



bürkert
FLUID CONTROL SYSTEMS

PRODUCT OVERVIEW

02 SOLENOID VALVES

06 PROCESS VALVES & CONTROL HEADS

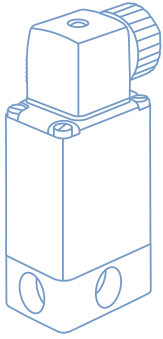
10 PNEUMATIC ACTUATION

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17 MASS FLOW

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SOLENOID VALVES



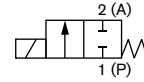
Solenoid Valve Systems from Burkert are suited to operate with neutral, aggressive and contaminated fluids, steam and other high temperature media. For contaminated media Burkert offers solenoid valves with isolating diaphragms.

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.

7011

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

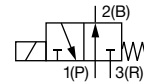


Shown without plug

7012

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

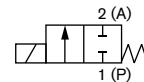


Shown without plug

6013

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

- Direct-acting and compact valve up to diameter of DN 6.0
- Opens without differential pressure
- Vibration-proof, bolted coil system
- Slipped over coil system
- Vacuum rated valves available

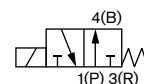
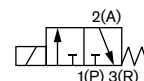


Supplied as shown

6014

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

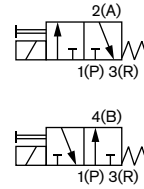
- Threaded or flange version
- High quality FKM seal as standard
- Slip over coil system



Shown with 2509 plug

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

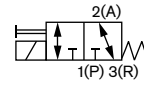
- Isolating separating diaphragm design
- Long service life
- Maintenance-free pivoted armature technology
- Service-friendly, robust manual override



0330

**Pivot Operated 3/2-way Universal Solenoid Valve in
brass or stainless steel
NPT 1/4", 0-174 PSI max.**

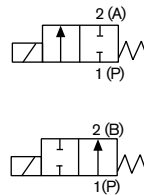
- Universal flow function
- Isolating separating diaphragm design
- Handles slightly contaminated fluids with ease
- Manual override as standard
- Long lifetime



0330

**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



6027

Servo-assisted 2/2 way piston valve

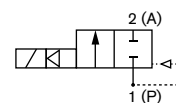
- Servo-assisted and compact piston valve with diameter of up to DN 13
- Vibration-resistant, screwed coil system
- Increased leak-tightness with welded plunger guiding tube
- Safe opening with hard-coupled piston system
- High pressure versions up to 3626 PSI
- Manifold mount options



6240

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

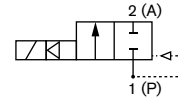


6213 EV

6281 EV

Servo-Assisted Solenoid Valve with Plunger Pilot NPT 1/2" - NPT 2", 2.9-232 PSI

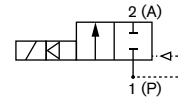
- Waterhammer-free
- Rugged molded diaphragm
- Compact design with high flow rates



5282

2/2-way Servo-Assisted Solenoid Valve with Isolated Pilot NPT 1/2" - NPT 2"

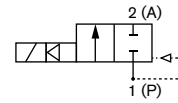
- Unique isolated technology for slightly contaminated fluids
- Independently adjustable open / close rate
- Easily configurable for normally open
- Manual override



0290

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



6407

Servo-Assisted 2/2-way Steam Piston Valve NPT 1/2" - NPT 1 1/2", 0-145 PSI

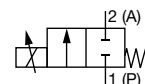
- Servo-assisted piston valve
- Safe opening with hard-coupled piston system without differential pressure
- Vibration-resistant, push-over coil system
- Energy-saving double coil technology with "Kick and Drop" (KD) electronics



2871

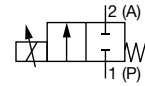
Direct-acting 2-way proportional solenoid control valve

- 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

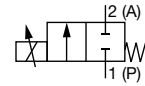
- Excellent range
- Neutral gases and liquids
- Compact valve design
- Orifice sizes 0.8 ... 6 mm
- Optional: Explosion-protected coil



