

BIG F PRO

INSTALLATION, USE AND MAINTENANCE MANUAL

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Thank you for purchasing an Atlas Filtri BIG F PRO Water Treatment System.

INTRODUCTION

Atlas Filtri BIG F PRO are designed to reduce turbidity and to kill harmful bacteria and viruses in water supplies. By means of UV-C rays, a purification process that's eco-friendly and chemical-free, DNA and RNA of microorganisms is damaged, resulting in an effective germicidal action. A double-stage pre-filtration unit ensures that particulate matter does not shield micro-organisms from the UV-C light.

This system will effectively treat water, depending on the required UV dosage and existing water quality. The system is designed for mains and rainwater supply.

The **Atlas Filtri BIG F PRO** system cartridges and lamp need to be regularly maintained and/or replaced to guarantee optimum performance. For replacements contact your nearest Atlas Filtri dealer.

Quartz sleeve needs to be cleaned periodically to ensure optimum performances.

Warning

According to the European standard EN 60204-1 (safety of the set-up of the electrical equipment-general rules) low tension electrical equipment (rule 2006/95/CE) must be connected to a earthed current tap.

Safety warning

UV-C radiation can cause serious burns to unprotected skin and eyes, it is therefore compulsory not to connect the appliance to the socket without having first fitted the UV lamp in its housing.

Caution

Atlas Filtri BIG F PRO are designed to reduce turbidity and to kill harmful bacteria and viruses in water supplies. Do not use with chemically unsafe water (water that does not comply with the legal limits in force in your country) or with water of unknown quality. It is compulsory to perform a complete water analysis and, in case, adopt further treatments before using the system.

Note: This water filtering appliance should only be installed by a fully qualified & licenced plumber. Any operation on the electrical part of the product must be carried out by a qualified electrician, closely following the instructions supplied.

PREPARING YOUR SYSTEM

Please read all instructions carefully as failures caused by incorrect installation or operation make the warranty void.

Carefully check all the components (especially the lamp) are present and not damaged:

1. Filter System and UV chamber (with double-stage filtration unit, flexible steel hose and metallic frame).
2. UV Lamp and quartz sleeve (in cardboard tube).
3. Bag containing: spanner, manometers (2), lubricant (2), brass joint (1), gaskets (2) and the metallic frame key.
4. Ballast (**Atlas Filtri BIG F PRO** systems come with Ballast pre-installed).
5. This user guide.

Remove all the packing materials before using.

You must dispose of this product and its packaging according to local laws and regulations.

INFORMATION ON THE DISPOSAL OF THE SYSTEM

Applicable disposal methods may be different in countries outside of the European Union. Ask your retailer or local authority about the requirements that apply in your country.

We remind that, according to what is fixed by D.L.25 July 2005, № 151 “Accomplishment of directives 2002/CE, 2002/96/CE and 2003/108/CE, concerning the reduction of the use of dangerous substances in electric and electronic equipment, and the disposal of waste” both mercury vapours lamps and electrical panels, when no longer used, must be considered as special waste, and in the same way disposed of.

To do that, it is possible to send to specialized centres for the recovery of dangerous materials, or to contact directly our technical department.



INFORMATION TO USERS pursuant to art. 14 of the 2012/19 / EU DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on waste electrical and electronic equipment (WEEE).

The crossed bin symbol on the appliance or on its packaging indicates that the product at the end of its useful life must be collected separately and not disposed of together with other mixed urban waste.

Please contact your municipality, or local authority, for all information regarding the separate collection systems available in the area. The retailer is obliged to collect the old equipment free of charge when buying new equipment of an equivalent type, for the purpose of starting the correct recycling / disposal. Appropriate separate collection for the subsequent start-up of the disused equipment for recycling, treatment and environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favors the re-use and / or recycling of the materials it is composed of the equipment.

POSITIONING YOUR SYSTEM

Choose a location with a structurally appropriate mounting position. Allow at least a chamber length space above the unit for removal of the lamp and quartz-sleeve and 120 mm below the housings for replacing the cartridges and maintenance.

