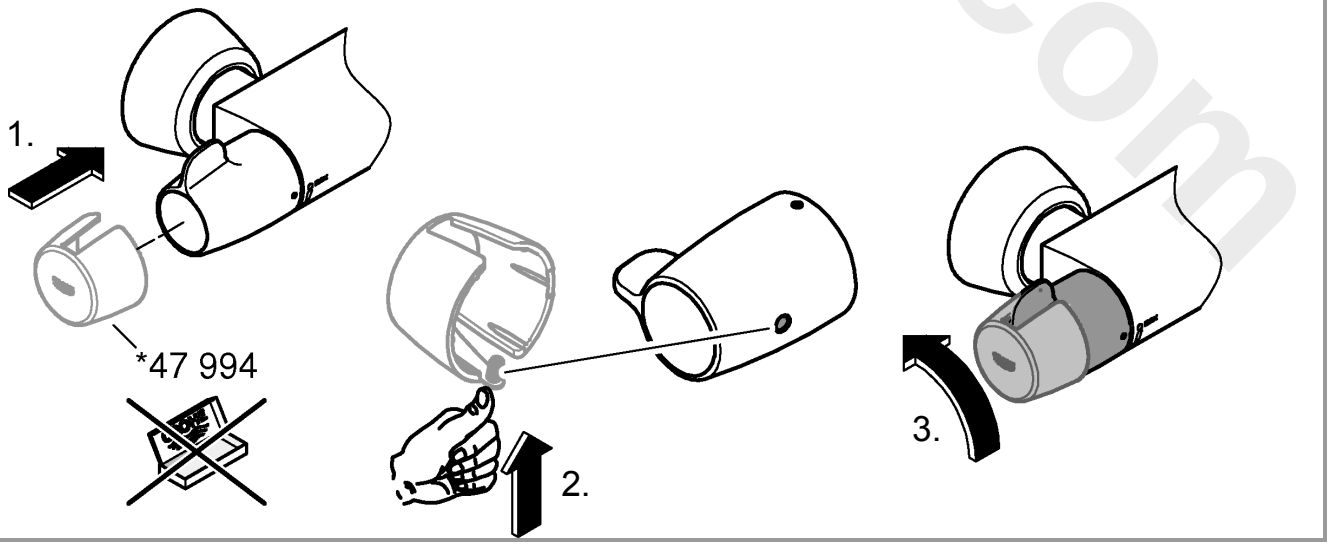


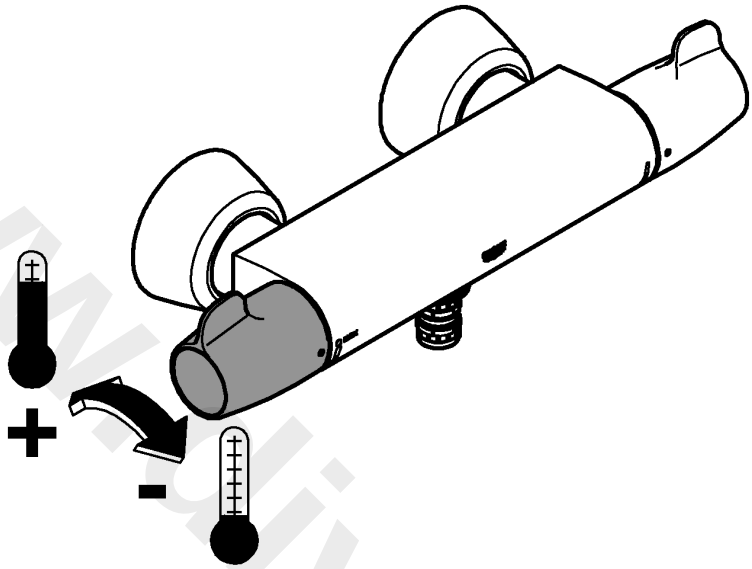
max. 35°C - 43°C

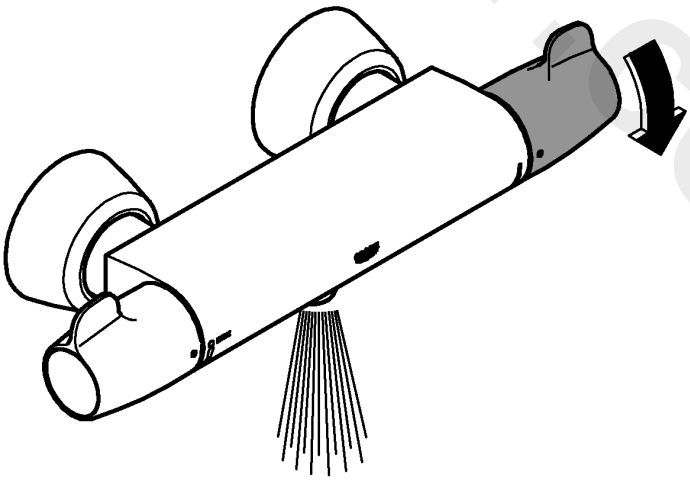
! TMV Type 3 = max. 41°C

3

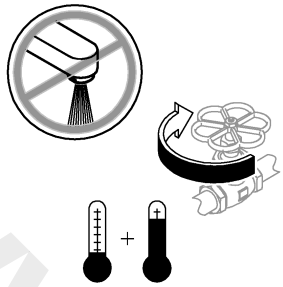




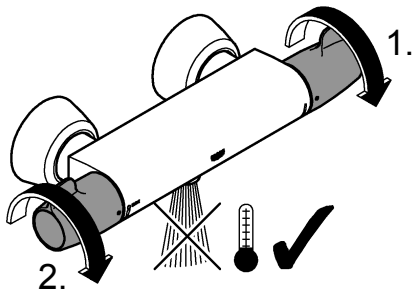




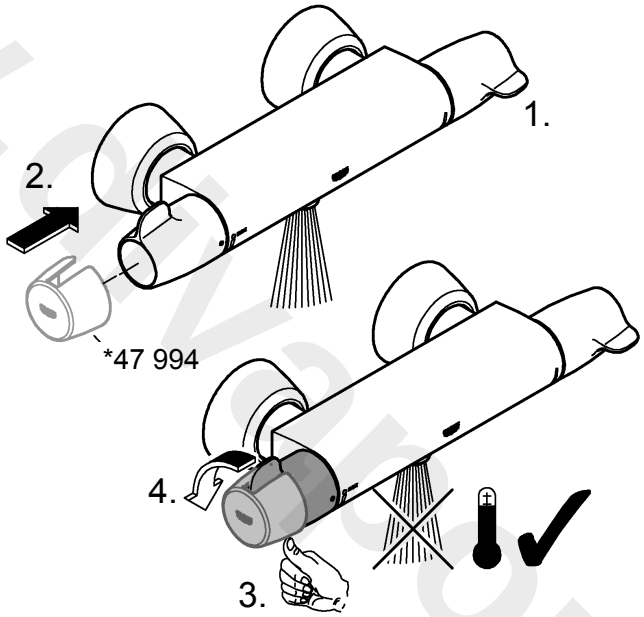
1



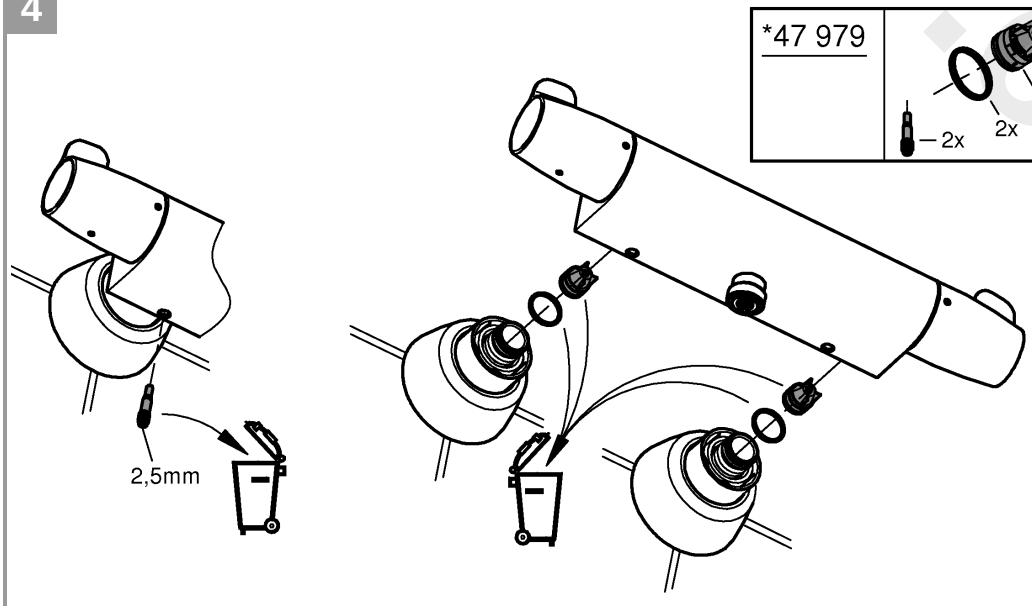
2



3



4



5

Pure Freude an Wasser

GROHE

D
✆ +49 571 3989 333
helpline@grohe.de

A
✆ +43 1 68060
info-at@grohe.com

AUS
✆ +(61) 1300 54945
grohe_australia@lixil.com

B
✆ +32 16 230660
info.be@grohe.com

BG
✆ +359 2 9719959
grohe-bulgaria@grohe.com

BR
✆ 0800 770 1222
falecom@grohe.com

CAU
✆ +99 412 497 09 74
info-az@grohe.com

CDN
✆ +1 888 6447643
info@grohe.ca

CH
✆ +41 44 877 73 00
info@grohe.ch

CN
✆ +86 4008811698
info.cn@grohe.com

CY
✆ +357 22 465200
info@grome.com

CZ
✆ +358 942 451 390
grohe-cz@grohe.com

DK
✆ +45 44 656800
grohe@grohe.fi

