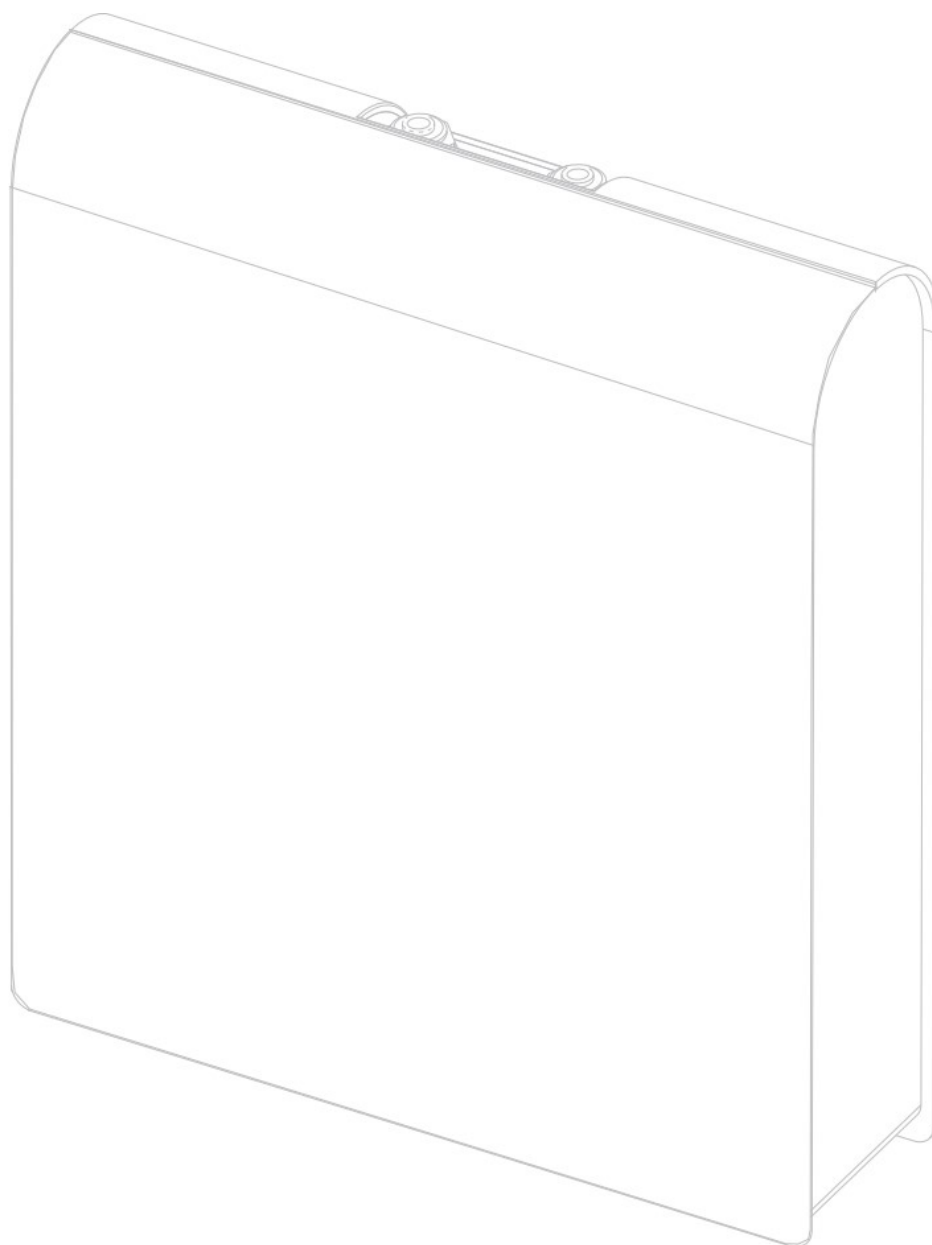


UNITOR™ AQUAFILTER SYSTEM STARTER PACK

Product Code (625575 & 779250)

INSTRUCTIONS AND OPERATIONS MANUAL



1. Safety Precautions Before Installation

WARNING!!! The system should not be used with biologically contaminated water or water of unknown origin.

Only original replacement parts, filter cartridges and accessories made by manufacturer may be used.

Compliance with the following instructions ensures:

- problem free product operation,
- manufacturer's warranty.

Failure to comply with the following instructions will result in loss of warranty.

