

Solenoid Valve Systems from Burkert are suited to operate with neutral, aggressive and contaminated fluids, steam and other high temperature media. For contaminated media Burkert offers solenoid valves with isolating diaphragms.

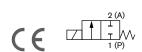
Burkert's uncompromising quality is evident in our range of solenoid valves. They are available in stainless steel, brass or engineered plastics (PVDF, PVC, PTFE). A wide range of seal materials have been proven for use with acids, lyes, steam, corrosive and toxic fluids. Water valves are developed in a compact and water hammer free design. Burkert has introduced several HazEx™ Solenoid Valve Systems with global approvals.

701

Direct-acting 2/2-way plunger valve

NPT 1/8" or manifold mounting

- Brass or stainless steel
- FKM seal as standard
- Slipped over coil system
- Simple and fast flange or manifold mounting





Shown without plug

Direct-acting 3/2-way plunger valve

NPT 1/8" or manifold mounting

- Brass or stainless steel
- FKM seal as standard
- Slipped over coil system
- Simple and fast push-in, flange or manifold mounting





Shown without plug



Direct-Acting Plunger 2-way Solenoid Valve NPT 1/8" - NPT 1/4"

- Direct-acting "Heavy-duty" welded plunger valve provides increased reliability & gas-tightness
- Opens without differential pressure
- Bolted-coil design built to withstand heavy vibration
- Slip over coil can be rotated in 4 X 90 degrees
- Vacuum rated valves available









Supplied as shown

Compact Plunger Operated 3/2-way Valve NPT 1/8" & NPT 1/4"

- Reliable double seated plunger operation
- Threaded or flange version
- High quality FKM seal as standard
- Slip over coil can be rotated in 4 x 90 degrees











Shown with 2508 plug

Pivot Operated 3/2-way Solenoid Valve in brass or stainless steel NPT 1/4"

- Isolating separating diaphragm design
- Long service life
- Handles slightly contaminated fluids with ease
- Manual override as standard







Pivot Operated 3/2-way Universal Solenoid Valve in brass or stainless steel

NPT 1/4", 0-174 PSI max.

- Universal flow function
- Isolating separating diaphragm design
- Handles slightly contaminated fluids with ease
- Manual override as standard
- · Long lifetime









Direct-acting 2/2-way plunger valve NPT 1/4"

- Direct-acting, powerful valve with diameter of up to DN 12
- Vibration-proof, bolted coil system
- Increased leak-tightness with welded plunger guiding tube
- Explosion proof versions













Servo-assisted 2/2 way piston valve

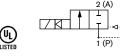
- Servo-assisted and compact piston valve with diameter of up to DN 13
- Vibration-resistant, screwed coil system
- Increased leak-tightness with welded plunger guiding tube
- Safe opening with hard-coupled piston system
- · High pressure versions up to 250 bar
- Manifold mount options



2/2-way Solenoid Valve for liquids and gases

- Coupled spring diaphragm system
- Waterhammer free and low noise
- Flow-optimized housing and diaphragm geometry for high flow





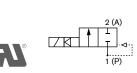


5213 EV

Servo-Assisted Solenoid Valve with Plunger Pilot

NPT 1/2" - NPT 2", 2.9-232 PSI

- Waterhammer-free
- Rugged molded diaphragm
- · Compact design with high flow rates





Supplied as shown

2/2-way Servo-Assisted Solenoid Valve with Isolated Pilot

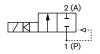
NPT 1/2" - NPT 2"

- Unique isolated technology for slightly contaminated fluids
- Independently adjustable open / close rate
- Easily configurable for normally open
- Manual override



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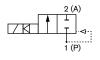
2/2-way hard-coupled Solenoid Valve

NPT 1/2" - NPT 2"

- Switches without differential pressure
- Operates on vacuum
- Process proven rugged and reliable design









Servo-Assisted 2/2-way Steam Piston Valve

NPT 1/2" - NPT 1 1/2", 0-145 PSI

- Servo-assisted piston valve
- Safe opening with hard-coupled piston system without differential pressure
- Vibration-resistant, push-over coil system
- Energy-saving double coil technology with "Kick and Drop" (KD) electronics



Direct-acting 2-way proportional solenoid control valve

- Precise flow control
- High and low differential pressure designs
- Vacuum rated
- Direct-acting valve for demanding control functions (wide control range, high cycling and dry gases)







Direct-acting 2-way standard solenoid control valve

- Excellent range
- Neutral gases and liquids
- Compact valve design
- Orifice sizes 0.8 ... 6 mm
- Optional: Explosion-protected coil













