

1



11

Low-Flow solution
Limiteur de débit
Limitador de caudal

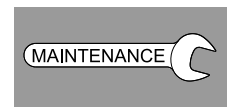
2 - 8



12 - 13

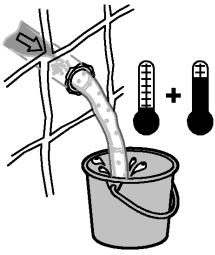
English
Français
Español

9 - 10



14

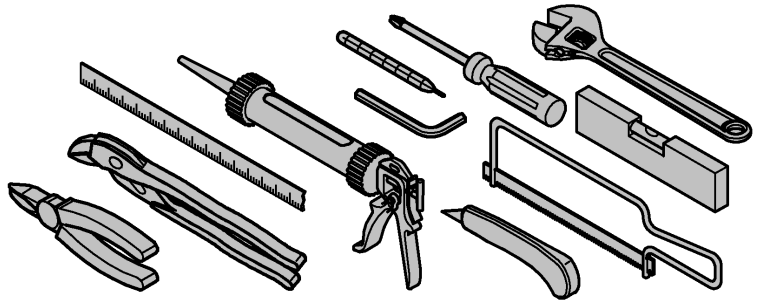




°F / °C

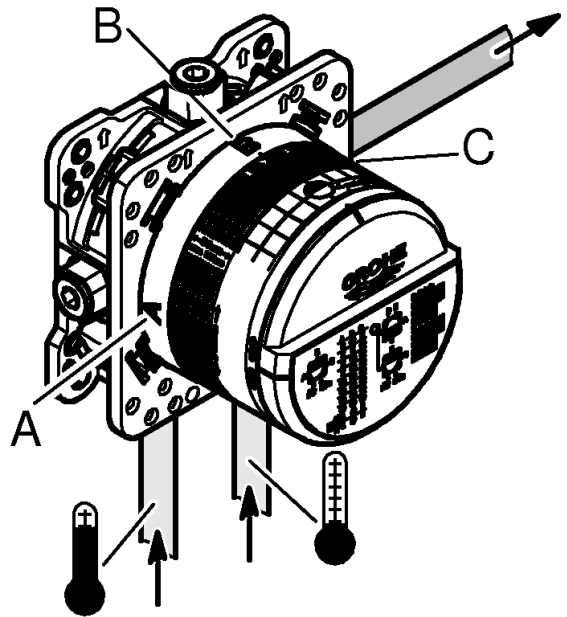
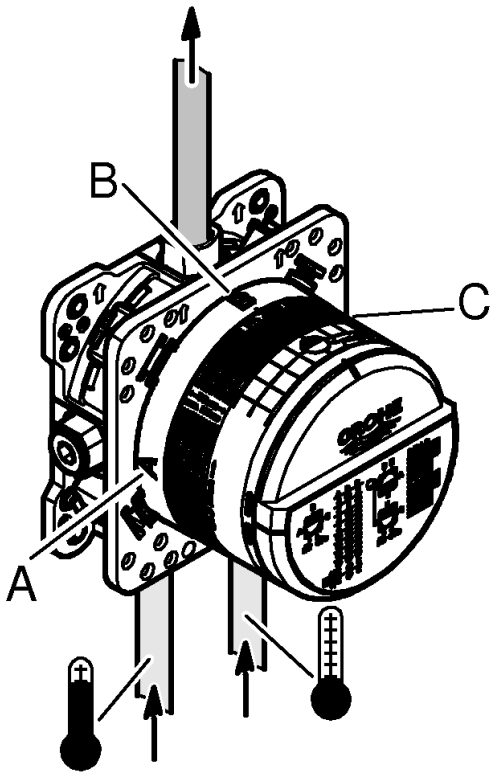
max. 158°F / 70°C

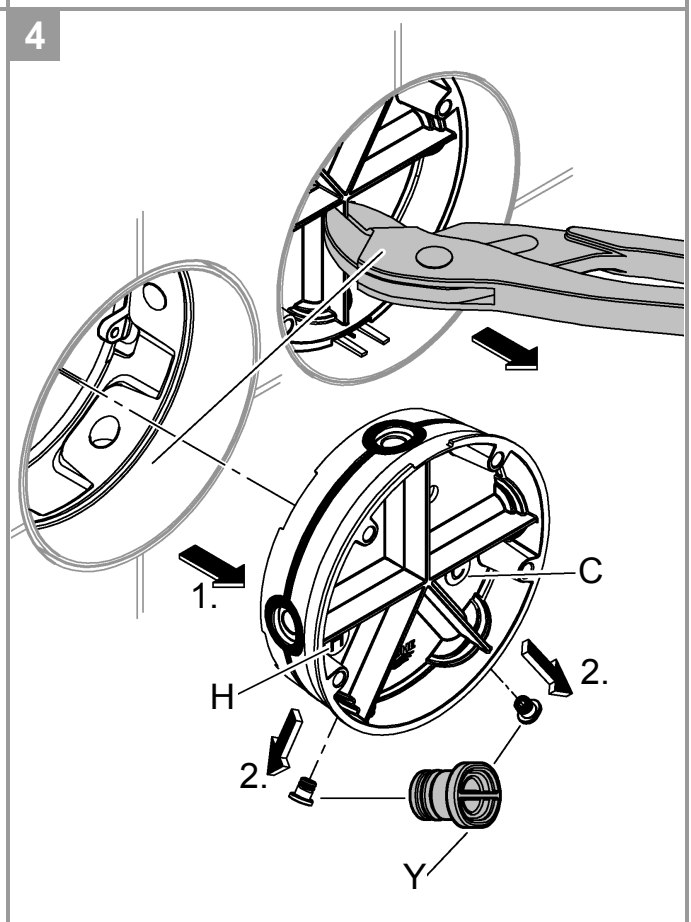
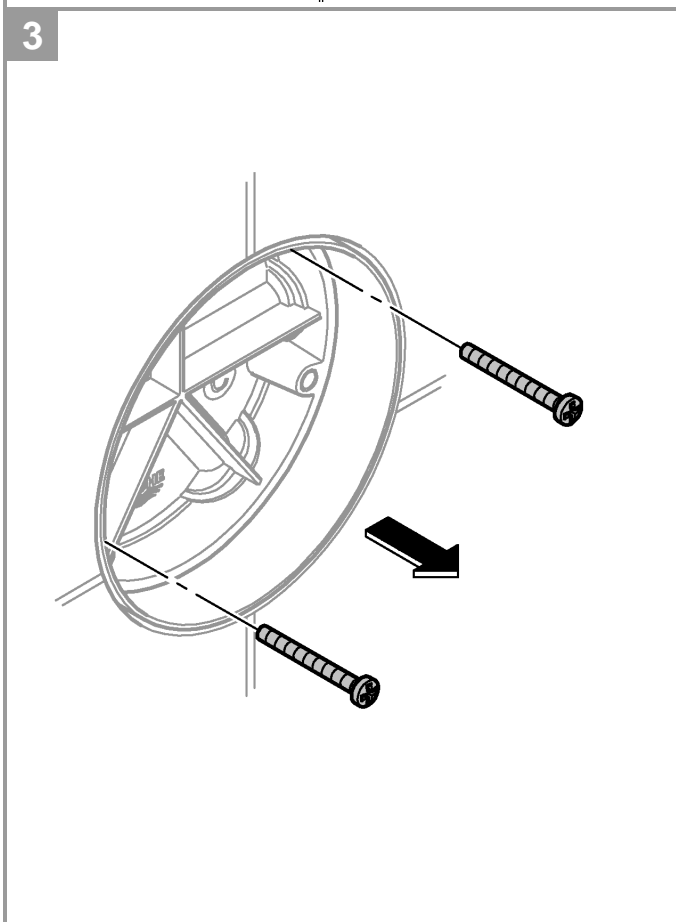
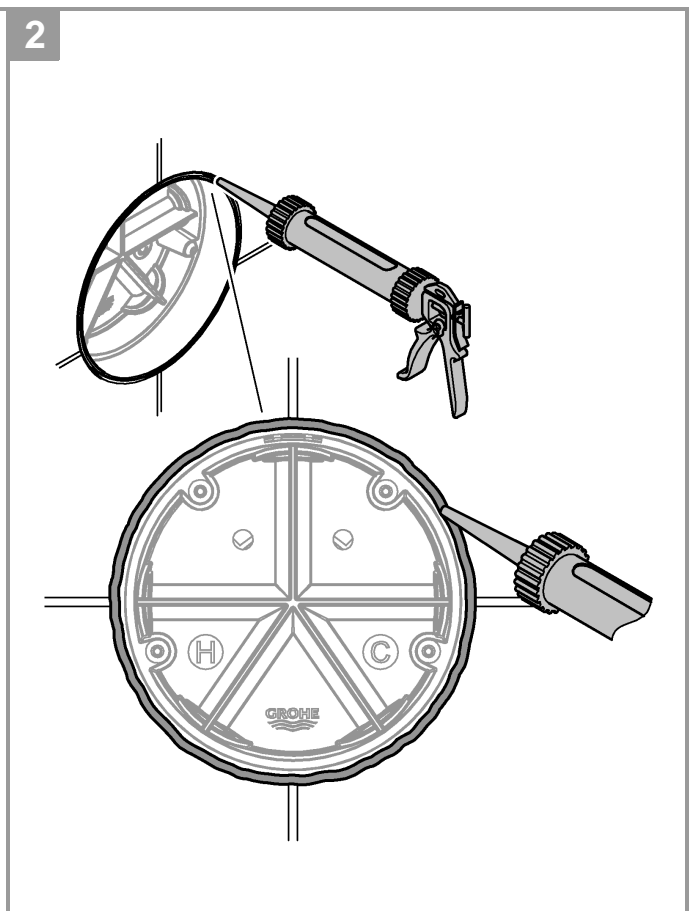
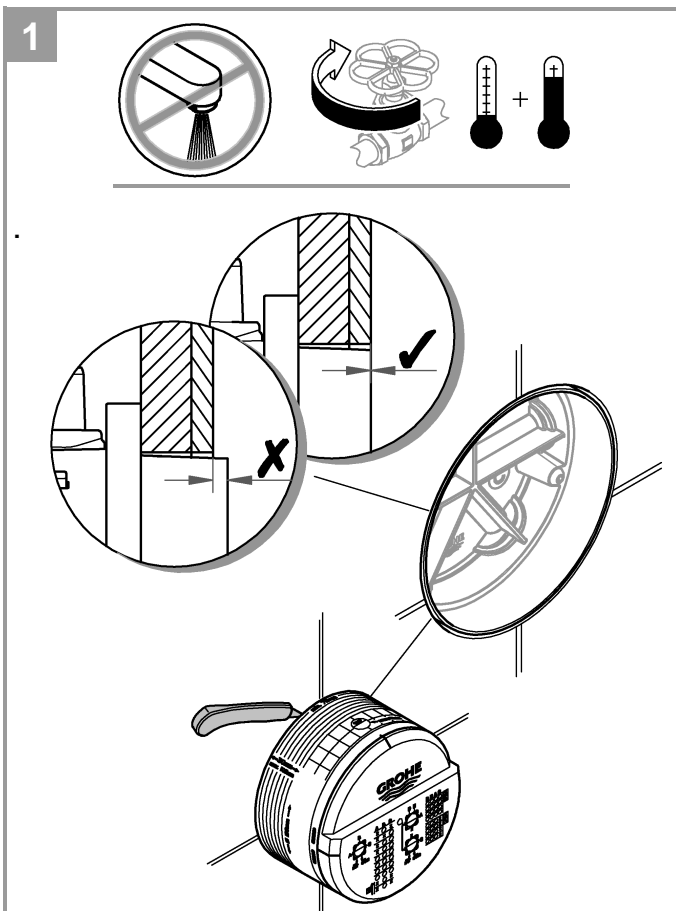
140°F / 60°C



