“Who’s to say that you have to hear the switching of a valve, anyway?”
“Those who always ask the same questions shouldn’t be surprised when they get no new answers.”

Our corporate culture clearly sets the agenda. At Bürkert there is room for new ideas. Here we leave the beaten track and break new ground. At Bürkert, we challenge things, convinced that only such an approach leads to new and innovative answers.

In the future – under the motto “inspiring answers” – we will regularly show you products and technologies which break new ground.
The WhisperValve micro valve

Increasing miniaturisation with higher performance – that is what is required today in all industrial sectors. Our new WhisperValve micro valve technology keeps pace with these trends, featuring an extremely compact design with unusually high efficiency for its size. Innovative actuator technology enables virtually silent switching of the valve, which makes the WhisperValve unique in its markets. A design with minimal internal volume, excellent flushability and reliable media separation is combined with high switching speed and dosing accuracy. The new actuator also enables proportional switching behaviour of the valve.

Benefits for you

- Virtually silent switching for unproblematic use in noise-sensitive areas
- Extremely compact design (7 mm & 9 mm width) and low overall weight for installation in close spaces and on pipette arms
- High fluidic performance with working pressure of 3 bar by orifice sizes 0.8 mm (Type 6712) and 1.2 mm (Type 6724)
- Minimal internal volume for excellent flushability with minimum requirement for liquid in the dosing and rinsing cycles
- High working pressure for minimal dwell time of the medium in the valve
- Low power consumption during switching and holding
- Replacement of dosing chamber for use in disposable applications possible

The WhisperValve produces a sound level of only 36 dB during switching. This makes it ideal for use directly next to the patient (at the point of care). Typical applications are dialysis and respiration units. The membrane can be made of EPDM, FKM or FFKM, which allows its use with practically all fluids and gases occurring in medical technology.

The excellent flushability of the valve Type 6712 is due to the good flow properties and the short time required for exchanging the entire volume within the valve.

**Smaller, faster and quieter**

In this innovative valve technology, a non-impact actuator controls the flow rate virtually silently. The WhisperValve produces a sound level of only 36 dB during switching. This makes it ideal for use directly next to the patient (at the point of care). Typical applications are dialysis and respiration units. The membrane can be made of EPDM, FKM or FFKM, which allows its use with practically all fluids and gases occurring in medical technology.
Quiet please!

In medical facilities, repetitive noises often disrupt the quiet atmosphere necessary for recovery. The clicking of valves in a dialysis unit is one example. In response to this challenge, the development engineers at Bürkert developed the WhisperValve, which functions without the typical mechanical clicking.

Medical technology
Whether in dialysis or respiration units, the new WhisperValve series is optimally equipped for use in medical technology. Reliable media separation, hygienically sound materials, and virtually silent operation are the most important advantages of the micro valve.

Extremely small – but not in performance

The use of micro valves is often ruled out by their limited performance with respect to operating pressure, switching speed and dosing accuracy. The new WhisperValve eliminates these limitations. For example, the operating pressure is very good, with up to 3 bar during switching and 8 bar (Type 6712) during the flushing process. In addition, the extremely compact dimensions and the low weight allow use of the valves in compact spaces and on the pipette arm of a dosing robot.

Automation
When it comes to the exact dosing of media – e.g. in the analysis of diverse types of samples – valves are needed that perform with absolute reliability, also with minimal quantities. Since these processes are increasingly automated, the miniaturisation of the components is also very important for the efficiency of the systems.

Printers
Diverse industrial applications also require the exact dosing of micro quantities, combined with reliable media separation. Modern inkjet printers are just one example of the many potential applications of the new valve generation.