- 1) Read this Instruction Manual carefully before beginning system installation.
- 2) Check if all elements needed for the installation are included with the system. (Refer to Section 3 "Included in the Box").
- 3) Please note that after installing the system, as well as after each filter cartridge and hollow fiber membrane replacements, and in the case of long inactivity of the system, system flushing procedure must be conducted before resuming system usage.
- 4) After inserting a tubing into a quick connector or a quick connector onto a stub, the connected place should be secured with a safety clip.
- 5) During disconnecting and connecting of tubing be sure not to break it (correctly installed tubing should be inserted 1.5 cm inside of quick connector).
- 6) Secure quick connector with safety clip after tubing has been inserted.
- 7) For sealing plastic components use only Teflon tape
- 8) Wash your hands thoroughly before and after filter cartridge or membrane element replacements.
- 9) During the cartridge or capillary membrane installation one must consider water flow direction. An arrow put on each of our inline cartridges indicates water flow direction.
- 10) In all cases of product returns, the system must be returned in its original packaging – otherwise the return will not be accepted.
- 11) The manufacturer is not responsible for any damages resulted from the use of this product if used for other purposes than filtration of potable water.
- 12) The manufacturer does not hold any responsibility for printing errors.
- 13) The manufacturer reserves the right to introduce change or amendments to the provided technical information at any time and without the necessity of a prior announcement.

Use only genuine **Aquafilter** replacement parts, filter cartridges and membrane elements. In case of use of other manufacturers' parts, Wilhelmsen Ships Service is not responsible for any damage caused in the course of product use.

2. Technical Specifications / Water Inlet Conditions

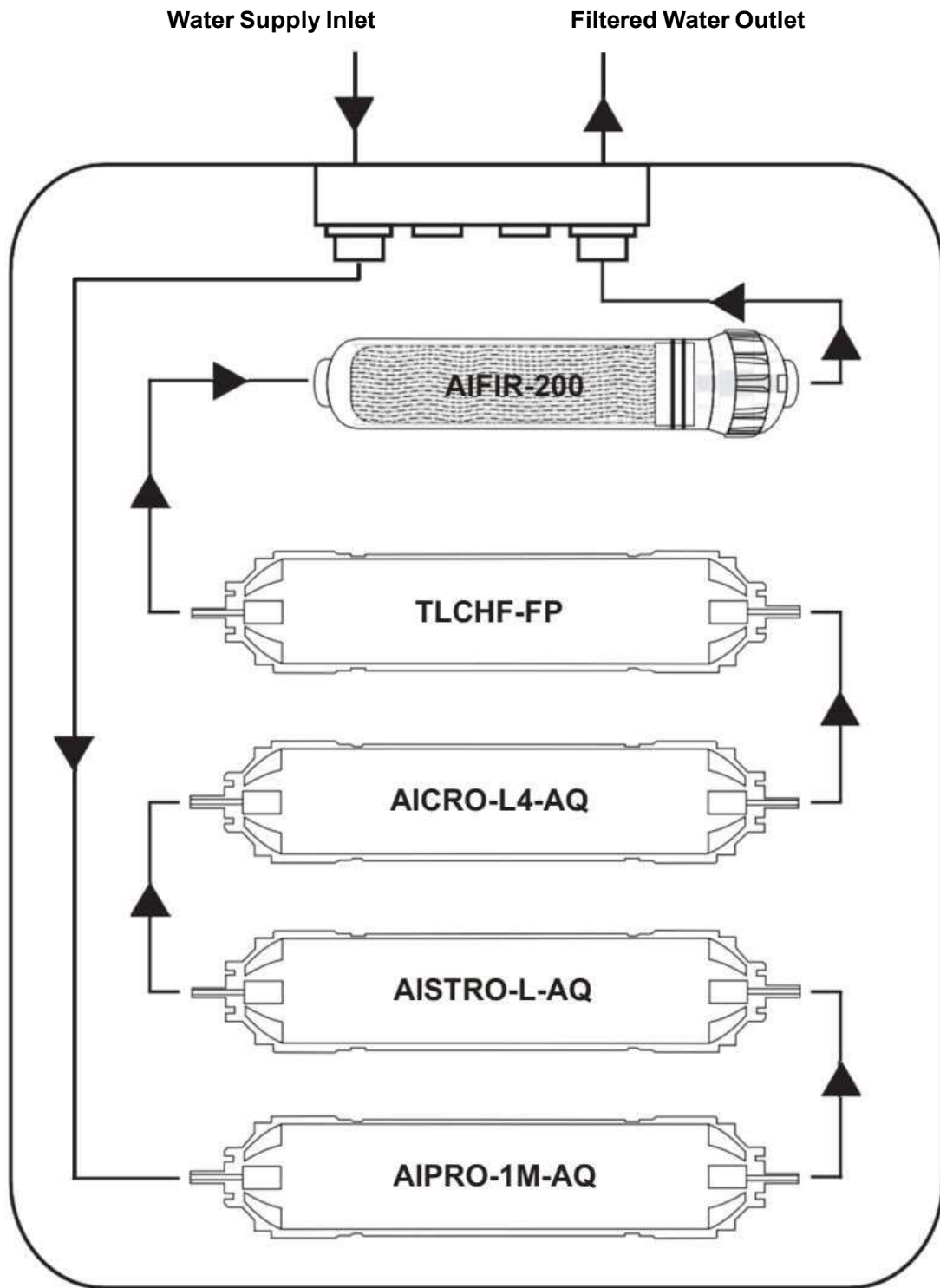
Inlet water temperature	between 2°C and 45°C
Water supply pressure	3,5 bar
Water supply adapter	1/2"
Outlet tubing	1/4"
Dimensions (height x width x depth)	438 mm x 100 mm x 360 mm

IMPORTANT NOTE! The system must be secured from high pressures and rapid pressure changes caused by local water supply systems. Pressure regulator must be installed on the inlet of the system's water supply. The system's optimal performance pressure is 4 bar.