Atlas Filtri BIG F PRO systems must be installed in a sheltered position, protected from direct sunrays, weather, rain, frost, water and have adequate ventilation.

All **Atlas Filtri BIG F PRO** systems should be protected from harsh environments where overexposure to salt or aggressive chemicals can occur.

INSTALLATION REQUIREMENTS

Warning - FOR CORRECT OPERATION OF THIS APPLIANCE, IT IS ESSENTIAL TO OBSERVE THE MANUFACTURER'S INSTRUCTIONS.

Cold water line only.

Power supply: AC 110-240 V; 50/60 Hz

Max Working Pressure: 8,3 bar

Working temperature: 4-45 °C (protect from freezing).

Max Flow rates: **mod. 156** 3240 L/h (54 lpm) - **mod. 256** 4200 L/h (70 lpm)

mod. 267 5700 L/h (95 lpm)

Note: Ensure the connection of the device meets the applicable plumbing code in your area.

Note: Only use thread seal tape (not included) for the manometers and nipple-head connection. Do not use liquid sealant.

ELECTRICAL POWER SURGE PROTECTION

An electrical power surge or spike can travel through the supply lines and cause serious damage to your electrical equipment. The **BIG F PRO** has a fuse to protect the circuit. The fuse is not a lightning arrester and may not protect the product if lightning or a very powerful surge hits the unit. If the installation is subject to electrical power surges or lightning we strongly recommend the use of suitable additional surge

protection devices on all electrical equipment. We recommend the use of an RCD or earth leakage circuit breaker on the power supply to your unit.

The flow rate **MUST** be equal or below the maximum values. Excessive flow will reduce UV dose and may render the unit ineffective.

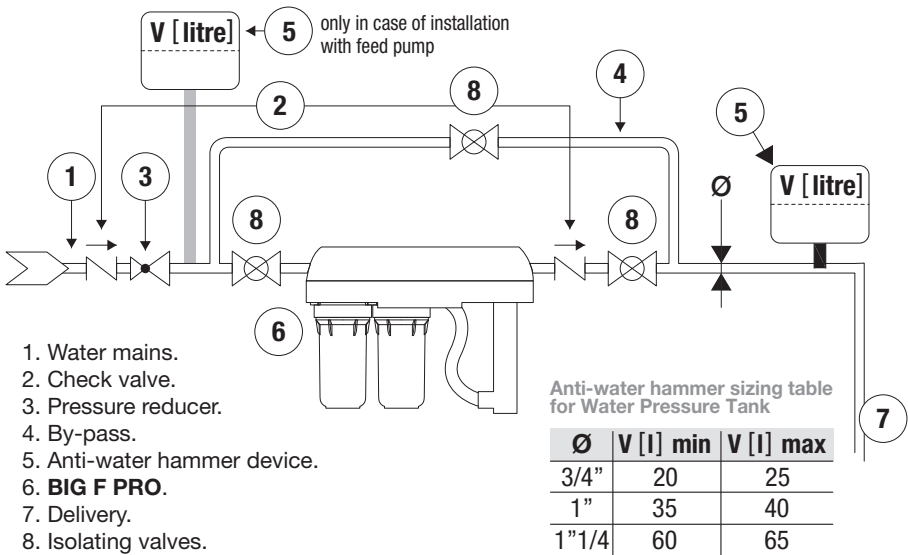
For the correct performance of the system the inlet water must meet the below parameters:			
Hydrogen sulphide	< 0,3 mg/L	Total hardness	< 120 mg/L
Iron	< 0,3 mg/L	UV transmittance	> 95% - 1 cm
Manganese	< 0,05 mg/L		

Warranty will not apply to units which fail due to being used on water which does not meet the above water quality parameters.

INITIAL INSTALLATION PROCEDURE

Warning

- Only use the system in the operating conditions indicated on the sticker on the filter bowl.
- if the sticker is tampered, damaged, not legible or missing, applicable working conditions are: max pressure 8,3 bar, max temperature 45°C.
- If pressure exceeds use limits, protect with a pressure reducing valve.
- Install an "anti-water hammer" system to protect the filter. In case of installation on systems powered by a pump and especially on those equipped with a pressure and flow controller, an additional expansion vessel must be installed between the pump and the first filter unit to minimize pressure fluctuations.



