

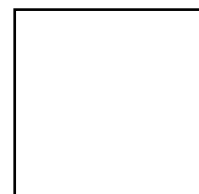
# bürkert







Fluid Control Systems



**bürkert**  
Fluid Control Systems

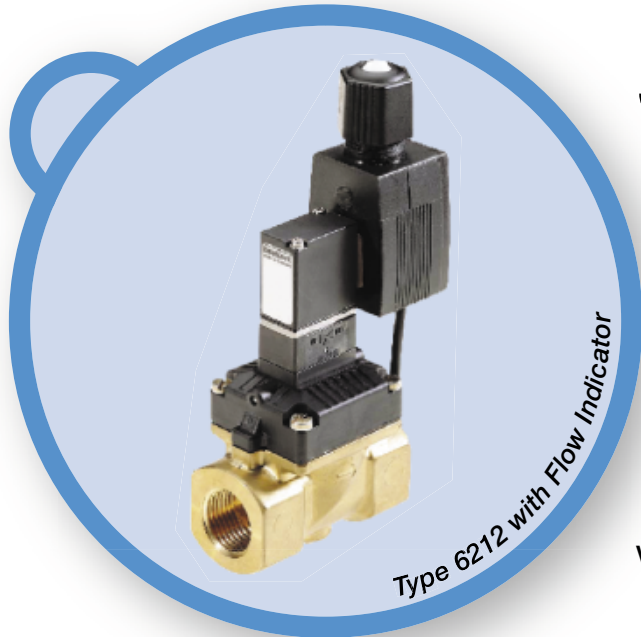
2602 McGaw Avenue  
Irvine, CA 92614 USA



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► **TEL · 800-325-1405**  
► **WWW.BURKERT-USA.COM**

# GENERAL PURPOSE SOLENOID VALVE SYSTEMS



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.

## SYSTEM FAMILY



Type 6038 Solenoid Steam Valve

Port Size	10/32" to 2-1/2"
Fluid Connections	NPT, BSP, Subbase
Body Material	Brass, Stainless Steel, PVC, PP, PVDF
Seal Material	Viton®, 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





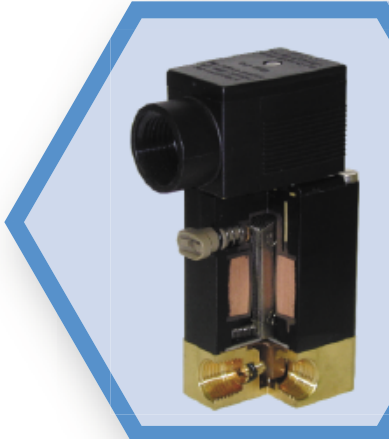
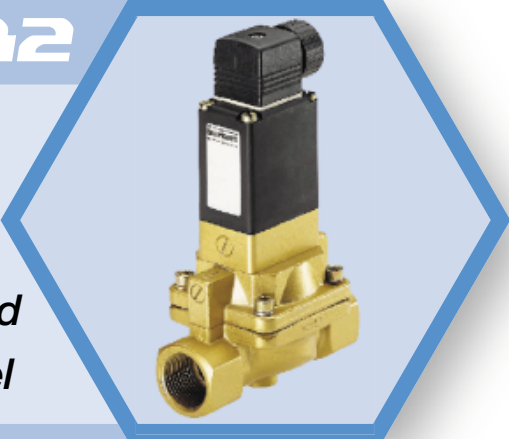


**6213**

- ▶ 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



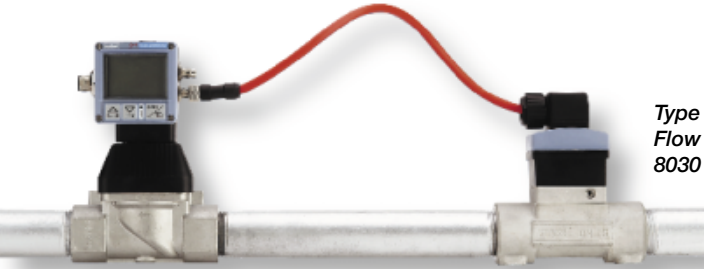
**330**

- ▶ 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 Subbase (331)

