# oventrop

Valves, controls + systems



Elbow with check valve for circulation for fresh water stations Regumaq X-25 and Regumaq X-45 **Operating instructions** 



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## 1. General information

The original operating instructions were drafted in German.

The operating instructions in other languages have been translated from German.

#### Other relevant documents

 Also consult the operating instructions of the fresh water station used by you.





## 1.1 Validity of the operating instruction

These operating instructions are valid for the elbow with check valve for circulation for the fresh water stations Regumaq X-25 and Regumaq X-45.

## 1.2 Type plate

The type plate is located on the side of the pump housing.

## 1.3 Extent of supply

- Elbow with check valve for circulation
- Flat seals
- Safety and installation advice

## 1.4 Contact

#### **Contact address**

OVENTROP GmbH & Co. KG

Paul-Oventrop-Straße 1

59939 Olsberg

GERMANY

www.oventrop.com

#### **Technical services**

Phone: +49 (0) 29 62 82-234

## 1.5 Declaration of conformity

Oventrop GmbH & Co. KG hereby declares that this product complies with the basic requirements and other relevant provisions of the EU Directives concerned.

The declaration of conformity can be obtained from the manufacturer.

## 1.6 Symbols used

6	Highlights important information and further explanations.
	Action required
•	List
1.	Fixed order. Steps 1 to X.
2.	
$\triangleright$	Result of action

## 2. Safety-related information

## 2.1 Correct use

Operating safety is only guaranteed if the product is used correctly.

The elbow with check valve for circulation may be used in the Oventrop fresh water stations Regumaq X-25 and Regumaq X-45 as check valve for the potable water circulation.

Any other use of the product will be considered incorrect use.

Claims of any kind against the manufacturer and/or its authorised representatives due to damage caused by incorrect use will not be accepted.

Observance of the operating instructions is part of compliance with correct use.

### 2.2 Warnings

Each warning contains the following elements:

#### Warning symbol SIGNAL WORD

Type and source of danger

Possible consequences if the danger occurs or the warning is ignored.

Ways to avoid the danger.

The signal words identify the severity of the danger arising from a situation.

## 🚺 DANGER

Indicates an imminent danger with high risk. The situation will lead to death or serious injury if not avoided.

## 🌔 WARNING

Indicates a possible danger with moderate risk. The situation may lead to death or serious injury if not avoided.

## CAUTION

Indicates a possible danger with lower risk. The situation will lead to minor and reversible injury if not avoided.

#### NOTICE

Indicates a situation that may lead to damage to property if not avoided.

## 2.3 Safety notes

We have developed this product in accordance with current safety requirements.

Please observe the following notes concerning safe use.

#### 2.3.1 Danger to life due to electric current

Danger to life due to contact with live components.

- Completely disconnect the station from the power supply.
- Check that no voltage is present.
- Secure the station against switching back on.
- Only install in dry indoor areas.

## 2.3.2 Danger caused by inadequately qualified personnel

Any work on this product must only be carried out by qualified tradespeople.

As a result of their professional training and experience as well as their knowledge of the relevant legal regulations, qualified tradespeople are able to carry out any work on the described product professionally.

#### User

The user must be informed how to operate the product by qualified tradespeople.

## 2.3.3 Risk of burns due to hot components and surfaces

- Allow the station to cool down before working on it.
- Wear suitable protective clothing to avoid unprotected contact with hot system components and fittings.

#### 2.3.4 Availability of the operating instructions

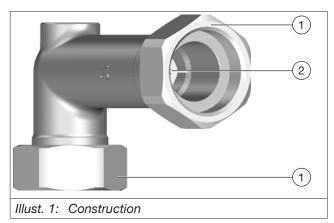
Any person working on the product has to read and apply these operating instructions.

The operating instructions must be available at the installation location of the product.

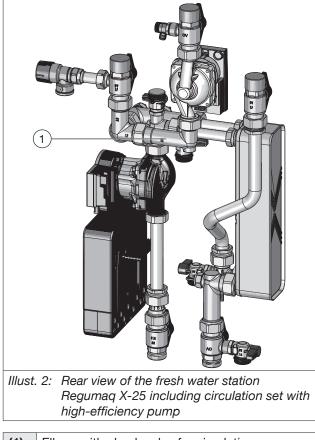
Hand these operating instructions and all other relevant documents over to the user.

## 3. Technical description

## 3.1 Construction



(1)	Collar nuts
(2)	Check valve



(1) Elbow with check valve for circulation

## 3.2 Functional description

The check valve for circulation automatically prevents the cold potable water from entering the circulation pipes of the Oventrop fresh water stations Regumaq X-25 and Regumaq X-45 against the pumping direction of the circulation pump.