	psi						gpm
	14,5	29	43,5	58	72,5	87	
B / C	4,4	6,3	7,7	8,8	9,9	10,8	

	bar						l/min
	1	2	3	4	5	6	
B / C	16,7	23,7	29	33,5	37,4	41	



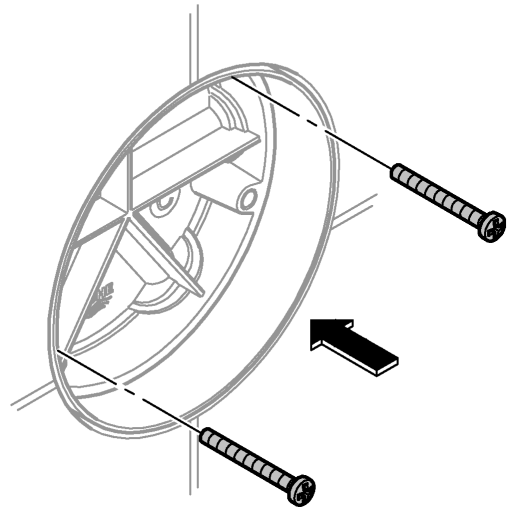




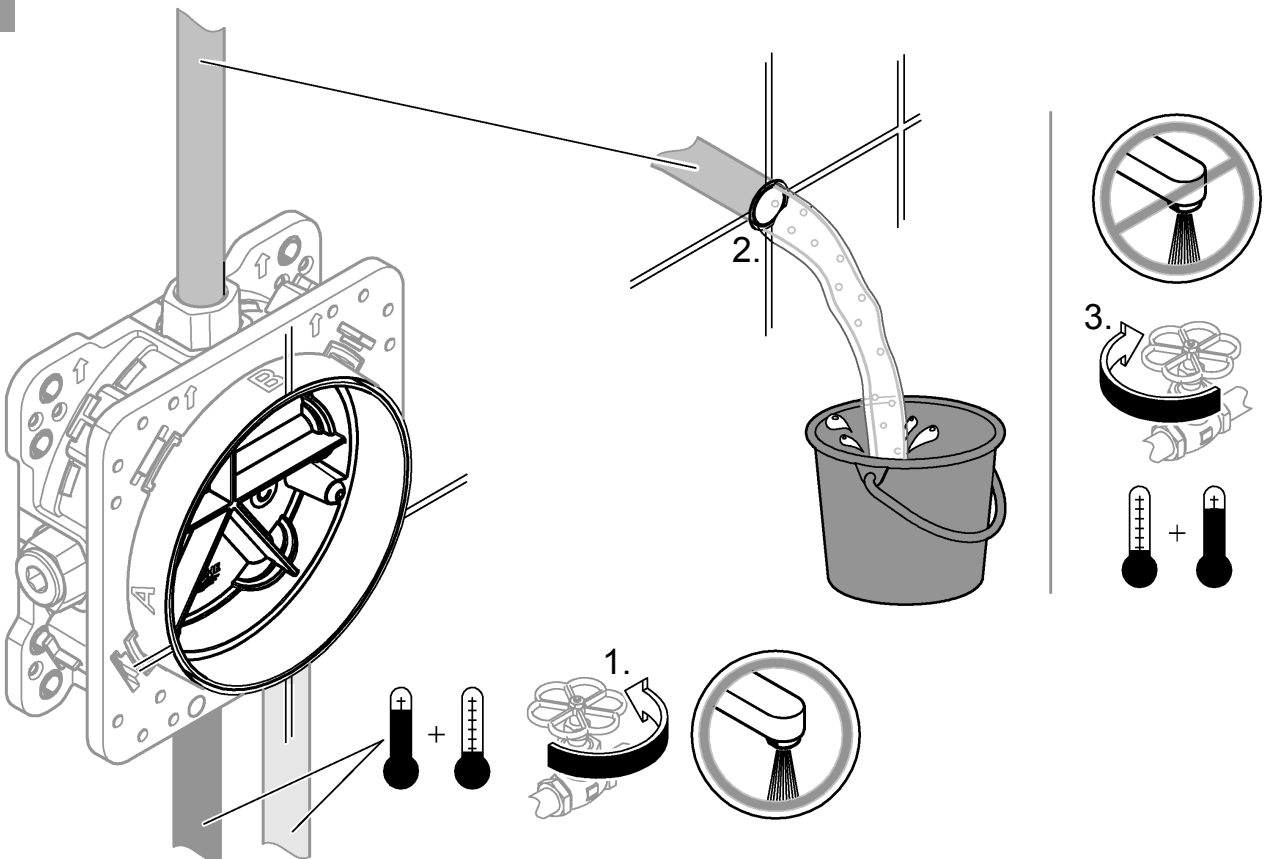
5

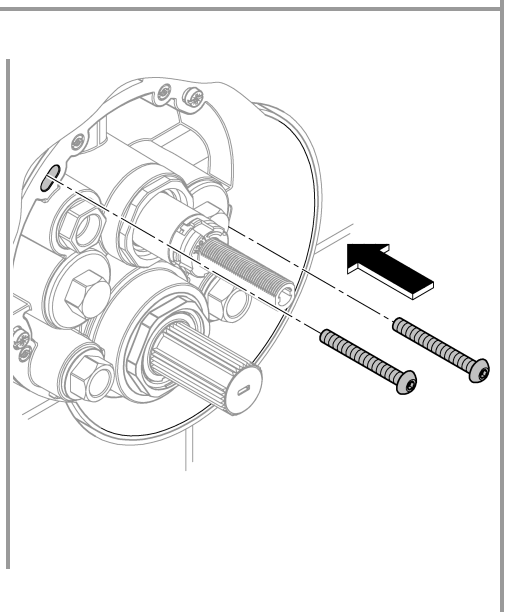
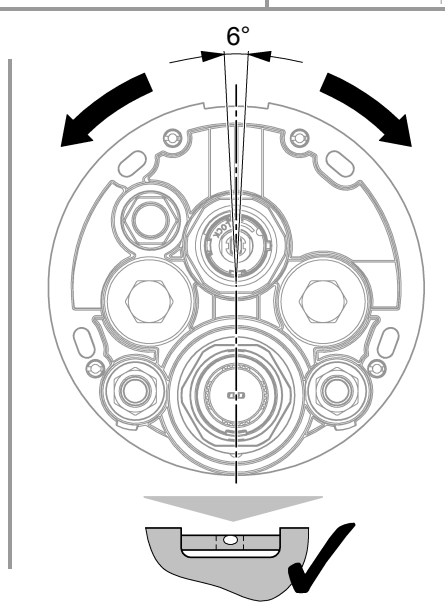
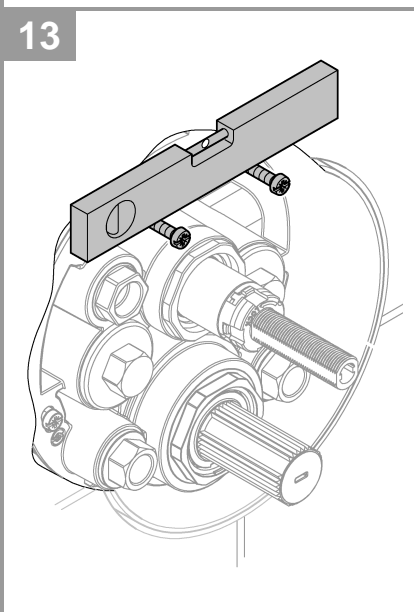
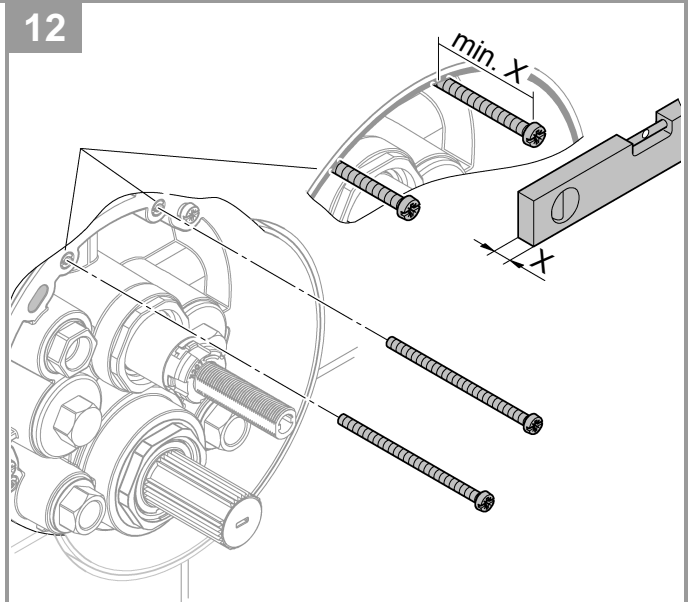
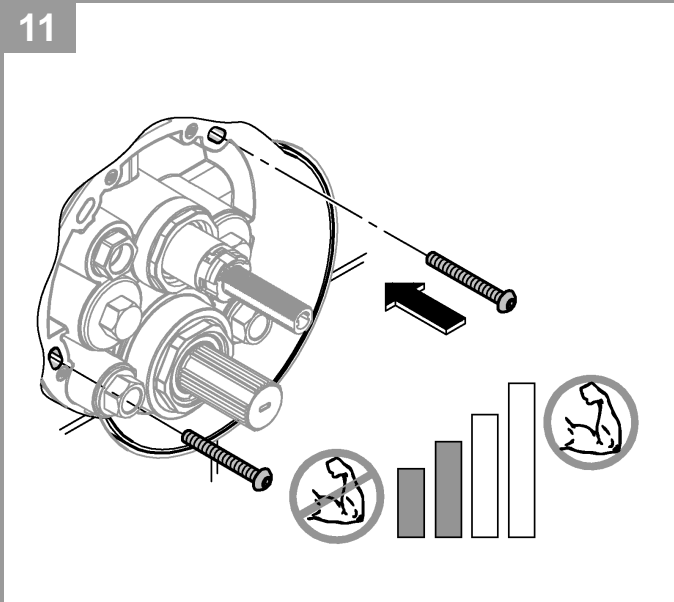
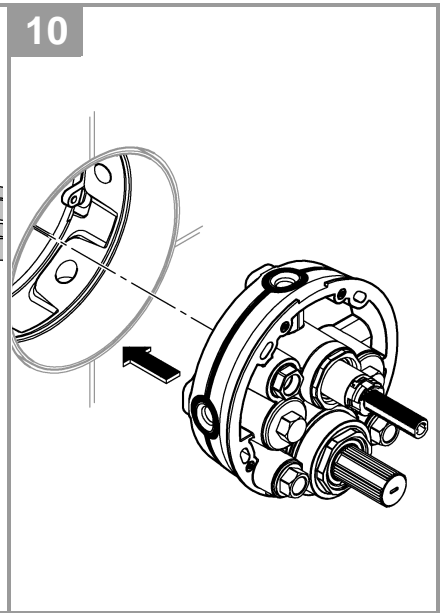
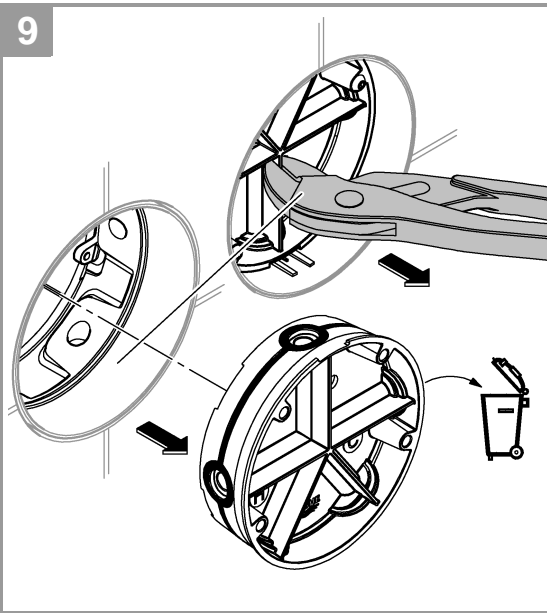
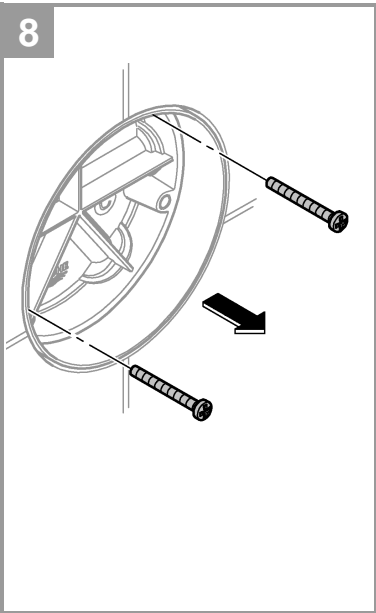