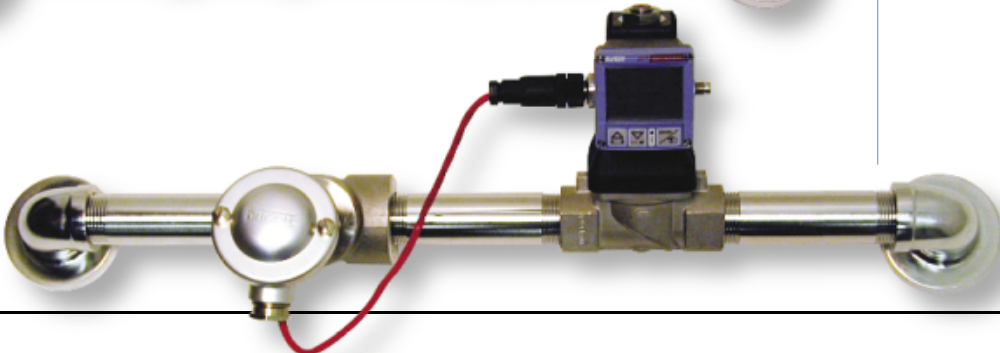
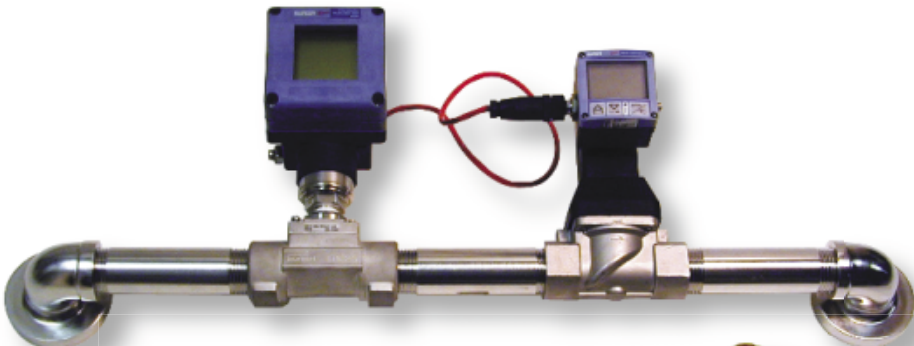
**GENERAL PURPOSE SOLENOID VALVE SYSTEMS**

**Burkert's Closed Loop Continuous Control Solenoid Valves**

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



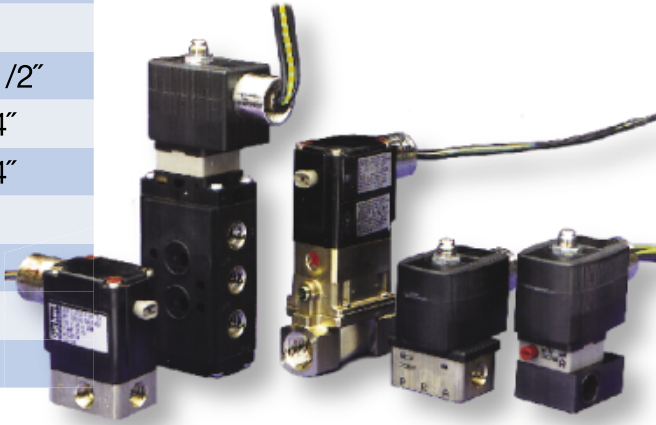
Type 6223 with 8623-2 plug-on Flow Controller linked directly to 8030 Flow Sensor



**Explosion Proof Valves**

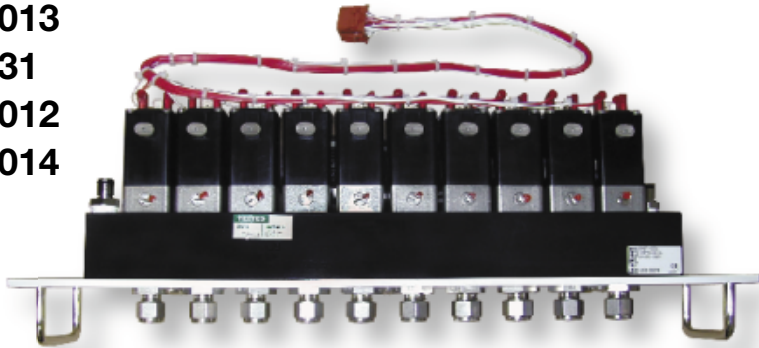
Burkert Offers a Wide Range of FM Approved Class I, Div. I Valves

