

Bürkert India

bürkert
FLUID CONTROL SYSTEMS

AT A GLANCE

Bürkert Fluid Control Systems: Local and Global

Established in 2005, Bürkert Contromatic Pvt Ltd is the Indian subsidiary of the Bürkert Group of Companies. The Headquarters for the Indian operations is situated in Chennai, a major manufacturing and OEM (original equipment manufacturer) centre in the region.

Bürkert Fluid Control Systems in India has further developed a national network of satellite branch offices and distributor alliance partnerships. This network of offices and people spans the country, maximising customer access to Bürkert and enhancing our shared pool of local experience and expertise.

With more than 60 years global experience, Bürkert Fluid Control Systems is an international leader in the engineering and manufacture of industrial technology products including solenoid, process and proportional valves, microfluidics, pneumatic actuation, mass flow controllers, instrumentation, sensors and related accessories.

Building on this firm foundation of world-class technology products, coupled with considerable local know-how, Bürkert has fast established a reputation as an

innovative provider of customised system modules for OEM manufacture and end-user automation systems.

With offices in more than 40 countries internationally and operational outposts in an additional 80, Bürkert is a major global group familiar with the need for flexibility and individuality in the national operations of different countries. As a privately owned and operated company, Bürkert maintains a flexibility and adaptability which encourages closeness to your way of thinking and responsiveness

to your needs.

If your needs are out of the square, Bürkert will re-draw the boundaries.

Please enjoy Bürkert 'At a glance', which is designed to offer a comprehensive range of standard and custom-built solutions for the monitoring and control of fluids.

Contact us today, and find out why we are known throughout the world as the Smart Choice in Fluid Control Systems.



**Bürkert Contromatic PVT Ltd, Chennai, India
Apex Towers, 54 II Main Rd, R.A.Puram.**



Service and performance

60+ Years Experience

Bürkert has been designing and manufacturing process control products for over 60 years and is internationally renowned for its expertise and innovation. The company supports its customers through an extensive service and distribution network operating from country offices in more than 40 countries, and operational centres in an additional 80. Bürkert India recently opened its first country office in Chennai, with branch offices and alliance partner distributors located throughout the country.

Product Range

Bürkert manufactures and stocks over 5000 different products including instrumentation, process automation, control valves, pneumatic actuation, solenoid valves and Fieldbus components.

Application areas include the control of flow, pH, ORP, conductivity, temperature, level and pressure in a wide range of industries including water treatment, textiles, automotive, pharmaceutical, food & beverage, medical and fine chemicals.

Research and Development

As a privately owned company Bürkert is able to invest considerable amounts in R&D every year, typically 15% of revenue. Our engineers and scientists are allocated considerable resources to assist in the development of cutting-edge innovation. Working within a collaborative environment that values experience, encourages courage in going the extra distance in innovation and fosters closeness to the customers needs, our imaginative R&D teams lead the field in developing new products and systems using the latest materials, electronics and software.

Engineering

Modern automation systems are continually advancing in both technology and application. Bürkert embraces these advances and continually endeavours to develop trouble-free systems that are easy to implement and add bottom-line value to customer operations. Our innova-

tions range from integrated intelligence in our products for stand alone loops and custom module development, to decentralised network system solutions.

Integration

Bürkert is experienced in the design and build of complete systems engineered to meet your requirements, through to turn-key automation solutions taken from concept to commissioning including hardware, software, documentation, training and ongoing care.

Training

Bürkert offers training in the use of technology products and systems, designed to give the customer maximum application capability across the entire range of products. Bürkert will undertake to train either at your site or our facilities.

After Sales Support

Bürkert's technical and sales teams provide support for the extensive range of equipment and services offered. Bürkert support includes telephone assistance, fast turnaround of repairs, calibration commissioning, training and on-site service by arrangement.





Solenoid valves

Bürkert's solenoid valve systems are suited to neutral, aggressive and contaminated fluids, steam and other high temperature media.

High-quality universal solenoid valves are available in stainless steel, brass or thermoplastics that can be used for a variety of purposes. A wide range of seal materials have been proven for use with acids, lyes, corrosive and toxic fluids.

Valves for water application feature a compact, water-hammer-free design. Bürkert also offers SIL and EX certified solenoid valve systems that achieve the highest levels of reliability and safety.

