

Install instructions for an **AQUABION®**



Cold water supply (metal / non-metal pipe), hot water processing

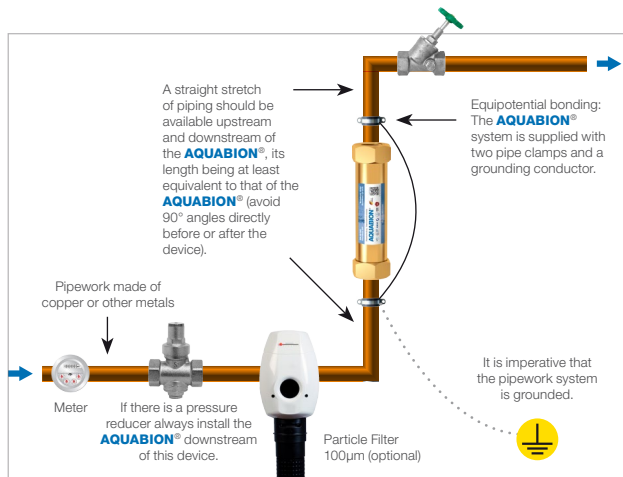


Figure 1

In a system with metal pipework

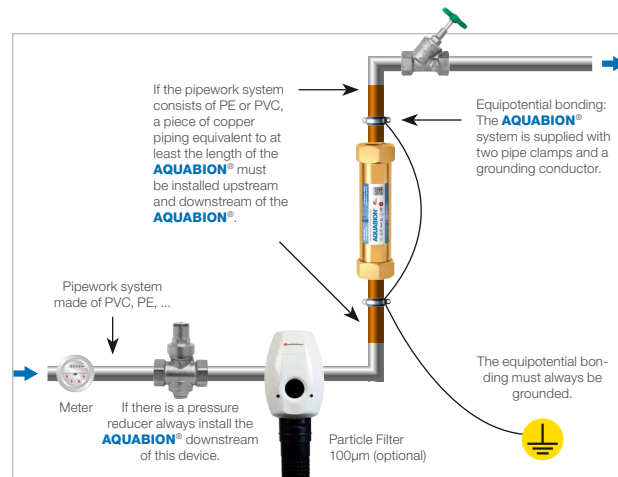


Figure 2

In a system with plastic pipework

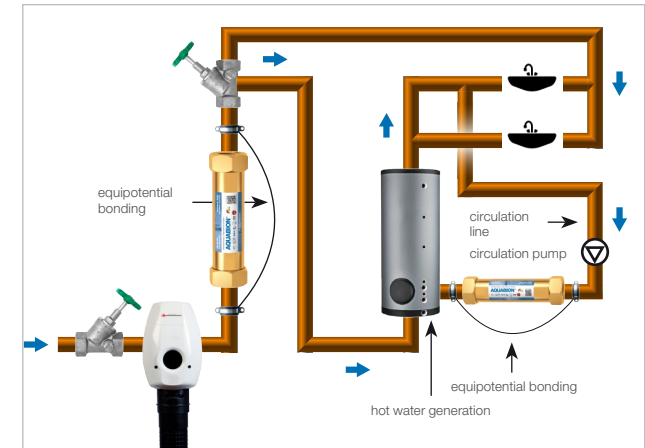


Figure 3

Attached to a cold water pipe and with hot water supply

For optimal operation of the device, the following information must be observed:

1 The water

In keeping with statutory requirements, drinking water must comply with the applicable drinking water regulations. The **AQUABION®** meets the statutory requirements for use with both drinking and service water. The operational limits for the effective use of **AQUABION®** are:

conductivity:	min. 150 µS/cm
	max. 2.500 µS/cm
pH-value:	min. 5,0
carbonat hardness:	min. 4° dH

The water quality and operating condition must remain within the operational limits during use.

2 The ION active anode system **AQUABION®**

The **AQUABION®** is designed exclusively for use in air-free, permanently water-carrying piping systems for drinking and service water. The maximum indicated flow of the selected **AQUABION®** should be adjusted to the rated flow of the upstream water meter or pump. **AQUABION®** also functions with a low flow rate. Even

with standing water, the anode continues to work, producing a potential differential. The **AQUABION®** chosen for installation in the piping system should not be over-sized, since this would inhibit both the turbulences needed for proper functioning and the self-cleaning action, which, in turn, would reduce the effectiveness of the system. The sizing in domestic properties is based on at least the size of the water meter.

3 Fitting (cf. schematic diagram)

For fitting in the water pipe, an appropriate section of pipe is cut out, two union bolts are inserted and the **AQUABION®** installed.

Fitting position: vertical

Exception: if there is a microfilter of about 100µ upstream of the **AQUABION®**, then the **AQUABION®** can be installed in a horizontal position. Without a filter a "U"-bend may be needed to maintain the correct fitting position.

Fitting location: **Downstream** of the water meter and **downstream** of a microfilter (if present). If a booster unit is installed, the **AQUABION®** is fitted on

the **discharge-side**.

Inflow & outflow: Straight metal - iron, copper or stainless steel - inflow and outflow sections, each equal to the **AQUABION®** body length must be installed before and after the **AQUABION®**.

4 Caution!

When fitting the **AQUABION®** in plastik pipework, the inflow and outflow sections, each equal to the **AQUABION®** body length, must be metal (iron, copper or stainless steel). **Equipotential bonding:** To neutralise any disturbance through electrical voltages, the **AQUABION®** must always be by-passed by a copper cable (DIN 46440) and cable clips supplied with the set. This must also be done in plastic pipe systems.

5 Caution!

In copper pipe installation work, the **AQUABION®** must not be subject to any direct heat from soldering. It must not be levered off or counter-rotated at the union ends. Pliers or a vice must not be applied to the **AQUABION®** body, but only to the square/hexagonal bar intended for the purpose. It is essential that the

AQUABION® is fitted in a stress-free state!

6 Central heating boiler with circulation pump

If the property has a central heating boiler with a circulation pump, we recommend the horizontal or vertical installation of an additional **AQUABION®** in the circulation pipe downstream of the pump - on the discharge side - for after-treatment (after the pump).

7 Attention! Additional information for flanged **AQUABION® F 50 - F 250**

Only the flange seals supplied by ION Deutschland GmbH are to be used for proper installation of the flanged devices. Any seals which are lost or damaged during installation are to be purchased new from ION Deutschland GmbH, Düsseldorf. Only genuine flange seals are to be used, otherwise no guarantee can be made of the seal tightness of the equipment. Failure to comply with this provision invalidates the 5-year manufacturer guarantee in connection with warranties. On no account are fixing bolts to be used to pull the **AQUABION®** apart to make it fit!