



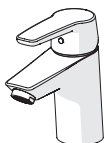
Oras Saga

INSTALLATION AND MAINTENANCE GUIDE



Contents

CZ Obsah	FI Sisällysluettelo	NL Inhoud	SE Innehållsförteckning
DE Inhaltsübersicht	FR Sommaire	NO Innhold	SK Obsah
DK Indholdsfortegnelse	IT Indice	PL Spis treści	UA Зміст
EE Sisukord	LT Turinys	RO Cuprins	
ES Contenidos	LV Saturs	RU Содержание	



Technical data.....	4-7
Installation	12, 16-17
Operation.....	18
Maintenance.....	18-20, 23
Spare parts.....	24



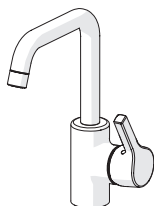
Technical data.....	7
Installation	14, 16-17, 23
Operation.....	18
Maintenance.....	18-21, 23
Spare parts.....	25



Technical data.....	8
Installation	15-16
Operation.....	18
Maintenance.....	18-20, 22-23
Spare parts.....	25



Technical data.....	9-10
Installation	12, 16-17
Operation.....	18
Maintenance.....	18-20, 23
Spare parts.....	26



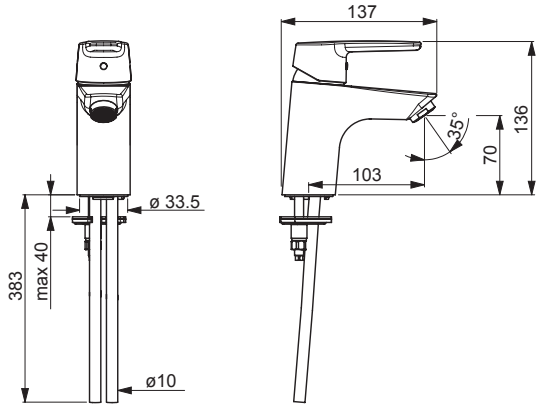
Technical data.....	10
Installation	14, 16-17, 23
Operation.....	18
Maintenance.....	18-21, 23
Spare parts.....	27



Technical data.....	11
Installation	15-16
Operation.....	18
Maintenance.....	18-20, 22-23
Spare parts.....	27

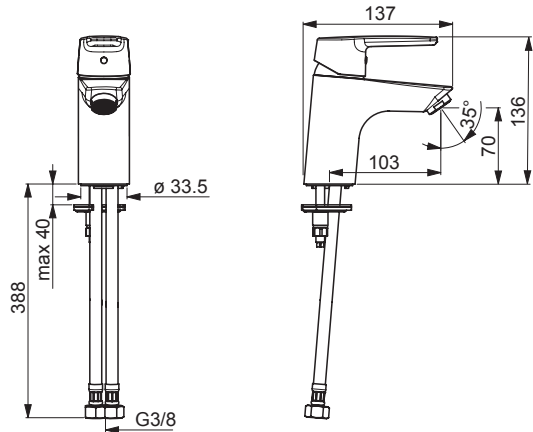
3910

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



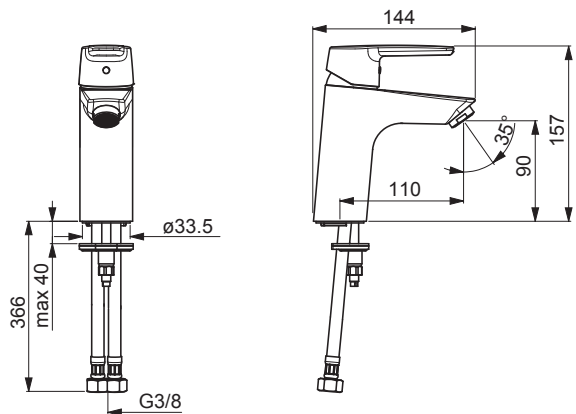
3910F (3910FK)

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



3911F

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



3904

EN 817

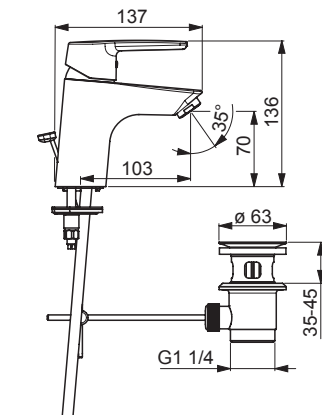
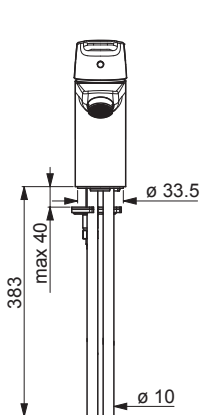
I (ISO 3822) Oras lab.

50 -1000 kPa

0.1 l/s (300 kPa)

200 kPa (0.1 l/s)

max. +80°C



3904F (3904F-102, 3904F-104, 3904F-105)

EN 817

I (ISO 3822) Oras lab.

50 -1000 kPa

0.1 l/s (300 kPa)

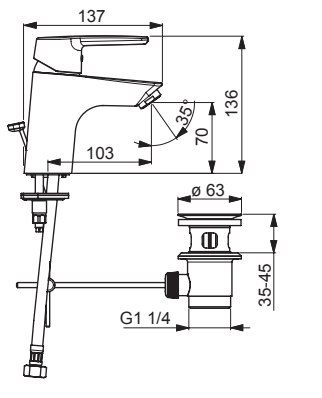
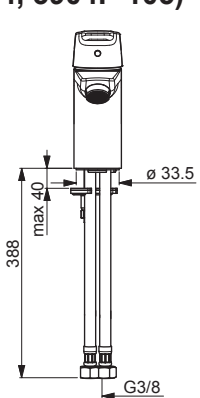
0.028 l/s (300 kPa) 3904F-102

0.056 l/s (300 kPa) 3904F-104

0.07 l/s (300 kPa) 3904F-105

200 kPa (0.1 l/s)

max. +80°C



3914F

EN 817

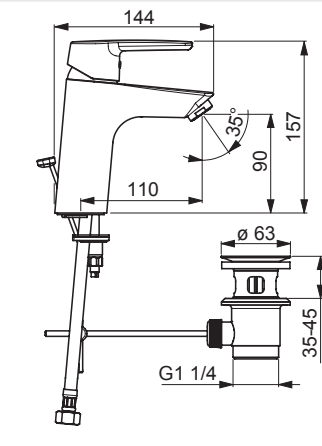
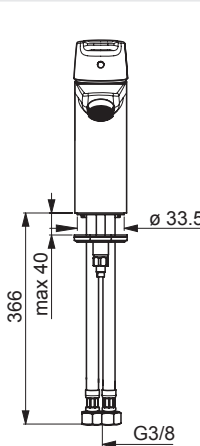
I (ISO 3822) Oras lab.

