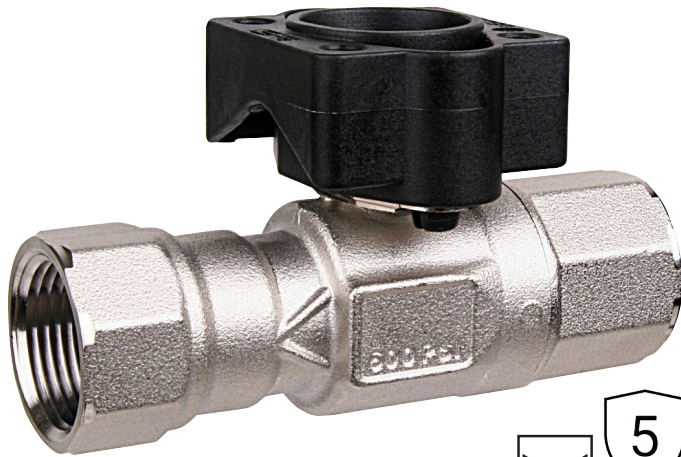


# B220HT464 Technical Data Sheet

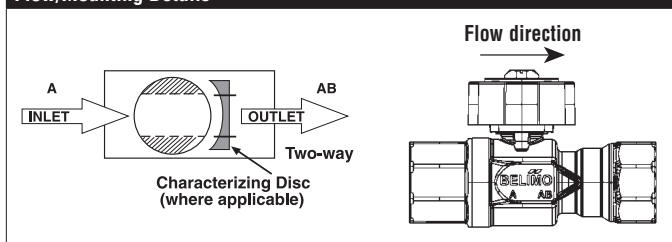
## Stainless Steel Ball and Stem



### Technical Data

|                                   |   |
|-----------------------------------|---|
| Fluid                             | high temperature hot water/low pressure steam, up to 60% glycol |
| Flow characteristic               | A-port equal percentage   |
| Controllable flow range           | 75°   |
| Valve Size [mm]                   | 0.75" [20]  |
| Pipe connection                   | NPT female ends   |
| Housing                           | Nickel-plated brass (DZR) P-CuZn35Pb2                           |
| Ball                              | stainless steel   |
| Stem                              | stainless steel   |
| Stem seal                         | Viton O-ring  |
| Seat                              | ETFE  |
| O-ring                            | EPDM (lubricated)   |
| Characterised disc                | ETFE  |
| Body Pressure Rating              | 600 psi   |
| Maximum Inlet Pressure (Steam)    | 15 psi  |
| Max Differential Pressure (Steam) | 15 psi  |
| Close-off pressure $\Delta$ ps    | 200 psi   |
| Cv                                | 4.64  |
| Weight                            | 0.88 lb [0.40 kg]   |
| Fluid Temp Range (water)          | 60...266°F [16...130°C]   |
| Leakage rate                      | 0%  |
| Maintenance                       | maintenance-free  |

### Flow/Mounting Details



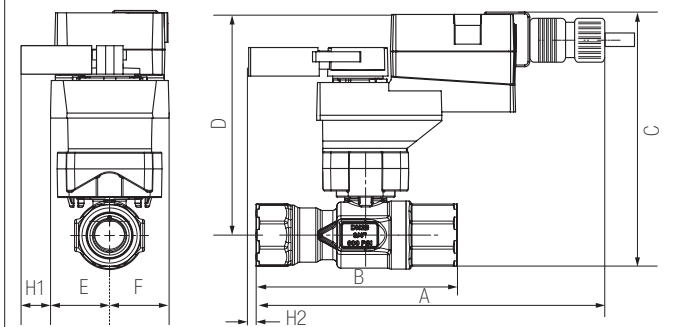
### Application

This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include unit ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow. This valve is designed to fit in compact areas where on/off, floating point and modulating control is required using 24 VAC.

### Suitable Actuators

|           | Non-Spring | Spring |
|-----------|------------|--------|
| B220HT464 | LRB(X)     | LF     |

### Dimensions (Inches [mm])



### LRB, LRX

| A             | B             | C             | D             | E         | F | H1        | H2        |
|---------------|---------------|---------------|---------------|-----------|---|-----------|-----------|
| 8.3"<br>[211] | 4.0"<br>[101] | 6.1"<br>[154] | 5.6"<br>[142] | 1.3" [33] |   | 1.2" [30] | 0.6" [15] |

### Safety Notes

**WARNING:** For Belimo products sold in California: these products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).



| A          | B          | C          | D          | E         | F |
|------------|------------|------------|------------|-----------|---|
| 8.7" [221] | 4.0" [101] | 6.8" [172] | 6.1" [155] | 1.9" [48] |   |

# LF24 US, Valve Actuator Technical Data Sheet

On/Off, Spring Return, AC/DC 24 V



5-year warranty



## Technical Data

|                                    |  |
|------------------------------------|--|
| Power Supply                       | 24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%                           |
| Power consumption in operation     | 5 W  |
| Power consumption in rest position | 2.5 W  |
| Transformer sizing                 | 7 VA (class 2 power source)                                    |
| Electrical Connection              | 18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector |
| Overload Protection                | electronic throughout 0...95° rotation                         |
| Angle of rotation                  | 90°  |
| Direction of rotation motor        | reversible with built-in switch                                |
| Direction of motion fail-safe      | reversible with cw/ccw mounting                                |
| Position indication                | Mechanical   |
| Running Time (Motor)               | 40...75 s  |
| Running time fail-safe             | <25 s @ -4...122°F [-20...50°C], <60 s @ -22°F [-30°C]         |
| Ambient humidity                   | max. 95% r.H., non-condensing                                  |
| Ambient temperature                | -22...122°F [-30...50°C]                                       |
| Storage temperature                | -40...176°F [-40...80°C]                                       |
| Degree of Protection               | IP54, NEMA 2   |
| Agency Listing                     | cULus acc. To UL 873 and CAN/CSA C22.2 No. 24-93               |
| Noise level, motor                 | 50 dB(A)   |
| Noise level, fail-safe             | 62 dB(A)   |
| Maintenance                        | maintenance-free   |
| Quality Standard                   | ISO 9001   |
| Weight                             | 3.1 lbs (1.40 kg.)   |






†Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3


## Safety Notes

**WARNING:** For Belimo products sold in California: these products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

**Wiring Diagrams**

**✂ INSTALLATION NOTES**

-  Actuators with appliance cables are numbered.
-  Provide overload protection and disconnect as required.
-  Actuators may also be powered by 24 VDC.
-  Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.
-  Meets cULus requirements without the need of an electrical ground connection.

** WARNING! LIVE ELECTRICAL COMPONENTS!**  
 During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