Compact Valves

Bürkert's compact and low weight range of solenoid valves is easy to install and designed to handle neutral, slightly aggressive fluids and steam up to 180°C.

The 2/2 or 3/2-way body is available in brass, stainless steel or thermoplastic, with threaded or manifold mount port connections. The range features multi-position solenoid coils that are interchangeable (AC or DC) without disturbing the valve body. A lockable manual override option is also available.

Zero-Differential Valves

Offered in both direct acting and pilot assisted variants, Bürkert's zero-differential valves have a long life cycle. This is largely due to the robust design involving corrosion resistant features, multi-position coils and water-hammer-free operation. Zero-differential valves from Bürkert are designed to handle neutral, slightly aggressive fluids and steam up to 180°C.

EX Approved Valves

Bürkert offers a wide range of certified valves designed for applications requiring high reliability and safety in operation. These valves are engineered to operate over a wide ambient temperature range for long life cycle, without corroding. Bürkert's EX approved valves are available with high performance, universal current coils in 1.8, 3, 7 & 9 watt, with moulded lead or junction box electrical connections.

Safety Integrity Level Valves

Bürkert offers a range of solenoid valves appropriate to systems requiring Safety Integrity Level (SIL) certification of 1 to 3. SIL solenoid valves are available in 2/2 and 3/2 way variants and in our full range of valve body materials.

Isolating Diaphragm Valves

Bürkert's dependable family of diaphragm valves is designed to handle contaminated fluids, and offer long life cycle and trouble-free operation with minimal maintenance needs. The 2/2 or 3/2-way design is available with brass, stainless steel or thermoplastic bodies, and feature a separating diaphragm made from NBR, FKM, EPDM or FFKM which isolates the solenoid system from the operating fluid. Lockable manual override is standard in these valves, with electrical feedback signaller and threaded or manifold mount port connections available.





Process and control valves

Diaphragm Valves

Developed to handle the unique challenges of hygienic and sterile applications, Bürkert offers diaphragm valves with precise material formulae and physical tolerances. The valves are available in a wide range of materials certified for food and beverage, biotechnology, pharmaceutical and cosmetic industry applications.

All Bürkert diaphragm valves are rigorously tested during development and production to ensure reliability in critical processing environments.

Globe Valves

Bürkert's globe valves are available in on/off and fully modulating configuration. Globe valves can be supplied to worldwide standards of flanges, weld-end, threaded-ports and Tri-Clamp, in sizes to DN100. Bürkert offers Stainless Steel 316L bodies as standard for globe valves.

Angle Seat Valves

Bürkert's air piloted angle-seat valve is operated by an efficient piston actuator, and features a very high life expectancy, typically around 5 million cycles.

Compared to conventional globe valves, the angle-seat body design achieves extremely high flow rates. High quality steam and water-hammer free versions are available.

Quarter Turn Valves

Bürkert's range of manual, pneumatic and electric quarter-turn ball valves is available in stainless steel or plastic, and is suited to a wide variety of applications within water treatment, chemical, food, dyeing, textile and pharmaceutical industries.

Accessories

Stroke limiters, handwheels, electrical feedback sensors and pilot valves are available to suit the entire range of valves. Bürkert is able to supply a wide selection of accessories, comprehensively and completely fulfilling customer needs.

Top-mount or Side-mount Position Control

Bürkert is unique in offering all valves with innovative positioners/ controllers for continuous process control. These intelligent electro-pneumatic controllers can be specified with a wide variety of options, and include smart features to minimise air use, setup and configuration time. Even non-Bürkert valve products can be converted, with the same control and air saving benefits.

Features include voltage and current inputs, autotune for commissioning setup, pre-programmable characteristic curves and self-linearisation. Integral PID controllers with remote setpoint capability are available. Bürkert valves are optimally suited to use with leading industrial network infrastructures, including Profibus DP & PA, DeviceNET and HART protocols, plus ATEX approved variants for hazardous areas.





Pneumatic actuation

Bürkert's pneumatic actuation systems offer direct mounted pilot solenoid valves, and remote mounted valves and valve islands.

The remote valve islands are modular and DIN rail mounted. They are high flow 3/2, 5/2 and 5/3 with integral push-in fittings, LED indication and manual override. All major Fieldbus protocols such as Profibus, DeviceNet, Interbus, CANopen and Ethernet are available, as are network protocols designed for hazardous areas such as EEx(m) and EEx(i).