50 -1000 kPa

0.1 l/s (300 kPa)

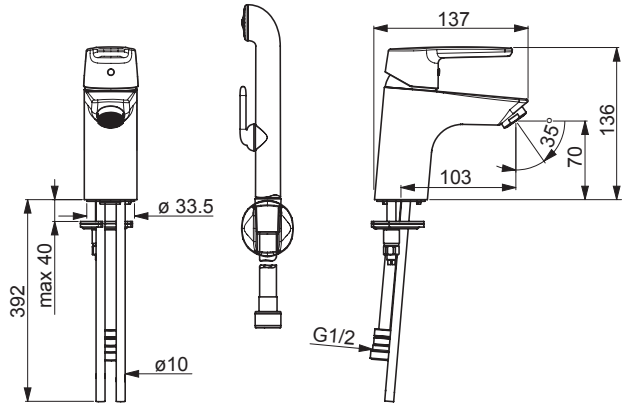
200 kPa (0.1 l/s)

max. +80°C



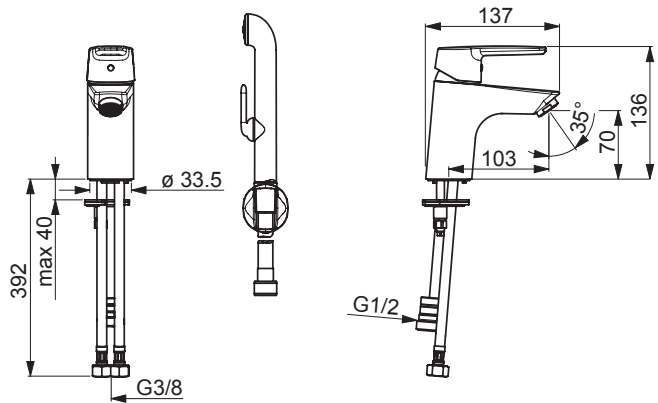
3912

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



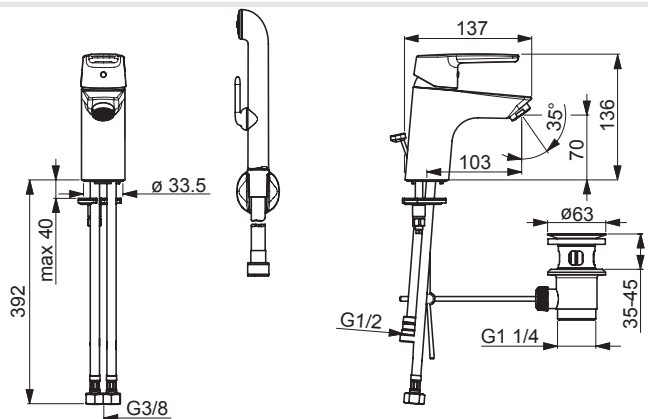
3912F

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



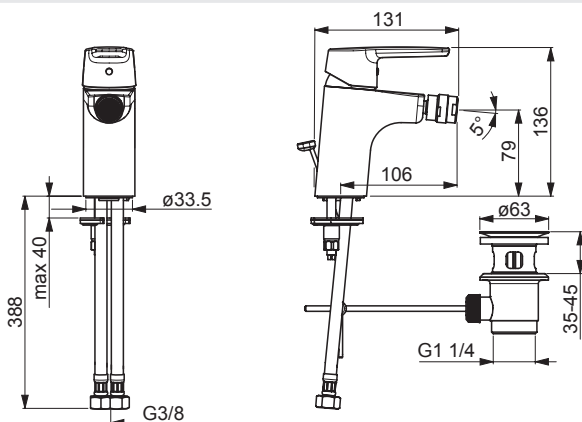
3908F

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



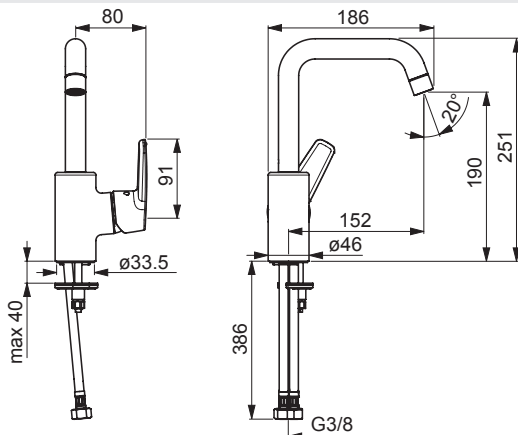
3918F

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



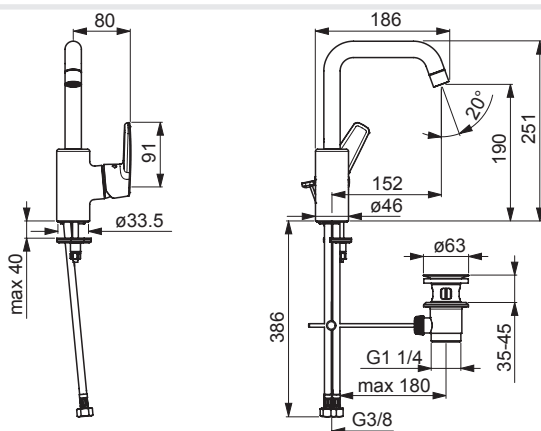
3907F

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



3909F

EN 817
 I (ISO 3822) Oras lab.
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



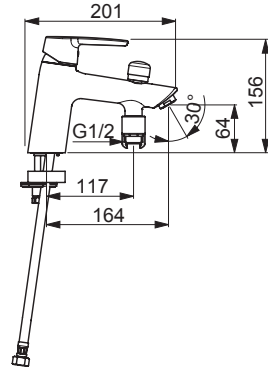
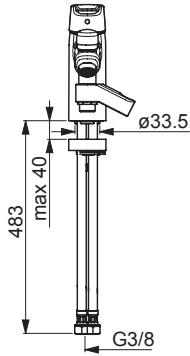
3946F

EN 817

50 -1000 kPa

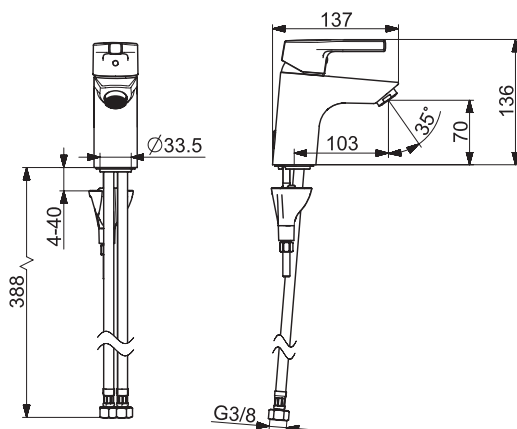
0.33 l/s (300 kPa)