Atlas Filtri BIG F PRO systems has 1" BSPP plumbing connections (Inlet 1" BSPP female, Outlet 1" BSPP male).

1. Remove the flexible hose from its seat inside the cardboard protection.
2. Before attempting installation, check that the UV lamp and its quartz sleeve are intact inside their respective packaging.
3. Locate a suitable position for the **BIG F PRO** system remembering to allow 120mm under the housings and at least a chamber length space above the unit for removal of the lamp and sleeve. A power outlet with residual current protection is required.

You can choose the direction of the water flow through the unit, depending on whether you have water inlet from the left (default setting) or from the right. To reverse the direction of flow, unscrew the filter housings, the UV System, the earthing and the power supply box, reassemble all the components removed so that the UV chamber is on the left, the filter housing inlet on the right and the UV lamp controller is slightly to the left. Re-fit the gauges.

Warning

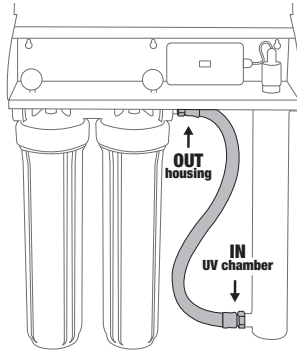
Pay attention to ensure the earth strap has been fitted. Check that once reversed the water will be flowing through the filters in the correct direction.

N.B. The water MUST always pass through the Filter Housings BEFORE the UV unit.

4. Atlas Filtri BIG F PRO systems have 3 mounting holes at the rear of the mounting bracket. Use the mounting holes to mark the desired position on the wall where the fixings are required to go.
5. Drill the holes and install the anchors (fixing anchors not included).
6. Position the mounting bracket on the wall. Insert and tighten the fixings to hold the system securely to the wall.

Note: The outlet is always on the UV side of the system.

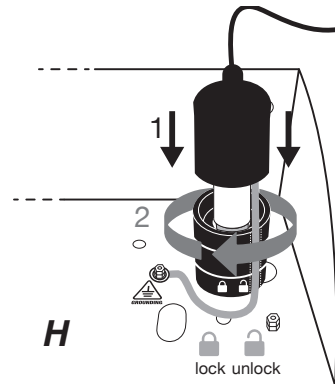
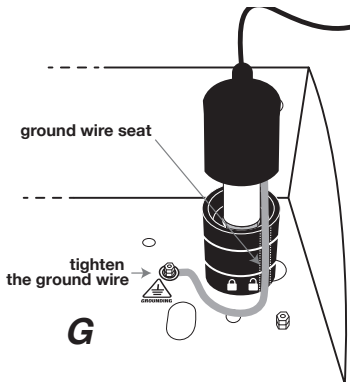
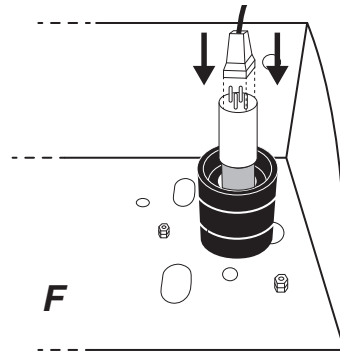
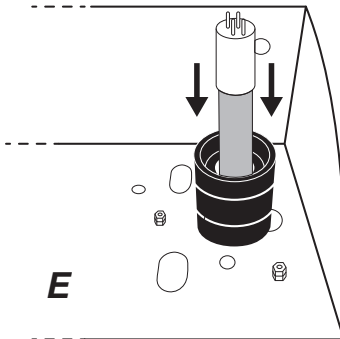
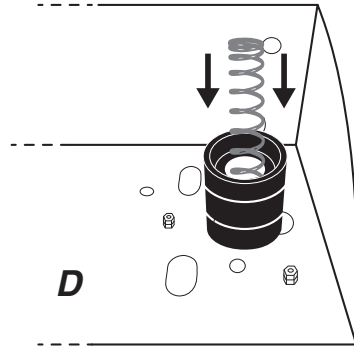
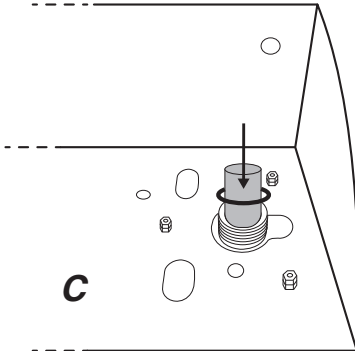
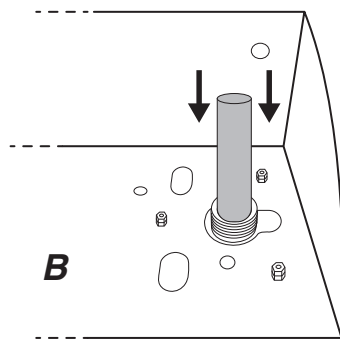
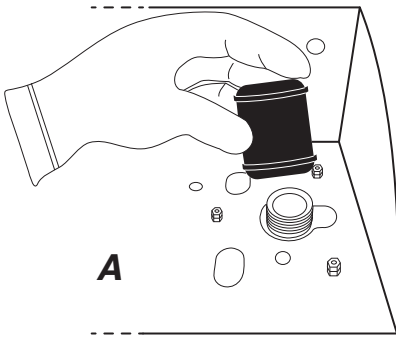
7. Turn off the water mains.
8. Plumb inlet and outlet pipework to the Atlas Filtri BIG F PRO unit. The inlet is a 1" BSPP female and the outlet is a 1" BSPP male.
9. Connect the brass nipple to the outlet of the housing; PTFE sealant tape (not included). In case of leakage of water add some more sealant tape and/or screw more tightly.
10. Connect the manometers applying some PTFE sealant tape (not included) to the thread and screw them on tightly, but without over-tightening, into the 1/8" threaded ports on the top of the head; at product start-up, in case of leakage of water add some more sealing tape and/or screw more tightly.



