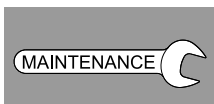


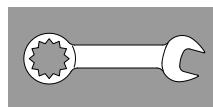
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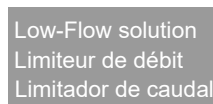
11 - 12



2 - 8



13



9 - 10



14



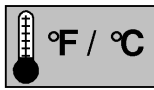
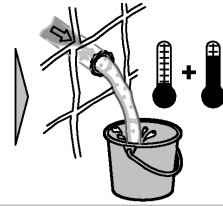


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DIN  
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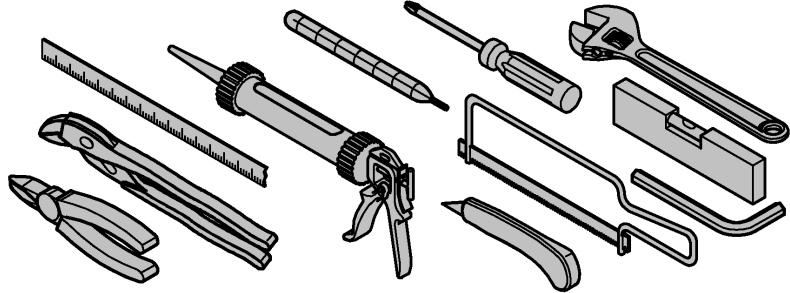
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DIN EN  
806



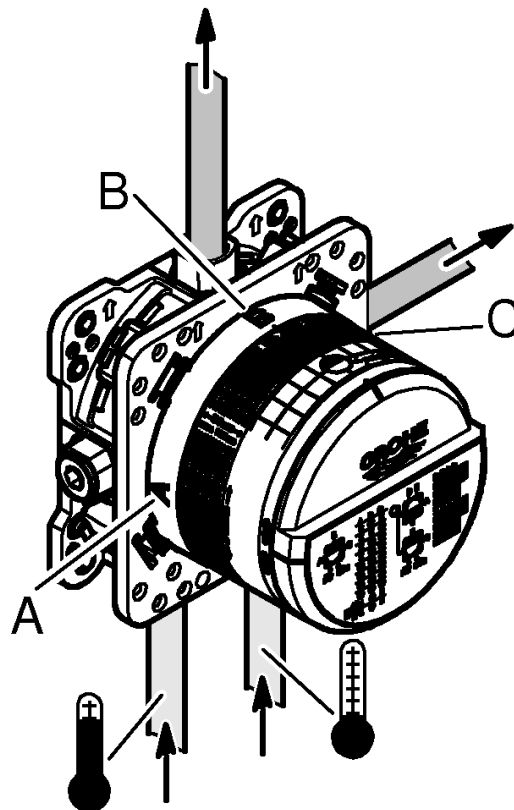
max.  
158°F  
70°C

140°F  
60°C



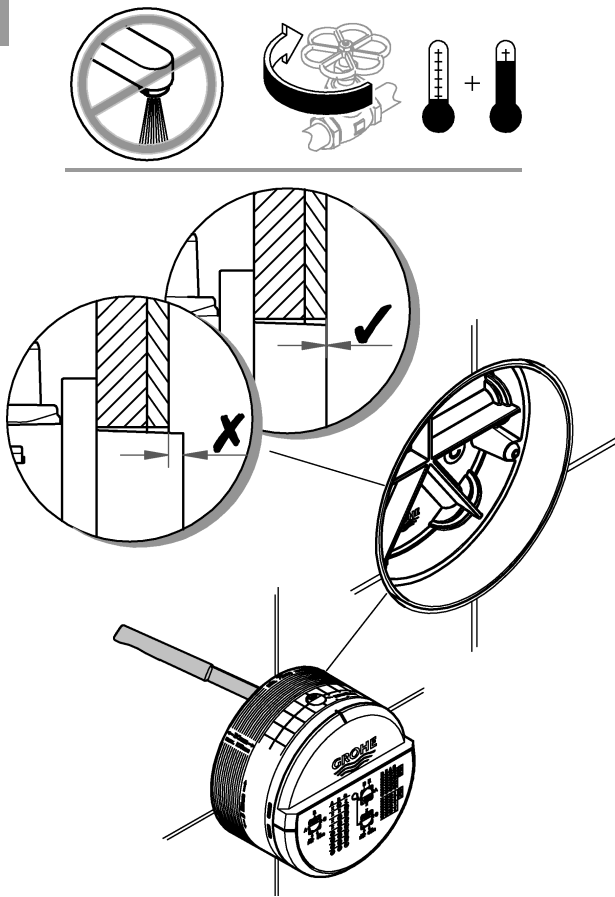
	psi						gpm
	14,5	29	43,5	58	72,5	87	
B	3,7	5,2	6,3	7,3	8,2	9	
C	4	5,6	6,9	7,9	8,9	9,7	
B + C	4,4	6,3	7,7	8,8	9,9	10,8	

	bar						l/min
	1	2	3	4	5	6	
B	13,9	19,6	24	27,7	31	33,9	
C	15	21,2	26	30	33,6	36,8	
B + C	16,7	23,7	29	33,5	37,4	41	

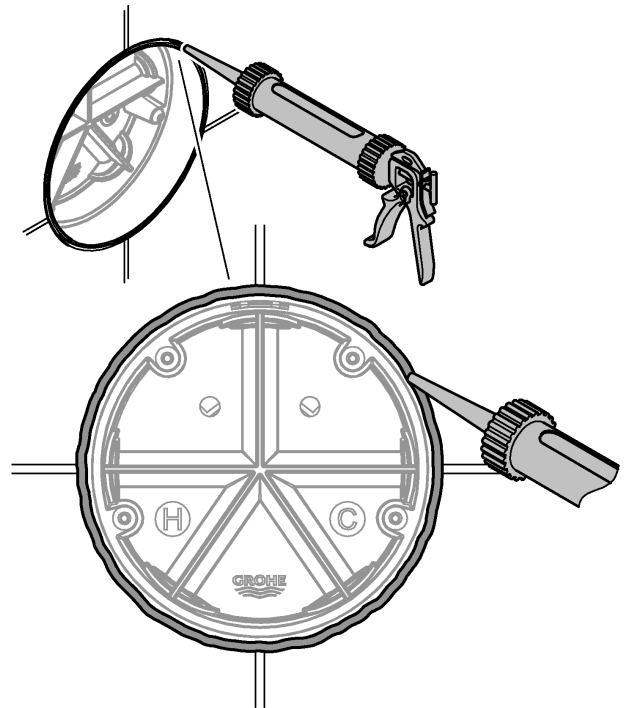




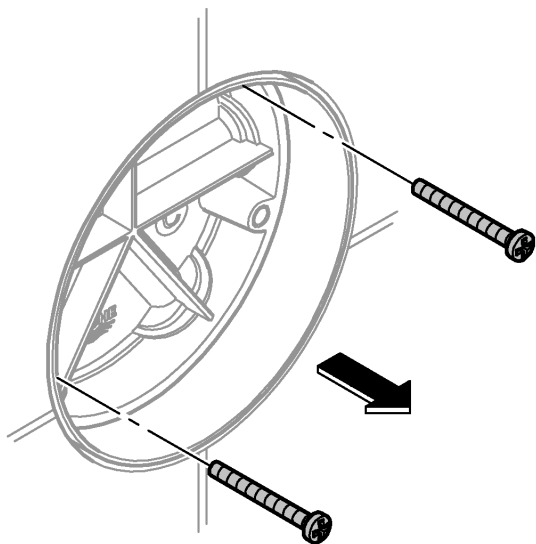
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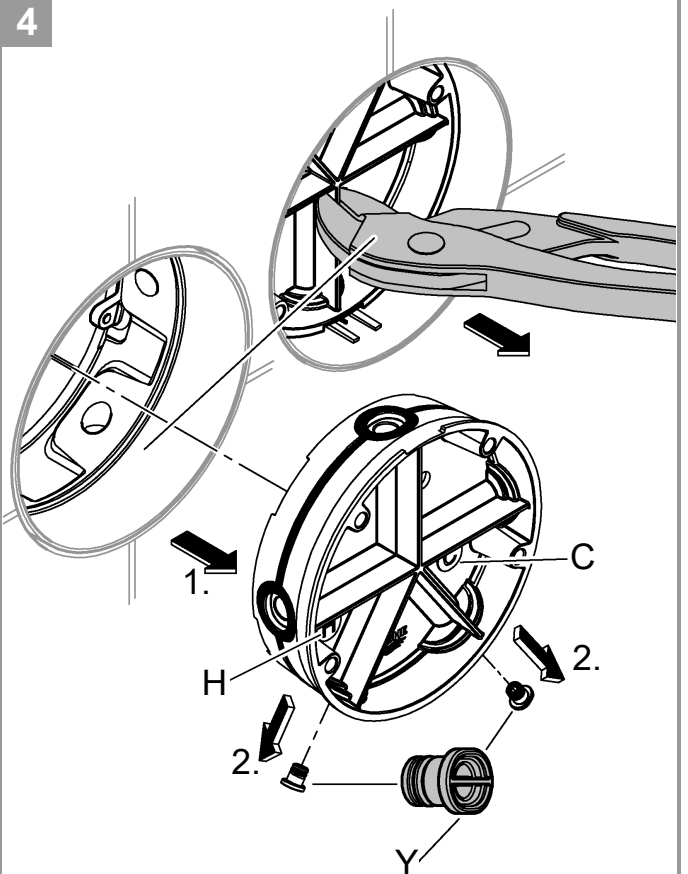
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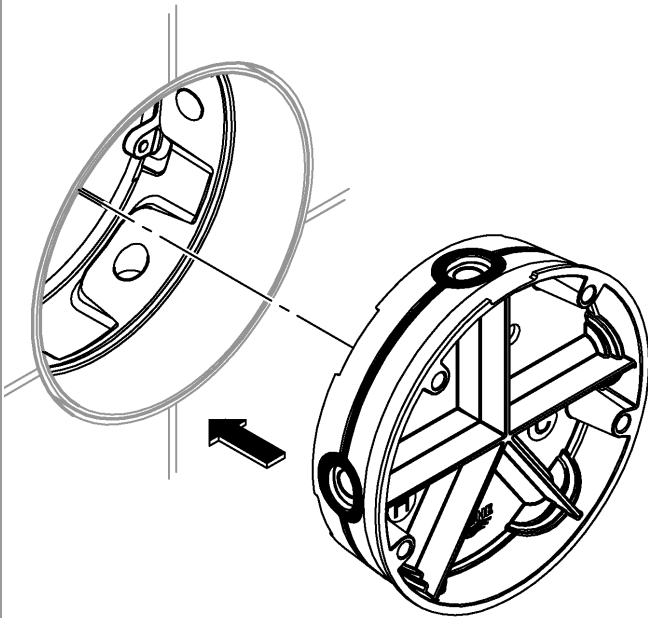


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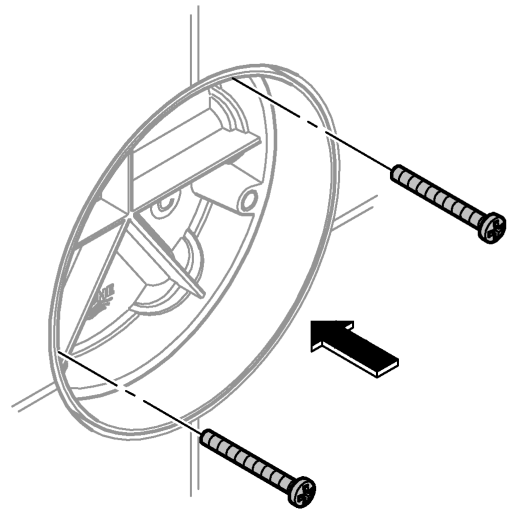




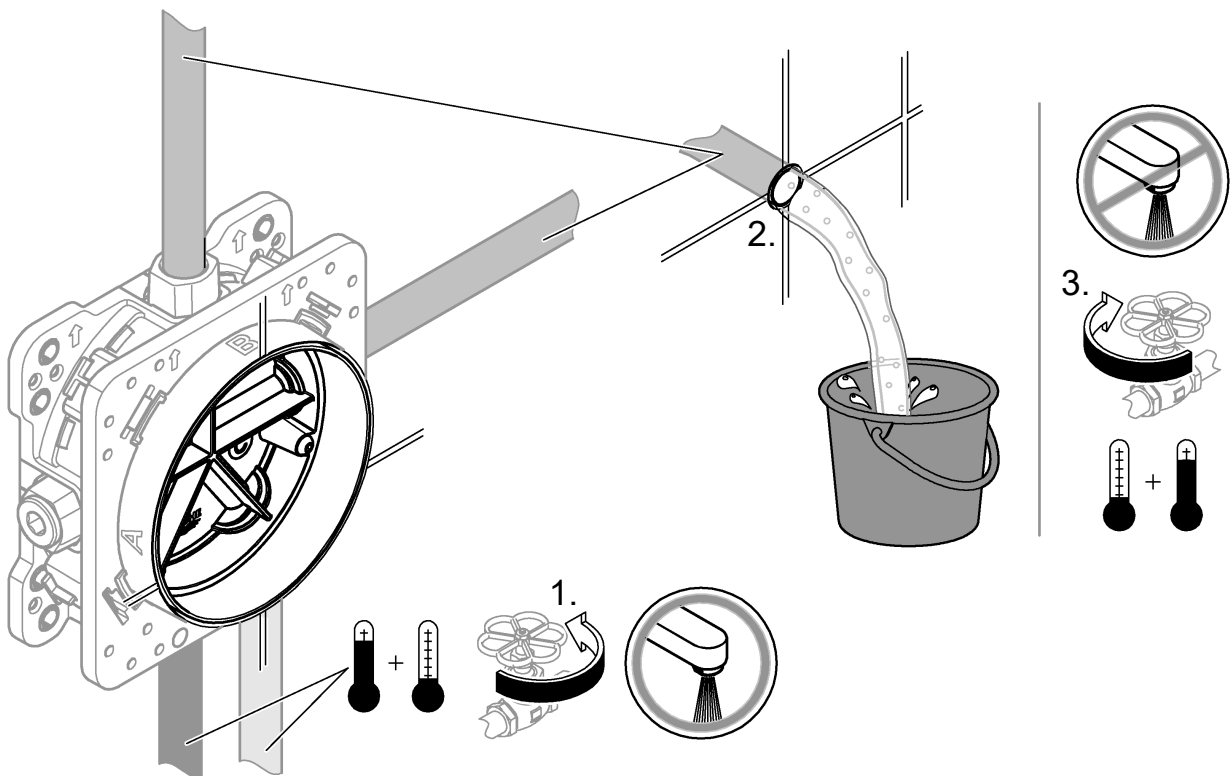
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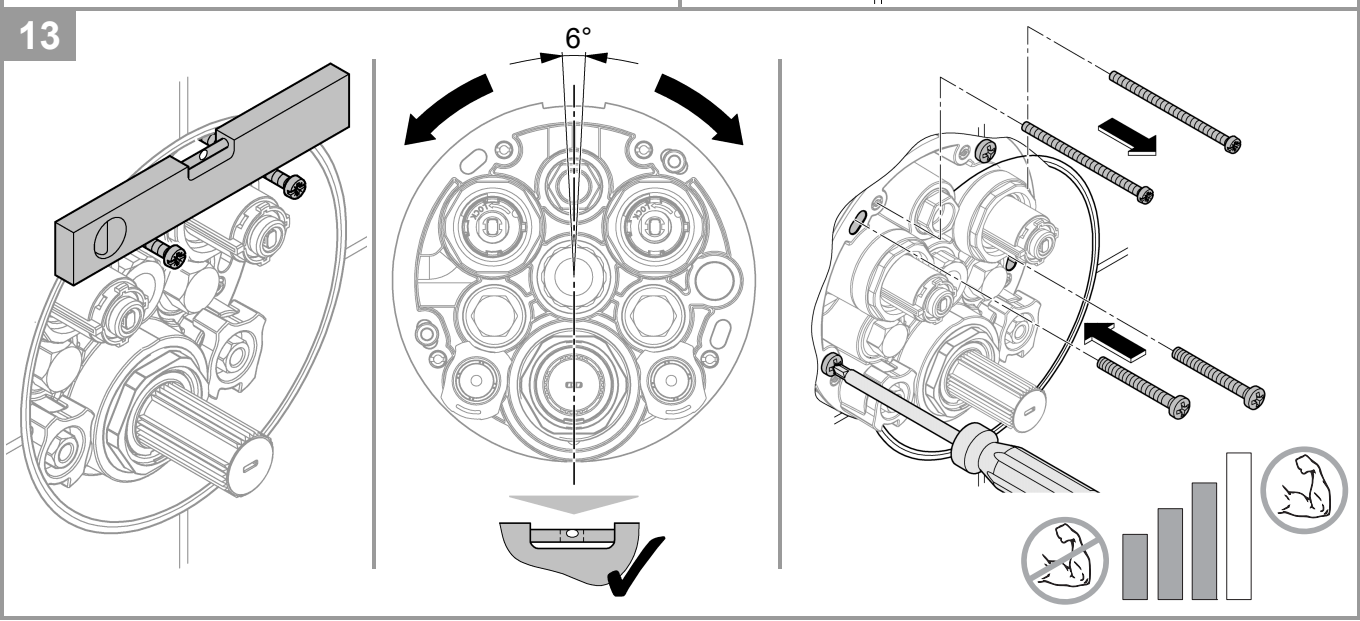
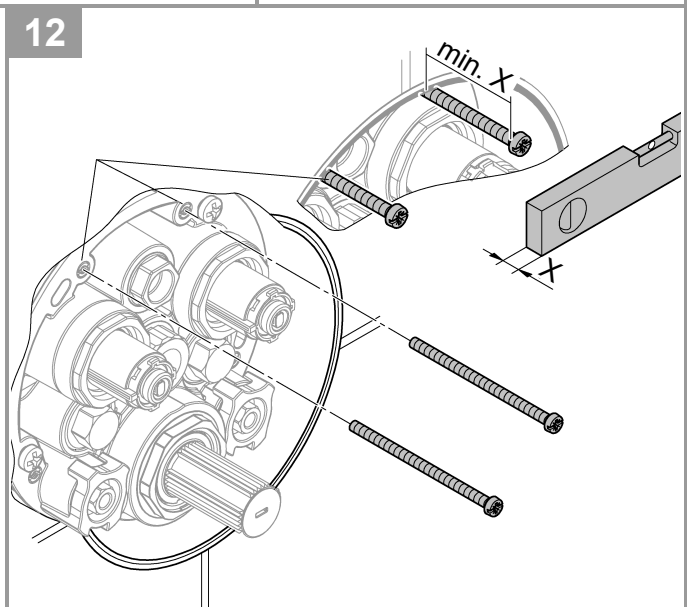
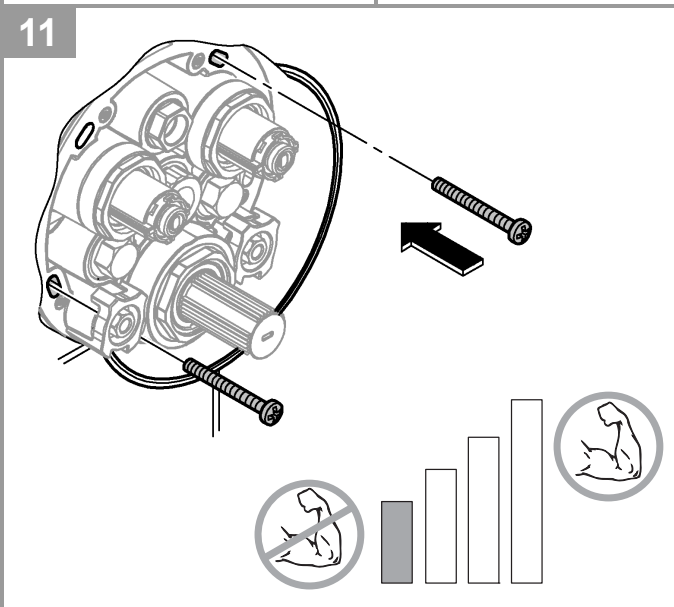
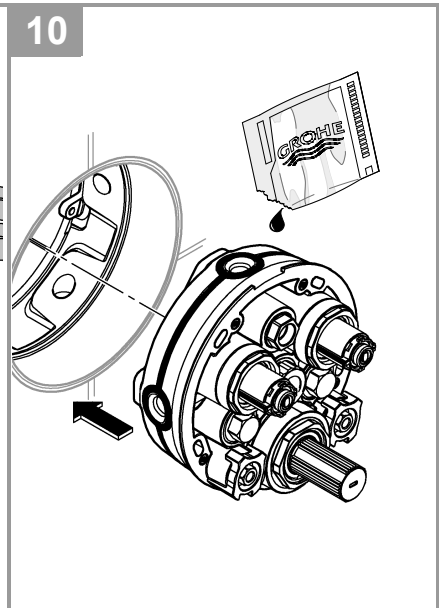
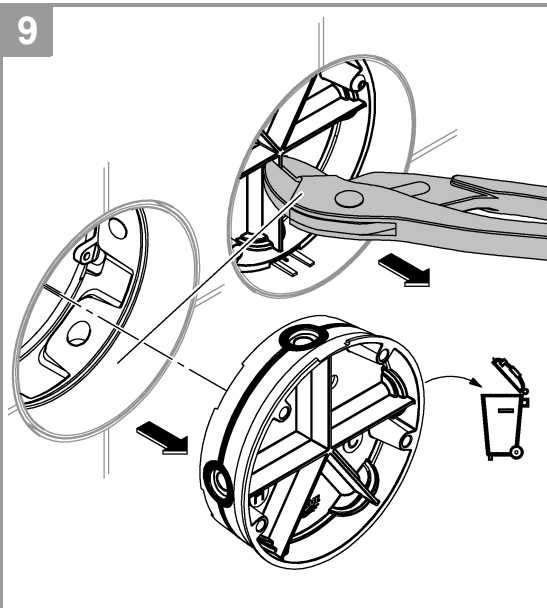
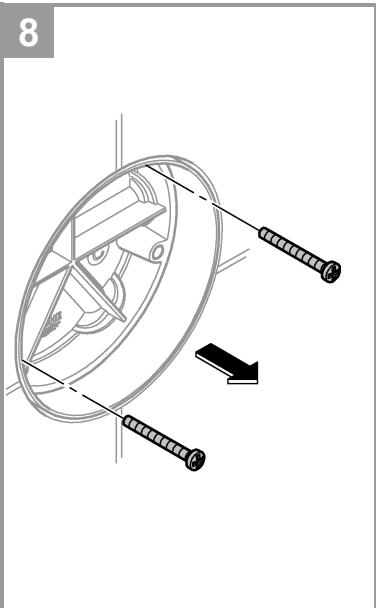
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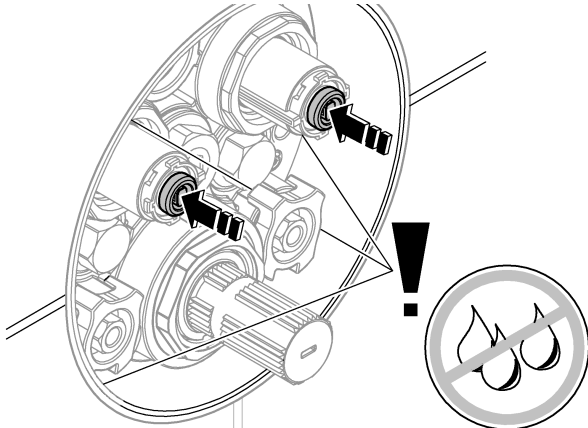
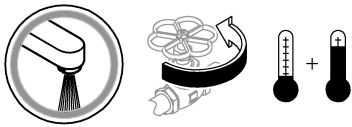




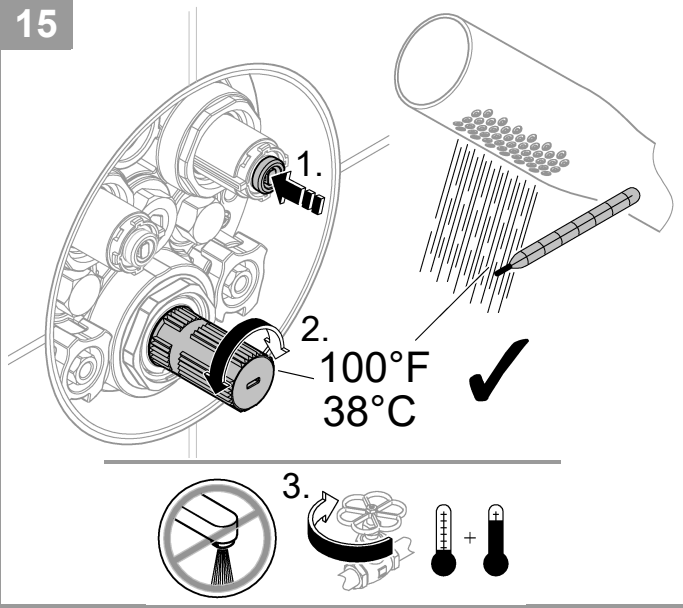




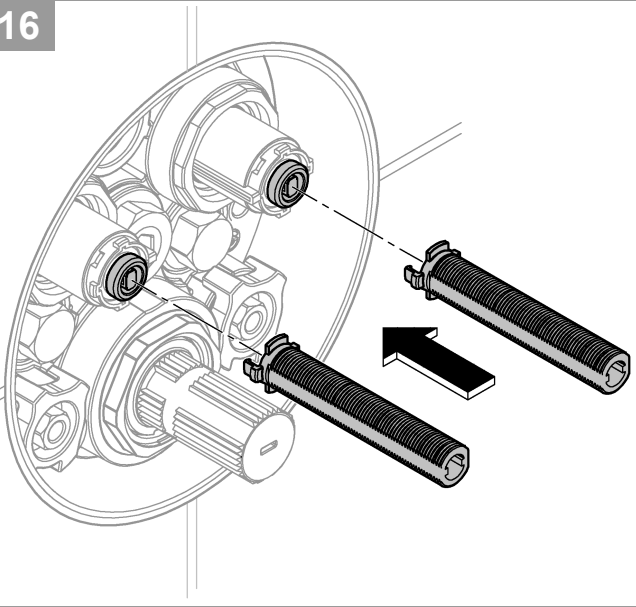
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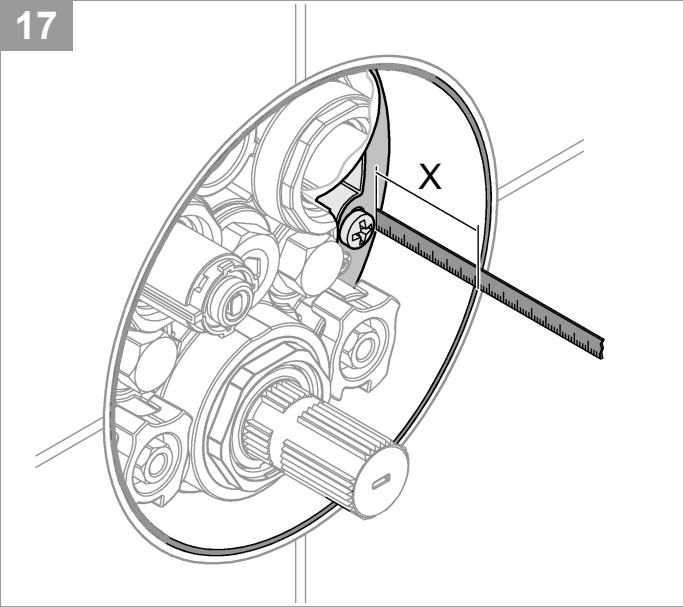
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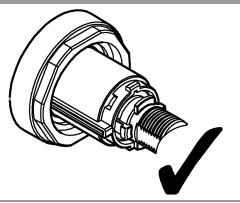
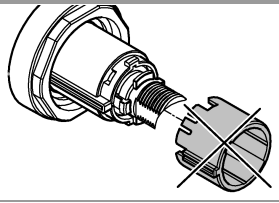


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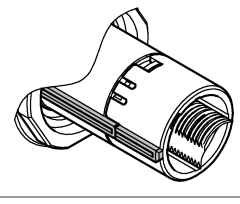
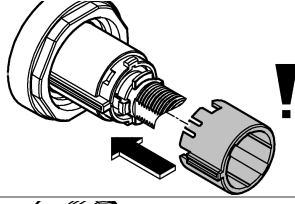


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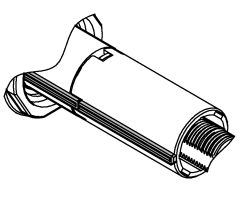
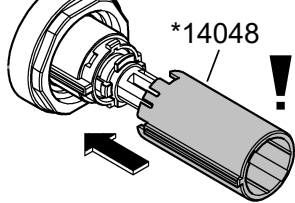
A  
 $X < 1\frac{3}{4}''$   
(40mm)



