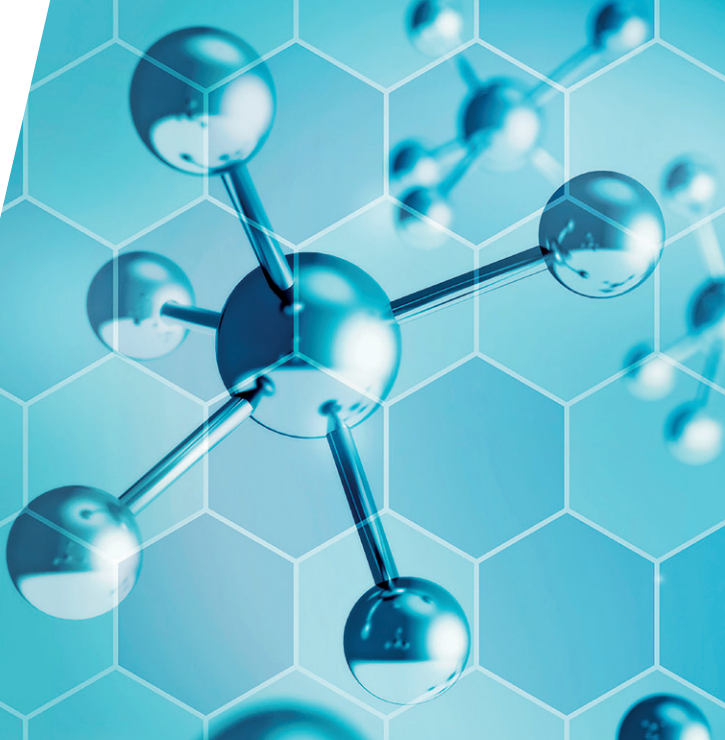


BIBUS



**Fluid technology for
life science applications**

www.lifescience.bibus.com



The partner for your success

Are you looking for a reliable partner who specialises in fluid technology, to meet your requirements at an advanced level?

BIBUS AG is a family-run trading, service, and production company with a 75-year history. With our worldwide distribution and network of suppliers, we support our customers with customised solutions, from individual products to the end-to-end production of complete systems.

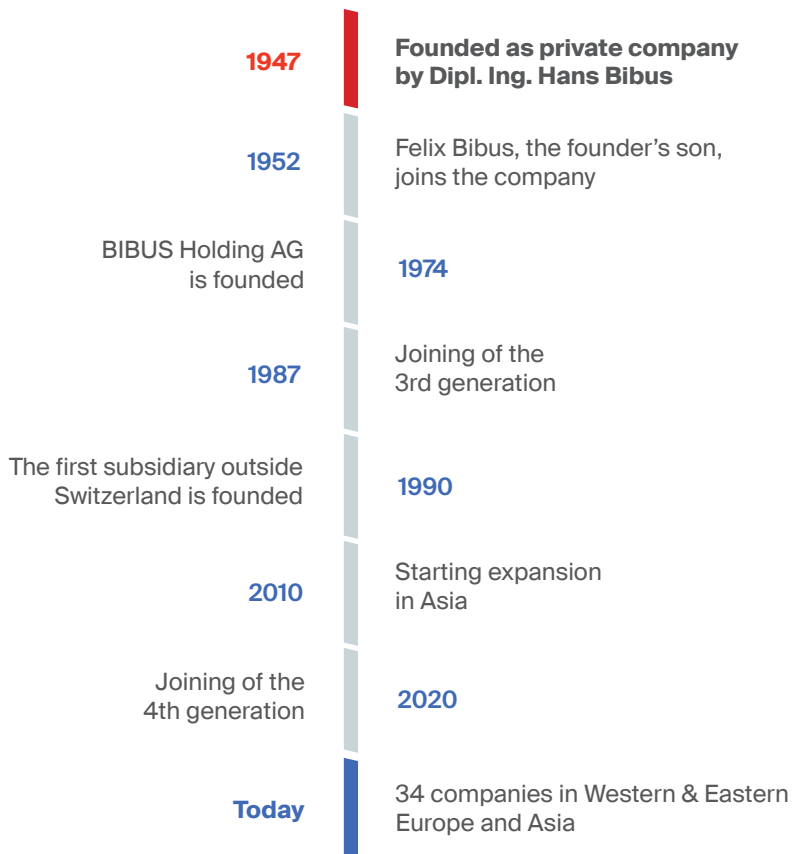
We understand our customer's requirements and identify the critical tasks in the applications.