Direct-acting 2-way standard solenoid control valve

- Excellent range
- · Neutral gases and liquids
- Compact valve design
- Orifice sizes 2 ... 9.5 mm
- Optional: Explosion-protected coil













2/2 way Proportional Valve (motor-driven)

- Actuator isolated from flow path
- Excellent range and fast response times
- Low power consumption
- Orifice sizes 8 to 25 mm
- Versions: Standard, positioner, process controller

PWM Control Electronics for Solenoid Control Valves

- Programmable digital electronics
- Converts an analogue input signal into a PWM output signal
- Adjustable PWM frequency
- Digital communication possible (büS)
- Optional integrated time control and digital/analogue input signals



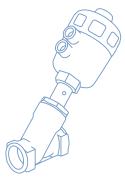
Digital Timer

- Digital version with bright LED display
- Analogue version with LED illumination to indicate switching status
- Connection according to DIN EN 175301-803 (form A)
- Protection class IP65 (NEMA 4)



PROCESS VALVES & CONTROL HEADS

Making your life simpler, our ground-breaking innovation has created a remarkable range of attractive and hardworking valve elements which can be combined to give the user the best possible fit for purpose. With unlimited modularity, Bürkert saves you time by offering valves for media from slurries to steam and from de-ionized water to hydrochloric acid to offer peace of mind with the sure knowledge you have chosen experience and quality.



On-Off Pneumatically Operated 2/2-way Angle Valve for Liquids NPT 1/2" - NPT 2 1/2"

- Waterhammer-free
- High flow rates
- Self adjusting double packing
- Optical position indicator is standard
- Rotating power head to orient air control connections







On-Off Pneumatically Operated 2/2-way Angle Valve for Steam and Gases NPT 1/2" - NPT 2 1/2"

- Flow direction above seat
- PPS actuator for hot environments
- Optical position indicator is standard
- Self adjusting double packing

and vacuum applications

Process Test Conditions (SPTC)

- High flow rates
- Rotating power head to orient air control connections

Suitable for CIP (cleaning in place), SIP (sterilization in place

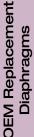
Independently tested by BioProcess Institute to comply with ASME BPE Standard requirements for Standard

Internationally certified for use in stringent pharmaceutical,

aseptic, sterile and sanitary food applications







Pneumatically Operated 2/2-way Diaphragm Valve CLASSIC for **Decentralized Automation**

- Diaphragm hermetically separates the fluids from the operating mechanism
- Easy integration of limit switches and banjo solenoids
- SS body with clamp or weld ends
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications





On-Off Pneumatically Operated 2/2-way ELEMENT Angle Valve NPT 1/2" - NPT 2 1/2"

- Compressed air recycling control function with ELEMENT control tops
- Perfect for clean applications
- Wide range of accessories
- With flow direction below or above seat
- High flow rates
- High cycle life

2 (A)



Pneumatically Operated 2/2-way Globe Valves 1/2" - 4"

- Flow direction below seat
- Long life
- Flow optimized stainless steel body 316L
- Perfect replacement for flanged ball valves



Pneumatically Operated 2/2-way Diaphragm Valve ELEMENT for Decentralized Automation

- · Optimized flow and zero deadleg
- Diaphragm hermetically separates the fluids from the operating mechanism
- Easy integration of ELEMENT automation units
- SS body with clamp or weld ends
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications



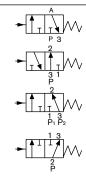
Pneumatically Operated 2/2-way Diaphragm Valve ELEMENT for **Decentralized Automation**

- Hydroformed pharmaceutical grade tube valve body
- · Optimal design for hygienic environments
- Easy integration of automation units with ELEMENT
- Reduced mass up to 75% allows for optimized heating and cooling cycles
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications



3/2-way Globe Valve, pneumatically operated NPT 1/2" - NPT 1 1/2"

- · Different flow circuit functions and control functions
- Long life actuator
- Optical display as standard in series
- Rotary actuator aligns the pilot air ports





Manually Operated Tank Bottom Diaphragm Valve

- Valve housing and diaphragms available in various materials
- Standard surface finish SF1 Ra ≤0.5 µm...1.6 µm (optionally electro polished)
- Available DN8 to DN100 with clamp and weld connections
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications



2/2-way Diaphragm Valve, Manually Operated, Forged Valve Body OD Tube Butt Weld and Clamp Port Connections 1/4"-2"

- Hermetical separation of fluid from operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications



233

Manually operated 2-way Diaphragm Valve, Tube Valve Body OD Tube Butt Weld and Clamp Port Connections 1/2"-2"

