



Installation Guide



Watersprint™ Purify Solo 40FS

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This document is produced and printed by:
Watersprint AB
Medicon Village
Scheeletorget 1
223 81 Lund
Sweden
Phone: +46 46 378 00 90
info@watersprint.com
www.watersprint.com

WATERSPRINT™ PURIFY SOLO 40FS

PRODUCT INFORMATION

This product is designed and produced in Sweden, with high quality, versatility, compact design and cost efficiency in mind.

The Watersprint™ Purify Solo 40FS is ready for integration and is a UVC LED unit where flowing water is exposed to UVC light that disinfects the water from microbes.

Our products utilize a combination of design, materials, mechanics and fluid dynamics to optimize the use of UVC light and thereby achieve maximum disinfection performance.

Thanks to the external flow sensor and the control unit, the UVC LEDs will turn on automatically when water flow is detected. Unlike other sources of UV light, the UVC LEDs immediately provide full output, meaning the water will be disinfected from the moment it starts to flow.

There is an indicator LED on the control unit that shows when the system is on and when disinfection is active. It also indicates if an error occurs in the UVC LED unit.

This is an advanced water purification product for increased safety of drinking water. The disinfection is based on UVC light, using the latest UVC LED technology.

The product is CE-marked, and materials in contact with water are approved for potable water according to EU requirements.

SPECIFICATIONS

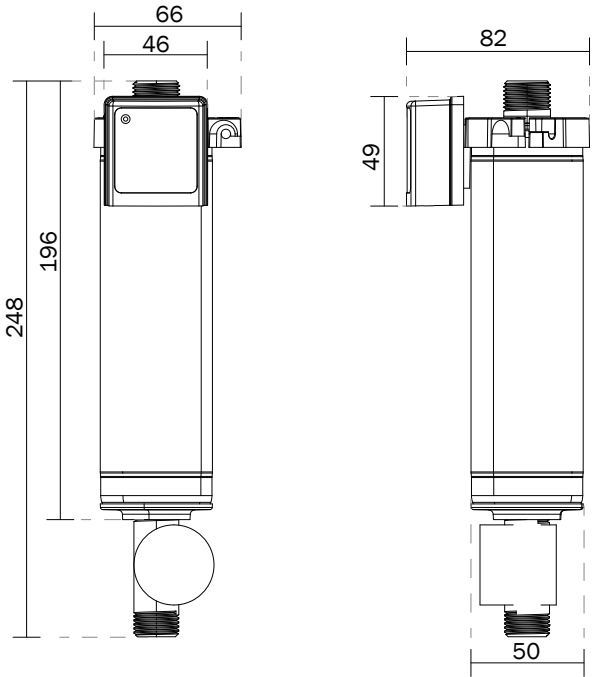
Calculated performance	Min.	Nominal	Max.
16 mJ/cm²			10 l / min
30 mJ/cm²			5 l / min
Electrical characteristics			
Input voltage		12 VDC	
Input current		2 A	
Water temperature (°C)	1		45
Water pressure			10 bar, 145 psi

Ingress protection
IP21

- Regulatory**
- RoHS & REACH
 - WRAS
 - CE (EMC/LVD)
 - NSF/ANSI/CAN 372

Weight
UVC LED Unit: 0,5 kg

Dimensions (mm)



SAFETY INFORMATION

POTENTIAL HAZARDS

Read all labels and tags attached to the system. Personal injury or damage to the system could occur if not observed.

SAFETY SYMBOLS

	Waste electrical and electronic equipment (WEEE). This symbol indicates that waste electrical or electronic equipment (WEEE) must not be discarded with household waste. For proper disposal, contact your local recycling/reuse or hazardous waste center.
	This is the safety alert symbol. Obey all safety messages that follow this symbol to avoid potential injury.
	This symbol indicates a risk of electrical shock and/or electrocution.
	This symbol indicates there is a potential UV hazard. Proper protection must be worn.
	This symbol indicates that combustible or flammable material must not be stored near the system.
	This symbol indicates that the contents of the transport package are fragile and the package must be handled with care.
	This symbol indicates safety glasses with side protection are required for protection against UV exposure.
	This symbol indicates that the operator must read all available documentation to perform required procedures.
	This symbol indicates that the system may only be connected to a properly grounded, grounding-type controller receptacle that is protected by a Ground Fault Circuit Interrupter (GFCI).



DANGER!

Failure to follow these instructions will result in serious injury or death.