11. Connect the flexible hose to the brass nipple and to the inlet of the UV chamber using the supplied gaskets.
12. ASSEMBLY OPERATIONS:
 - (A) Open the cover. Remove the lamp connector from the top nut, disconnecting the ground wire and unscrew the black sleeve bolt. **warning: pay attention to the blue gasket inside.**
 - (B) Insert the quartz sleeve carefully centring the seat at the bottom plate of the UV chamber.
 - (C) Insert the o-ring into the quartz sleeve.
 - (D) Tighten the sleeve bolt and insert the spring into the quartz tube by dropping it into the chamber.
 - (E) Slowly insert UV lamp into the quartz sleeve.
 - (F) Connect the lamp connector to the pins on the lamp.
 - (G) Place the ground wire in the appropriate seat of the black bolt.
 - (H) Push the black cap on the black bolt and turn it clock wise to lock it. Connect again the ground wire to the frame.

Use gloves to handle the quartz (glass) and lamp surface as marks or fingerprints may interfere with UV transmission. If lamp is soiled, please clean lamp with an alcohol based cleaner.

13. Use the filter housing spanner to tighten filter bowls until firm. DO NOT OVER TIGHTEN.
14. Turn the water on, let the water flow through – opening a tap downstream to flush the unit for 5 minutes at least. Then check the system thoroughly for leaks.
15. Turn the power on and ensure that the lamp is operating (see lamp ballast operation chapter)
16. Close and lock the cover. Note: Your cabinet comes with 1 key for your convenience. Please store it safely.



OPERATION

• Prior to perform any work on the UV steriliser system, always disconnect the power supply.

Warning: Do not look directly into ultraviolet rays emitted from the UV lamp as they will cause serious burns to unprotected eyes.

• The treated water will seem warm for a short period at first flow. This is because the UV lamp emits heat. When turning on a tap, let the water run for a short time to purge any warm water.

