

2006 Product Range Overview

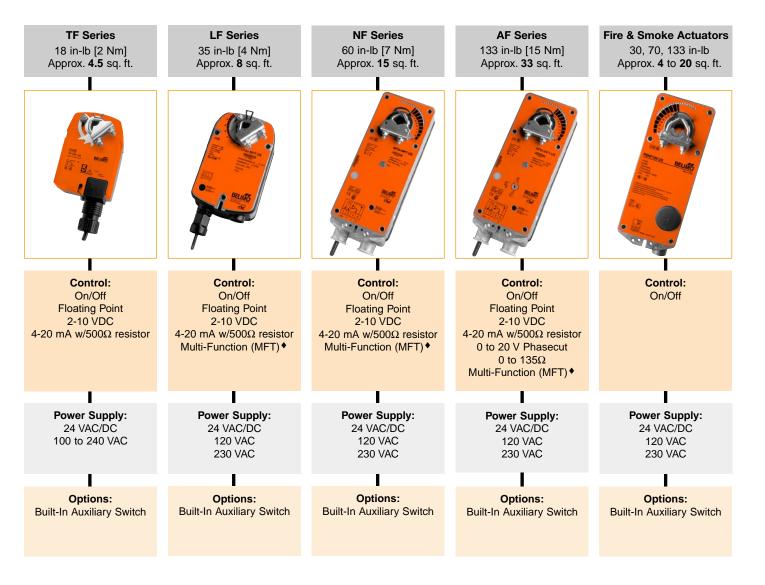


Belimo Project: One Bellevue Center, Seattle, Washington

Actuator Product Range

Spring Return





- Multi-Function Technology (MFT) Options: Control Selectable
- Start and Span Adj., Start 0.5 to 30 VDC. Span 2.5 to 32 VDC
- PWM Adj: 0.02 to 50.0 sec
- Floating Point
- On/Off

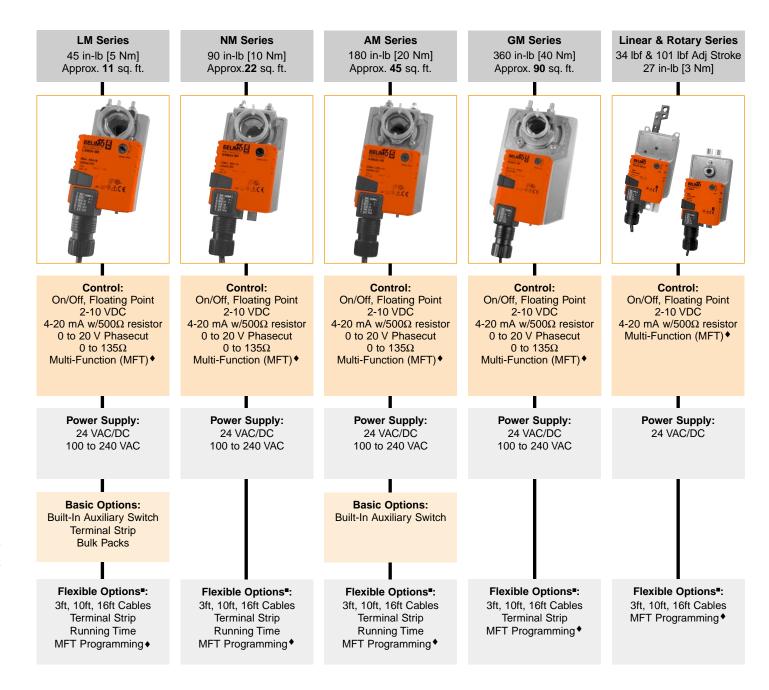
Feedback Selectable Running Time Selectable

See programming codes on pg. 41



Actuator Product Range

Non-Spring Return



Do you need a longer cable or different programming?

Flexible Options:

Belimo's new flexible line of actuators are configurable to your specific needs, See page 36.

Selectable Options:

- · Clamp diameter and type.
- Wiring options from cable lengths to terminal strips.
- Running Time
- MFT Programming

