

# **QUICK EXCHANGE SYSTEM (QES)**

SERVICE AND INSTALLATION MANUAL



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## Please Note:

- 1. Read all instructions carefully before operation.
- 2. All rights to these documents are owned by **Watch Water GmbH**. Modifications to the documents are strictly prohibited.

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## 01 \ MANUAL OVERVIEW

This installation manual is designed to guide the installer through the process of installing and maintaining our Quick Exchange System (QES) featuring our very own Quick Exchange Filter Head (QEFH). This manual is a reference and will not include every system installation situation. The person installing this equipment should have basic knowledge of water conditioning and adequate plumbing skills. Certain parts of the manual will serve as aids to manufacturers in the writing and layout of the manuals for installers and service personnel.

Icons That Appear in This Manual:

## Warning

Failure to follow this instruction can result in personal injury or damage to the equipment.

## Caution

Failure to follow this instruction can result in damage to the equipment.

## 02 \ PRODUCT DESCRIPTION

Watch Water Quick Exchange Systems (QES) are designed for rapid installation and quick exchange of your filter media. This quick exchange mechanism is achieved with the help of our Quick Exchange Filter Head (QEFH) which is manufactured and distributed exclusively by Watch Water Germany.

These systems can handle flow rates up to 15m³/h (to 66 gal/min). Filter medias and adsorbers in any new or existing portable water systems can be utilized. Water passes through treatment system where the contaminants are removed. When the treatment media is ready for replacement, the pressure tanks can be conveniently removed from the line and replaced with a new tank. The used tanks can be safely transferred to our distributors for safe disposal of the spent media, or the customers can change the media themselves by following the guidelines in Section 6.3.

## 03 \ SAFETY INFORMATION

- Follow state and local codes for water testing. Do not use water that is micro-biologically unsafe or of unknown quality. All water treatment equipment should be installed to local plumbing codes.
- The quick exchange system (tank and QEFH) is only compatible with certain media. Please consult Watch Water GmbH or its distributors before using any unknown media.

#### Warning

When used with media not intended for the QES, the materials in the head or tank may be damaged or even combust explosively, with fatal consequences.

Before installation, inspect the valve for any transport damage.

Before installation, inspect the valve for any transport damage.

### Caution

Damaged valves may no longer meet the safety requirements, and therefore are not to be installed.

→ Do not put excessive pressure on the system especially of the filter head. This additional stress can be due to high ambient temperatures, from other connected pipes, or while being stepped on.

## Caution

The system is only designed for use at the permissible medium pressure load, otherwise it can lead to damage of equipment

- The quick exchange head is designed to accommodate minor plumbing misalignments but are not designed to support the weight of the whole system or the plumbing.
- \* Keep the media tank in the upright position. Do not turn on side, upside down, or drop.

#### Caution

Turning the tank upside down will cause media to enter the valve.

- ◆ When filling media tank, fill tank slowly to prevent media from exiting the tank.
- When installing the water connection, connect to the plumbing system first.
- ★ While doing maintenance work, do not open any connections when the system is under pressure. The filter head and all lines which are connected must be depressurized first.

## Warning

Opening connections when system is under pressure leads to medium leakage and damage to the head. It can be life-threatening!

- \* Keep the plumbing free of any deposits or build-ups inside pipes.
- → Do not use Vaseline, oils, other hydrocarbon lubricants or spray silicone anywhere. If required, use only 100% silicone lubricants. Otherwise, avoid any type of lubricants, including silicone, on the clear lip seals.
- The nuts and caps are designed to be unscrewed or tightened by hand or with the special plastic wrench. If necessary, pliers can be used to unscrew the nut or cap. Do not use a pipe wrench to
- tighten or loosen nuts or caps. Do not place a screwdriver in the slots on caps and/or tap with a hammer.
- ➤ Do not use pipe dope or other sealants on threads. Use Teflon tape on the threaded inlet and outlet.