max. +80°C



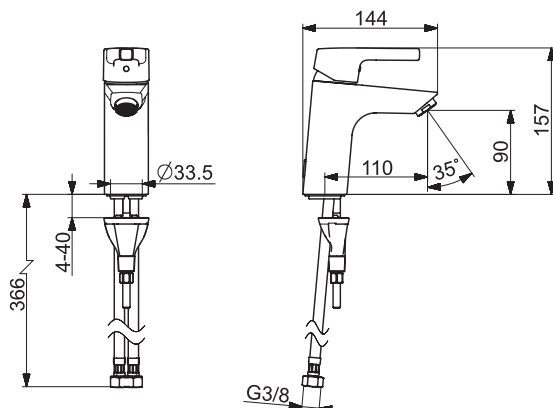
3910FH, 3910FHK

EN 817
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



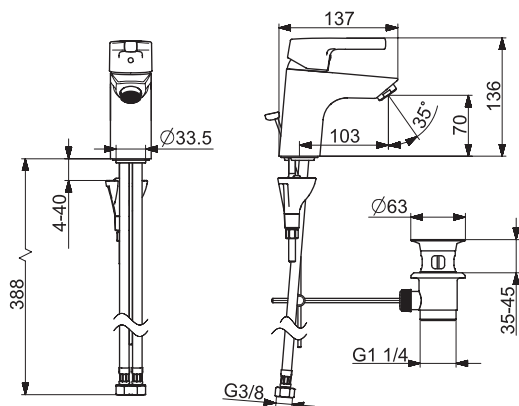
3911FH

EN 817
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



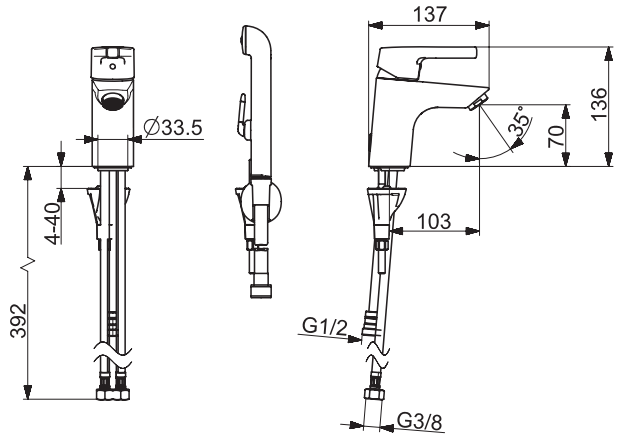
3904FH

EN 817
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



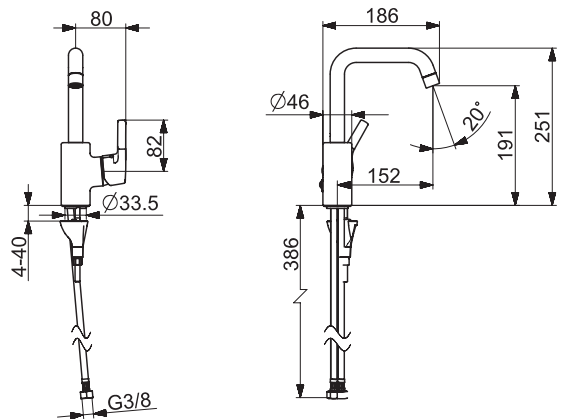
3912FH

EN 817
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



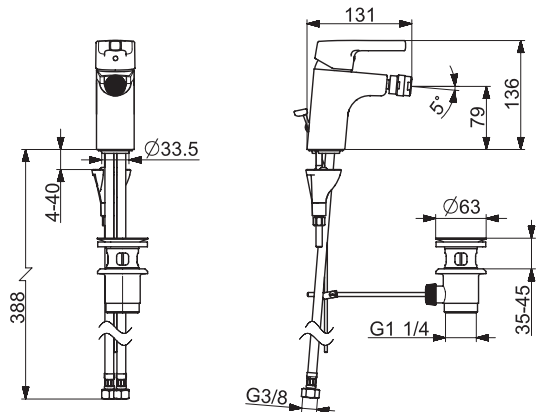
3907FH

EN 817
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



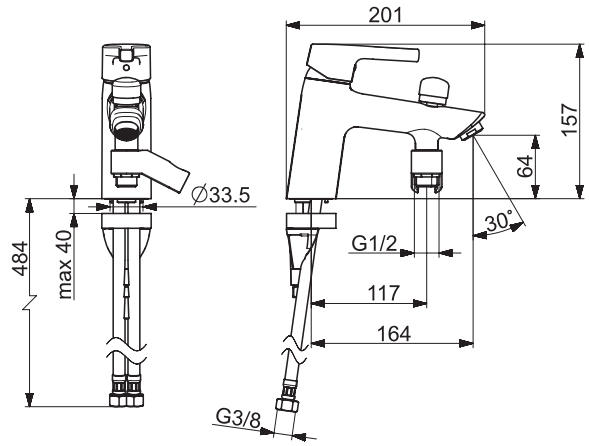
3918FH

EN 817
 50 -1000 kPa
 0.1 l/s (300 kPa)
 200 kPa (0.1 l/s)
 max. +80°C



3946FH

EN 817
 50 -1000 kPa
 0.12 l/s (300 kPa)
 220 kPa (0.1 l/s)
 max. +80°C



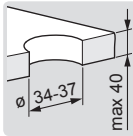
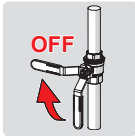
Installation

CZ Montáž
DE Montage
DK Installation
EE Paigaldus
ES Montaje

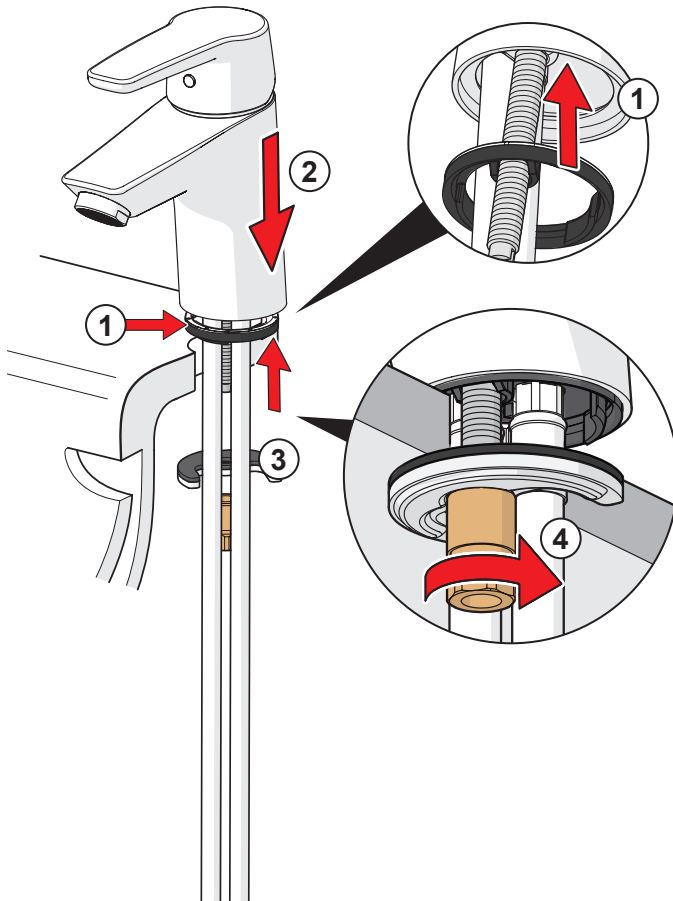
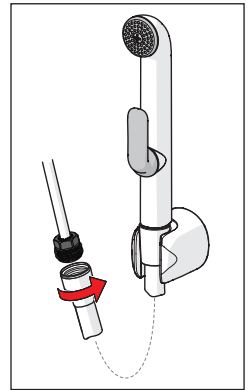
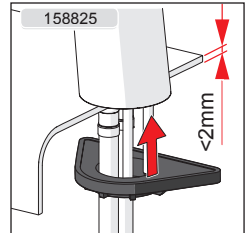
FI Asennus
FR Installation
IT Montaggio
LT Montavimas
LV Montāža

NL Installatie
NO Montering
PL Instalacja
RO Instalare
RU Установка

SE Installation
SK Inštalácia
UA Встановлення



max.
1600 kPa



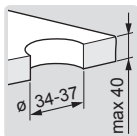
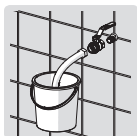
Installation

