



the smart choice in fluid control systems

burkert

FLUID CONTROL SYSTEMS

2602 Mc Gaw Avenue
Irvine, CA 92614 USA



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mass flow controllers



type 8712



type 8710



type 8626

- 0.3 second response time for low flow ranges down to .02 ml/min
- designed for neutral non-contaminated gases
- ranges from .02 ml/min to 1500 l/min
- CMOSens technology multiple analog signal input and outputs 0-5V, 0-10V, 0-20mA or 4-20mA
- upto 500:1 turndown
- field bus communications capabilities include PROFIBUS-DP and DeviceNet

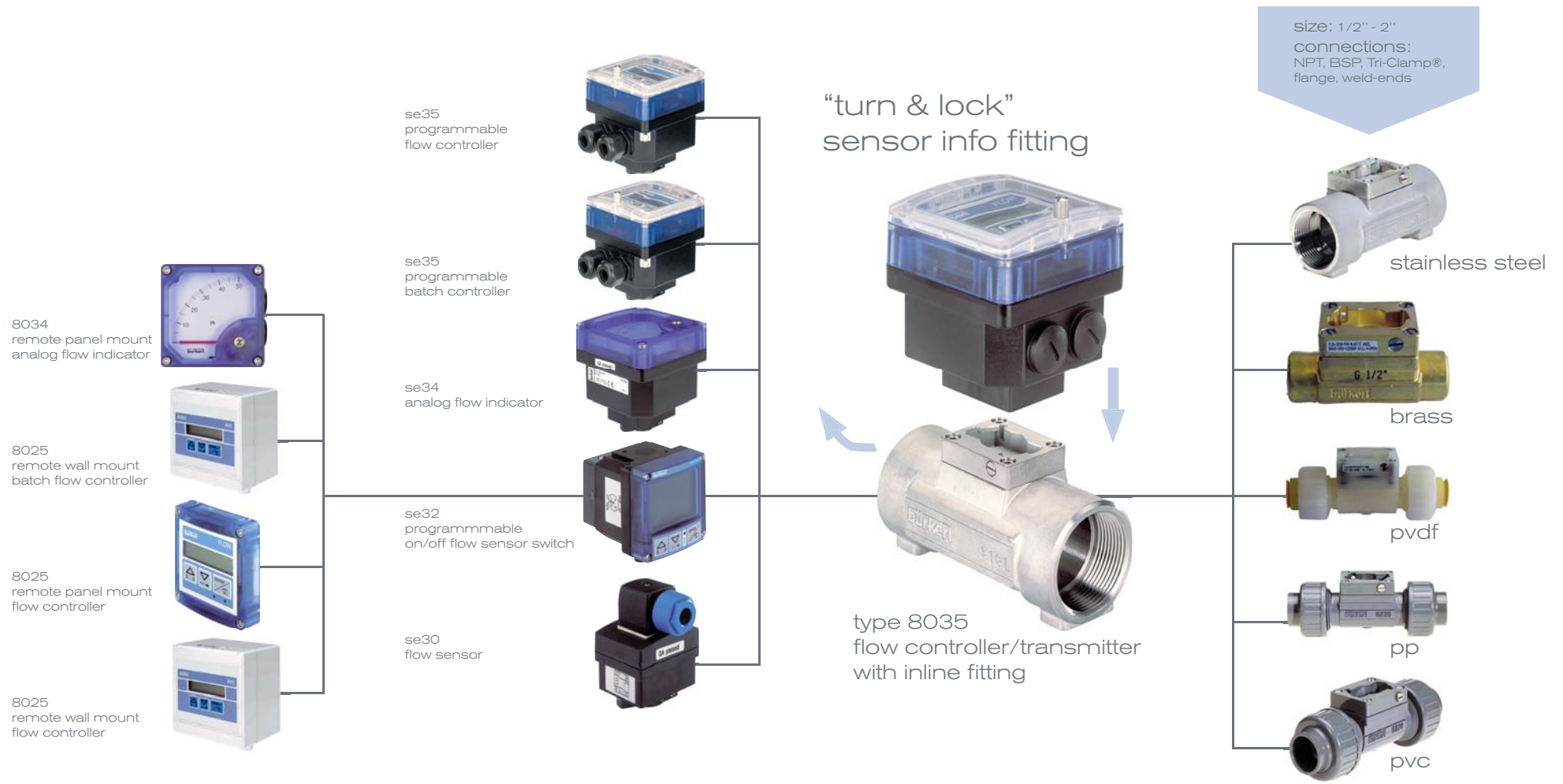
your choice of flow control solutions

inline open cell rotor fitting quickly connects with:

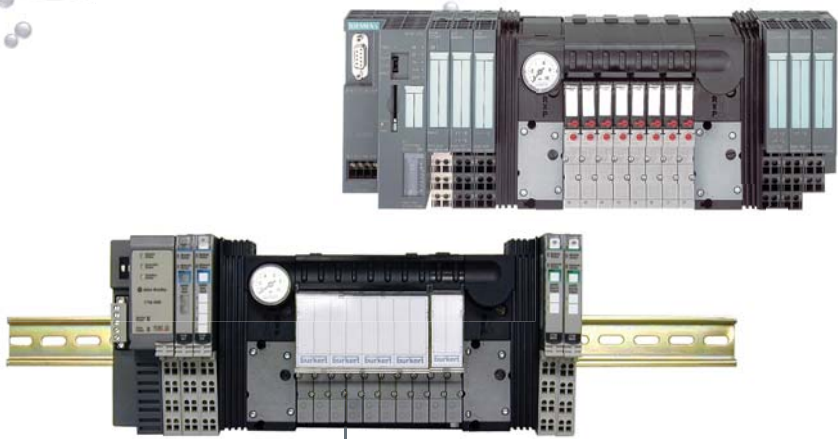
- flow sensor
- flow switch
- batch controller
- on/off flow controller
- analog flow meter
- 4-20 mA flow transmitter
- programmable flow controller



fitting totally isolates sensor element from process flow. no process downtime required



process actuation



Burkert's unique remote process actuation control system, AirLINE, offers virtually any combination of valve island functionality, electronic inputs and outputs and fieldbus connectivity in an extremely compact and revolutionary design. The next generation of pneumatic pilot valves allows very high flow rates. Airline leaves the freedom to choose between Phoenix Contact INLINE, WAGO 750, Allen Bradley Point I/O and Siemens ET200S electronic modules. It creates a fully integrated fieldbus communication, process valve actuation and control platform combined with the industry leader in I/O bus communication. Imagine the possibilities.

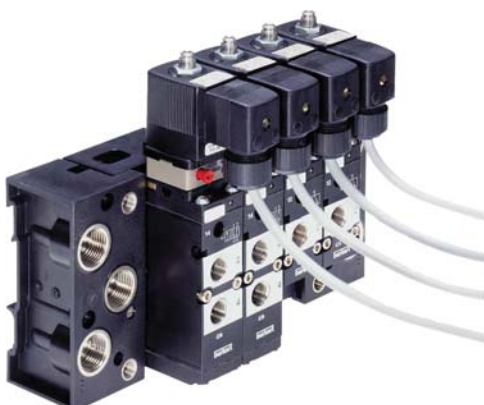
with the burkert process valves and sensors



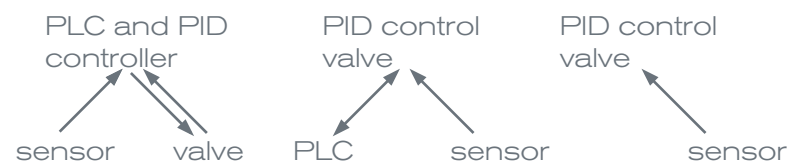
linked systems

direct connection of valve to sensor

- system integration
- pilot valves
 - direct mount banjo
 - modular manifold assemblies
 - NAMUR
- modular pneumatic manifold
 - analog & digital I/O
 - common bus protocols
 - DeviceNet, PROFIBUS, AS-i
 - Ethernet I/P, Control Net



type 6519 Namur multi-way valves



	Traditional	Networking Systems	Decentralized Control
PID \$500	1	-	-
I/O \$250	1	1	-
Installation \$100/hr	7	6	5
Programming \$100/hr	3	2	1
Cable \$1/ft	50	25	5
COST	\$1800	\$1075	\$605

cost savings: 40% 60%

process valve systems



operation

- large LCD display
- three key, menu guided programming
- programmable control valve characteristics

installation

- compact design utilizing Burkert angle seat, globe or diaphragm
- detailed technical documentation
- wide range of end connections



commissioning

- automatic optimum calibration of positioner to valve

sensor inputs

- measured values:
- 4-20 mA
 - frequency
 - PT100
 - optional external set point adjustment via PLC (4-20mA)



The spectrum of Process Valve Systems contains angle seat valves, globe valves and diaphragm valves.

Designed for either ON/OFF or Continuous Control.

TOP and SIDE Control units with Decentralized Intelligence are designed to be installed on almost every process valve.