  Teflon tape is not necessary on the nut connection or caps because of O-ring seals.
- ▲ When the system is installed outdoors, several items must be considered. The system is not designed to withstand extreme humidity or direct sunlight. If it is necessary to locate the system in direct sunlight, a protective outdoor cover over the valve and tank is necessary.
- ★ Temperature Freezing temperatures will freeze the water in the system. This will cause physical damage to the internal parts as well as the plumbing. High temperatures will also affect the system. A protective cover should assist with high temperature applications.
  Insects The quick exchange system have been designed to keep all but the smallest insects out of the critical areas. A top cover should be installed securely in place.

## **LOCATION SELECTION**

Location of a water treatment system is important. The following considerations must be taken into account when selecting the location for the water conditioning system:

- Level platform or floor.
- Locate the system close to drain and connect according to plumbing codes. Do not locate unit where it or its connections (including the drain and overflow lines) will ever be subjected to room temperatures under 34F.
- ♣ Do not install the unit near acid or acid fumes.
- → If supplementary water treating equipment is required, make sure that adequate additional space is available.
- The distance between the drain and the water filter should be as short as possible.

## **04 \ COMPONENTS**

A. Quick Exchange Filter Head (QEFH)



B. Quick Exchange System (QES) - Components

















## **05 \ SPECIFICATIONS**

Quick Exchange Filter Head (QEFH)-

Model	QEFH 2.	QEFH 2.2				
Valve Body Material						
Plumbing Connections	1" BSP 8	1" BSP & NPT				
Top Tank Connection	2.5"	2.5"				
Distributor Pilot	1.05"	1.05"				
Pressure	Min	1.4 Bar   20 PSI	Max	8.6 Bar   125 PSI		
Water Temperature	Min	1°C   34°F	Max	43°C   110°F		
Ambient Temperature	Min	1°C   34°F	Max	52°C   125°F		
Flow Rate (Maximum)	15 m³/h	15 m³/h   66 gpm				
Compatible Tank Sizes	07 x 17,	07 x 17, 08 x 35, 08 x 44, 10 x 44, 10 x 54, 13 x 54				

## 06 \ INSTALLATION / USAGE

### **6.1 INITIAL INSTALLATION**

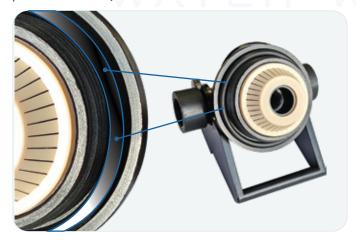
**Step 1: Unboxing & Inspection**- Carefully unpack the Quick Exchange System and inspect all components for any signs of damage incurred during shipping. If any damage is observed, contact Watch Water customer support or your local distributor for assistance.

**Step 2: Select Installation Location**- Choose a suitable location for installing the Quick Exchange System while following the safety guidelines mentioned above. Ensure that there is adequate space for the system and easy access for maintenance.

## Step 3: Connecting the Inlet and Outlet-

- Position the QEFH at the desired location, preferably close to the water source and ensure that it is positioned at a comfortable height for easy access to the lever handle and filter tank.
- Connect the water inlet and outlet pipes to the corresponding ports on the QEFH.
- Use appropriate fittings and sealants to ensure leak-free connections. Double-check all connections for tightness and proper alignment.

**Step 4: Preparing the Filter Tank**- Bring the prefilled filter tank containing filter media and place it next to the QEFH. Remove the cover cap (Part 05) from the tank and make sure that an O-ring(Part 08) is placed on the QEFH as shown below.



**Step 5: Installing the Filter Tank**- Ensure that the QEFH's head holder (Part 04) is securely seated in the tank and make sure the riser tube (Part 09) is connected to the top distributor (Part 07) precisely.



Step 6: Activating the Quick Exchange Mechanism- Once the filter tank is properly aligned, carefully place the valve main (Part 02) on the Head holder and push it in to the maximum until it doesn't go further. Carefully insert the handle lock (Part 06) inside the QEFH to lock the head on top of the tank. This locks the head on tank and your systems is ready for service.