CZ Montáž
DE Montage
DK Installation
EE Paigaldus
ES Montaje

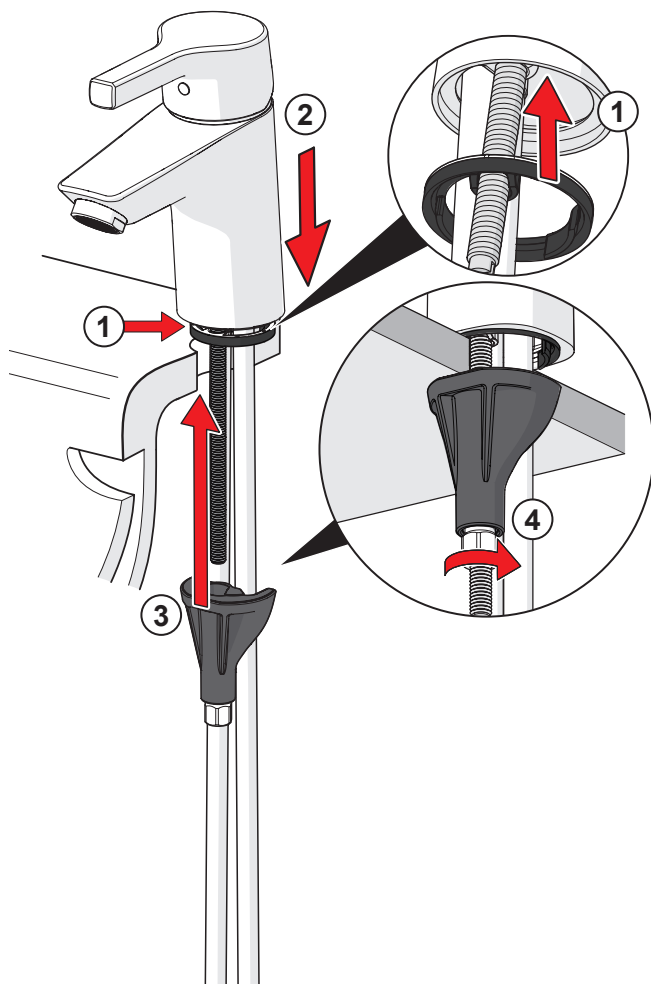
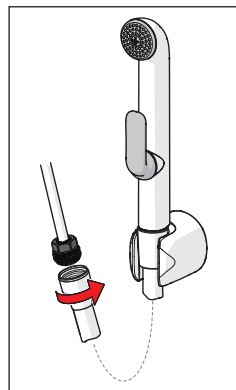
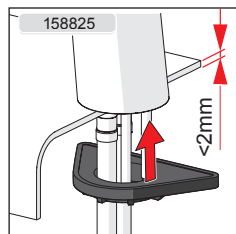
FI Asennus
FR Installation
IT Montaggio
LT Montavimas
LV Montāža

NL Installatie
NO Montering
PL Instalacja
RO Instalare
RU Установка

SE Installation
SK Inštalácia
UA Встановлення



max.
1600 kPa



Installation

CZ Montáž

DE Montage

DK Installation

EE Paigaldus

ES Montaje

FI Asennus

FR Installation

IT Montaggio

LT Montavimas

LV Montāža

NL Installatie

NO Montering

PL Instalacja

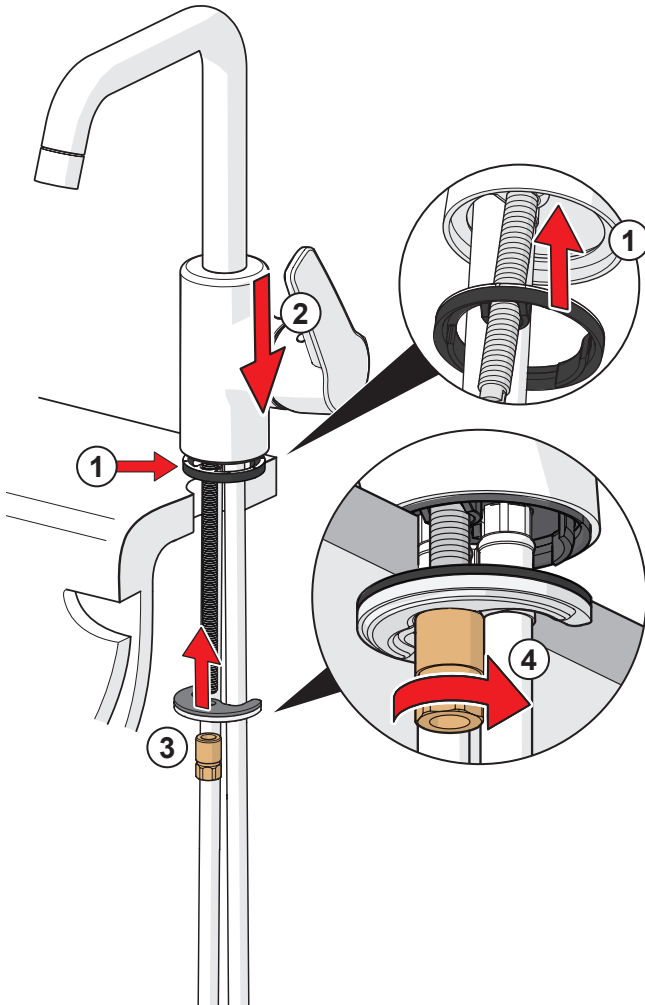
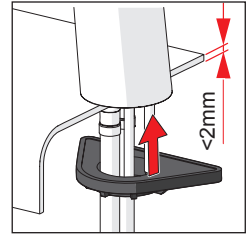
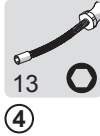
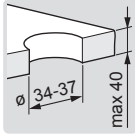
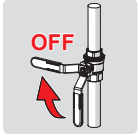
RO Instalare

RU Установка

SE Installation

SK Inštalácia

UA Встановлення



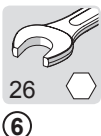
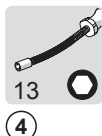
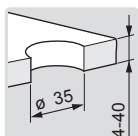
Installation

