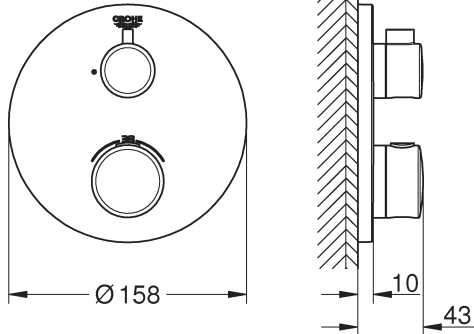
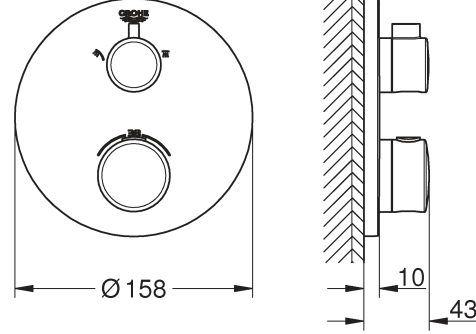




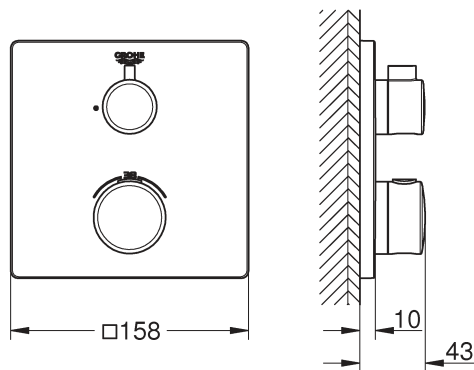
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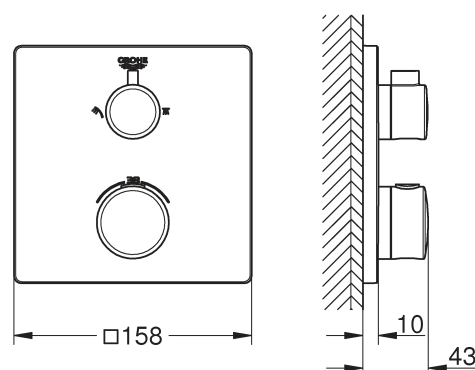
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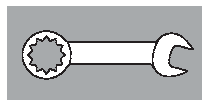
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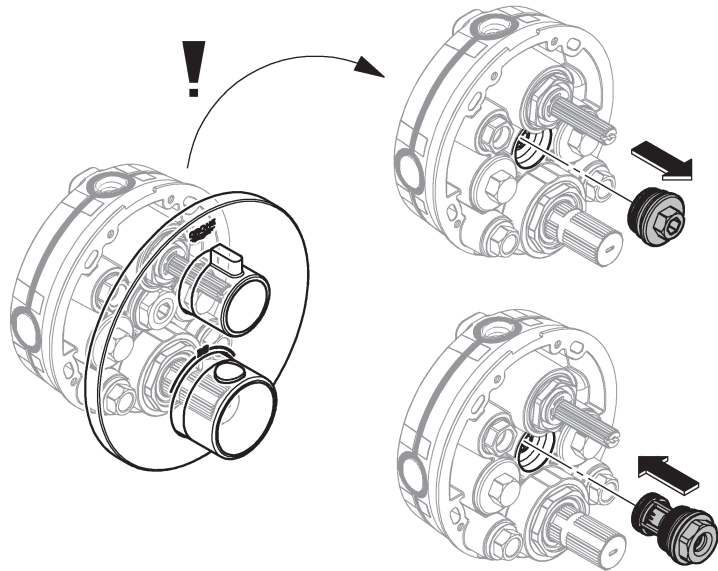
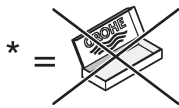
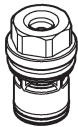
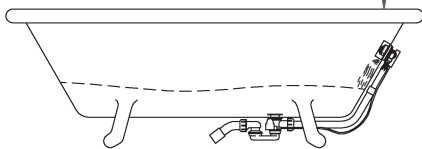
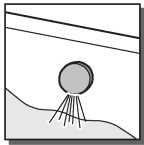
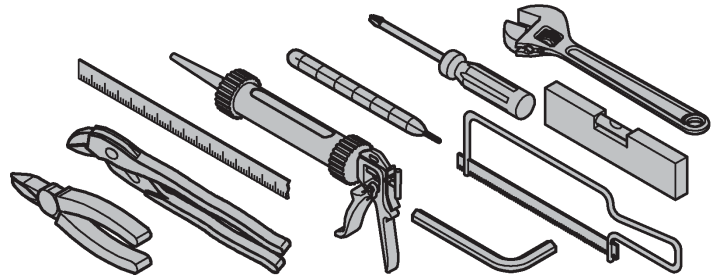
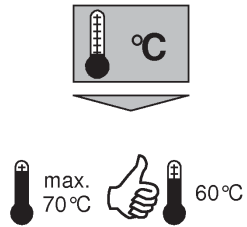
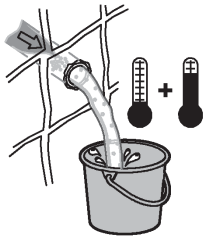


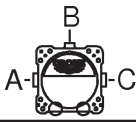
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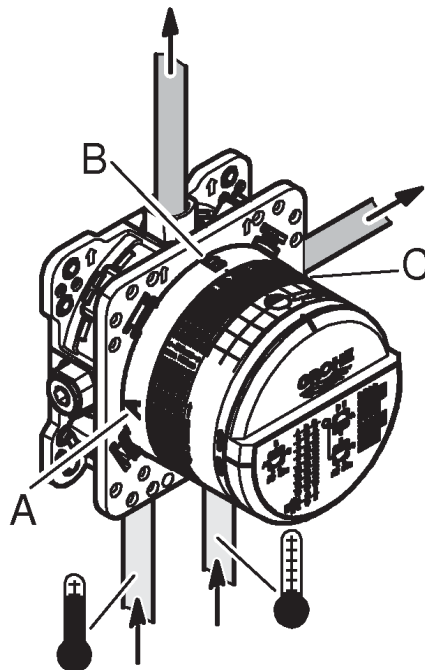