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"



**Custom Manifold Solutions**

- ▶ 6011
- ▶ 6013
- ▶ 331
- ▶ 6012
- ▶ 6014



"Innovative Manifold Designs Customized to Meet Your Application Requirements"



# INTELLIGENT VALVE SYSTEMS

Burkert's program of process valves includes Globe; Y-Pattern Globe (angle-seat); General Purpose and Sanitary Diaphragm; and ball 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 2000 with Type 8633 "Mini-Top" Pilot and Switch Combo

## THE BURKERT 2000 VALVE

- ▶ *The longest lasting valve in process systems*
- ▶ *5 million water service cycles guaranteed*
- ▶ *Fit it and forget it!*
- ▶ *Now Tube End, Tri-Clamp®*
- ▶ *Now in ANSI globe pattern to replace ball valves in high cycle applications without changing your piping (Type 2012)*

*Decentralized Closed Loop Proportional Flow System*

Four Type 2712's 1.5" with remote PID position control



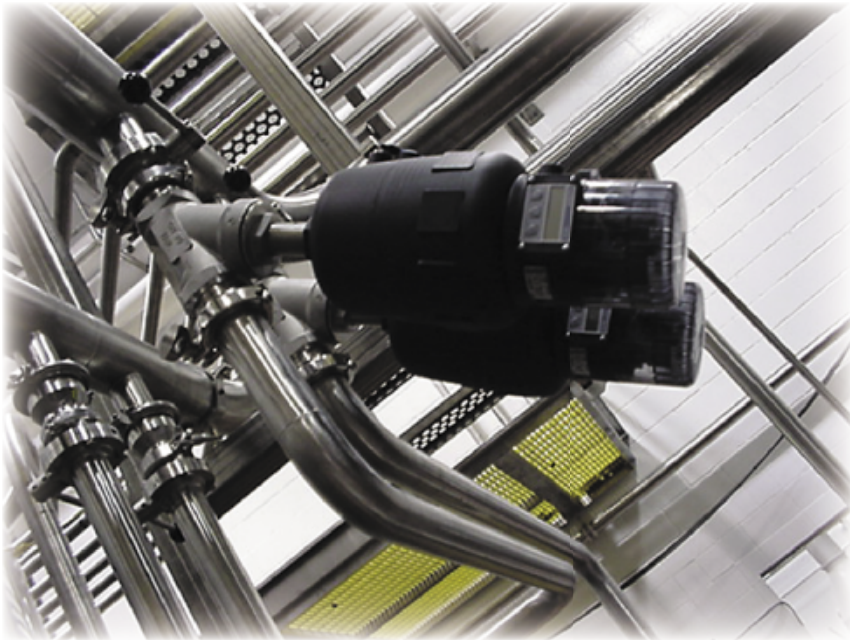
Remote Type 1067 Controller



Type 2031 Diaphragm with PID TOP Control

Type 8045 Flow Sensor





*Dual Type 2632  
Angle Seat Valves  
with TOP Control  
for Hot and Cold  
Water Control.*



## Commissioning

- Automatic optimum calibration of actuator to valve

## Sensor inputs

measured values:

- 4–20 mA
- Frequency
- PT100
- Optional external setpoint adjustment via PLC (4–20mA)



## Operation

- Large LCD display
- Three key, menu guided programming
- Programmable control valve characteristics

## Installation

- Compact design utilizing Burkert angle seat, globe, diaphragm or ball valve
- Detailed technical documentation
- Wide range of end connections

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

Designed for either ON/OFF or Continuous Control. TOP and SIDE Control units with Decentralized Intelligence are designed to be combined with 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

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); Pharmaceutical, Water Treatment, and other industries. These are available in manual; ON/OFF; and continuous control operations.