CZ Montáž
DE Montage
DK Installation
EE Paigaldus
ES Montaje

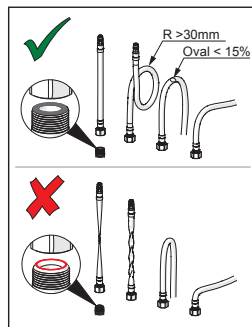
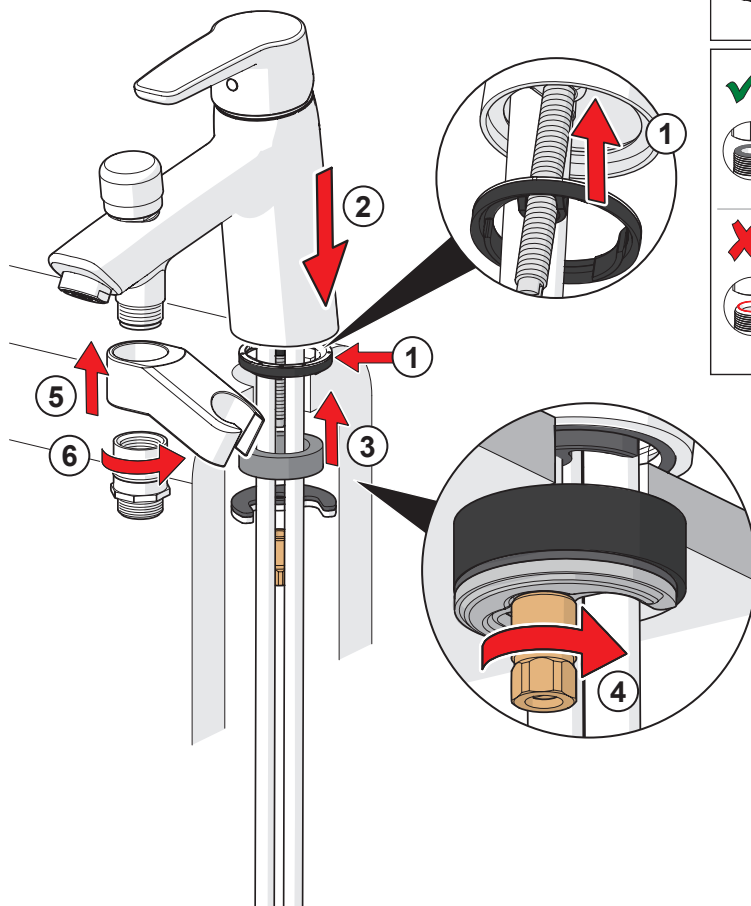
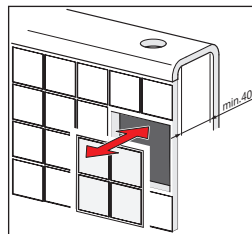
FI Asennus
FR Installation
IT Montaggio
LT Montavimas
LV Montāža

NL Installatie
NO Montering
PL Instalacja
RO Instalare
RU Установка

SE Installation
SK Inštalácia
UA Встановлення



max.
1600 kPa



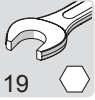
Installation

CZ Montáž
DE Montage
DK Installation
EE Paigaldus
ES Montaje

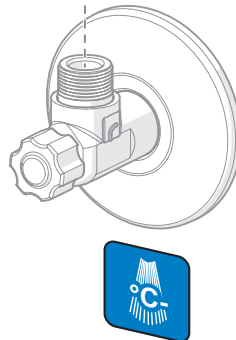
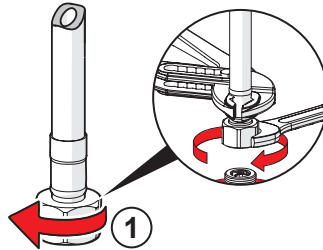
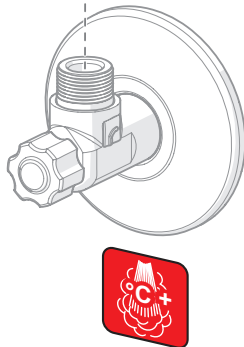
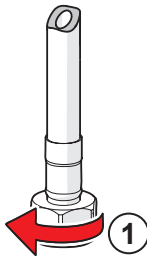
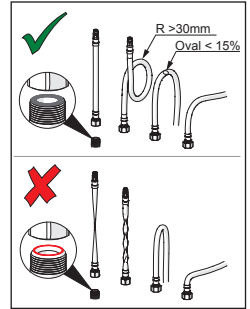
FI Asennus
FR Installation
IT Montaggio
LT Montavimas
LV Montāža

NL Installatie
NO Montering
PL Instalacja
RO Instalare
RU Установка

SE Installation
SK Inštalácia
UA Встановлення



①



Installation

CZ Montáž
DE Montage
DK Installation
EE Paigaldus
ES Montaje

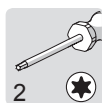
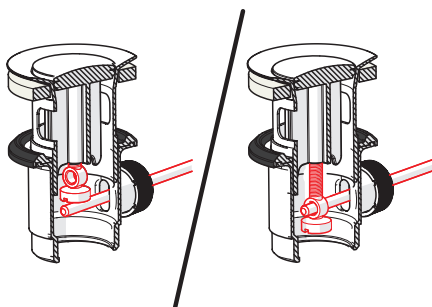
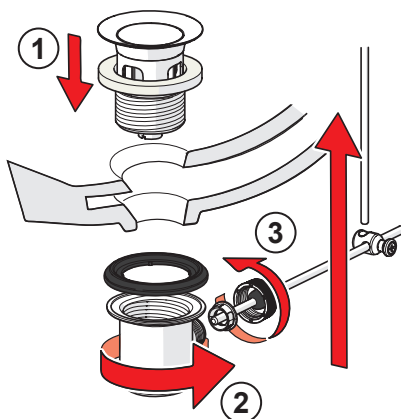
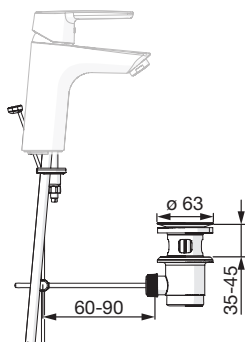
FI Asennus
FR Installation
IT Montaggio
LT Montavimas
LV Montāža

NL Installatie
NO Monterng
PL Instalacja
RO Instalare
RU Установка

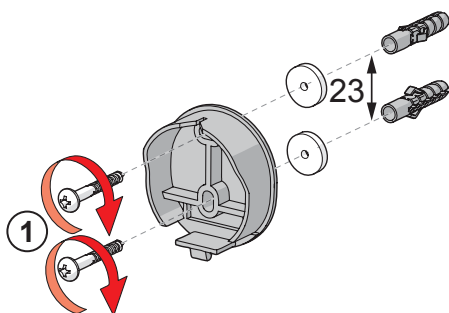
SE Installation
SK Inštalácia
UA Встановлення