- UVC is hazardous for eyes and skin. Never look into a powered unit!
- **ELECTRIC SHOCK:** To avoid electric shock, special care should be taken since water is present near the electrical equipment. For repairs, contact an authorized service facility. Do not attempt repairs yourself unless a situation is encountered that is explicitly addressed by the provided maintenance and troubleshooting sections.
- **DO NOT** operate the disinfection system if it has a damaged cord or plug, if it is malfunctioning, or if it has been dropped or damaged in any manner.
- **DO NOT** use this disinfection system for uses other than intended (potable water applications). The use of attachments not recommended or sold by the manufacturer / distributor may result in unsafe operation.
- **DO NOT** store this disinfection system where it will be exposed to outdoor conditions.
- **DO NOT** store this disinfection system where it will be exposed to temperatures below freezing unless all water has been drained from it and the water supply has been disconnected.



WARNING!

Failure to follow these instructions could result in death or serious injury.

- Poor water quality (opaque water due to particles or coloration) affects disinfection. Observe the recommended UVT of 95-98%.
- A water-filled unit must not be exposed to sub-zero temperatures.
- Changes or modifications made to this system without the consent of the manufacturer could render the system unsafe for operation and may void the manufacturer's warranty.
- This appliance contains a UVC-emitter
- Do not operate the UVC emitter if any part is not mounted correctly.
- The appliance is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- The power supply wiring needs to be fitted with a disconnecting switch that will disconnect all cable leads.
- This appliance must only be supplied at safety extra low voltage (SELV) corresponding to the marking on the appliance.



CAUTION!

Failure to follow these instructions could result in minor or moderate injury.

- Carefully examine the disinfection system after installation. It must not be plugged in if there is water on parts not intended to be wet such as the controller.



NOTE!

- Ordinary handling of an electrical product.
- The product works in air and water temperatures from 1 °C (33,8 °F) and up to 45 °C (113 °F).
- The UV system is not to be used or played with by children. Persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, must not operate the UV system unless supervised or given proper instruction.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- Read and understand the Installation Guide before operating and performing any maintenance on this equipment.

WATER QUALITY REQUIREMENTS

The incoming water quality is critical for UVC disinfection to achieve its full performance. Our recommended levels for some of the most important water quality parameters are shown below. Please note that while the Purify Solo 40FS is an advanced UVC LED disinfection unit, its intended use is to disinfect the water from microbial growth in the water system.

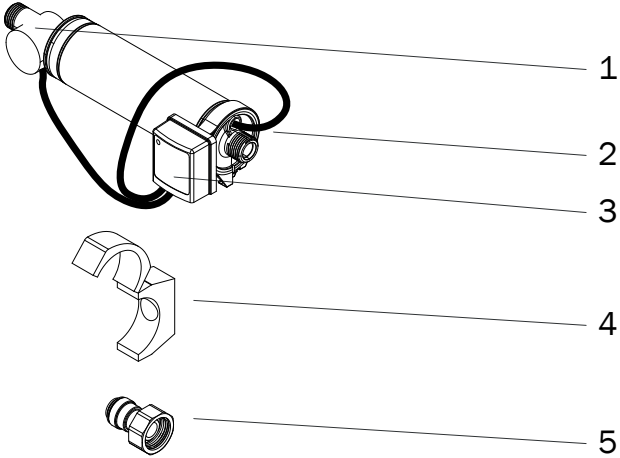
Parameter	Recommended level
Color	< 10 mg/l Pt
Hardness	< 8° dH
Turbidity	< 0.3 NTU
UV Transmittance (UVT)	> 95%

It is also recommended to disinfect the water system by chemical dosing before installing the Purify Solo 40FS to ensure that the water system is free from pathogens, after which the Purify Solo 40FS will keep it clean.

