



P r e c i s i o n C o n t r o l V a l v e

Manufactured by Flow Control Industries, Inc.



Flow Control Industries designed the high-performance DeltaPValve® to complement engineered hydronic systems and drive performance beyond design expectations. Through 25 years of hydronic system experience, Flow Control Industries has determined the characteristics of an efficient hydronic system include:

Coil leaving air temperature control within $\pm 0.1^\circ\text{F}$

Coil chilled and heating water ΔT at or above design at all load conditions

A dynamically balanced hydronic system at all load conditions

Assured system diversity and effective pump control

Precise flow control at chilled and heating water coils is the only way to achieve the system stability required to maximize installed production and distribution infrastructure while minimizing system energy consumption.

The characteristics of a Precision Control Valve are:

- **Ability to maintain $\pm 0.1^\circ$ coil leaving air temperature (LAT)**
 - LAT from the coil must be maintained within a tight tolerance in order to maintain system stability and achieve design or better ΔT .
- **Individually tested and factory calibrated**
 - Valves tested to ensure full shutoff and pressure independent performance within specifications.
 - A unique flow tag is included confirming flow rates through the full range of operation.
- **Pressure Independent Control**
 - Increases system stability, and thus system efficiency, by eliminating flow variation due to pressure fluctuations in the system.
- **ΔT Guarantee**
 - Coils meet ARI certified performance at all load conditions, and will exceed this performance at part load.
 - ΔT is the best indicator of demand-side system efficiency.
- **Industrial Quality Design**
 - Debris resistant design due to high spring force, large diaphragm surface area, and large passageways throughout the valve. Internal valve design is reliant on tight tolerances, dynamic spring forces and area-ratios, all playing an equally important role in valve performance and long term reliability.
 - Stainless steel and brass internal components ensure reliability throughout a 30+ year life cycle.
 - Field serviceable to minimize system impact.
- **Field Verifiable Performance**
 - Inlet, intermediate, and outlet P/T ports are vital to:
 - Verify pressure independent operation.
 - Validate flow rates.
 - Confirm valve shutoff.
 - Troubleshoot system issues (clogged strainers, flow obstructions, etc.).
- **100:1 Turndown**
 - The ability to control flow throughout the full range of the control valve.
 - 90% of valve operation is spent below 50% open and therefore it is vital to ensure accurate control at low flow.
- **Full System Compatibility**
 - Flow ranges of 0.5-5500 GPM allows precision control throughout the entire hydronic system.

No other manufacturer approaches hydronic system optimization with the breadth of experience and system expertise of Flow Control Industries. DeltaPValve® systems have consistently increased system capacity and improved energy efficiency while simplifying installation and operation of hydronic systems. In our experience, it is impossible to achieve the same level of system performance without addressing each of the above components of precision control.

About Flow Control Industries, Inc.

Flow Control Industries, Inc. (FCI) is a specialty manufacturer of high-performance pressure independent control valves, delivering energy efficient products and services through a consultative process to increase building value and lower total cost of ownership (TCO).

The DeltaPValve®, FCI's flagship product, was developed by founder and Chairman Paul Skoglund, P.E. over 20 years ago when he realized that more effective valves could revolutionize mechanical system efficiency. As an industry pioneer, Paul was the first to create the patented design, development and application of pressure independent control valves.

Since the release of the first DeltaPValve®, FCI's team of world class engineers has worked to improve its design, efficiency and overall effectiveness. This focus and dedication has propelled the DeltaPValve® to the top of the industry, being the only variable flow hydronic system that **GUARANTEES ΔT** .

DeltaPValves are used in projects all over the world and are consistently saving customers millions of dollars in first costs, operating costs and deferred capital costs.