B  
 $X = 1\frac{3}{4}'' - 2\frac{3}{16}''$   
(40mm - 55mm)

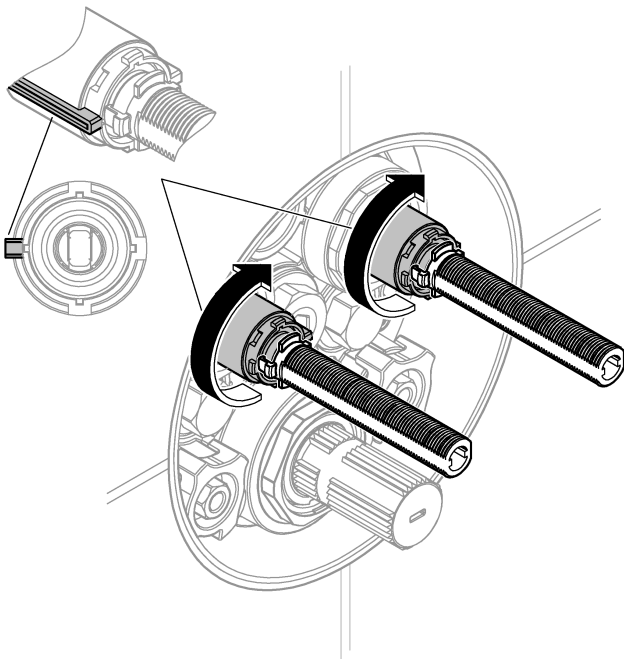


C  
 $X > 2\frac{3}{16}''$   
(55mm)

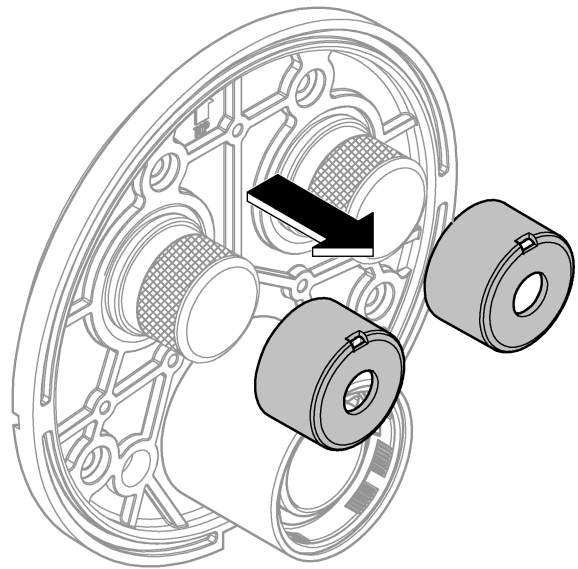




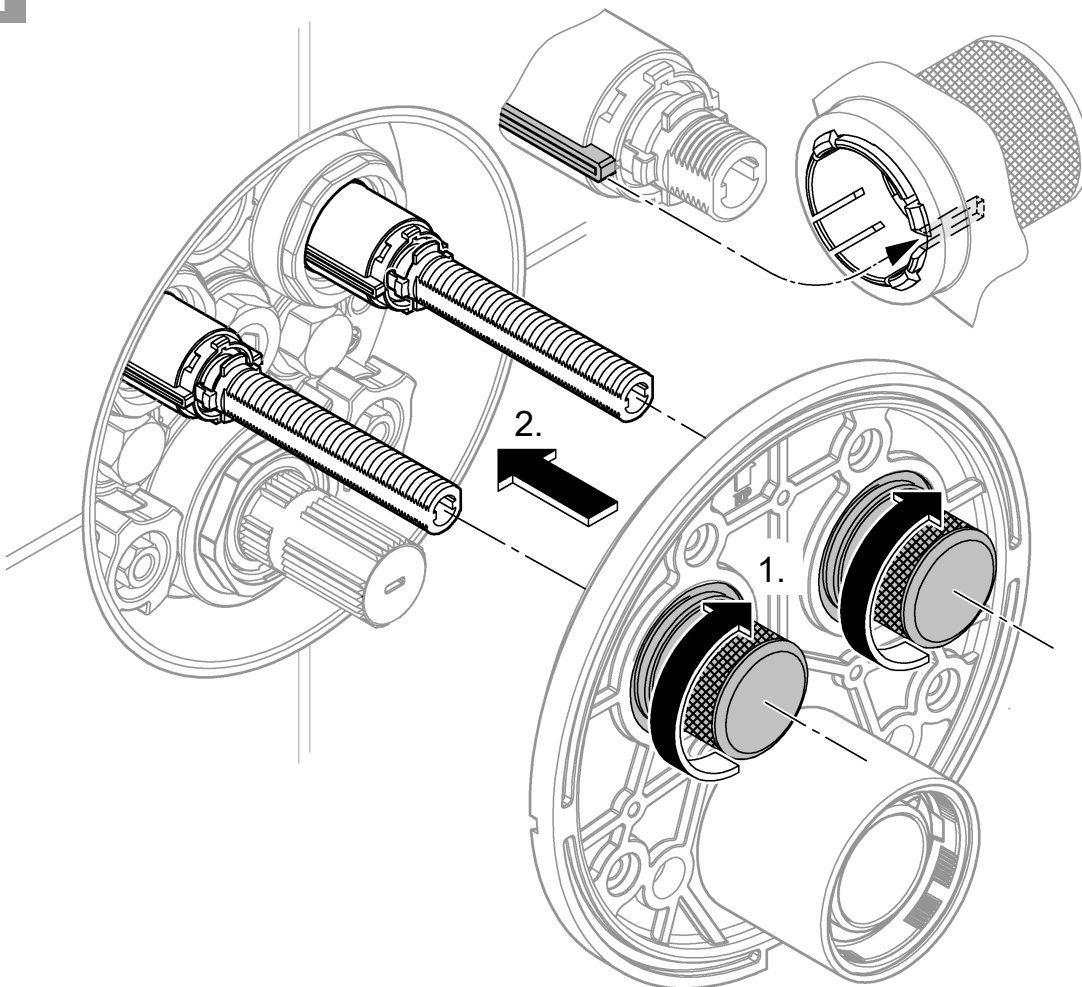
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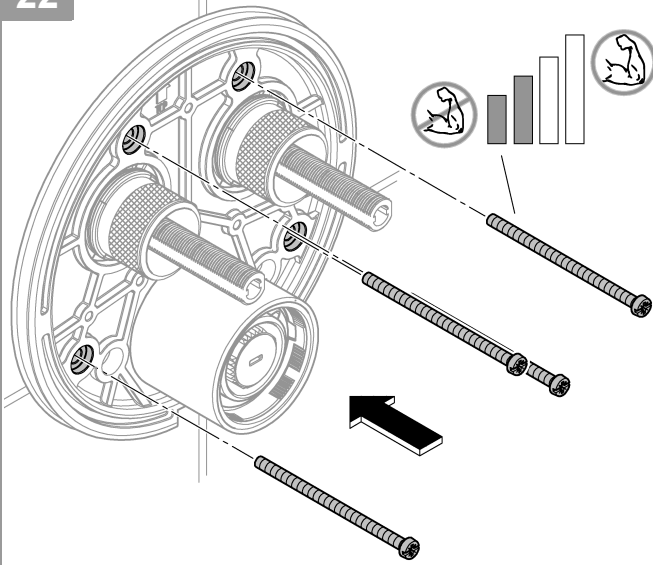


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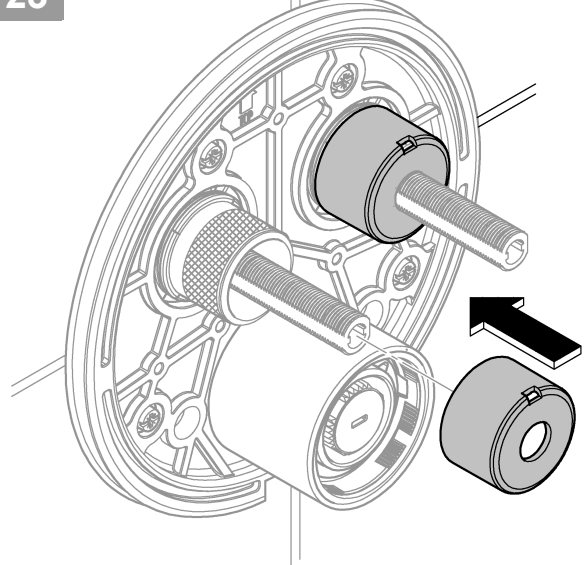




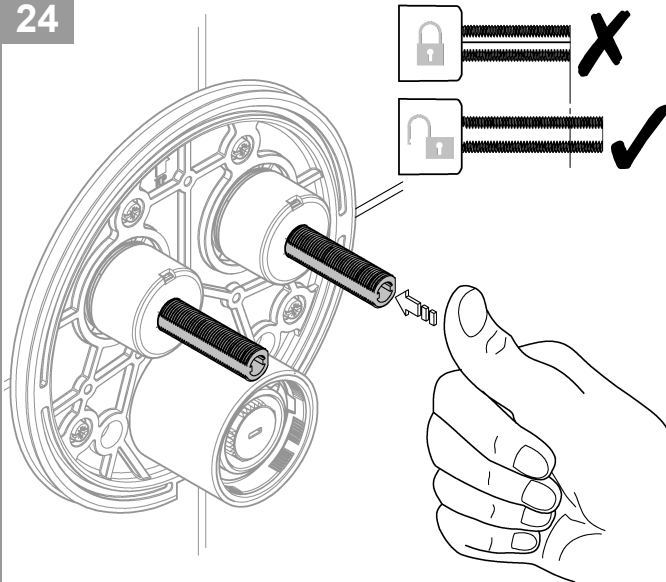
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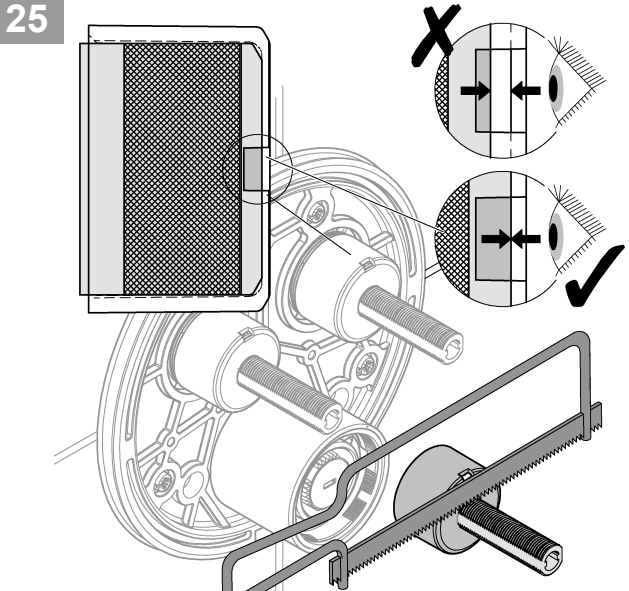
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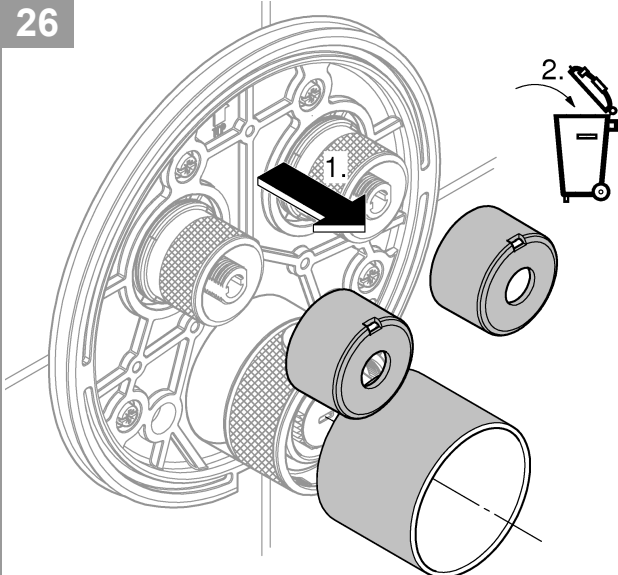
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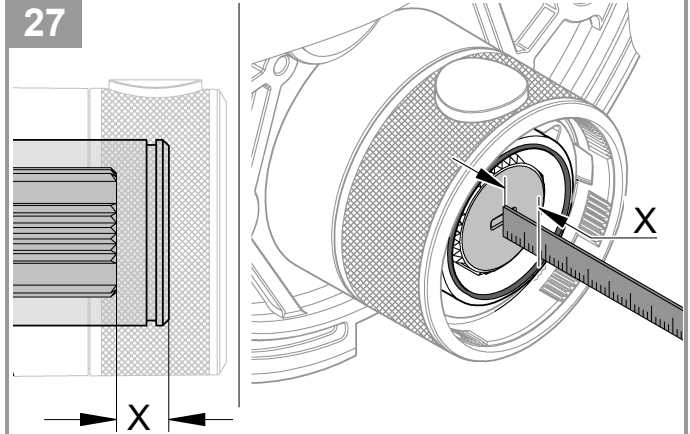
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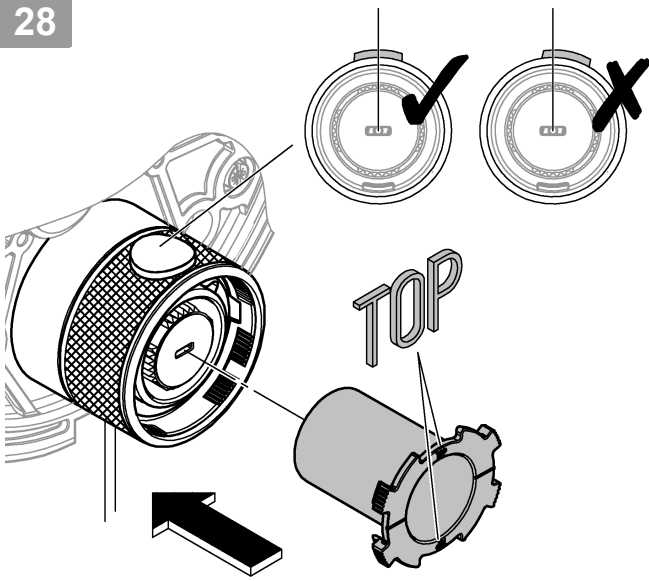
$X < 1\frac{3}{16}"$   
(29,5)

28

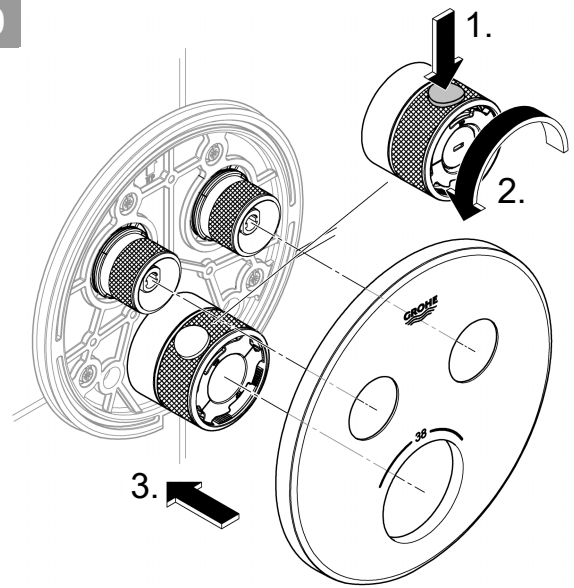
$X > 1\frac{3}{16}"$   
(29,5) \*14 048



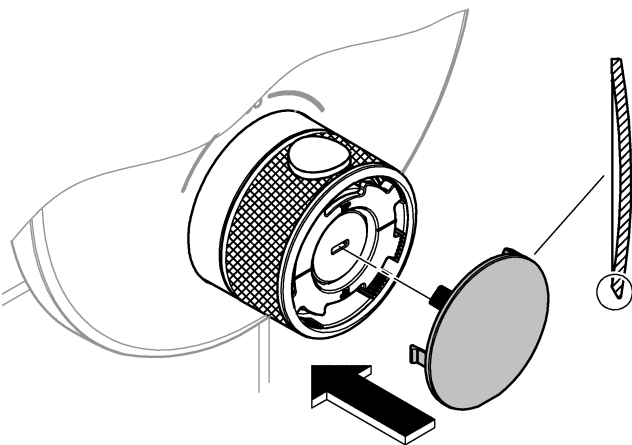
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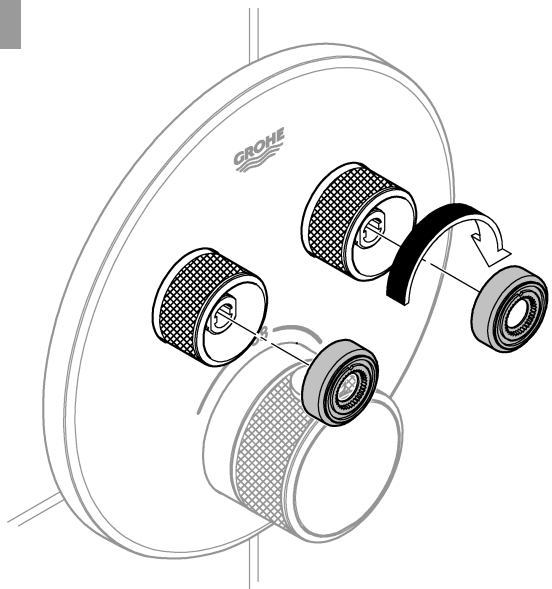
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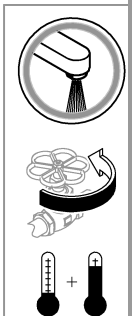
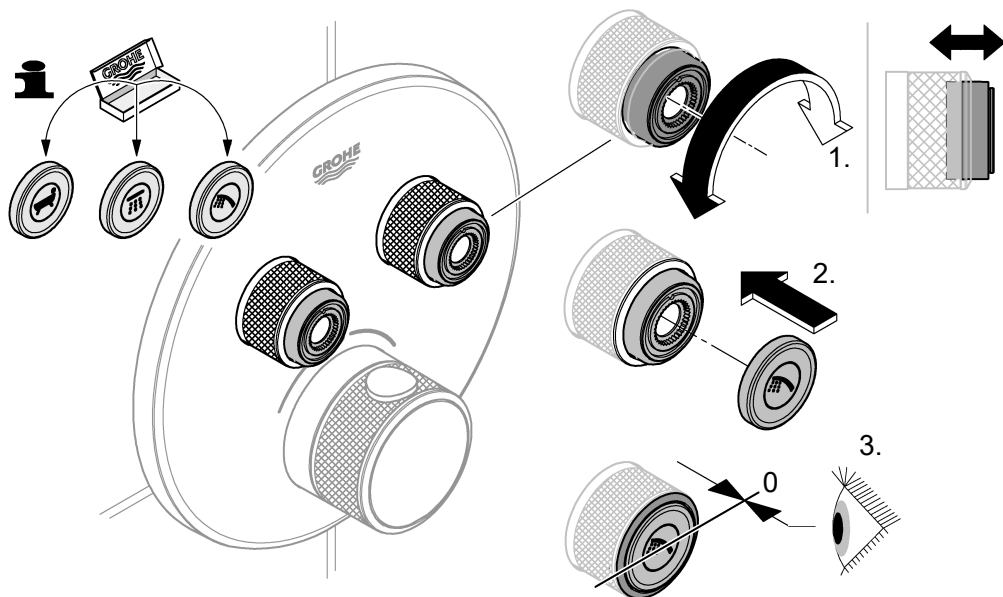
30



31



32



**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 13.

**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)

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. [17]. 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 5 Fig. [15].
- 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 13.

**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)

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. [17]. 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 5, fig. [15].
- 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 thermostatiques 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 13.

**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)

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. [17]. 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 5 fig. [15].
- Después de cada operación de mantenimiento en el cartucho compacto del termostato.

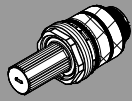
**Limitación de la temperatura**


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.

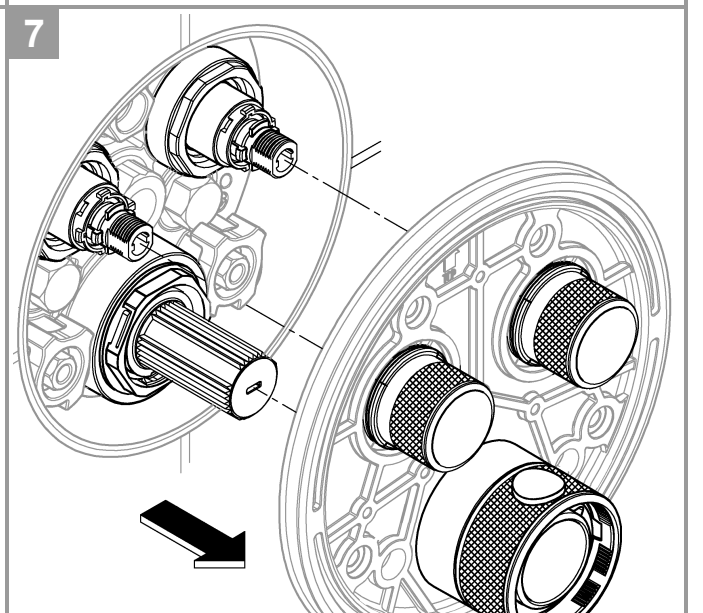
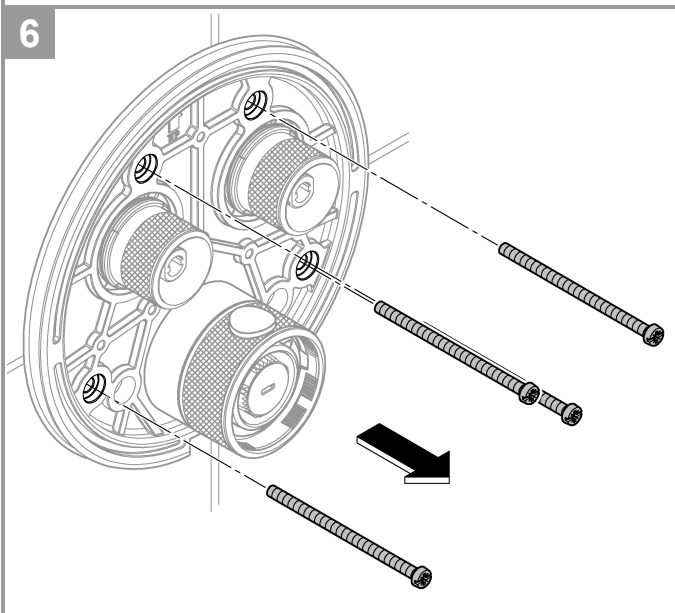
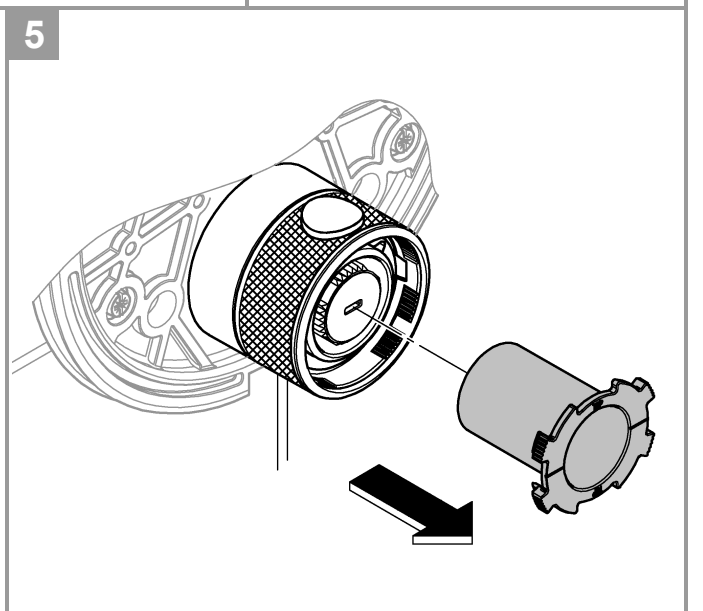
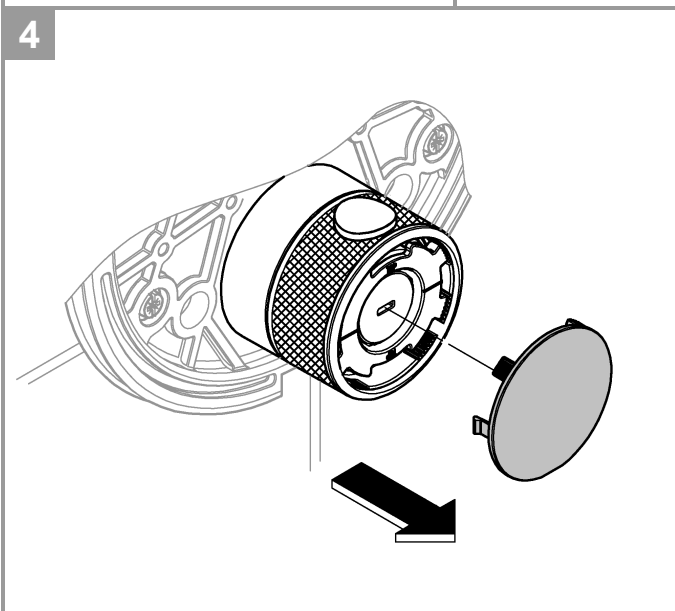
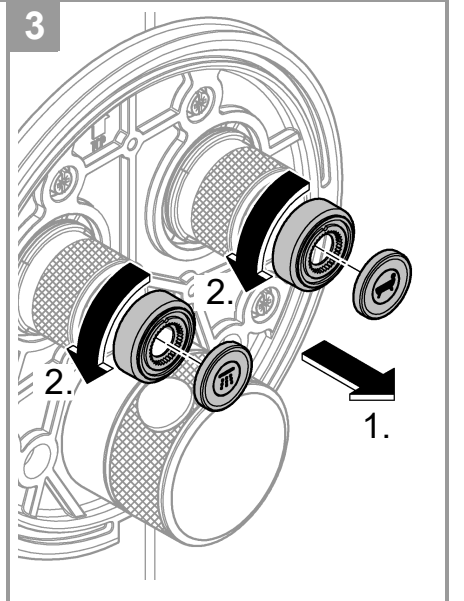
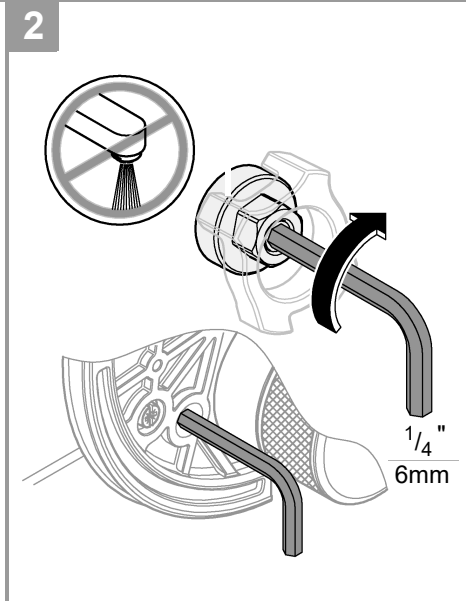
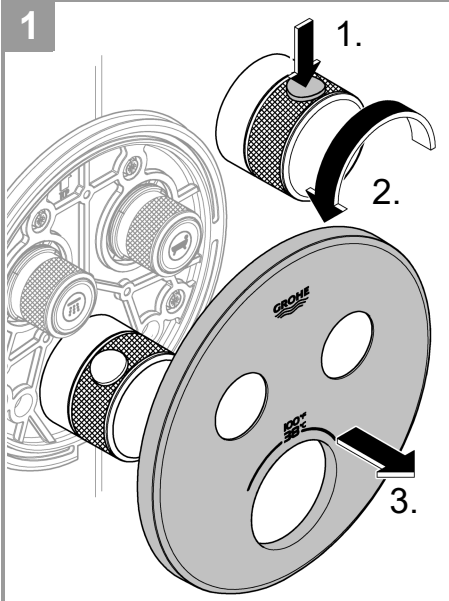
**En las normas de instalación locales el termostato tiene una temperatura máxima establecida de 109 °F.**

**Atención en caso de peligro de helada**

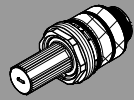
Al vaciar la instalación de la casa, los termostatos deberán vaciarse por separado, ya que hay válvulas antirretorno en las conexiones del agua fría y caliente.