3. Scope of Supply (Included in the Box)

X 1	X 1	X 2	X 1	X 2	X 1	X 2	X 1
X 1	X 1	X 6	X 1	X 1			

4. Connection Diagram

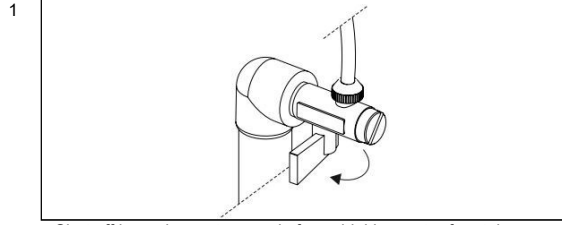


5. System Installation

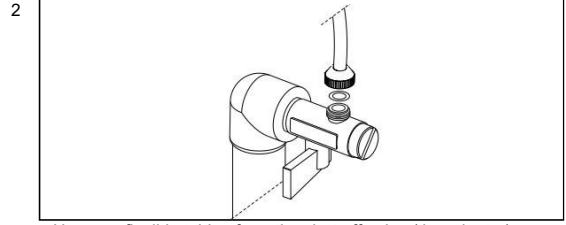
IMPORTANT NOTE!

The manufacturer is not responsible for any damages that result from improper installation or use of system.

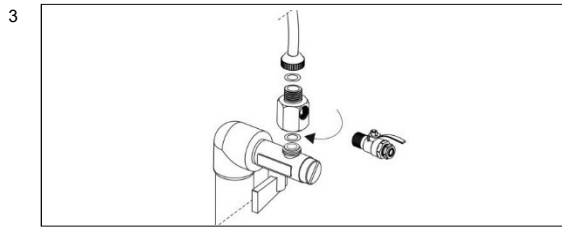
Connecting the water source to the Pre-filter housing (779229)



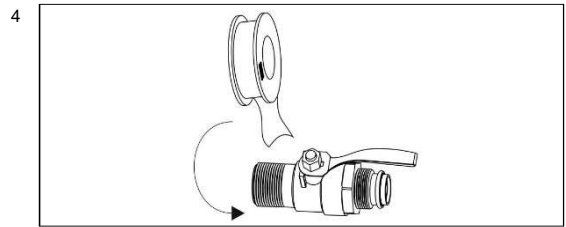
Shut off incoming water supply from drinking water fountain



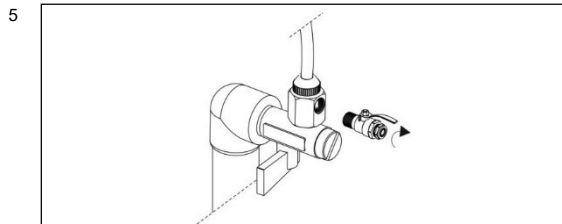
Unscrew flexible tubing from the shut-off valve (the adapter).
IMPORTANT NOTE! Between the shut-off valve and flexible tubing is a rubber gasket - be sure not to lose it.



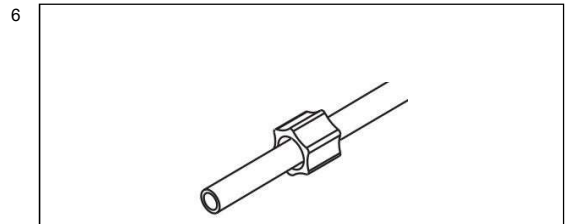
Screw adapter (779248) onto the shut-off valve to allow easy installation of (779249) valve and its easy opening and closing.
IMPORTANT NOTE! Remember to place rubber gaskets in between the connections.



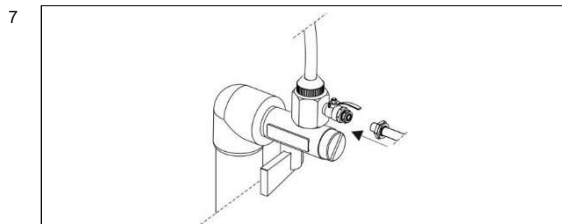
Wind a few layers of Teflon Tape on shut-off valve adapter (779249)



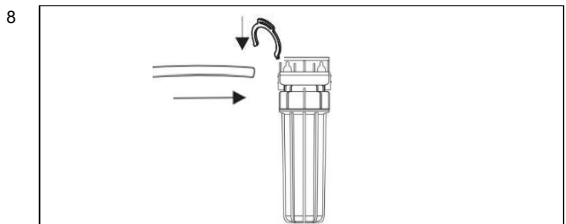
Screw valve adapter (779249) into adapter (779248).