2873

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



2875

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



3285

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



8605

Digital Timer

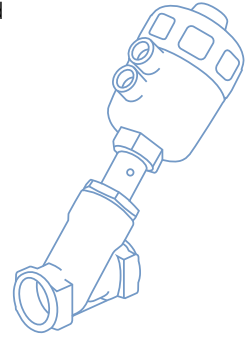
- Digital version with bright LED display
- Analogue version with LED illumination to indicate switching status
- Connection according to DIN EN 175301-803 (form A)
- Protection class IP65 (NEMA 4)



1087

PROCESS VALVES & CONTROL HEADS

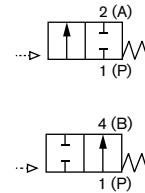
Making your life simpler, our ground-breaking innovation has created a remarkable range of attractive and hardworking valve elements which can be combined to give the user the best possible fit for purpose. With unlimited modularity, Bürkert saves you time by offering valves for media from slurries to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



2000

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

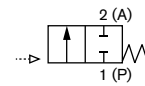
- Waterhammer-free
- High flow rates
- Self adjusting double packing
- Optical position indicator is standard
- Rotating power head to orient air control connections



2000

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

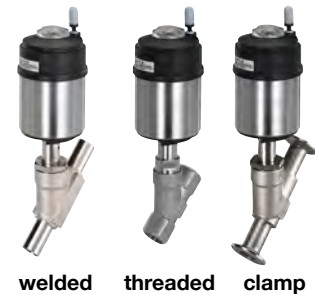
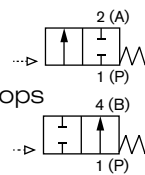
- Flow direction above seat
- PPS actuator for hot environments
- Optical position indicator is standard
- Self adjusting double packing
- High flow rates
- Rotating power head to orient air control connections



2100

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

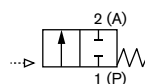
- Perfect for clean applications
- Wide range of accessories
- With flow direction below or above seat
- Compressed air recycling control function with ELEMENT control tops
- High flow rates
- High cycle life



2101 | 2012

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



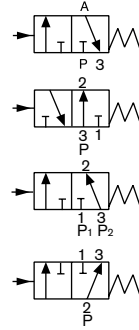
**Type 2012
Classic
DN65-100**

**Type 2101
ELEMENT
DN15-50**



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



2106

- Suitable for CIP (cleaning in place), SIP (sterilization in place) and vacuum applications
- Independently tested by BioProcess Institute to comply with ASME BPE Standard requirements for Standard Process Test Conditions (SPTC)
- Internationally certified for use in stringent pharmaceutical, aseptic, sterile and sanitary food applications



OEM Replacement
Diaphragms

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



2031 forged On/Off

Pneumatic operated 2/2 way Diaphragm Valve - Tube Valve Body

- Hydroformed pharmaceutical grade tube valve body
- Optimal design for hygienic environments
- Reduced mass up to 75% allows for optimized heating and cooling cycles
- Ultra-compact design supports sustainability initiatives



2031 TVB

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

- Industry leading flow rate (CV)
- Diaphragm hermetically separates the fluids from the operating mechanism
- Easy integration of ELEMENT automation units: on/off or modulating
- SS body with clamp or weld ends
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications



2103 forged On/Off

Manually Operated Tank Bottom Diaphragm Valve

- Valve housing and diaphragms are available in various materials
- Standard surface finish SF1 Ra $\leq 0.5 \mu\text{m}$... $1.6 \mu\text{m}$ (optionally electropolished)
- Available DN8 to DN50 with clamp and weld connections
- Minimum stroke limiter/closing force limiter as standard



2/2-way Diaphragm Valve, Manually Operated, Forged Valve Body

- Industry leading flow rate (CV)
- Diaphragm hermetically separates the fluids from the operating mechanism
- SS body with clamp or weld ends
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications
- Minimum stroke limiter/closing force limiter as standard



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

- Diaphragm hermetically separates the fluids from the operating mechanism
- SS body with clamp or weld ends
- Internationally certified for pharmaceutical, aseptic, sterile and sanitary food applications
- Minimum stroke limiter/closing force limiter as standard



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)



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)



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)



8692 | 8693

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
- Configurable 3-wire mode (4-20 mADC) via COMMUNICATOR software
- Available as 4-20 mADC, AS-Interface, IO-Link (with AOI) or Bürkert System bus (büS)



