Reduce Energy Costs with Burkert Digital Valve Positioners

Burkert Fluid Control Systems

USA

US Headquarters
11425 Mt. Holly-Huntersville Road
Huntersville, NC 28078

Phone: 1-800-325-1405
Fax: 949-223-3198

marketing-usa@burkert.com
www.burkert-usa.com

Canada

5002 South Service Road
Burlington, Ontario L7L 5Y7

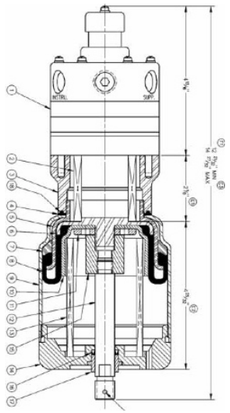
Phone: 905-632-3033
Fax: 905-632-3833

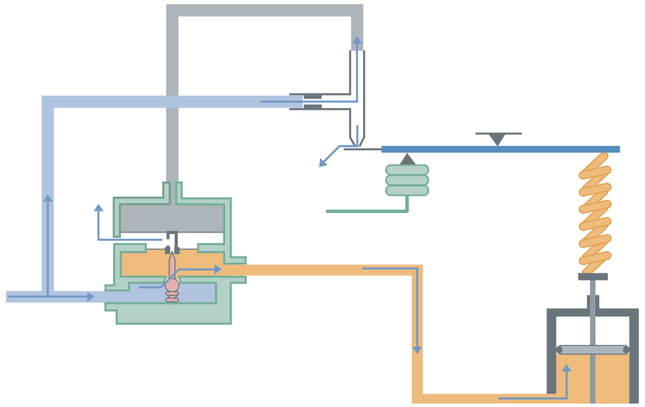
sales.ca@burkert.com
www.burkert.ca

Burkert Digital Valve Positioner

Save air and money with our digital valve positioner!

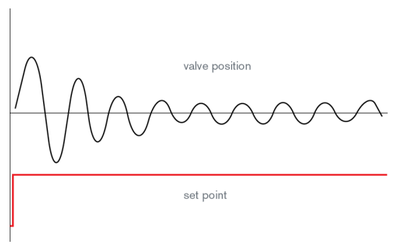
Traditional pneumatic top mount valve positioners with I/P transducers have remained a staple in the food and beverage industry for almost 70 years. The advantage has been the durability of the all mechanical system in an environment subjected to constant washdown. The downside to this device is the numerous valves and springs inside the housing and the fact that this device is designed to leak air continuously.





This schematic view shows the leak paths in a pneumatic positioner

Losses from P/P positioner	
rated loss at 100 psi air pressure	5.0 scfm
@ 8750 operating hrs/year	2,625,000 scf
Losses from valve hunting (typical 2" valve)	
loss per cycle	0.21 scf
@ 6 strokes/min and 8750 operating hrs/year	683,804 scf
Losses from I/P transducer	
rated loss at 30 psi air pressure	0.2 scfm
@ 8750 operating hrs/year	105,000 scf
Total costs	
total air usage	3,413,804 scf/year
electricity cost @ $0.06/kwh	$0.06 per kwh
ancillary air costs - air driers, etc	$0.25 1000 scf
Total costs per year	**$978 per year**
These are the losses for an average system.	



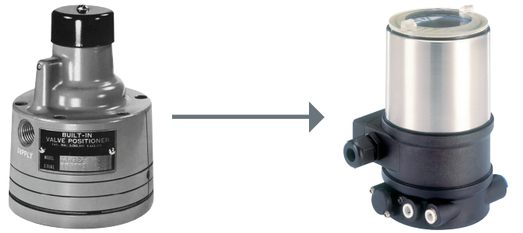
Valve hunting

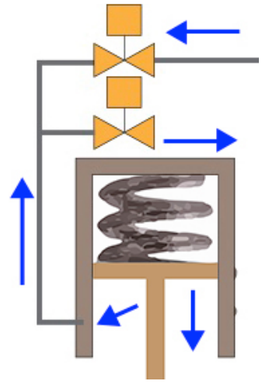
I/P Transducer

The solution ... transition from pneumatic positioner to digital positioner

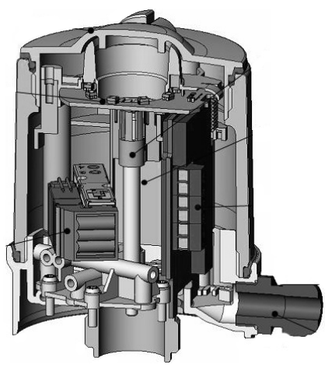
The Burkert Digital Valve Positioner eliminates these air losses. The correct amount of air is injected into the actuator chamber so that the valve is set at the required position.

Electronic solenoids control the air flow in and out of the actuator chamber. The firing of the solenoids is controlled by a sensing puck in conjunction with an internal PID controller.



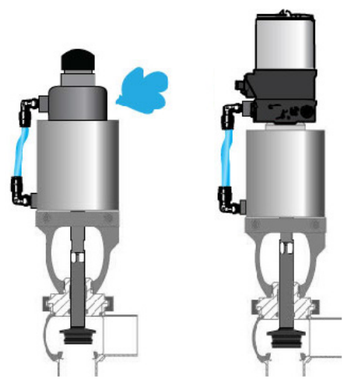


- Pneumatic positioners bleed air continuously ... digital positioners use no air once set-point has been acheived
- Electronics enclosure is pressurized with the instrument air in order to keep moisture out
- Adaptable to most linear actuated valves



Internal View

Mounting



Upgrade from pneumatic → *To digital control*