

INDUSTRIAL SPRING SYSTEM

Cat. No. SPRING 1000



The device is supplied with tap water.

Degrees of water purification:

- filtration on sediment filters:
cascade filtration on 20 µm and 5µm high efficiency sediment filters,
 - filtration on carbon filters:
filtration on granular activated carbon to remove organic compounds, chlorine and chlorine derivatives,
 - softening process (option):
automatic softening station - rinsing and regeneration of the bed is carried out automatically,
compact construction - corrosion resistant ion exchange column (fiberglass tank) placed inside the salt casing, high capacity for removing hardness ions,
 - reverse osmosis station:
efficiency: 900 - 1100 dm³ / h (depending on the model), retention degree 96-99%, recovery rate 60%, high pressure pump, retentate and permeate rotameters,
 - demineralization on a mixed ion exchange bed - ion exchange column with a capacity of 25 dm³,
 - UV lamp 185 / 254nm or 254 nm (option),
 - 0.45 / 0.2µm microfiltration capsule (option).
- Automatic and maintenance-free operation of the device.
 - Retention rate is 96-99%.
 - Conductivity of purified water <0.06 µS / cm.
 - Water intake point - second purity class according to ISO 3696: 1999.
 - Possibility of installing an additional water intake point - first class of purity according to ISO 3696: 1999 and in accordance with FP.
 - Possibility to install an additional water intake point - third purity class according to ISO 3696: 1999.
 - Tank for storing purified water (capacity to choose).
 - Automatic system shutdown when the tank is full or when the water intake is closed.
 - Can be connected to a dishwasher, autoclave, analyzer, etc.
 - Possibility of creating a water distribution network with intake points covering several rooms or floors in a building.
 - Control water intake points.
 - Automatic membrane rinsing (possibility of individual setting of the period and time of membrane rinsing).
 - Forced flushing of membranes (service).
 - System designed for cold water supply: 5-40°C.
 - Possibility of self-service by the User (without having to call the service).
 - Power supply: 230V / 50Hz.
 - Stainless steel frame.

Functions monitoring system operation:

- The device is equipped with a microprocessor control and measuring system having:
 - color graphic display with Touch Panel function,
 - conductivity meter measuring the conductivity and temperature of tap water,
 - conductivity meter measuring the conductivity and temperature of purified water after reverse osmosis,
 - conductivity meter measuring the conductivity and temperature of demineralized water,
 - conductivity measurement in µS / cm or MOhm units,
 - automatic temperature compensation,
 - continuous control and preview of the degree of retention (degree of retention) of RO membranes,
 - clock displaying date and time,
 - alarm informing about mechanical and carbon filter replacement,
 - alarm informing about replacement of the RO module,
 - alarm informing about exchange of ion exchange bed,
 - alarm informing about replacing the UV lamp radiator (option),
 - alarm informing about the replacement of the microfiltration capsule (option),
 - information on the tank filling level on the device display,
 - preview of service dates,
 - menu in Polish,
 - built-in RS 232 interface for communication with a computer ensuring the possibility of individual adjustment of service frequency and alarm levels,
 - built-in USB connector for communication with a computer ensuring the possibility of individual adjustment of service frequency and alarm levels,
 - computer program enabling individual settings of alarm thresholds and data archiving.

Functions securing the system operation:

- Interruption of system operation with:
 - low feed water pressure (no feed water),
 - a full tank / closed water intake point.
- Thermal protection of the osmotic module, automatic stopping of the system operation at the supply water temperature below 4°C or above 40°C.
- Ability to stop the system when any alarm occurs.
- System autostart capability.
- Preview of monitoring messages / alarms.

Purified Water Parameters:

Purified water in the device meets the requirements of ISO 3696: 1999 for first, second and third degree water.

The water obtained meets the microbiological and physicochemical requirements of FP for purified production water*.

* system equipped with a UV lamp and a microfiltration capsule

Additional equipment / services:

tank for storing purified water:

- pressure - option: 80 l, 110 l, 230 l, 320 l or 450 l,
- pressureless - capacity to be agreed (on request),
 - compact device housing made of stainless acid-resistant steel (all system components, except for the tank, installed inside the housing),
 - tank housing made of stainless acid-resistant steel,
 - adjustment of conductivity value from 0.06 µS / cm to 15 µS / cm,
 - purified water recirculation,
 - full DQ, IQ, OQ, PQ qualification procedure with documentation,
 - cooperation with building management systems (BMS).

Required connections at the installation site:

- cold tap water connection $\frac{3}{4}$ " or 1",
- drain to sewage system (sewage grate),
- 230V socket.

*the life of the insert may change depending on the flow, its characteristics and the level and type of tap water pollution.

** the volume of purified water depends on the quality of the feed water, the maximum amount of salts dissolved in the feed water - 1200 mg / l