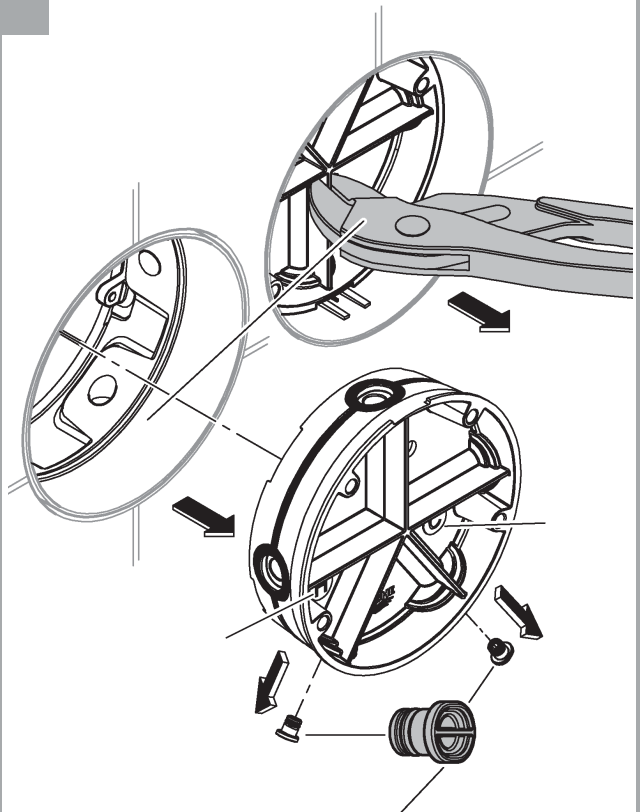
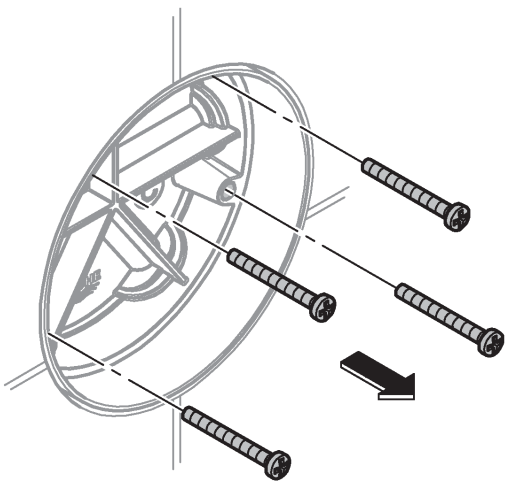
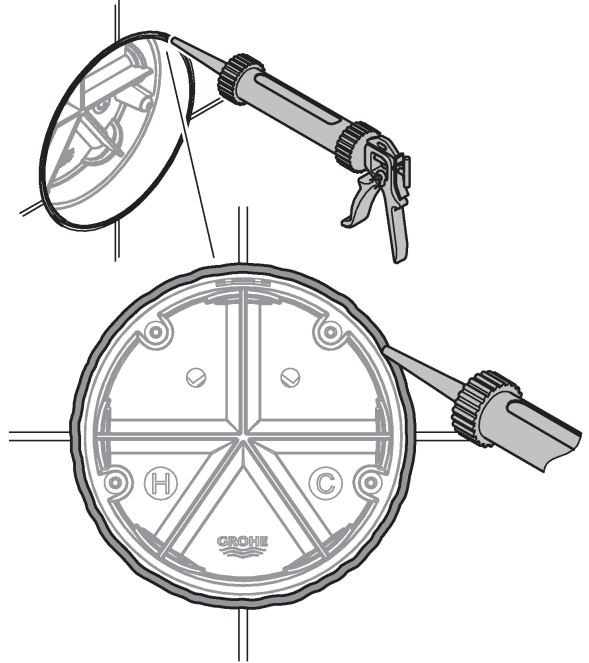
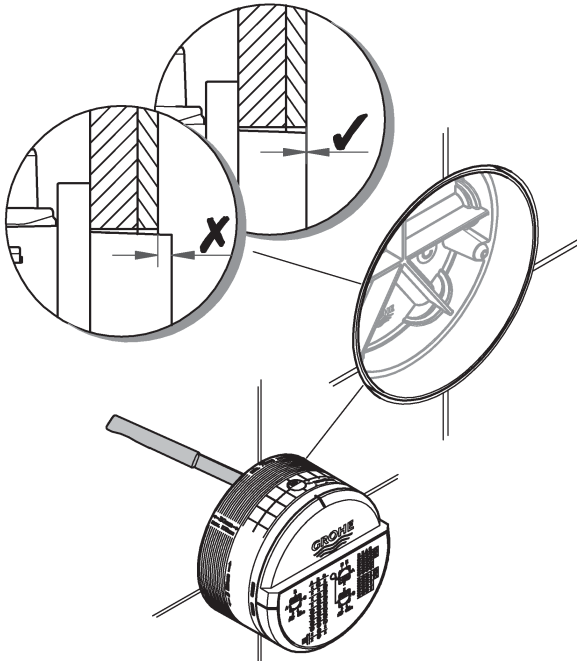
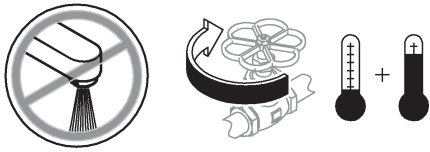
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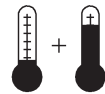
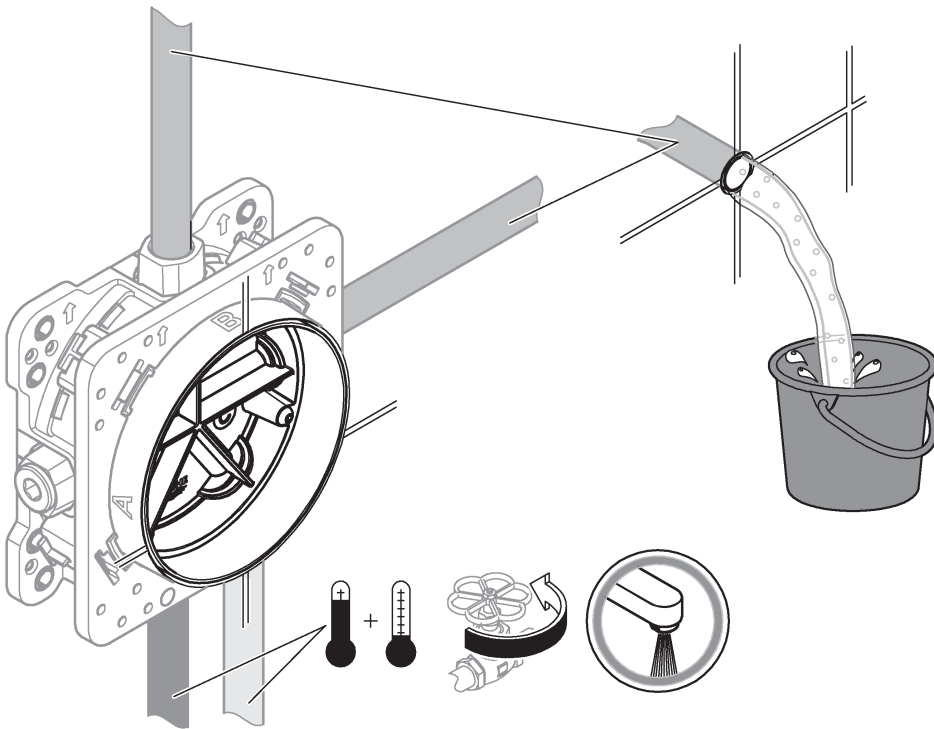
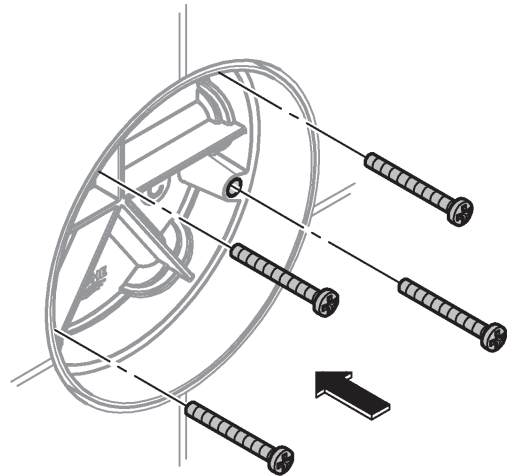
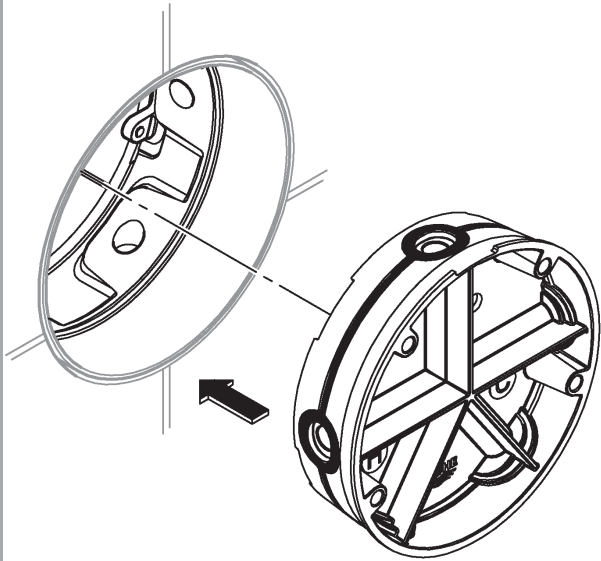


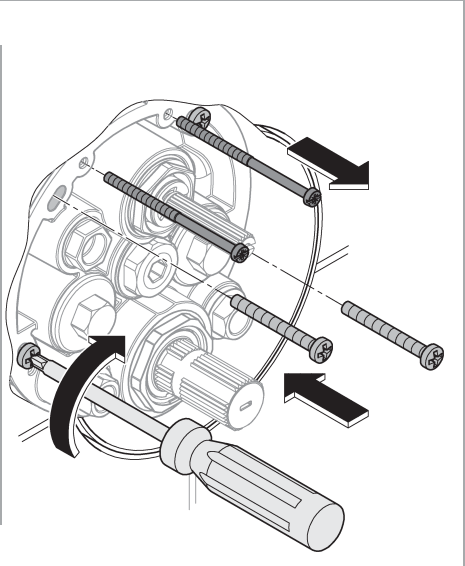
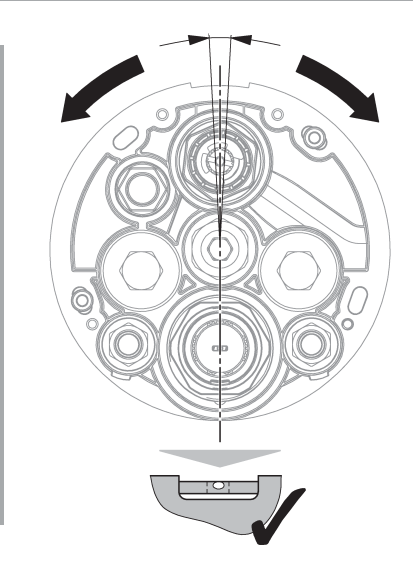
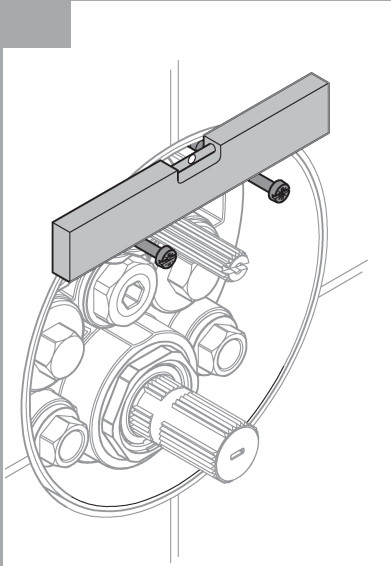
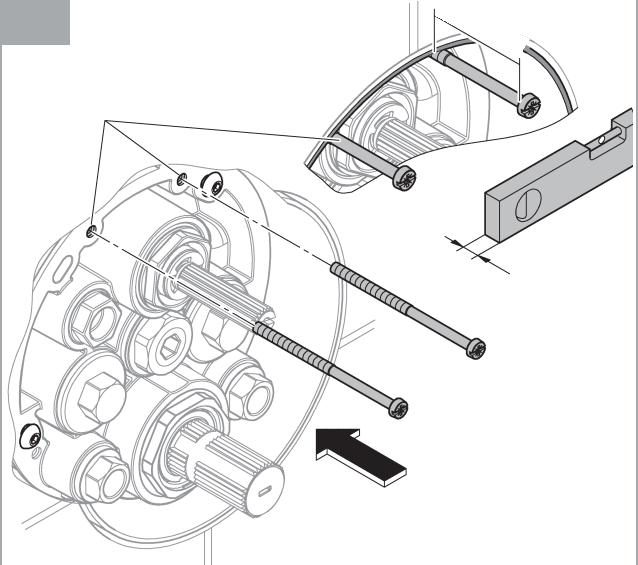
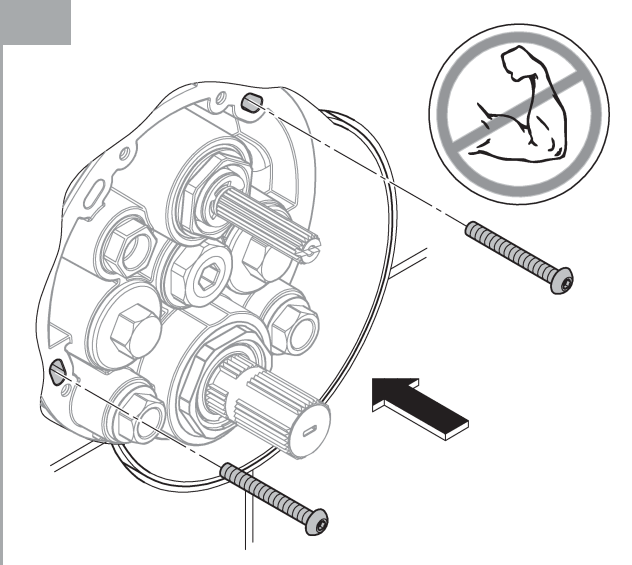
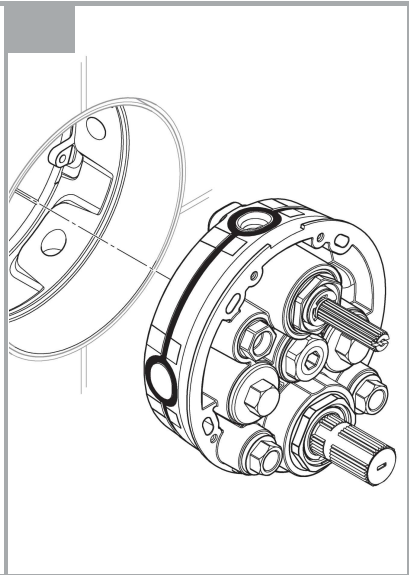
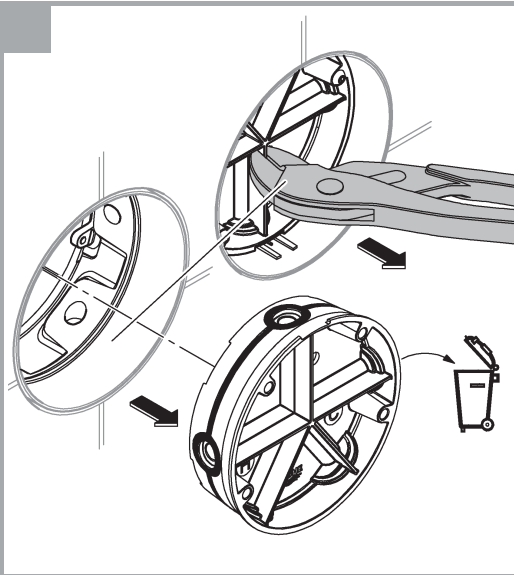
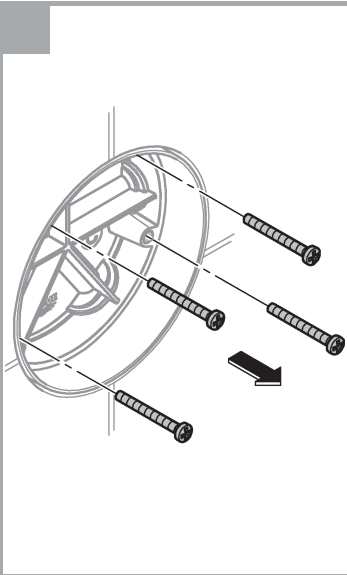