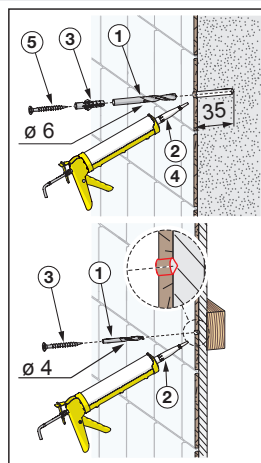
1 2 3



1



2



Operation

CZ Funkce

DE Funktion

DK Betjening

EE Toimimine

ES Servicio

FI Toiminta

FR Utilisation

IT Funzionamento

LT Veikimo principas

LV Darbības princips

NL Bediening

NO Funksjon

PL Działanie

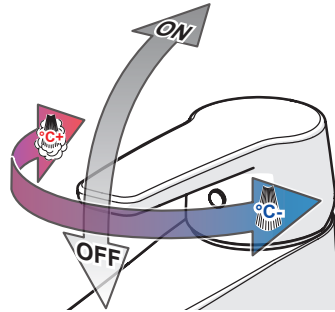
RO Funcționare

RU Принцип действия

SE Funktion

SK Prevádzka

UA Принцип дії



Limiting the flow rate

CZ Omezení průtoku

DE Begrenzung der Durchflussmenge

DK Begrænsning af vandmængden

EE Vooluhulga piiramine

ES Limitación de la tasa de flujo

FI Virtaaman rajoitus

FR Limitation du débit

IT Limitazione della portata

LT Vandens srovės reguliavimas

LV Ūdens plūsmas ierobežošana

NL Begrenzing van de doorstroomhoeveelheid

NO Begrensning av vannmengde

PL Ograniczenie wielkości strumienia

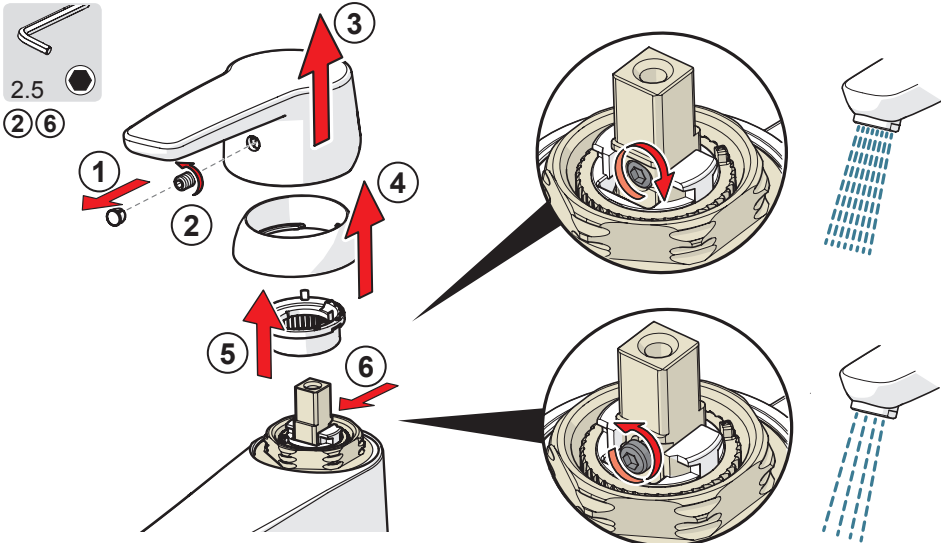
RO Limitarea debitului

RU Регулирование потока

SE Flödesbegränsning

SK Obmedzenie prietoku

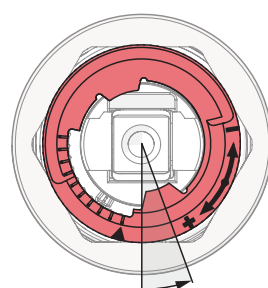
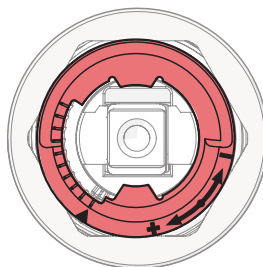
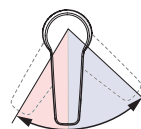
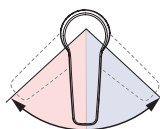
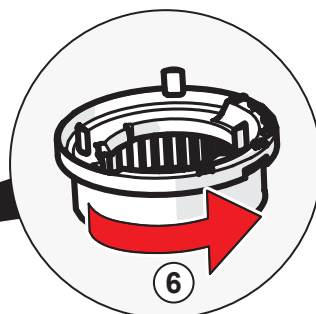
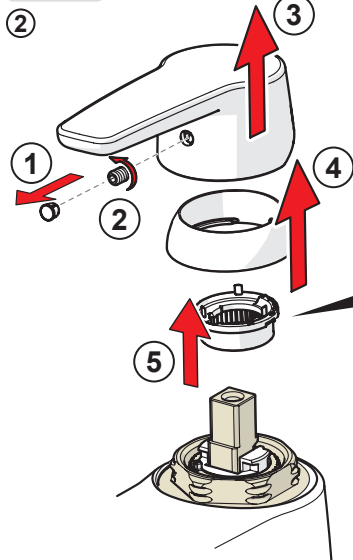
UA Регулювання потоку



Limiting temperature

CZ Omezení teploty vody
DE Temperaturbegrenzung
DK Forindstilling af vandets max. temperatur
EE Temperatuuri piiramine seadeosast
ES Limitación de la temperatura
FI Lämpötilan rajoitus
FR Limitation de la température
IT Limitazione della temperatura
LT Temperatūros apribojimas
LV Karstā ūdens temperatūras ierobežošana

NL Perlator vervangent
NO Begrenzing temperatur
PL Ograniczenie temperatury
RO Limitarea temperaturii
RU Ограничение температуры в регулирующем блоке
SE Begränsning av vattnets max. temperatur
SK Obmedzenie teploty
UA Обмеження температури в регулюючому блоці



To change the cartridge

CZ Výměna kartuše

DE Ein- und Ausbau der Kartusche

DK Udskiftning af reguleringskassette (unit)

EE Seadeosa vahetus

ES Montaje del cartucho

FI Säätöosan vaihto

FR Montage et démontage de la cartouche

IT Montaggio della cartuccia

LT Valdanciosios kasetės pakeitimas

LV Regulēšanas mehānisma kasetes maiņa

NL Vervangen van het keramische binnenwerk

NO Skifting av kassett

PL Wymiana modułu sterującego

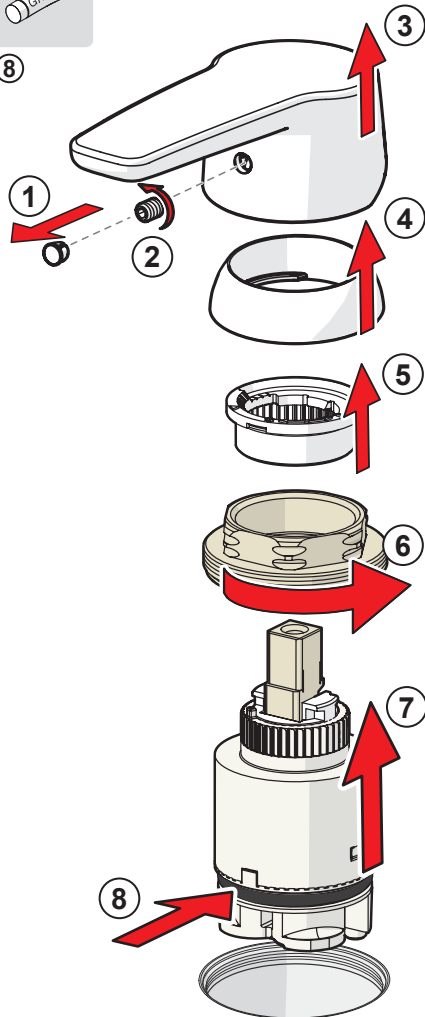
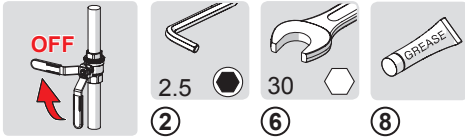
RO Înlocuirea cartușului

RU Замена регулировочного блока

SE Byte av kassett

SK Výměna kartuše

UA Заміна регульовального блоку



To change the spout's swing angle

CZ Výměna výtokového ramene

DE Den Schwenkbereich des Auslaufs ändern

DK Ændring af tudens svingradius

EE Jooksutoru pöördumisingurga muutmise

ES Variación del radio d'azione della bocca

FI Juoksuputken kääntymiskulman muuttaminen

FR Changement de la rotation du bec

IT Per modificare l'angolo di rotazione della bocca

LT Snapelio posūkiuo kampo pakeitimas

LV Iztekas pagriezienu leņķa maiņa

NL Om de draaihoek van de uitloop te wijzigen

NO Begrensning av tudens svingutslag

PL W celu zmiany kąta obrotu wylewki

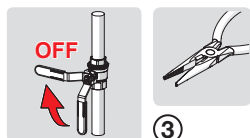
RO Modificarea unghiului de rotație a pipei

