



## INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE OF HYDRA MINI SELF-CLEANING FILTERS

Dear Customer,

Thank you for choosing this product manufactured in Italy by ATLAS FILTRI S.r.l., assembled and marketed in the USA and Canada by ATLAS FILTRI NORTH AMERICA, LLC. The filter has been designed and manufactured in Italy using over 40 years of expertise in the industry.

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COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV  
ISO 9001 • ISO 14001  
ISO 45001

# 1 - Safety Alert Symbols



**WARNING SIGN:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. It highlights conditions that are a serious risk for personal safety.



**CAUTION SIGN:** Indicates a potentially hazardous situation which, if not avoided, may result in a minor or moderate injury, and to alert against unsafe practices.



**NOTICE SIGN:** Alerts you to pertinent facts and conditions.

# 2 - General Information



**PLEASE READ THIS INSTRUCTION MANUAL THOROUGHLY AND CAREFULLY AND UNDERSTAND ITS CONTENTS BEFORE INSTALLING YOUR ATLAS FILTRI FILTER HOUSING.**

- The information in this instruction manual is subject to modifications without prior notice and is not binding on the manufacturer Atlas Filtri North America, LLC.
- Keep the instruction manual for future reference.

**Contact:** See page 1

**Product Identification:** A label carrying product identification, serial number, production batch is applied on the package of the product. An additional label describing maximum working pressure and maximum working temperature is applied to the filter housing.

**The label must not be removed, tampered, hidden, covered, or changed.**

If the label on the product is missing or the operational conditions on the label are not legible, DO NOT INSTALL the filter and contact Atlas Filtri North America LLC Authorized Distributors or contact the manufacturer by e-mail at [atlasfiltrinorthamerica@atlasfiltri.com](mailto:atlasfiltrinorthamerica@atlasfiltri.com).



The values of the maximum working temperature and the maximum working pressure shown in the label affixed to the filter housing are intended as maximum working parameters and must not be exceeded under any circumstance.

# 3 - Personnel's Qualification

**ONLY QUALIFIED AND LICENSED PERSONNEL MAY PERFORM INSTALLATION, SERVICE AND MAINTENANCE OF THE ATLAS FILTRI FILTERS.**

# 4 - Precautions, Warnings

**READ ALL INSTRUCTIONS AND PRECAUTIONS BEFORE INSTALLING AND USING YOUR ATLAS FILTRI PRODUCT.**



**Before installation ensure that any electric plugs in the vicinity of the area are disconnected.**



**Do not install near electric appliances.**



**Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on waters that contain filterable cysts.**

# CAUTION

Turn-off the water main before installation.

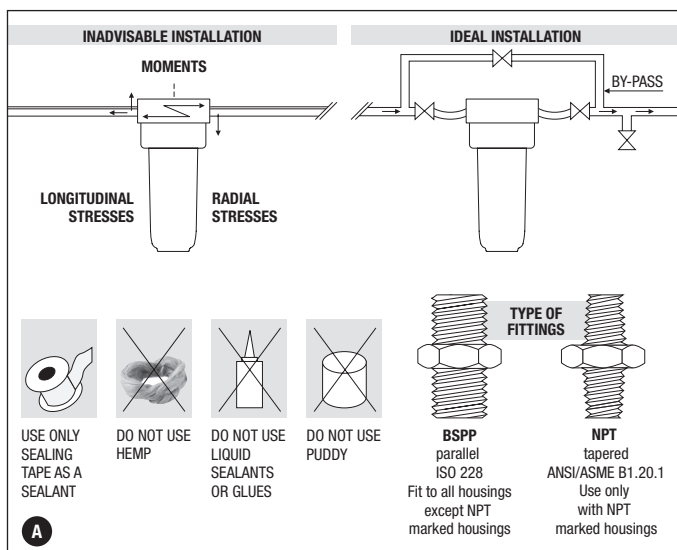
## 5 - Installation

Refer to Fig. A, B and C for installation directions.