This enables us to bring together precisely matched configurations of components and/or systems that ensure safe and economical operation.

We specialise in the development of high-performance fluid control systems that meet stringent technical and regulatory requirements and deliver a mature, industrialised and production ready solution.

Supporting your success:
We measure our performance by your success!

Strong foundation





CUSTOMER & APPLICATIONS

Are you looking for a fluid control systems expert to discuss your requirements with? Our strength is the ability to understand our customers' needs, to identify the critical tasks in applications and to propose value orientated solutions. We develop, manufacture and drive the fluid technology solution certification process up until validation, in order to support your ongoing successes.



ENGINEERING & INDUSTRIALISATION

Our business model is based on a consulting approach, both for standard products and for entirely customised solutions and we strive to develop world class configurations of components and systems. We are experts in industry requirements and remain focused on cost and simplicity, in order to develop well thought-through solutions. Benefit from our expertise as part of your success!



SUPPLYCHAIN & PRODUCTION

The time-to-market target of your project is agreed at the outset and the component procurement is an essential element of the development process. Regulatory requirements and quality assurance measures are built-in to our products and systems as soon as solutioning starts, which enables us to supply you with tested functional samples, prototypes and pilots as soon as possible. Our lean production and cultivated partnership with our suppliers enables maximum cost efficiency and the highest quality of products.



PRODUCT- & LIFE CYCLE MANAGEMENT

Throughout the development and delivery of our solutions, our cooperation has no limits; we support the market positioning with commercial agreements, in line with the engineering and lifecycle of the product. In accordance with our motto, we deliver product management with expertise, for a successful product life cycle.

Applications

BIBUS offers a wide range of components and customized solutions for the control of liquid and gaseous media in the Life Science sector, ensuring the highest efficiency and reliability. The Life Science field encompasses various disciplines, including biology, molecular biology, biophysics, medicine, biomedicine, pharmacy, biochemistry, chemistry, agricultural technology, and food research.

The application of liquid and gas control can be found in medical devices such as ventilators and anaesthesia machines, dialysis machines, press therapy and vacuum therapy devices, shockwave therapy systems, infusion dosing devices, dental units, autoclaves, and oxygen concentrators.

Furthermore, these technologies are utilized in hematology and analytical devices, for example in biotechnology (mass spectrometry), gas and liquid chromatography, biomedical analyses, environmental analyses, molecular analyses, genomics, clinical chemistry, and electrophoresis.



Medium control in syringe pump



Fluid handling in laboratory application

Applications



Control the supply of dialysis fluid from the container to the patient.



Micro fluid handling in space laboratory for cell examination.



Filtering, mixing, control of pressure and flow, referencing of carbon dioxide and oxygen sensors.

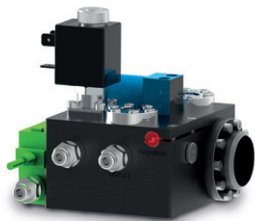


Management of liquid, air and vacuum, for supply the dental handpiece instruments.

System solutions

High pressure gas control system

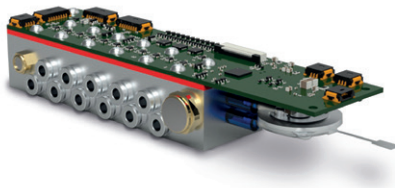
High-precision pressure and flow measurement technology, coupled with proportional and valve technology, control the gaseous medium precisely to the set pressure and flow.



APPLICATION: Medical technology

Miniaturised valve block

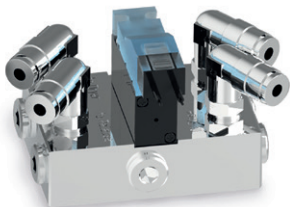
Compact, low-noise and energy-efficient valve, pump and measuring technology, combined in the smallest installation space.