6



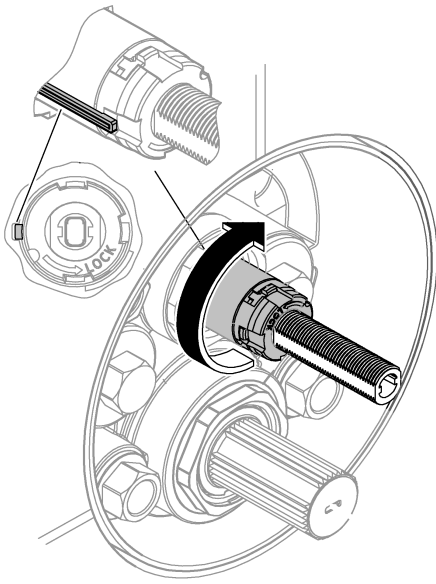
7



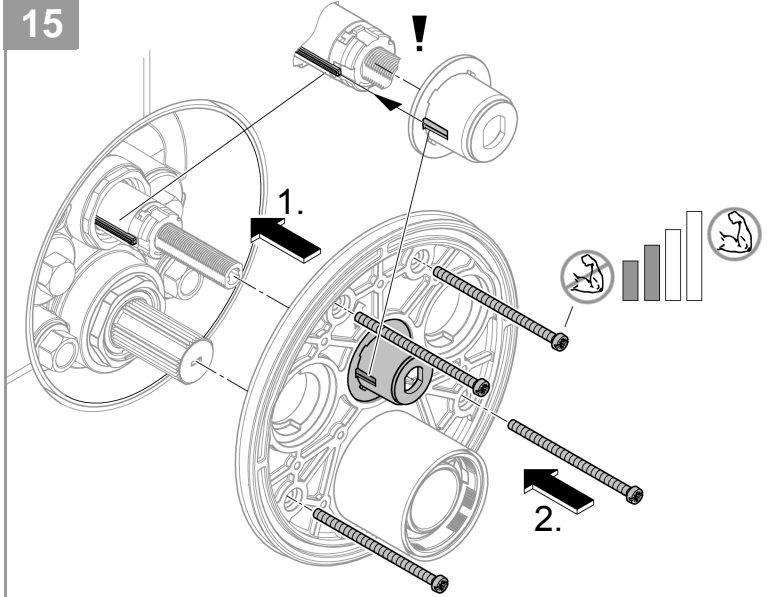




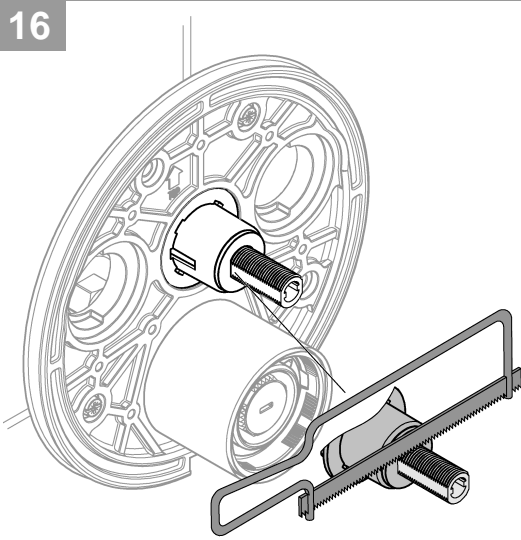
14



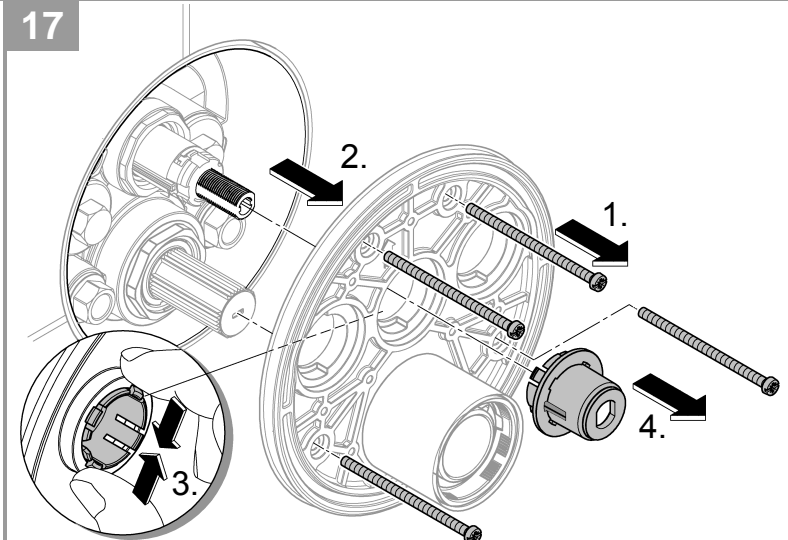
15



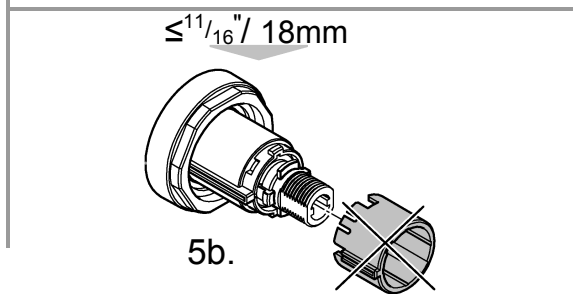
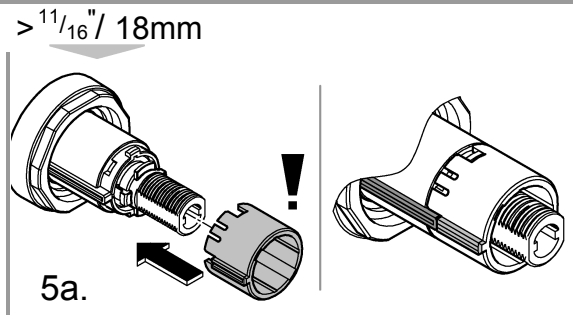
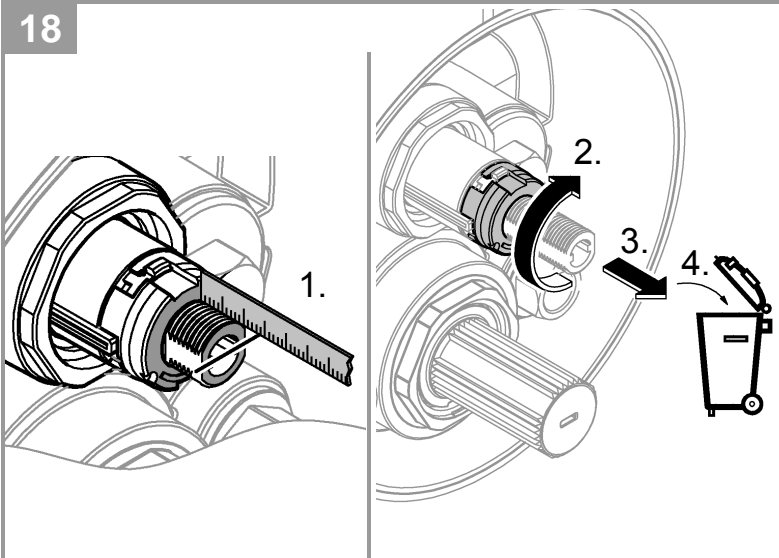
16



17

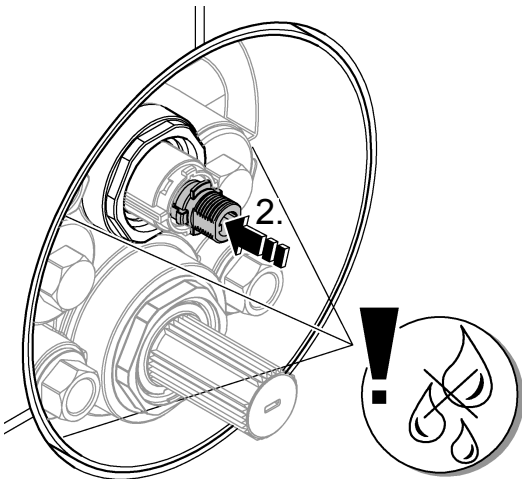
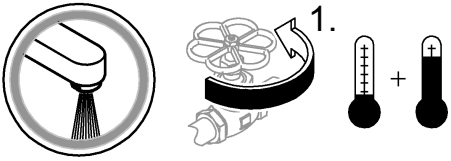


18

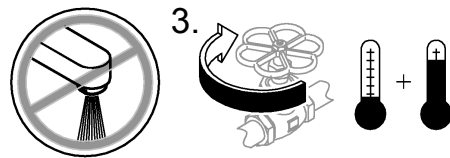
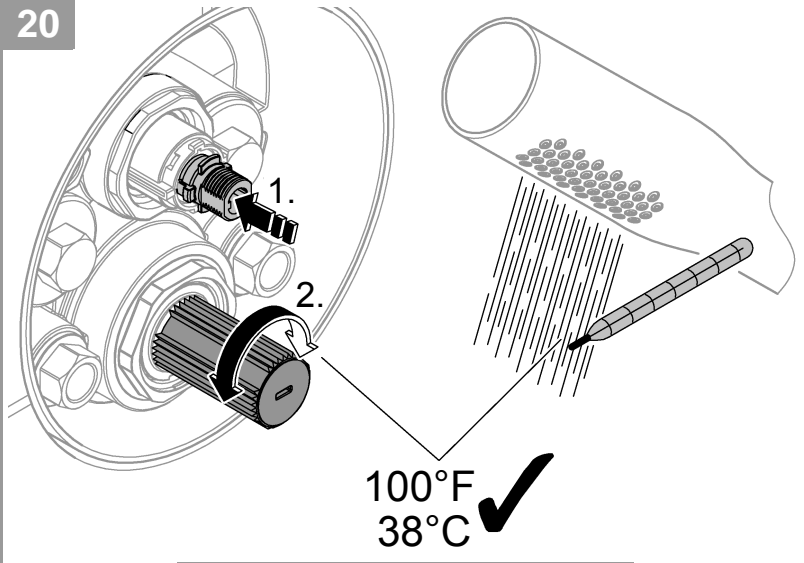