Banjo Pilot Valves

The simplest form of process actuation can be achieved by mounting a pilot solenoid valve directly into the process valve actuator inlet port with a banjo bolt connector. This gives a faster actuator response and allows provision of a manual override facility at the process valve. Bürkert selection of banjo solenoid valves is available in a wide variety of body materials and voltage options, including EExia IIcT6.

Namur Valves

An optional alternative to the banjo pilot solenoid, this valve type mounts directly onto the internationally recognised

Namur interface profile as is found on all mainstream process control pneumatic actuators. Bürkert offers a selection of Namur valve options that can be directly integrated with AS-i control systems.

In-line Valves

Bürkert pneumatic valves are available for use in "in-line" duties and options include N.O., N.C., 3/2, 4/2, 5/2 and 5/3 functionality. Monostable, bistable and impulse operation, as well as a wide variety of port connection options, can be supplied.

Manifold Valves

Bürkert pneumatic valves can be conveniently arranged into dedicated manifold or valve island assemblies for use in both centralised and decentralised control systems. Electrical control options vary from simple cable plug connections to

solenoid terminals, through to sophisticated Fieldbus systems solutions. Bürkert systems have been developed to work within existing site protocols, to minimise complexity as well as installation and ongoing maintenance costs. Bürkert is an Encompass Partner with Rockwell Automation, and has alliance partnerships with Siemens, Phoenix and Wago, and work with most protocols available globally.

A number of manifolded assemblies are available as IP65 devices and are suitable for installation directly in the workplace without any other enclosure. All manifolds can be expanded at a later date if required.

Accessories

A full range of pneumatic accessories are also available.





Sensors for process control

Bürkert's smart range of instrumentation and sensors has proven its superior performance all over the world.

Bürkert instrumentation includes sensors, switches and transmitters for flow, level, analysis, pressure and temperature. Controller systems are available for batching, pH and chlorine control applications.

Flow Control

Bürkert's flow sensors, batch controllers and valves can be used for indication, monitoring, transmitting and I/O control. The devices are robust to work reliably with the most demanding media, covering a wide dynamic range. Bürkert's range of instruments is highly flexible, offering a variety of measuring principles including paddle wheel, magnetic-inductive and positive displacement, as well as various fittings and materials. This modular configuration enables customer selection of the optimum combination for the process at hand.

Batch Control

By adding smart controllers to our range of flow sensors and valves, Bürkert is able to offer filling and batch control systems to suit almost any application.

Analytical Control

Bürkert's analytical sensors and controllers for pH, conductivity and ORP measurement combine easily and cost-effectively the wide selection of valves available. These combination valve/sensor builds are generally the ideal solution for many application areas such as water treatment, chemical, pharmaceutical and the food and beverage industries.

Temperature Control

Temperature control devices such as Bürkert sensor/switch units are widely used in all branches of industry. Display and control units can be mounted separately from the sensor to make them easy to reach and to read. Or for more traditional applications, Bürkert offer a range of digital and analogue panel mount controllers.

Level Control

Non-contact, highly precise ultrasonic level transmitters indicate the volume of media in a vessel, and make level control possible via Bürkert's EasyLINK and other communications and control systems. Optional wall, panel or compact mounting versions are available.