MAINTENANCE 



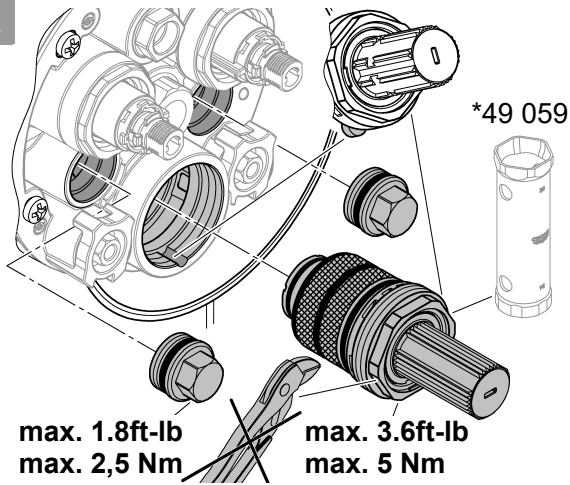




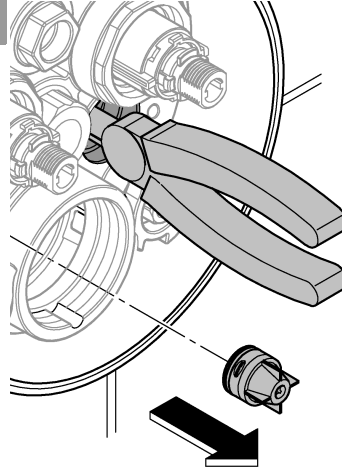
MAINTENANCE 



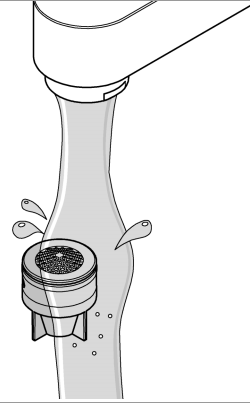
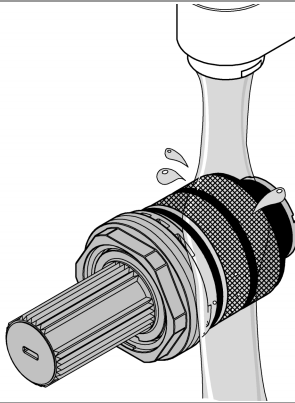
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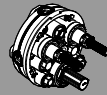
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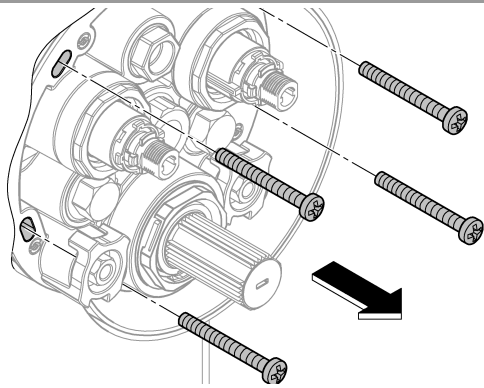
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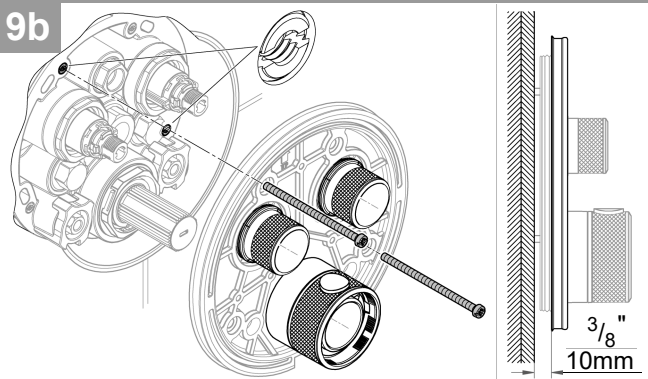
MAINTENANCE 



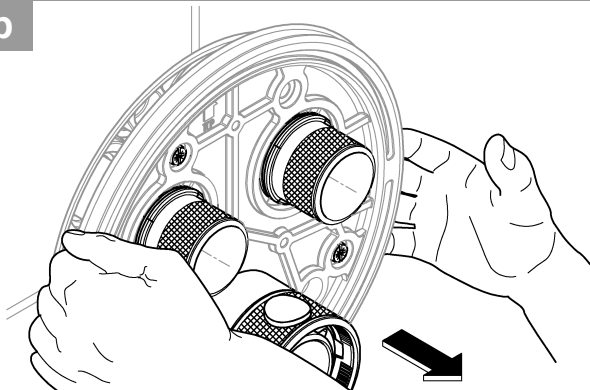
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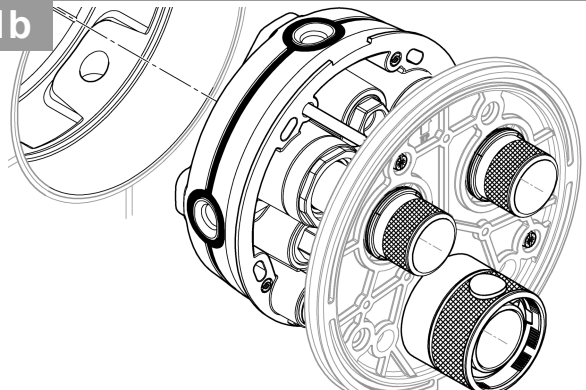
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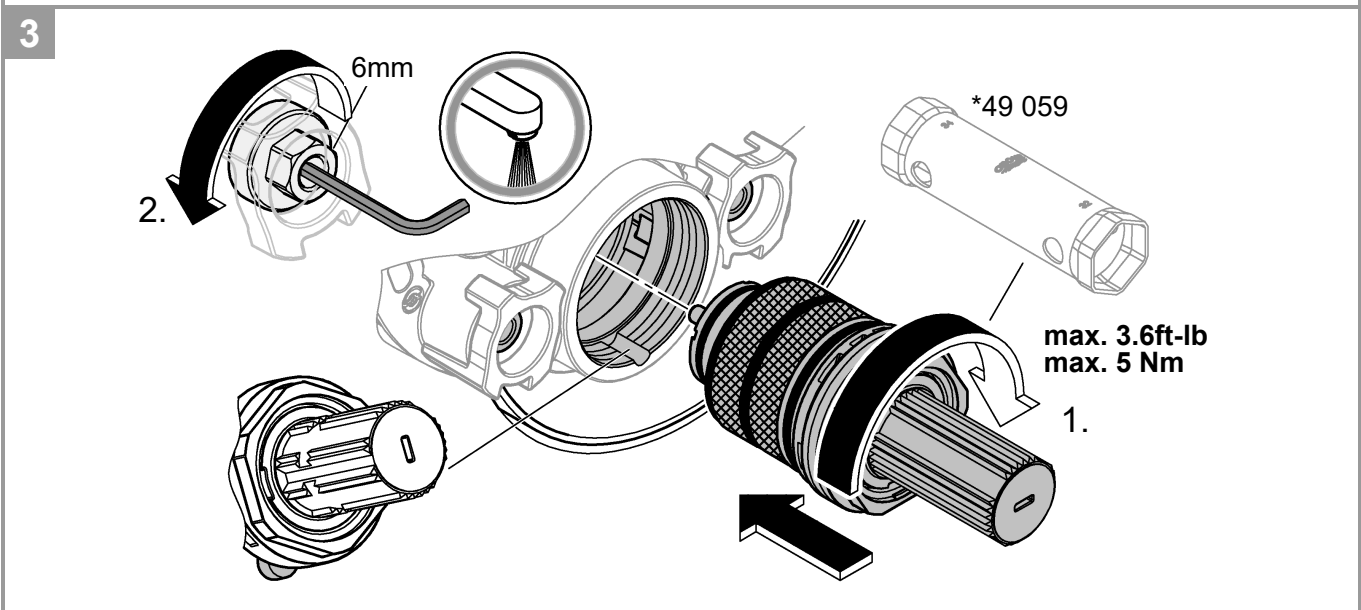
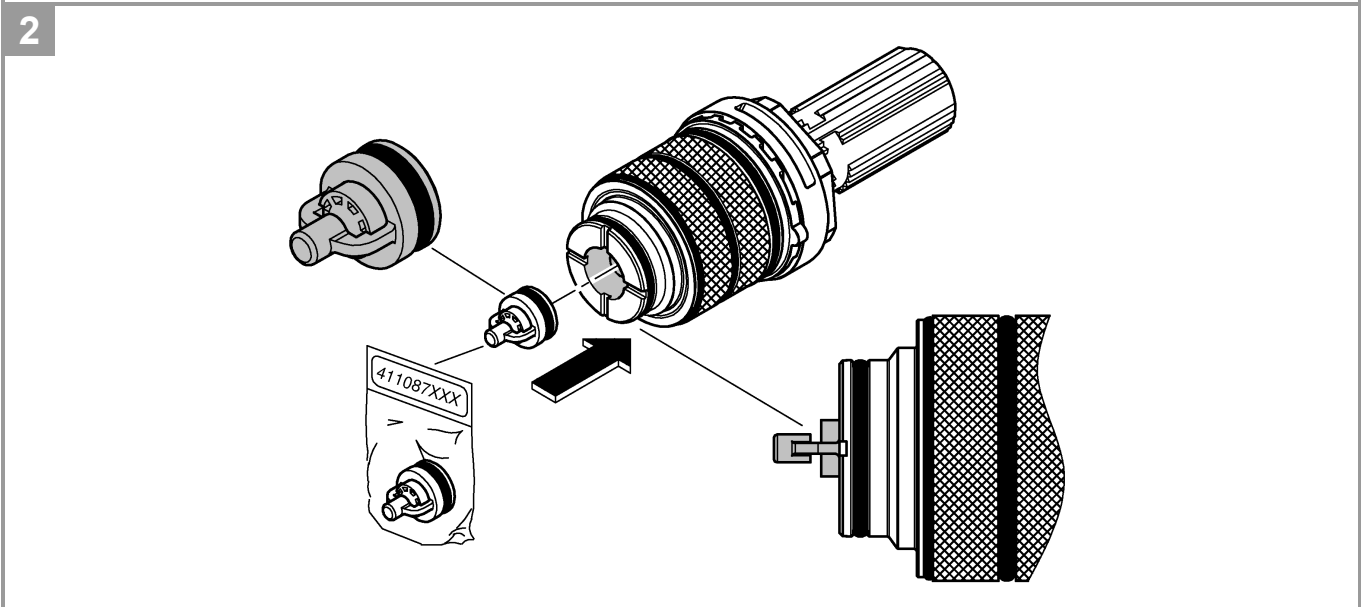
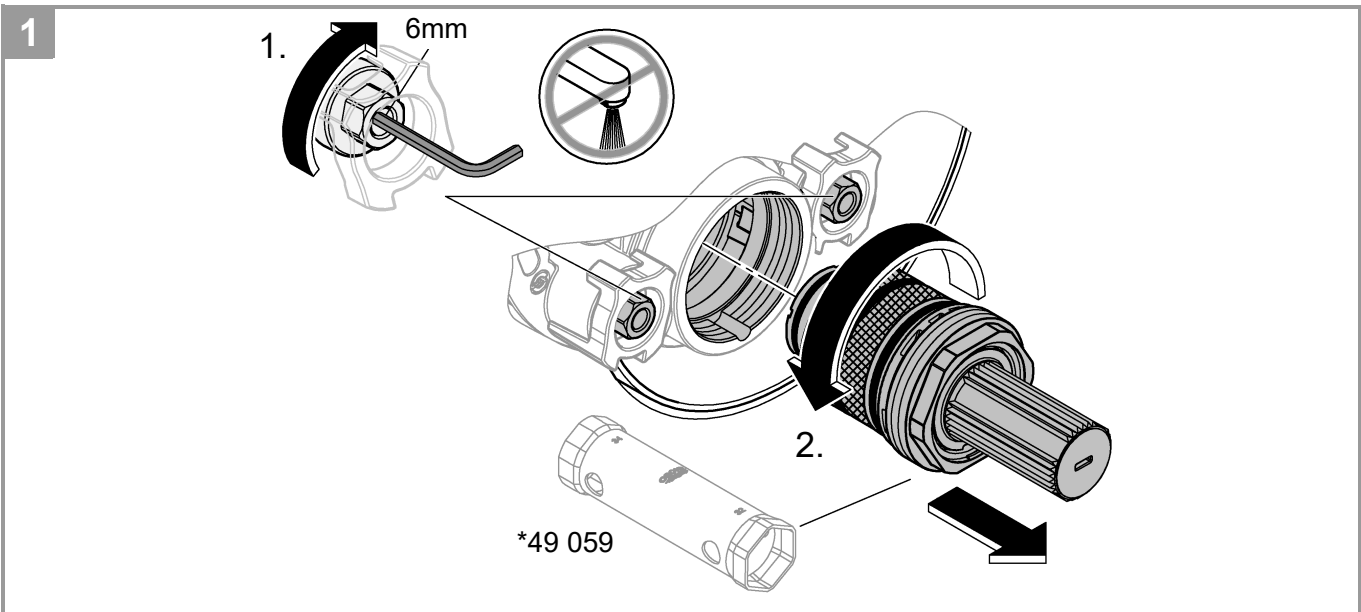


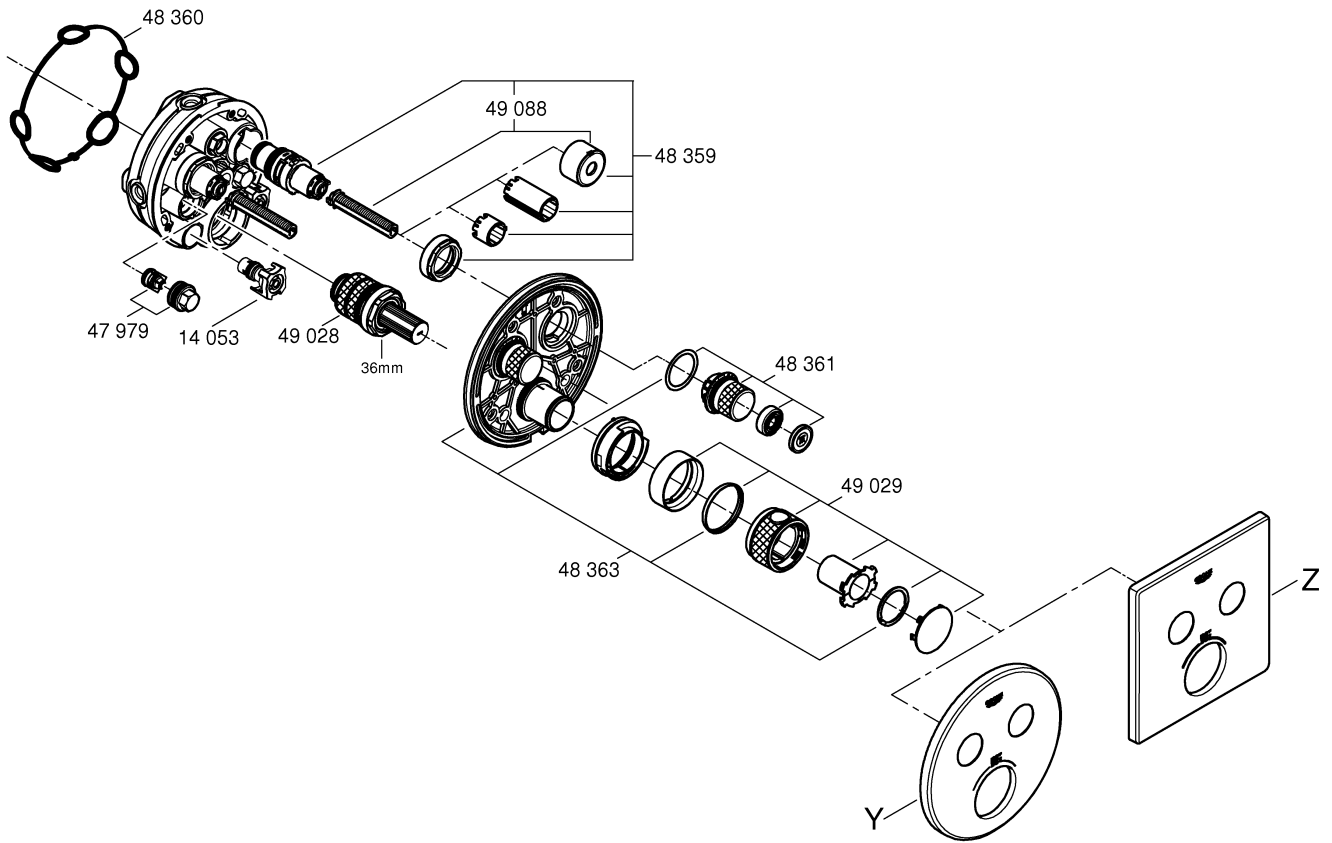
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11b







*49 059	36mm		
*49 003		Y	Z
		49 046	49 052
*14 048	+25	49 047	49 053

Pure Freude an Wasser

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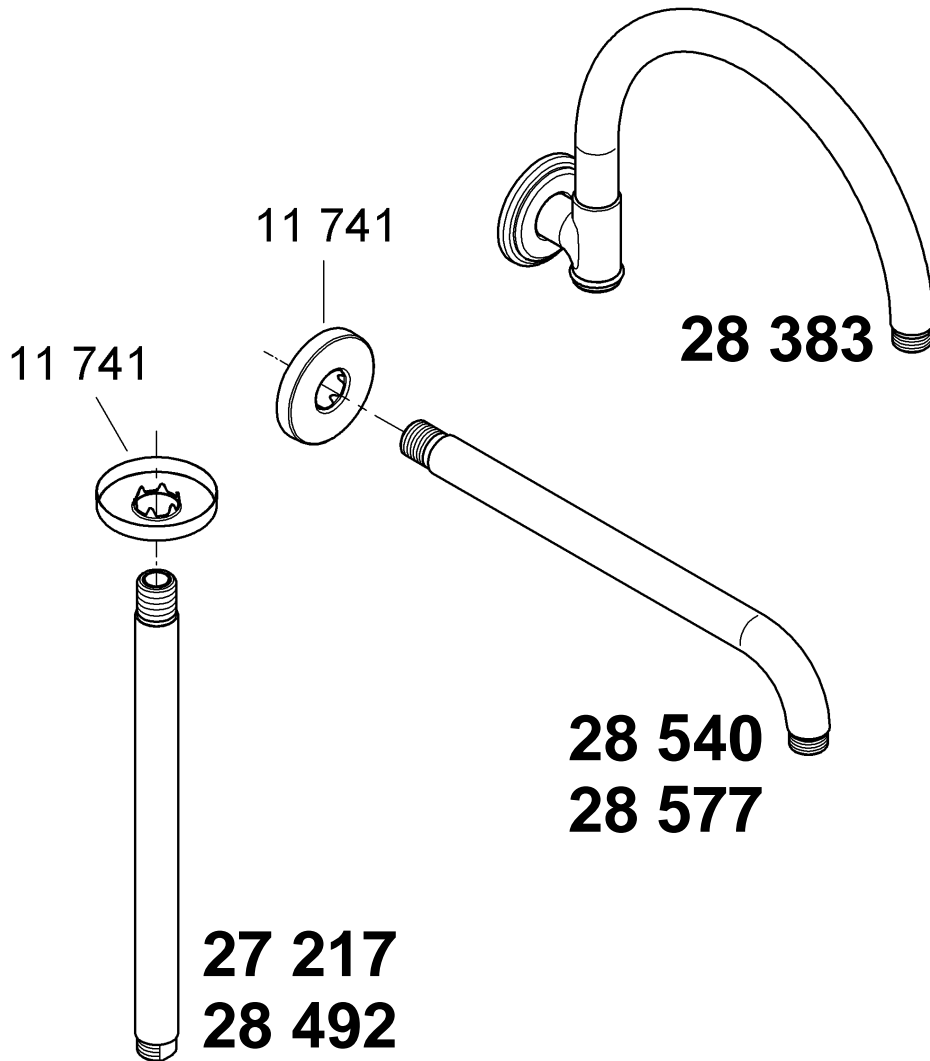
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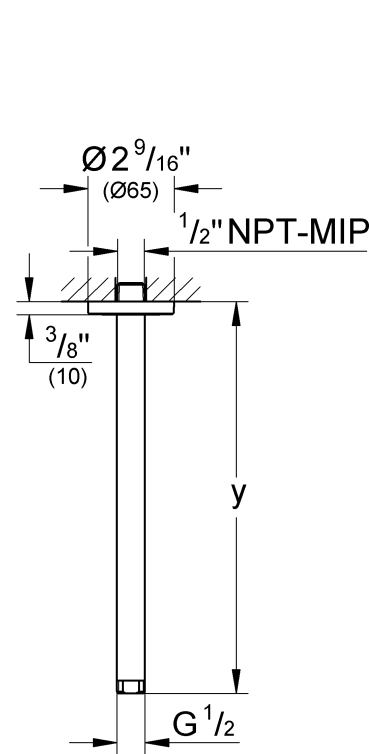
2016/09/28



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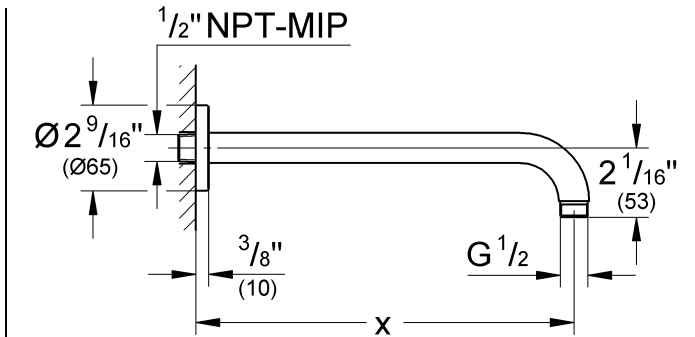


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**28 492**



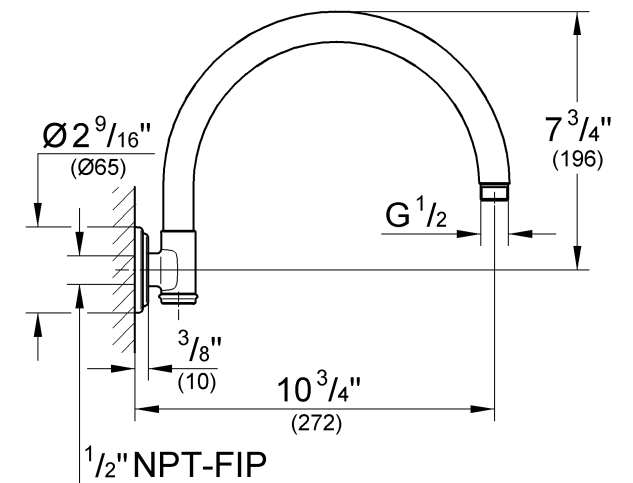
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28 492	11 9/16"	296

**27 217**  
**28 492**



	x	x
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28 540	15 1/4"	387

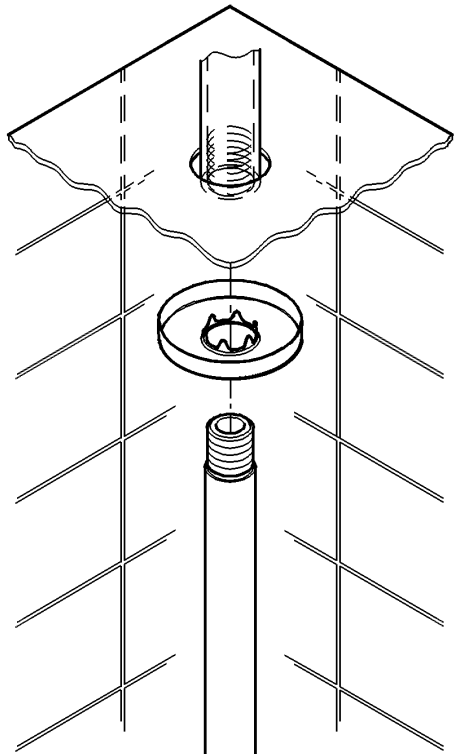
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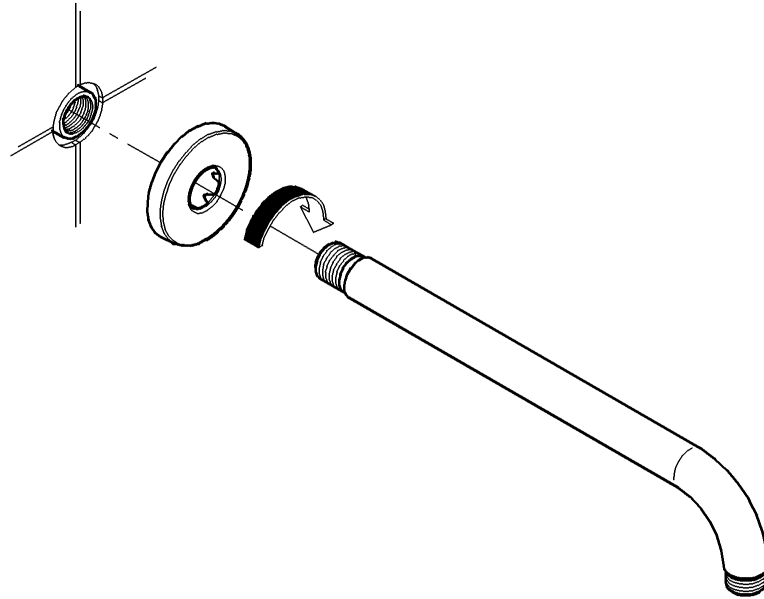


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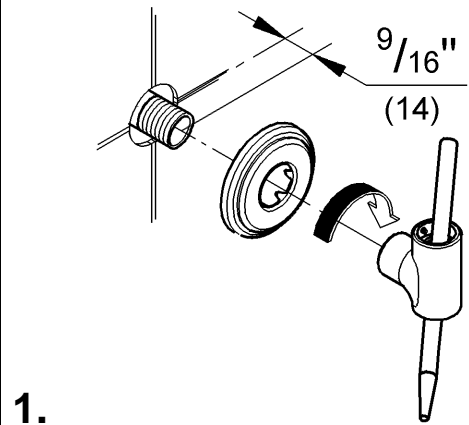


17mm

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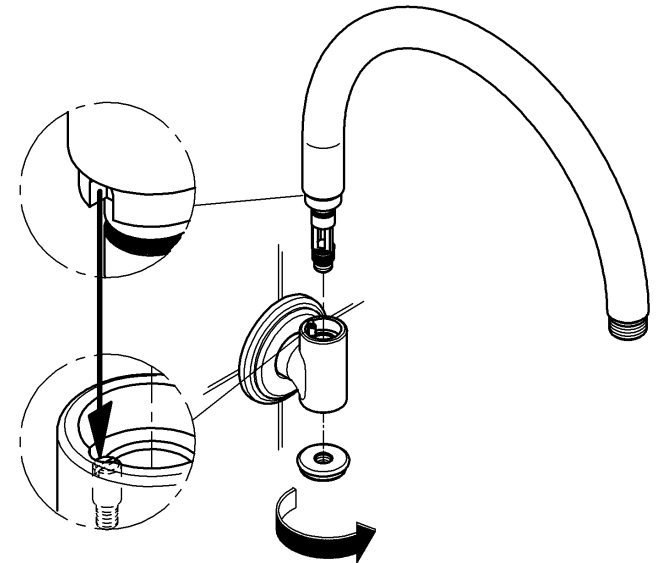


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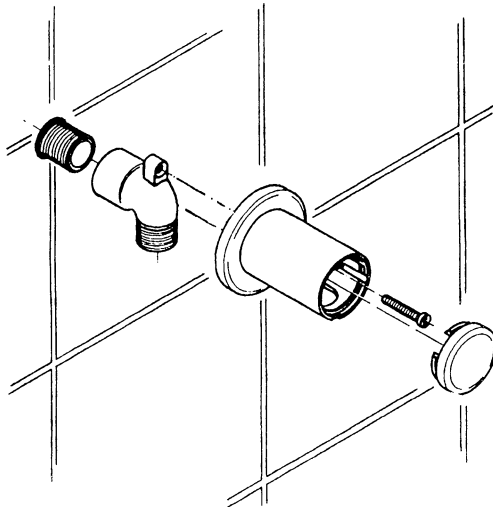
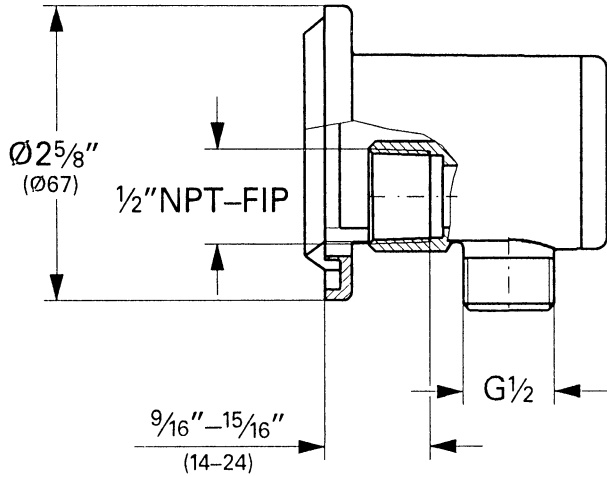
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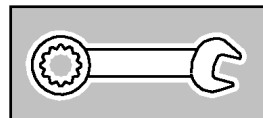
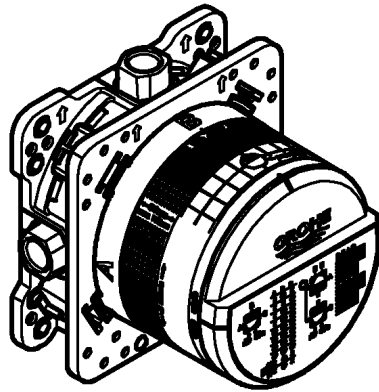
WATER TECHNOLOGY

