



## UrSpring Medical

UrSpring® Medical removes all bacteria and parasites from your city water without the use of chemicals and without any residuals, before it enters into your practice or your laboratory.

Such, the UrSpring Medical reduces biofilm existing in the piping system of your practice as well as in your treatment equipment and, most important, reduces the risk of water-borne infections for you, your staff and your patients, who daily get in touch with water during treatment.

Due to its medical grade filter quality, the UrSpring Medical also removes all particles from city water and protects valuable treatment equipment downstream.



### Natural, full removal of pathogens without disinfection and without residuals

Studies, carried out by the Technical University of Zürich ETH, Switzerland, have proven, that regular city water contains up to 200.000 active cells per one Milliliter or 760 Million active cells per one gallon.



That vast amount of biomass, being swept into your facilities and equipment every day, forms strong biofilm on pipelines and inside medical equipment. The picture on the left show a two inch diameter drinking water line, in which bacteria, metabolizing dissolved iron, formed a biofilm of up to half an inch thick.

Seccua Filtration has proven full removal for bacteria, parasites and turbidity from water - perfect protection for your downstream equipment.

### The only sustainable approach to improved water-quality

Continuous dosing of chemicals is expensive, creates harmful disinfection-byproducts and is aggressive on pipes and equipment. You never can be sure whether enough chemicals reach to every Point-of-Use to perform an effective disinfection, and as soon as dosing stops, pathogens come back even stronger, feeding from the dead bacteria left behind.

In opposite to those old methods, Seccua Filtration is removing nutrients for bacteria from water and such significantly reduces biofilm by simply starving it. The UrSpring BioFilter, added upstream, is perfectly suited for removing dissolved organics, another large source of nutrients for bacteria and pathogens.

### Engineered and made in Germany

In Germany we engineer state-of-the-art technology. With almost two decades of experience in membrane filtration, Seccua is proud to develop and produce the best available technology in water filtration worldwide.

## Performance Data

Filtration Performance <sup>1</sup>		
Peak Load (to AWWA M22)	40 l/min (11 gpm)	
Continuous Load	16 l/min (4 gpm)	
Flow @ $\Delta p=0,5$ bar (7 psi)	21 l/min (5.5 gpm)	
Flow @ $\Delta p=0,2$ bar (3 psi)	10 l/min (2.6 gpm)	

Removal Performance <sup>2</sup>		
Virus	>99,99% (>4.7 log tested)	
Bacteria	>99,99% (>4.9 log tested)	
Parasites, Cyst	>99,99% (>4.7 log tested)	

<sup>1</sup> Filtration performance depends on water quality and temperature. Please design carefully before deploying an UrSpring system and consult with Seccua Authorized System Partners for advise if required.

<sup>2</sup> Virus and Bacteria removal of the Ultrafiltration membrane was measured by US EPA against EPA Standards for Ultrafiltration systems used on surface water filtration on a new membrane. The tests have been carried out using a Seccua Virex Pro unit which uses the same filter elements than the UrSpring systems. Removal performance can decrease over time, caused by membrane damage, without the UrSpring system being able to determine such decay.

## Operating conditions

Max. operating pressure	6 bar (87 psi)
Max. operating temperature	40 °C (104 °F) 80 °C (176 °F) available

## Filtration and Flushing

Filtration	100% of all water fed into the unit is filtered, no continuous flow of drain or concentrate occurs.
Flushing	Flushing occurs fully automatically, either daily, by adjustable time-interval or when the smart controls of the system detect filter fouling.
	Flushing can be automatically postponed when the system detects actual water consumption.

## Programming

Language	German or English
Units	Metric or US

## Hydraulic Block & Connections



Feed, Filtrate, Drain: 3/4" John Guest Quick Connect Couplings

The entire valves block is machine from one single-body block of pure, certified POM plastics (anodized alum available).

All sealing through O-Rings.

Slow closing solenoid drain-valve prevents water hammer.

Integrated sensors for flow, feed- and filtrate-pressure.

## Certifications and Approvals

All applied materials in contact with water are compliant to NSF 61 (USA), DVGW KTW (Germany) and CE (Europe) standards. Electric components comply to VDE standards (Germany), UL (USA) and CE (Europe). Seccua is ISO 9001 certified and audited by TÜV Süd (Germany).

## Integrated Membrane Protection and true fouling control

The smart control of the UrSpring system protects the membrane filter cartridge from being damaged by water hammer. It also protects the system from too high operating pressures, which might occur.

As the only systems available, Seccua filtration-systems monitor the true fouling of the system, computing it real-time by continuously monitoring flow and differential pressure.



## Intelligent Flushing

The UrSpring Medical system flushes itself, fully adjustable, by time-of day, by time-interval or when the system detects, that the filter has fouled beyond an adjustable level.

Intervals and time-of-day as well as fouling-threshold can be freely programmed.

All contaminants removed by the filter are being flushed to drain.

## No Interruption of flow

The UrSpring Medical system is able to detect ongoing water consumption and delays its programmed flushing cycle then accordingly, if required, to times of no water usage.

## Protection against too high operating pressures

Seccua UrSpring system continuously monitor the feed- and the filtrate pressure. Should either one exceed the maximum allowed operating pressure, water is automatically released to drain.

## Weight & Dimensions

Width	149 mm (5.9 inch)
Depth	149 mm (5.9 inch)
Height	1268 mm (49.9 inch)
Weight (dry)	12 kg (26.5 lbs)
Installation	Wall mounted

