BELIMO

# Technical data sheet G7100

5-year warranty

## Technical data

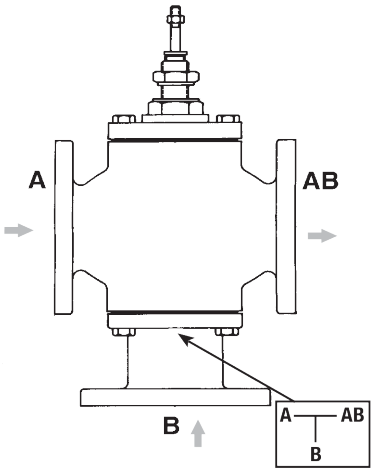
| | | |
|---|---|---|
| **Functional data** | Valve Size | 4" [100] |
| | Fluid | chilled or hot water, up to 60% glycol |
| | Fluid Temp Range (water) | 32...350°F [0...176°C] |
| | Body Pressure Rating | ANSI Class 125, up to 175 psi below 150°F |
| | Flow characteristic | linear |
| | Servicing | repack/rebuild kits available |
| | Rangeability Sv | 50:1 |
| | Flow Pattern | 3-way Mixing |
| | Leakage rate | ANSI Class III |
| | Controllable flow range | stem up - open B – AB |
| | Cv | 190 |
| | ANSI Class | 125 |
| | Body pressure rating note | up to 175 psi below 150°F |
| **Materials** | Valve body | Cast iron - ASTM A126 Class B |
| | Valve plug | bronze |
| | Stem seal | NLP EPDM (no lip packing) |
| | Seat | Stainless steel AISI 316 |
| | Pipe connection | 125 lb flanged |
| **Suitable actuators** | Non-Spring | EVB(X)<br>RVB(X) |
| | Electronic fail-safe | (2*GKB(X)) |

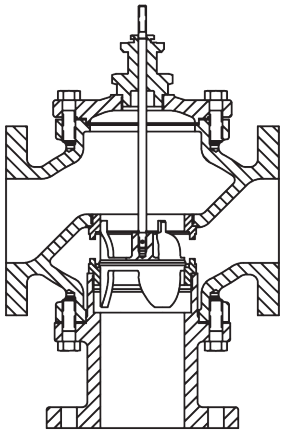
## Safety notes

- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov
- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.

## Product features

### Flow/Mounting details

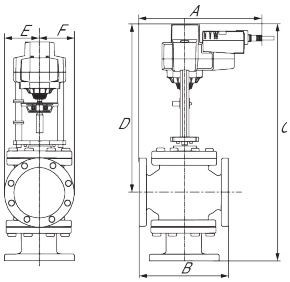


## Dimensions

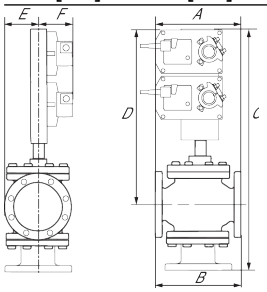
### Dimensional drawings

EVB, EVX, RVB, RVX



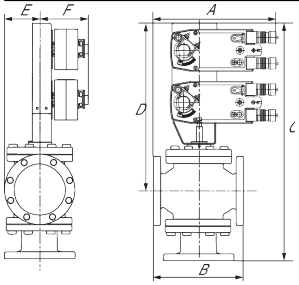

| A | B | C | D | E | F | Number of Bolt Holes |
|---|---|---|---|---|---|---|
| 13.7" [349] | 13.0" [330] | 29.7" [754] | 19.8" [502] | 4.5" [114] | 4.5" [114] | 8 |

2*GMB, 2*GMX, 2*GKB, 2*GKX




| A | B | C | D | E | F | Number of Bolt Holes |
|---|---|---|---|---|---|---|
| 13.7" [349] | 13.0" [330] | 33.2" [844] | 23.4" [594] | 4.5" [114] | 5.3" [135] | 8 |

2*AFB, 2*AFX

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BELIMO

On/Off, Spring Return, AC 24...240 V

# Technical data sheet 2*AFBUP-S-X1

5-year warranty

## Technical data

| | | |
|---|---|---|
| **Electrical data** | Nominal voltage | AC 24...240 V / DC 24...125 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Power consumption in operation | 7.5 W |
| | Power consumption in rest position | 3.5 W |
| | Transformer sizing | 14 VA @ AC 24 V (class 2 power source), 17 VA @ AC 120 V, 36 VA @ AC 240 V |
| | Auxiliary switch | 2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 10...90° |
| | Switching capacity auxiliary switch | 3 A resistive (0.5 A inductive) @ AC 250 V |
| | Electrical Connection | (2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m], |
| | Overload Protection | electronic throughout 0...95° rotation |
| **Functional data** | Position feedback U note | No Feedback |
| | Direction of motion motor | selectable by ccw/cw mounting |
| | Direction of motion fail-safe | reversible with cw/ccw mounting |
| | Manual override | 5 mm hex crank (3/16" Allen), supplied |
| | Angle of rotation | 95°, |
| | Running Time (Motor) | 75 s |
| | Running time fail-safe | <20 s |
| | Noise level, motor | 50 dB(A) |
| | Noise level, fail-safe | 62 dB(A) |
| | Position indication | Mechanical |
| **Safety data** | Degree of protection IEC/EN | IP54 |
| | Degree of protection NEMA/UL | NEMA 2 UL Enclosure Type 2 |
| | Agency Listing | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU |
| | Quality Standard | ISO 9001 |
| | Ambient temperature | -22...122°F [-30...50°C] |
| | Storage temperature | -40...176°F [-40...80°C] |
| | Ambient humidity | max. 95% r.H., non-condensing |
| | Servicing | maintenance-free |
| **Weight** | Weight | 9.69 lb [4.4 kg] |
| **Materials** | Housing material | Galvanized steel and plastic housing |

## Electrical installation

⚠ **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.

(A) Actuators with appliance cables are numbered.

Meets cULus requirements without the need of an electrical ground connection.

(UP) Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.

Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.

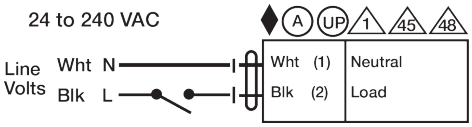
1 Provide overload protection and disconnect as required.

3 Actuators may also be powered by 24 VDC.

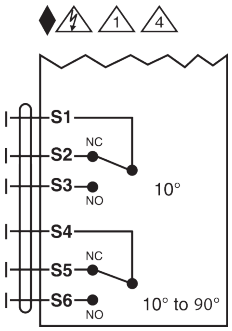
4 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

45 Actuators may be powered in parallel. Power consumption must be observed.

48 Parallel wiring required for piggy-back applications.




On/Off




Auxiliary Switches