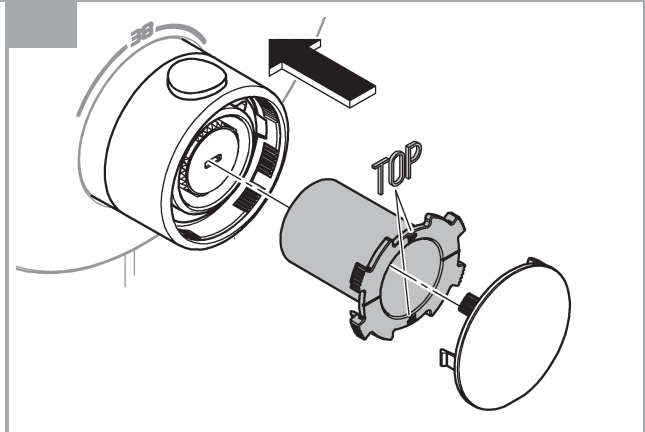
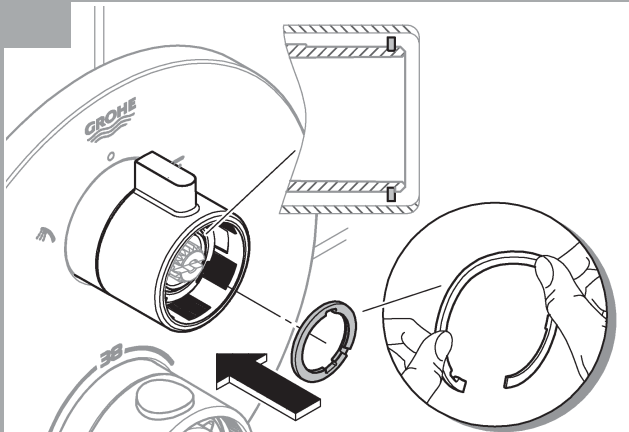
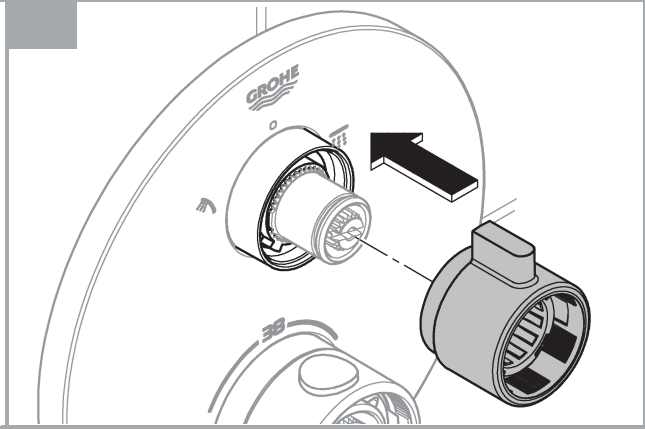
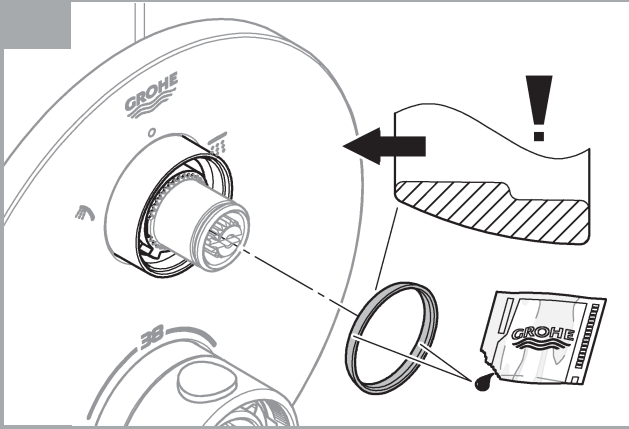
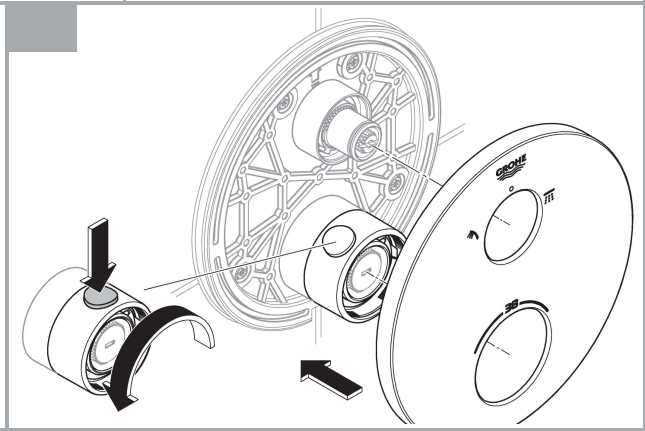
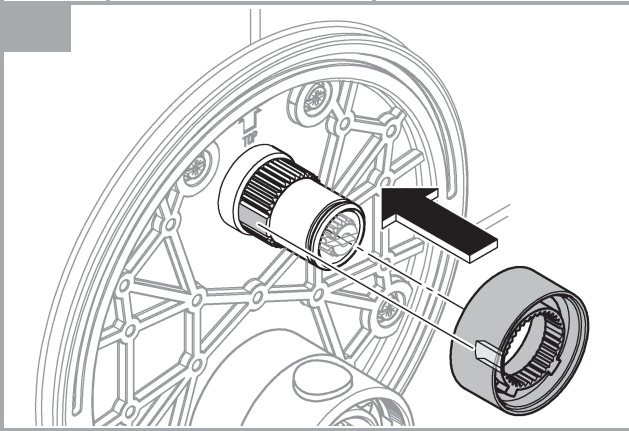
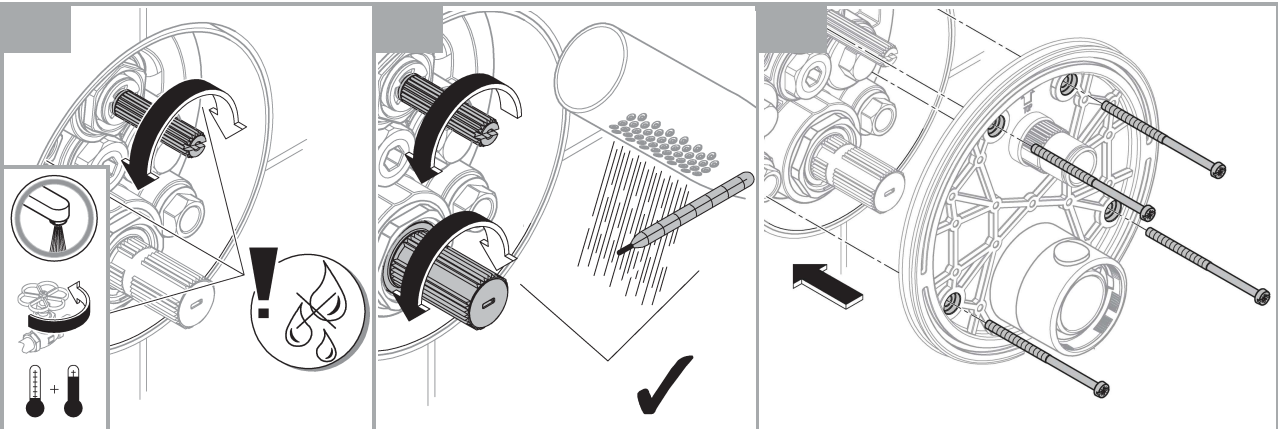
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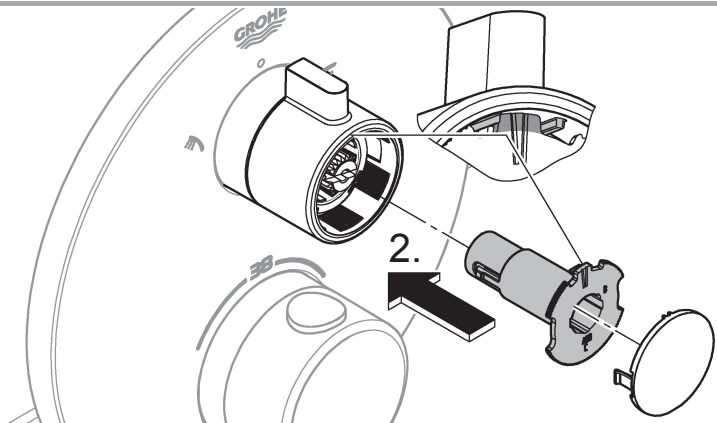
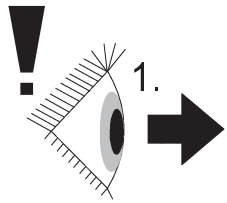