LAMP BALLAST OPERATION

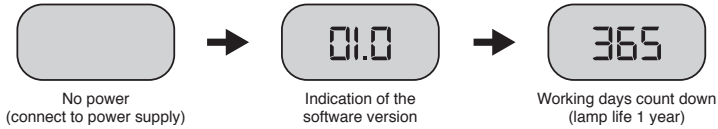
Any operation on the electrical part of the product must be carried out by a qualified electrician, closely following the instructions supplied.

Ballast Display Information

⚠ ATTENTION: If the display does not turn-on replace the fuse in the UV control panel.

DISPLAY MESSAGES – Start up:

DISPLAY MESSAGES – Working days:



Press for less than 1 sec to show the lamp working days:

DISPLAY ALARMS - Troubleshooting:

AL1: Indicates the end of lamp life (count-down timer shows 0 days) In such case replace the UV lamp and



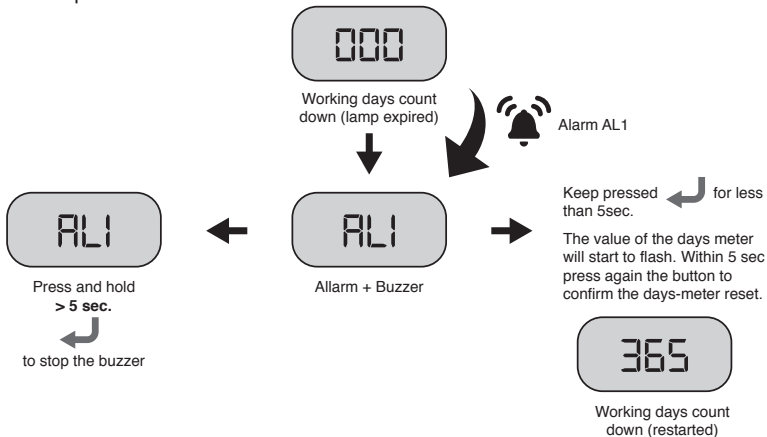
reset the working days count down. To reset the working days count down replace the lamp and press and hold for less than 5 seconds the button. The value of the days-meter will start to flash. Within 5 sec press the button again to confirm the days-meter reset.

⚠ ATTENTION: Do not replace the lamp with power connected to the unit.


Press and hold for more than 5 seconds the button to mute the alarm for 7 days (max 4 times).

N.B. if within 5 sec the lamp reset is not «confirmed», the days-meter reverts back to the current days remaining value.

AL2: Indicates lamp failure. Check:



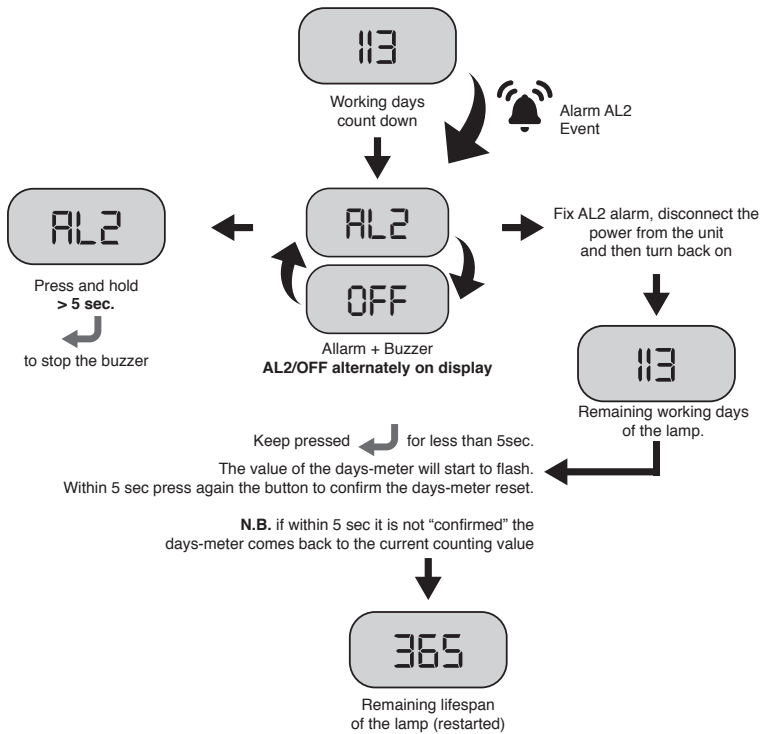
- Lamp connection.
- If the lamp is burnt out by testing a new lamp.
- If the lamp starter has failed by testing a new lamp.