PRODUCT OVERVIEW

COMPONENTS

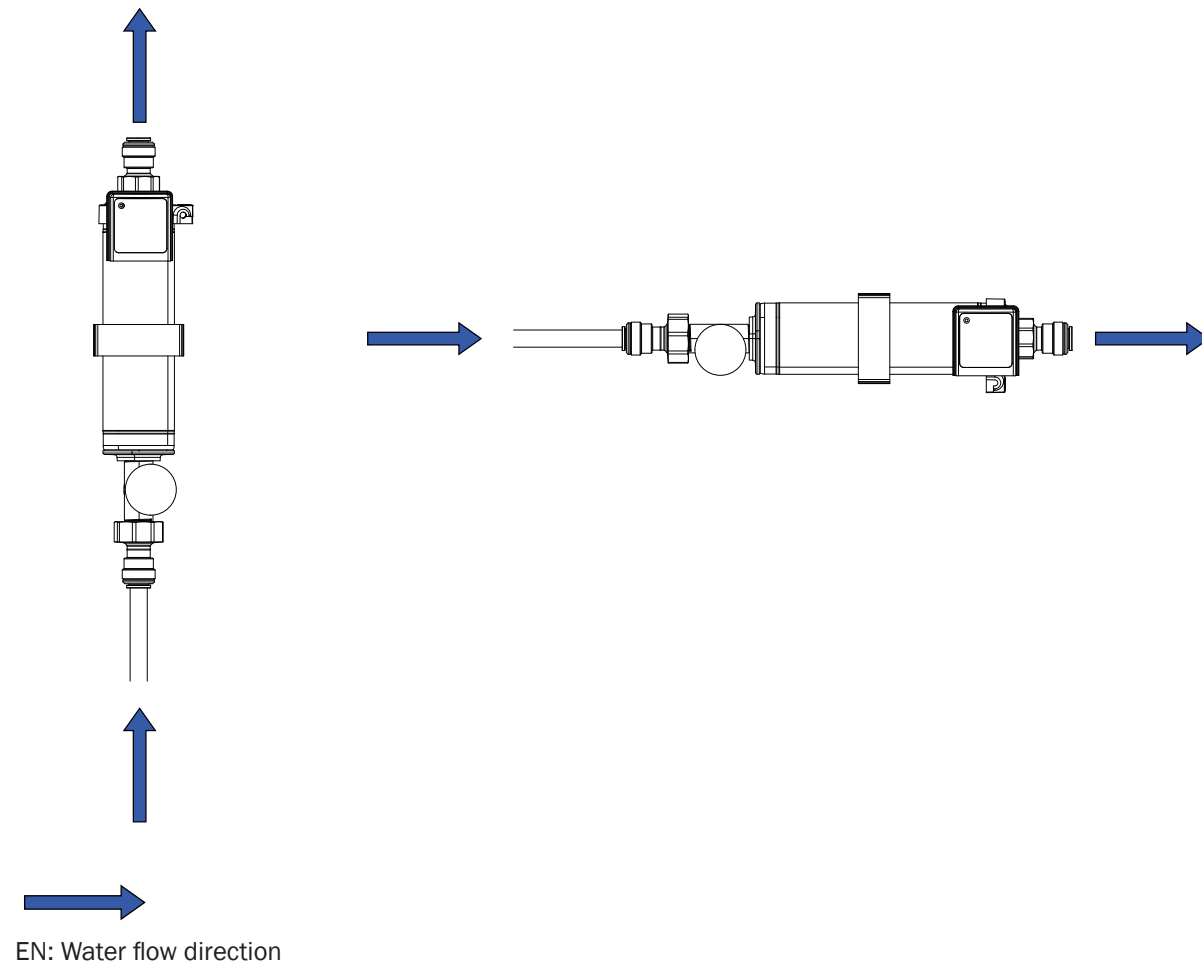
The Purify Solo 40FS includes the following:



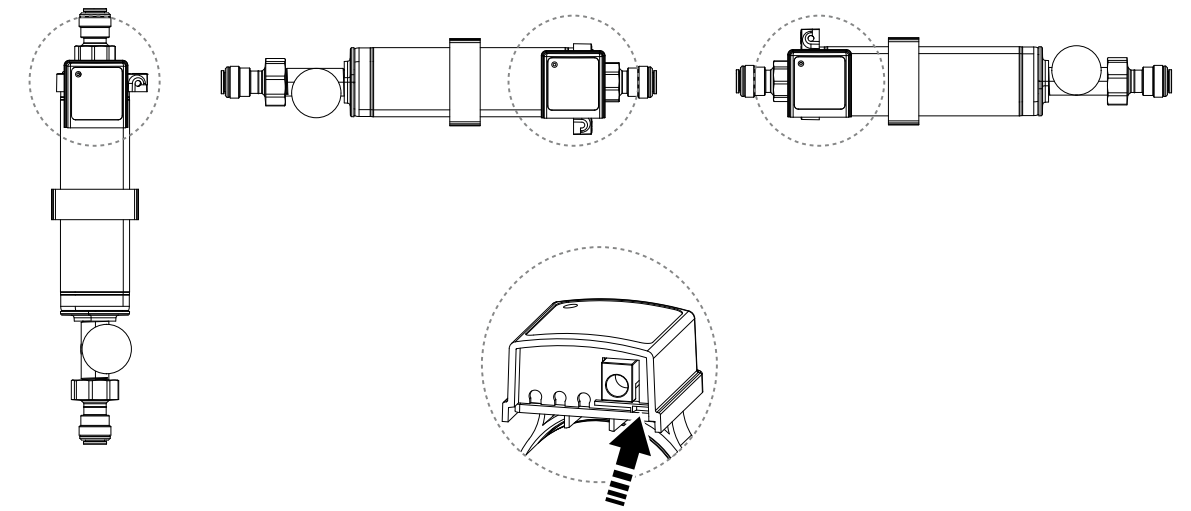
- 1. Flow sensor incl. cable
- 2. UVC LED unit incl. cable
- 3. Controller
- 4. Bracket for UVC LED unit
- 5. 2x 3/8" quick-connector