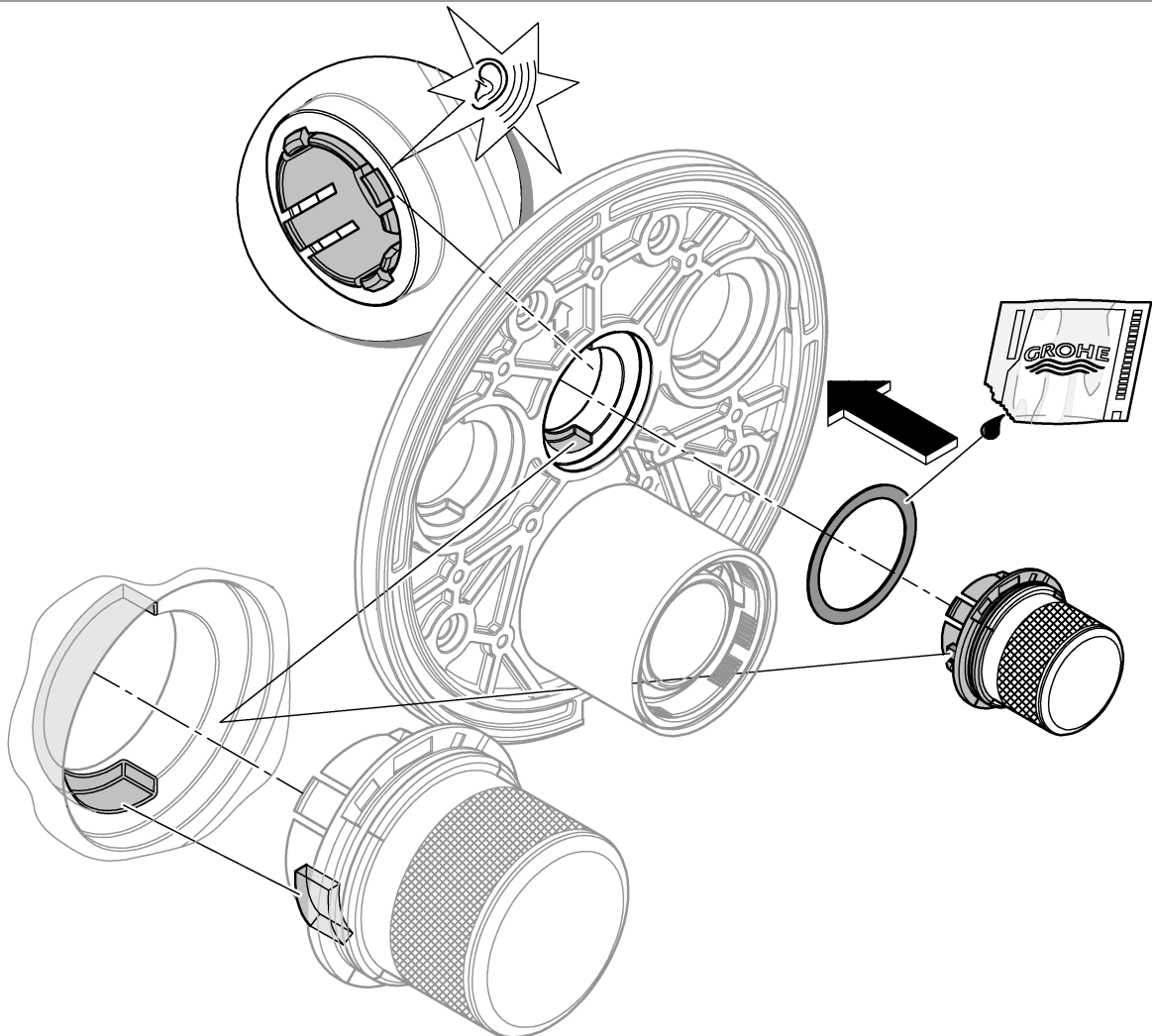
19



20

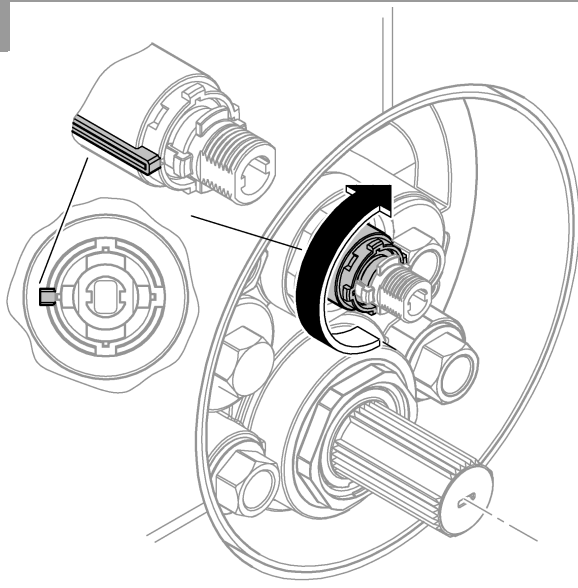


21

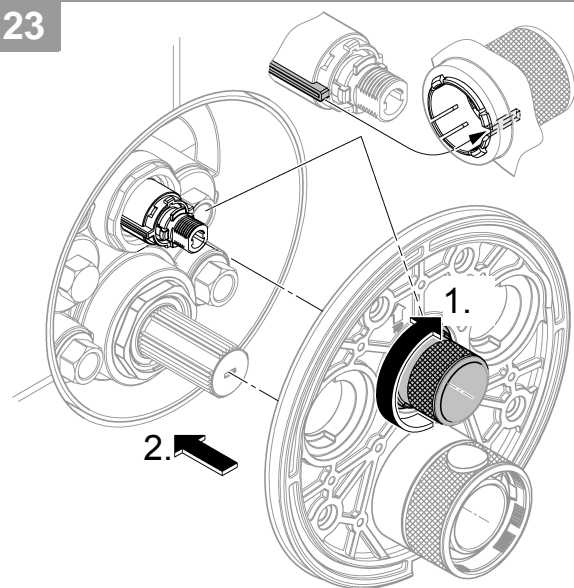




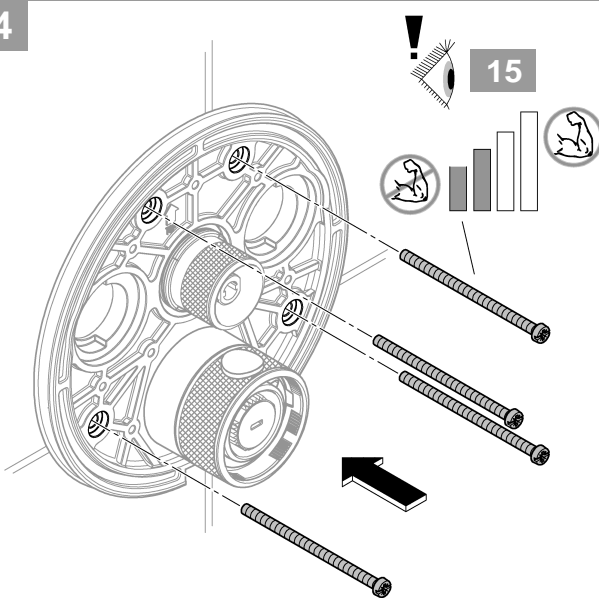
22



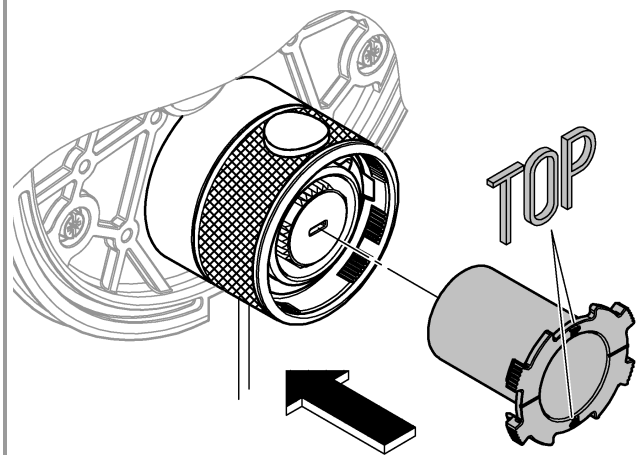
23



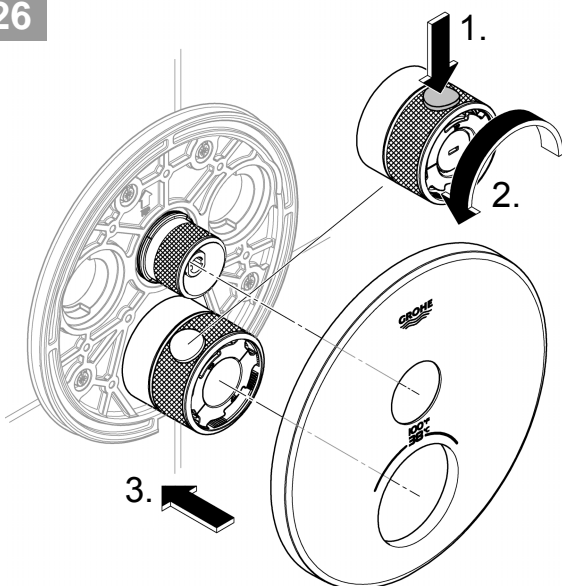
