

Dear Customer,

Thank you for choosing this Filter. Carefully read the in-formation in this manual before installing the filter. Failure to observe the indicated instruction null and voids all warranties. Keep this manual, containing the warranty conditions, and proof of purchase.

INTRODUCTION

RAINMASTER was designed to filter and treat rain water collected in accumulation tanks and thus used for various domestic, civil and industrial uses.

Use RAINMASTER to filter water of all impurities and remove all odours and colours that can reduce rain water quality and prevent its convenient and satisfying use. Rain water treated with Rainmaster must only be used for technical, non-drinking purposes.

RAINMASTER is a valid filtering and treatment system for all cases that require filtering and treatment to obtain clear, odourless and tasteless water, free of pesticides, insecticides and organic chloride compounds in general.

WARNING

RAINMASTER is not a purifier: do not use to filter water intended for drinking if inlet water quality is not guaranteed for this use or if its origin and quality are unknown.

The RAINMASTER range is made up of registered and patented double filters (**DUO models**) and triple filters (**TRIO models**). All filters come with an exclusive self-cleaning pre-filter and active carbon cartridge for final water treatment. Active carbon cartridges can be carbon block type (CB-EC) to provide improved flow capacity, or granular carbon type (LA) to provide improved treatment performance. RAINMASTER TRIO triple filters also come with a fine post-filtration cartridge (FA) up-stream from the active carbon cartridge to guarantee improved efficiency.

GENERAL REQUIREMENTS

Observe the use limits indicated on the filter label.

If pressure exceeds use limits, protect with a pressure reducer.

Install an "anti-water hammer" system to protect the filter.

Keep away from light sources.

Keep away from excessive heat and cold (min. 4°C, max 45°C).

Only use original Atlas Filtri cartridges. The use of non-original cartridges null and voids the warranty.

TECHNICAL SPECIFICATIONS

RAINMASTER filters have been designed and constructed with innovative technical solutions concerning self-cleaning pre-filter cartridge cleaning system efficiency by washing in counter-current to remove more substances deposited on the cartridge surface.

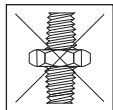
The self-cleaning filter has a nominal filtration of 90 micron in the RAH version with stainless steel net cartridges and RLH version with plastic net cartridge, or 50 micron nominal filtration in the RSH versions with pleated plastic mesh cartridges.

When the filtering element is clogged, it is simply cleaned by opening the valve on the bottom of the cup (see figure 1).

This operations generates a depression in the filter that pushes the cartridge down, automatically reversing water flow from the inside (in counter-current) out of the cartridge (see figure 2).

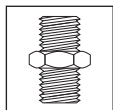
This water flow in counter-current carries particles and substances deposited on the cartridge to the drain. Closing the valve after a couple of seconds returns pressure distribution to its initial conditions and the internal spring returns the cartridge to its service position (se figure 3).

The RAINMASTER filter features a drain funnel, which is a device designed to protect potable water in water installations against pollution, to prevent pollution by backflow, in accordance with European standard UNI EN 1717 of November 2002. This device prevents backflow by making all elements downstream from the solenoid drain valve vent to atmosphere (protection unit symbol: DC).



CONIC

WARNING: the above described operating modes and cleaning in counter-current occur in excellent conditions with minimum 1.8 BAR supply pressure. Make sure supply pressure is not under this value, installing a pressure gauge upstream from the hydraulic system.



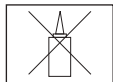
CYLINDRICAL(GAS)

INSTALLATION

Before installing the filter it is recommended to install a by-pass and cut-off valve, keeping both the filter inlet and outlet closed.

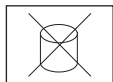
Mount the filter on the wall using the support with screws (standard supply).

Connect the filter inlet and outlet connections (NB: outlet indicated by an arrow on the head) only to pipes with BSP type connections (cylindrical, GAS type) as indicated in the drawing. Use flexible tubes to connect the filter to the pipes if necessary.



SEALANTS

WARNING: only use TEFLON[®] tape to seal filter connections. Do not use other types of sealing material or the warranty shall be null and void.



PASTE

CONNECTING THE FILTER DISCHARGE TO DRAIN

Connect a rubber tube reinforced with canvas to the drain funnel or hose fitting at the base of the filter, secure with a clamp and have it discharge into the drain (see figures 4A and 4B). The drain point must be lower than the drain funnel or hose fitting. The rubber tube reinforced with canvas must not be more than 2 metres long.

WARNING: avoid bending or pinching the rubber tube: this could generate counter-pressure against the drain with consequent malfunctions.