8694

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 Ethernet 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



8801 : 2100 / 2101

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

- High cycle life and maintenance-free operation
- Stainless IP65 and 67, NEMA4 protection
- Excellent control characteristics and impact resistance
- Simple to install and commission

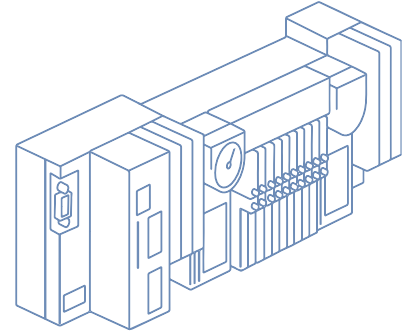


8802 : 2300 / 2301

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.

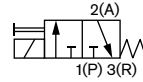
Bürkert has tamed the power of pneumatics and brings it to you in its most efficient form resulting in new standards in factory automation and process control.



6014 P | 7012 P

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



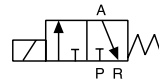
Type 6014 P

Type 7012 P

6014 Manifold

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

- Extremely rugged
- Slip over coil design
- Manual override

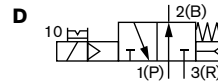
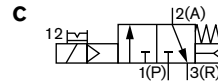


Shown with 2508 plugs

6518

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

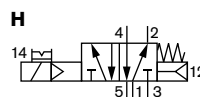


Shown: Standard Coil

6519

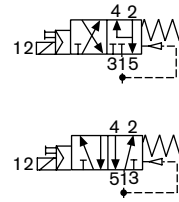
5/2 way Solenoid Valve for pneumatics

- 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**

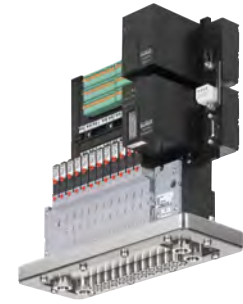
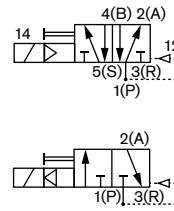
- High flow rate
- Low power consumption
- High switching reliability
- Manual override as standard
- Corrosion-resistant construction



6519 NAMUR

**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



8640

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



8652

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



8653

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

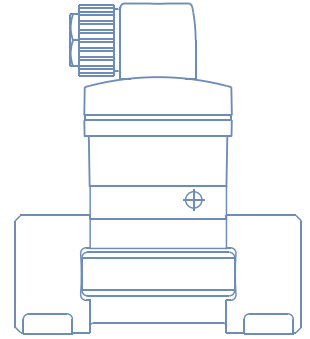
- Reduced space requirement in the control cabinet
- Makes it possible to use more compact control cabinets
- Hose connections directly at the bottom of the switch cabinet



8615

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.



8022

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



8025 / SE35
Batch controller

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



8026

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"



8030 / SE30

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



In-Line Flow Transmitter for continuous measurement
For use with fitting S030, 1/2" to 2"

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



8036 / SE36

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

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



8041

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



8045

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

S020 PVC



S030 PVC

S030 & S020 Fittings

Compact Magmeter with display
1/2" to 2", 0-232 PSI

- For continuous multiparameter monitoring
- Measuring and monitoring of flow, temperature and conductivity
- Quick and flexible start-up via IO-Link and Bluetooth
- Easy adjustment to suit the process by using adapters

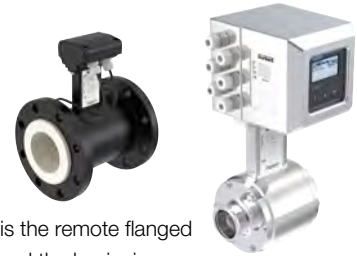


8050

8059

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

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



Shown is the remote flanged sensor and the hygienic clamp compact version

8098

FLOWave SAW Flowmeter 3/8" up to 3.0"

- Digital communication, parameter setting via communicator and display
- 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
- Optional density and mass flow measurement



Blind 8098 "S" OEM version

S077

Positive Displacement Sensor Fitting for continuous flow measurement 1/2" to 4"