Put the nut on the flexible yellow tubing (779242)

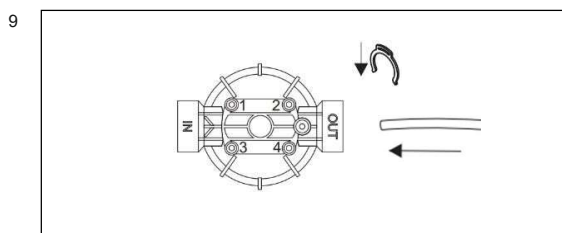


Push the yellow tubing all the way into the shut off valve adapter (779249) and tighten the nut.

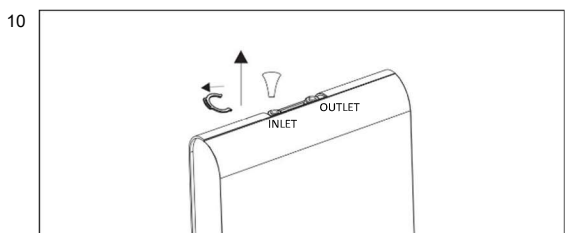


Connect other side of the first yellow tubing (779242) to Prefilter housing (779229) into the [IN] inlet and secure it with the blue clip fastener and Teflon tape

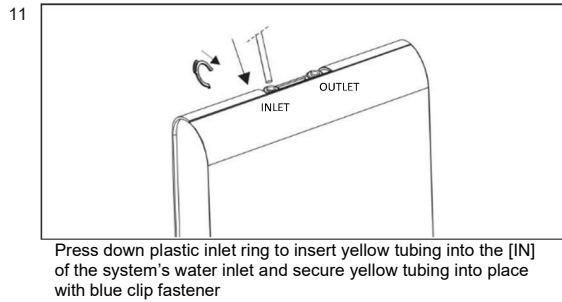
Connecting the Pre-filter (779229) to the Aquafilter System (779237)



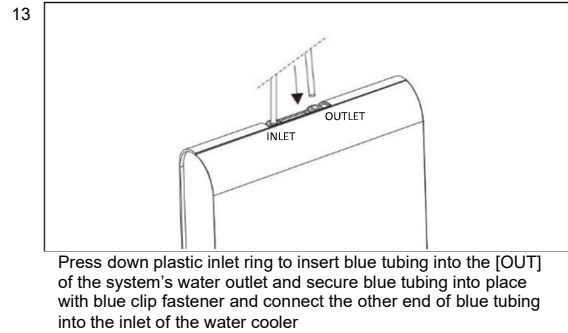
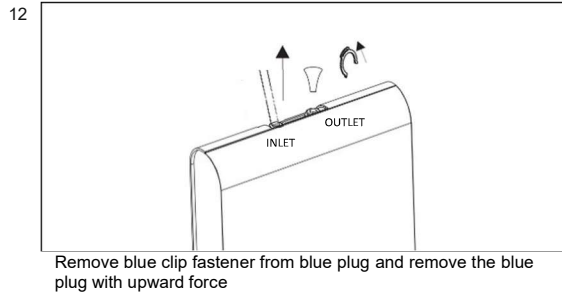
Take the second yellow tubing (779242) and insert one end into the [OUT] outlet of the Pre-filter (779229) and secure it with blue clip fastener and Teflon tape



Remove blue clip fastener from yellow plug on system and pull-out yellow plug from [IN] inlet in upward motion with force



To connect system to water cooler



6. Installing the Faucet (779240)

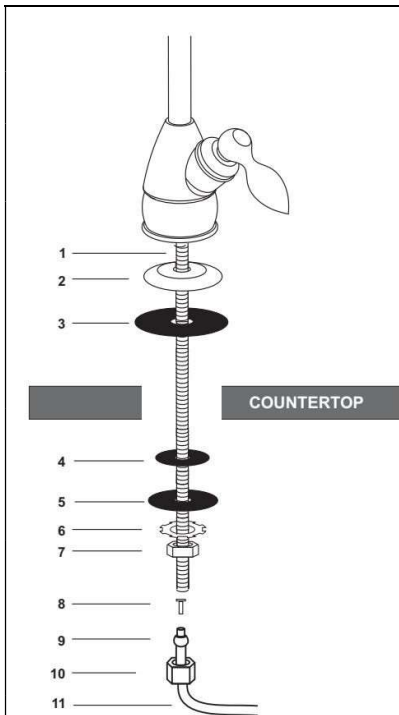


Fig. 1. Installing chrome filter faucet 779240

- 1) On threaded faucet extension [1], first put on cover plate [2], and then rubber gasket [3].
- 2) Secure the faucet in the counter opening.
- 3) Underneath the sink, put the rubber [5] and metal [6] washers on the faucet extension [4], and tighten with metal nut [7].
- 4) Install flexible tubing (supplying water and connecting faucet with the system):
 - put the tubing [11] through the metal nut [10] and plastic tightening ring [9],
 - put the insert [8] into the tubing. Push flexible tubing (all the way) into the faucet extension [4] and tighten it (by hand) with the metal nut [10].
- 5) Connect other end of flexible tubing with connector [OUT] (white ring) (Fig. 2).