APPLICATION: Medical technology

Micro valve block

Micro valve with 10 mm size for high pneumatic pressures and highest tightness.



APPLICATION: Analytical technology

Dosing unit

Compact pump block for pumping and dosing of aggressive, liquid media.



APPLICATION: Analytical technology

Valve technology

Media-flushed valves

Media-flushed micro and miniature valves for compact, energy-efficient, and smart fluid control systems. Despite their small dimensions, these valves surprise with their high performance in terms of flow rate, operating pressure and service life.



Cartridge - valve



Mini - valve



Mini - valve



Mini - valve

Media-separated valves

Media-separated valves are used in vacuum technology, diagnostics, medical technology, and laboratory automation. The diverse media separation principles lead to a broad performance spectrum, with a focus on maximum reliability.



Diaphragm - valve



Metal diaphragm - valve



Rocker - valve



Pinch - valve

Microvalve technology

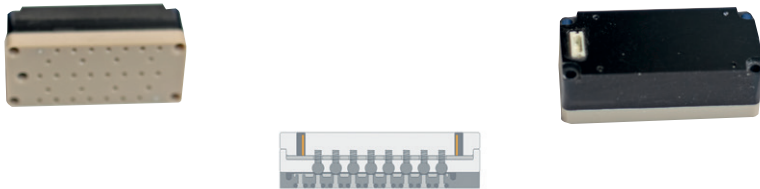
Microvalves

The advantages of microfluidics are unmistakable: high precision, low power consumption, laminar flows, minimal dead volume and much more. Microfluidic systems are used primarily where the smallest quantities of liquid are controlled. The micro valves impress with their small size, which is made possible by the innovative shape memory actuators.



Microvalve block

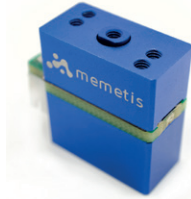
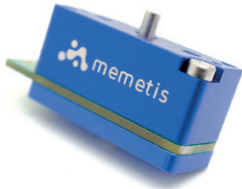
The 8-channel multi-valve block is ideal for dispensing or mixing liquid samples. It has minimal internal volume, making it indispensable in applications such as DNA synthesis.



Microactuators

Shape memory actuators

Wherever movement is required in a confined space, microactuators made of shape memory alloys offer innovative solutions. They generate considerable forces while being extremely compact. These actuators are used in small and intelligent point-of-care devices, medical devices, laboratory and organ-on-a-chip solutions or research setups.



Electronic control unit

The valves and chip actuators are operated by an actuator made of shape memory alloys, which must be current-controlled. We therefore offer user-friendly electronic control units, that deliver a constant current of maximum 500 mA. These control units are ideal for initial tests or laboratory set-ups.



Proportional technology and sensors

Proportional valves

Pressure and flow regulation as well as control of gaseous and liquid media. From low to high pressure and flow, these devices can reliably control and regulate the medium.



Proportional valve



Cartridge
proportional valve



Open Frame
controller



Flow controller

Sensors

Pressure and flow measurement of gaseous and liquid media. From lowest to highest pressure and flow, these sensors measure the medium precisely and continuously.



Flow sensor for
gases



Flow sensor for
liquids



Pressure sensor and
pressure switch

Filtration and connection technology

Filters

Efficient filters against bacteria, particles, moisture, and aerosols ensure the required purity of the medium. Filtration is reliable, efficient, with the lowest pressure drop and, if desired, monitored.



Antibacterial filter



Inline-filter

Fittings

Oxygen fittings or clean fittings, made of stainless steel, brass or biocompatible high-performance plastic, with or without seals, as standard or bespoke design. With this variety, any medium can be connected.



Oxygen fitting



Elbow fittings with
PTFE seal



Microfitting

START YOUR PROJECT WITH US

BIBUS supplies proven and innovative fluid control systems that are precisely adapted to your requirements and processes. This shortens your time to market and reduces system complexity and costs, in order to deliver world-class quality solutions.

We look forward to hearing from you!



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