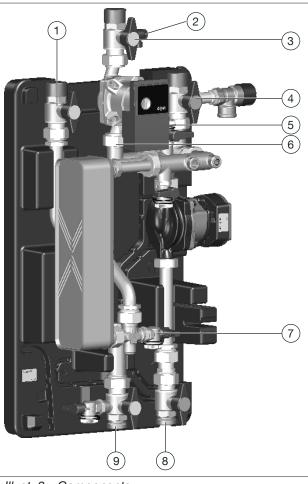
## 3.3 Technical data

Connections	
Storage cylinder circuit	G1 male thread, flat sealing
Torques	
Collar nuts G1	45 Nm

## 4. Transport and storage

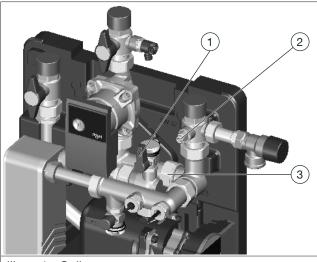
Temperature range	0 °C to +40 °C
Relative air humidity	Max. 95%
Particles	Store dry and free from dust
Mechanical influences	Protected from mechanical agi- tation
Weather influ-	Do not store outdoors
ences	Protect from direct sunlight
Chemical influences	Do not store together with ag- gressive fluids

## 5. Installation



Illust. 3:	Components
	000000000000000000000000000000000000000

(1)	Isolating ball valve for hot potable water cir- culation supply
(2)	Draining valve
(3)	Isolating ball valve for hot potable water cir- culation return
(4)	Isolating ball valve for potable water (cold)
(5)	Fill and drain ball valve for storage cylinder circuit return
(6)	Collar nut of elbow with check valve - pump side
(7)	Fill and drain ball valve for potable water (hot)
(8)	Isolating ball valve for storage cylinder circuit return
(9)	Isolating ball valve for storage cylinder circuit supply



Illust. 4: Collar nut

(1)	Fill and drain ball valve for storage cylinder circuit return
(2)	Isolating ball valve for potable water (cold)
(3)	Collar nut of elbow with check valve - station side

## 5.1 Preparation

#### 

#### Risk of scalding due to hot fluids

If the station has been in operation, there is a risk of scalding due to the unintentional discharge of hot water or water steam.

- Allow the system to cool down.
- Wear safety goggles.

#### 

#### Risk of burns due to hot components

Any unprotected contact with hot components may lead to burns.

► Wear safety gloves.

#### NOTICE

#### Risk of damage due to pressure surges

Sudden filling of the station with water may lead to damage, for instance to the sensors or sealing points.

- Always open and close the ball valves slowly.
- 1. Lift off the upper shell of the station.
- Completely disconnect the controller from the power supply.
- 3. Close all isolating ball valves slowly:

#### Installation

- Potable water (cold)
- Hot potable water circulation supply
- Hot potable water circulation return
- Storage cylinder circuit supply
- Storage cylinder circuit return
- Unscrew the cap of the fill and drain ball valve for potable water (hot) (position (7) in Illust. 3 on page 7) and connect a draining hose.
- 5. Open the fill and drain ball valve for potable water (hot).
- 6. Connect a draining hose to the draining valve (position (2) in Illust. 3 on page 7).
- 7. Open the draining valve.
- ▷ The potable water circuit is drained off.

### 5.2 Tools required

• 38 mm spanner

## 5.3 Removal of the elbow with check valve

#### NOTICE

Damage to electrical components due to splashing water

Water may escape when loosening screw connections. This may cause damage to electrical components.

Keep suitable cloths and a container available to keep escaping water away from the controller and other electrical components.

The collar nut of the elbow with check valve on the station side (position (3) in Illust. 4 on page 7) cannot be accessed:



- If the isolating ball valve for potable water (cold) (position (2) in Illust. 4 on page 7) is closed.

- If the fill and drain ball valve for storage cylinder circuit return (position (1) in Illust. 4 on page 7) is closed.

- 1. Open the fill and drain ball valve for storage cylinder circuit return (position (5) in Illust. 3 on page 7).
- 2. Pull off the handle of the isolating ball valve for potable water (cold) (see position (2) in Illust. 4 on page 7).
- Loosen the collar nut of the elbow with check valve on the station side (position (3) in Illust. 4 on page 7)
- Loosen the collar nut of the elbow with check valve on the pump side (position (6) in Illust. 3 on page 7).
- 5. Remove the elbow with check valve.

## 5.4 Installation of the new elbow with check valve

1. Fit the new elbow with check valve.



- Use the new flat seals included in the delivery.
- 2. Hand tighten the collar nuts.
- 3. Firmly tighten the collar nuts once the elbow with check valve is properly positioned.



Observe the information regarding torques.

- 4. Push the handle onto the isolating ball valve for potable water (cold).
- 5. Close the fill and drain ball valve for storage cylinder circuit return.

## 6. Commissioning

- Fill and bleed the fresh water station as described in the chapter "Commissioning" of the operation instructions of your fresh water station.
- Connect the station to the power supply.
- $\triangleright$  The fresh water station is ready for operation.

## 7. Disposal

ΝΟΤ	ICE
	Risk of environmental pollution
	Incorrect disposal (for instance with domes- tic waste) may lead to environmental dam- age.
	<ul> <li>Dispose of packaging material in an environmentally friendly manner.</li> <li>Dispose of the components appropriately.</li> </ul>

If no return or disposal agreement has been made, dispose of the product yourself.

- ► If possible, recycle the components.
- Dispose of components which cannot be recycled according to the local regulations. Disposal with domestic waste is not permitted.

#### OVENTROP

GmbH & Co. KG Paul-Oventrop-Straße 1 59939 Olsberg GERMANY www.oventrop.com