E
✆ +34 93 3368850
grohe@grohe.es

EST
✆ +372 6616354
grohe@grohe.ee

F
✆ +33 1 49972900
sav-fr@grohe.com

FIN
✆ +358 942 451 390
grohe@grohe.fi

GB
✆ +44 871 200 3414
info-uk@grohe.com

GR
✆ +30 210 2712908
nsapountzis@ath.forthnet.gr

H
✆ +36 1 2388045
info-hu@grohe.com

HK
✆ +852 2969 7067
info@grohe.hk

I
✆ +39 2 959401
info-it@grohe.com

IND
✆ +91 1800 102 4475
customercare.in@grohe.com

IS
✆ +354 515 4000
jonst@byko.is

J
✆ +81 3 32989730
info@grohe.co.jp

KZ
✆ +7 727 311 07 39
info-cac@grohe.com

LT
✆ +372 6616354
grohe@grohe.ee

LV
✆ +372 6616354
grohe@grohe.ee

MAL
info-malaysia@grohe.com

MX
✆ 01800 8391200
pregunta@grohe.com

N
✆ +47 22 072070
grohe@grohe.no

NL
✆ +31 79 3680133
vragen-nl@grohe.com

NZ
technicalenquiries@paterson
trading.co.nz

P
✆ +351 234 529620
commercial-pt@grohe.com

PL
✆ +48 22 5432640
biuro@grohe.com.pl

RI
✆ 0-800-1-046743
customercare-
indonesia@asia.lixil.com