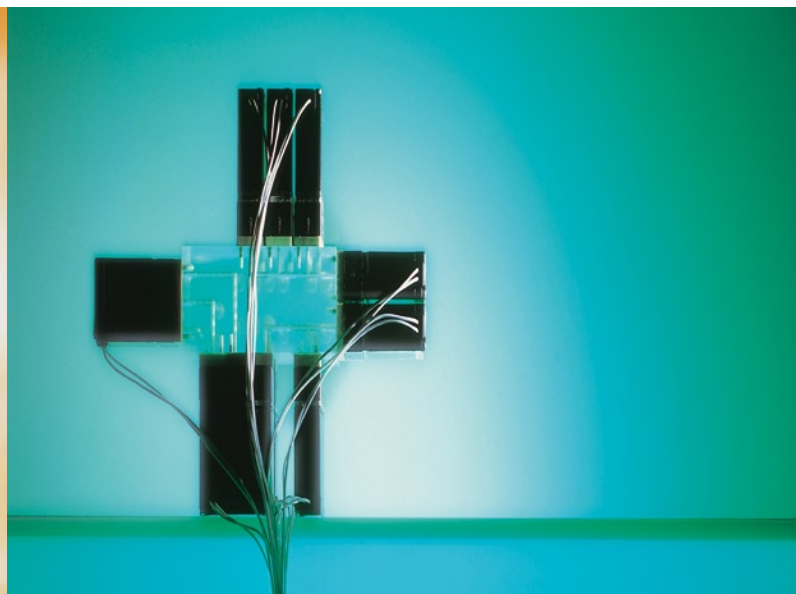
Pressure Control

The extensive Bürkert product range provides greater application flexibility. Bürkert offers the complete range of pressure devices, from low cost sensors to high-spec devices for high specification and difficult applications.

Controllers

Bürkert offers intelligent PID controllers that integrated into control valves, positioners, instruments and modulation solenoids.





Mass flow control and MicroFluidics

Mass Flow Measurement & Control

Bürkert's range of Mass Flow controllers operate independent of pressure, temperature and density. The devices offer in-line and bypass sensors for highly accurate, repeatable and fast response. Bürkert's Mass Flow range includes two types, meters and controllers.

Mass Flow Meters (MFMs) range from 20-1500 litres per min (full scale), with a lowest controllable flow rate of 0.4ml per minute. MFMs utilise the latest measurement technologies for high reliability and fast response including standard analogue signal outputs as well as RS232 and RS485 (for model 8006, 8702 and DeviceNet) interface for configuration and testing.

Mass Flow Controllers (MFCs) include all the options of the MFM, with the addition of a modulating valve and PID circuitry. This enables complete stand alone control capabilities. These units are mostly used with control and monitoring systems, which act to both read the process flow and send a remote set-point via analogue (4-20mA or 0-10V) signal.

Models are also available in DeviceNet and Profibus for direct connection to

control systems. These prove a very cost effective option when complete system costs are considered.

Modulation Solenoid Valves

Bürkert offers true modulating solenoids in Stainless Steel and brass, from sub-miniature to 25mm.

Modulating solenoid valves are available with standard process signal inputs (4-20mA), or integrated PID controllers.

MicroFluidic Valves & Pumps

Bürkert's compact MicroFluidic range of valves, pumps, sensors and controllers are suitable for a wide range of functions including dosing, dispensing, flow control, batching and pressure control.

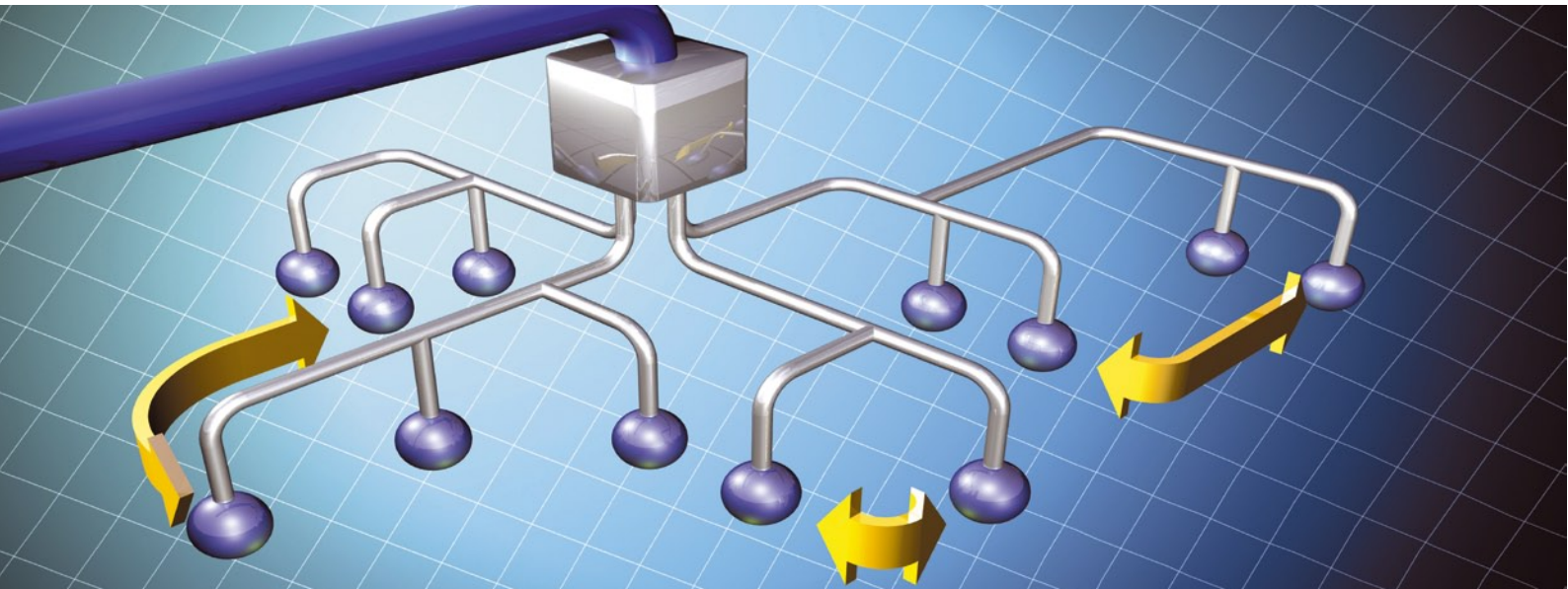
Manufactured with advanced thermoplastics PP, PVDF and PEEK, as well