28 627

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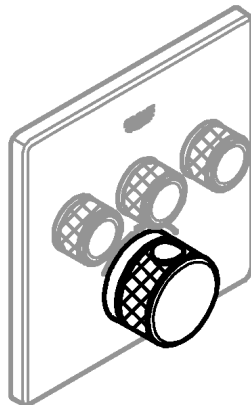


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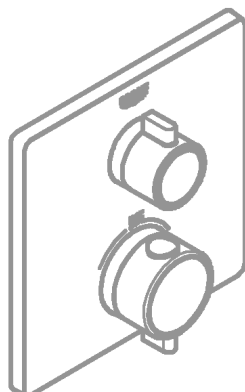
**1-9**

### Grotherm SmartControl



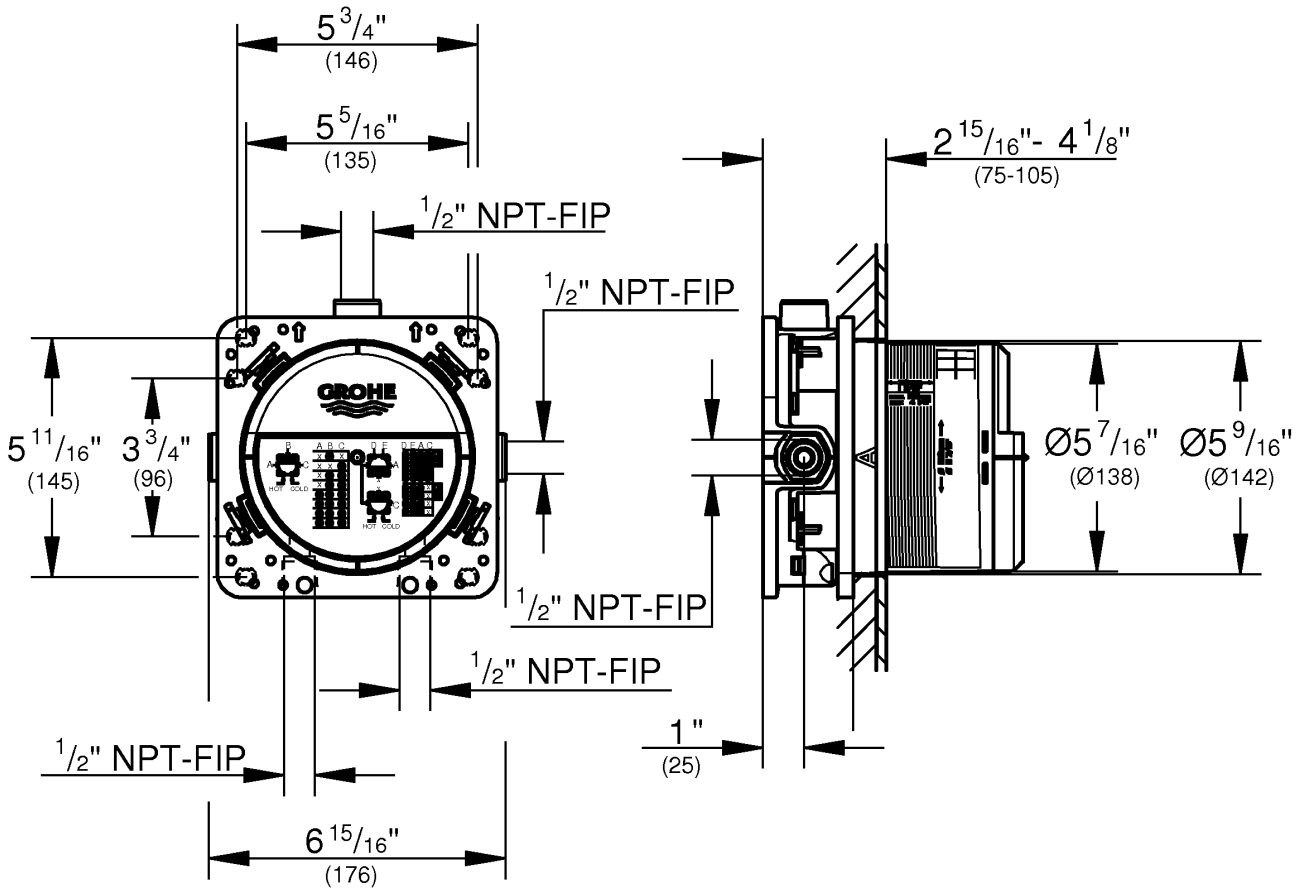
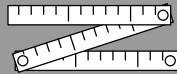
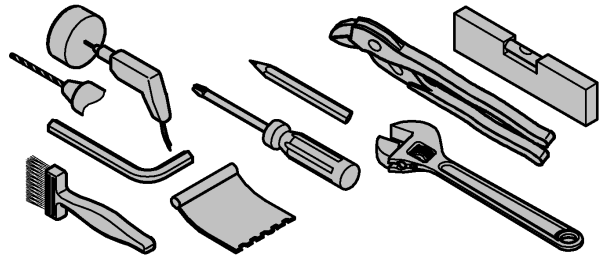
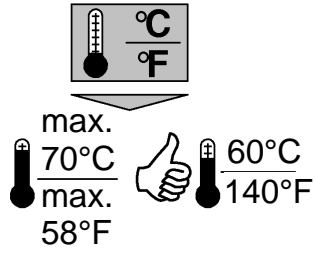
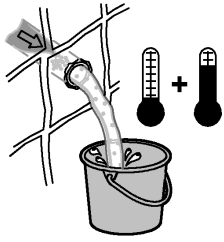
**10-24**

### Grotherm 2-Handle Thermostat



**25-30**





## Applications

Operation is possible with:

- Pressurised storage heaters
- Thermally/hydraulically controlled instantaneous water heaters

Operation with unpressurised storage heaters (displacement water heaters) is **not** possible!

## Technical data

- Operating pressure: max.145 psi
- Test pressure 232 psi

### Note:

To comply with noise levels if static pressure exceeds 72.5 psi, a pressure reducing valve must be fitted.

**Installation options**, see pages 4-9.

- Installation in studding
- Installation with spacers
- Installation directly on the wall
- Installation in the wall
- Installation on prefabricated house assembly plates or prefabricated shells

## Installation of the box

- Make drill holes for the box and slots for the pipes.
- Installation depth 2 15/16" - 4 1/8".
- If the box is installed too deeply an extension can be applied.

## Connecting the pipes

The outflows intended for this purpose are to be used.

- Recommended configuration options:
  - Grohtherm SmartControl see from page 10-24.
  - Grohtherm 2-Handle Thermostat see from page 25-30.
- Non-binding outflows must be sealed with the accompanying plug (X).
- Check connections for water-tightness.
- **Plugs (Y) must be assembled**, see page 8, Fig. [6].

**Apply carrier material as sealant**, see page 9, Fig. [9] to [11].

## Plaster and tile the wall.

Do **not** cut the fitting template prior to final installation.

## Domaine d'application

Utilisation possible avec :

- Réservoirs sous pression
- Chauffe-eau instantanés hydrauliques/thermiques

Le fonctionnement avec des accumulateurs sans pression (chauffe-eau à écoulement libre) **n'est pas possible !**

## Caractéristiques techniques

- Pression de service max.10 bars
- Pression d'épreuve 16 bars

### Remarque :

Il est recommandé d'installer un réducteur de pression en cas de pressions statiques supérieures à 5 bars.

**Possibilités de montage**, voir pages 4-9.

- Montage dans un support charpenté
- Montage avec entretoises
- Montage directement sur le mur
- Montage dans le mur
- Montage sur plaques de montage pour préfabriqué ou plaques pré-fabriquées

## Installation du boîtier

- Préparer des trous pour le boîtier et des fentes pour les canalisations.
- Profondeur de montage : 75-105mm.
- Si le boîtier est installé trop en profondeur, il est possible d'utiliser une rallonge.

## Brancher les canalisations

Il convient d'utiliser les sorties prévues à cet effet.

- Possibilités de configuration recommandées :
  - Grohtherm SmartControl voir à partir de la page 10-24.
  - Grohtherm 2-Handle Thermostat voir à partir de la page 25-30.
- Les sorties non obstruées doivent être étanchéifiées à l'aide des bouchons (X) fournis.
- Vérifier l'étanchéité des raccordements.
- **Les bouchons (Y) doit être monté**, voir page 8, fig. [6].

**Monter le support pour le produit d'étanchéité**, voir page 9, fig. [9] à [11].

**Enduire complètement le mur et le carreler.**

**Ne pas** raccourcir le gabarit de montage avant le montage final.

**E**

## Campo de aplicación

Es posible el funcionamiento con:

- Acumuladores de presión
- Calentadores instantáneos con control hidráulico/ térmico

**No** es posible el funcionamiento con acumuladores sin presión (calentadores de agua sin presión).

## Datos técnicos

- Presión de utilización máx. 145 psi
- Presión de verificación 232 psi

## Nota:

Si la presión en reposo es superior a 72.5 psi, se recomienda instalar un reductor de presión para alcanzar los valores de emisión de ruidos.

**Posibilidades de montaje**, véanse las páginas 4-9.

- Montaje en una pared de tablonos
- Montaje con separador
- Montaje directo en la pared
- Montaje en la pared
- Montaje en placas de montaje de viviendas prefabricadas o células acabadas

## Instalación de la caja

- Hacer orificios en la caja así como ranuras en las tuberías.
- Profundidad de montaje 2 15/16"- 4 1/8".
- Si la caja se ha montado en un sitio demasiado profundo, se puede introducir una prolongación.

## Conectar las tuberías

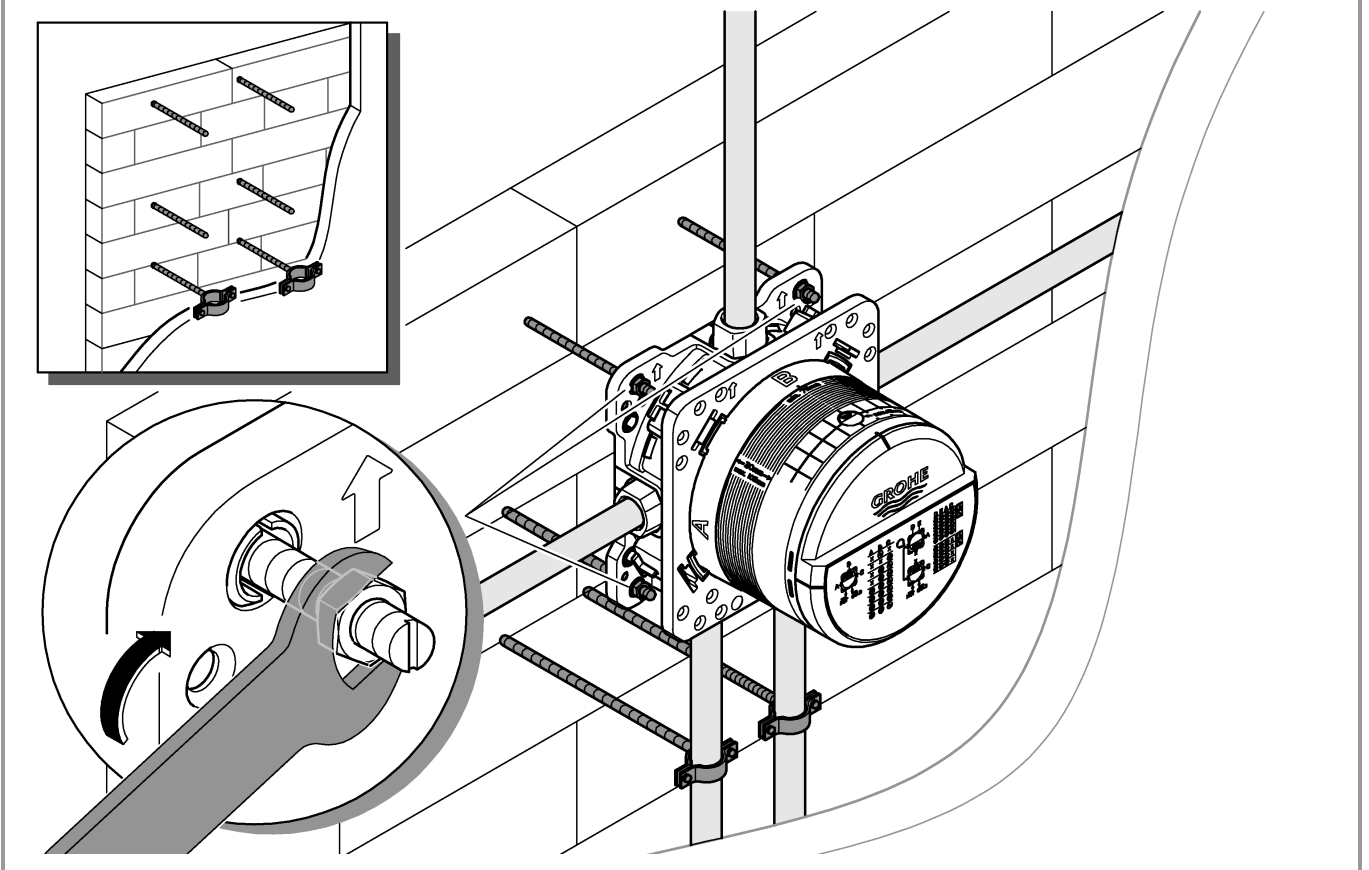
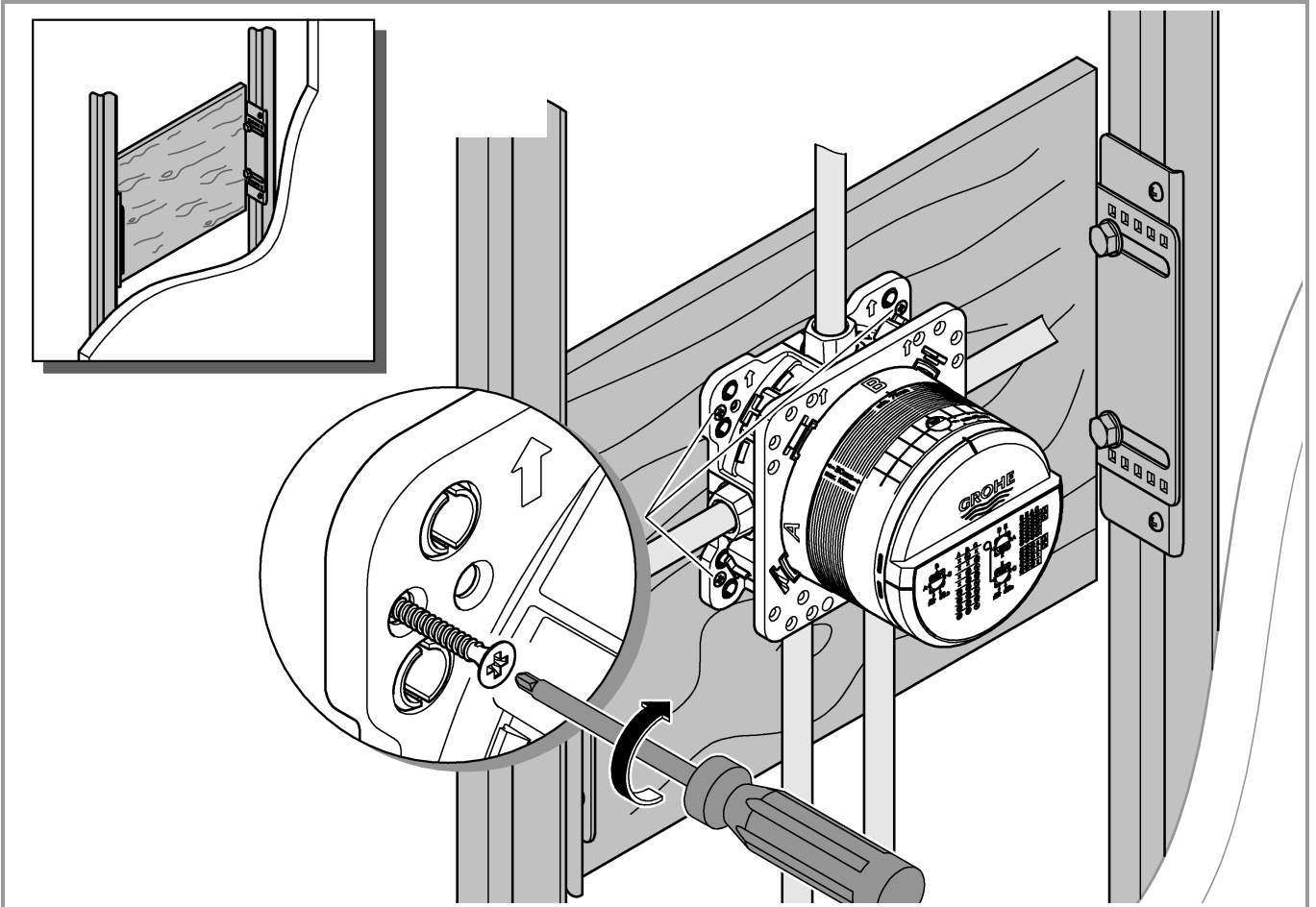
Se deben utilizar las salidas previstas para ello.

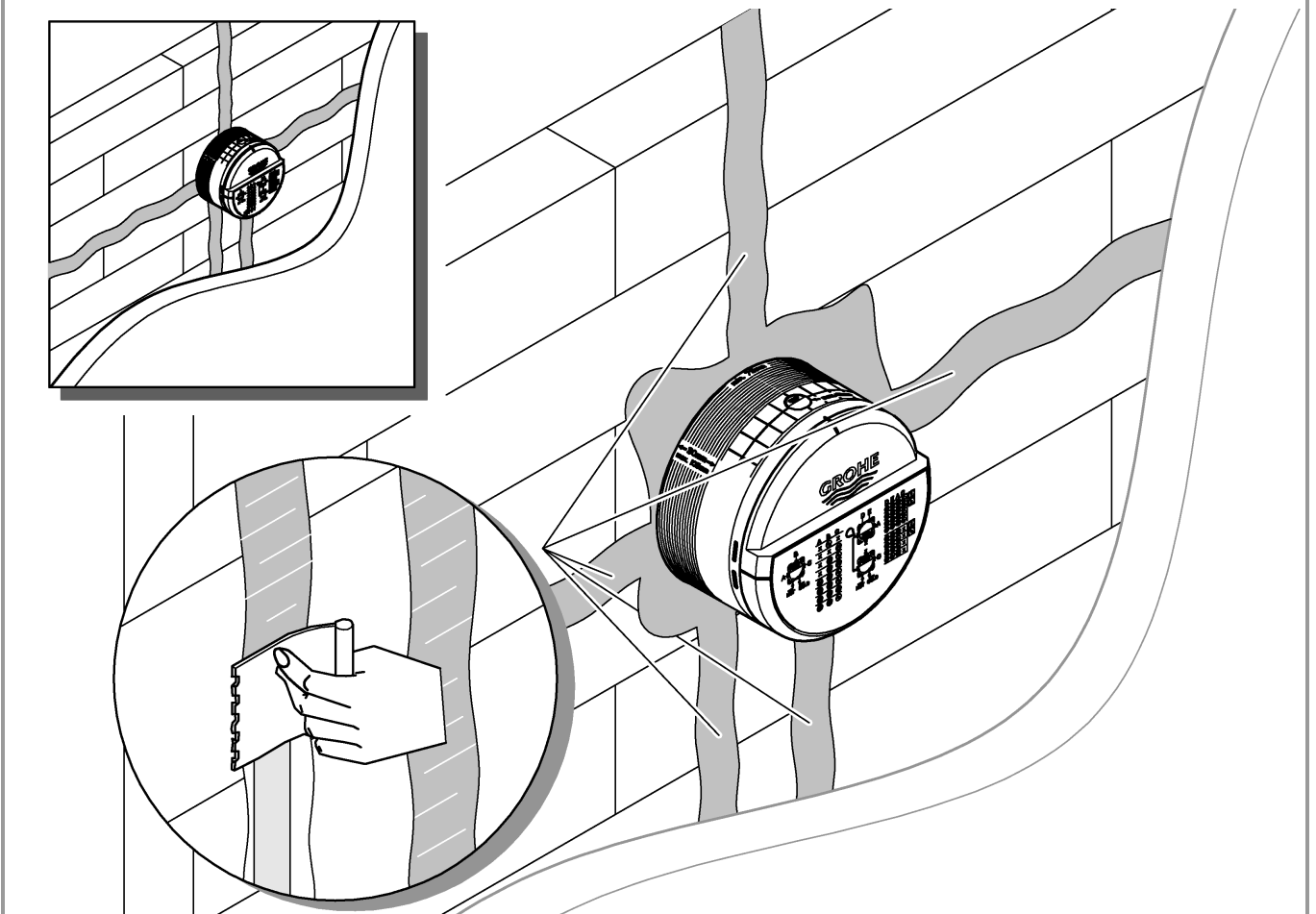
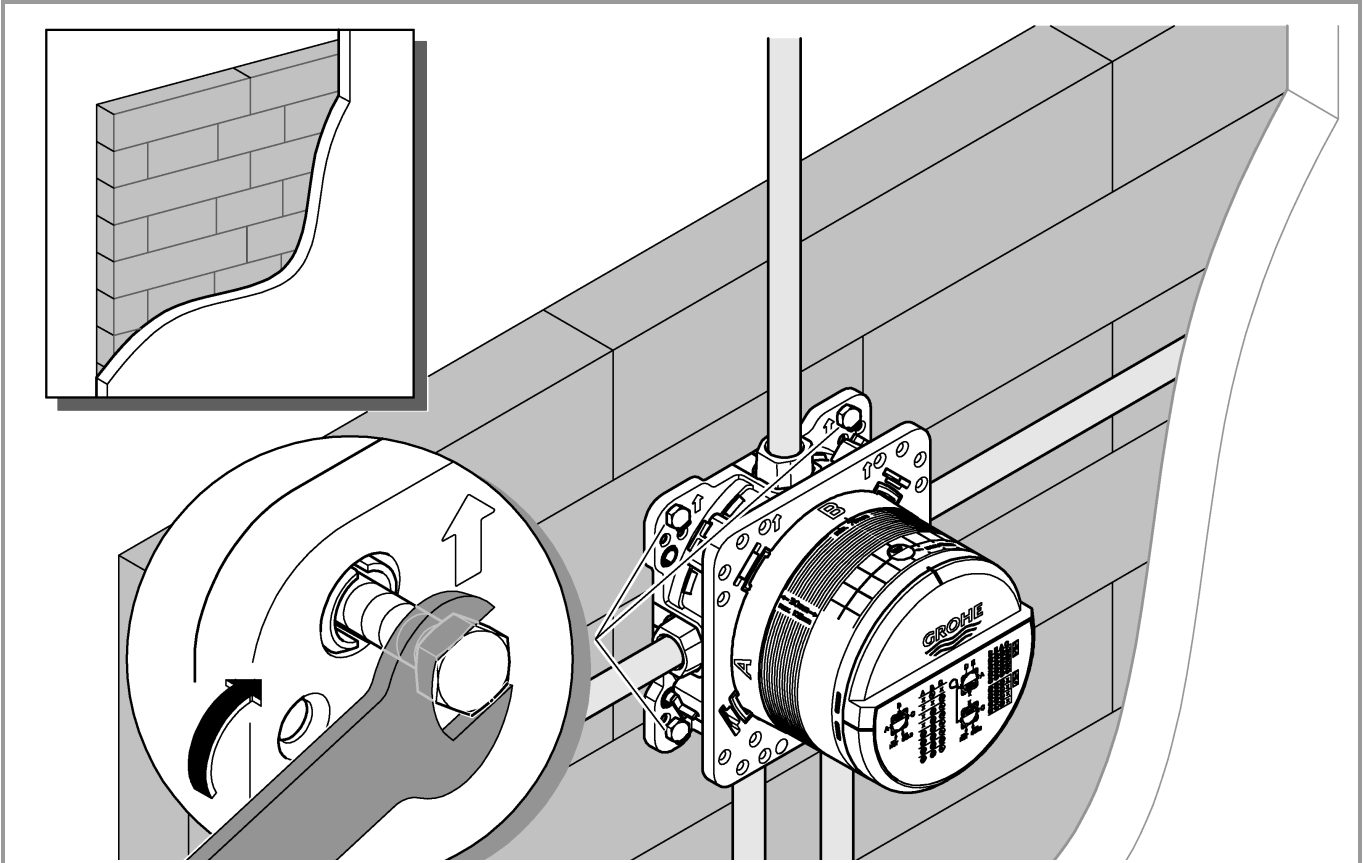
- Posibilidades de configuración recomendadas:
  - Véase Grohtherm SmartControl a partir de la página 10-24.
  - Véase Grohtherm SmartControl a partir de la página 25-30.
- Las salidas libres se deben sellar con el tapón suministrado (X).
- Comprobar la estanqueidad de las conexiones.
- **Los tapones (Y) se debe montar**, véase la página 8, fig. [6].