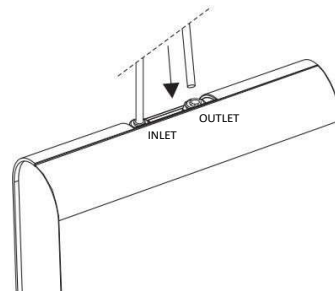
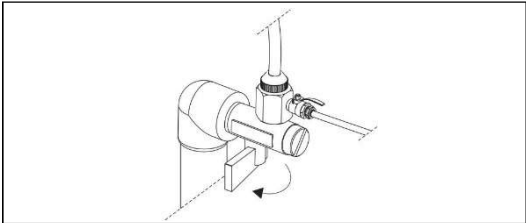
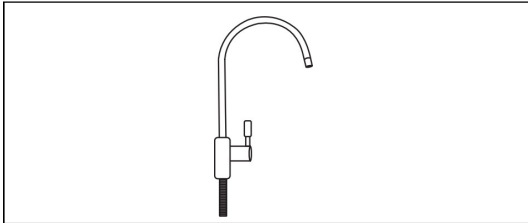
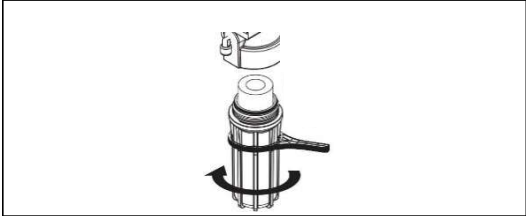


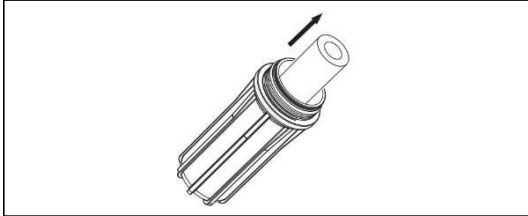
Fig. 2. Connecting the flexible tubing with [OUT] connector

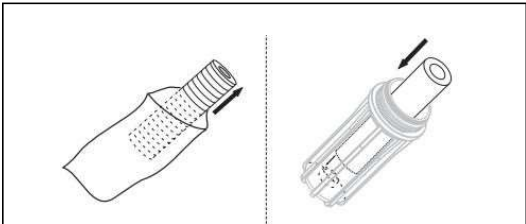
8. Pre-filter Cartridge (779231)

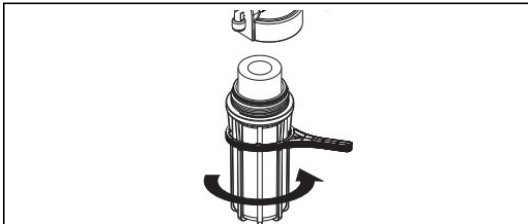
- 1 

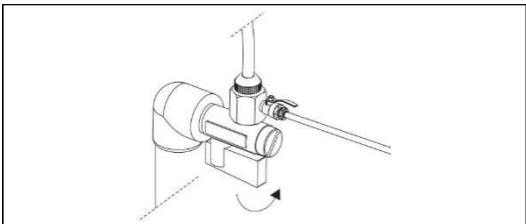
Shut off water supply valve
- 2 

Open filter faucet to release pressure from the system
- 3 

Unscrew filter housing sump from filter cap by hand or using wrench (779245) perpendicularly to the filter housing
- 4 

Remove old filter cartridge
- 5 

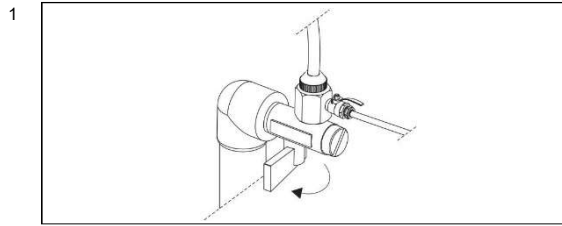
Unpack the new cartridge out of plastic foil. Place filter cartridge inside filter housing sump (pressing against the top of plastic stem to ensure its central location).
- 6 