24



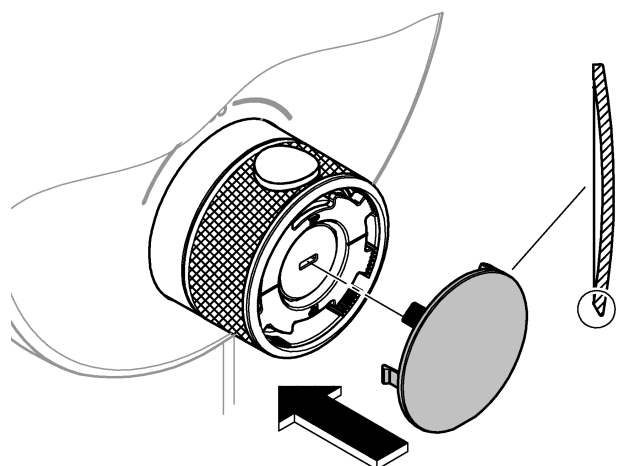
25



26

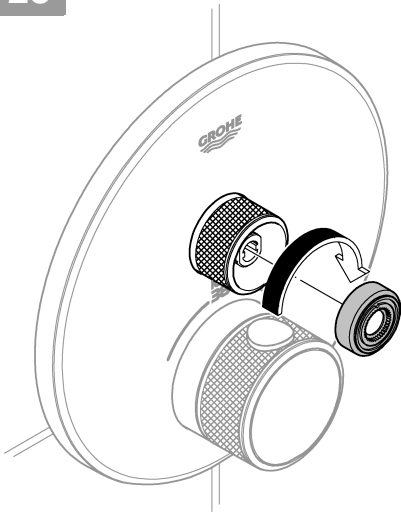


27

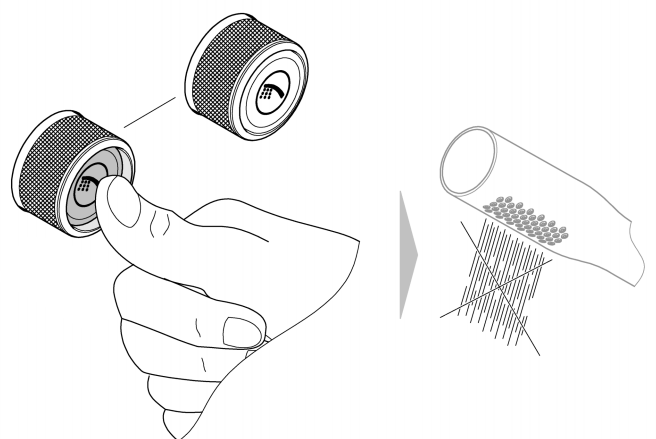
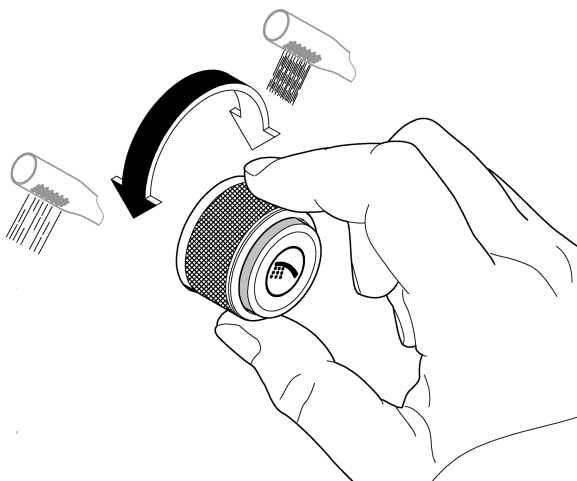
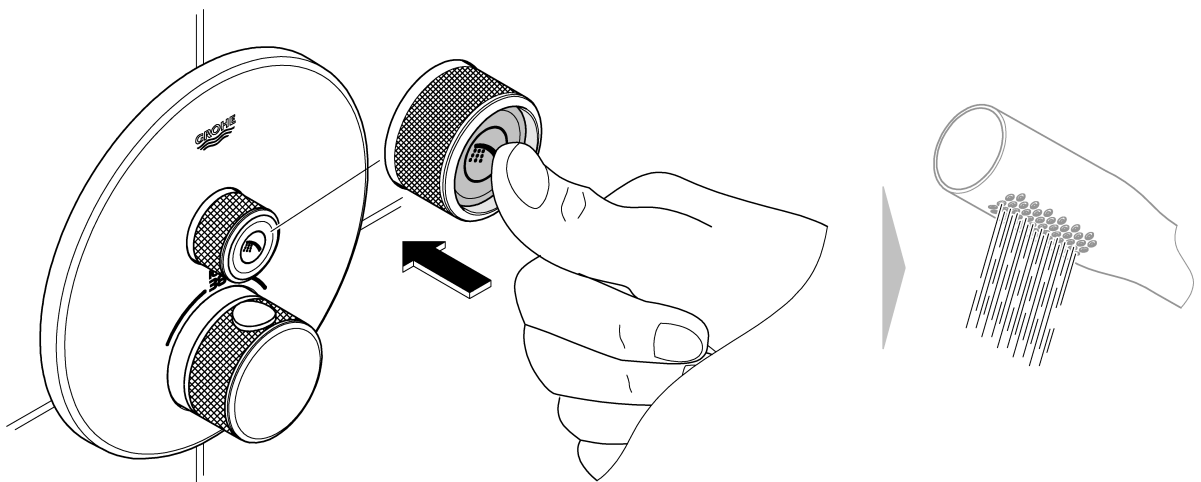
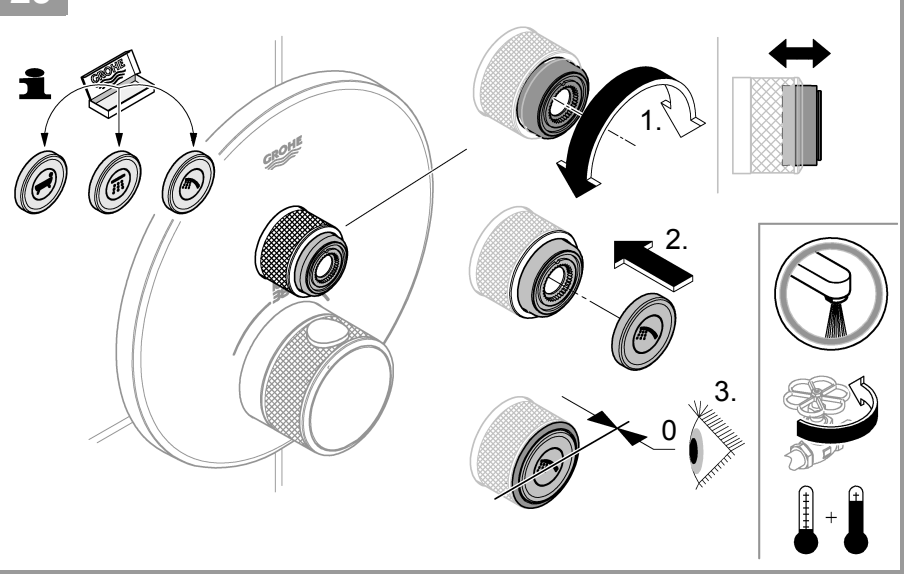