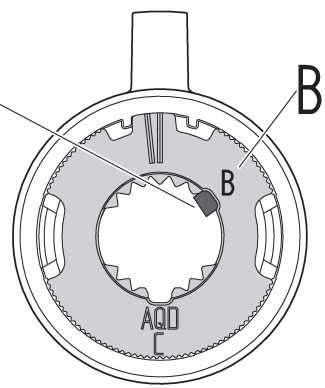
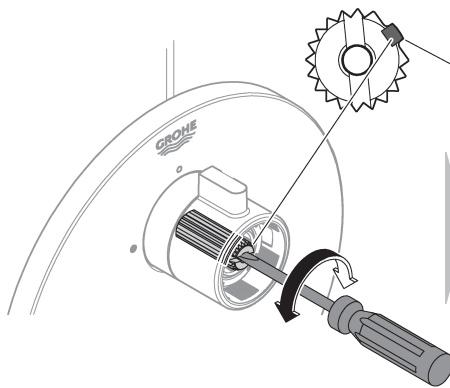
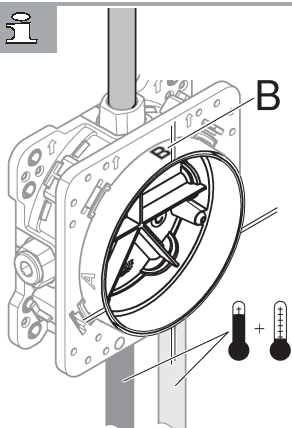




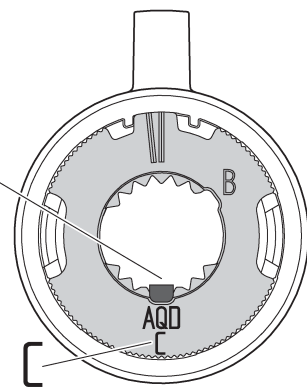
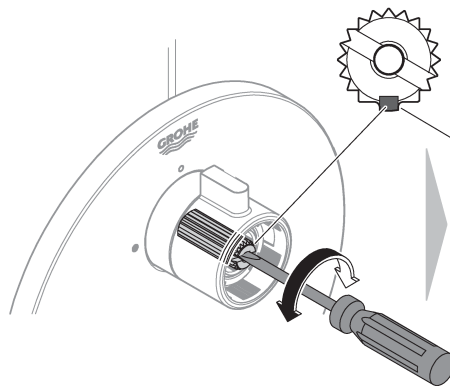
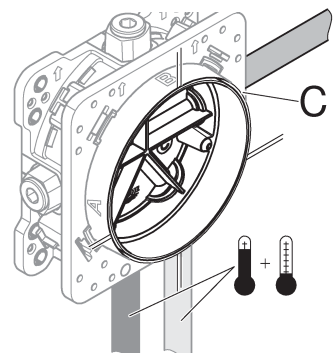




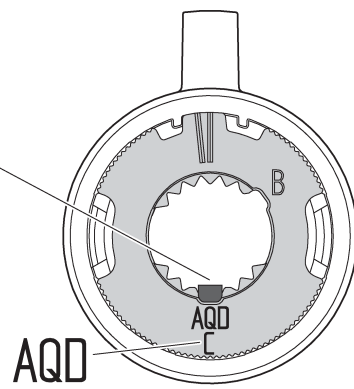
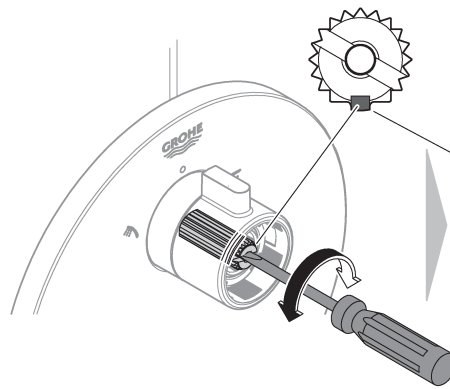
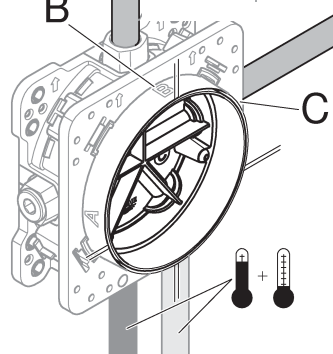
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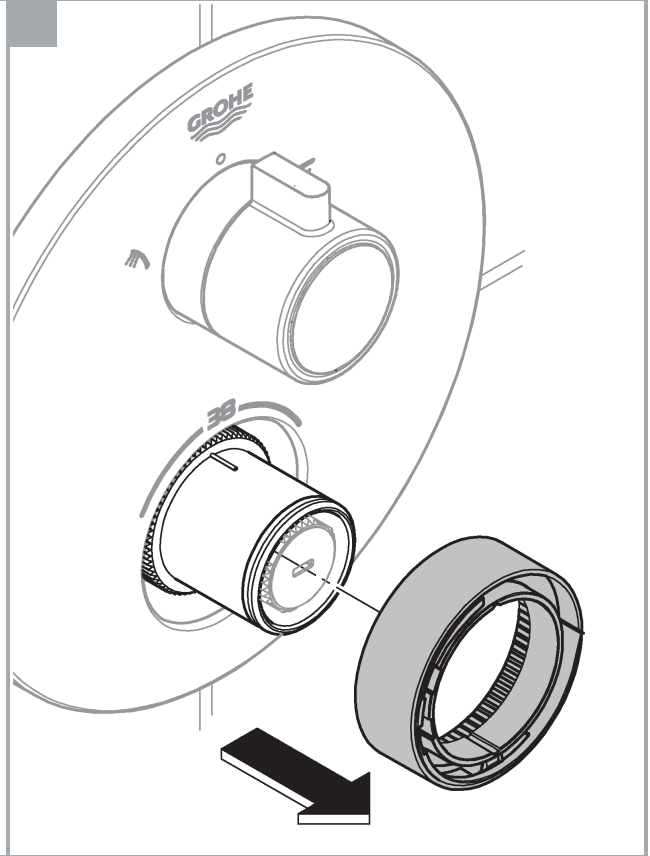
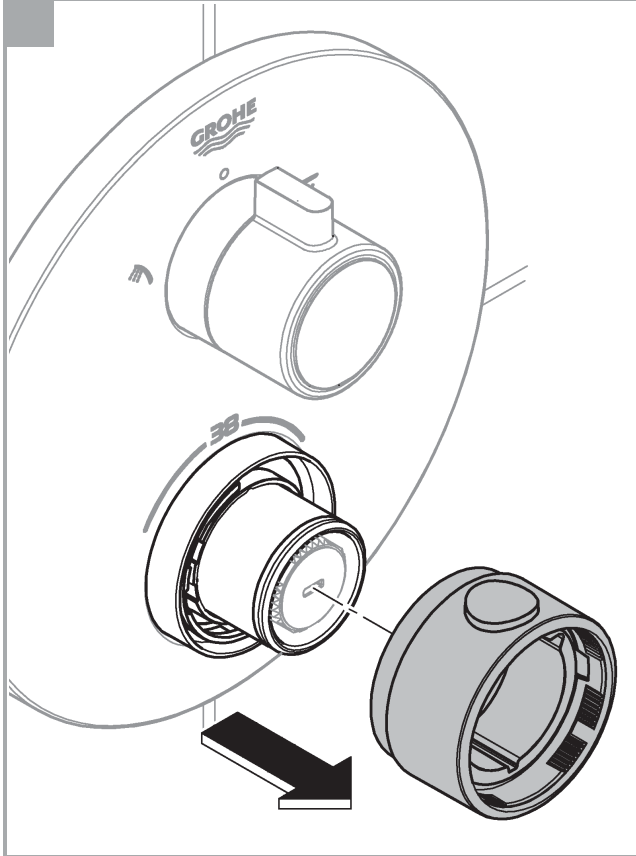
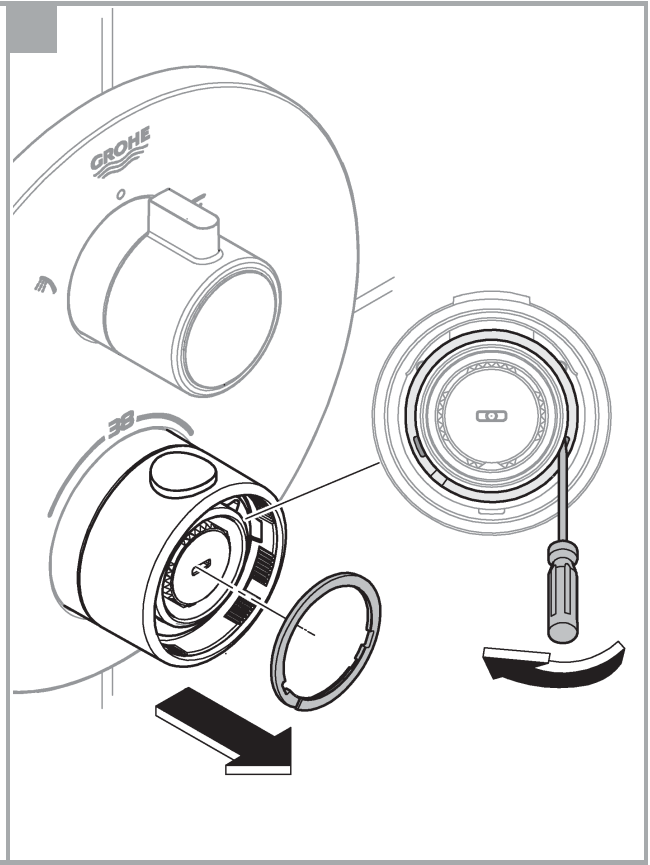
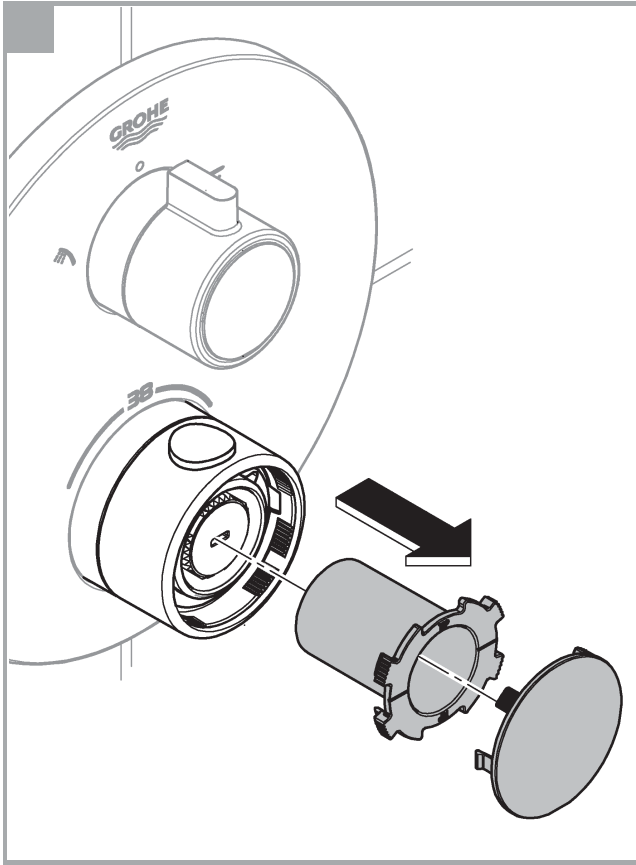