In case of lamp replacement press and hold for less than 5 seconds the  button. The value of the days-meter will start to flash. Within 5 sec press again the button to confirm the days-meter reset.

 **ATTENTION:** Do not replace the lamp with powered unit!

Press and hold for more than 5 seconds the  button to mute the alarm for 7 days (max 4 times).


BALLAST DISPLAY INFORMATION




Warning

DISPLAY OFF: The fuse of the pcb is blown. Unscrew the cap of the power supply box. Remove the small box close to the power supply plug, replace the fuse (mod. 5x20 1,6A Fast).

Maintenance


MADE IN ITALY
BIG F PRO
 **ATLAS FILTRI**
improving water

DAYS COUNTDOWN






Alarms:
 AL1 = lamp exhaust
 AL2 = lamp OFF
 DISPLAY OFF = replace fuse

Total Days < 1 sec.
 (*) Reset < 5 sec.
 Audio alarm OFF > 5 sec.



• $t_c = \text{max } 70\text{ }^\circ\text{C}$

 disconnect main supply before removing the cover

(*) after flashing press again to confirm countdown reset

You can obtain replacement parts from your local Atlas Filtri dealer. To maintain performance and warranty, use genuine Atlas Filtri replacements.

The **BIG F PRO** series have been designed and manufactured with simple and functional features which make the checking procedures and the periodical servicing particularly easy.

REPLACEMENTS LIST	
AB3505056	UV LAMP 56W
AB3505057	QUARTZ SLEEVE 56W + SPRING (mod. 156-256)
AB3505058	BIG F PRO UV LAMP CONTROLLER
AB3505066	O-RING FOR QUARTZ SLEEVE (BIG F PRO)
AB3505067	UV LAMP 67W
AB3505068	QUARTZ SLEEVE 67W + SPRING (mod. 267)
AA7530215	O-RING DP BIG Blue

To maintain a high quality of disinfected water, cartridges, lamp and quartz-sleeve should be regularly checked/replaced (dependent on water quality and usage).

Maintenance operations may only be carried out by personnel who have been trained and authorized for this work by the owner and/or user. The owner and/or user must ensure that the maintenance personnel are familiar with the safety measures and regulations, and that they also comply with them, in addition to having read and understood the operating instructions.

Flush system for 10 minutes after any period of non-use of more than 2 days. For a period of non-use of 2 weeks or more, it may be necessary to replace the cartridges.

Only original replacement parts from the supplier must be used.

The following are the recommended service intervals for replacement parts:

Cartridge Replacement Procedure

SERVICE INTERVALS	
Sediment cartridges	replace with a new cartridge every 3-6 months or with a pressure drop more than 1Bar(100Kpa/15PSI).
UV lamp	once per 9000 hours/one year.
UV quartz sleeve	quartz sleeve cleaning is recommended at least quarterly, more frequent cleaning may be required depending on your water quality, please seek the advice of your retailer.
O-ring for quartz sleeve	annually.

Prior to performing any work on an **Atlas Filtri BIG F PRO** systems always disconnect the power supply first. Change the cartridges at least every six months or when a drop in downstream water pressure of 1 bar or more is observed. To change the filter cartridges please adhere to the following procedure:

Replacement of the cartridge

Follow standards in force regarding waste disposal of used cartridges.