INSTALLATION GUIDE

INSTALLATION OPTIONS



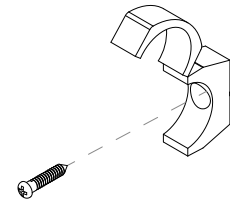
! EN: NOTE! Change direction of electronics housing depending on direction of installation to protect electronics from water ingress.



PURIFY SOLO 40FS STEP BY STEP INSTRUCTIONS

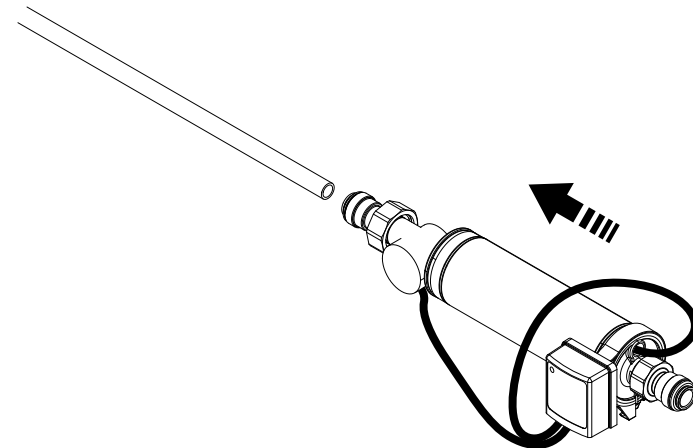
⚠ EN: NOTE! Drain the water system and secure that the water flow is switched off.

A.

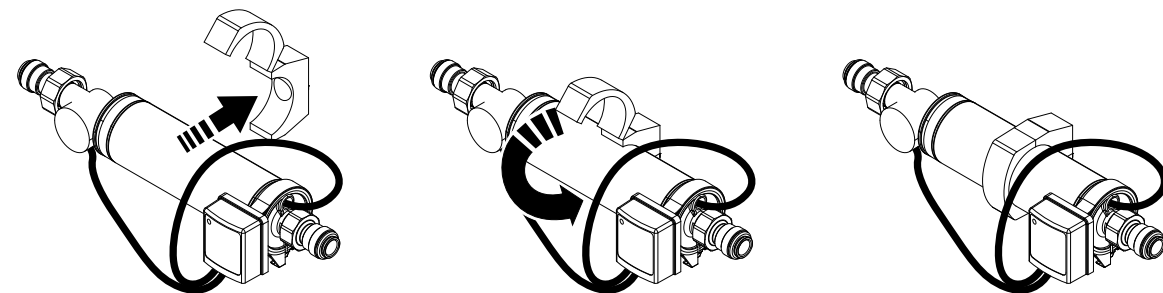


EN: Screw not included.