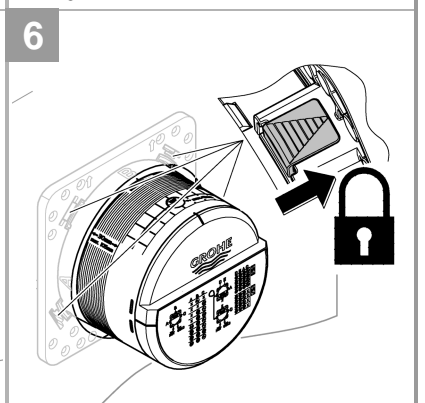
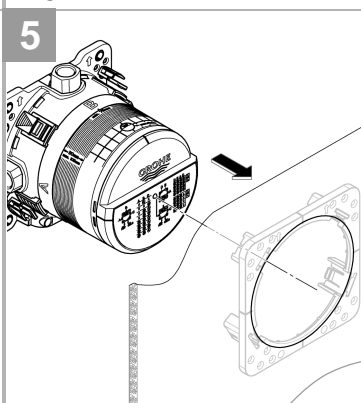
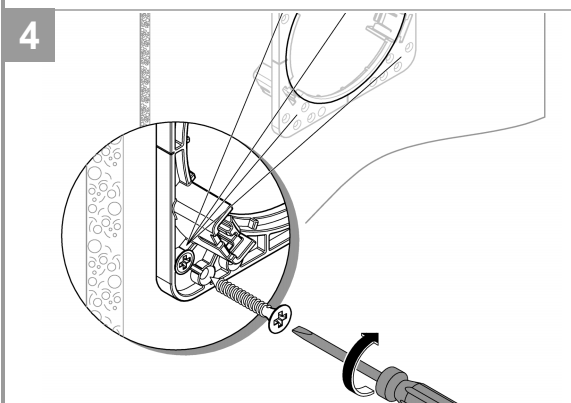
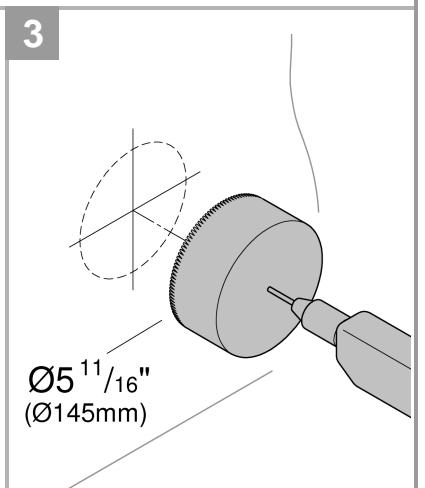
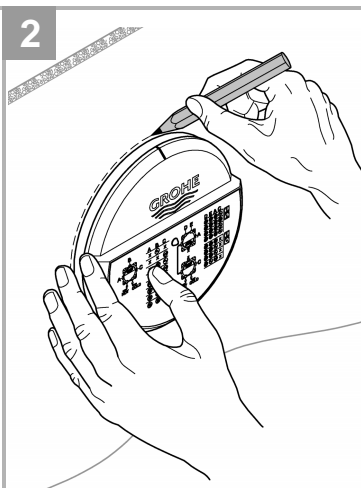
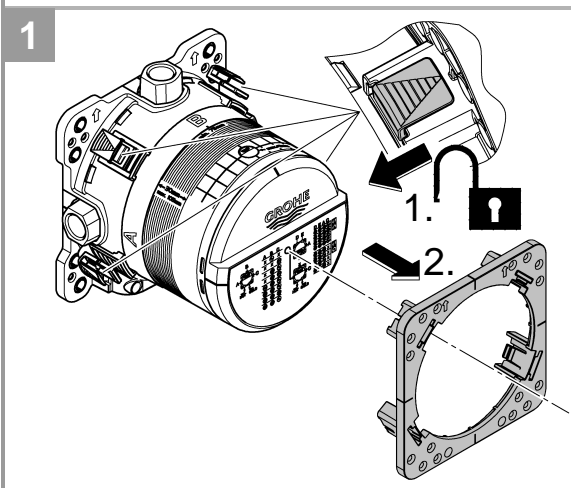
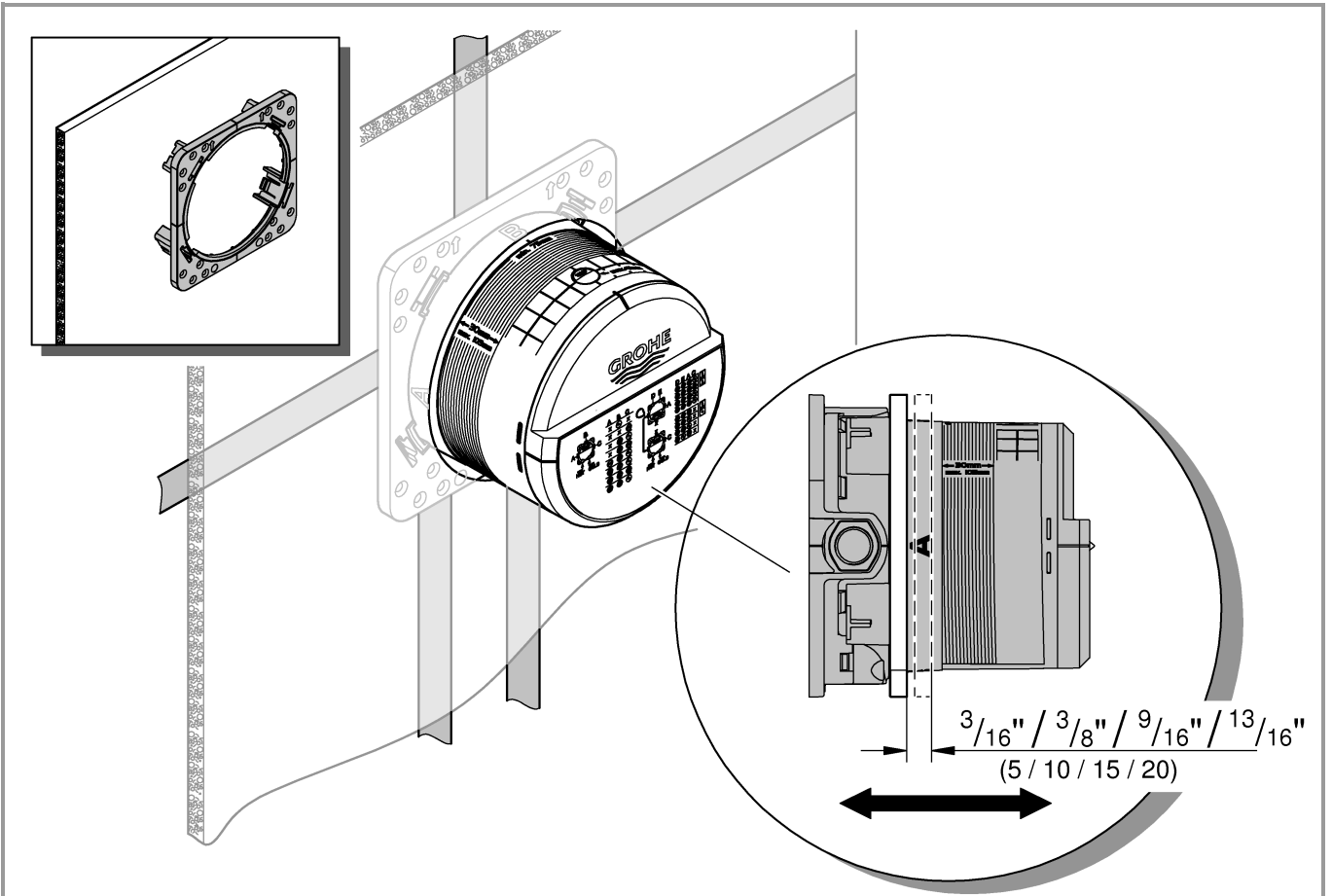
**Conseguir material de base para el impermeabilizante**, véase la página 9, fig. [9] hasta la [11].

**Concluir el enlucido y alicatado de la pared.**

**No** acortar la plantilla de montaje antes de proceder con la instalación de acabado.

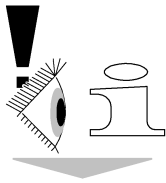








1



Grotherm Smart Control



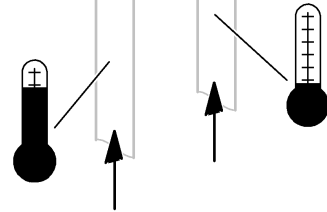
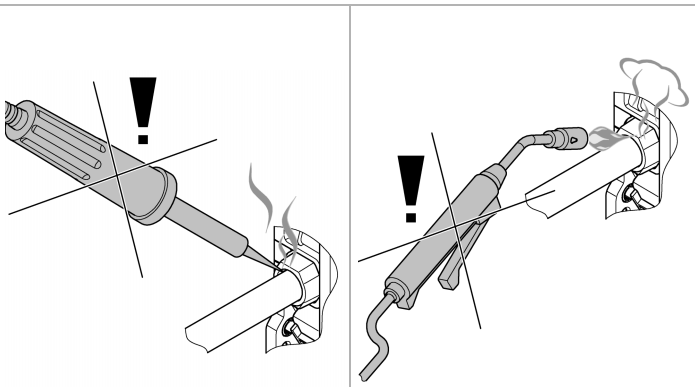
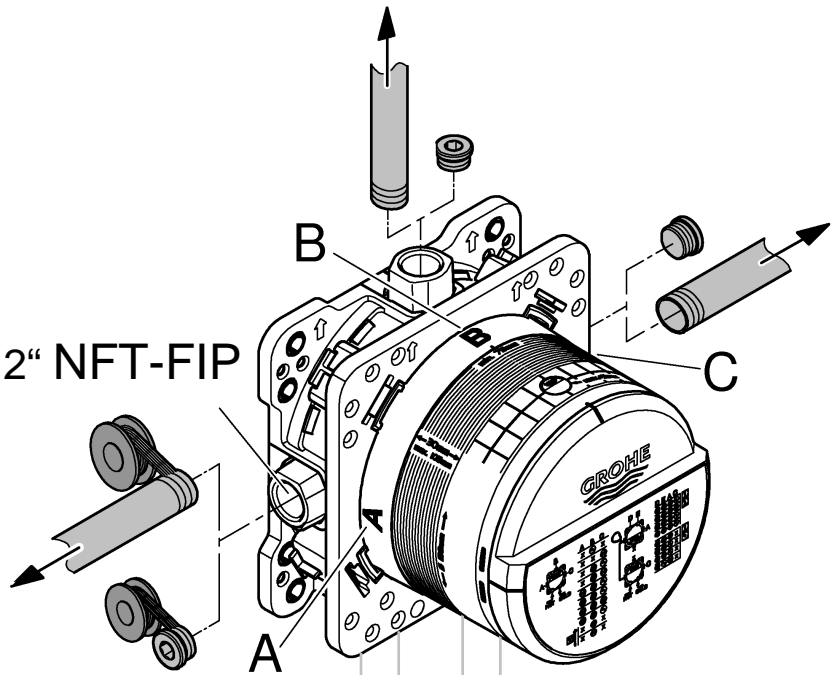
10-24

Grotherm 2-Handle Thermostat

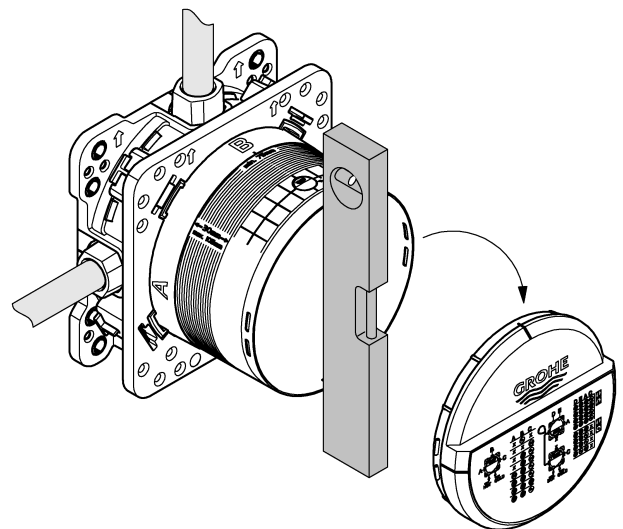
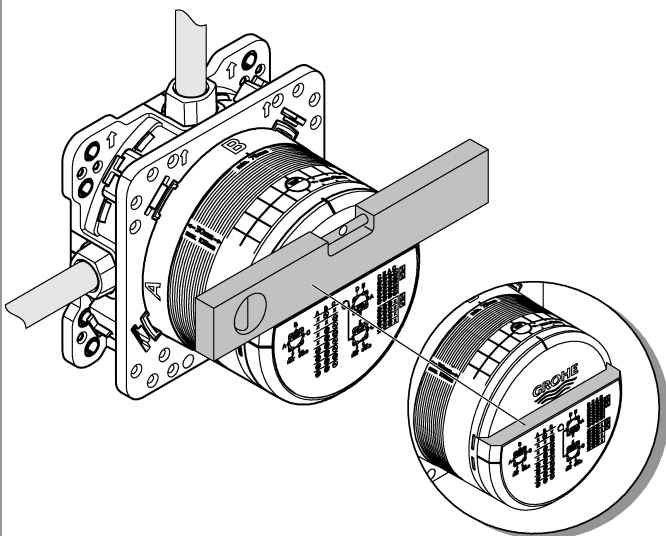


25-30

1/2" NPT-FIP

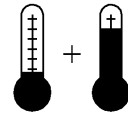
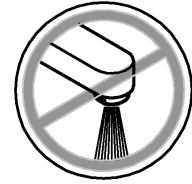
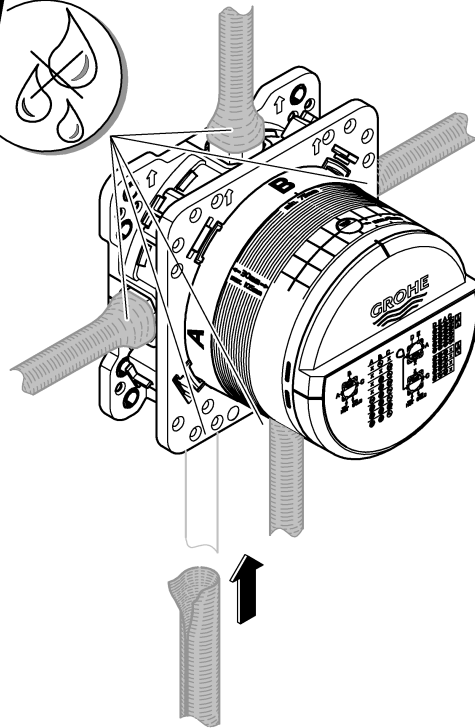
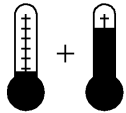
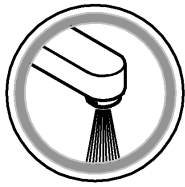


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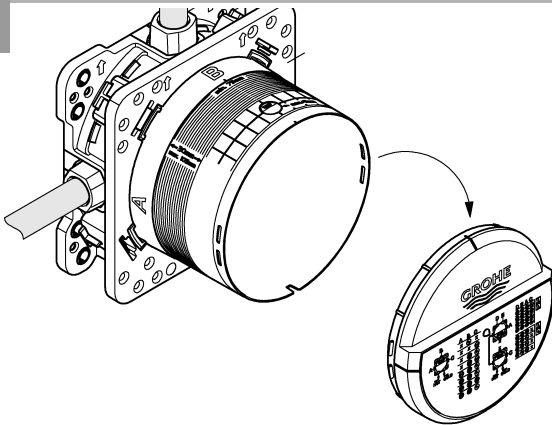




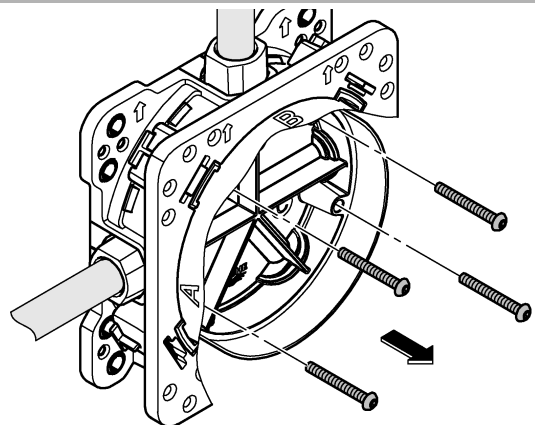
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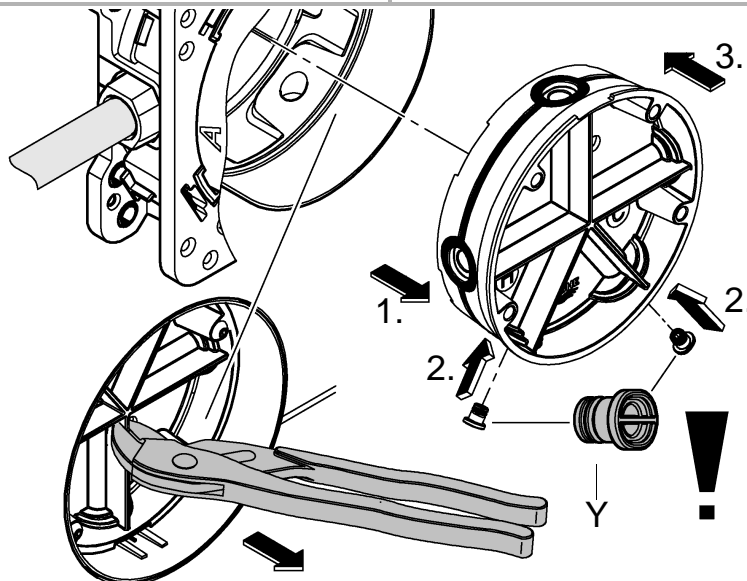
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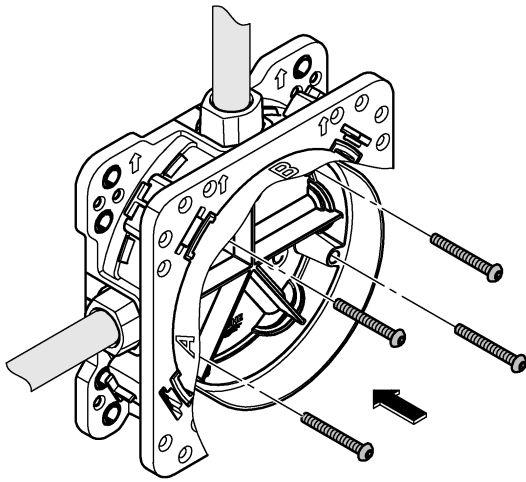
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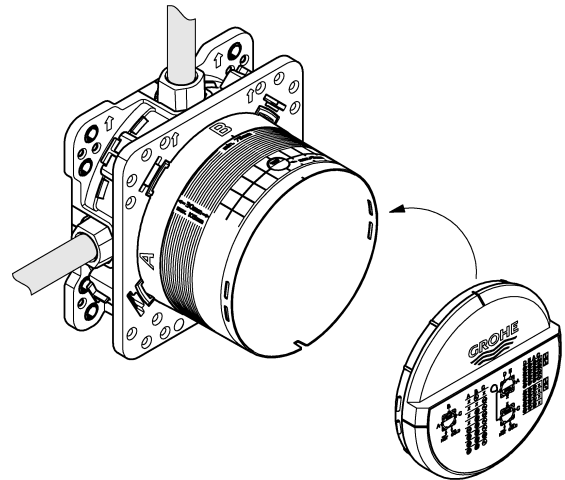




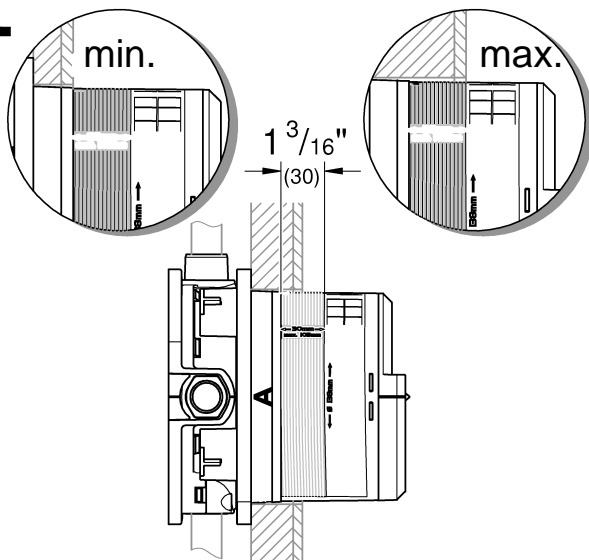
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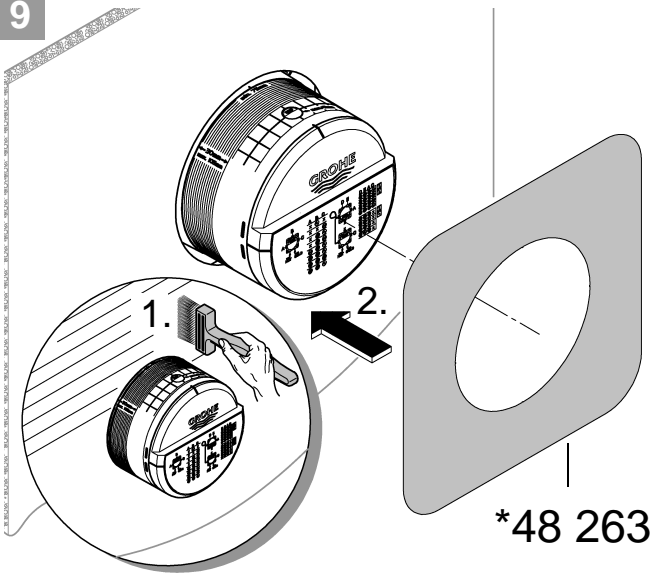
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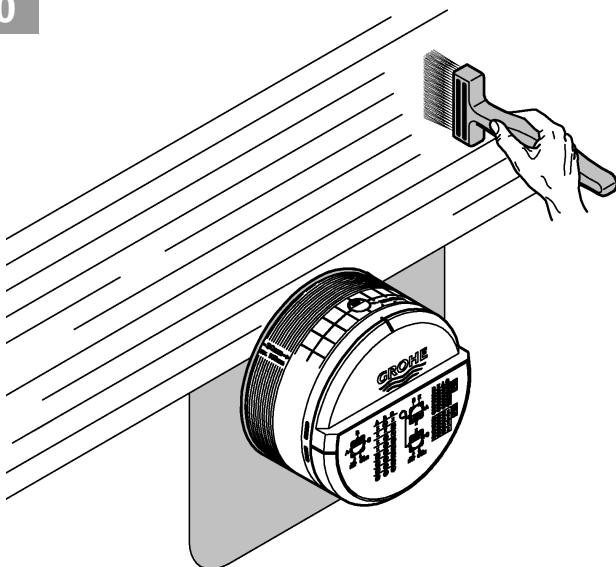
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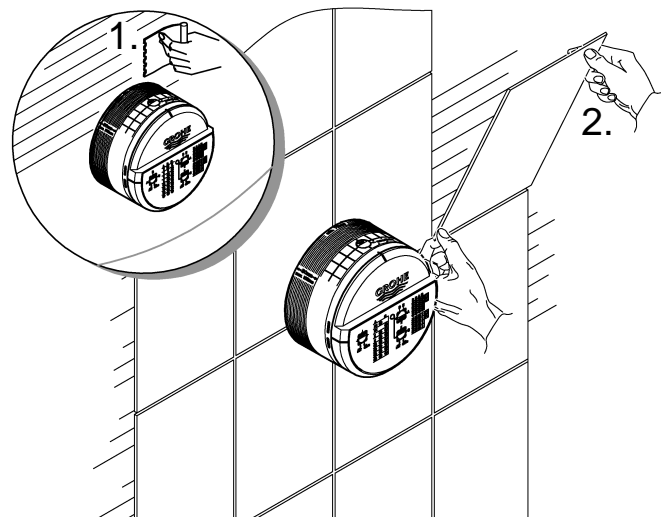
9



10



11



USA

## Technical specifications Grotherm SmartControl

### Thermostat

- 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 inlet 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 12-24. **These are to be observed when dimensioning the outlet!**

- Recommended configuration options, see from page 11-24.

### The following special accessories are available:

- Extension 1" (prod. no.: 14 048)
- Service stops (prod. no.: 14 053)
- Reversed connection, hot on right – cold on left replace thermostat cartridges (prod. no.: 49 003)

F

## Caractéristiques techniques Grotherm SmartControl

### Thermostat

- 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
- Température
  - Arrivée d'eau chaude max. 70 °C
  - Recommandée pour une économie d'énergie 60 °C
  - Désinfection thermique possible
- Température de l'eau chaude au raccord d'alimentation au moins 2 °C de plus que la température de l'eau mitigée

Débits sans résistances en aval, voir pages 12-24.

**Veillez en tenir compte lors du**

## dimensionnement de l'évacuation!

- Possibilités de configuration recommandées, voir à partir de la page 11-24.

### Les accessoires spéciaux suivants sont disponibles :

- Rallonge de 25mm (réf. : 14 048)
- Robinets d'arrêt (réf. : 14 053)
- Raccordement inversé, chaud à droite - froid à gauche, remplacer la cartouche du thermostat (réf. : 49 003)

E

## Datos técnicos de Grotherm SmartControl

### Thermostat

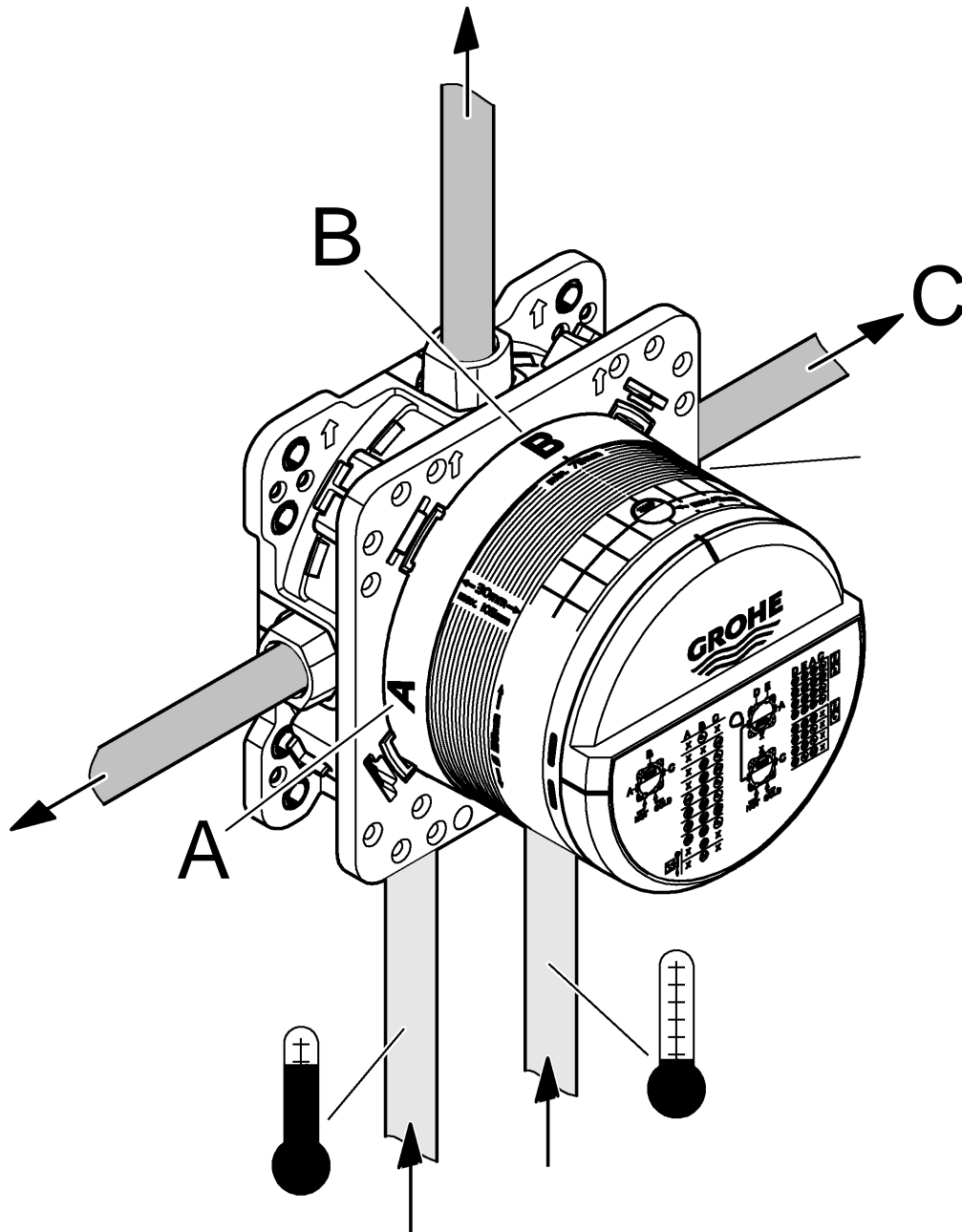
- Presión de trabajo
  - Presión mínima de trabajo sin resistencias posacopladas 7.25 psi
  - Presión mínima de trabajo con resistencias posacopladas 14.5 psi
  - Presión recomendada 21.75 – 72.5 psi
- Temperatura
  - Entrada de agua caliente máx. 158 °F
  - Recomendada para ahorrar energía 140 °F
  - Desinfección térmica posible
- La temperatura del agua caliente en la acometida min. 3.6 °F superior a la temperatura del agua mezclada

Caudales sin resistencias posacopladas, véanse las páginas 12-24. **Tenga en cuenta las dimensiones del desagüe.**

- Posibilidades de configuración recomendadas, véase a partir de la página 11-24.