1. Before opening the filter housing turn-off the water mains.
2. Release the pressure from the product by un-screwing the vent-valve of the head. Then screw and tighten again the vent-valve.
3. Open the housing unscrewing the bowl using the supplied wrench.
4. Remove the used cartridge.
5. Wipe clean the filter housing with cold water and a soft sponge.
6. Open the new cartridge wrap and discard wrap.
7. Put a new cartridge in the filter housing.
8. Change the O-ring in the top of the filter housing. Check if it is properly located, lubricated and free of any damage. Tighten the housing bowl to housing's head using a proper wrench. Do not over-tighten.
9. Turn-on the water mains, paying attention to completely remove the air left inside the housing using the vent valves.
10. Slowly turn-on a water supply (tap) downstream of the **BIG F PRO**.
11. Open the vent-valve of the head, wait for air purge from the vent-valve, then screw and tighten the vent-valve.



REMARK: let the water flow for at least 5 minutes before use.

Warning

at re-start after every maintenance operation and/or refill change, when the filter's bowl is unscrewed from head, change the o-ring with a new one and carefully lubricate before tightening the bowl to the head. Make sure that there are no water leaks from the product and especially control the tightening between the housing head and the housing bowl. Continue checking that the tightening is good and there is no water leakage for 48 hours following the installation and start-up. In case of leakage, open the housing, remove the o-ring from the bowl, place a new o-ring and apply lubricant, then re-tighten the bowl to head and repeat the leakage check as above.

Ask your vendor for original o-rings, lubricant and other spare parts.

System disinfection

Use the following step for a full disinfection of the Home and Facility lines before a new installation, after service or shut down of the unit.

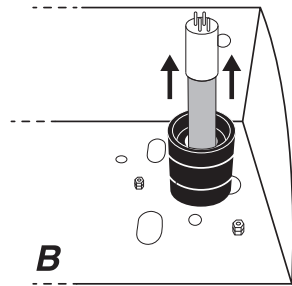
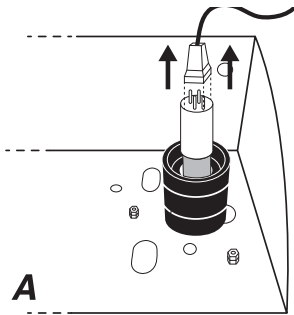
- Plug In the Unit and remove any "dead ends" in the lines to avoid bacteria harbour.
- Unscrew the sumps and remove the cartridges. Fill the first sump with 1 cup of Bleach (5.25% Chlorine) and replace the sump.
- Slowly turn on the water supply and run the water for each faucet, toilet, shower heads etc, until bleach can be smelled and close it. Wait 30 minutes to let the Chlorine disinfects the utilities.
- Turn off the water inlet and replace the cartridges in the unit. Turn on again and flush every faucet, shower heads etc until chlorine smell can no longer been detected.

Lamp Replacement Procedure Procedure for the UV lamp replacement (9000 h/one year max)
Use gloves to handle the quartz (glass) and lamp surface as marks or fingerprints may interfere with UV transmission.

- 1) Disconnect the power supply and turn off the water.
- 2) Unlock and open the metallic cover.
- 3) Release the water pressure using the valves on the top of the mounting bracket.

⚠ ATTENTION: Wait until the lamp has cooled down.

- 4) Lift the black cap slightly turning, carefully loosen the electrical 4-pins connection (A), and extract the old lamp from the quartz sleeve (B).
- 5) Remove the lamp from the packing, handling it carefully by its ends.
- 6) Insert the new lamp into the quartz sleeve of the UV System.
- 7) Connect the lamp to the electrical connection and reposition the black cap on the black bolt and turn it clockwise to lock it.
- 8) Reconnect the power supply and turn on the water.



Quartz Sleeve Maintenance/Replacement Procedure

Minerals dissolved in water form a coating on the quartz sleeve. The quartz sleeve must be regularly checked and cleaned to remove this coating in order to maintain disinfection performances.

- 1) Disconnect the power supply and turn off the water
- 2) Unlock and open the metallic cover.
- 3) Release the water pressure using the filter housing valves on top of the housing head.
- 4) Remove the lamp, as for the lamp replacement procedure.

⚠ ATTENTION: Wait until the quartz sleeve has cooled down.

