



Dear Customer,

Thank you for choosing this Atlas Filtri product, made in Italy. Carefully read the information 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

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

Use HYDRA 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 Hydra Rainmaster must only be used for technical, non-drinking purposes.

HYDRA 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

HYDRA 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 HYDRA 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. HYDRA RAINMASTER TRIO triple filters also come with a fine post-filtration cartridge (FA) upstream 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

HYDRA 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.

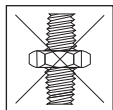
The self-cleaning filter has a nominal filtration of 90 micron in the RAH version with stainless steel net cartridges and RLH version with plastic net cartridge, or 50 micron nominal filtration in the RSH versions with pleated plastic mesh cartridges.

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).

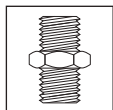
This water flow in counter-current carries particles and substances deposited on the cartridge to the drain. Closing the valve after a couple of seconds returns pressure distribution to its initial conditions and the internal spring returns the cartridge to its service position (see figure 3).

The HYDRA 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.



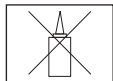
CYLINDRICAL(GAS)

## 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.

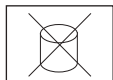
Mount the filter on the wall using the support with screws (standard supply).

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 HYDRA RAINMASTER can provide long-last improved performance if maintenance is correctly and regularly performed following the instructions indicated in ROUTINE 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 (HYDRA 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

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

### DECLARATION OF COMPLIANCE

Manufacturer's address: ATLAS FILTRI srl - Via del Santo 227, 35010 Limena (PD) - ITALY

HYDRA 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.

## DATI TECNICI GAMMA HYDRA RAINMASTER

## HYDRA RAINMASTER RANGE TECHNICAL SPECIFICATIONS

## DONNÉES TECHNIQUES GAMME HYDRA RAINMASTER

## TECHNISCHE DATEN DER HYDRA RAINMASTER-PRODUKTPALETTE

## DATOS TÉCNICOS GAMA HYDRA RAINMASTER

## ТЕХНИЧЕСКИЕ ДАННЫЕ СЕРИИ HYDRA RAINMASTER

### HYDRA RAINMASTER

BAR Min / БАР Мин 1,8

BAR Max / БАР Макс 8

T°C Min / T°C Мин +4

T°C Max / T°C Макс +45

### HYDRA RAINMASTER DUO CB-EC

RAH

RLH

RSH

Micron / Микрон

90

90

50

IN/OUT 1/2"

3600/1,5

3600/1,5

3600/1,5

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 3/4"

5000/1,5

5000/1,5

5000/1,5

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 1"

5700/1,5

5700/1,5

5700/1,5

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

### HYDRA RAINMASTER DUO LA

RAH

RLH

RSH

Micron / Микрон

90

90

50

IN/OUT 1/2"

1900/2,2

1900/2,2

1900/2,2

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 3/4"

2600/2,2

2600/2,2

2600/2,2

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 1"

2900/2,2

2900/2,2

2900/2,2

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

### HYDRA RAINMASTER TRIO CB-EC

RAH

RLH

RSH

Micron / Микрон

90

90

50

IN/OUT 1/2"

3500/1,7

3500/1,7

3500/1,7

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 3/4"

4800/1,7

4800/1,7

4800/1,7

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 1"

5500/1,7

5500/1,7

5500/1,7

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

### HYDRA RAINMASTER TRIO LA

RAH

RLH

RSH

Micron / Микрон

90

90

50

IN/OUT 1/2"

1800/2,5

1800/2,5

1800/2,5

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

IN/OUT 3/4"

2500/2,5

2500/2,5

2500/2,5

Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч

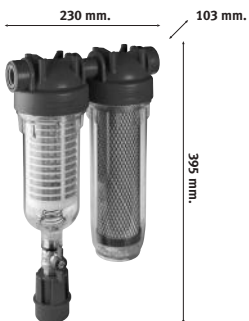
IN/OUT 1"

