UGVL Universal Globe Valve Linkage For Use with LV and SV Series Actuators





Application

The UGVL retrofit kit is designed to easily attach LV and SV series actuators to select globe valves. Its unique adjustable design allows the UGVL to be mounted on $\frac{1}{2}$ to 2" two-way or three-way valves in both normally open and normally closed configurations.

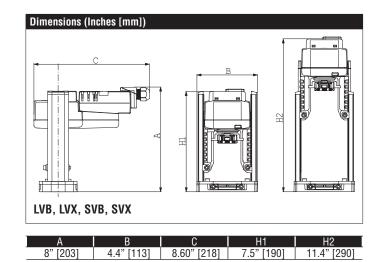
Operation

The UGVL linkage with actuator will provide 20 mm of linear travel to accommodate a wide range of valves.

Default/Configuration

The default set up for a UGVL linkage will be factory installed along with a LV or SV series actuator. Included in the kit will be all the necessary hardware to facilitate mounting to the valve.

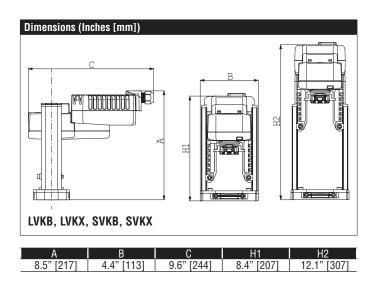
| Suitable Actuators | | |
|--------------------|----------------|----------------------|
| | Non-Spring | Electronic Fail-Safe |
| UGVL | LVB(X), SVB(X) | LVKB(X), SVKB(X) |



| Technical Data | |
|------------------------------------|--|
| Service | chilled or hot water and steam |
| Applicable Valve Size | 1/2" [13], 3/4" [19], 1" [25], 1-1/4" [32], 1-1/2" [38], 2" [50] |
| Frame, plate, base | aluminum, steel |
| Collar | aluminum, steel, (fits bonnets up to 1.7" dia both threaded or notched.) |
| Coupling | GF Nylon supplied |
| Stem Adaptor | aluminum, steel (fits stems up to .66" dia both threaded or slotted.) |
| Stroke | 0.6" [15 mm] LV, 3/4" [20 mm] SV |
| 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 | 4.2 lb [1.9 kg] |

For close-off pressure reference Select $\ensuremath{\mathsf{Pro}}$ or Retrofit Technical Documentation.









| Technical Data | |
|-------------------------------|--|
| Power Supply | 24 VAC ± 20%, 50/60 Hz, 24 VDC ± 10% |
| Power Consumption Running | 1 W |
| Power Consumption Holding | 0.5 W |
| Transformer Sizing | 2 VA (class 2 power source) |
| Electrical Connection | 3 ft, 18 GA plenum 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 | 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 $\Omega,$ 1/4 W resistor) |
| Input Impedance | 100 k Ω for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA |
| Feedback Output U | 2 to 10 VDC |
| Stroke | 0.6" [15 mm] |
| Linear Force | 112 lbf [500 N force] |
| Direction of Rotation (Motor) | reversible with built-in switch |
| Position Indication | stroke indicator on bracket |
| Manual Override | 4 mm hex crank (shipped w/actuator) |
| Running Time (Motor) | 90 sec (default), Optional (90 or 150 sec) |
| 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, IP42, 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) | <55 dB (A) |
| Servicing | maintenance free |
| Quality Standard | ISO 9001 |
| Weight | 2.4 lb [1.1 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.

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



Wiring Diagrams

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🔀 INSTALLATION NOTES

Actuators may also be powered by 24 VDC.

Only connect common to negative (-) leg of control circuits.

A 500 Ω resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.

Actuators with plenum cable do not have numbers; use color codes instead.

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.