- 5) Unscrew the sleeve-bolt and extract the quartz sleeve with care.
- 6) Clean the quartz sleeve by wiping it with a cloth soaked with an acid solution such as vinegar, lemon or calcium lime rust remover (CLR). If quartz sleeve cannot be cleaned or is damaged, it must be replaced with a new one.
- 7) Repeat steps of initial installation procedure (**page 6**).
- 8) Turn on water checking for leaks.
- 9) Remount the lamp, its electrical connection and cover.
- 10) Reconnect the power supply .

✍ REMARK: after maintenance, slowly turn on a water supply (tap) downstream of the unit and let the water flow for at least 5 minutes before use.

✍ REMARK: After a period of inactivity, it is suggested to perform all the maintenance operations, replacing the sediment cartridges, cleaning the quartz-sleeve and checking/replacing the UV lamp. After these maintenance operations, slowly turn on a water supply (tap) downstream of the unit and let the water flow for at least 5 minutes before use.

uv system characteristics

BIG F PRO 156 / BIG F PRO 256

GENERAL INFORMATION	
Max flow rate	54 l/m (40 mj/cm ²) - 70 l/m (30 mj/cm ²)
UV-C transmittance	95% - 1 cm
UV-C dose	40 mj/cm ² - 30 mj/cm ²
Water temperature range	4° - 45° C
Total consumption	61W
Mounting	vertical or horizontal

UV REACTOR	
Material	Stainless steel 304
Connections	Thread 1" BSPP Male
Max working pressure	8,3 bar
Protection class	IP 54
Shape	Z
Flow direction	From bottom to top

UV LAMP	
Number	1
Lifespan	9000 hr
Lamp power	56 W
Type	LPHO

CONTROL PANEL	
Material	Thermoplastic
Dimension	218x113x60 mm
Protection class	IP 54
Ambient temperature range	4° - 45° C
Power supply	110-240 V / 50-60 Hz
Lamp cable length	0,6 m
Power supply cable	2 m
Feed plug	AUS Type L
Monitor display	Digital
Days meter	Yes for total system life
Resettable days meter	Yes for lamp life control
Audio alarm	With mute options

uv system characteristics

BIG F PRO 267

GENERAL INFORMATION	
Max flow rate	72 l/m (40 mj/cm ²) - 95 l/m (30 mj/cm ²)
UV-C transmittance	95% - 1 cm
UV-C dose	40 mj/cm ² - 30 mj/cm ²
Water temperature range	4° - 45° C
Total consumption	73 W
Mounting	vertical or horizontal

UV REACTOR	
Material	Stainless steel 304
Connections	Thread 1" BSPP Male
Max working pressure	8,3 bar
Protection class	IP 54
Shape	Z
Flow direction	From bottom to top

UV LAMP	
Number	1
Lifespan	9000 hr
Lamp power	67 W
Type	LPHO

CONTROL PANEL	
Material	Thermoplastic
Dimension	218x113x60 mm
Protection class	IP 54
Ambient temperature range	4° - 45° C
Power supply	110-240 V / 50-60 Hz
Lamp cable length	0,6 m
Power supply cable	2 m
Feed plug	AUS Type L
Monitor display	Digital
Days meter	Yes for total system life
Resettable days meter	Yes for lamp life control
Audio alarm	With mute options

Atlas Filtri BIG F PRO Water Treatment System
EC DECLARATION OF CONFORMITY

The undersigned hereby declares, under full responsibility, that the unit:

BIG F PRO 156-256-267 MODELS

IS IN COMPLIANCE WITH

- 2014/35/UE (low voltage directive)
- 2014/30/UE (electromagnetic compatibility)
- 2015/863/UE (RoHS3)
- 2012/19/UE (WEEE)
- IEC -EN 60204-1 norms (safety of machinery-electrical equipment of machinery)
- IEC -EN 55022 norms (characteristics of radio interference)
- D.Lgs. 31/2001 (Implementation of Directive 2015/1787/UE on the quality of water intended for human consumption)
- 2014/68/UE (art.4 comm.3) (PED)

The validity of CE marking is subordinated to the equipment integrity. Any modification, if not authorized, will cancel the use of the CE marking. This will occur in case the relevant risks have not been previously analyzed by our company, and a new EC Declaration of Conformity has been issued.



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