

## IPS KalyxX RedLine

The device is designed to treat hot water and specially protect boilers and flow heaters. In the year, the 6 - 12 mm limescale will settle on the heating coil.

## IPS KalyxX BlueLine

We recommend using the device to treat drinking water. In addition to the reduction of limescale and corrosion, it has an antibacterial effect. The silver-plated electrodes reduce the occurrence of bacteria in the pipeline.

IPS KalyxX removes the odor of water, improves its taste and extends freshness. It also increases the pH level of water. It is suitable for long-term drinking. It also improves metabolism and promotes digestion.

### USE OF IPS KalyxX RedLine/BlueLine

Households, public buildings, restaurants, hotels, production and processing plants. It reliably works at heat transfer stations, in the protection of exchanger and refrigeration.

## IPS KalyxX GreenLine

The device is suitable for irrigation systems. Protects pipes, nozzles and related irrigation components. Adjusted water has a proven effect on research for faster germination and promoting plant growth. It also has a positive effect on cell metabolism and livestock farming.

### USE OF IPS KalyxX GreenLine

Ornamental gardens, public park areas, soccer lawns, golf courses, hydroponics, fruit and vegetable growing, livestock feeding, etc.

**IPS KalyxX is an organic product. It works efficiently and reliably for about 10 years without:**

- an external source of energy
- maintenance
- operating costs
- chemistry
- magnets

## TECHNICAL DESCRIPTION

IPS KalyxX (Ion Polarization System) is designed for the physical-galvanic treatment of water for households, public buildings, and industrial plants. Under water hardness we understand the amount of calcium and magnesium found in water.

IPS KalyxX - not a softener - does not add anything to the water or take anything out of it. It preserves all its health benefits and improves its properties. At the same time, it effectively prevents the formation of solid sediments and corrosion in cold and hot water pipelines, boilers, water tanks, appliances, etc.

IPS KalyxX is suitable for new piping as a prevention as well as for older ones, from which it gradually removes existing deposits.

IPS KalyxX is a flow-through body with inlet and outlet ports. In it are placed turbine-shaped electrodes (not magnets) of two different electrically conductive materials. The electrode design is patent-protected (TGP® - turbulent galvanic polarization) and creates a swirling water flow that modifies the structure of minerals.

The water flowing through the body forms by means of the electrodes a galvanic wet cell with a voltage of up to 4.2 to 6V. As a result, minerals and salts in the treated water lose the ability to produce hard crystalline deposits (calcite). They acquire the structure of soft particles - sludge (aragonite) and are washed away with water. This structure is maintained for up to 72 hours.

### WARNING

**The occurrence of soft powder on a kettle does not mean IPS KalyxX does not work. It is a transformed aragonite that you simply remove with your finger or cloth.**

The device is effective in water with conductivity of 50 - 2000  $\mu\text{S}/\text{cm}^2$ . This is normal water with hardness 8 - 30  $^{\circ}\text{dH}$  (German degrees).

IPS KalyxX meets all safety criteria for contact with drinking water and has an international IAPMO certificate confirming 76% efficiency of the reduction of sedimentation.

## WARRANTY

**All IPS KalyxX devices are covered by a warranty of 2 years subject to professional installation and compliance with the terms and conditions of this leaflet. The warranty does not apply to mechanical damage to the device.**

## MOUNTING INSTRUCTIONS

IPS KalyxX can be mounted horizontally or vertically on water pipes with the temperature of 0 - 99  $^{\circ}\text{C}$ .

### WARNING

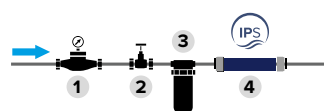
**When installing IPS it is necessary to observe the flow direction (FLOW DIRECTION), which is indicated by arrows on the device. Compliance with this condition affects the proper functioning and efficiency of the device.**

In the system where the IPS KalyxX is installed, it is forbidden to have a builtin ion converter (exchanger), or an electromagnetic system, or a device using a external voltage. The maximum flow rate of water through the device is 4 m/s. IPS devices are rated at 1 MPa. Pressure losses are negligible.

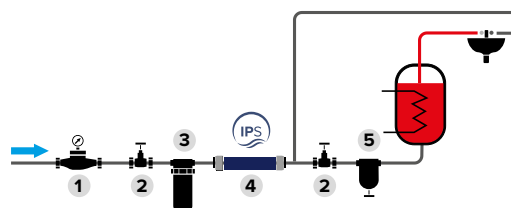
### RECOMMENDATION

**Before the IPS, we recommend placing a filter for mechanical impurities with a min. 50 microns.**

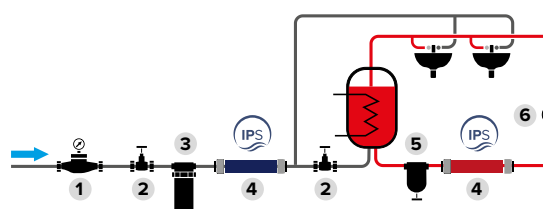
## CONNECTION DIAGRAMS IPS KalyxX



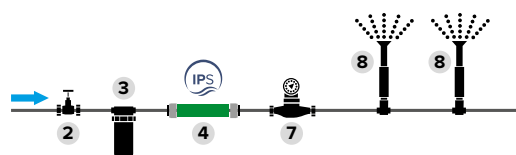
**A STANDARD INSTALLATION ON THE WATER SUPPLY**



**B INSTALLATION IN THE HOT WATER SYSTEM WITHOUT CIRCULATION**



**C INSTALLATION IN THE HOT WATER SYSTEM WITH CIRCULATION**



**D INSTALLATION IN THE IRRIGATION SYSTEMS**

- 1 Meter of consumption 2 Shut-off valve 3 Filter for mechanical impurities  
4 IPS KalyxX ● BlueLine ● RedLine ● GreenLine 5 Desludger  
6 Circulating pump 7 El. valve 8 Irrigation nozzle