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



8110 | 8111

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

8140

Radar Level Transmitter for General Purpose and Hygienic Applications NPT thread, ANSI flange and tri-clamp process connections

- Continuous filling level measurement up to 120 m, 4...20 mA, 2-wire
- Available process connections: mounting bracket, thread (G, NPT 3/4 and 1 1/2), flange (DN50, 2" ASME), clamp (2")
- Excellent 80 GHz radar signal focusing and high measurement dynamics
- Adjustable via the display/configuration module and keys, alternatively via Bluetooth



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

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



8177

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



8188 | 8189

pH Transmitter

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



8202 ELEMENT

pH Probes For use with 8202 pH transmitter

- For many different types of installations and applications



8203

Conductivity transmitter with removable operating unit

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



8222 ELEMENT

8228

Inductive conductivity meter

- Configurable outputs: up to 2 transistor and up to 2 analogue 4-20 mA outputs
- Simulation of process values and diagnostic functions
- Sensor-versions available with PEEK, PVDF or PP
- Perfect for concentrated liquids and wide conductivity ranges



8316

Pressure Measuring Device

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



8619

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



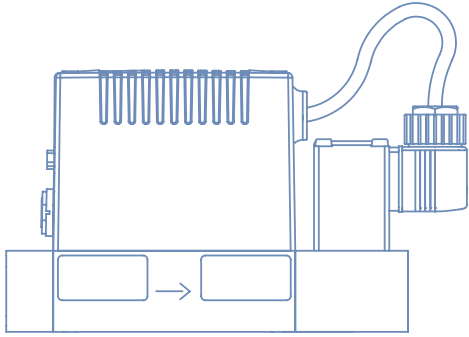
S022 Fittings

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



MASS FLOW

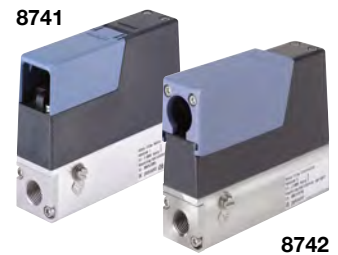


Bürkert's Mass Flow Meters (MFM) and Mass Flow Controllers (MFC) rank among the most sought after components in the business. With a well established position in various processes all over the world, they set the standard in the measurement and control of mass flow rates.

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



8741 | 8742

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



8745 | 8746

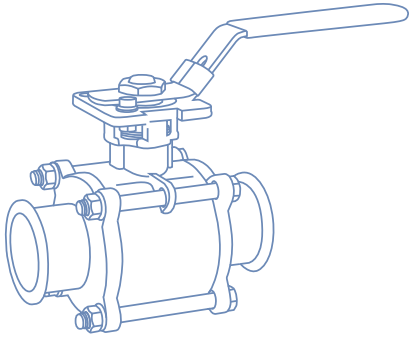
Mass Flow Controller (MFC)/Mass Flow Meter (MFM) for Liquids Flow measurement / control up to 120 kg/h

- 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



8756

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.

Flanged ball valves

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

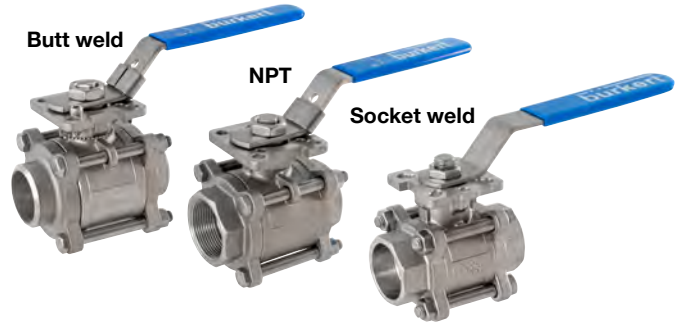
- 275 PSI WOG
- 150lb RF ANSI flange
- Full port to Sch 40 pipe
- Bolted split body
- Range of seal options
- Blow-out proof stem with self adjust packing
- ISO 5211 direct actuator mount (6"+ indirect)



Butt weld, NPT, and socket weld ball valves

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



Clamp and tube end ball valves

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.

CLICK ME



FOR MORE INFO



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