CANAPA

FIRST USE

Proceed as follows after installation and self-cleaning pre-filter drain connections:

- make sure there are no water leaks by gradually opening water supply to the filter;
- gradually fill the filter to about full and then release air in the filter by opening the breather screw on the head of the device, making sure all air is released and the filter filled with water. Close the breather screw when finished. Let a few litres of water flow from the filter before use. The filter is now ready for correct use.



TEFLON[®] TAPE

MAINTENANCE

Thanks to the self-cleaning pre-filter, the RAINMASTER can provide long-last improved performance if maintenance is correctly and regularly performed following the instructions indicated in ROU-TINE MAINTENANCE and EXTRAORDINARY MAINTENANCE.

ROUTINE MAINTENANCE

Self-cleaning pre-filter:

clean the filter cartridge in counter-current by opening the drain valve for 15/20 seconds. Washing in counter-current is performed as indicated in the TECHNICAL SPECIFICATIONS.

If the cartridge is not perfectly clean after washing, repeat the operation with the same procedure one or more times until the desired cleanliness is reached. If acceptable cleanliness is not achieved for good filter operations, follow the extraordinary maintenance procedure described below.

Carbon filters:

- replace the CB-EC cartridge at least every 6 months or before the limit if odours, colours or bad tastes are found in water and/or flow significantly reduces;
- replace the LA cartridge at least every 3 months or before the limit if odours, colours or bad tastes are found in water and/or flow significantly reduces.

Post-filter (RAINMASTER TRIO models only):

- replace the post-filter cartridge FA every 3-6 months when replacing the active carbon cartridge or before the limit if flow significantly reduces.

NB: Dispose of used cartridges according to current laws.

EXTRAORDINARY MAINTENANCE

Self-cleaning pre-filter:

In time, routine cartridge cleaning may become difficult due to build-up on the cartridge net. In this case, extraordinary cartridge cleaning is required as follows:

- cut off water flow upstream from the filter;
- release filter pressure by opening the water tap downstream from the filter;
- open the filter unscrewing the cup from the head using the spanner (supplied);
- remove the cartridge (wearing protective gloves to prevent scratches due to worn mesh);
- clean the cartridge under a jet of cold water and use a soft brush to remove most impurities;
- insert the clean cartridge in the cup;
- screw the cup onto the head;
- follow the procedure under "FIRST USE" to reuse the filter;
- replace the self-cleaning filter cartridge every 24-36 months or before the limit if the cartridge net is visibly torn.

Carbon filters and post-filter:

In the event of prolonged filter disuse, disconnect the device from the mains and remove cartridges, storing them in a cool and dry place until next use.

TROUBLESHOOTING

RAINMASTER filters are constructed following strict quality controls and are subject to stringent efficiency and resistance tests. Following are a series of problems that may occur due to incorrect installation or maintenance or improper use, possible negligence or due to filter or part wear.

PROBLEM	CAUSE	SOLUTION
Water does not run from faucets	<ul style="list-style-type: none">- cartridge clogged;- Bowl broken;- cut-off valves and/or By-pass closed.	<ul style="list-style-type: none">- clean the cartridge following the extraordinary maintenance procedure;- replace the bowl and O-ring;- open the closed cut-off valve or by-pass.
Unfiltered water runs from faucets	<ul style="list-style-type: none">- cartridge broken;- spring broken;- cartridge gasket ruined;- by-pass valve open.	<ul style="list-style-type: none">- replace the cartridge;- replace the spring;- replace the cartridge gasket;- close the by-pass valve.
The cartridge does not clean during self-cleaning operation	<ul style="list-style-type: none">- insufficient pressure in the bowl;- cartridge not correctly positioned in the bowl.	<ul style="list-style-type: none">- check the drain pipe: if pinched or bent, remove the problem;- rotate the cartridge clockwise or Counter-clockwise so that it moves vertically without strain in the bowl.
Water leaks between the filter head and bowl.	<ul style="list-style-type: none">- Bowl O-ring ruined	<ul style="list-style-type: none">- replace the O-ring.
Water leaks from connections between pipes and from the sides of the filter	<ul style="list-style-type: none">- sealant (TEFLON®) insufficient	<ul style="list-style-type: none">- add a few turns of TEFLON®
Water leaks between the bowl and drain valve	<ul style="list-style-type: none">- drain valve gasket damaged	<ul style="list-style-type: none">- replace the gasket.

DECLARATION OF COMPLIANCE

RAINMASTER filters are constructed in accordance with the following European directives: UNI EN 1717 - Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow.