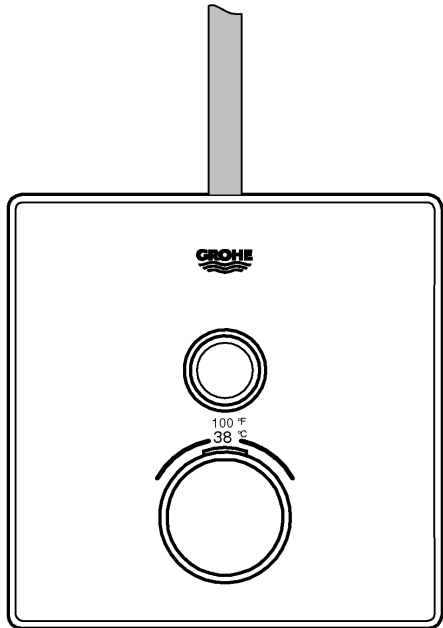
### Los siguientes accesorios opcionales están disponibles:

- Prolongación de 1" (n.º de pedido: 14 048)
- Bloqueos de seguridad (n.º de pedido: 14 053)
- Conexión invertida, derecha caliente - izquierda frío sustituir los cartuchos del termostato (n.º de pedido: 49 003)



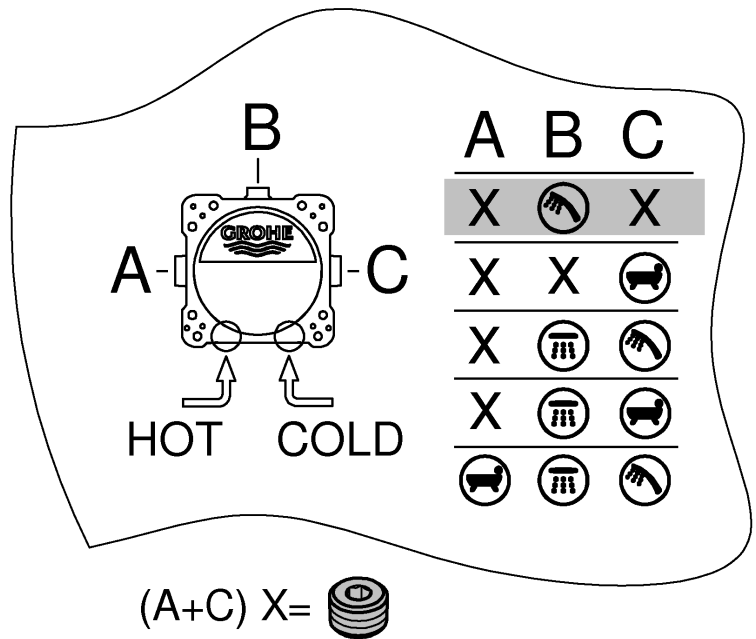


# Grohtherm SmartControl



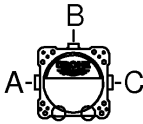
A	psi						C
	B						
	14,5	29	43,5	58	72,5	87	
B	4,4	6,3	7,7	8,8	9,9	10,8	gpm

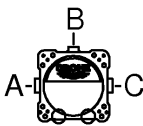
A	bar						C
	B						
	1	2	3	4	5	6	
B	16,7	23,7	29	33,5	37,4	41	l/min

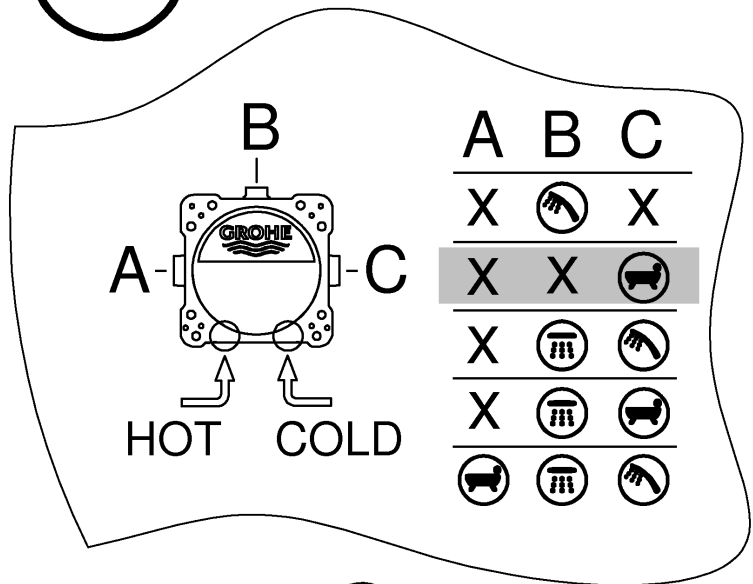
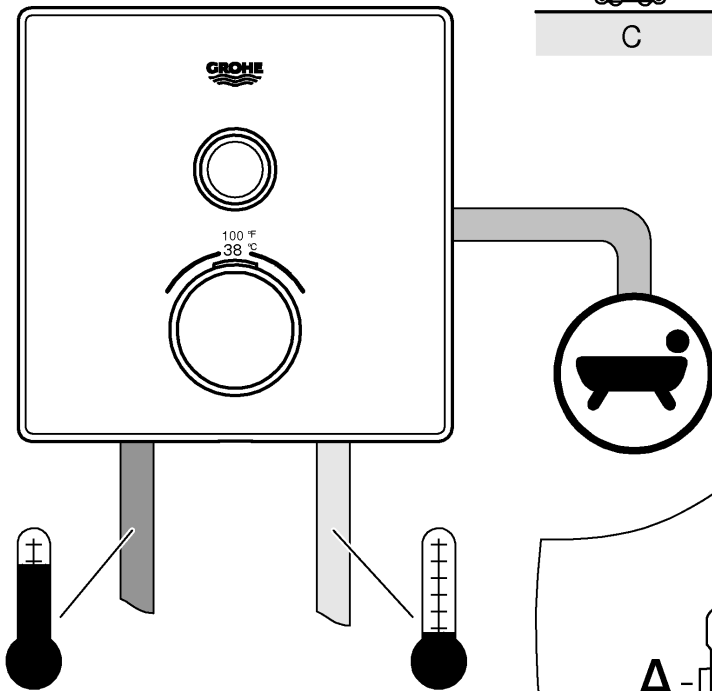




# Grohtherm SmartControl

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

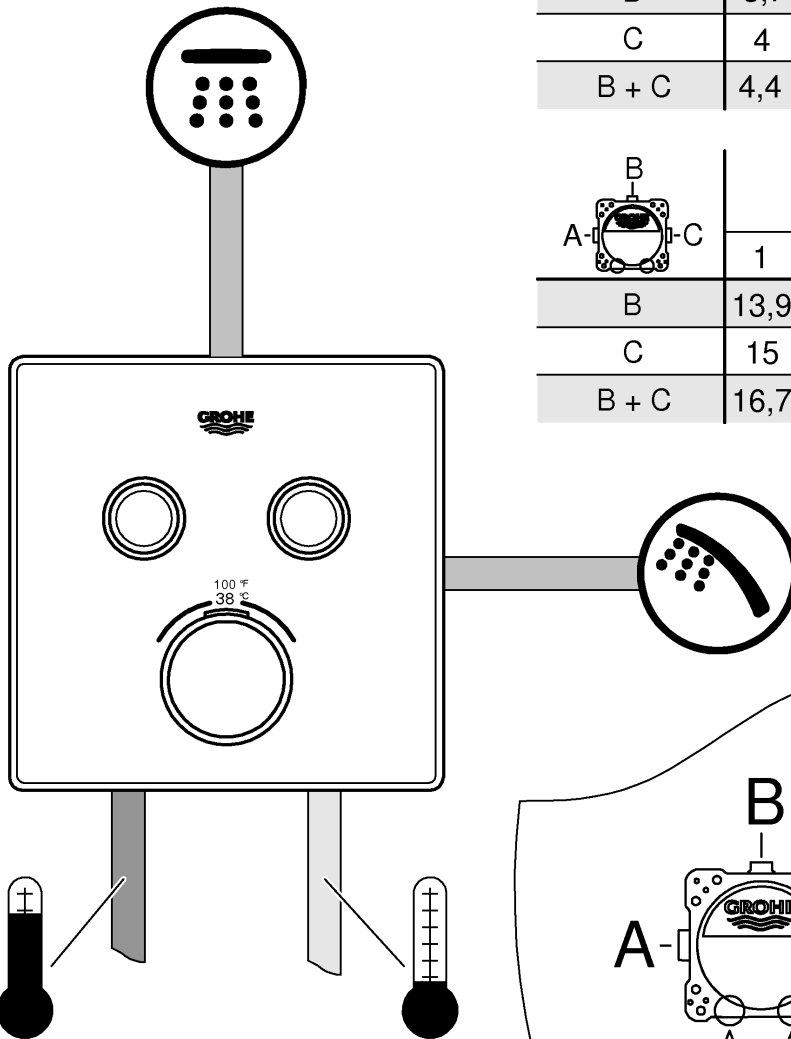
	bar						l/min
	1	2	3	4	5	6	
C	16,7	23,7	29	33,5	37,4	41	

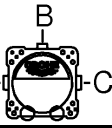


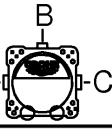
(A+B) X=

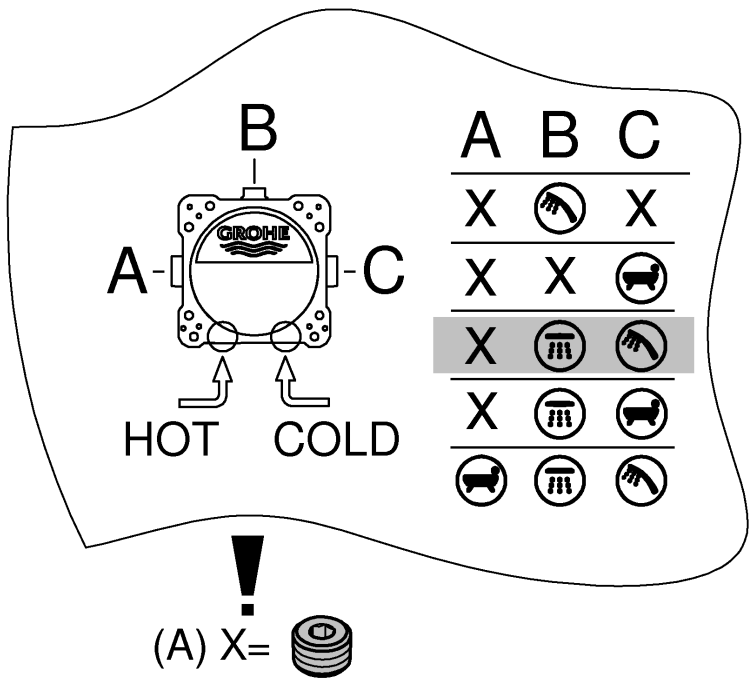


# Grotherm SmartControl



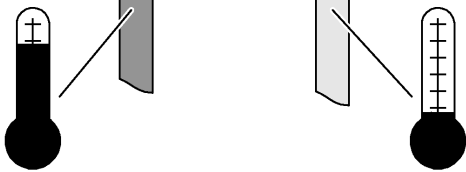
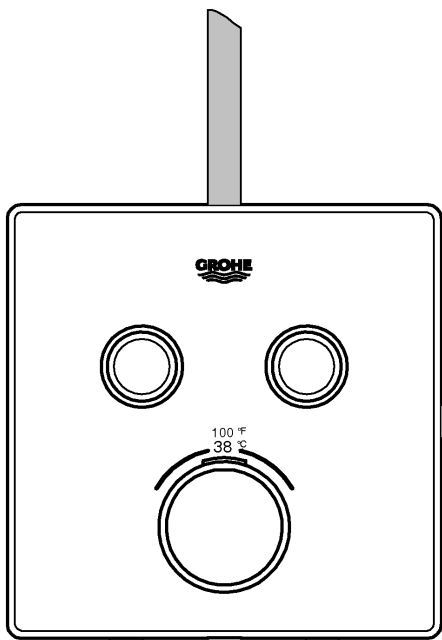
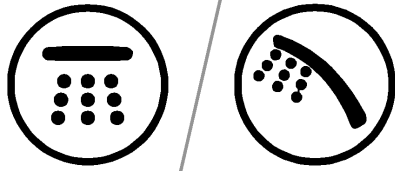
A-  -C	psi						gpm
	14,5	29	43,5	58	72,5	87	
B	3,7	5,2	6,3	7,3	8,2	9	
C	4	5,6	6,9	7,9	8,9	9,7	
B + C	4,4	6,3	7,7	8,8	9,9	10,8	

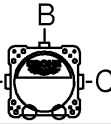
A-  -C	bar						l/min
	1	2	3	4	5	6	
B	13,9	19,6	24	27,7	31	33,9	
C	15	21,2	26	30	33,6	36,8	
B + C	16,7	23,7	29	33,5	37,4	41	

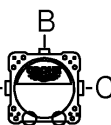


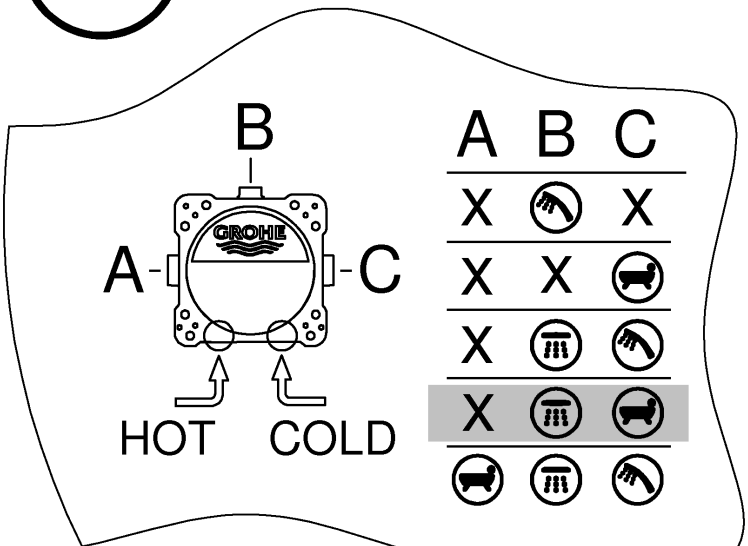



# Grohtherm SmartControl



	psi						gpm
	14,5	29	43,5	58	72,5	87	
B	3,7	5,2	6,3	7,3	8,2	9	
C	4	5,6	6,9	7,9	8,9	9,7	
B + C	4,4	6,3	7,7	8,8	9,9	10,8	

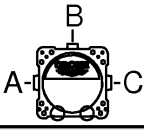
	bar						l/min
	1	2	3	4	5	6	
B	13,9	19,6	24	27,7	31	33,9	
C	15	21,2	26	30	33,6	36,8	
B + C	16,7	23,7	29	33,5	37,4	41	

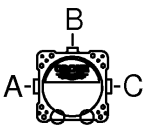


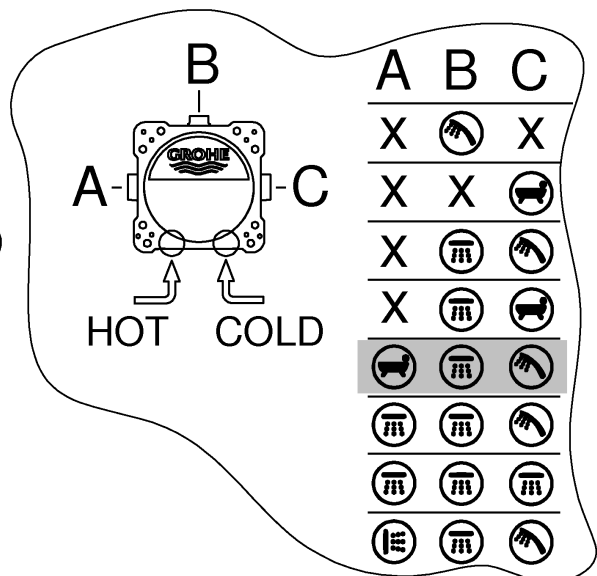
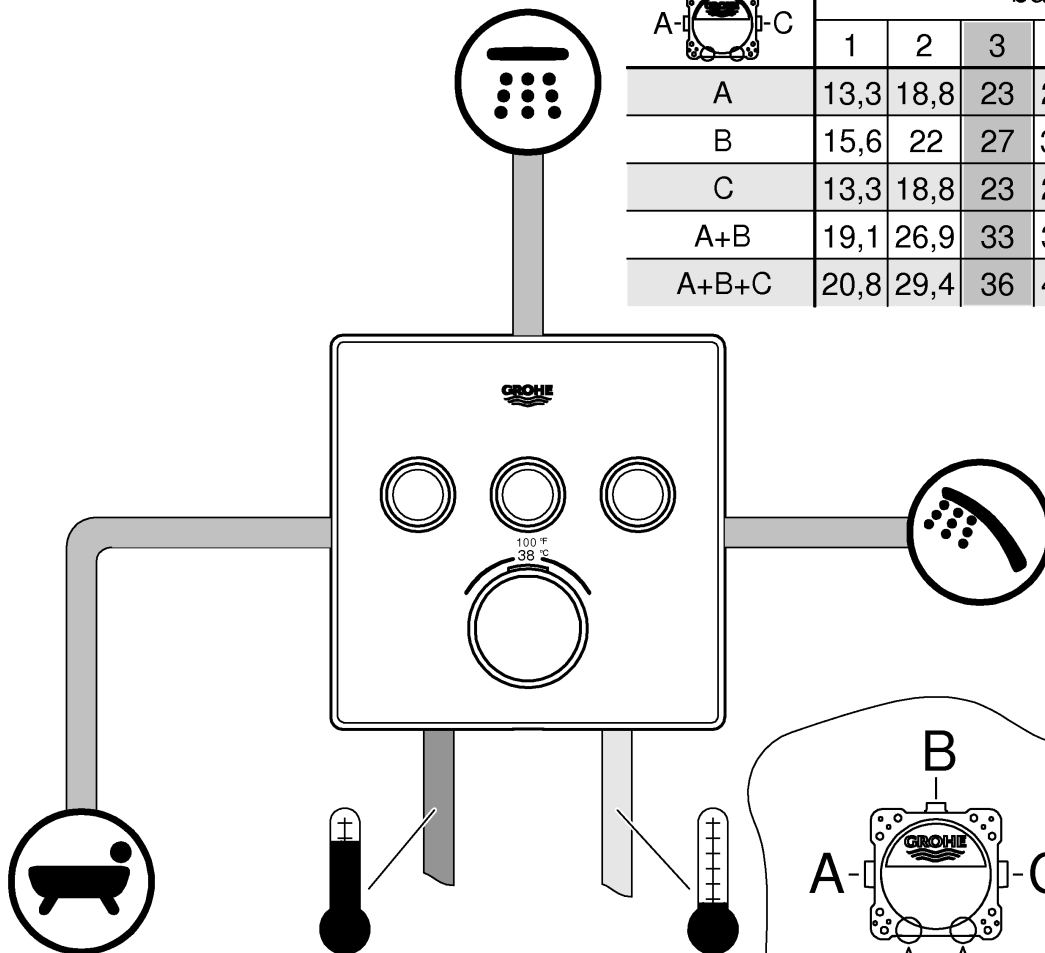
(A) X = 



# Grotherm SmartControl

	psi						gpm
	14,5	29	43,5	58	72,5	87	
A	3,5	5	6,1	7	7,8	8,6	
B	4,1	5,8	7,1	8,2	9,2	10,1	
C	3,5	5	6,1	7	7,8	8,6	
A+B	5	7,1	8,7	10,1	11,3	12,3	
A+B+C	5,5	7,8	9,5	11	12,3	13,4	

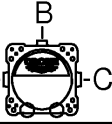
	bar						l/min
	1	2	3	4	5	6	
A	13,3	18,8	23	26,6	29,7	32,5	
B	15,6	22	27	31,2	34,9	38,2	
C	13,3	18,8	23	26,6	29,7	32,5	
A+B	19,1	26,9	33	38,1	42,6	46,7	
A+B+C	20,8	29,4	36	41,6	46,5	50,9	

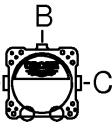


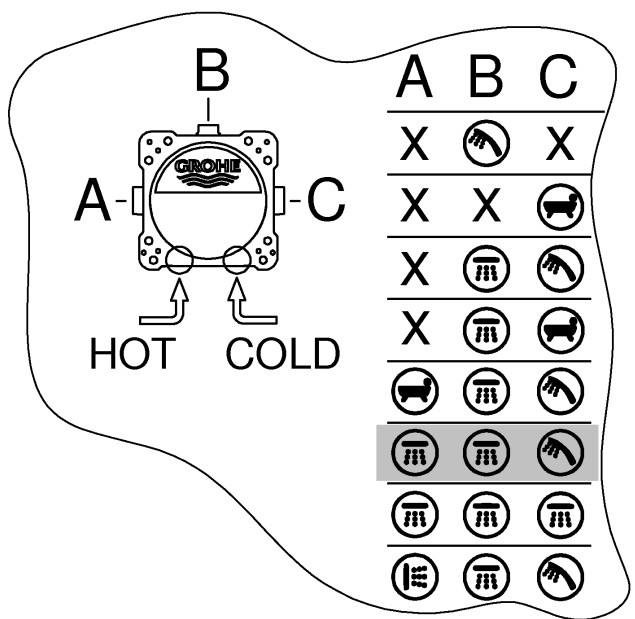
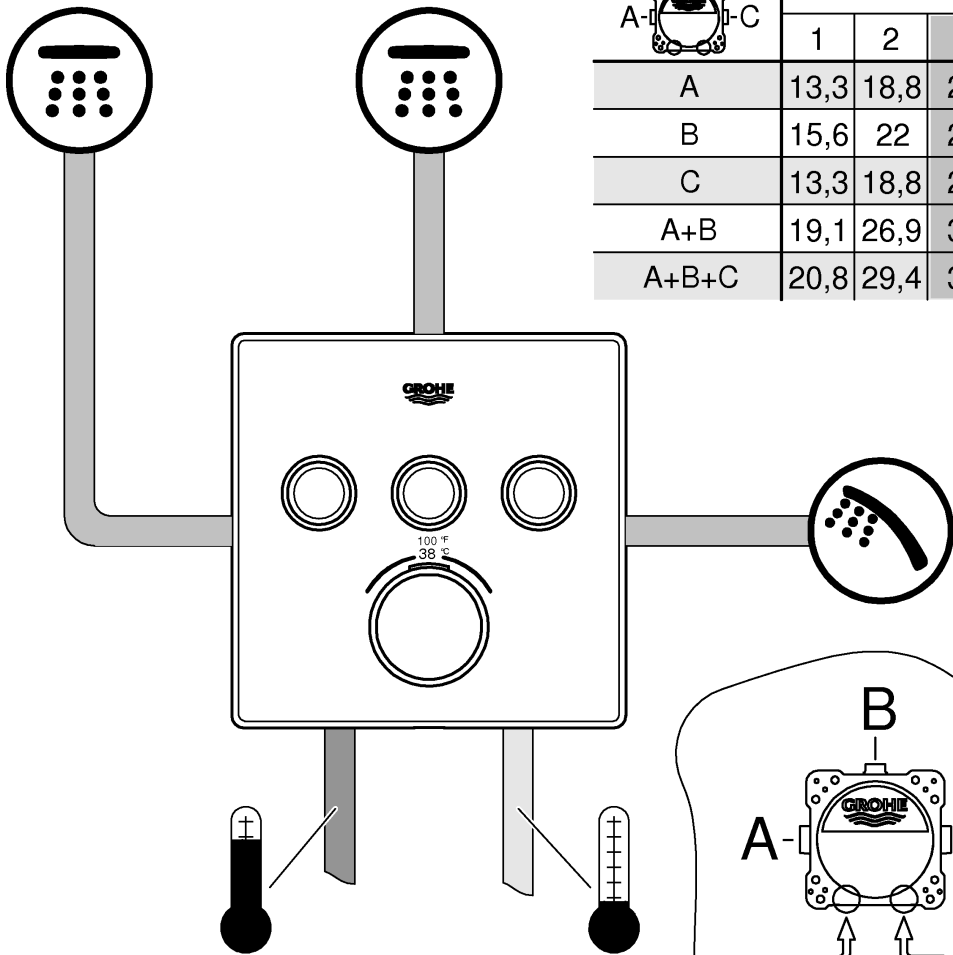




# Grotherm SmartControl

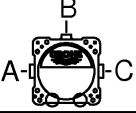
	psi					
	14,5	29	43,5	58	72,5	87
A	3,5	5	6,1	7	7,8	8,6
B	4,1	5,8	7,1	8,2	9,2	10,1
C	3,5	5	6,1	7	7,8	8,6
A+B	5	7,1	8,7	10,1	11,3	12,3
A+B+C	5,5	7,8	9,5	11	12,3	13,4

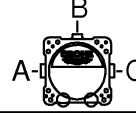
	bar					
	1	2	3	4	5	6
A	13,3	18,8	23	26,6	29,7	32,5
B	15,6	22	27	31,2	34,9	38,2
C	13,3	18,8	23	26,6	29,7	32,5
A+B	19,1	26,9	33	38,1	42,6	46,7
A+B+C	20,8	29,4	36	41,6	46,5	50,9





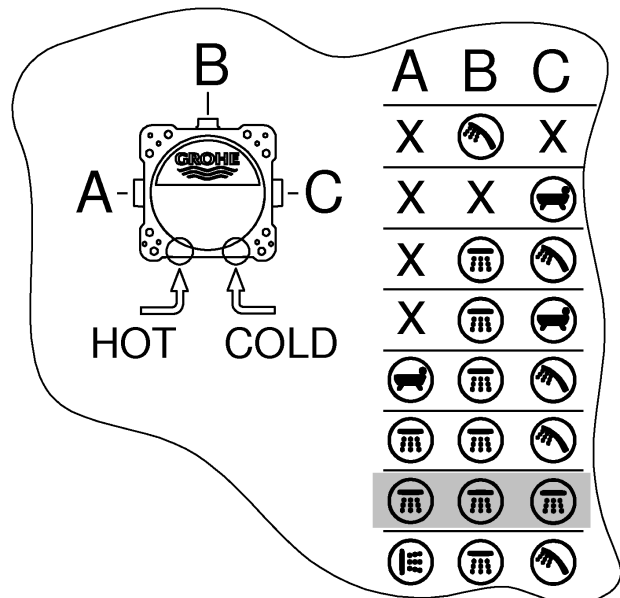
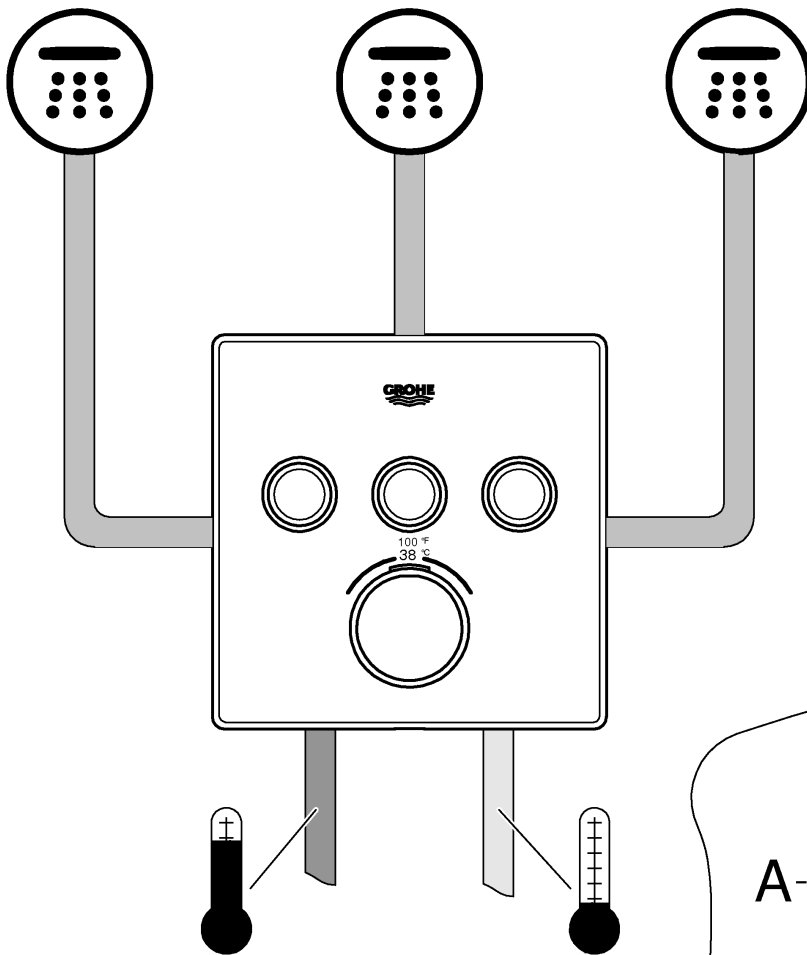
# Grotherm SmartControl

	bar					
	1	2	3	4	5	6
A	13,3	18,8	23	26,6	29,7	32,5
B	15,6	22	27	31,2	34,9	38,2
C	13,3	18,8	23	26,6	29,7	32,5
A+B	19,1	26,9	33	38,1	42,6	46,7
A+B+C	20,8	29,4	36	41,6	46,5	50,9

	psi					
	14,5	29	43,5	58	72,5	87
A	3,5	5	6,1	7	7,8	8,6
B	4,1	5,8	7,1	8,2	9,2	10,1
C	3,5	5	6,1	7	7,8	8,6
A+B	5	7,1	8,7	10,1	11,3	12,3
A+B+C	5,5	7,8	9,5	11	12,3	13,4