2800/2,5

2800/2,5

2800/2,5

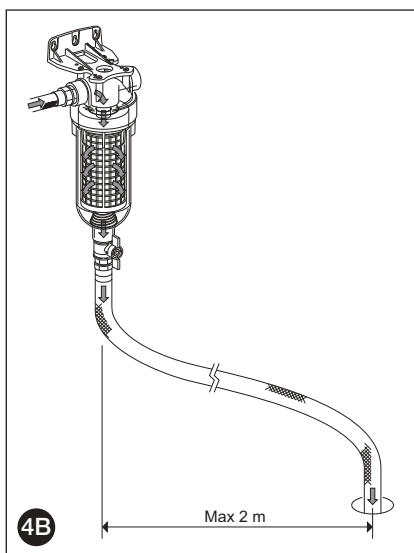
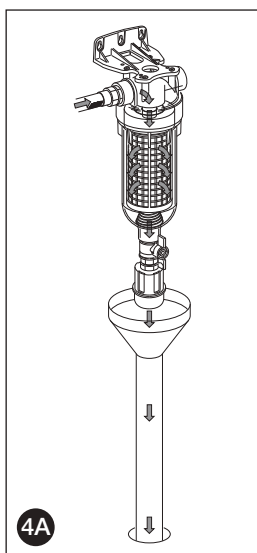
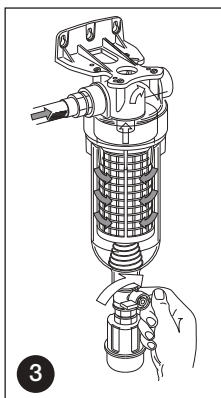
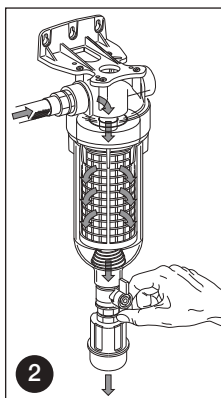
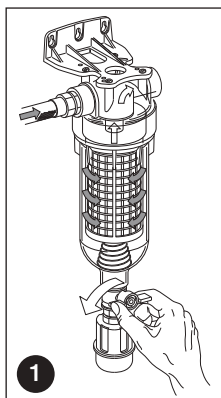
Q Max l/h @ 3 BAR / ΔP BAR @ Q Max  
Q Макс л/ч @ 3 BAR / ΔP БАР @ л/ч



HYDRA RAINMASTER DUO



HYDRA RAINMASTER TRIO



## Garanzie

- Conservare l'etichetta della scatola per identificare il prodotto.
- I termini di garanzia applicati sono quelli contenuti nella Direttiva CEE 85/374 per i paesi UE. Per i paesi extra UE il prodotto è coperto da garanzia limitata per 12 mesi dalla data dell'acquisto provato da regolare scontrino. Richieste di risarcimento devono essere fatte per scritto al punto vendita - o ad Atlas Filtri srl, Via del Santo 227, I-35010 Limena, Italia. Il danneggiato deve: indicare il prodotto, il luogo, la data di acquisto; offrire il prodotto in visione; provare il nesso causale tra difetto e danno. Per qualsiasi controversia il produttore elige come Foro competente il Tribunale di Padova, Italia, con applicazione della normativa italiana.

## 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.

## Garantie

- Conserver l'étiquette de la boîte pour identifier le produit.
- Pour les pays de l'Union européenne, les délais de garantie sont ceux indiqués dans la Directive CEE 85/374. Pour les pays qui ne font pas partie de l'Union européenne, le produit est garanti 12 mois à compter de la date d'achat reportée sur le ticket de caisse. Les demandes d'indemnisation doivent être faites par écrit au point de vente ou à Atlas Filtri srl, Via del Santo 227, I-35010 Limena, Italia. Le client qui a subi un dommage doit: indiquer le produit, le lieu et la date d'achat; permettre d'examiner le produit en question; prouver le rapport entre le défaut et le dommage. En cas de litige, le fabricant reconnaît le Tribunal de Padoue (Italie) comme étant le seul compétent, avec application de la loi italienne.