Screw in filter housing cap to filter housing sump and tighten it with wrench (remember to use the wrench perpendicularly to the filter housing). Use the same procedures for the installation of remaining filter cartridges.
ATTENTION! If you cannot tightly screw the filter cap with filter housing sump check if all O-rings and cartridge are position correctly.
- 7 

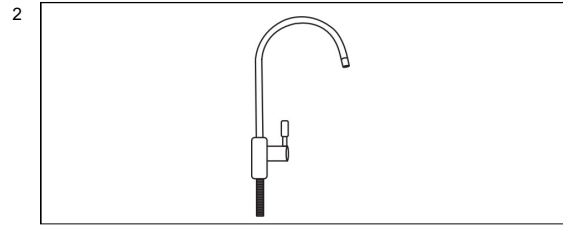
Slightly open filter faucet and next gradually open your water supply valve to fill filter housings with fresh water and release air from the system through the faucet.
ATTENTION! After each filter cartridge replacement procedure, all filters must be flashed out with running water for at least 5 minutes. Filtered water can be safely consumed after this process is completed.

WARNING! Before the first use of the system and after cartridge replacement, perform the system flushing process. Flush the system for several minutes before use. Use only microbiologically safe and adequately disinfected water. After completion of the above operations, filtered water can be consumed.

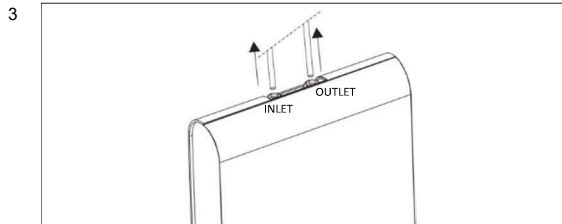
8. System Cartridge Replacement



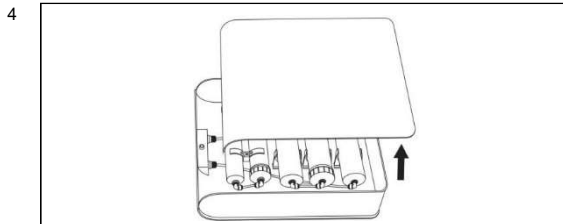
Shut off water supply valve



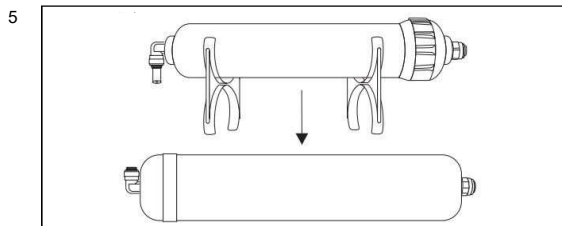
Open filter faucet to release pressure from the system



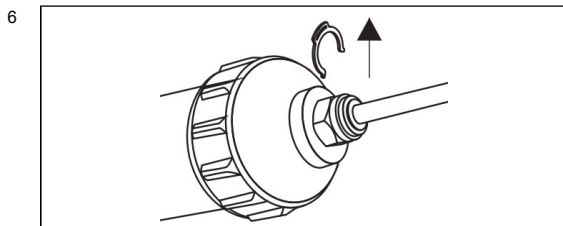
Before replacing the membrane, disconnect all flexible tubing from the system (inlet / outlet).



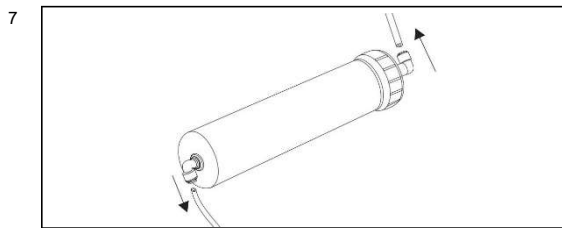
Remove front panel of the system's housing



Remove cartridge from housing bracket

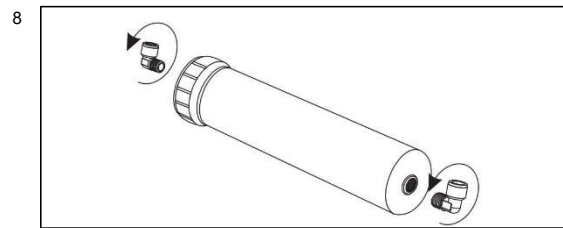


To disconnect tubing from the inlet elbows of filter cartridge detach the safety clips from elbow inlet and outlet of the cartridge.

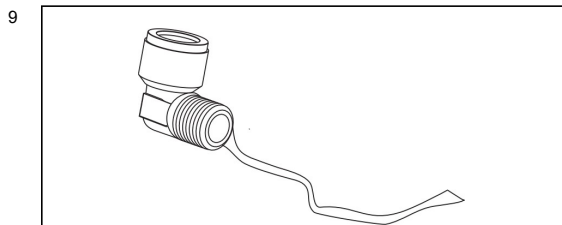


Press the elbow flange symmetrically and pull the tubing out.