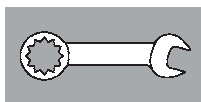
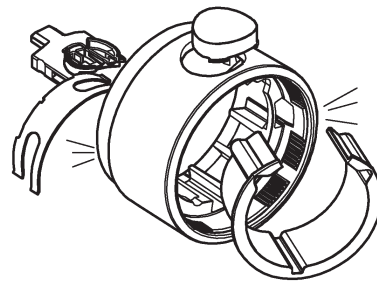
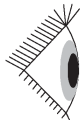
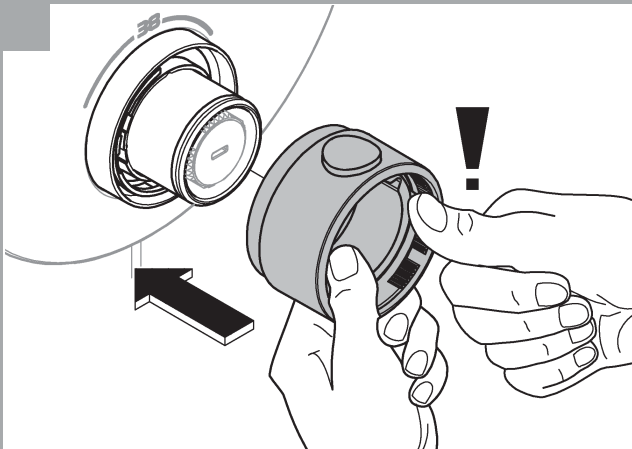
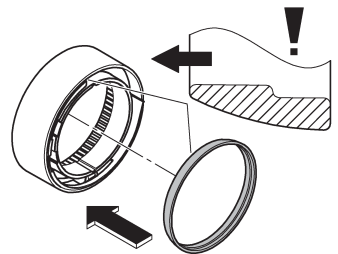
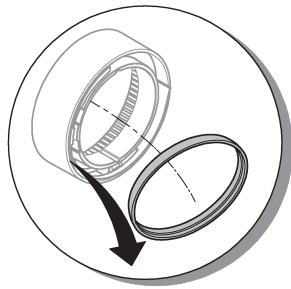
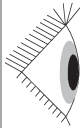
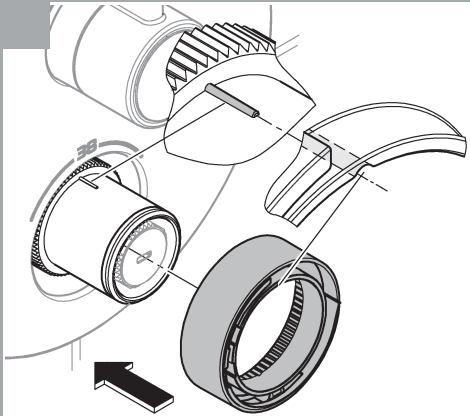
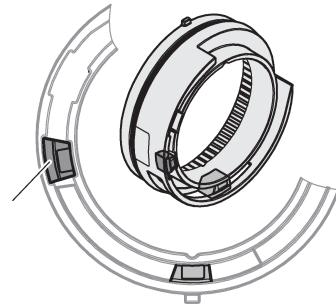
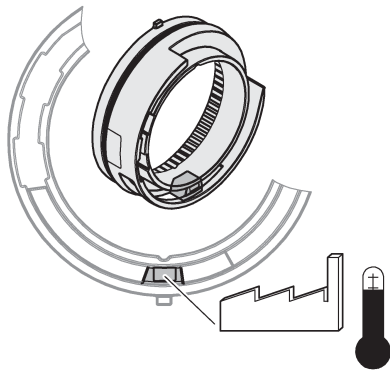
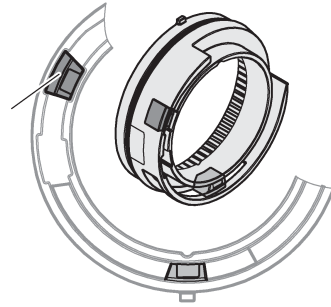
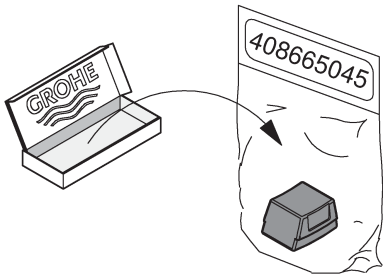
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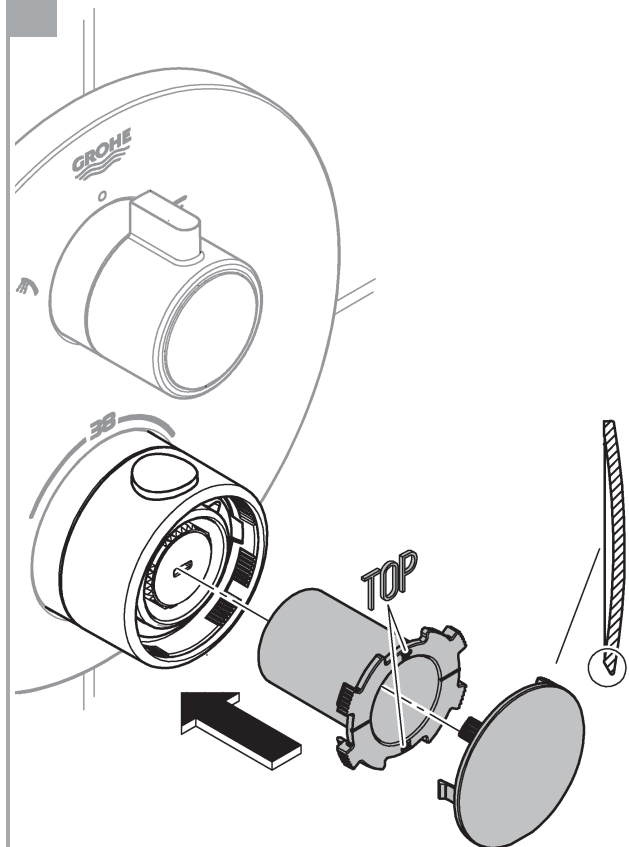
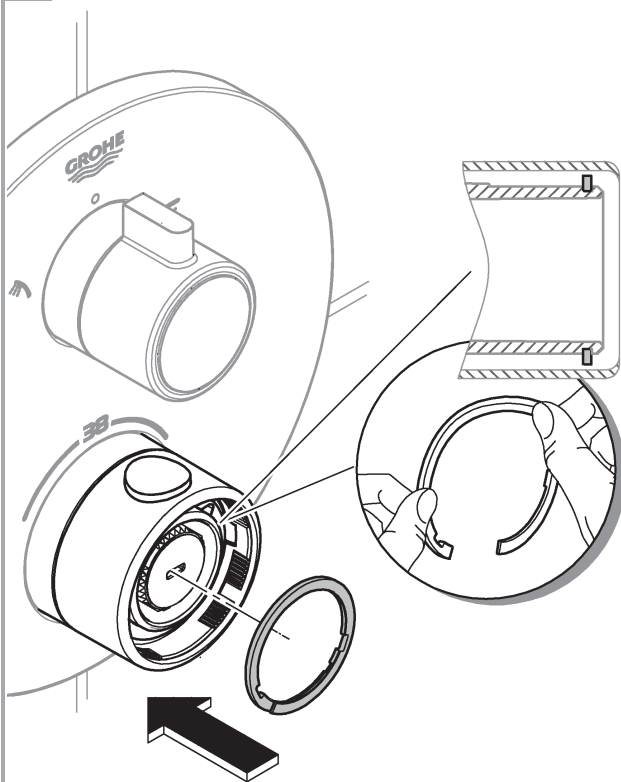
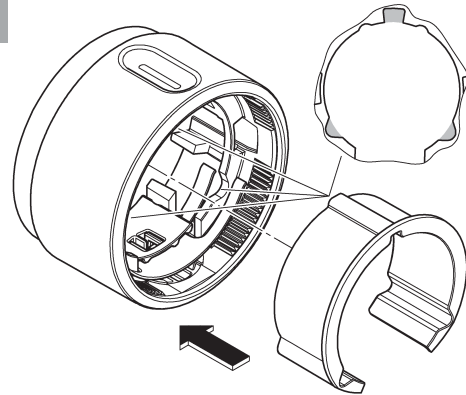
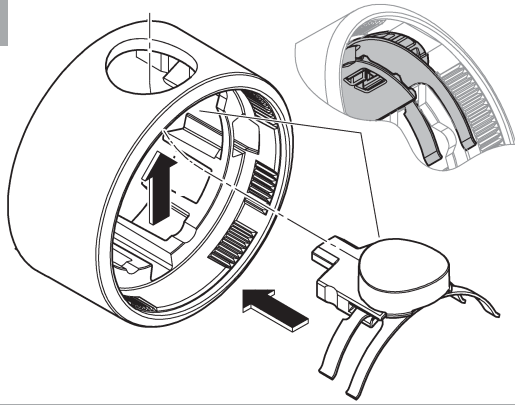
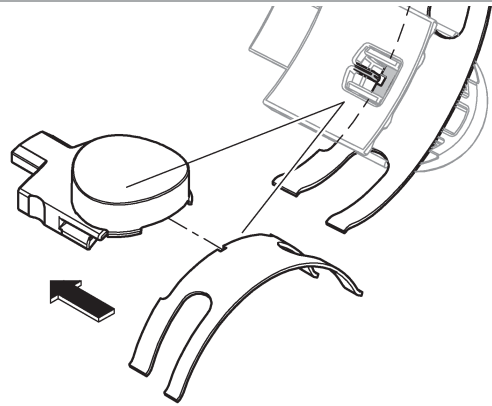
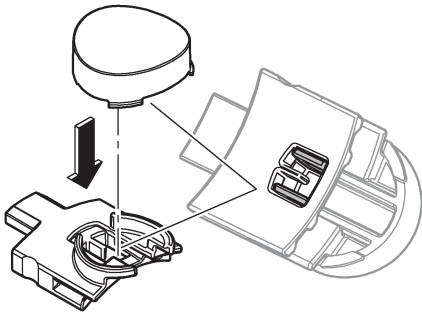


