Valve Actuation

Steam

Instruments

Hot Water

Industrial PVF



# ARMSTRONG PRODUCTS



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### The Brain: Hot Water Systems

### Description:

The Brain DRV80, DRV40, and DRV25 are Armstrong's revolutionary digital recirculating water temperature control valves that precisely controls water temperature with +/- 2 degrees F. Armstrong manufactures a range of digital hot water packages that incorporate all the advantages of The Brain to meet your hot water temperature conditioning applications: Digital-Flo Water to Water as well as Digital-Flo Steam to Water.

- The Brain® Digital Recirculation Technology (DRV) mixing valves by Armstrong International
- +/- 2 deg. F temperature control
- Multiple BAS interface protocols
- The Brain® family of products meets ASSE 1017 and have a hot water sanitizing mode for Legionella control
- Armstrong Digital-Flo® HT for high temperature industrial hot water heating and Digital-Flo® for lower temperature commercial application
- Using constant pressure steam preventing system stall with no pump trap
- +/- 2 deg. F temperature control
- Multiple BAS interface protocols are available including Bacnet<sup>™</sup>, LonWorks<sup>™</sup> and Modbus among others
- Maintains temperatures above Legionella survival temperature









### **Emech: Digital Control Valves**

### **Description:**

For industrial and process applications, the Emech unit provides locally or remotely set water temperature control with uncompromising performance. The combination of the valve's efficient mixing chamber, electronic actuator with programming keypad, and integrated temperature sensor creates an out-of-the-box temperature control solution that aggressively reacts to incoming pressure and temperature changes, holding output temperatures to within 1 degree F.

- Emech<sup>™</sup> patented digital control valves from Armstrong International for 3-way mixing and 2-way control
- High speed 100% duty cycle stepper motor for rapid closed-loop response
- Embedded PID control









### Flo-Direct: Water Heater

### Description:

Armstrong's Flo-Direct Complete Thermal Exchange Gas-Fired Water Heater offers a complete range of high efficiency, compact, all-stainless steel water heaters which are remarkably dependable, simple in design and operation, and suitable for a wide variety of hot-water applications. Flo-Direct often delivers fuel savings as high as 30-60% when comparted to other steam/water heating systems.

- The Armstrong International Flo-Direct® CTE gas fired water heaters for industrial water heating applications
- 99.7% efficiency rating
- CTE technology avoids direct flame quenching resulting in complete energy transfer at all times without the negative side effects of competitive units
- Meets USFDA bottle drinking water standards









### **Steam & Water Hose Stations**

### Description:

Steamix hose stations from Armstrong offer a maximum temperature rise set point and cold water failure shutdown for ultimate user safety. Armstrong hot and cold water hose stations include a thermostatic mixing valve for optimum flexibility, control and safety for applications where there is a central hot water supply. Accessories include retractable hose reels to accommodate various hose lengths and also multiple spray nozzles for a range of flow rate requirements.

- Steamix® Steam & Water hose stations from Armstrong
- Featuring the unique fail cold system that will not allow dangerous live steam to pass







### **Radiator Products**

#### Description:

Armstrong is a leading supplier of radiator products. Armstrong continues to serve the special needs of homeowners, hotels, commercial buildings, schools, universities—anyone who uses steam/hot water radiators for building heat.

- Radiator Valves
- Radiator Air Vents
- T-wafer Thermostatic Replacement Capsules
- Radiator Traps







### **Trap Valve Station and Associated Traps**

### **Description:**

The Armstrong Trap Valve Station enhances your capability to check trap operation and offers a built-in method to block and bleed traps. It has two piston-style isolation valves, a test valve and an integral stainless steel strainer with blowdown valve. Saves on energy, installation and maintenance. The stainless steel version of the remarkable Armstrong Trap Valve Station (TVS) gives you two piston-style isolation valves, a test valve and an integral stainless steel strainer with blowdown valve, all merged in a single, versatile package.