as stainless steel, Bürkert's micro-range is rated for neutral to pure aggressive organic and inorganic fluidic media, and certified for use in high-grade, hygienic and hostile environments to 55°C.

Isolating diaphragms are available in FKM, EPDM or FFKM. Many units are bidirectional, to enhance flexibility of system design, with standard and custom manifold designs available.

Bürkert's micro range is ideal for the medical, analytical and laboratory technology industries. MicroFluidic valves, pumps and sensors are typically used in applications involving continuous low flow, micro dosing, probe or sample preparation (eg for HPLC). The componentry is also applied in the replacement of peristaltic pumps and replacement of syringes in pipetting.





Network systems

The Bürkert AirLINE series is the only pneumatic system that directly integrates to a variety of industrial systems hard- and software. This means that all communications, network nodes, and I/O hardware for automation projects are specified by the consumer. This additionally allows total flexibility in network choice. AirLINE facilitates trouble-free network upgrades, allowing add-ons without disturbance to the existing infrastructure.

One of the key advantages of AirLINE is the addition of unlimited pneumatic outputs, which makes possible the design of complete plant automation modules

operated from a single network node, without system limitations. For example, a pre-filtration plant can be specified to have 6 x DI, 4 x DO, 1 x AI and 8 x pneumatic outputs integrated onto a single network node in a single field enclosure, rather than multiple boxes and extensive cabling that all other companies require.

Bürkert's AirLINE system reduces resource inputs, saving space, time and money, and all but eliminates the need for multi-core cables, trays, breakout boxes, etc. This factor drastically reduces installation costs on small and large projects. Moreover, comprehensive AirLINE installations are considerably less com-

plex than alternatives, for ease of use, maintenance and trouble-free operation. AirLINE carries Hot Swap capability.

Bürkert's AirLINE system is considerably quicker to install so concept to commissioning timelines are drastically shortened. System design can further be enhanced with the addition of integral control software in the remote nodes. This software meets IEC61131-3 standards and enables complex control.

Bürkert's AirLINE alliance partners include Wago, Rockwell Automation (with Encompass Partnership), Phoenix, GE Fanuc, Siemens and Beckhoff.

Fax-back information request

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Please supply more information or catalogues on the following:

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| <input type="checkbox"/> Solenoid Valve systems | <input type="checkbox"/> Fieldbus and Network systems |
| <input type="checkbox"/> Process & Control Valves | <input type="checkbox"/> Flow control systems |
| <input type="checkbox"/> Pneumatic Actuation and valve banks | <input type="checkbox"/> Temperature control systems |
| <input type="checkbox"/> Instrumentation for process control | <input type="checkbox"/> Filling and Level control systems |
| <input type="checkbox"/> Mass Flow Meters and Controllers | <input type="checkbox"/> Approvals for hazardous areas |
| <input type="checkbox"/> MicroFluidic valves, Pumps and Sensors | <input type="checkbox"/> Technical application & sizing information |
| <input type="checkbox"/> General Products (data sheet) Book & CD | <input type="checkbox"/> Have an Applications Engineer contact me |

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