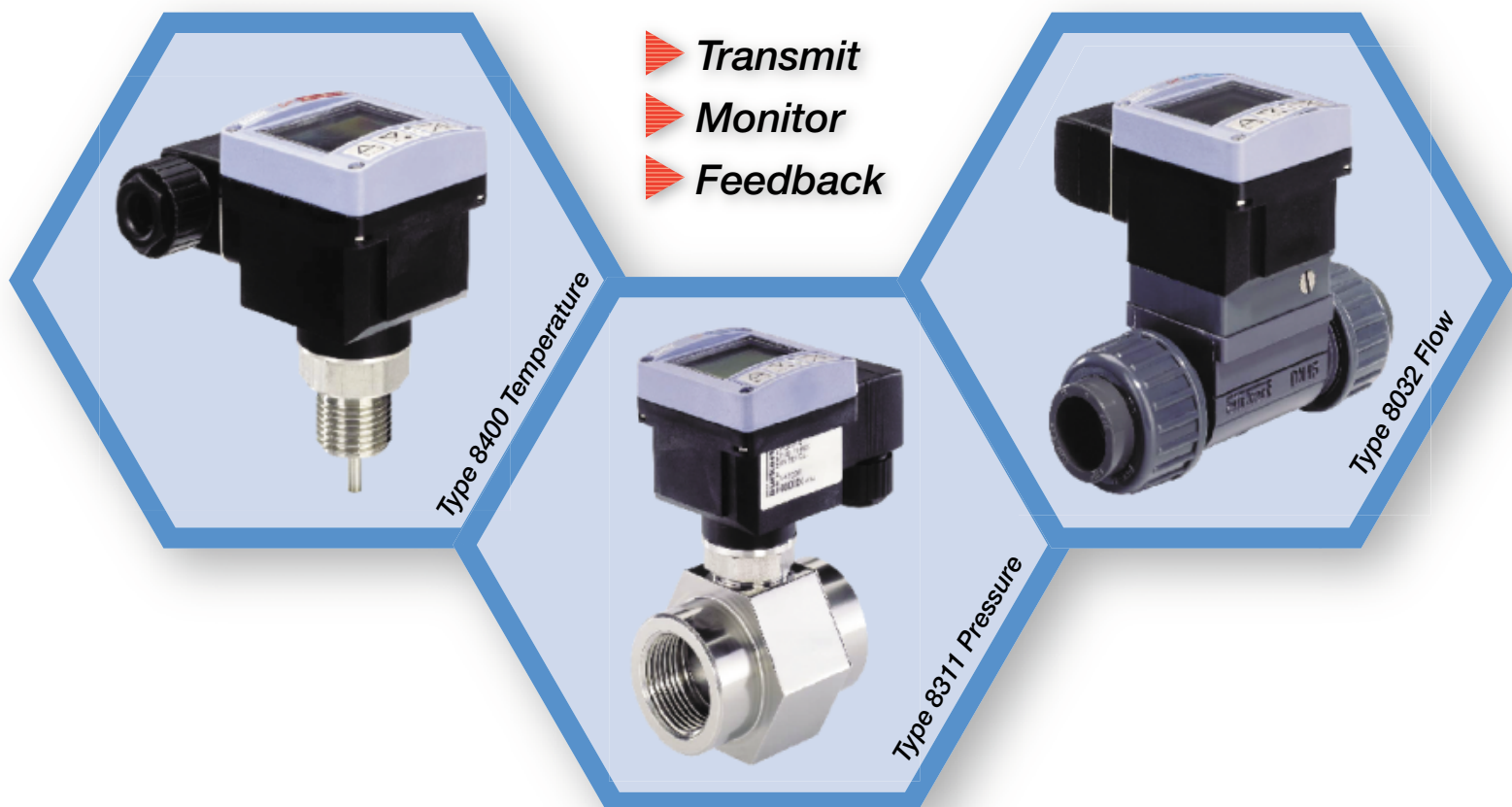
- ▶ Sterile/Tandem Access
- ▶ GMP
- ▶ Diverter
- ▶ Tank Bottom
- ▶ ON/OFF or continuous control
- ▶ Positioner with integral PID controller

*1/4" Manual Bio-tek valve and  
3" Diaphragm with PROFIBUS DP*





# BURKERT SENSORS "ALL-IN-ONE"



Burkert's easy to handle 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.
- ▶ Conductivity/Resistivity
- ▶ Level
- ▶ Temperature
- ▶ Pressure