## Garantie

- Bewahren Sie die Schachteletikette gut auf, um das Produkt zu identifizieren.
- Bei den angewendeten Garantiebedingungen handelt es sich um jene, die in der Richtlinie CEE 85/374 für die Länder der EU enthalten sind. Bei Nicht-EU-Staaten ist die Garantiedeckung auf 12 Monate ab dem durch einen regulären Rechnungsbeleg bestätigten Kaufdatum beschränkt. Ansuchen um Entschädigungsansprüche müssen schriftlich bei unserer Verkaufsstelle bzw. bei Atlas Filtri srl, Via del Santo 227, I-35010 Limena, Italien gestellt werden. Der Geschädigte muss folgendermaßen vorgehen: Produktidentifikation, Ort und Datum des Kaufs sind anzugeben; das Produkt muss zur Ansicht vorgelegt werden; es ist der kausale Zusammenhang zwischen Mangel und Schaden zu beweisen. Als zuständiger Gerichtsstand für allfällige und jegliche Rechtsstreitigkeiten wurde vom Hersteller das Gericht von Padua, Italien, gewählt, wo die geltenden italienischen Rechtsvorschriften zur Anwendung gelangen.

## Garantías

- Conservar la etiqueta de la caja para identificar el producto.
- Las condiciones de garantía aplicadas son las contenidas en la Directiva CEE 85/374 para los países de la UE. Para los países fuera de la UE el producto está cubierto por una garantía limitada por 12 meses desde la fecha de la compra, probada por el recibo correspondiente. Las eventuales solicitudes de resarcimiento se deben realizar por escrito al punto de venta - o a Atlas Filtri srl, Via del Santo 227, I-35010 Limena, Italia. El damnificado debe: indicar el producto, el lugar, la fecha de compra; ofrecer el producto para ser examinado; probar el nexo causal entre defecto y daño. Ante cualquier controversia, el fabricante elige como Foro competente el Tribunal de Padua, Italia, con aplicación de la normativa italiana.

## Гарантии

- Сохраните этикетку с коробки для идентификации изделия.
- Для стран - членов ЕС применяются гарантийные условия, содержащиеся в Директиве CEE 85/374. Для стран - не членов ЕС, на изделие распространяется гарантия, ограниченная 12 месяцами со дня покупки, подтвержденной обычным чеком. Заявки на получение компенсации должны оформляться в письменном виде в пункте продажи, либо по адресу: Atlas Filtri srl, Via del Santo 227, I-35010 Лимена (Limena), Италия. Лицо, понесшее ущерб, должно: указать название изделия, место и дату покупки; предоставить рекламационное изделие; предоставить доказательства причинной связи между дефектом изделия и причиненным ущербом. В случае возникновения споров, изготовитель выбирает в качестве компетентного суда Суд города Падуя, Италия, с применением норм итальянского законодательства.



**ATLAS green is the ATLAS FILTRI seal for environmentally friendly products.**

Hydra Rainmaster filter housing bowls are made in PET, a highly recyclable plastic, manufactured with a proprietary procedure saving up to 60% of energy in injection molding compared with standard plastics. That is one of Atlas Filtri commitments to comply with Kyoto Treaty for the reduction of green house gas (CO<sub>2</sub>) emissions in the atmosphere.

CB-EC is the only environmentally friendly carbon block element, made with a proprietary technology reducing green house gas emissions in activated carbon production.



Via del Santo, 227 - 35010 LIMENA (Padova) - ITALY  
Tel. +39.049.769055 - Fax +39.049.769994 - [www.atlasfiltri.com](http://www.atlasfiltri.com)