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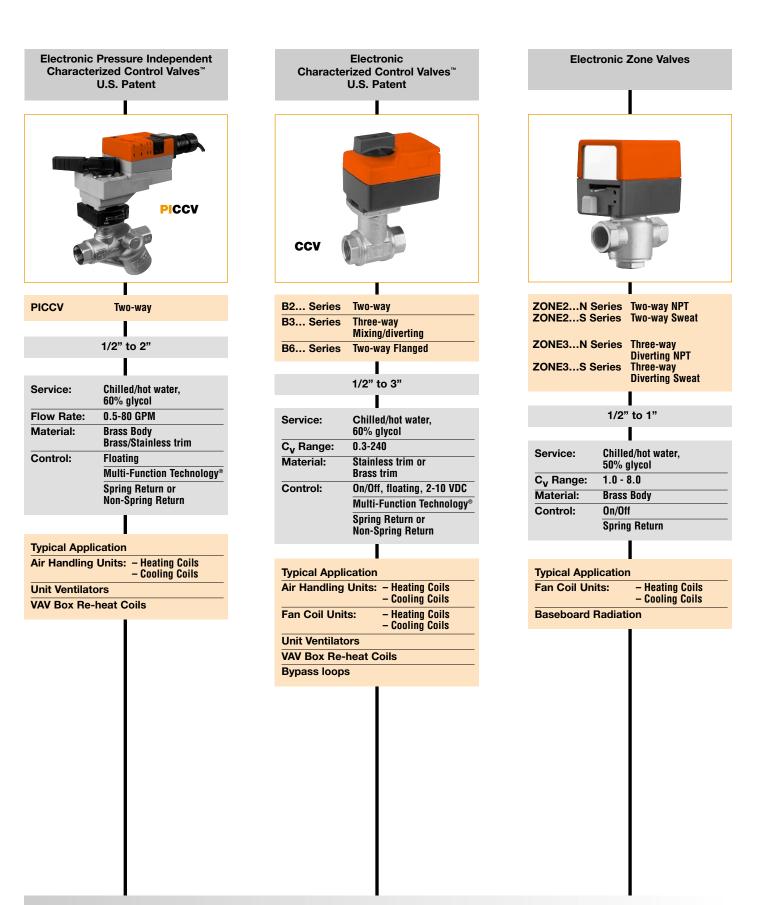
Feedback Selectable

Running Time Selectable

See programming codes on pg. 41

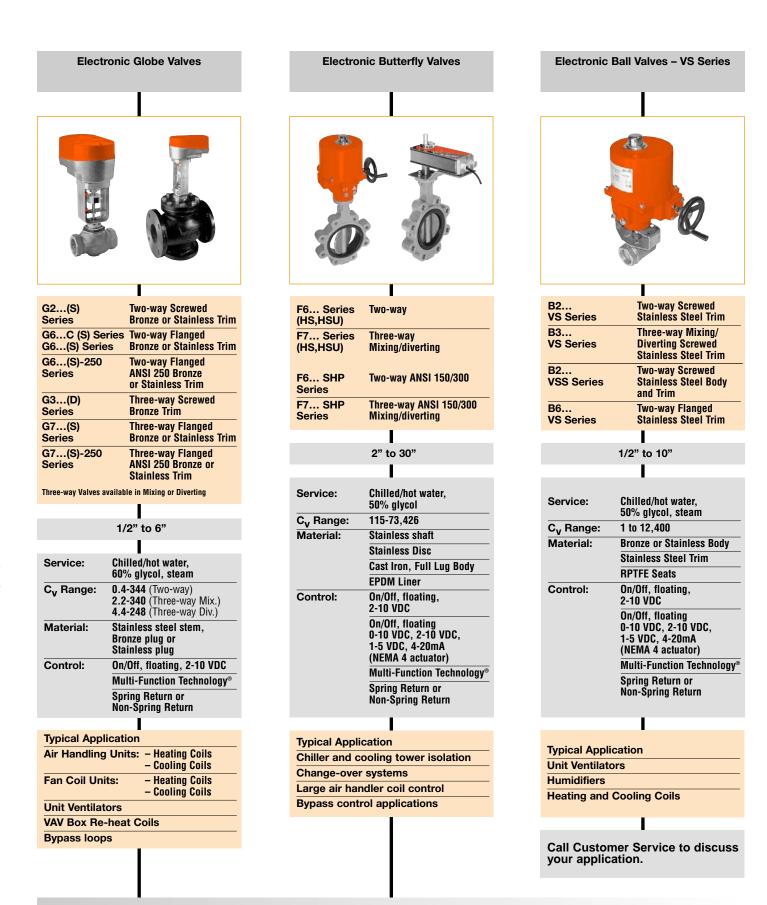
Control Valve Product Range







Control Valve Product Range



The Belimo Difference



- 5-Year peace of mind warranty.
- WARRANT
- Competent application assistance thanks to 100% dedication to HVAC Damper Actuators and Control Valves.
- Free technical support.
- Belimo University for HVAC application training.
- 100% product testing before shipment.
- Same-day shipments.
- Three customer Service Centers in the US (NE, SE and W).
- ISO 9001-2000 Quality Management System.
- 30+ years design, manufacturing and application experience.