# MASS FLOW CONTROLLERS



Type 8712



Type 8626



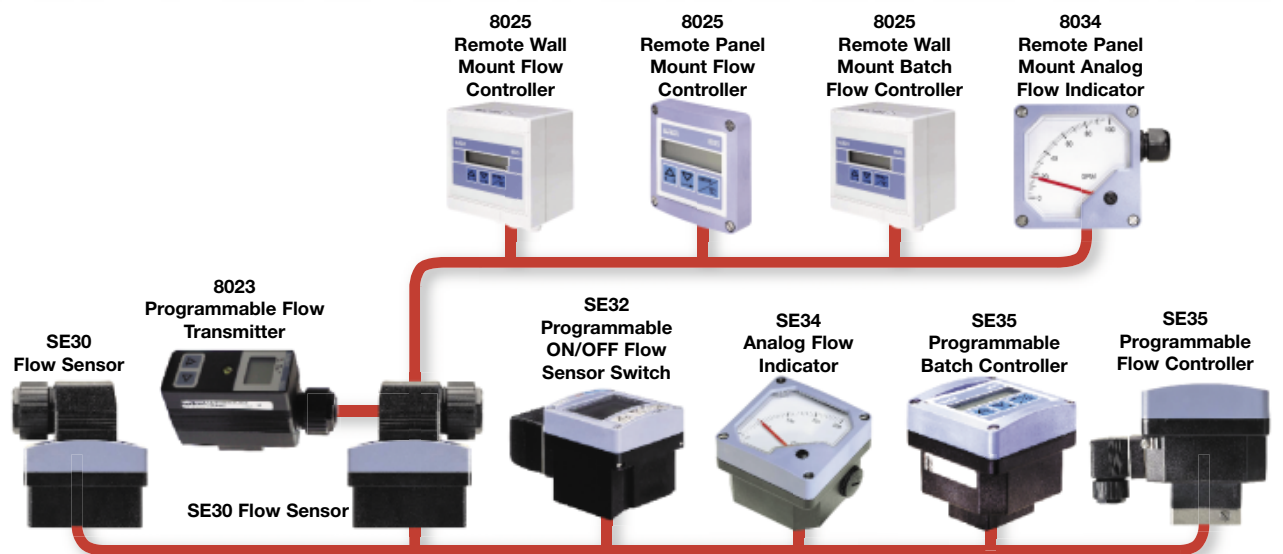
Type 8710

- ▶ .3 Second Response Time for Lowflow Ranges Down to .04 ml
- ▶ Designed for Neutral Non-contaminated Gases
- ▶ Ranges from .04mln/min to 1500 lln/min
- ▶ CMOSens® Technology
- ▶ Multiple Analog Signal Input and Outputs 0–5V, 0–10V, 0–20mA or 4–20mA
- ▶ 50:1 Control Range
- ▶ Field bus Communication 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



**“TURN & LOCK”  
SENSOR INTO  
FITTING**



Type 8035 flow controller/transmitter with inline fitting

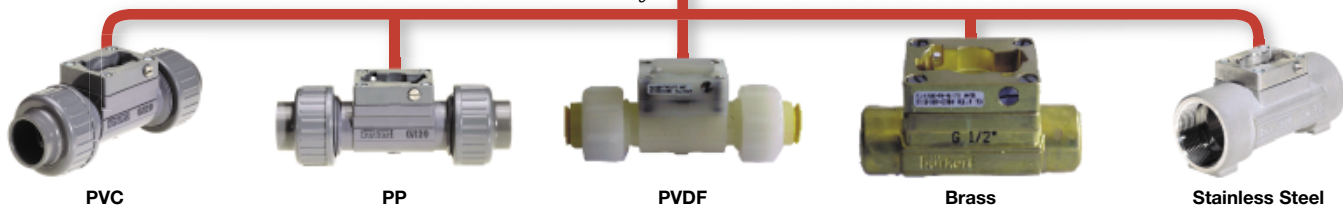
### WIRELESS INTERFACE



Type 8030 flow sensor with inline fitting requires no power supply

Fitting totally isolates sensor element from process flow. No process downtime required.