## Step 7: System Start-Up

- Open the inlet valve to allow water flow into the system. Check for any leaks around the connections and tighten if necessary.
- Close the outlet valve temporarily to allow the system to fill with water and built-up pressure.
- Once the system is filled, open the outlet valve to begin filtration.

**Step 8: System Maintenance**- Regularly monitor the system for proper operation and pressure levels. When it's time for filter media replacement, follow the steps further for a guick and easy replacement.

#### **6.2 TANK REPLACEMENT**

**Step 9:** To easily replace the tank, start by cutting off the inlet connection and remove the connection from inlet and outlet ports on the head. Then simply remove the handle lock from the filter head.



**Step 10:** After removing the connections, activate the lever mechanism by turning it as shown in picture.



**Step 11:** After the head is successfully removed from the tank, remove the head holder, top distributor, riser tube (along with bottom distributor) from the tank leaving behind the tank with only the used up media.

**Step 12:** Place the used tank at the side, bring in a pre-filled second tank and follow the steps 3 to 8 to successfully install the new tank.

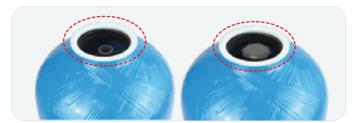
## **6.3 MEDIA REPLACEMENT**

**Step 13:** To replace the media in the used tank, the following two options can be used:

- 1. Send in the used tank to one of the Watch Water distributors. (Make sure to close the tank with head holder and cover cap before sending) **OR**
- 2. Replace the media yourself by following the following steps 14 to .

**Step 14:** Completely empty the used-up tank and rinse it thoroughly.

**Step 15:** Align the riser tube in the centre of the tank and close it with a stopper to avoid entry on media in the tube.



**Step 16:** Carefully place a funnel on the mouth of the tank and pour fresh media inside up to the required height.

Please Note: The volume/weight of the media to be put inside the tank depends on the type of media. Kindly contact your Watch Water distributor for accurate volumetric values.



**Step 17:** Remove the funnel from the tank and attach a head holder on it. Close the tank with a cover cap (Part 05). This tank can be stored and used in the next replacement cycle.



## 07 \ TROUBLESHOOTING

#### PROBLEM:

Water Leaks Around Connections.

## Possible Cause(s):

Loose fittings or improper sealing.

## Solution(s):

- Shut off the water supply to the system.
- Inspect all connections for signs of leaks.
- Tighten any loose fittings and check for proper alignment.
- Apply additional sealant if necessary.
- Turn the water supply back on and check for leaks again.

### PROBLEM:

**Unresponsive Quick Exchange Mechanism** 

## Possible Cause(s):

Mechanical issues with the lever handle or filter head.

### Solution(s):

- Ensure that the lever handle is fully engaged when attempting to release the filter tank.
- Check for any obstructions or debris blocking the movement of the lever handle.
- Lubricate the moving parts of the Quick Exchange Filter Head (QEFH) as needed.
- If the issue persists, contact Watch Water customer support for further assistance.

### PROBLEM:

Water Leaks Around Connections.

## Possible Cause(s):

Clogged filter media or pipes.

## Solution(s):

- Shut off the water supply to the system.
- Check the filter media for signs of clogging or fouling.
- If the filter media is dirty, replace it with a new prefilled tank.
- Inspect the inlet and outlet pipes for any obstructions.
- Clean or replace any clogged pipes or fittings.

### PROBLEM:

**Strange Noises or Vibrations** 

## Possible Cause(s):

Loose components or air trapped in the system.

### Solution(s):

- Check all connections and mounting hardware for tightness.
- Bleed any air trapped in the system by opening the pressure release valve (Part
- Ensure that the system is mounted securely to a stable surface.
- Contact Watch Water customer support if needed