Damper Actuators

- Extensive product range.
- Specific retrofit offerings.
- Small dimensions in relation to torque.
- Microprocessor-controlled Brushless DC motor increases actuator life span and reliability & provides constant running time (most actuators).
- Cut labor costs with simple direct coupling.
- Check damper position easily with clear position indication.
- Overload-proof throughout rotation.
- Temporary restrictions in damper movement will not change actuator operation. Actuator returns to normal operation when restriction is remove.
- Built-in or add-on mechanical stops to adjust angle of rotation.
- Built-in auxiliary switch is easy to use, offers feedback or signal for additional device (-S models).
- Need to change control direction?
 Do it easily with a simple switch on actuator housing.
- Rugged housings withstand rough handling in the mechanical room.
- Double insulated no need for separate ground. A Belimo exclusive (on 120/230V models, and all models with built-in auxiliary switches.)
- Automatically compensates for damper seal wear, ensuring tight close off.

🖪 Spring Return

- True mechanical spring return the most reliable failsafe.
- Reverse mount for clockwise or counterclockwise fail-safe.
- Manual override crank speeds installation (AF Series).
- 3 ft. appliance cable and conduit connector eases installation.

Return Non-Spring Return

- Increased torque output by up to 28%
- More mounting flexibility LM accepts 3/4" dia. shafts, NM, AM & GM mounts to 1.05" dia. jackshafts.
- New linear stroking actuators with extensive control responses and lengths (4", 8" and 12")
- New 360 degree actuators with extensive control responses and 0 to 330 degree operating angle with accessory or default endless rotation.
- New optional external auxiliary switch(es) or position feedback potentiometer modules – same modules for all non-spring return actuators!
- Manual override push button.
- Compatible to discontinued models.
- The power of choice Belimo's Flexible actuator range offers longer cable lengths, NEMA 2/IP54 terminal strip covers, mechanical clamping options, programming options

Fire and Smoke

- FSLF & FSNF meet the Uniform Building Code (UBC) 15-second operation time requirements between 32°F and 350°F at rated voltage and torque.
- FSAF meets UL555 operating requirements and offers 133 in-lb min torque output with only10VA power requirement.
- Overload protection is electronic throughout 0° to 95° rotation.
- 3 ft, 18 GA 3 color-coded leads, 1/2" conduit connector.

Multi-function Technology MFT

- Selectable:
 - o Control (VDC, PWM, Floating Pt, On/Off).
 - o Feedback.
 - o Motion (Run Time).
 - o Diagnostics (alarm messages).





The Belimo Difference

Pressure Independent Characterized Control Valves™

- Easy selection, no C_V calculation required.
- Hydronic balancing is simplified, as the circuits are not interactive.
- Flexible commissioning.
- One piece installation saves 50% of labor costs, installation space, and investment for balancing valve.
- Reduces pumping costs.
- Maintains ΔT for higher efficiency of chillers and condensing boilers.
- Visualizes flow in a BMS system and provides accurate flow for each degree of opening.
- Prevents overflow or underflow for fast start-up.

Characterized Control Valves™

- C_V range 0.3 to 240.
- An equal-percentage valve characteristic.
- Unlike a globe valve, no sudden change in inlet flow upon opening.
- Excellent stability of control.
- C_V values comparable with those of globe valves of the same size or larger.
- Higher close-off ratings than standard globe valves.
- 100% tight shut-off on two-way valves means NO leak-by unlike globe valves that have ANSI IV shutoff (leakage rate of 0.01% of the C_V rating).
- Three-way valve can be piped in mixing or diverting application.
- Position indication visible from 10 ft. distance.

Electronic Zone Valves

- Push button for quick removal of actuator.
- Easy manual open lever with automatic return.
- Up to 75 psi close-off.
- Only 2-3/8" wide to fit most baseboards.
- Spring return normally open or normally closed.
- One actuator for two- and three-way applications.
- Available with or without auxiliary switch.

Electronic Globe Valves

- Self-adjusting stroke utilizes full control signal for maximum resolution.
- Visual sliding stroke indicators speed installation and system check.
- Assembly can be mounted with valve stem horizontal to the pipe.
- Self locking valve coupling to ensure proper valve-actuator connection.
- Pressure Compensated Flanged Globe Valves utilize a balanced plug design. Perfect for high close-off requirements.

Electronic Butterfly Valves

- Cast Iron Full Lug Bodies.
- EPDM liner.
- Stainless Steel Disc as Standard.
- Unique seat and disc design ensures positive valve sealing while maintaining low seating torque.
- Belimo or Industrial NEMA 4 Actuators.
- Easily Accessible Field Wiring Terminal on NEMA 4 type.
- Simple, Single Handed Override Wheel on NEMA 4 type.
- High Performance line for ANSI 150/300 Ratings.

Electronic Ball Valves

- Bronze, Cast Iron and Stainless Bodies.
- Stainless Ball and Stem.
- NPT or Flanged Bodies.
- Live Loaded or Gland Type Packing.
- Belimo or Industrial NEMA 4 Actuators.



NEW Retrofit Guide Now Available!



Call your Belimo Representative for a copy; or download at:
www.belimo.com

2005

Technical Documentation and Price List Retrofit Solutions for Valves

Effective October 2005



www.belimo.com

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