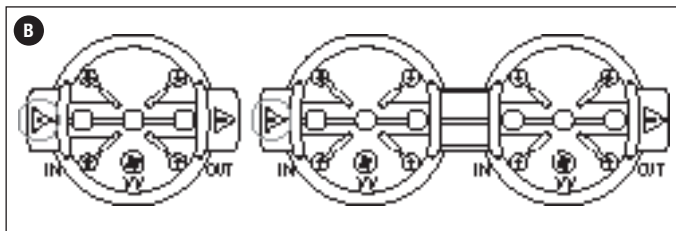
- Before installation, check if the plumbing system has been constructed according to the applicable plumbing code.
- Avoid all kinds of stress by using the wall bracket provided. Should the use of the wall bracket be impossible, the installer (qualified and licensed personnel) shall be responsible for the most appropriate installation avoiding stress which may affect the filter's integrity.
- Connect the inlet to the product's side with the arrow IN and the outlet to the side with the arrow OUT. (Fig. B)
- **Connect to pipes using tapered fittings ONLY in the case of NPT marked filter housing and/or in the case of filter housing specified as NPT in the label affixed in the package of the product.**  
**Preferably connect to pipes using flexible hoses.**
- Connect to pipes using BSPP (parallel) fittings in the case the filter housing is not marked NPT or not specified as NPT on the package label. Preferably connect to pipes using flexible hoses.
- Use only sealing tape as a sealant for the connections.
- The installation of a by-pass is recommended (see Fig. A).
- Install the provided drain kit to the filter sump: screw the drain-valve to sump male threaded connection, then screw the drain funnel (or the hose fitting) to the drain-valve, making sure the 2 gaskets provided with the ball-valve are in place and well positioned. (If you have a model with female threaded sump connection, screw the provided male threaded junction to sump first and then screw the drain-valve).
- In case of HYDRA-M (models with gauges): screw the provided gauges to the dedicated ports on top of Hydra head, using sealing tape to provide tightening.
- Connect a reinforced rubber hose 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 D1 and D2). The drain point must be lower than the drain funnel or hose fitting. The rubber hose must not be more than 6.5 feet (2 metres) long.

# WARNING

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



## Modes for presentation of inlet and outlet directions (arrows) in different filter housings models



### 6 - Start Up

- Keep the filter package with label affixed to identify the product.
- Ensure that the sealing is tight and secure.
- As the installation of the filter and the connection of the rubber hose to the drainage are made, proceed as follows:
  - by gradually opening the water supply to the filter, make sure there is no water leaking;
  - gradually fill the filter to the top then release air in the filter as following:
  - for HYDRA: by opening the vent-valve on the head of the filter, making sure all air is released and the filter becomes completely filled with water, then tighten the vent-valve;
  - for HYDRA M: Release air from the filter by opening a tap downstream the filter in the pipe-line.
- After the installation, run the tap and let the water flow for at least 5 minutes before use.

## CAUTION

The initial quality of the water will not be optimal unless the tap runs for at least 5 minutes before use.

### 7 - Use (check the label on the package to identify the product series and model)

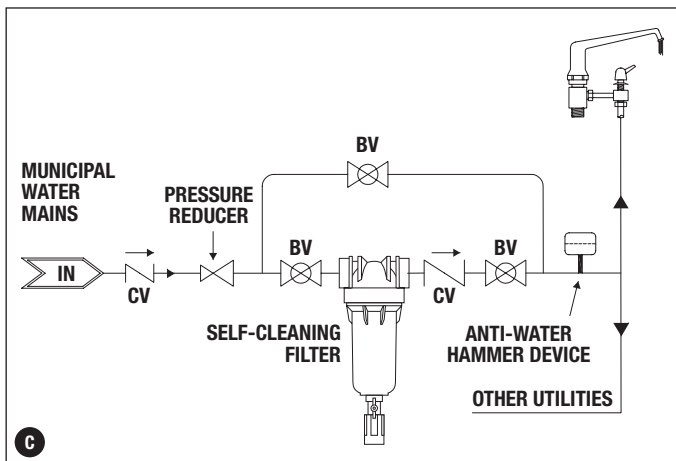
- Refer to Figure C for installation layout.
- HYDRA series of filter housing with plastic threaded connections are certified by IAPMO RT against NSF/ANSI Standards 42, 61, 372-lead free, CSA B483.1 for the filtration of drinking water. Do not use for the filtration of drinking water, do not use for filtration of water that is unsafe or of unknown quality. Systems certified for cyst reduction may be used on waters that contain filterable cysts.
- Check for the filter model from the label applied on the product package and from the legend "Sticker Legend" printed on the package.
- Respect the working parameters shown in the label affixed to the filter housing.
- If pressure exceeds the working conditions, protect the product with a pressure reducer.
- Keep protected from light. Supply cold water only, with pH in the range of drinking water.
- Use only HYDRA HOT filters for hot water filtration (applicable working temperature on product's label).
- Protect from excessive cold or heat: do not expose to temperature below 39°F (4°C) or above 113°F (45°C).
- For temperature above 113°F (45°C) use the HYDRA HOT model which can stand up to 176°F (80°C).
- Protect from back-flows of water with a non-return valve.
- Protect from hammering with an anti-hammering device.
- Should the filter be unused for 1 week or more remove the cartridge, wipe clean and store in clean, dry place. Insert the cartridge back into the filter only prior to use.