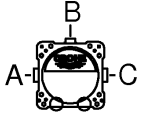
l/min

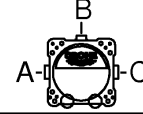
gpm

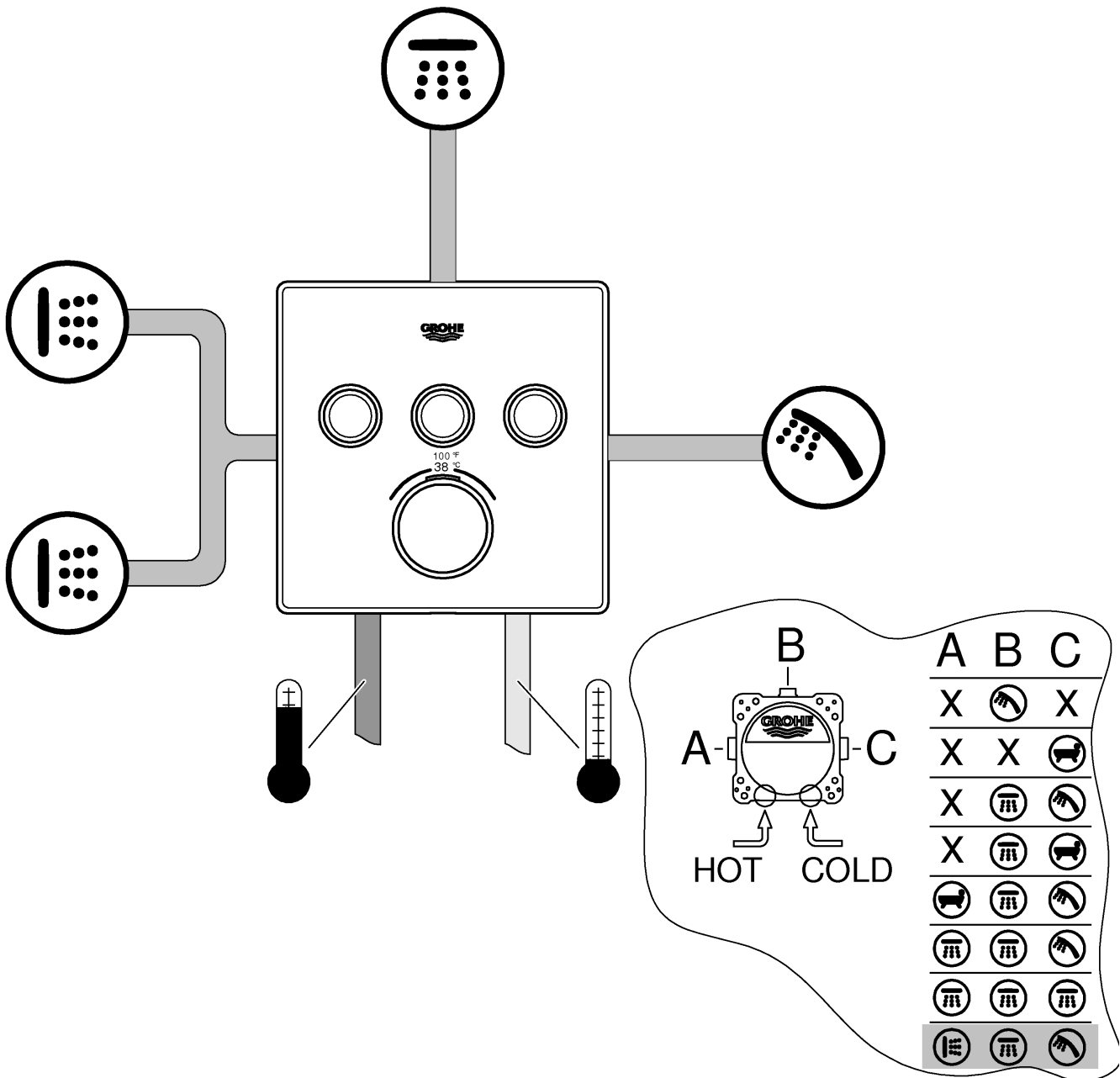


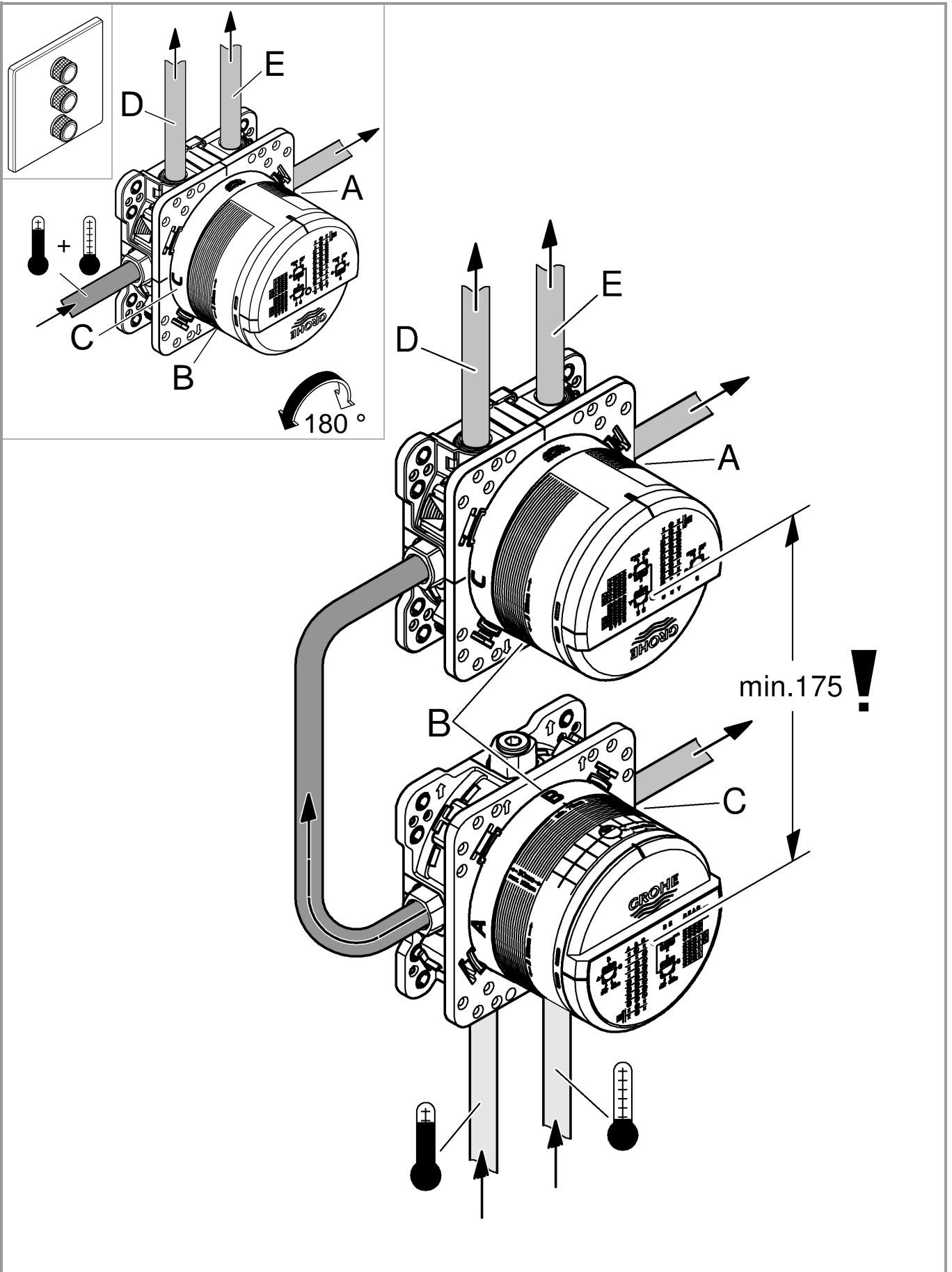


# Grotherm SmartControl

	bar						l/min
	1	2	3	4	5	6	
A	13,3	18,8	23	26,6	29,7	32,5	
B	15,6	22	27	31,2	34,9	38,2	
C	13,3	18,8	23	26,6	29,7	32,5	
A+B	19,1	26,9	33	38,1	42,6	46,7	
A+B+C	20,8	29,4	36	41,6	46,5	50,9	

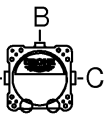
	psi						gpm
	14,5	29	43,5	58	72,5	87	
A	3,5	5	6,1	7	7,8	8,6	
B	4,1	5,8	7,1	8,2	9,2	10,1	
C	3,5	5	6,1	7	7,8	8,6	
A+B	5	7,1	8,7	10,1	11,3	12,3	
A+B+C	5,5	7,8	9,5	11	12,3	13,4	



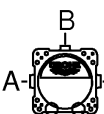




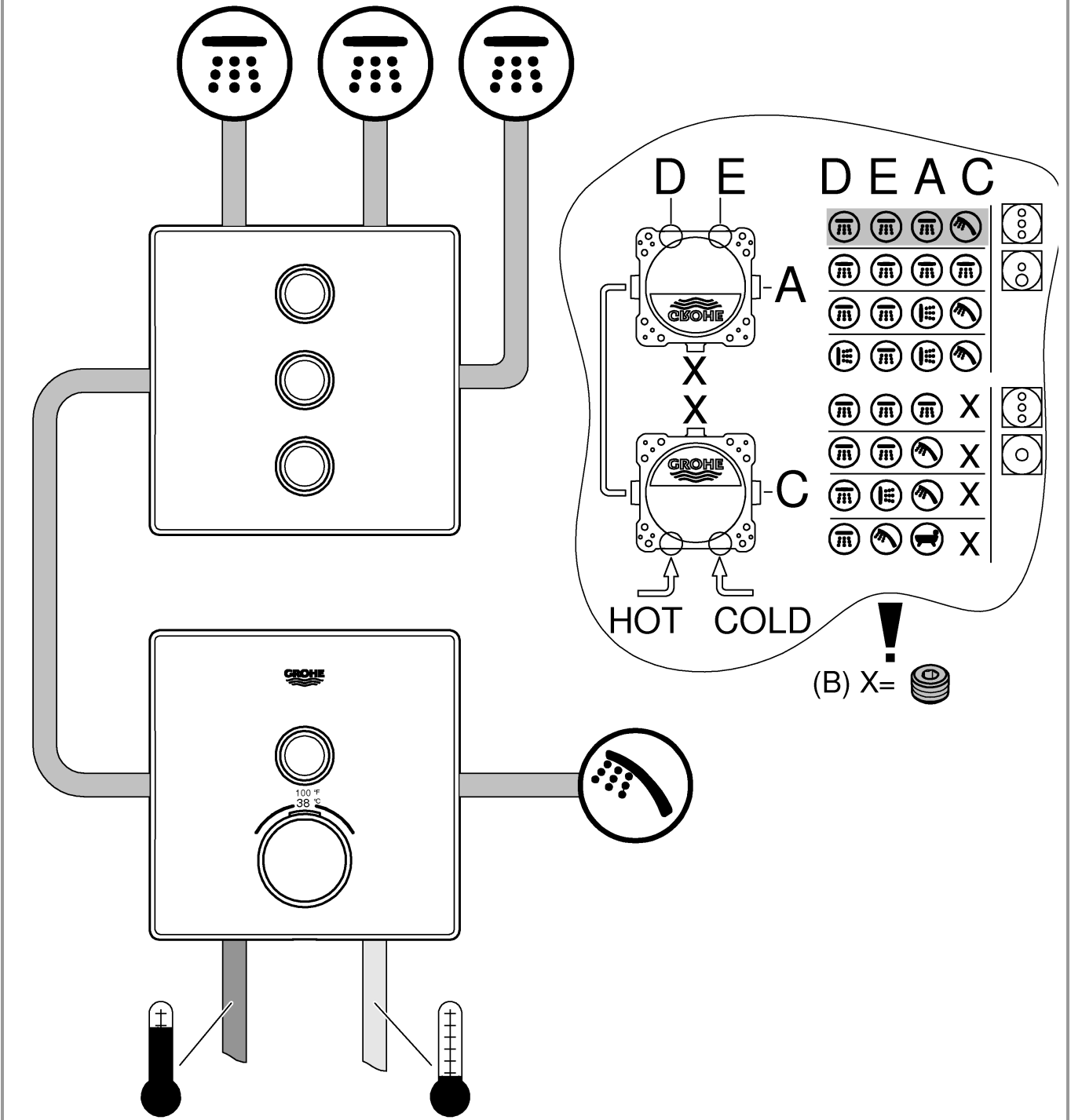
# Grotherm SmartControl

	psi					
	14,5	29	43,5	58	72,5	87
D	3,2	4,5	5,5	6,4	7,2	7,8
E	3,2	4,5	5,5	6,4	7,2	7,8
A	3,2	4,5	5,5	6,4	7,2	7,8
C	4,4	6,3	7,7	8,8	9,9	10,8
D+E+A	4,4	6,3	7,7	8,8	9,9	10,8
D+E+A+C	5,5	7,8	9,5	11	12,3	13,4

gpm

	bar					
	1	2	3	4	5	6
D	12,1	17,1	21	24,2	27,1	29,7
E	12,1	17,1	21	24,2	27,1	29,7
A	12,1	17,1	21	24,2	27,1	29,7
C	16,7	23,7	29	33,5	37,4	41
D+E+A	16,7	23,7	29	33,5	37,4	41
D+E+A+C	20,8	29,4	36	41,6	46,5	50,9

l/min

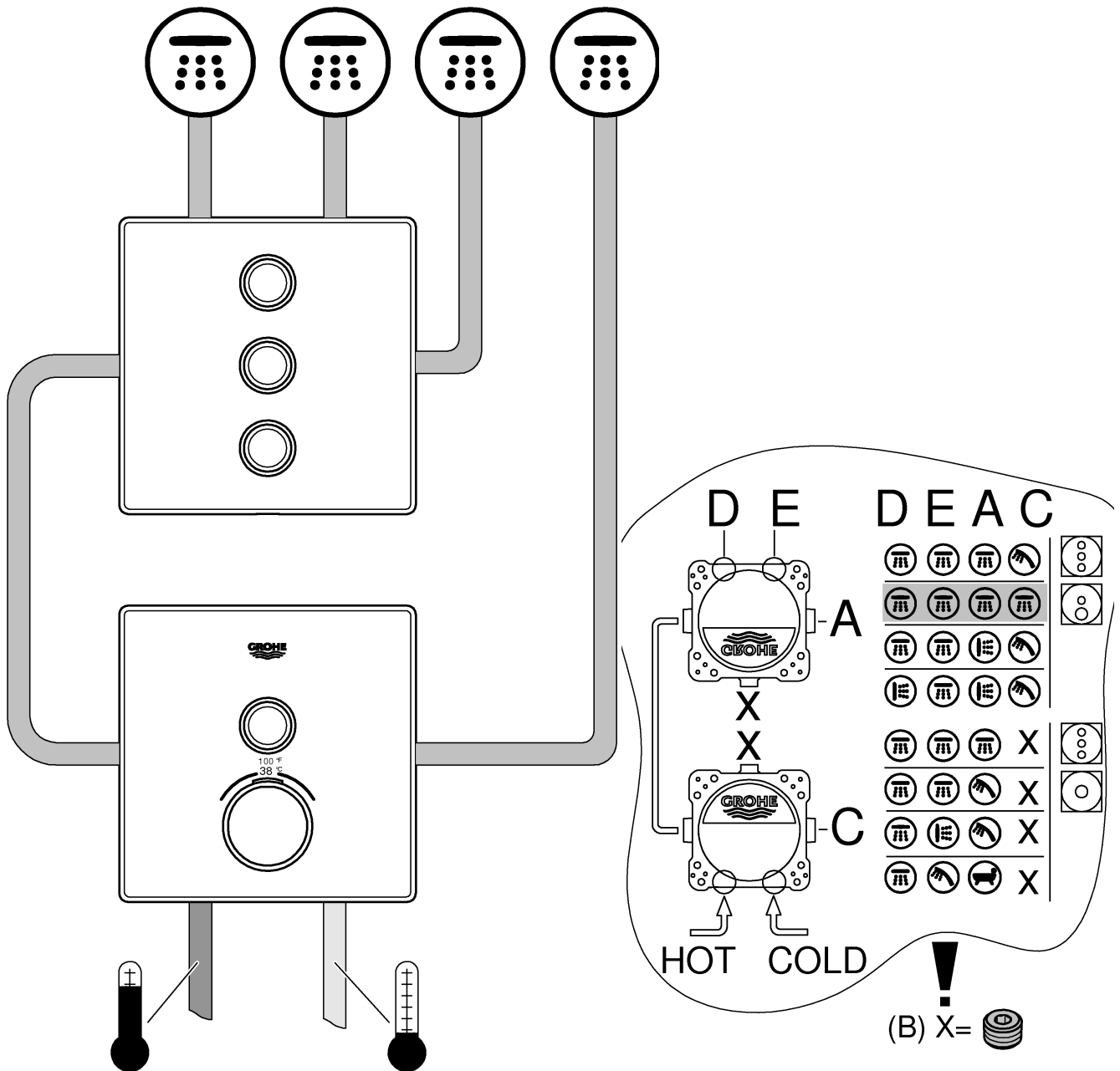




# Grotherm SmartControl

A-B-C	psi						gpm
	14,5	29	43,5	58	72,5	87	
D	3,2	4,5	5,5	6,4	7,2	7,8	
E	3,2	4,5	5,5	6,4	7,2	7,8	
A	3,2	4,5	5,5	6,4	7,2	7,8	
C	4,4	6,3	7,7	8,8	9,9	10,8	
D+E+A	4,4	6,3	7,7	8,8	9,9	10,8	
D+E+A+C	5,5	7,8	9,5	11	12,3	13,4	

A-B-C	bar						l/min
	1	2	3	4	5	6	
D	12,1	17,1	21	24,2	27,1	29,7	
E	12,1	17,1	21	24,2	27,1	29,7	
A	12,1	17,1	21	24,2	27,1	29,7	
C	16,7	23,7	29	33,5	37,4	41	
D+E+A	16,7	23,7	29	33,5	37,4	41	
D+E+A+C	20,8	29,4	36	41,6	46,5	50,9	





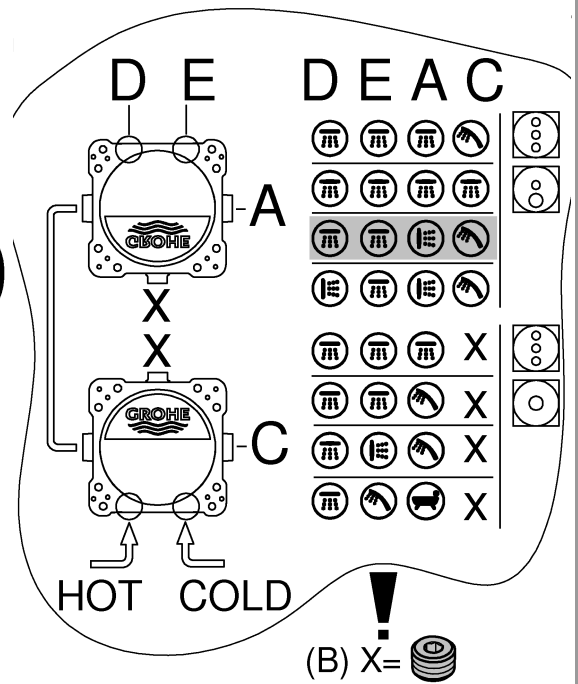
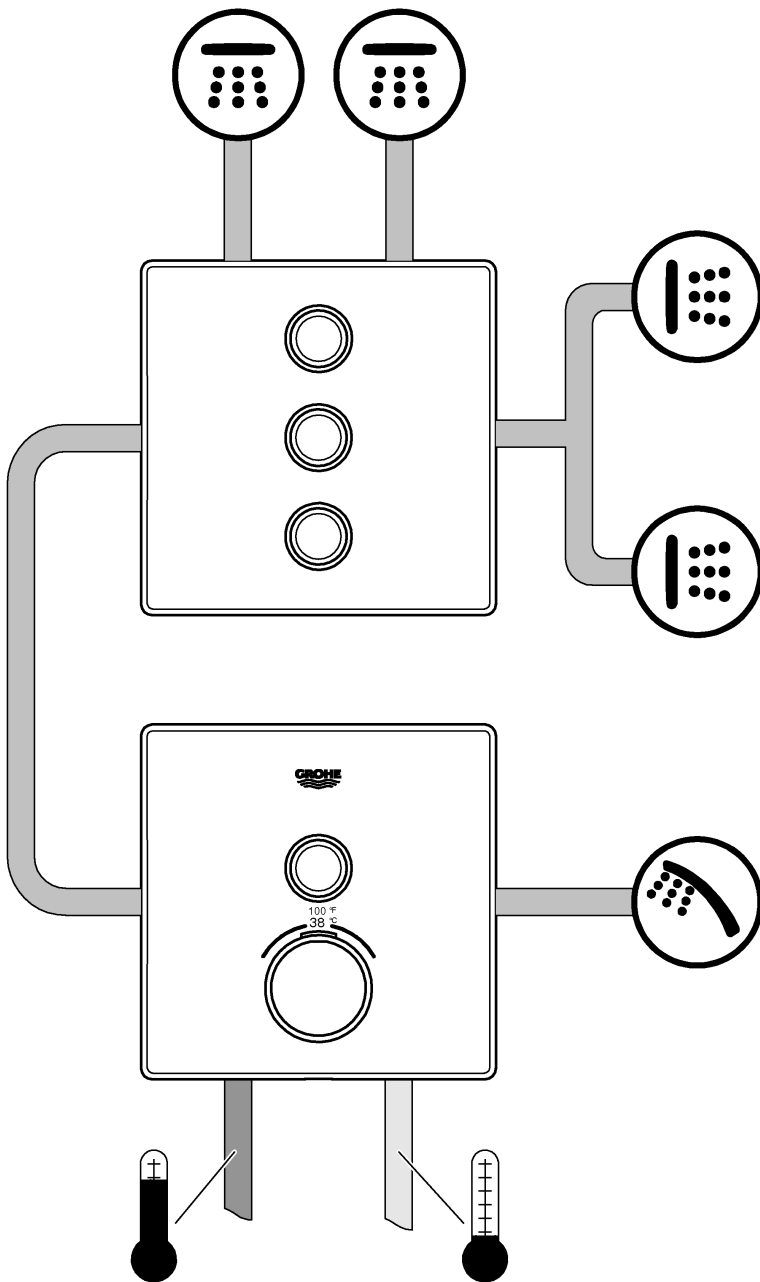
# Grotherm SmartControl

A-B-C	psi					
	14,5	29	43,5	58	72,5	87
D	3,2	4,5	5,5	6,4	7,2	7,8
E	3,2	4,5	5,5	6,4	7,2	7,8
A	3,2	4,5	5,5	6,4	7,2	7,8
C	4,4	6,3	7,7	8,8	9,9	10,8
D+E+A	4,4	6,3	7,7	8,8	9,9	10,8
D+E+A+C	5,5	7,8	9,5	11	12,3	13,4

gpm

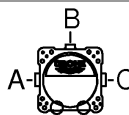
A-B-C	bar					
	1	2	3	4	5	6
D	12,1	17,1	21	24,2	27,1	29,7
E	12,1	17,1	21	24,2	27,1	29,7
A	12,1	17,1	21	24,2	27,1	29,7
C	16,7	23,7	29	33,5	37,4	41
D+E+A	16,7	23,7	29	33,5	37,4	41
D+E+A+C	20,8	29,4	36	41,6	46,5	50,9

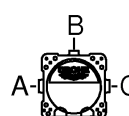
l/min

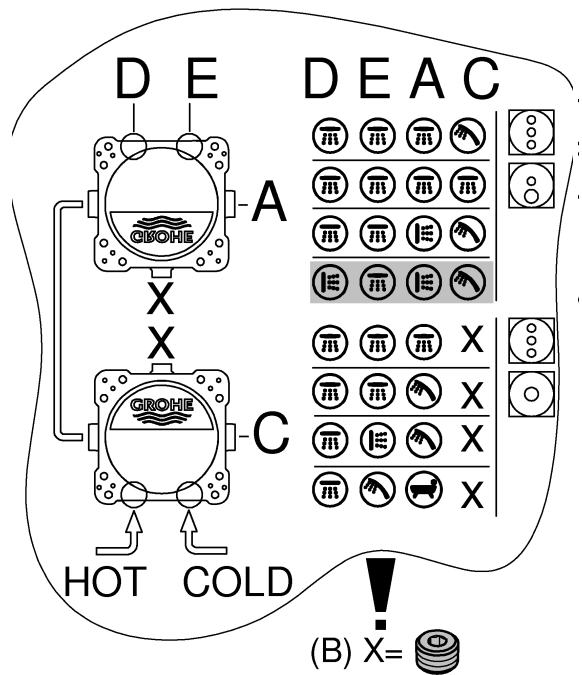
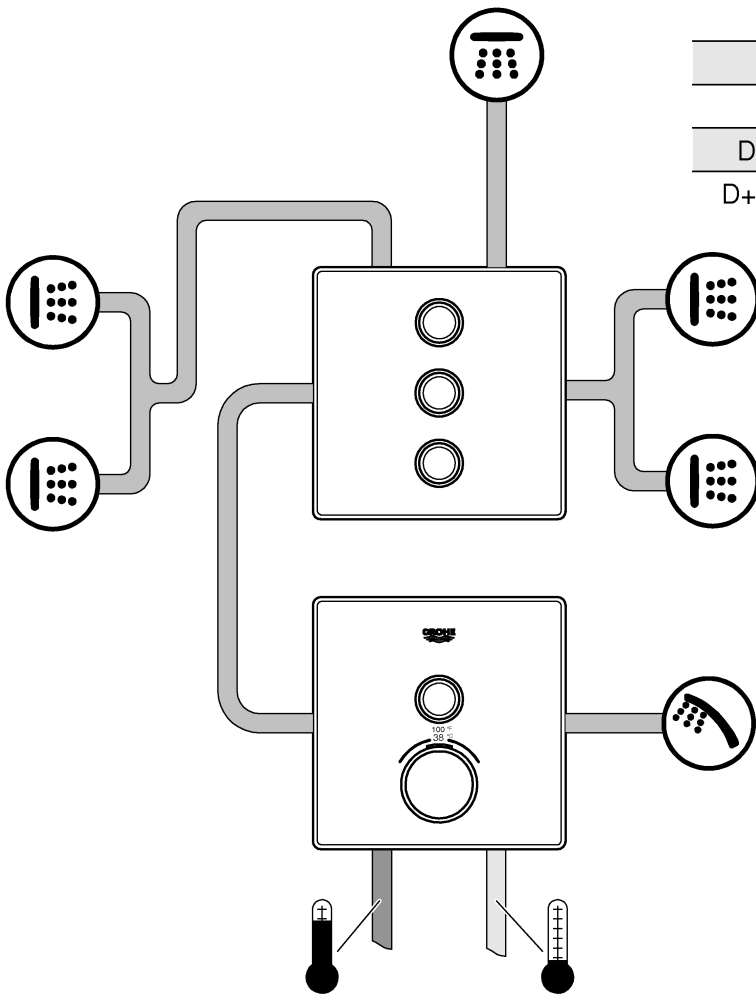




# Grotherm SmartControl

	psi						gpm
	14,5	29	43,5	58	72,5	87	
D	3,2	4,5	5,5	6,4	7,2	7,8	
E	3,2	4,5	5,5	6,4	7,2	7,8	
A	3,2	4,5	5,5	6,4	7,2	7,8	
C	4,4	6,3	7,7	8,8	9,9	10,8	
D+E+A	4,4	6,3	7,7	8,8	9,9	10,8	
D+E+A+C	5,5	7,8	9,5	11	12,3	13,4	

	bar						l/min
	1	2	3	4	5	6	
D	12,1	17,1	21	24,2	27,1	29,7	
E	12,1	17,1	21	24,2	27,1	29,7	
A	12,1	17,1	21	24,2	27,1	29,7	
C	16,7	23,7	29	33,5	37,4	41	
D+E+A	16,7	23,7	29	33,5	37,4	41	
D+E+A+C	20,8	29,4	36	41,6	46,5	50,9	





USA

### Technical specifications Grohtherm 2-Handle Thermostat

- 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
- Minimum flow rate 1.3gpm
- Temperature
  - Hot water inlet 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 27-30. **These are to be observed when dimensioning the outlet!**

- Recommended configuration options, see from page 26-30.

#### The following special accessories are available:

- Extension 1" (prod. no.: 14 058)
- Service stops (prod. no.: 14 053)
- Reversed connection, hot on right – cold on left replace thermostat cartridges (prod. no.: 49 003)

F

### Caractéristiques techniques Grohtherm 2-Handle Thermostat

- 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
  - Arrivée d'eau chaude max. 70 °C
  - Recommandée pour une économie d'énergie 60 °C
  - Désinfection thermique possible
- Température de l'eau chaude au raccord d'alimentation au moins 2 °C de plus que la température de l'eau mitigée

Débits sans résistances en aval, voir pages 27-30.

### Veillez en tenir compte lors du dimensionnement de l'évacuation !

- Possibilités de configuration recommandées, voir à partir de la page 26-30.