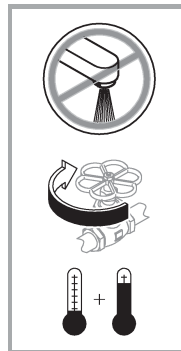
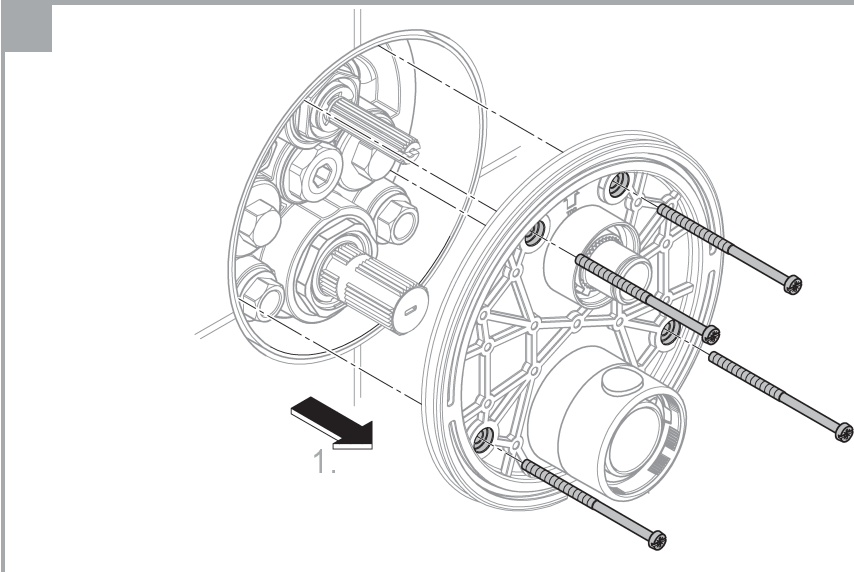
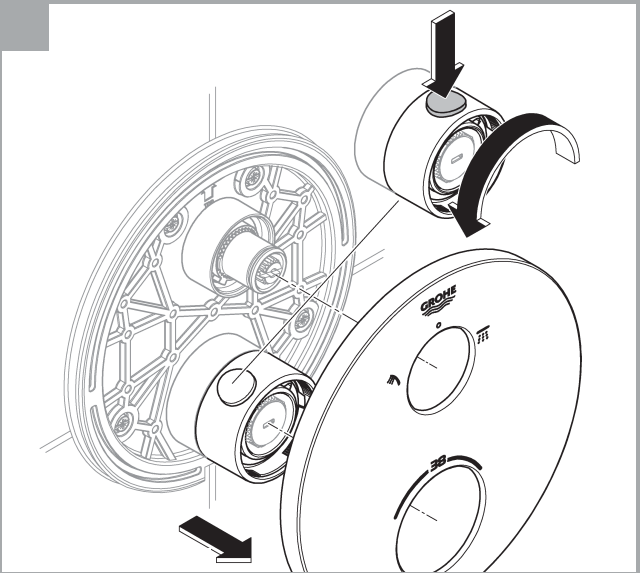
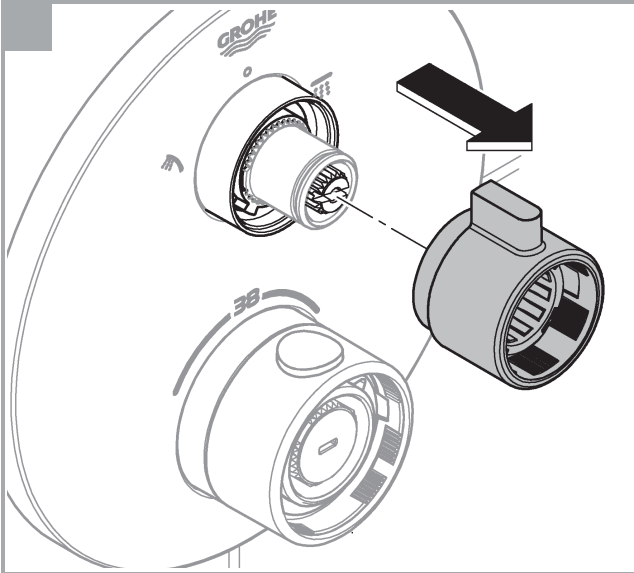
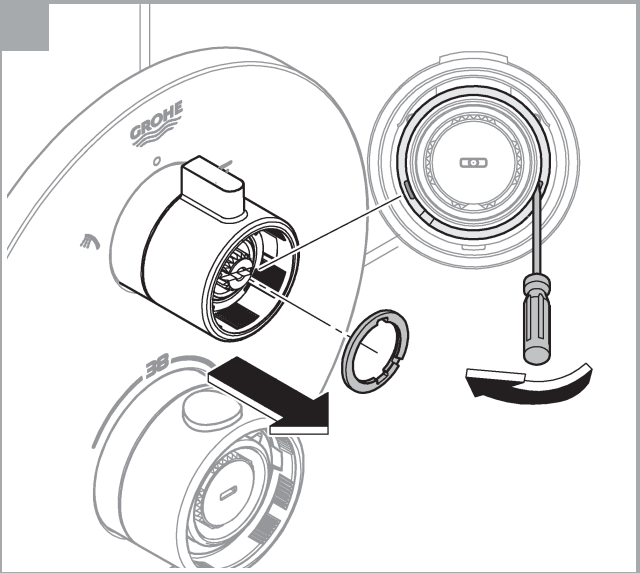
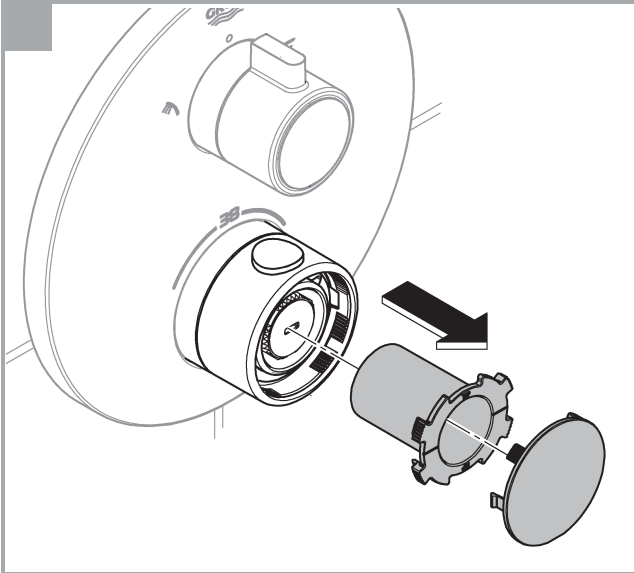
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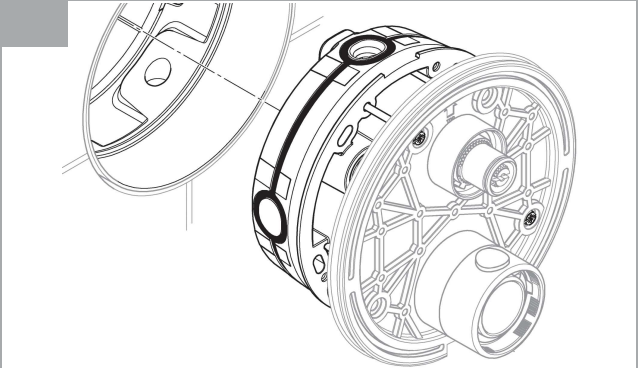
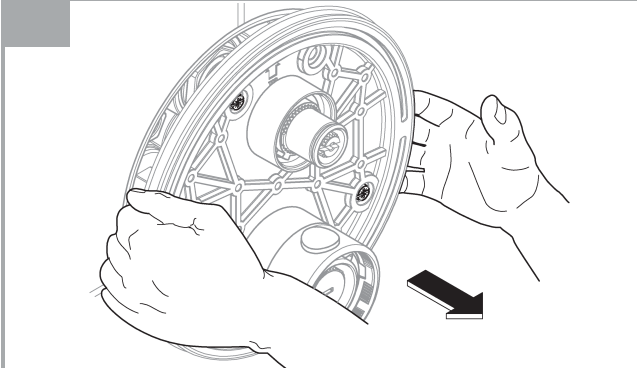
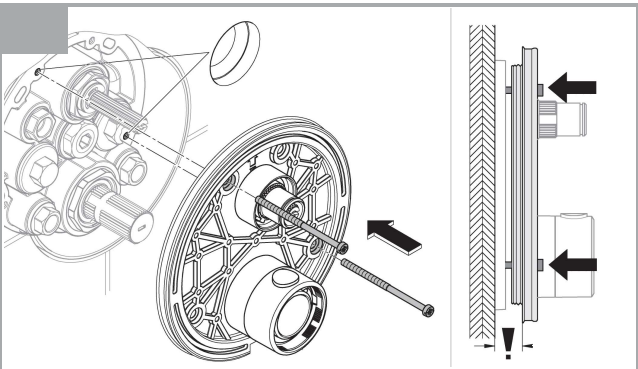
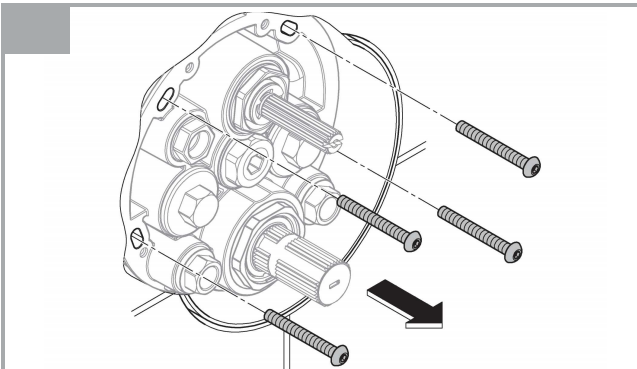
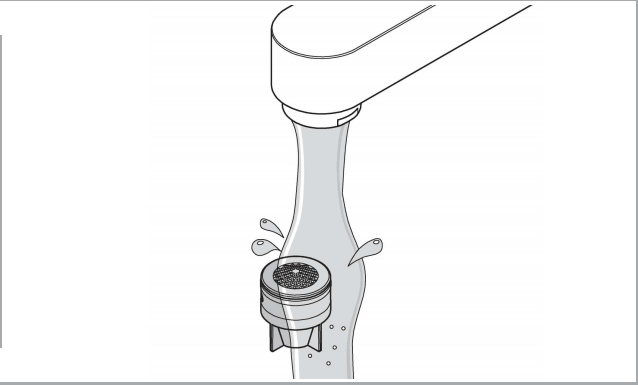
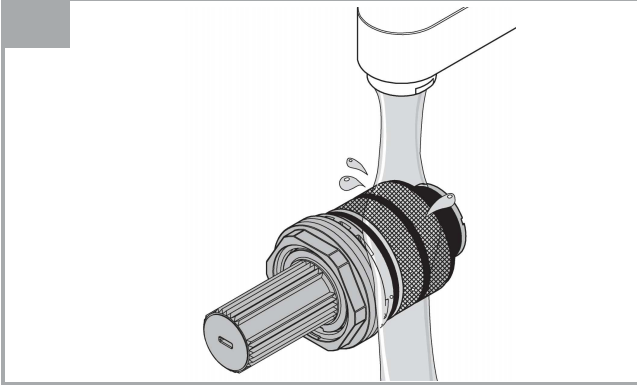
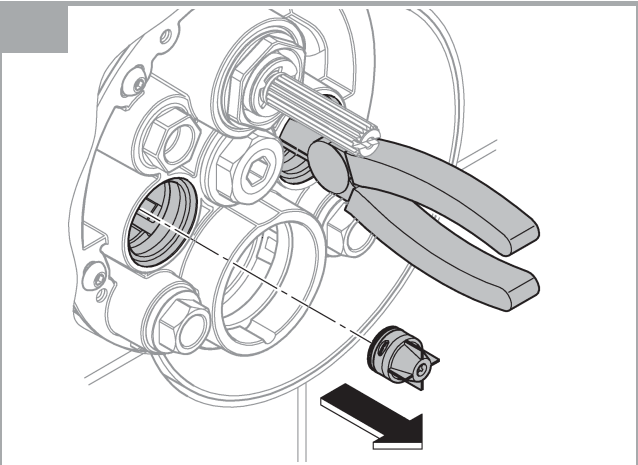
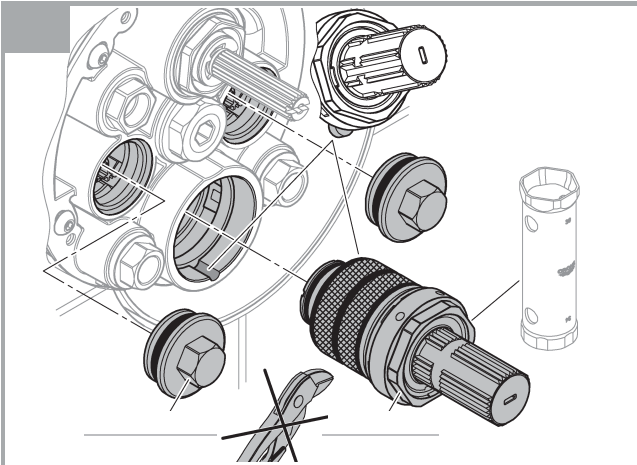