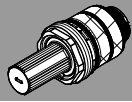



28



29

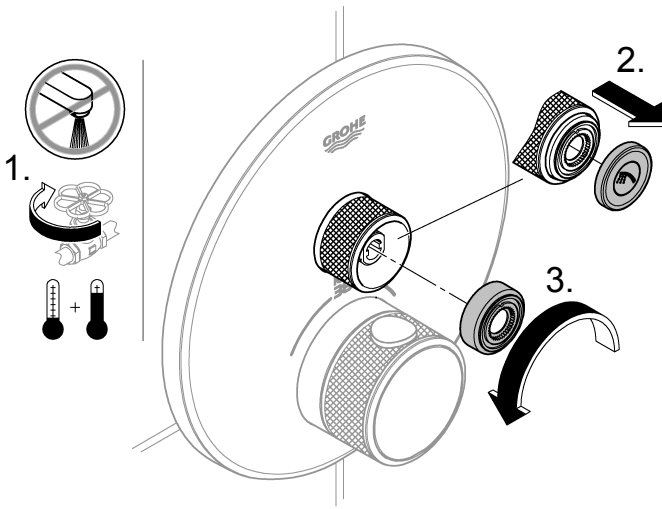




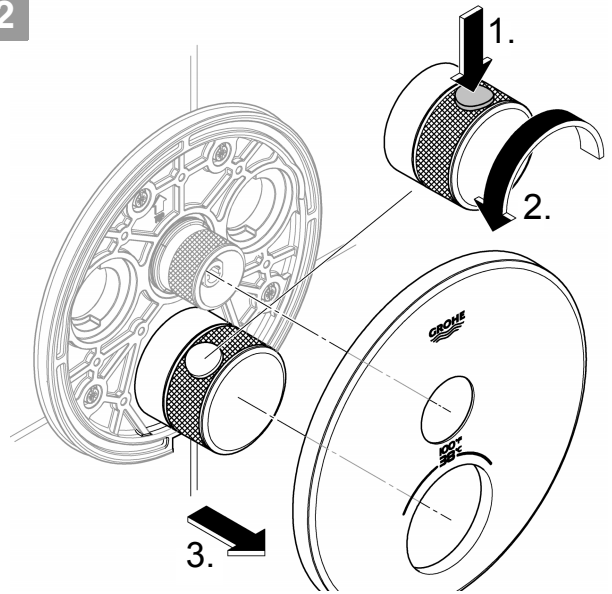
MAINTENANCE 



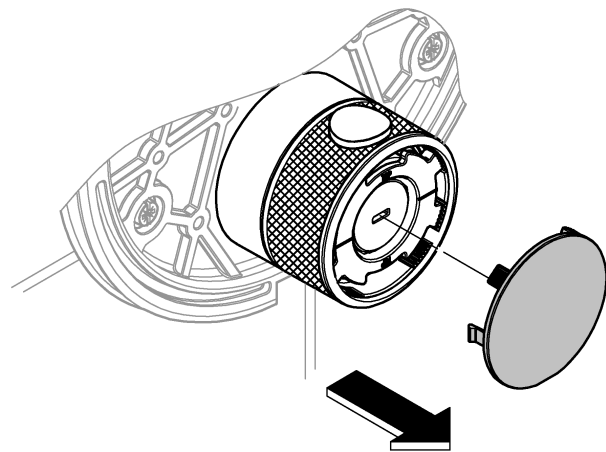
1



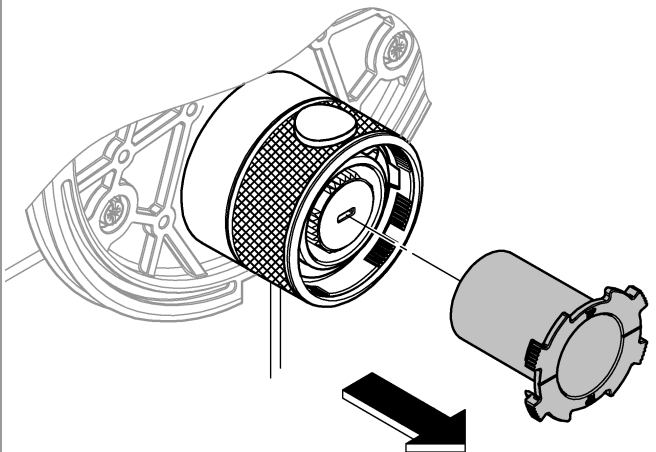
2



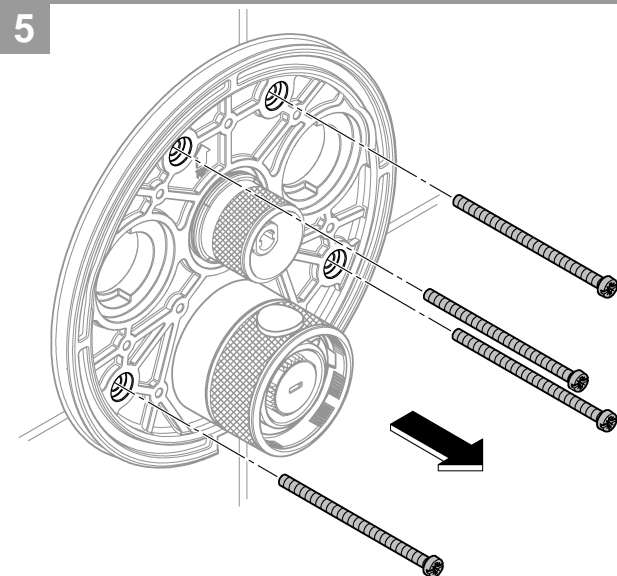
3



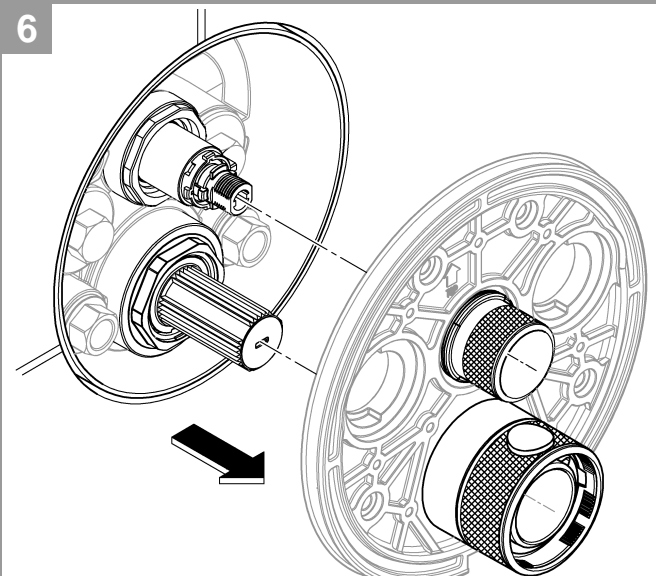
4

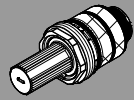


5



6

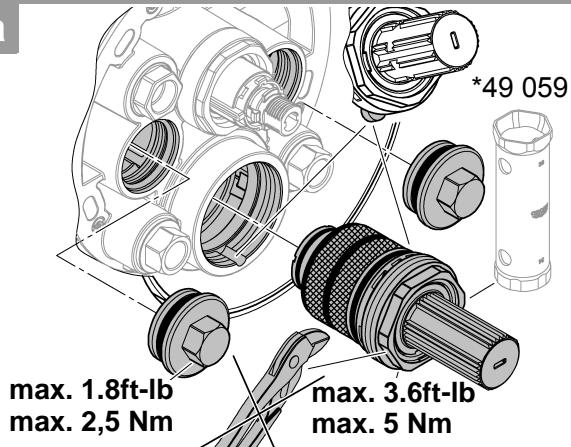




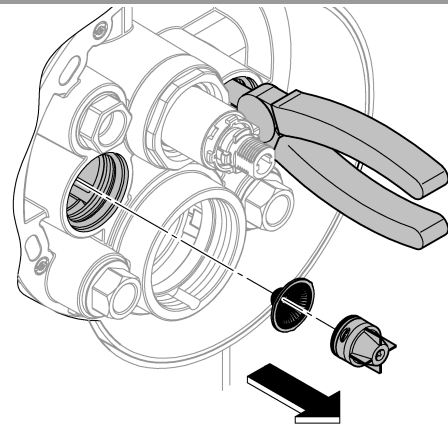
MAINTENANCE



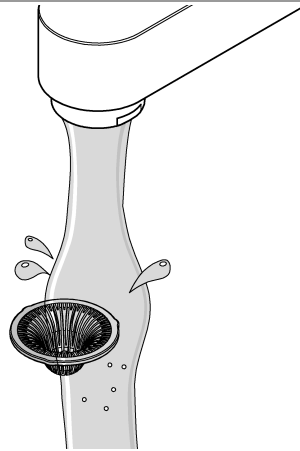
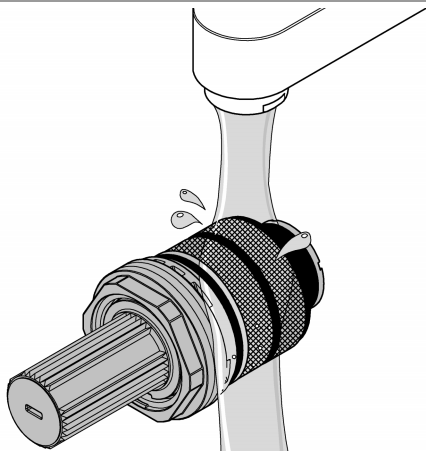
7a