#### Les accessoires spéciaux suivants sont disponibles :

- Rallonge de 25mm (réf. : 14 058)
- Robinets d'arrêt (réf. : 14 053)
- Raccordement inversé, chaud à droite - froid à gauche, remplacer la cartouche du thermostat (réf. : 49 003)

E

### Datos técnicos de Grohtherm 2-Handle Thermostat

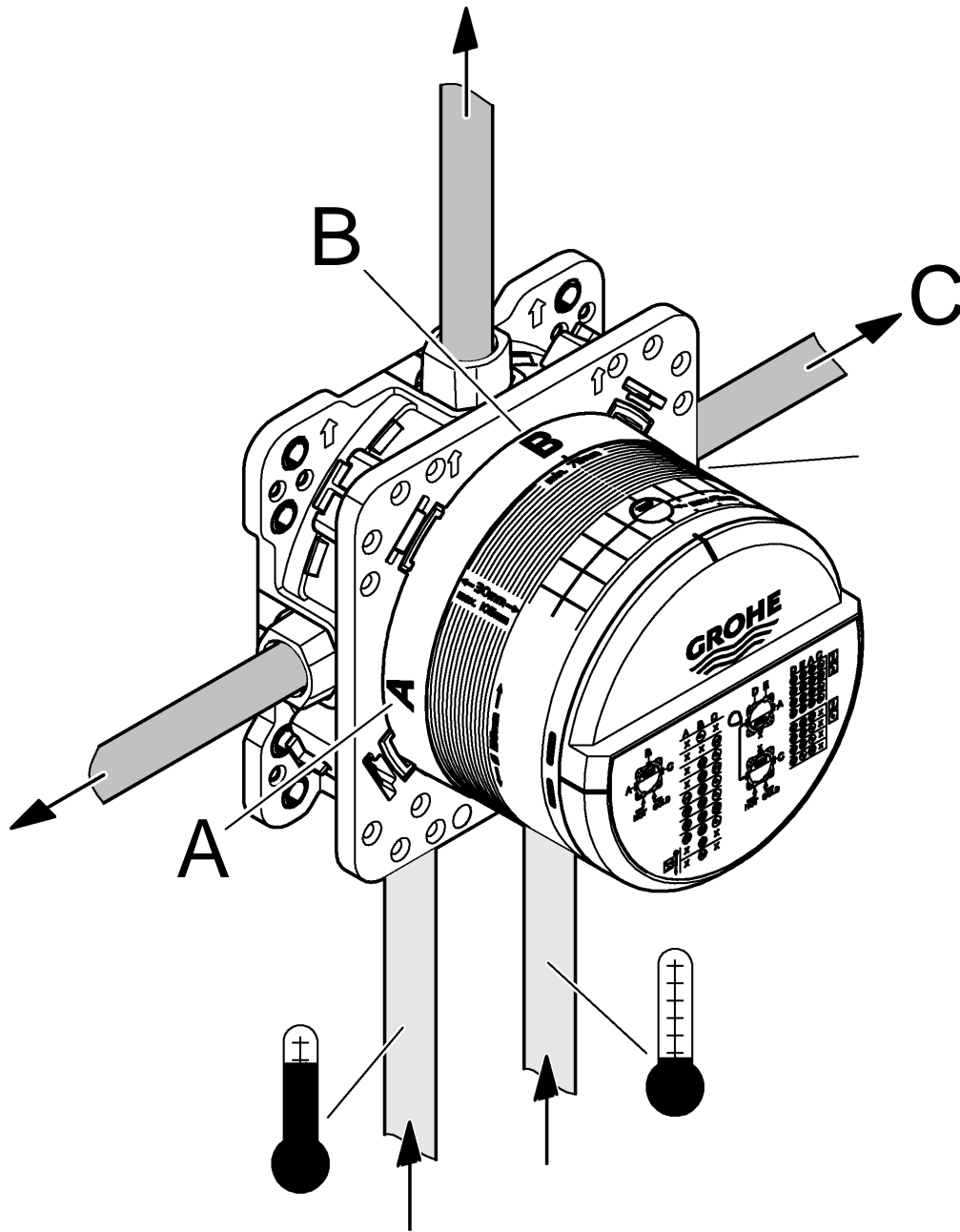
- Presión de trabajo
  - Presión mínima de trabajo sin resistencias posacopladas 7.25 psi
  - Presión mínima de trabajo con resistencias posacopladas 14.5 psi
  - Presión recomendada 21.75-72.5 psi
- Caudal mínimo 1.3gpm
- Temperatura
  - Entrada de agua caliente máx. 158 °F
  - Recomendada para ahorrar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

Caudales sin resistencias posacopladas, véanse las páginas 27-30. **Tenga en cuenta las dimensiones del desagüe.**

- Posibilidades de configuración recomendadas, véase a partir de la página 26-30.

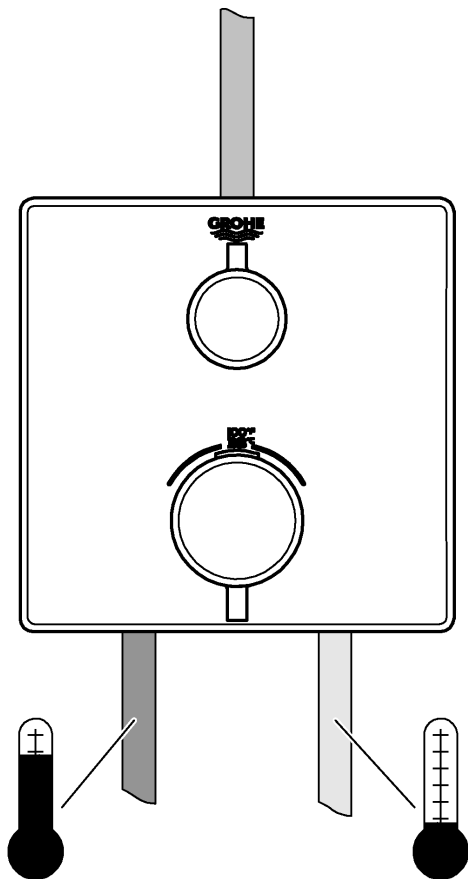
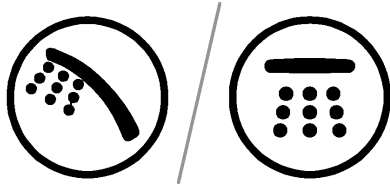
#### Los siguientes accesorios opcionales están disponibles:

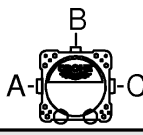
- Prolongación de 1" (n.º de pedido: 14 058)
- Bloqueos de seguridad (n.º de pedido: 14 053)
- Conexión invertida, derecha caliente - izquierda frío sustituir los cartuchos del termostato (n.º de pedido: 49 003)

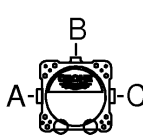


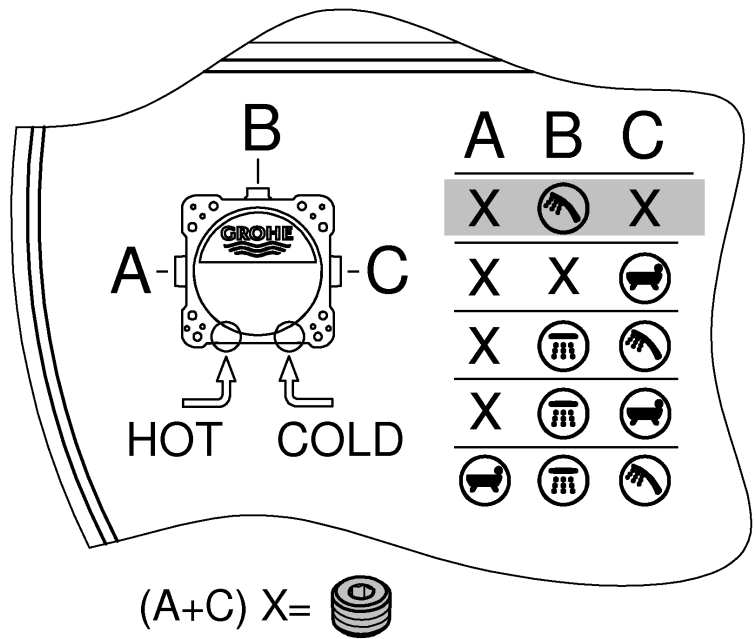


# Grotherm 2-Handle Thermostat



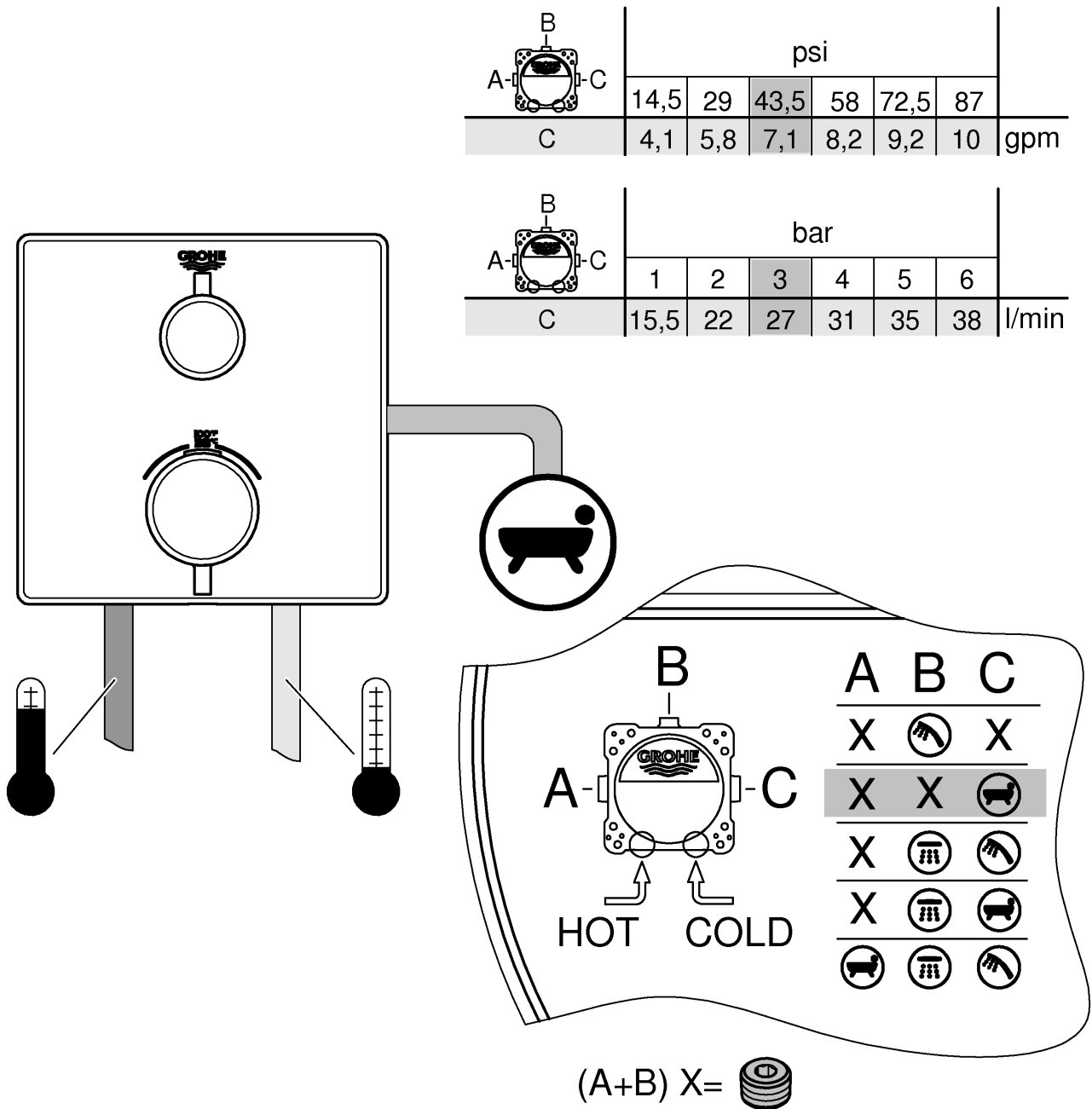
	psi						gpm
	14,5	29	43,5	58	72,5	87	
B	4,1	5,8	7,1	8,2	9,2	10,0	

	bar						l/min
	1	2	3	4	5	6	
B	15,5	22	27	31,0	35	38	



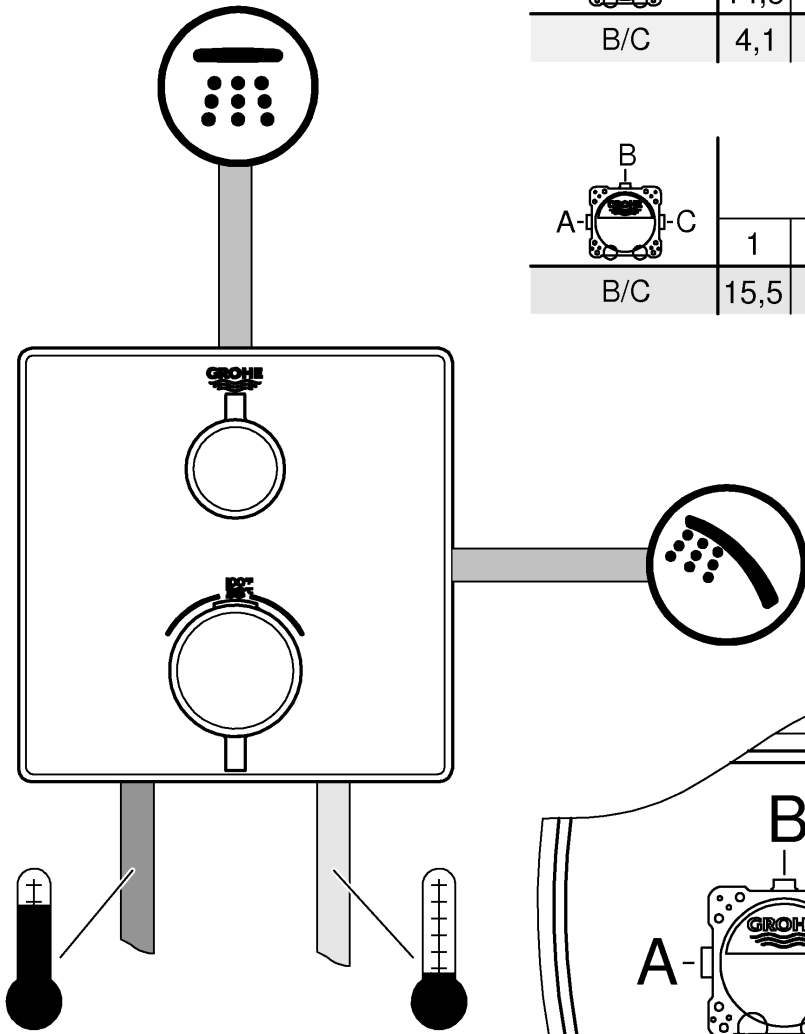


# Grotherm 2-Handle Thermostat



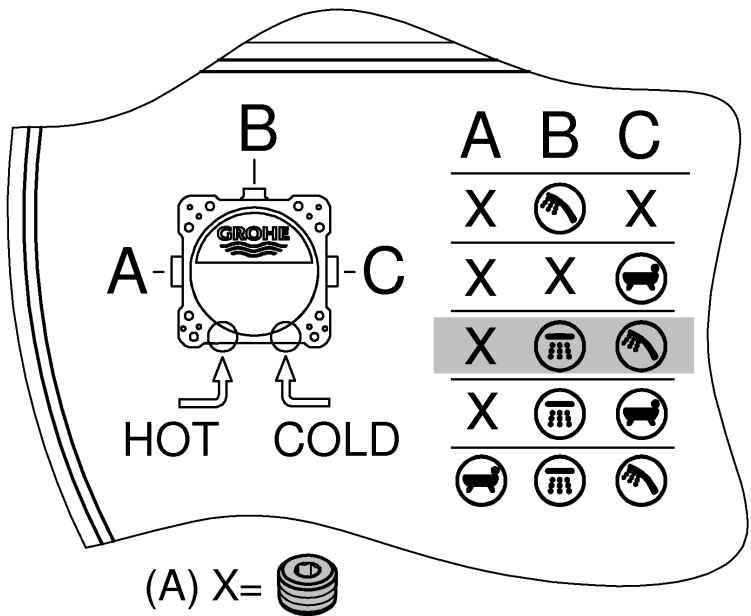


# Grotherm 2-Handle Thermostat



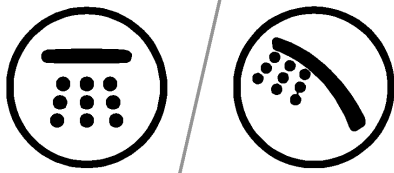
	psi						gpm
	14,5	29	43,5	58	72,5	87	
B/C	4,1	5,8	7,1	8,2	9,2	10,0	

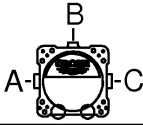
	bar						l/min
	1	2	3	4	5	6	
B/C	15,5	22	27	31	35	38	

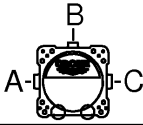


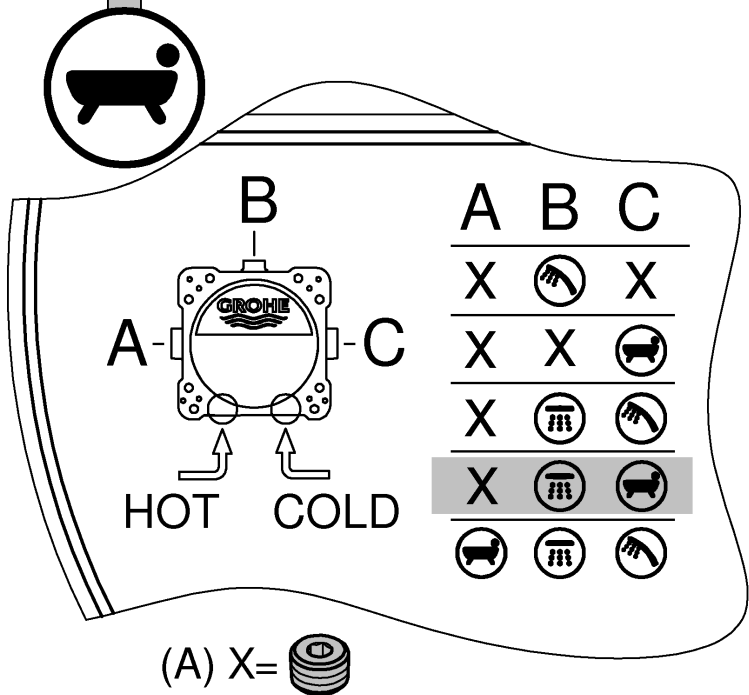
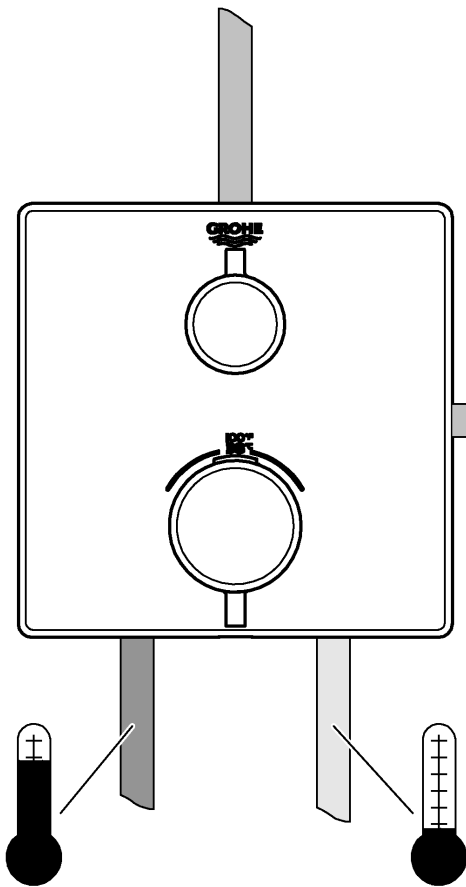


# Grotherm 2-Handle Thermostat



	psi						gpm
	14,5	29	43,5	58	72,5	87	
B/C	4,1	5,8	7,1	8,2	9,2	10,0	

	bar						l/min
	1	2	3	4	5	6	
B/C	15,5	22	27	31	35	38	



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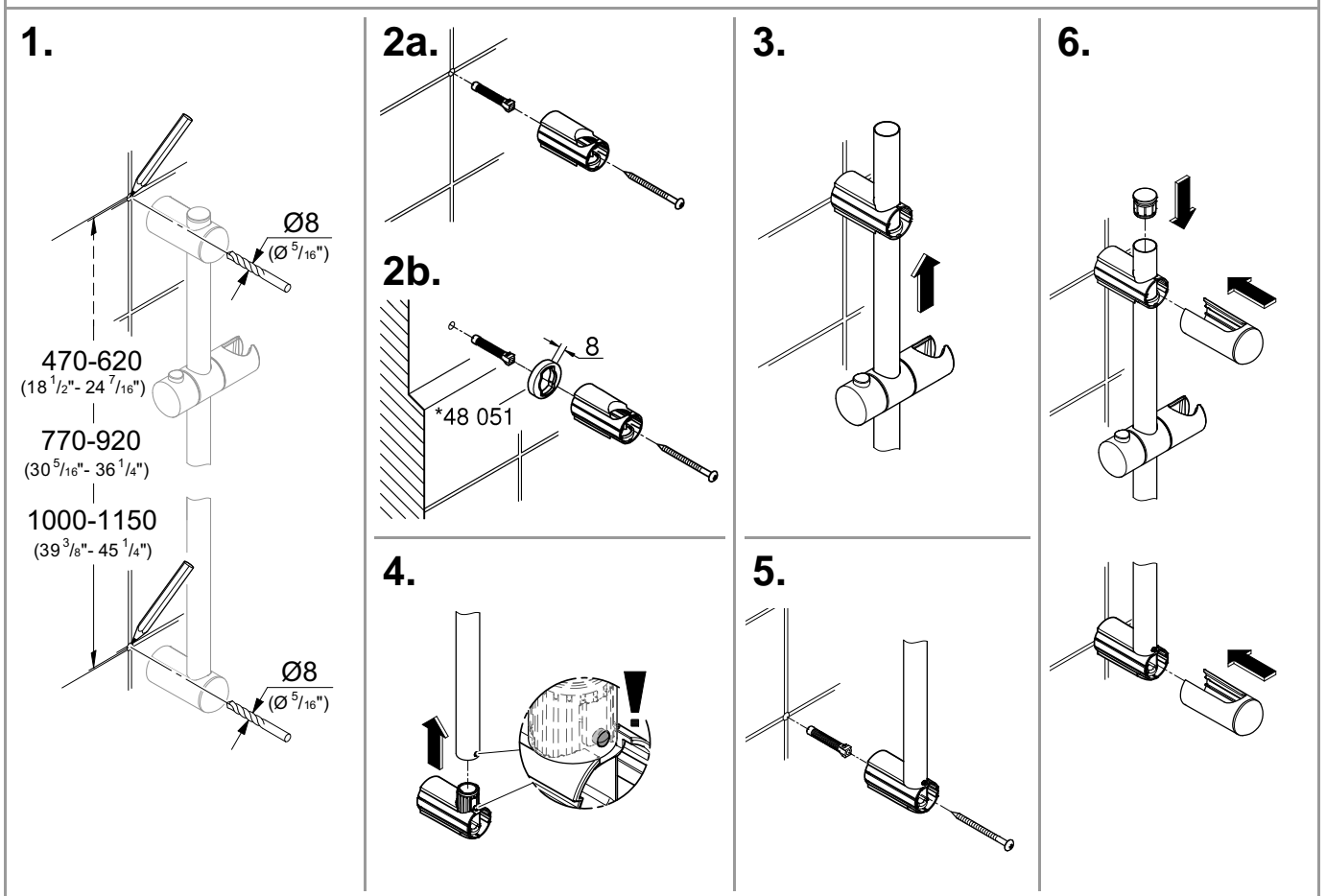
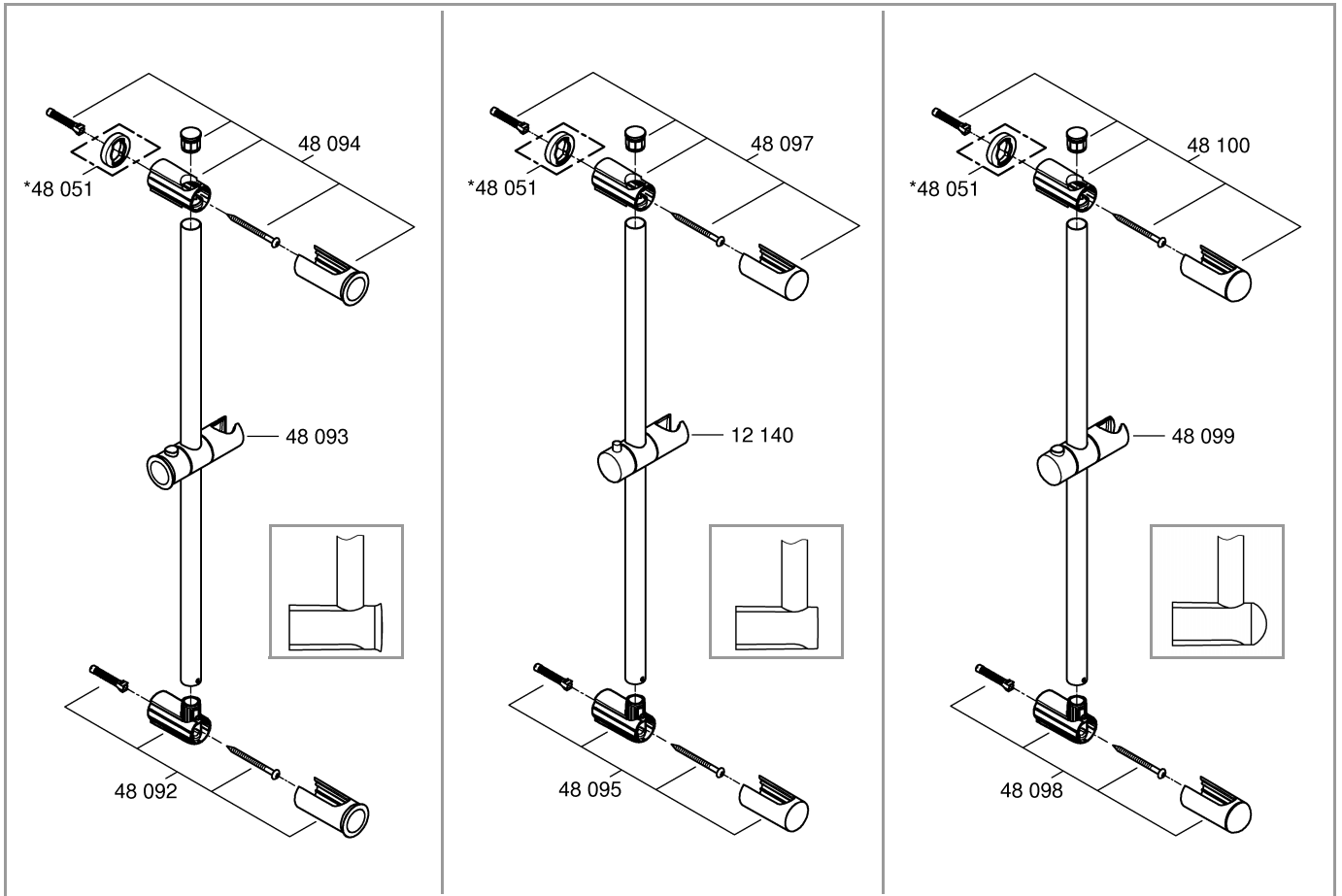
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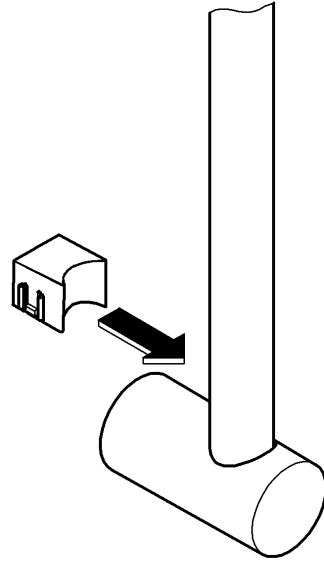
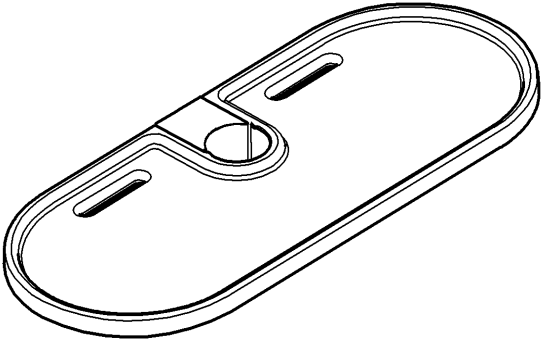
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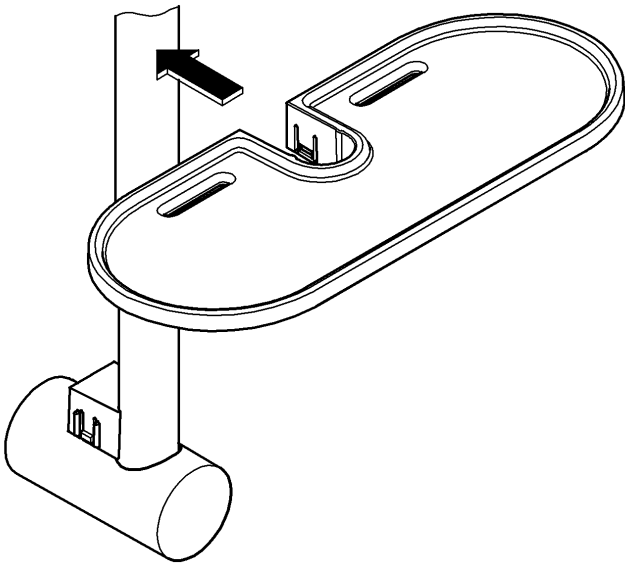




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