They have an integrated positioner with a PID controller that can be connected directly to a sensor or PLC, and are available with common fieldbus communication. The advantages are obvious: programmable flow characteristics, low wiring costs and improved communication methods resulting in an optimized Total Cost of Ownership.

diaphragm valves



3" diaphragm with PROFIBUS DP



tank bottom diaphragm



zero dead volume diaphragm

The Burkert diaphragm valve is available in almost any configuration our customers have requested with Stainless Steel and Plastic body options, for use in Food & Beverage (FDA or 3A); Pharmaceutical, Water Treatment, and other industries. These are available in manual; ON/OFF; and continuous control operations.

- SAP and GMP configurations
- zero static tee
- diverter
- tank bottom
- ON/OFF or continuous control
- positioner with integral PID controller

intelligent valve systems

Burkert's program of process valves includes Globe; Y-Pattern Globe (angle-seat); General Purpose and Sanitary Diaphragm valves. Valves are available for ON/OFF or modulating control operation. The pipe sizes range from 1/4" through 4". Industry standard port connections including threaded, welded, Tri-Clamp®, or flanged. A variety of pilot valves, valve banks, positioning, and PID control systems satisfy the multitude of customer requests.

Long life with very low maintenance is a key factor in customer loyalty. The excellent control provided with our positioning systems is another key factor. Integrated PID combined with the ability to direct link to a sensor, allows easy sourcing and the lowest Total Cost of Ownership. Operation through a PLC using any standard BUS protocol provides even greater flexibility.



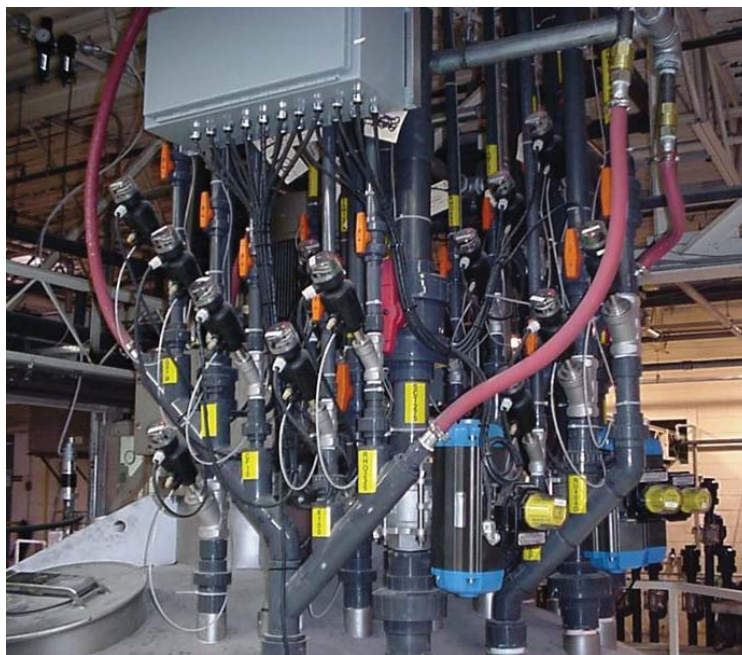
type 2712
1.5" globe with
positioner TOP
control



4" type 2712
modulating
globe valve with
DeviceNet TOP
control



type 2031
with 1067 positioner
diaphragm valve
system for
proportional control



the burkert 2000 valve

- the longest life valve in process systems
- 5 million cycles in water service guaranteed
- fit it and forget it!
- tube end, Tri-Clamp®
- now in ANSI globe pattern to replace ball valves in high cycle applications without changing your piping (Type 2012)



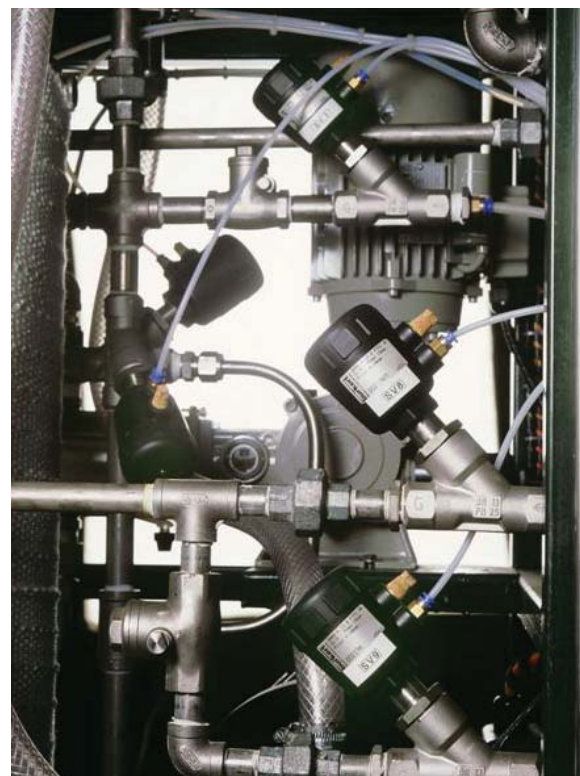
type 2000
y-pattern valve



type 2000
cut-away diagram



type 2632
w/ top control



burkert sensors "all - in - one"



