

WGVL Warren Globe Valve Linkage

For Use with AVK and EV and RV Series Actuators



| Technical Data | |
|---------------------------------|---|
| Service | chilled or hot water and steam |
| Applicable Valve Size | 2" [51], 2-1/2" [64], 3" [80], 4" [101], 5" [127], 6" [152] |
| Stem | 316 stainless steel |
| Frame, plate, base | aluminum, steel (fits Warren Type 20,22,23,30, and 32) and Belimo G6/G7 |
| Collar | steel |
| Coupling | GF Nylon supplied |
| Housing Material | Aluminum die cast and plastic casing |
| Stem Adaptor | steel |
| Stroke | 2" [50 mm] |
| Mounting Position | 360° |
| Media Temperature Range (Water) | 20°F to 250°F [-7°C to 120°C] |
| Media Temperature Range (Steam) | 32°F to 338°F [0°C to 170°C] |
| Weight | 5.7 lb [2.6 kg] |

For close-off pressure reference Select Pro or Retrofit Technical Documentation.

Application

The WGVL retrofit kit is designed to easily attach AVK, EV and RV series actuators to select Warren globe valves. Its casted base and lower lock nut allow the WGVL to be mounted on 2-1/2" to 6" two-way or three-way valves in both normally open and normally closed configurations.

Operation

The WGVL linkage with actuator will provide 50 mm of linear travel to accommodate a wide range of valve sizes.

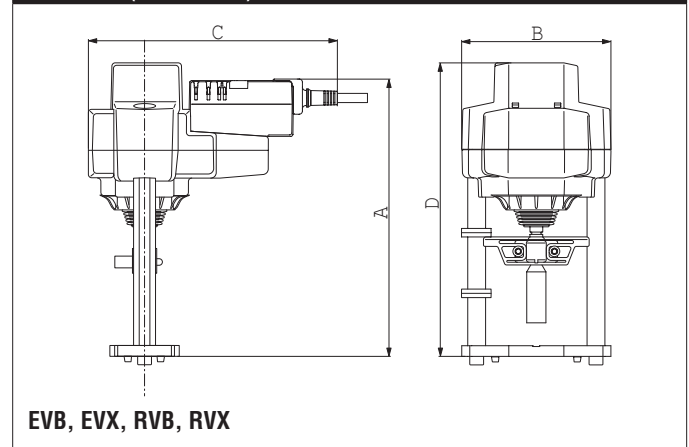
Default/Configuration

The default set up for a WGVL linkage will be factory installed along with an AVK or EV, RV series actuator. Included in the kit will be all the necessary hardware to facilitate mounting to the Warren valve.

Suitable Actuators

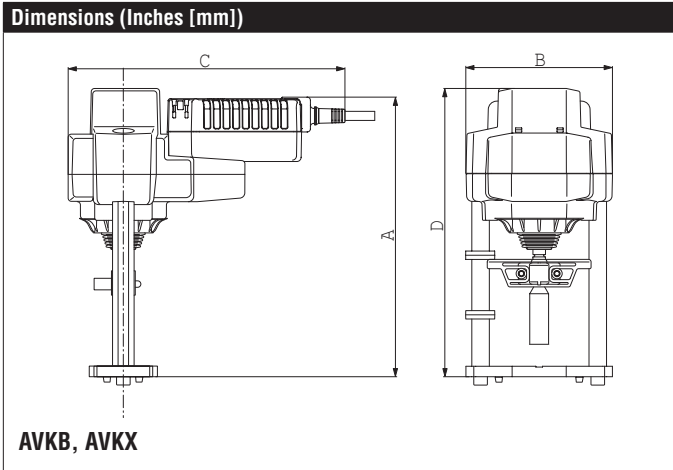
| | Non-Spring | Electronic Fail-Safe |
|------|----------------|----------------------|
| WGVL | EVB(X), RVB(X) | AVKB(X) |

Dimensions (Inches [mm])



| A | B | C | D |
|-------------|---------------|-------------|----------------|
| 10.2" [259] | 5.50" [139.7] | 9.20" [234] | 12.22" [310.4] |

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| A | B | C | D |
|-------------|---------------|-------------|-------------|
| 10.4" [264] | 5.50" [139.7] | 10.3" [262] | 10.9" [276] |

AVKB120-3

On/Off, Floating Point, Electronic Fail-Safe, Linear, 120 V



| Technical Data | |
|-----------------------------------|--|
| Power Supply | 100-240 VAC ± 20%, 50/60 Hz |
| Power Consumption Running | 3.5 W |
| Power Consumption Holding | 2 W |
| Transformer Sizing | 6.5 VA (class 2 power source) |
| Electrical Connection | 3 ft, 18 GA appliance rated cable with 1/2" conduit connector protected NEMA 2 (IP54) |
| Overload Protection | electronic throughout full stroke |
| Electrical Protection | actuators are double insulated |
| Operating Range Y | on/off, floating point |
| Input Impedance | 100 k Ω (0.1 mA), 500 Ω, 1000 Ω (on/off) |
| Feedback Output U | No Feedback |
| Stroke | 1.25" [32 mm] |
| Linear Force | 450 lbf [2000 N force] |
| Direction of Rotation (Motor) | reversible with switch |
| Direction of Rotation (Fail-Safe) | reversible with switch |
| Position Indication | stroke indicator on bracket |
| Manual Override | 5 mm hex crank (3/16" Allen), supplied |
| Running Time (Motor) | 90 sec, constant independent of load |
| Running Time (Fail-Safe) | 35 sec |
| Bridge Time | 2 sec delay before fail-safe activates |
| Pre-charging Time | 5 to 20 seconds |
| Humidity | 5 to 95% RH non-condensing |
| Ambient Temperature Range | -22°F to +122°F [-30°C to +50°C] |
| Storage Temperature Range | -40°F to +176°F [-40°C TO +80°C] |
| Housing | NEMA 2, IP54, UL enclosure type 2 |
| Housing Material | Aluminum die cast and plastic casing |
| Agency Listings† | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC |
| Noise Level (Motor) | <60 dB (A) |
| Noise Level (Fail-Safe) | <60 dB (A) |
| Servicing | maintenance free |
| Quality Standard | ISO 9001 |
| Weight | 6.4 lb [2.9 kg] |

† Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 800V. Type of action 1. Control pollution degree 3.

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Wiring Diagrams
INSTALLATION NOTES

- Actuators with appliance cables are numbered.
- Actuators may be connected in parallel. 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.