- Light tube valve body
- Flow optimized body in stainless steel
- Zero dead volume
- Easy to weld
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications



898

Control Head

Universal attachment for hygienic process valves

- 3 switching points
- Color status display
- Manual override to be used with closed housing
- Fieldbus AS-Interface, IO-Link or büS (CANopen)
- Optionally available with FM cl1d2 NI approval
- Available as 120vac. 24vdc versions



69

Control Head for decentralized automation of ELEMENT process valves

- Contact-free inductive valve position registration (teach function)
- Colored illuminated status display
- Integrated control air routing
- Fieldbus AS-Interface, IO-Link or büS (CANopen)
- Optionally available with FM cl1d2 NI approval



Digital electropneumatic Positioner/Controller for the integrated mounting on process control valves

- Integrated PID Control (8693)
- Compact, robust stainless steel design
- Easy start-up by automatic X-Tune function
- Contact-free position sensor
- Integrated control air routing with spring chamber aeration
- Available as 4-20 mADC/0-10 VDC or Ethernet I/P (with AOP)



Digital electropneumatic positioner for the integrated mounting on process control valves

- · Compact, robust stainless steel design
- Easy start-up by automatic X-Tune function
- Contact-free position sensor
- Integrated control air routing
- Available as 4-20 mADC, AS-Interface, IO-Link (with AOI) or System bus (büS)
- Configurable 3-wire mode (4-20 mADC) via COMMUNICATOR software



Digital Electropneumatic Positioner SideControl and Digital Electropneumatic Process Controller SideControl

- Integrated PID Control (8793)
- Compact and robust design
- Easy start-up by automatic X-Tune function
- Integrated diagnostic functions for valve monitoring
- Dynamic positioning system with no air consumption in controlled state
- Available as 4-20 mADC or Ethenet I/P (with AOP), AS-i 3.0 or IO Link (with AOI)

8791 8792 8793

Angle Seat Valve System for on/off Control and Globe Valve System for on/off Control

- Long service life
- Easy integration of automation units with ELEMENT
- Stainless steel housing
- Suitable for 10 bar(g)/145 PSI steam



Globe control valve

Angle Control Valve and Globe Control Valve 2/2-way continuous control, 1/2" to 4"

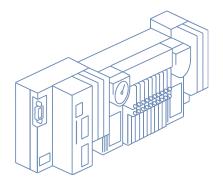
- Easy integration of digital automation modules in all extension stages
- High cycle life and maintenance-free operation
- Excellent control characteristics and impact resistance
- Stainless IP65 and 67, NEMA4 protection
- Simple to install and commission
- Various combination possibilities



PNEUMATIC ACTUATION

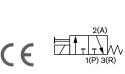
Pneumatic technology is known for high reliability, high force and torque generation and cleanliness. This makes it indispensable for efficient solutions for drives and actuators for control and regulation.

Bürkert has tamed the power of pneumatics and brings it to you in its most efficient form resulting in new standards in factory automation and process control.



Direct mounting pilot valves for pneumatic actuators NPT 1/8" or NPT 1/4"

- Simple to connect to valve and air supply
- Low power
- Tough and reliable
- Manual override as standard







Type 6014 P

Type 7012 P

Heavy Duty 3/2-way Pilot Valve Blocks NPT 1/4", 0-145 PSI

- Extremely rugged
- Slip over coil design
- Manual override





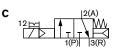




Shown with 2508 plugs

Servo-assisted 3/2 way Solenoid Valve for pneumatics

- High flow-rate capacity
- Single or manifold mounting
- Circuit function NC and NO
- Push-over solenoid coil
- Reduced power consumption
- With manual override







Shown: Standard Coil

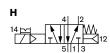
5/2 way Solenoid Valve for pneumatics

- High flow rate
- Low power consumption
- Single and manifold assembly
- High switching reliability
- Manual override as standard
- Corrosion-resistant construction











5/2 way on 3/2 way Convertible Solenoid Valve for pneumatics, NAMUR version

NPT 1/4", NAMUR

- High flow rate
- Low power consumption
- High switching reliability
- Manual override as standard
- Corrosion-resistant construction



CE UL FM



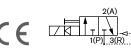


Modular pneumatic valve unit

AirLINE and AirLINE Quick

- Compact design
- Modular configuration
- Cost savings in the control cabinet with AirLINE Quick
- Simple exchange of valves







AirLINE - the valve island optimized for process automation

- Compact design
- Easy diagnostics by LC display
- Process reliability through pneumatic functions
- · Optimized for installation at the bottom of the control cabinet
- Supports communication protocols Ethernet I/P, CAT, ProfiNET and Modbus TCP as standard