type 8400
temperature

- transmit
- monitor
- feedback



type 831 1
pressure



type 8032
flow

Burkert's Sensor and Controller Systems have proven their outstanding performance all over the world. The Burkert product program contains sensor/switches and transmitters for flow, level, analysis, pressure and temperature. controller systems are available for batch, pH control and chlorine control. Burkert's technology makes it possible to connect the sensor/switches and transmitters to valves or controllers forming high-performance systems with Decentralized Intelligence. The Sensor and Controller Systems from Burkert optionally include a fieldbus interface compatible with common fieldbus protocols.

easy to use, transmitters and controllers for

- flow
- batching
- pH
- O.R.P.
- temperature
- pressure
- conductivity/resistivity
- level



type 8226
conductivity transmitter



type 8035
flow transmitter



type 8205
pH



type 8045
insertion magnetic flow meter



type 8055
full bore magnetic flow meter



type 8175
ultrasonic level transmitter

general purpose solenoid valve systems



type 255
2/2 way solenoid



type 406
steam valve



type 407
steam valve

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, Teflon®). 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.



explosion proof valves

Burkert offers a wide range of FM approved Class I, Div. I Valves

Type	Size
330	1/4"
340	1/4"-1 1/2"
6013	1/8"-1/4"
6014	1/8"-1/4"
6213	1/4"-2"
5281	1/2"-2"
5282	1/2"-2"
5404	1/2"-1"



Port Size	10/32" to 2-1/2"
Fluid Connections	NPT, BSP, Sub-base
Body Material	Brass, Stainless Steel, PVC, PP, PVDF
Seal Material	FKM, Buna, EPDM, Teflon®
Operation	Direct acting, internally piloted, zero differential
Functionality	2-way and 3 way, normally closed, normally open, proportional
Approvals	UL recognized, UL listed, FM Class I, Div II, FM Class I, Div I, CSA, CGA, CE, ATEX, and more
Coils	Epoxy, Polyamide
Electrical Connections	DIN style cable plugs, conduit plugs, spade terminals, flying leads

system family

general purpose



type 6011/6012
2 and 3 way



type 5404
high pressure



type 6013
sub-base version

water valves



type 6213
(0-145 PSI)



type 5281
(3-232 PSI)



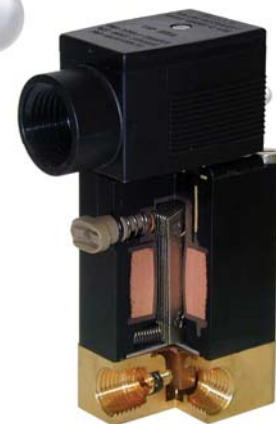
6213

- Zero Differential As Standard
- DIN Plug As Standard
- Short Delivery Times As Standard
- Burkert Innovations



5282

- Unique Isolating Diaphragm
- Speed Control Standard
- Manual Override Standard
- Normally Open or Normally Closed
- 1/2"-2" Brass and Stainless Steel



330

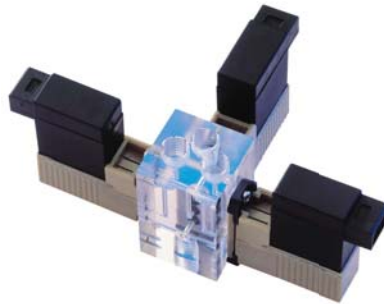
- High Cycle Life > 20 Million Cycles
- Manual Override Standard
- Unique Isolating Diaphragm
- Optional Mechanical Position Feedback
- Excellent Corrosion Resistance
- 1/4" Brass, Stainless Steel and Sub-base (331)

custom manifold solutions



127

- Miniature Rocker Solenoid Valve
- Isolating Diaphragm
- Optional Mechanical Position Feedback
- Can Handle Contaminated /Agressive Media



6604

- Micro Flipper Solenoid Valve
- Isolating Diaphragm for Analytical Applications
- Can Handle Contaminated /Agressive Media

"Innovative manifold designs customized to meet your application requirements"

burkert's closed loop continuous control solenoid valves

Type 6223 with 8623-2 plug-on Flow Controller linked directly to 8030 Flow Sensor

Valves	Size	Plug-On PI	Controllers
6022	1/4"	8623-2	Flow
6023	3/8"	8624-2	Pressure
6223	3/8"-1	8625-2	Temperature