HYDRA RAINMASTER RANGE TECHNICAL SPECIFICATIONS

RAINMASTER

BAR Min / 1,8

T°C Min / +4

BAR Max / 8

T°C Max / +45

RAINMASTER DUO CB-EC	RAH	RLH	RSH
Micron	90	90	50
IN/OUT 1/2" Q Max l/h @ 3 BAR	3600/1,5	3600/1,5	3600/1,5
IN/OUT 3/4" Q Max l/h @ 3 BAR	5000/1,5	5000/1,5	5000/1,5
IN/OUT 1" Q Max l/h @ 3 BAR	5700/1,5	5700/1,5	5700/1,5

RAINMASTER DUO LA	RAH	RLH	RSH
Micron	90	90	50
IN/OUT 1/2" Q Max l/h @ 3 BAR	1900/2,2	1900/2,2	1900/2,2
IN/OUT 3/4" Q Max l/h @ 3 BAR	2600/2,2	2600/2,2	2600/2,2
IN/OUT 1" Q Max l/h @ 3 BAR	2900/2,2	2900/2,2	2900/2,2

RAINMASTER TRIO CB-EC	RAH	RLH	RSH
Micron	90	90	50
IN/OUT 1/2" Q Max l/h @ 3 BAR	3500/1,7	3500/1,7	3500/1,7
IN/OUT 3/4" Q Max l/h @ 3 BAR	4800/1,7	4800/1,7	4800/1,7
IN/OUT 1" Q Max l/h @ 3 BAR	5500/1,7	5500/1,7	5500/1,7

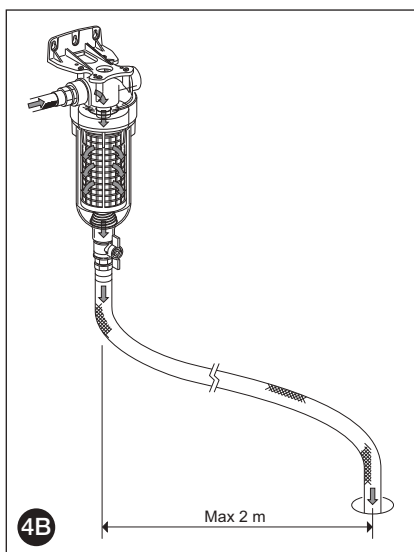
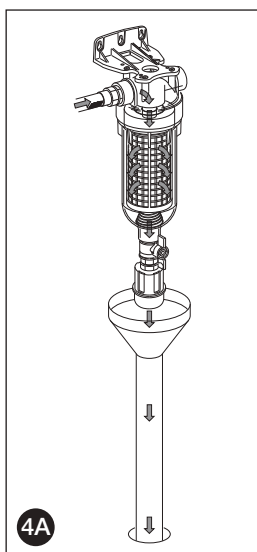
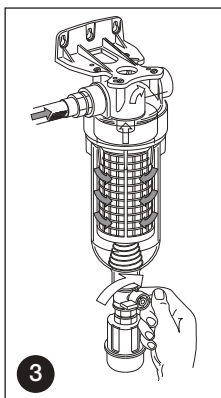
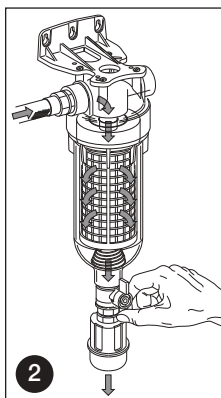
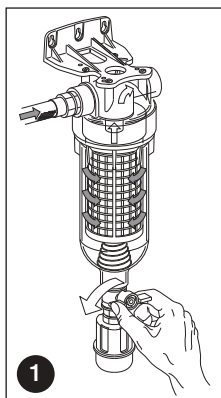
RAINMASTER TRIO LA	RAH	RLH	RSH
Micron	90	90	50
IN/OUT 1/2" Q Max l/h @ 3 BAR	1800/2,5	1800/2,5	1800/2,5
IN/OUT 3/4" Q Max l/h @ 3 BAR	2500/2,5	2500/2,5	2500/2,5
IN/OUT 1" Q Max l/h @ 3 BAR	2800/2,5	2800/2,5	2800/2,5



RAINMASTER DUO



RAINMASTER TRIO



Warranty

- Keep the label on the box for product identification.
- Applied warranty conditions are those in Directive CEE 85/374 for EU countries. For non EU countries, the product is covered by a limited 12-month warranty from date of purchase (proof of purchase required). Claims must be made in writing to the point of sale or to Atlas Filtri srl, Via del Santo 227, I-35010 Limena, Italy. Claims must: Indicate the product, place and date of purchase; provide the product for review; prove connections between defects and damages. All disputes are regulated by Italian law and shall be submitted to the Court of Padua, Italy.