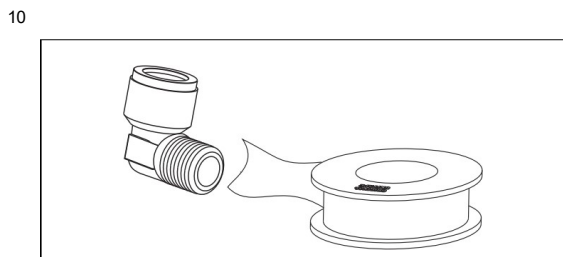
NOTE! When removing tubing be particularly careful not to bend it. The collapse of the tubing can lead to breakage and water leakage.



Unscrew inlet and outlet connectors from the cartridge.



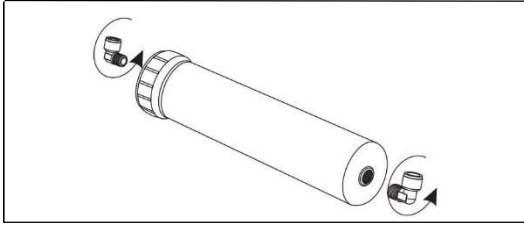
Remove old Teflon tape



Apply several layers of Teflon tape to the connector threads.

NOTE! Use only Teflon tape, do not use tow.
Apply Teflon tape in the opposite direction to the direction connectors will be installed.

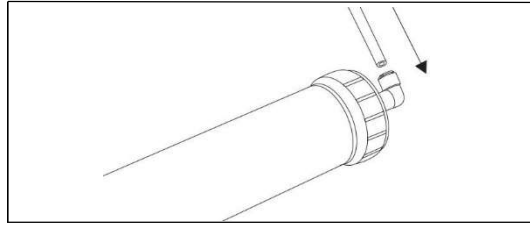
11



Install (screw in) connectors into new filter cartridge.

NOTE! During installing (screwing in) individual connectors do NOT withdraw (unscrew) them at any time. This may result in connection damage and future water leaks.

12



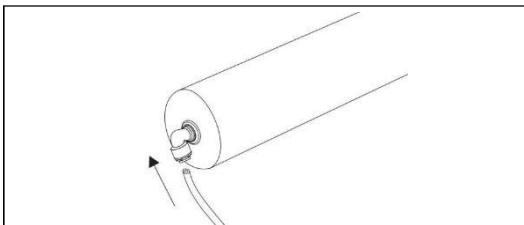
Connect the OUTLET elbow from filter cartridge with INLET elbow of filter cartridge using flexible tubing.

Do the following:

- 1) Make sure that the input will be connected in the direction of water flow. The correct water flow direction is indicated by arrows placed on the label of each filter cartridge.
- 2) Push-in tubing into the output elbows attached to filter cartridge (properly inserted tubing sets in about 1.5 cm).
- 3) Secure the connection with safety clip.

NOTE! When inserting the tubing be particularly careful not to bend it. The collapse of the tubing can lead to breakage and water leakage

13



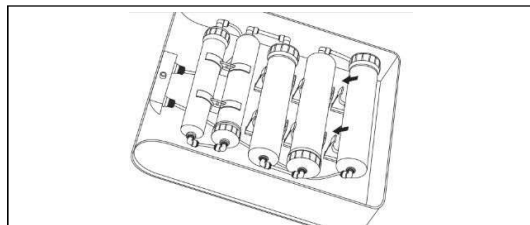
Connecting INLET elbow from filter cartridge with water supply using tubing.

Do the following:

- 1) Make sure that the filter cartridge is installed correctly in the same direction as water flow. Water flow direction is marked with an arrow on the product label.
- 2) Push the inlet tubing into the elbow connector, attached to the filter cartridges (properly inserted tubing sets in about 1.5 cm.)
- 3) Secure the connection with safety clip.

NOTE! When inserting the tubing be particularly careful not to bend it. The collapse of the tubing can lead to breakage and water leak.

14



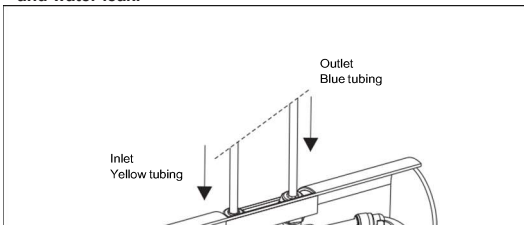
Insert filter cartridge back into mounting brackets.

To replace the remaining filter cartridges, follow instruction described by steps 5 to 14

NOTE!

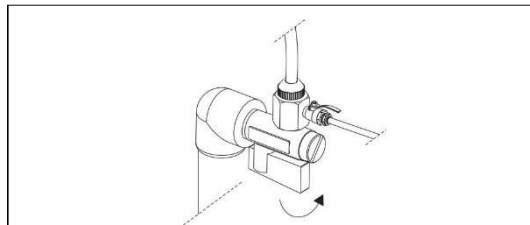
After each filter cartridge replacement procedure, all filters must be flashed out with running water for at least 5 minutes. After completing the above-mentioned procedures, filter water can be consumed.