RU Изменение угла поворота излива

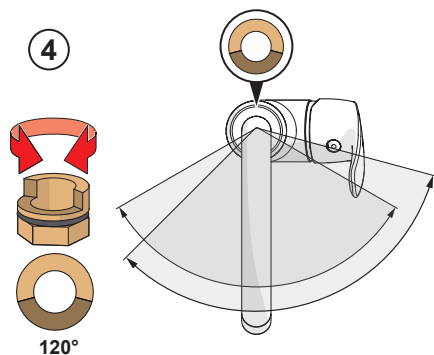
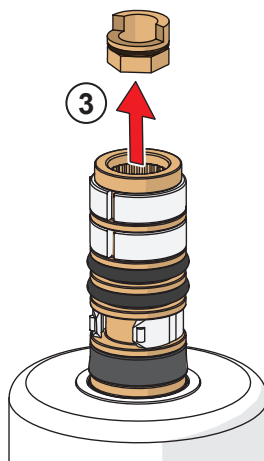
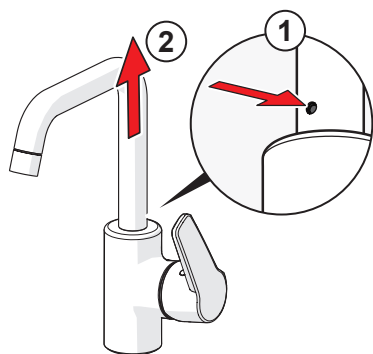
SE Ändring av utloppspipens svängradie

SK Možnosť zmeny veľkosti uhlu otáčení výtokového ramena

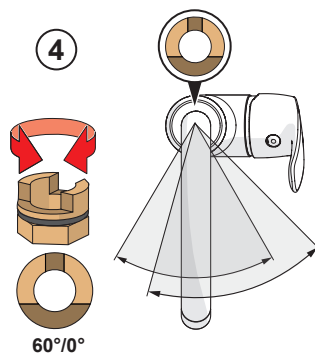
UA Зміна кута повороту виливу



③



159670/10



159667/10

Changing the diverter

CZ Výměna přepínače

DE Wartung des Umstellers

DK Udskiftning af omskifter

EE Suundvahetaja vahetamine

ES Cambiar la inversor

FI Vaihtimen vaihto

FR Changement de l'inverseur

IT Sostituzione della deviatore

LT Perjungiklio pakeitimas

LV Trīseju vārsts maiņa

NL Omsteller vervangen

NO Bytting av omkaster

PL Wymiana przełącznika

RO Înlocuirea divertorului

RU Замена переключателя

SE Byte av omkastare

SK Výměna prepínača

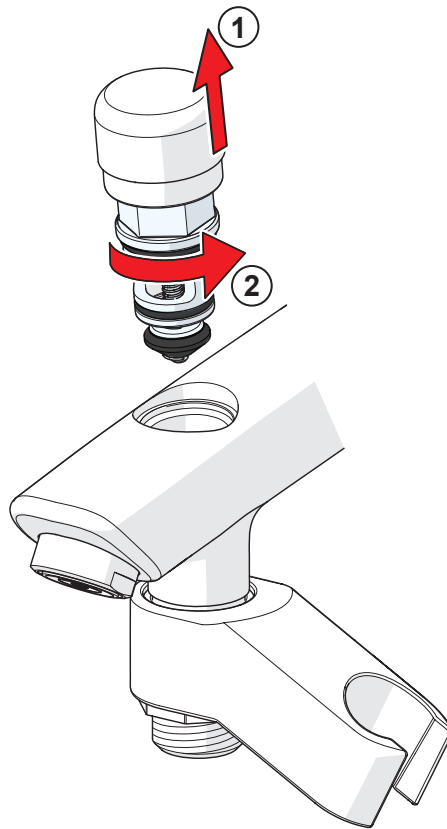
UA Заміна перемикача



19

①

3946F, 3946FH



Cleaning the faucet

CZ Čištění baterie

DE Reinigung der Armatur

DK Rengøring af armaturet

EE Puhastamine

ES Limpieza de la grifería

FI Puhdistus

FR Nettoyage du robinet

IT Pulizia della rubinetteria

LT Maišytuvo valymas

LV Krāna tīrīšana

NL Reinigen van de kraan

NO Rengjøring av kranen

PL Czyszczenie baterii

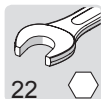
RO Curățire

RU Чистка смесителя

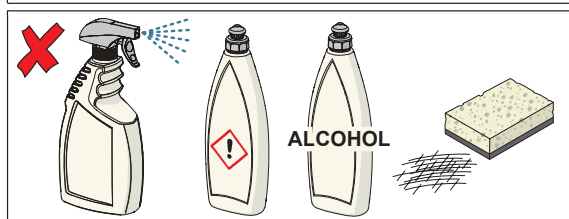
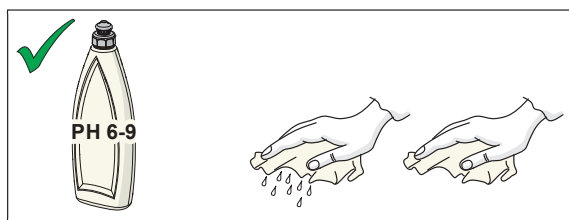
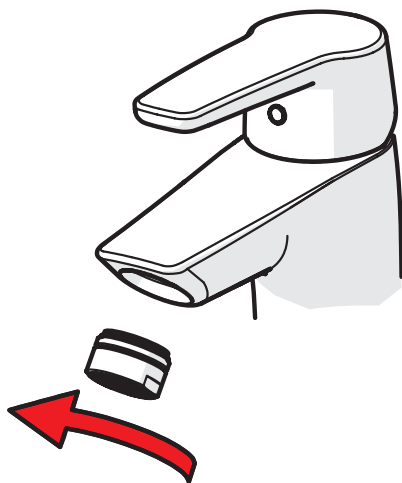
SE Rengöring av blandarna

SK Čistenie vodovodnej batérie

UA Чищення змішувача



22



Spare parts

CZ Náhradní díly

FI Varaosat

NL Reserve-
onderdelen

RU Запасные части

DE Ersatzteile

FR Pièces détachées

NO Reservedeler

SE Reservdelar

DK Reservedele

IT Pezzi di ricambio

PL Części zamienne

SK Náhradné diely

EE Varuosad

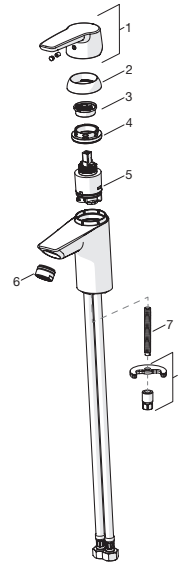
LT Atsarginės dalys

RO Piese de schimb

UA Запасні частини

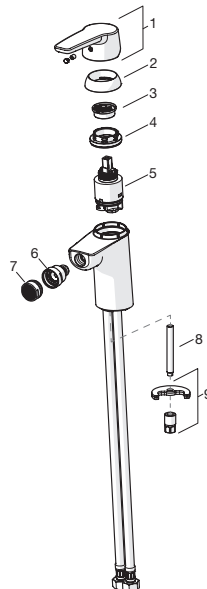
3904, 3904F, 3908F, 3910, 3910F, 3911F, 3912, 3912F, 3914F