AirLINE Field - the valve island

- Compact field-mount design
- Easy to read LCD display
- LED status indication
- Supports IO-Link (AOI), CANopen or buS
- IP 65/67 wash-down rated
- Configurable with COMMUNICATOR software





Standard Panel

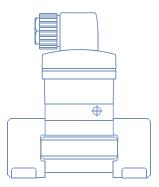
16, 24 and 48 station manifolds double 3/2-way NC

- Reduced space requirement in the control cabinet
- Makes it possible to use more compact control cabinets
- Hose connections directly at the bottom of the switch cabinet
- Supports communication protocols Ethernet I/P, CAT, ProfiNET and Modbus TCP as standard



SENSORS, TRANSMITTERS & CONTROLLERS

For more than twenty years we have been providing our customers with sensors, transmitters and controllers where fit-for-purpose is optimized. From the outset our clients, large and small, have appreciated the practical orientation, man-machine interface and architecture of the sensor range characterized by extremely simple installation, commissioning, calibration and teach functionality. Standardized layout, electrical interfaces, process connections, and, above all, intuitive menus, make the whole range simple to work with.



Flow Transmitter/Pulse Divider

- Microprocessor-controlled electronics
- 2-wire (4-20 mA) / 3-wire (NPN/PNP) operation
- Removable display unit
- Pluggable to flow sensor 8020 and 8030





Batch Controller for panel or wall mounting 7 batch sizes, 2 relay outputs

- Controls 7 batches automatically
- Fast fill and fine control for accuracy
- Shows both flow rate and volume



Batch controller

8025 / SE35

Insertion Flow Transmitter for continuous measurement For pipe > 2", 0-145 PSI

- · Up and download of the data through removable display
- Pipe sizes 1/2" to 16"
- Preferably, for pipe diameter greater than 2"





INLINE Flowmeter for continuous flow measurement For use with fitting S030, 1/2" to 2"

- Turn and lock bayonet fitting isolates sensor from media
- Economic integration in pipe systems
- 3-wire frequency version for direct connection to PLC (PNP and NPN)
- Connection to Burkert remote electronics



S022 Fittings

In-Line Flow Transmitter for continuous measurement For use with fitting \$030, 1/2" to 2"

- Up and download of the data through removable display
- Automatic calibration: TEACH-IN
- · All output signals without presence of flow





Blind INSERTION Magmeter For use with fitting 1/2" to 16"

- Solid state technology
- Clean in place (CIP)
- FDA approved



INSERTION Magmeter with display

For use with fitting 1/2" to 16"

- Simple to read display
- Easy push button menu
- Clean in place (CIP)
- FDA approved



Full bore INLINE Magmeter 1/2" to 6", Up to 232 PSI

- Full bore section
- High frequency sampling
- Flow or batch control



Fittings for 8202 & 8222 pH and Conductivity Sensors Tee Fittings and Adaptors

- Simple installation guaranteed
- Range of chemically compatible materials
- Modular concept for pH, ORP and conductivity



Positive Displacement Sensor Fitting for continuous flow measurement

DN15 - DN100

- INLINE Quarter-Turn technology
- Electronics available for indication, monitoring, transmitting, On/Off control and batch control



FLOWave SAW Flowmeter

3/8" up to 3.0"

- · Without any parts in the measuring tube
- Conforms to hygienic requirements CIP/SIP capable
- Ideal for liquids with low or no conductivity
- Compact, lightweight and low energy consumption
- Digital communication, parameter setting via communicator, display and Wi-Fi



Blind 8098 "S" OEM version

Tuning-Fork Level Switch

1/2", 3/4" or 1" NPT and clamp 2"

- For universal use as overfill or dry run protection system
- Hygienic surface finish
- Extension tubes available



Type 8110

Type 8111

Ultrasonic Level Transmitter for General Application NPT and G thread process connection

- Two-wire version
- Reliable non-contact measurement
- HART communication



Microwave Level Transmitter for General Application

- Universal level measurement device for fluids
- Liquid interface measurement
- Insensitive to dust and steam
- 4-20 mA/HART 2 wires, ATEX/IECEx approvals Ex



pH Transmitter

- Accepts all standard pH probes
- Removable programming puck
- Data upload/download via puck
- With temperature compensation
- Diagnostic function





pH Probes

For use with 8202 pH transmitter

• For many different types of installations and applications



Conductivity transmitter with removable operating unit

- Intuitive menu structure
- Removable programming puck
- Data upload / download via puck
- Diagnostic function



Inductive conductivity meter

- Configurable outputs: up to 2 transistor and up to 2 analogue 4-20 mA outputs
- Removable backlighted display
- Simulation of process values and diagnostic functions
- Sensor-versions available with PEEK, PVDF or PP