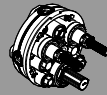
8a



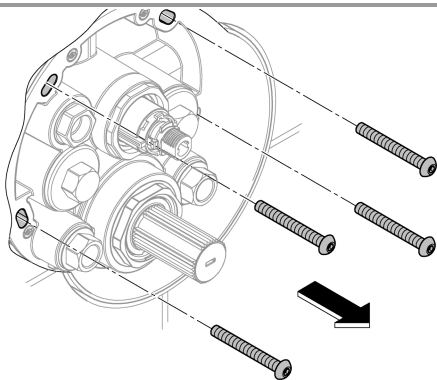
9a



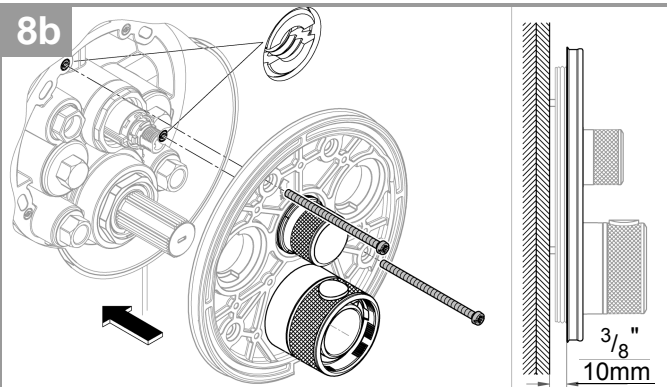
MAINTENANCE



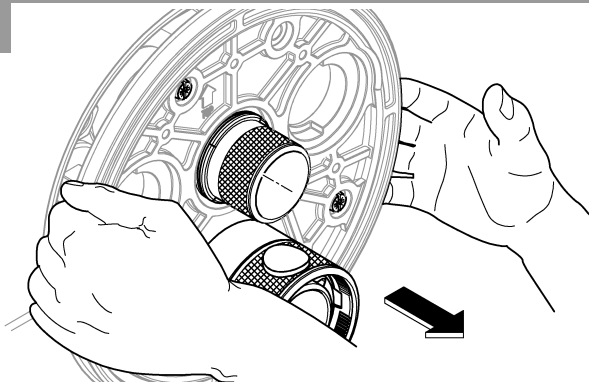
7b



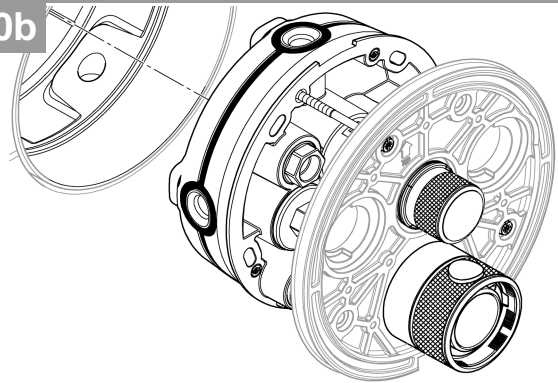
8b



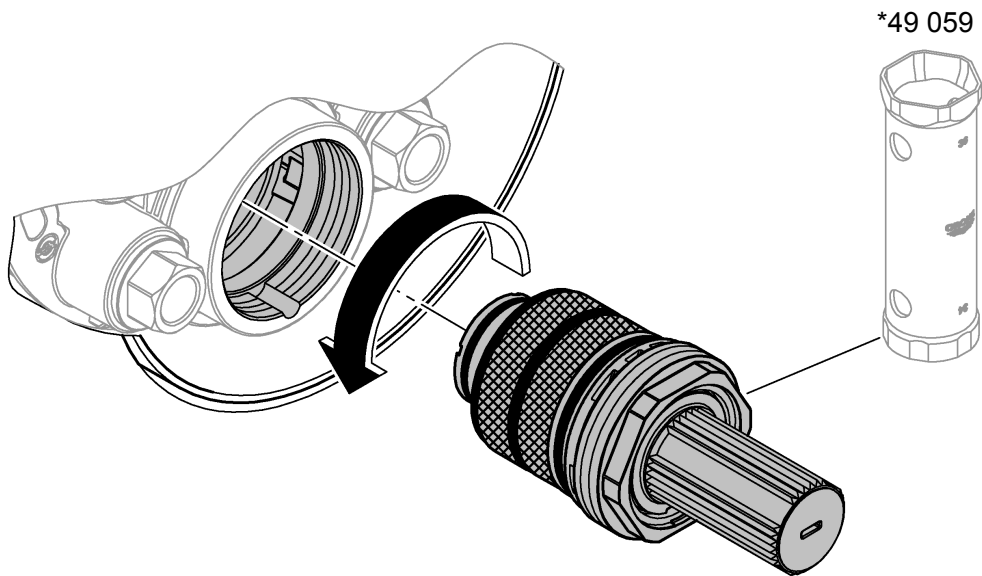
9b



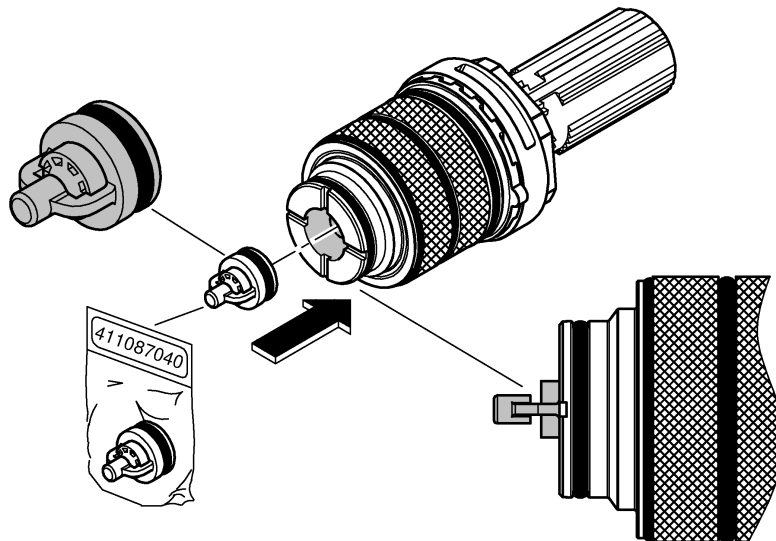
10b



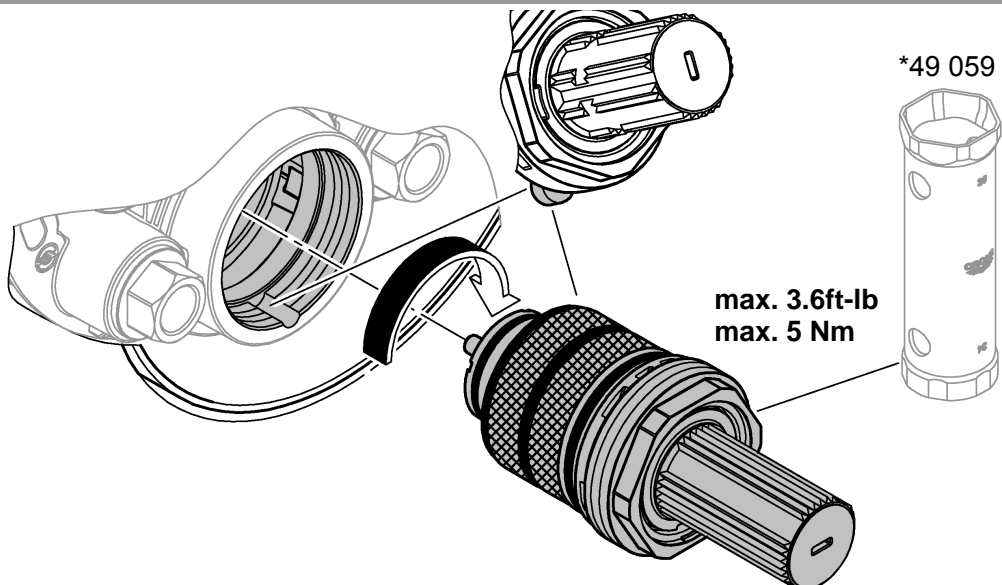
1



2



3



Note

Please know and follow all applicable local plumbing codes when setting the temperature on the water heater.

Only for shower application:

If your local plumbing code requires to install the limiter to reduce the total flow of water in the shower to 1.8gpm at 80psi, see page 11.

Technical Data

- Flow pressure
- Minimum flow pressure without downstream resistances 7.25 psi
- Minimum flow pressure with downstream resistances 14.5 psi
- Recommended 21.75–72.5 psi
- Temperature
- Hot water supply max. 158 °F
- Recommended for energy saving 140 °F
- Thermal disinfection possible
- Hot water temperature at supply connection min. 3.6 °F higher than mixed water temperature

Flow rates without downstream resistances, see page 1.

These should be observed when dimensioning the outlet!