15



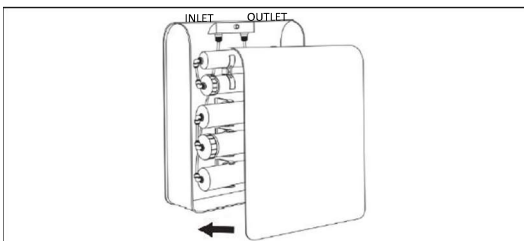
Reattach yellow and blue tubing

16



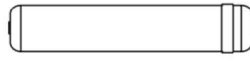
Slowly open water supply valve and check for leaks

17



Close the system housing

9. Filter Cartridges (625576 or 779260)

Cartridge Type	Description	Service Length*
	AIPRO-1M-AQ The cartridge is made of pure polypropylene, a surfactant-free depth filter ensures low pressure drops, with exceptional dirt holding capabilities. The cartridge is highly effective for filtering / absorption of sand, silt, clay, rust and other sediments.	3 – 6 months
	AISTRO-L-AQ The cartridge utilizes FDA-grade, sodium, based, strongly acidic ion-exchange resin which reduces calcium and magnesium ion content in water. Calcium and magnesium are often called "hardness minerals". Large amounts of these ions in water are responsible for the formation of scale deposits, higher detergent consumption and stains on glassware. This inline water softening cartridge exchanges calcium and magnesium with sodium ions and therefore reduces water hardness.	3 – 6 months
	AICRO-L4-AQ Granulated activated carbon cartridge with KDF® media made of the high grade activated coconut carbon. It is designed to remove up to 99% of chlorine, sediments and organic contaminants. KDF® media utilizing redox reactions, kills or inhibits bacteria growth, converts chlorine to chlorides. In addition, it also removes heavy metals such as iron, copper, lead, mercury, arsenic and many others. It also improves the taste and Oduor of water. Used in combination with activated carbon, KDF can significantly extend the life of filter cartridges.	3 – 6 months
	TLCHF-FP In-line ultrafiltration (UF) membrane 0.01-micron cartridge that removes viruses, bacteria, as well as suspended particles from drinking water. Particles and materials of high molecular weight are unable to pass through the 0.01-micron UF membrane so that only fresh water and dissolved minerals get through. The UF membrane also has a chemical resistance to oxidants and chlorine. The UF membrane is stable at wide range of pH levels.	3 – 6 months
	AIFIR-200 ML Inline alkalizing-mineralizing cartridge increases the pH and lowers ORP of filtered water. Through an accurate negative ionized ceramic media, AIFIR2000 provides water with negatively charged atoms and complex particles.	3 – 6 months

* Depends on amounts of filtered water, its quality and level of contamination from incoming water, and filter usage.

Cartridge colour is subjected to change without notice.

Before the first use of system and after each cartridge replacement, the system should be flushed with water for **at least 10 minutes**. After these procedures, filtered and conditioned water may be consumed.

WARNING! Filter cartridges are not subject to any complaints at the time of:

- after opening protective packaging,
- after first use of filter cartridges.

Disclaimer for Water Filtration Systems

To ensure the effectiveness and safety of our water filtration systems, it is essential that the following guidelines are adhered to by the vessel crew:

Compliance with Standards:

The water supplied to the filtration system must meet the World Health Organization (WHO) drinking water standards. The filtration system is an additional measure and does not replace the need to comply with these regulations.

Regular Water Testing:

Conduct water quality tests both before and after commissioning the filtration system.

Perform regular checks to ensure ongoing compliance with WHO guidelines and Maritime Labor Convention (MLC 2006) standards.

Operator Responsibilities:

Ensure the water provided on board is safe and free from harmful organisms and chemicals.

Continuously monitor water quality and report any adverse results as required by International Health Regulations (IHR 2005).

Fresh Water Safety Plan (FWSP):

Implement a risk assessment and management approach covering the entire water supply process from loading to tap delivery.

Include system assessment, hazard analysis, appropriate treatment processes, and a monitoring and corrective action plan to prevent contamination.

Water Inlet Pressure:

Maintain the maximum water inlet pressure at 3.5 bar or below. Use a pressure regulator if necessary to ensure compliance.

Pre-Treatment Requirement:

Ensure incoming water has sufficient pre-treatment and meets WHO standards before using the Unitor Aquafilters System.

Water Quality:

Do not use the filtration system for water with very high microbiological content, unsafe conditions, or extreme hardness.

By following these guidelines, you help ensure the water filtration system operates effectively and maintains high-quality drinking water on board.

Wilhelmsen Ships Service

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