- Inverted bucket traps
- Disc traps
- Thermostatic traps
- Thermostatic wafer traps
- Bimetallic traps
- Float and thermostatic traps
- Two-bolt steam traps from other manufacturers









### **Steam Traps**

### Description:

An efficient steam trap wastes less energy, which means you burn less fuel and reduce emissions. The results are energy savings and a cleaner, healthier environment. By helping companies • Clean Steam Thermostatic manage energy, Armstrong steam traps are also helping protect the world we all share. Steam traps have a big job, actually several tasks, in a well-designed steam system. For overall efficiency and economy, steam traps must provide:

### Alternatives:

- Inverted Bucket
- Float & Thermostatic
- Controlled Disc
- Thermostatic Wafer
- Thermostatic
- Bimetallic
- Superheat
- Differential Condensate Controller









### Description:

Provision for automatic drainage is sometimes not included in the original system. It is possible to discharge liquid manually through a valve that has been cracked open. However, an open drain also continuously wastes air or gas. Periodically opening a valve by hand and leaving it until it blows freely will also drain a system. Frequently, however, an operator will delay or forget to close a valve, thereby wasting precious air or gas. Liquid drainers installed at appropriate points will remove liquid continuously and automatically without wasting air or gas.

#### Features:

Trouble-free operation

**Liquid Drainers** 

- Minimal need for adjustment or maintenance
- Reliable operation even in dirty environments
- A long operating life
- Minimal Air Loss
- Ease of Repair

### Liquid drainers go by many names. They are also known as:

- Compressed air drains
- Condensate drainers
- Air traps
- Water traps
- Dump valves
- Float traps
- Compressed air traps

Pipe Valves

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### Air Vents

### Description:

Armstrong's float type and thermostatic air relief traps are designed to remove gases from liquids down to 0.40 specific gravity and for removal of non-condensate gases from steam systems.

- Free Floating Lever
- High Leverage
- Thermostatic
- Fixed Pivot







### **Strainers**

### Description:

As the name implies, a strainer helps screen out particulate matter in a piping system. Although steam traps get most of the glory, strainers also play an important role in the efficient operation of a well-designed system. Armstrong offers strainers in a wide choice of sizes and materials to meet most pipeline straining requirements. All of our strainers are made to Armstrong's high standards and are guaranteed to be free from defects in workmanship or material.

- Material types: Cast iron, carbon steel, chrome-moly, forged steel, stainless steel, bronze
- Connection types: Screwed, socketweld, flanged
- Note: T-type strainers are available in stainless steel









### **Python Control Valves**

### Description:

Armstrong Python Series Control Valve provides safe and accurate control for steam or water utility systems. Series 1100 valves are globe two-way single seated design, which satisfy the majority of control applications for HVAC, industrial and commercial markets. The Python Linear Control Valve (AEL) is Armstrong's electric version of the reliable 1100 series Control Valve that features auto and manual control with high-thrust capabilities to deliver precise control.

- Body with top entry trim and bolted bonnet facilitates easy access to all internal parts for in-line inspection, maintenance and trim replacement.
- Stream line flow path provides large flow capacity.
- Variety of trim options are available to satisfy a vast application range including reduced port trims enabling nearest accurate selection for precise control requirements.
- Trims with top bush guided plugs are available with simple construction for stable operation, assuring high rangeability and turndown ratios.
- Micro trims available for control of minute flow rates.
- Trims with large guide plugs are available for full pressure balancing effect providing an economical choice for high pressure applications.
- All parts are renewable in-line.
- Pneumatic and electric positioners.
- Carbon steel or stainless steel body construction.
- Reverse and direct acting multi-spring actuators.
- Available in 1/2" 2" NPT and 1/2" 8" ANSI flange design.
- Rated for class IV shut-off.





## Valuable Services

Pipe Valves offers the quality products and the best services to improve your bottom-line performance.

- 🧵 Pipe Shop: We cut, bevel, groove, and thread
- Energy audits, steam trap surveys, live steam lab demonstrations
- Daily local truck routes, emergency delivery options
- Phone, counter, email, fax and e-commerce ordering options
- Express sales counter pickup and tool rental
- Vendor Managed Inventory options customized to your needs
- Product specialists and staff engineers assist with problem solving
- Kitting Services we can bag and tag to your specifications
- Bin management, bar code scanning and labeling solutions available
- PV University Classes, Where Seeing Is Believing: Actuation, Valves, Steam
- 24/7 emergency service available in many areas