The following special accessories are available:

- Extension 1" (25mm) (prod. no.: 14 048)
- Service Stops (prod. no.: 14 053)

Thermostat compact cartridge for exchanged water channels: Reversed connections, hot on right and cold on left, replace compact cartridge (prod. no.: 49 003)

Installation

- In order to flush, remove the plugs (Y), see page 2 Fig. [4].
- Open cold and hot water supply and check connections for watertightness!
- Alignment of functional unit by 6° possible.
- Measure valves, see page 5 Fig. [18]. For a dimension larger than $1\frac{1}{16}$ " (18mm), the enclosed extension must be used.

Adjusting to 100 °F

- Before the mixer is put into service if the mixed water temperature measured at the point of discharge varies from the desired temperature set on the thermostat, see page 6 Fig. [20].
- Every time following maintenance on the thermostatic compact cartridge.

Temperature limitation

The safety stop limits the temperature range to 100 °F. If a higher temperature is required, the 100 °F stop can be overridden by pressing the button.

In accordance with local plumbing codes, this thermostat is limited to a maximum temperature of 109 °F.

Danger of frost damage

When the domestic water system is drained, the thermostats must be drained separately since non-return valves are installed in the hot and cold water connections.

Remarque

Vous devez connaître et respecter tous les codes de plomberie locaux applicables pour le réglage de la température du chauffe-eau.

Seulement pour l'application de douche:

Si votre code de plomberie exige, installez le limiteur de débit pour réduire le débit total de l'eau dans la douche à 6,8 l/min à 5,5 bar, voir page 11.

Caractéristiques techniques

- Pression dynamique
- Pression dynamique minimale sans résistances en aval 0,5 bar
- Pression dynamique minimale avec résistances en aval 1 bar
- Recommandée 1,5 à 5 bars
- Débit minimal 5 l/min
- Température
- Entrée d'eau chaude max. 70 °C
- Recommandée pour économie d'énergie 60 °C
- Désinfection thermique possible
- Température de l'eau chaude au raccord d'alimentation au moins 2 °C supérieure à la température de l'eau mitigée

Débits sans résistances en aval, voir page 1. **Respecter les données indiquées lors du dimensionnement de l'évacuation !**

Les accessoires spéciaux suivants sont disponibles :

- Extension de 25mm (réf. : 14 048)
- Butées d'arrêt d'isolation (réf. : 14 053)

Cartouche compacte de thermostatique pour raccordements inversés : Raccordements inversés (chaud à droite, froid à gauche), remplacer la cartouche compacte (réf. : 49 003)

Installation

- Pour le rinçage, démonter les clapets (Y), voir page 2, fig. [4].
- Ouvrir les arrivées d'eau froide et d'eau chaude et vérifier l'étanchéité des raccordements.
- Possibilité d'orienter l'unité de commande de 6°.
- Mesurer les vannes, voir page 5, fig. [18]. Pour des dimensions supérieures à 18mm, utiliser l'extension fournie.

Réglage sur 38 °C

- Préalablement à la mise en service : si la température de l'eau mitigée mesurée au point de puisage est différente de la température souhaitée réglée au niveau de la poignée graduée du thermostatique, voir page 6, fig. [20].
- Après chaque opération de maintenance sur la cartouche compacte du thermostatique.

Limitation de la température

La température est limitée à 38 °C par la butée de sécurité. Il est possible d'obtenir une température plus élevée (supérieure à 38 °C) en appuyant sur le bouton.

Conformément aux directives locales d'installation, ce thermostatique est limité à une température max. de 43 °C.

Attention en cas de risque de gel

Lors du vidage de l'installation sanitaire, il convient de vider séparément les thermostats dont les raccordements d'eau froide et d'eau chaude sont équipés de clapets anti-retour.

Nota

Debe conocer y cumplir todos los códigos locales aplicables para ajustar la temperatura del calentador de agua.

Solo para la aplicación de ducha:

Si el código de instalación local requiere, instale el limitador de caudal para reducir el caudal total de agua en la ducha a 1.8gpm a 80psi, véase la página 11.

Datos técnicos

- Presión de trabajo
- Presión mínima de trabajo sin resistencias postacopladas 7.25 psi
- Presión mínima de trabajo con resistencias postacoplada 14.5 psi
- Recomendado 21.75-72.5 psi
- Caudal mínimo 1.3 gpm
- Temperatura
- Entrada de agua caliente máx. 158 °F
- Recomendado para ahorrar energía 140 °F
- Desinfección térmica posible
- La temperatura del agua caliente en la acometida de mín. 3.6 °F es superior a la temperatura del agua mezclada

Caudales sin resistencias postacopladas, véase la página 1.

Tenga en cuenta las dimensiones del desagüe.

Los siguientes accesorios especiales están disponibles:

- Prolongación de 1" (25mm) (n.º de pedido: 14 048)
- Cierres de servicio (n.º de pedido: 14 053)

Cartuchos compactos de termostato para las entradas de agua intercambiadas: Conexión invertida, sustituir los cartuchos compactos, los calientes en el lado derecho y los fríos en el izquierdo (n.º de pedido: 49 003)

Instalación

- Para lavar, desmonte el tapón (Y), véase la página 2 fig. [4].
- Abrir las llaves de paso del agua fría y del agua caliente y comprobar la estanqueidad de las conexiones.
- Es posible alinear la unidad de funcionamiento 6°.
- Medir las válvulas, véase la página 5 fig. [18]. Para una medida más grande de $1\frac{1}{16}$ " (18mm), se debe utilizar la prolongación suministrada.

Ajustar a 100 °F

- Antes de la puesta en servicio, si la temperatura del agua mezclada medida en el punto de consumo difiere de la temperatura teórica ajustada en el termostato, véase la página 6 fig. [20].
- Después de cada operación de mantenimiento en el cartucho compacto del termostato.

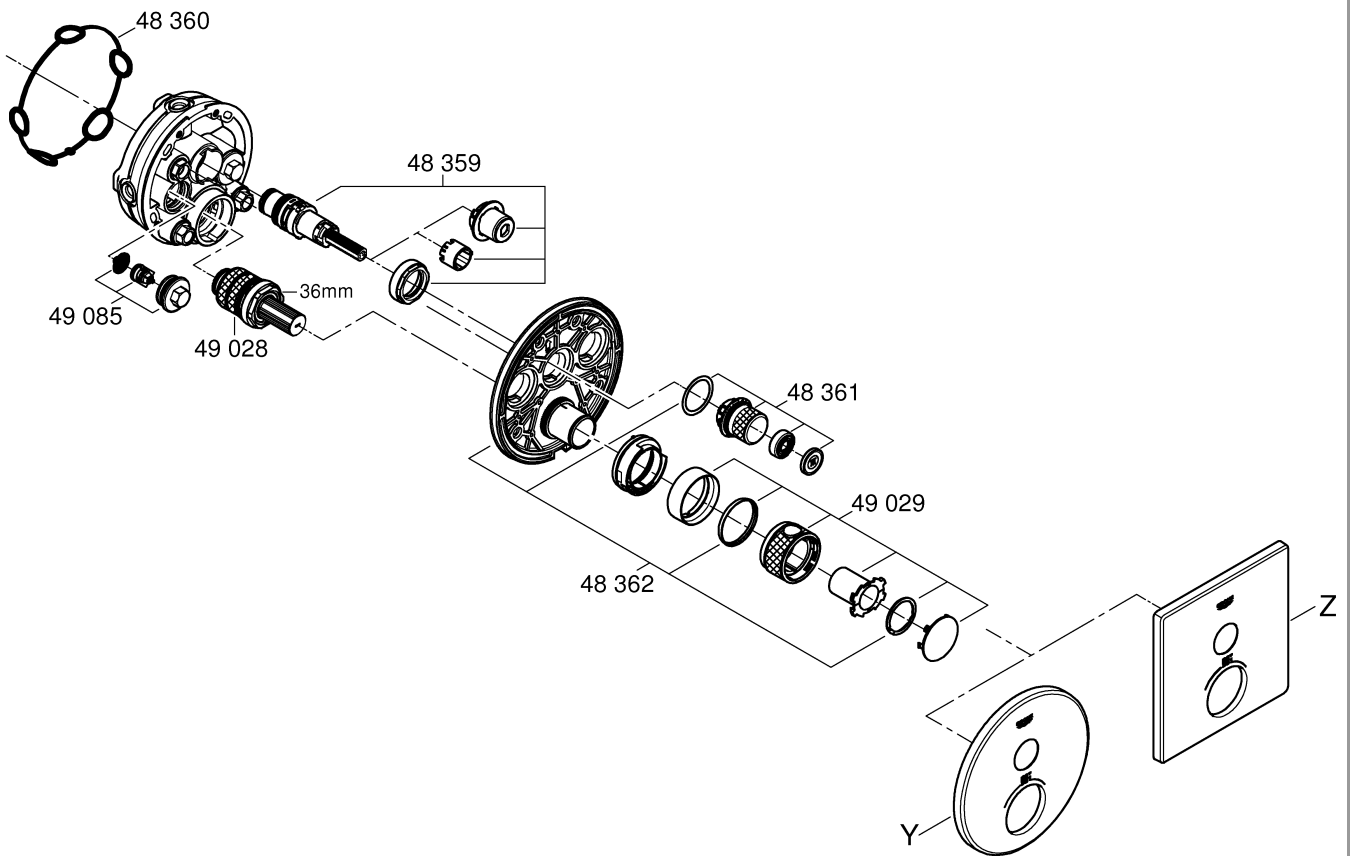
Limitación de la temperatura

La gama de temperaturas está limitada a 100 °F mediante el cierre de seguridad. Si desea seleccionar una temperatura más alta, se puede exceder el límite de 100 °F presionando la tecla.

En las normas de instalación locales el termostato tiene una temperatura máxima establecida de 109 °F.

Atención en caso de peligro de helada

Al vaciar la instalación de la casa, los termostatos deberán vaciarse por separado, ya que hay válvulas antirretorno en las conexiones del agua fría y caliente.



* =		*49 059 36mm
		*49 003
*14 053 		*14 048 +25

Y		Z	
49 044 	 10	49 050 	 10
49 045 	 14	49 051 	 14

Pure Freude an Wasser

GROHE
WAVES

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