D

Sicherheitsinformation



Vermeidung von Verbrühungen

An Entnahmestellen mit besonderer Beachtung der Auslauftemperatur (Krankenhäuser, Schulen, Pflege- und Seniorenheime) wird empfohlen grundsätzlich Thermostate einzusetzen, die auf 43 °C begrenzt werden können. Dieses Produkt ist mit einem Temperaturendanschlag ausgestattet. Bei Duschanlagen in Kindergärten und speziellen Bereichen von Pflegeheimen wird generell empfohlen, dass die Temperatur 38 °C nicht überschreiten sollte. Hierzu Grohtherm Special Thermostate mit Sondergriff zur Erleichterung der thermischen Desinfektion und entsprechendem Sicherheitsanschlag verwenden. Geltende Normen (z.B. EN 806-2) und technische Regeln für Trinkwasser sind zu beachten.

Technische Daten

- Fließdruck
- Mindestfließdruck ohne nachgeschaltete Widerstände 0,5 bar
- Mindestfließdruck mit nachgeschalteten Widerständen 1 bar
- Empfohlen 1,5 - 5 bar
- Mindestdurchfluss 5 l/min
- Temperatur
- Warmwassereingang max. 70 °C
- Zur Energieeinsparung empfohlen 60 °C
- Thermische Desinfektion möglich
- Warmwassertemperatur am Versorgungsanschluss min. 2 °C höher als Mischwassertemperatur

Durchflüsse ohne nachgeschaltete Widerstände, siehe Seite 1. **Diese sind bei der Dimensionierung des Abflusses zu beachten!**

Folgende Sonderzubehöre sind erhältlich:

- Verlängerung 25mm (Best.-Nr.: 14 058)
- Für die Kombination mit Wannenfüll- und Überlaufgarnituren ist nach EN1717 eine zugelassene Sicherungseinrichtung vorgeschrieben (Best.-Nr.: 14 055)
- Vorabsperungen (Best.-Nr.: 14 053)

Thermostat Kompaktkartusche für vertauschte Wasserwege: Seitenverkehrter Anschluss, warm rechts - kalt links Kompaktkartusche austauschen (Best.-Nr.: 49 003)

Installation

- Zum Spülen, Stopfen (Y) demontieren, siehe Seite 2 Abb. [4].
- Kalt- und Warmwasserzufuhr öffnen und Anschlüsse auf Dichtheit prüfen!
- Ausrichten der Funktionseinheit um 6° möglich.

Justieren auf 38 °C

- Vor Inbetriebnahme, wenn die an der Entnahmestelle gemessene Mischwassertemperatur von der am Thermostat eingestellten Solltemperatur abweicht, siehe Seite 5 Abb. [15].
- Nach jeder Wartung an der Thermostat-Kompaktkartusche.

Temperaturbegrenzung

Der Temperaturbereich wird durch die Sicherheitssperre auf 38 °C begrenzt. Wird eine höhere Temperatur gewünscht, so kann durch Drücken der Taste die 38 °C-Sperre überschritten werden.

Temperaturendanschlag

Falls der Temperaturendanschlag bei 43 °C oder bei 46 °C liegen soll, muss der mitgelieferte Temperaturanschlag in die entsprechende Position eingesetzt werden, siehe Seite 7 - 9.

Achtung bei Frostgefahr

Bei Entleerung der Hausanlage sind die Thermostate gesondert zu entleeren, da sich im Kalt- und Warmwasseranschluss Rückflussverhinderer befinden.

GB

Safety information



Avoiding scalding

It is recommended that thermostatic devices able to limit the water temperature to 43 °C be installed at points of discharge with special attention to the outlet temperature (hospitals, schools, nursing and retirement homes). This product is equipped with a temperature end stop. It is generally recommended that the temperature of shower systems not exceed 38 °C in nurseries and specific areas in care homes. Use Grohtherm Special thermostats with special handles for facilitating thermal disinfection and with an appropriate safety end stop. Applicable standards (e.g. EN 806-2) and technical regulations for potable water must be observed.