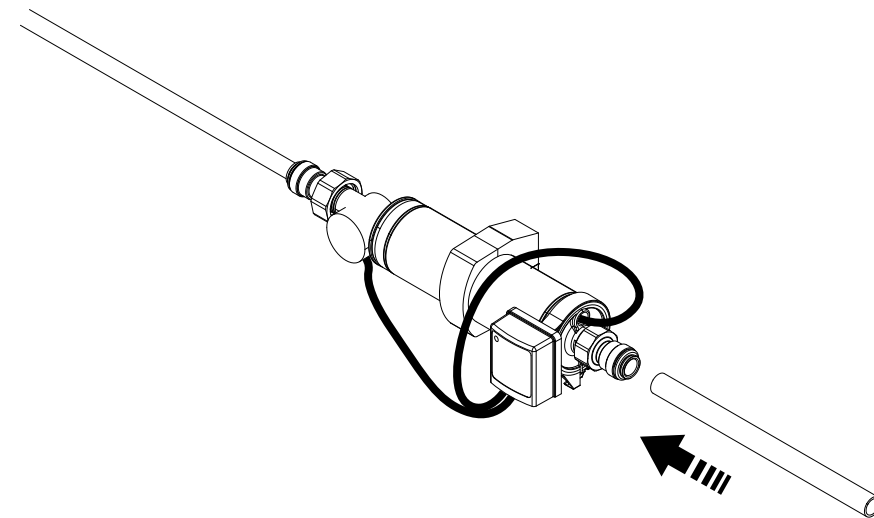
B.



C.

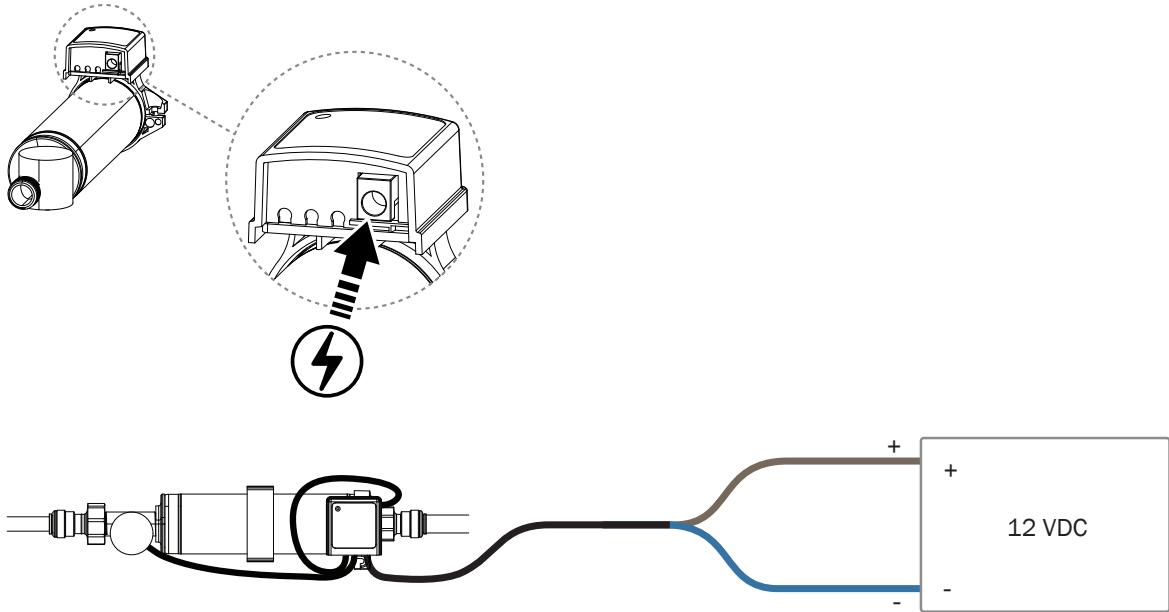


D.



ELECTRICAL

EN: Connect the brown cable lead to the + 12 VDC cable and the blue cable lead to the -/ground cable. Plug the cable into the contact on the bottom end of the controller.



FUNCTION

- EN: Green - Stand-by
- EN: Blue - Treatment
- EN: Red - End of Life / Fault

EN: If the Status LED is red, please reboot the unit. If the Status LED is still red after three reboots, contact your reseller.

INTERPRETATION OF STATUS LED

System Status	Indicator LED change to	Behaviour
Power on	Green	Stay green
Power on, waterflow, no UVC LED Unit connected, or LED/PCB Failure	Red	Stay Red
Power on, waterflow, system OK	Blue	Return to green
Power on, disinfection active, no water flow, overheating	Blue -> Red	Return to green or blue after cool off
Power on, no flow sensor connected	Green	Stay Green

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www.aquatell.ca

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Watersprint AB
Medicon Village,
Scheeleorget 1
SE-223 81 Lund
SWEDEN
Tel: +46 46-378 00 90
info@watersprint.com
www.watersprint.com