- 1 1000801V
- 2 601967V
- 3 601973V
- 4 601968V
- 5 601969V
- 6 601974V
- 6 601255V (3904F-102)
- 6 601434V (3904F-104)
- 6 601166V (3904F-105)
- 7 601970V
- 8 601985V



3918F

- 1 1000801V
- 2 601967V
- 3 601973V
- 4 601968V
- 5 601969V
- 6 601976V
- 7 601974V
- 8 601970V
- 9 601985V

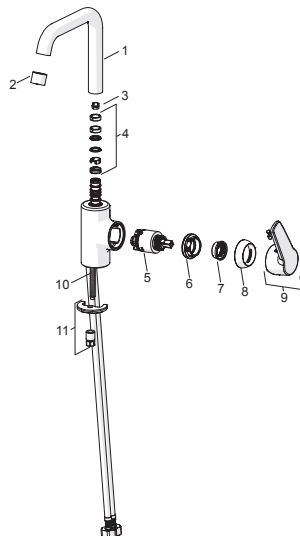


Spare parts

CZ Náhradní díly	FI Varaosat	NL Reserve- onderdelen	RU Запасные части
DE Ersatzteile	FR Pièces détachées	NO Reservedeler	SE Reservdelar
DK Reservedele	IT Pezzi di ricambio	PL Części zamienne	SK Náhradné diely
EE Varuosad	LT Atsarginės dalys	RO Piese de schimb	UA Запасні частини
ES Piezas de recambio	LV Rezerves daļas		

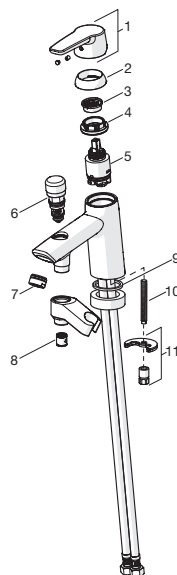
3907F, 3909F

- 1 1001051V
- 2 1001071V
- 3 159670/10 120°
- 3 159667V 60°/0°
- 4 1001098V
- 5 601969V
- 6 601968V
- 7 601973V
- 8 601967V
- 9 1000986V
- 10 601970V
- 11 601985V



3946F

- 1 1000801V
- 2 601967V
- 3 601973V
- 4 601968V
- 5 601969V
- 6 602623V
- 7 602104V
- 8 601989V
- 9 602624/10
- 10 601970V
- 11 601985V



Spare parts

CZ Náhradní díly

FI Varaosat

NL Reserve-
onderdelen

RU Запасные части

DE Ersatzteile

FR Pièces détachées

NO Reservedeler

SE Reservdelar

DK Reservedele

IT Pezzi di ricambio

PL Części zamienne

SK Náhradné diely

EE Varuosad

LT Atsarginės dalys

RO Piese de schimb

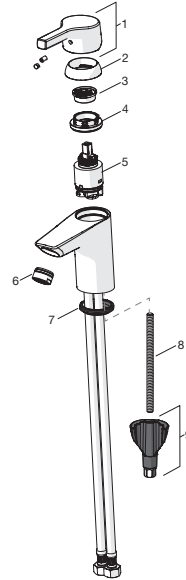
UA Запасні частини

ES Piezas de recambio

LV Rezerves daļas

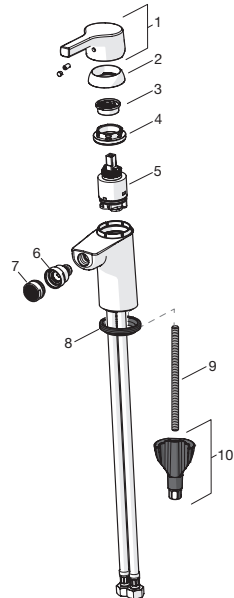
3904FH, 3910FH, 3910FHK, 3911FH, 3912FH

- 1 1005671V
- 2 601967V
- 3 601973V
- 4 601968V
- 5 601969V
- 6 601974V
- 7 1002371V
- 8 1000780V
- 9 602610V



3918FH

- 1 1005671V
- 2 601967V
- 3 601973V
- 4 601968V
- 5 601969V
- 6 601976V
- 7 601974V
- 8 1002371V
- 9 1000780V
- 10 602610V



Spare parts

CZ Náhradní díly
DE Ersatzteile
DK Reservedele
EE Varuosad
ES Piezas de recambio

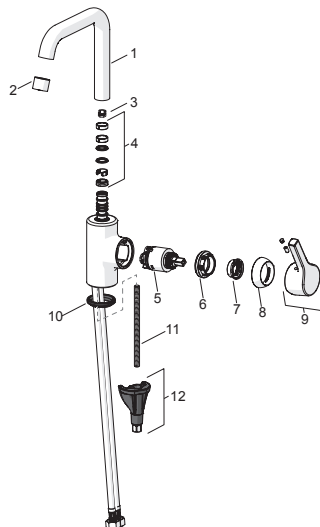
FI Varaosat
FR Pièces détachées
IT Pezzi di ricambio
LT Atsarginės dalys
LV Rezerves daļas

NL Reserve-
 onderdelen
NO Reservedeler
PL Części zamienne
RO Piese de schimb

RU Запасные части
SE Reservdelar
SK Náhradné diely
UA Запасні частини

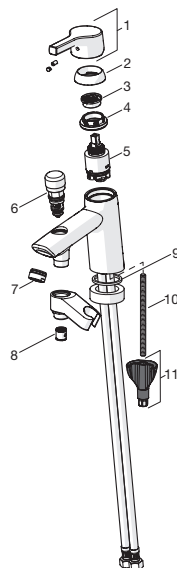
3907FH

- 1 1001051V
- 2 1001071V
- 3 159670/10 120°
- 3 159667V 60°/0°
- 4 1001098V
- 5 601969V
- 6 601968V
- 7 601973V
- 8 601967V
- 9 1005672V
- 10 1002371V
- 11 1000780V
- 12 602610V



3946FH

- 1 1005671V
- 2 601967V
- 3 601973V
- 4 601968V
- 5 601969V
- 6 602623V
- 7 602104V
- 8 601989V
- 9 602624/10
- 10 1000780V
- 11 602610V



Oras Group is a powerful European provider of sanitary fittings: the market leader in the Nordics and a leading company in Continental Europe. The company's mission is to make the use of water easy and sustainable and its vision is to become the European leader of advanced sanitary fittings. Oras Group has two strong brands, Oras and Hansa.

The head office of the Group is located in Rauma, Finland, and the Group has four manufacturing sites: Burglengenfeld (Germany), Kralovice (Czech Republic), Olesno (Poland) and Rauma (Finland). Oras Group employs approximately 1400 people in twenty countries. Oras Group is owned by Oras Invest, a family company and an industrial owner.

ORAS GROUP

Isometsäntie 2, P.O. Box 40

FI-26101 Rauma

Tel. +358 2 83 161

Fax +358 2 831 6300

info.finland@oras.com

www.oras.com