## CAUTION



The values of the maximum working temperature and the maximum working pressure shown in the label affixed to the filter housing are intended as maximum working parameters and must not be exceeded. Use of the filter housing under higher pressure and/or higher temperature conditions could cause ruptures.

## INSTALLATION LAY OUT



### 8 - Accessories and spare parts

Accessories and spare parts are available through the Atlas Filtri North America LLC Authorized Distributors wholesalers and retailers network. In case of difficulties contact Atlas Filtri North America LLC by e-mail at [atlasfiltrinorthamerica@atlasfiltri.com](mailto:atlasfiltrinorthamerica@atlasfiltri.com).

## NOTICE

**Use only original ATLAS FILTRI spare parts.**

**The use of non-original ATLAS FILTRI spare parts voids the warranty.**

### 9 - Maintenance

Routine maintenance consists in cleaning the filter cartridge with a back-wash in counter-current operation by opening the bottom drain valve for 15-20 seconds.

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 a good filter operations, follow the procedure as described below.

- Opening the drain-valve generates a pressure-drop in the filter that pushes the cartridge downward, automatically reversing water flow from the inside (counter-current) out of the cartridge (see Fig. E1). This water flow in counter-current carries particles and substances deposited on the cartridge to the drain.
- Closing the drain-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 Fig. E2).

The HYDRA filter features a drain funnel, which is a device designed to protect potable water from pollution by backflow, in accordance with European standard UNI EN 1717/2002.

## NOTICE

**The above described operating modes and the back-wash cleaning occur in excellent conditions with minimum 26 psi (1.8 bar) supply pressure.**

In time, routine cartridge cleaning may become difficult due to high dirt loads blinding the cartridge net.

In this case, additional cartridge cleaning is required as follows:

- shut-off water flow upstream from the filter;
- open the drain-valve and run the water flows until empty;
- open the filter by unscrewing the sump from the head using the supplied wrench;
- remove the cartridge (wearing protective gloves to prevent scratches due to cartridge materials);
- clean the cartridge under a jet of cold water and use a soft brush to remove impurities;
- insert the clean cartridge back in the sump;
- screw the sump to the head;
- follow the procedure under "FILTER START-UP" to put the filter in service.

## CAUTION

In case of persistent encrustations onto the filter net or if the pressure difference between the two gauges remains above 14.5 psi (1 bar) after cleaning the filter, replace the filter cartridge with a new one.

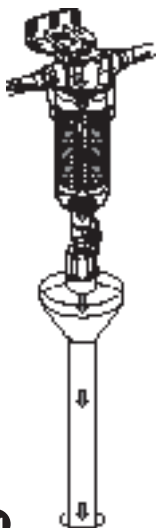
## CAUTION

Filter cartridges and the housing sump have an average working life, for that reason we recommend replacing plastic net cartridges at least every 24 months and stainless steel net cartridge at least every 48 months. The housing sump must be replaced with a new one at least every 5 years. Spare parts and cartridges are available through the Atlas Filtri North America LLC authorized distributors. In case of difficulties contact [atlasfiltrinorthamerica@atlasfiltri.com](mailto:atlasfiltrinorthamerica@atlasfiltri.com).

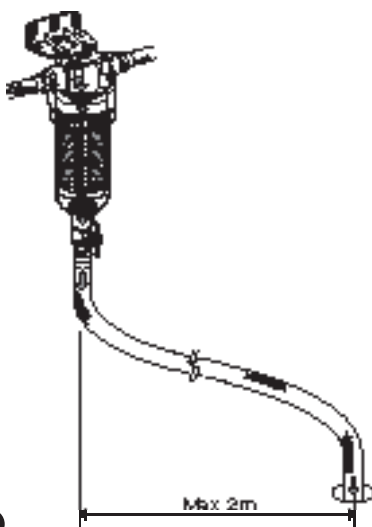
Follow the local regulation in force when disposing cartridges and sumps.

## CAUTION

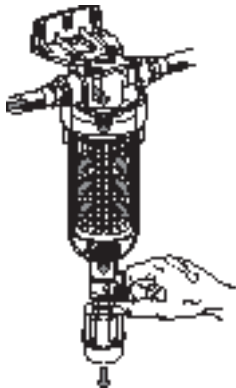
After carrying out maintenance operations, run a faucet downstream of the filter for at least 5 minutes before using the water.