Technical Data

- Flow pressure
- Minimum flow pressure without downstream resistances 0.5 bar
- Minimum flow pressure with downstream resistances 1 bar
- Recommended 1.5-5 bar
- Minimum flow rate 5 l/min
- Temperature
- Hot water supply max. 70 °C
- Recommended for energy saving 60 °C
- Thermal disinfection possible
- Hot water temperature at supply connection min. 2 °C 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 25mm (prod. no.: 14 058)
- An approved safety device is prescribed according to EN 1717 for combining with bath fillers and pop-up overflows (prod. no. 14 055)
- Isolating valves (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.

Adjusting to 38 °C

- 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.

F

Consignes de sécurité



Prévention contre les brûlures

Pour les points de puisage où la température de l'eau est particulièrement critique (hôpitaux, écoles, résidences médicalisées), il est recommandé d'utiliser systématiquement des thermostatiques pouvant être limités à 43 °C. Ce produit est équipé d'une butée de température. Pour les systèmes de douche dans les écoles maternelles et dans certaines parties de résidences médicalisées, il est généralement recommandé de ne pas dépasser une température de 38 °C. Utiliser dans ce cas les thermostatiques Grohtherm Special avec poignée spéciale pour l'aide à la désinfection thermique avec butée de sécurité. Respecter les normes (par ex. EN 806-2) ainsi que les réglementations techniques en vigueur concernant l'eau potable.

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. : 14 058)
- Pour la combinaison avec garnitures de trop-plein et de remplissage, la pose d'un dispositif de sécurité autorisé par la norme EN 1717 est obligatoire (réf. : 14 055)
- Robinets de barrage (réf. : 14 053)

Cartouche compacte de thermostatique pour raccords inversés : Raccords 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 raccords.
- Possibilité d'orienter l'unité de commande de 6°.

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.

Butée de température maximale

Si la température maximale doit être réglée sur 43 °C ou 46 °C, la butée de température fournie doit être installée dans la position correspondante, voir page 7-9.

Attention en cas de risque de gel

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

E

Información de seguridad



Prevención de quemaduras

En el punto de consumo, con especial atención en la temperatura de salida (hospitales, escuelas y residencias geriátricas y para la tercera edad), se recomienda utilizar termostatos que se puedan limitar hasta los 43 °C. Este producto está equipado con un tope limitador de temperatura. En las instalaciones de duchas en guarderías y zonas especiales de residencias geriátricas, se recomienda que la temperatura no sobrepase los 38 °C. Para ello, utilizar el termostato Special Grohtherm con regulador para facilitar la desinfección térmica y el tope de seguridad correspondiente. Tenga en cuenta las normas vigentes (p. ej., EN 806-2) y las especificaciones técnicas sobre el agua potable.

Datos técnicos

- Presión de trabajo
- Presión mínima de trabajo sin resistencias postacopladas 0,5 bar
- Presión mínima de trabajo con resistencias postacoplada 1 bar
- Recomendado 1,5-5 bar
- Caudal mínimo 5 l/min
- Temperatura
- Entrada de agua caliente máx. 70 °C
- Recomendado para ahorrar energía 60 °C
- Desinfección térmica posible

• La temperatura del agua caliente en la acometida de mín. 2 °C 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 25mm (n.º de pedido: 14 058)
- Según la normativa EN 1717, es necesario disponer de un dispositivo de seguridad autorizado para combinar el juego para llenado y el juego para rebose (n.º de pedido: 14 055)
- Bloqueos de seguridad (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)

Portate senza resistenze a valle, vedi pagina 1. **Queste devono essere rispettate durante il dimensionamento dello scarico!**

Sono disponibili i seguenti accessori speciali:

- Prolunga 25mm (N. ord.: 14 058)
- Per la combinazione con dispositivo di riempimento e set di troppo pieno della vasca è disponibile un dispositivo di sicurezza omologato EN 1717 (N. ord.: 14 055)
- Valvole di intercettazione (N. ord.: 14 053)

Cartuccia compatta termostato per vie d'acqua scambiate:
Sostituzione cartuccia compatta per raccordi invertiti, caldo a destra - freddo a sinistra (N. ord.: 49 003)

Installazione

- Per il lavaggio smontare il tappo (Y), vedi pagina 2 fig. [4].
- Aprire l'entrata dell'acqua calda e fredda e controllare la tenuta dei raccordi!
- Possibile allineare l'unità funzionale di 6°.

Regolare a 38 °C

- Da effettuare prima della messa in esercizio, se la temperatura dell'acqua miscelata, misurata dal punto di prelievo, si scosta da quella desiderata regolata dal termostato, vedi pagina 6 fig. [20].
- Dopo ogni intervento di manutenzione alla cartuccia compatta del termostato.

Limitazione di temperatura

L'intervallo di temperatura è limitato a 38 °C dal blocco di sicurezza. Se si desidera una temperatura più alta, premere il tasto per superare il limite dei 38 °C.

Limitatore di temperatura con blocco

Se il limitatore di temperatura con blocco deve essere impostato su 43 °C o 46 °C, il limitatore deve essere montato nella posizione corrispondente, vedi pagina 7-9.

Attenzione in caso di gelo

In caso di scarico dell'impianto domestico, è necessario svuotare separatamente i termostati, dato che nei raccordi dell'acqua calda e di quella fredda vi sono dei dispositivi anti-riflusso.



Informazioni di sicurezza



Per evitare le ustioni

Nei punti di prelievo in cui è necessario prestare particolare attenzione alla temperatura di scarico (ospedali, scuole, case di riposo per anziani) si consiglia di impiegare principalmente termostati che consentano di limitare la temperatura a 43 °C. Questo prodotto è provvisto di limitatore di temperatura con blocco. Nei sistemi doccia presenti negli asili e nelle aree particolari delle case di riposo, in genere è opportuno che la temperatura non superi i 38 °C. A tal fine bisogna utilizzare i termostati Grohtherm Special, che dispongono di una manopola speciale in grado di semplificare la disinfezione termica e di un apposito fermo di sicurezza. Osservare le norme in vigore (ad es. EN 806-2) e le regole tecniche in materia di acqua potabile.

Dati tecnici

- Pressione idraulica
- Pressione minima di portata, senza resistenza a valle 0,5 bar
- Pressione minima di portata con resistenza a valle 1 bar
- Consigliata 1,5-5 bar
- Portata minima 5 l/min
- Temperatura
- Ingresso acqua calda max. 70 °C
- Consigliata per il risparmio di energia 60 °C
- Disinfezione termica consentita
- Temperatura dell'acqua calda sul raccordo di alimentazione superiore di min. 2 °C rispetto alla temperatura dell'acqua miscelata



Veiligheidsinformatie



Voorkomen van brandwonden

Bij aftappunten waar speciale aandacht aan de uitlooptemperatuur moet worden besteed (ziekenhuizen, scholen, verzorgingstehuizen en woonzorgcentra), wordt het gebruik van thermostaten aanbevolen die op 43 °C kunnen worden begrensd. Dit product is voorzien van een temperatuurbegrenzer. Voor douche-installaties in kleuterscholen en specifieke gebieden in verzorgingstehuizen geldt als algemene aanbeveling dat de temperatuur 38 °C niet mag overschrijden. Gebruik hiervoor de Grohtherm Special-thermostaten met speciale greep voor eenvoudige thermische desinfectie en een overeenkomende veiligheidsbegrenzer. De geldende normen (bijv. EN 806-2) en de technische regels voor drinkwater moeten worden nageleefd.

Säkerhetsinformation



Prevention av skållskador

För tappställen där vattentemperaturen måste observeras särskilt (sjukhus, skolor, äldreboenden) rekommenderas i princip användning av termostater som kan begränsas till 43 °C. Denna produkt är utrustad med temperaturbegränsare. För duschsystem i förskolor och särskilda områden i vårdhem rekommenderas att temperaturen generellt inte överstiger 38 °C. Här används Grotherm Special-termostater med specialhandtag till lättad termisk desinfektion med den motsvarande säkerhetsbegränsningen. Tillämpliga normer (t.ex. EN 806-2) och tekniska föreskrifter för dricksvatten måste följas.

Tekniska data

- Flödestryck
 - Minsta flödestryck utan efterkopplade motstånd 0,5 bar
 - Minsta flödestryck med efterkopplade motstånd 1 bar
 - Rekommenderat 1,5–5 bar
- Minsta flöde 5 l/min
- Temperatur
 - Varmvattentillopp max. 70 °C
 - Rekommendation för energibesparing 60 °C
 - Termisk desinfektion kan användas
- Varmvattentemperatur vid försörjningsanslutning min. 2 °C högre än blandvattentemperatur

Genomflöden utan efterkopplade motstånd, se sidan 1. **Dessa ska observeras vid dimensioneringen av avloppet!**

Följande extra tillbehör finns tillgängliga:

- Förlängning 25 mm (best.-nr: 14 058)
- För kombination med badkarspåfyllnings- och bräddavloppsgarnityr krävs en godkänd säkerhetsanordning enligt EN 1717 (best.-nr: 14 055)
- Säkerhetsspärrar (best.-nr: 14 053)

Termostattpatron för förväxlade vattenanslutningar: Sidoförväxlade anslutningar, varmt höger - kallt vänster, byt patron (best.-nr: 49 003)

Installation

- För spolning, demontera pluggarna (Y), se sidan 2 fig. [4].
- Öppna kallvatten- och varmvattentillförseln och kontrollera anslutningarnas täthet!
- Funktionsenheten kan justeras med 6°.

Ställ in på 38 °C

- Före idrifttagning, om den vid tappstället uppmätta blandvattentemperaturen avviker från termostatinställningen, se sidan 5 fig. [15].
- Efter varje underhåll av termostatpatronen.

Temperaturbegränsning

Temperaturområdet begränsas av säkerhetsspärren vid 38 °C. Om en högre temperatur önskas kan 38 °C-temperaturspärren överskridas genom att knappen trycks in.

Temperaturbegränsare

Om temperaturen ska vara inställd på högst 43 °C eller 46 °C måste den medföljande temperaturbegränsaren ställas in på motsvarande position, se sidan 7-9.

Vid frostrisk

Töms hussystemet är det viktigt att tömma termostaterna separat, eftersom det finns backflödesspärrar monterade i kallvatten- och varmvattenanslutningen.