



# Bürkert Microsensors

## Innovative microsensors for laboratory and medical devices

Bürkert: Your partner for innovative microsensors in miniature space saving designs – for laboratory or medical devices (e.g. diagnostic instruments, dialysis or endoscope reprocessing devices). Our microsensor solutions allow you to precisely measure, monitor, and control relevant parameters such as conductivity, pH, (zero) chlorine, ORP, turbidity, and specific ions like  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ . We enable you to detect air bubbles and accurately measure very low flow rates. Bürkert supports you right from the development of your device.

### Cleaning and disinfection using microsensors

Successful cleaning in laboratory and medical technology is key for a safe and reliable device. Bürkert offers a variety of microsensors to monitor the composition of the cleaning solution or disinfectant. By measuring conductivity and pH, for example, be assured that the composition of the disinfectant passing through your device matches the required specification. Moreover, our compact microsensors help you to monitor and document the cleaning and disinfection cycles. Use this data to optimize your process and significantly increase the safety of your device. Whether for stationary or mobile devices, the remarkable compactness of our microsensors offers a high flexibility for your design.

### Your advantages

-  Compact and adaptable design
-  Highly accurate and fast measurements
-  Increased cleaning reliability
-  Continuous monitoring and documentation

### Areas of application

Due to their compact design, the microsensors are suitable for analyzers, stationary, or point-of-care devices.



Clinical chemistry



Hematology



Endoscope  
Reprocessing



Peritoneal Dialysis



Hemodialysis

### Laboratory devices

#### Designing reliable cleaning cycles

Verifying that cleaning in the appliance was sufficient is often based on continuous conductivity measurements. However, common sensors for conductivity measurement are often quite large and require a correspondingly large installation space. Bürkert microsensors satisfy the demand for a higher freedom of design by being amazingly small while delivering continuous measured values with high accuracy.

#### Clean more efficiently

Cleaning is a necessary process but should run as fast as possible to reduce the cleaning time and make your device ready for use again. Measuring and monitoring the concentration of your cleaning solution allows a more efficient and yet reliable cleaning of the device. Bürkert microsensors help you to optimize your process. We support you to set up your optimal rinsing cycle between the analysis of different samples to reduce your media consumption, and with it costs, and protect the environment. Naturally, due to the shorter cleaning cycles, you can analyze more samples.

#### Did you know?

In addition to single analytical sensors, Bürkert offers a large portfolio of flow sensors, valves, and pumps. Combined with our manufacturing and injection molding expertise, we support you in the development of your individual system solution – compact and ideally suited for your device. Equally, we can adapt our microsensors to your specific needs.

### The complete package for laboratory devices

In addition to microsensors, Bürkert offers a large portfolio of solutions for laboratory devices – from precise dosing to efficient waste handling. Discover our solutions for in-vitro diagnostics devices.



### Medical cleaning devices

#### Reliable cleaning and disinfection

Likewise in medical cleaning processes, such as endoscope reprocessing, Bürkert microsensors enhance the reliability during cleaning and disinfection. Our microsensors ensure the correct mixing ratio and monitor the parameters of the cleaning solution. Providing its accurate composition, we help you to prevent cross-contamination in your medical cleaning device.

#### What about another application?

Apart from cleaning, dialysate mixing and monitoring is a crucial process for every dialysis patient. Conductivity measurement complemented by pH measurement enable the device to precisely mix the individual dialysate composition required for a particular patient. During the dialysis process, you can monitor changes in the electrolyte composition in the dialysate (Na<sup>+</sup>, K<sup>+</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, Cl<sup>-</sup>) with ISE sensor measurements and maintain the correct composition. Providing the possibility to document all measured values, Bürkert microsensors help you to increase patient and user safety, and meet regulatory needs. Thus, our microsensors optimize home dialysis solutions and help that each patient receives an individualized treatment.

### Contact

You want to discuss your specific application?

Contact our experts

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### The complete package for medical devices

In addition to microsensors, Bürkert offers a whole range of solutions for medical technology including innovative, customized system solutions. Discover our portfolio.