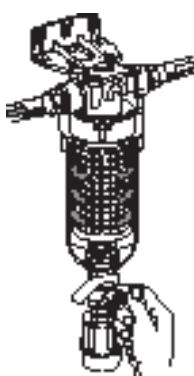
D1



D2



E1



E2

## 10 - Troubleshooting

MALFUNCTION	CAUSE	REMEDY
Water does not run from faucets	<ul style="list-style-type: none"><li>- Cartridge clogged</li><li>- Sump broken</li><li>- By-pass closed.</li></ul>	<ul style="list-style-type: none"><li>- Clean the cartridge following the maintenance procedure</li><li>- Replace the sump 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 damaged</li></ul>	<ul style="list-style-type: none"><li>- Replace the cartridge</li><li>- Replace the spring</li><li>- Replace the cartridge gasket</li></ul>
The cartridge does not clean during self-cleaning operation	<ul style="list-style-type: none"><li>- Insufficient pressure in the sump</li><li>- Cartridge not correctly positioned in the sump</li></ul>	<ul style="list-style-type: none"><li>- Check the drain hose: if pinched or bent, correct 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 sump.	<ul style="list-style-type: none"><li>- Sump o-ring damaged</li></ul>	<ul style="list-style-type: none"><li>- Replace the o-ring and lubricate.</li></ul>
Water leaks from connections between pipes and from the sides of the filter IN/OUT ports	<ul style="list-style-type: none"><li>- Sealant insufficient</li></ul>	<ul style="list-style-type: none"><li>- Add a few turns of sealing tape and tighten fittings until snug</li></ul>
Water leaks between the sump 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>

## 11 - Filter Housing and Cartridge Disposal

Filters housings and used filter cartridges must be disposed of in accordance with applicable rules and regulations.

## 12 - LIMITED WARRANTY

- a) Limited Warranty:** Atlas Filtri North America, LLC warrants for a period of 12 months from the date of purchase of the filter that each new Atlas Filtri North America, LLC filter shall be free, under normal use and maintenance, from any defect in material and workmanship subject to the following exclusions and limitations.
- b) Exclusions:** The warranty offered by Atlas Filtri North America, LLC is not applicable to the following:
- (i) Wear and tear of the cartridge and any components as part of their normal function, including without limitation gaskets.
  - (ii) Installation, tampering, modifications, lack of or incorrect maintenance, maintenance carried out not in accordance with Atlas Filtri North America, LLC instructions or by non-qualified personnel.
  - (iii) Installation and/or use of parts or other non-original Atlas Filtri North America, LLC components.
  - (iv) Installation of the filter in unsuitable environments and/or in conditions not contemplated in the instructions manual.
- c) Limitations:** The liability of Atlas Filtri North America, LLC under this limited warranty is limited solely to the replacement of defective product by an authorized Atlas Filtri North America, LLC distributor at its normal place of business during normal business hours, excluding shipping, installation labor or other repair costs. Defect and delays in repair do not give the right to compensation, or extension of the warranty. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, ATLAS FILTRI NORTH AMERICA, LLC SHALL NOT BE LIABLE FOR ANY OTHER EXPENSE, LOSS OR DAMAGE, WHETHER DIRECT, INCIDENTAL, PUNITIVE, CONSEQUENTIAL, OR EXEMPLARY ARISING IN CONNECTION WITH THE SALE OR USE OF OR INABILITY TO USE THE ATLAS FILTRI NORTH AMERICA, LLC PRODUCT FOR ANY PURPOSE. This limited warranty shall constitute the Purchaser's sole remedy and the sole liability of Atlas Filtri North America, LLC, whether on warranty, contract or negligence grounds, with regard to any actual or alleged defect in the condition or performance of any Atlas Filtri North America, LLC product. EXCEPT AS SPECIFICALLY SET FORTH HEREIN, ANY WARRANTY IMPLIED BY LAW, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS EXPRESSLY EXCLUDED. TO MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, THE FOREGOING STATEMENTS OF WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REMEDIES.

d) **Limitation of Liability.** ATLAS FILTRI NORTH AMERICA, LLC'S LIABILITY ON ANY CLAIM OF ANY KIND RELATING TO THESE TERMS OR THE MANUFACTURE, SALE, DELIVERY, RESALE OR USE OF ANY ATLAS FILTRI NORTH AMERICA, LLC PRODUCT, SHALL IN NO EVENT EXCEED THE PRICE OF THE ATLAS FILTRI NORTH AMERICA, LLC PRODUCT WHICH GAVE RISE TO ANY SUCH CLAIM.

**NOTICE**

We recommend that before installing a water filtration system you have the water tested to determine actual water filtering needs.

**NOTICE**

Use only original ATLAS FILTRI spare parts.  
The use of non-original ATLAS FILTRI spare parts voids the warranty.

**MAINTENANCE RECORDS**

DATE	TYPE OF MAINTENANCE

**NOTES**