**Size:**  
1/2"–2"  
**Connections:**  
NPT, BSP, Tri-Clamp®,  
Flange, Weld-Ends



PVC

PP

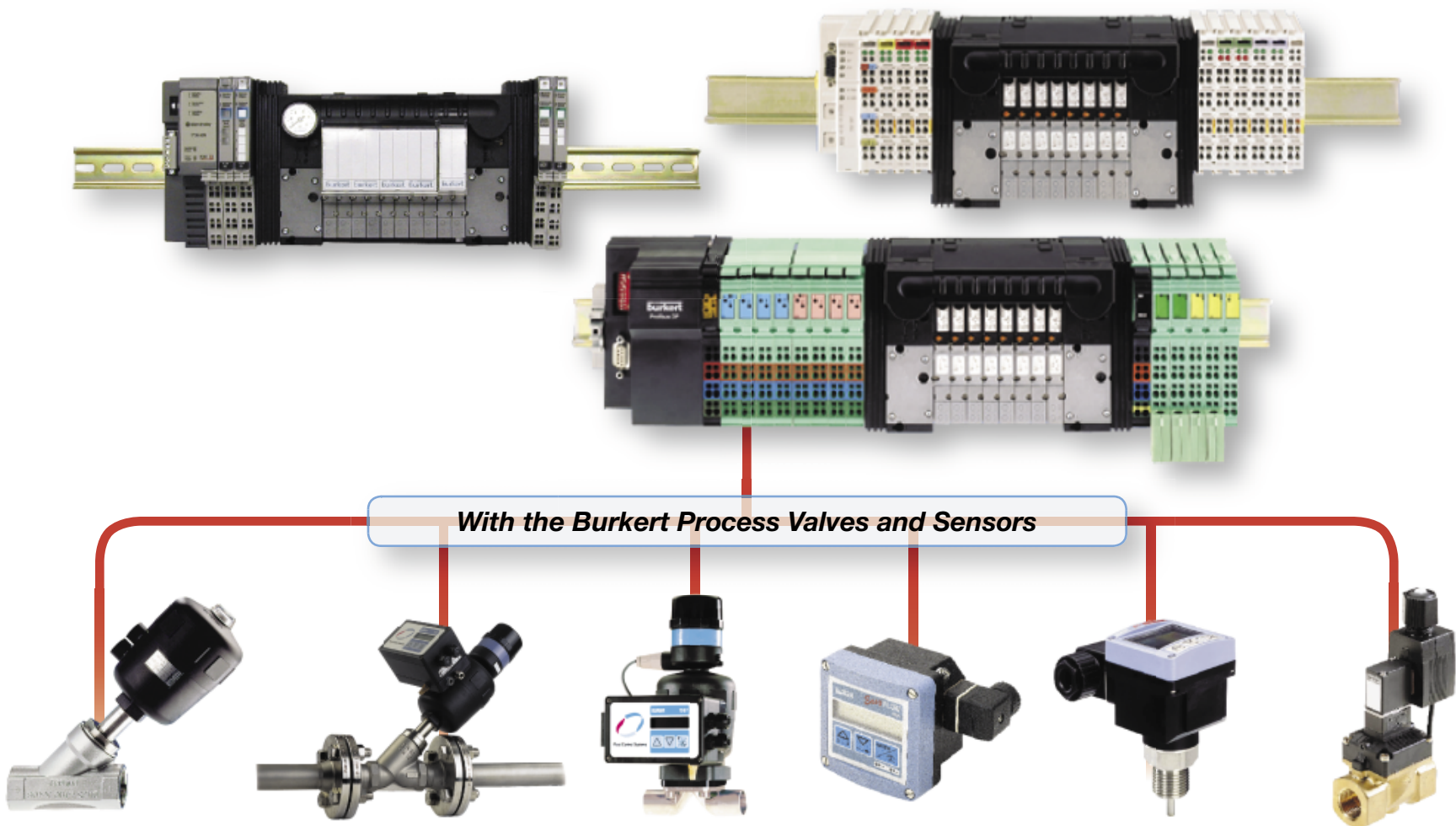
PVDF

Brass

Stainless Steel



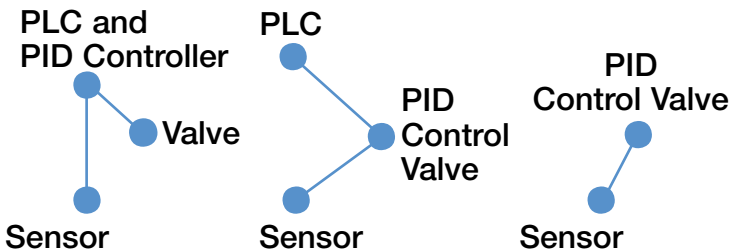
# PROCESS ACTUATION



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.

## LINKED SYSTEMS

Direct Connection of Valve to Sensor



- ▶ High Reliability with Rocker Design
- ▶ High Flow Rates
- ▶ HazEx™
- ▶ 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 & more...

	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

40%  
66%  
**COST SAVINGS!**