Pressure Measuring Device

- Ceramic/thick film measurement cell
- 2-wire version for 4-20 mA output
- Compact, stable construction for the highest operational reliability





Multi-channel, multi-functional transmitter/controller 1/4" DIN Panel Mount

- Flexible analytical and flow transmitter
- Compatible with most flow, pH/ORP, chlorine and conductivity sensors
- Intuitive programming
- SD card for data logging and upload/download





S030 and S020 flow fittings

1/2" to 14", 0-232 PSI

- Straight thru tube assures maximum accuracy
- Wide range of materials and connections
- Unique INLINE version isolates medium from measuring device



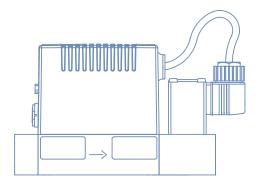
Flow measurement with SAW technology

Hygiene is the top priority when producing food products and beverages. FLOWave provides you with a compact solution that meets strict hygienic requirements. Thanks to innovative SAW technology, the flowmeter dispenses with sensor elements in the measuring tube. No parts in the measuring tube means: no leaks, no material incompatibility, no maintenance, no pressure drop and easy cleaning.





MASS FLOW



Bürkert's Mass Flow Meters (MFM) and Mass Flow Controllers (MFC) rank among the most sought after components in the business. With a well established position in various processes all over the world, they set the standard in the measurement and control of mass flow rates.

Reproducible accuracy and precision, with a coherent price-performance ratio – these are the exceptional characteristics of Bürkert's thermal MFMs/MFCs. Our mechatronic devices unite the functionality of several components at once, in an efficient compact structure with no moving components in the gas flow. Compactness and device intelligence make fluid handling so much easier.

Mass Flow Controller (MFC)/Mass Flow Meter (MFM) for Gases Nominal flow ranges from 0.010 l/min to 160 l/min

- High accuracy and repeatability
- Very fast response times
- Easy device exchange through configuration memory
- · Analog and digital communications protocols
- Optional: USP Class VI, FDA, EG 1935 conformity



Mass Flow Controller (MFC)/Mass Flow Meter (MFM) for Gases Nominal flow ranges from 20 I/min up to 2500 I/min

- · High accuracy and repeatability
- Easy device exchange through configuration memory
- Up to four calibration curves can be stored in the device
- Low pressure drop, even at high flow rates
- Available with electromagnetic proportional valve and with motor-driven proportional valve
- Optional: USP Class VI, FDA, EG 1935 conformity

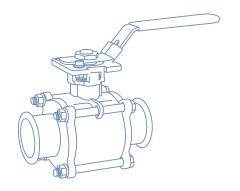
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Mass Flow Controller (MFC)/Mass Flow Meter (MFM) for Liquids Flow measurement / control up to 120 kg/h

- Very high accuracy and measuring range
- High long-term stability, no zero-point adjustment necessary
- Highly resistant wetted materials
- The measuring principle of the sensor is based on the Coriolis effect and is completely independent of the medium
- Density and temperature measurements



BALL VALVES



Bürkert has packaged Quarter Turn valves and technologies for modular simplicity. First dividing quarter turn into three basic components; the valve, an actuator and top works – Bürkert builds a complete solution. Automation-ready valves, with high quality actuators and unbeatable top works solutions. A modular, functional high quality quarter turn package. Configure your perfect package using our online configurator tool.

Ball Valves in cast 316 SS (CF8M) 2-way Split body construction

- 275 PSI WOG
- 150lb RF ANSI flange
- Full port to Sch 40 pipe
- Bolted split body
- Range of seal options
- · Blow-out proof stem with self adjust packing
- ISO 5211 direct actuator mount (6"+ indirect)



Ball Valves in cast 316 SS (CF8M) 2-way 3-piece construction

- 1000/800 PSI WOG
- Thread, socket and butt weld ends
- Full port to Sch 40 pipe
- Semi lugged body
- Range of seal options
- Blow-out proof stem with self adjust packing
- ISO 5211 direct actuator mount

NPT Socket weld

Ball Valves in cast 316 SS (CF8M) 2-way 3-piece construction

- 1000/800/600 PSI WOG
- US Clamp and US Tube Weld End
- Full port to US OD Tube
- Semi lugged body
- · Blow-out proof stem with self adjust packing
- ISO 5211 direct actuator mount



Ball Valve Configurator

Use the simple Ball Valve Configurator to select the item number with the right parameters and call-in your order for Burkert Express Program options - even faster than the delivery times offered online.