RO
✆ +40 21 2125050
info-ro@grohe.com

ROK
✆ +82 2 1588 5903
info-singapore@grohe.com

RP
✆ +63 2 8938681

RUS
✆ +7 495 9819510
info@grohe.ru

S
✆ +46 771 141314
grohe@grohe.se

SGP
✆ +65 6311 3611
info-singapore@grohe.com

SK
✆ +420 277 004 190
grohe-cz@grohe.com

T
✆ +66 21681368
(Haco Group)
info@haco.co.th

TR
✆ +90 216 441 23 70
GroheTurkey@grome.com

UA
✆ +38 44 5375273
info-ua@grohe.com

USA
✆ +1 800 4447643
us-customerservice@grohe.com

VN
✆ +84 90 9694768
✆ +84 90 9375068
info-vietnam@grohe.com

AL **BiH** **HR** **KS**
ME **MK** **SLO** **SRB**
✆ +385 1 2911470
adria-hr@grohe.com

Eastern Mediterranean,
Middle East - Africa
Area Sales Office:
✆ +357 22 465200
info@grome.com

IR **OM** **UAE** **YEM**
✆ +971 4 3318070
grohedubai@grome.com

Far East Area Sales Office:
✆ +65 6311 3600
info@grohe.com.sg

Latin America:
✆ +52 818 3050626
pregunta@grohe.com

www.grohe.com

2016/09/28