

FGVL Flanged 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	2-1/2" [64], 3" [80], 4" [101], 5" [127], 6" [152]
Stem	316 stainless steel
Frame, plate, base	aluminum, steel (fits competitor bonnets up to 2.3" dia.)
Collar	aluminum
Coupling	GF Nylon supplied
Housing Material	Aluminum die cast and plastic casing
Stem Adaptor	steel/Aluminum
Stroke	1.25" [32 mm] AVK, 2" [50 mm] EV/RV
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	9 lb [4.1 kg]

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

Application

The FGVL retrofit kit is designed to easily attach AVK, EV and RV series actuators to select Flanged globe valves requiring larger stem travels and higher forces. Its casted base and lower locking clamp allow the FGVL 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 FGVL linkage with actuator will provide up to 2" [50 mm] of linear travel to accommodate a wide range of valve sizes.

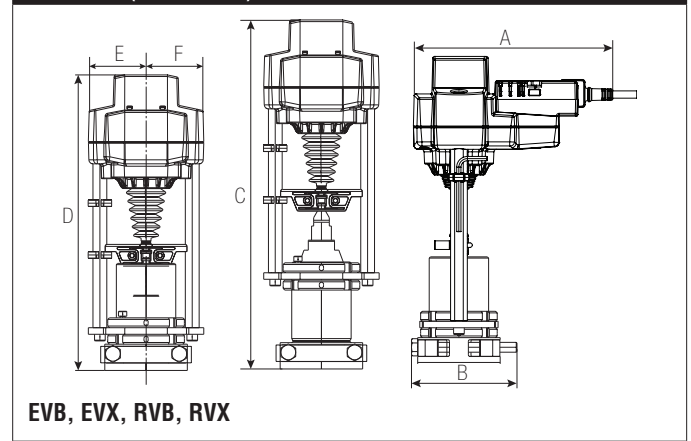
Default/Configuration

The default set up for a FGVL 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 valve.

Suitable Actuators

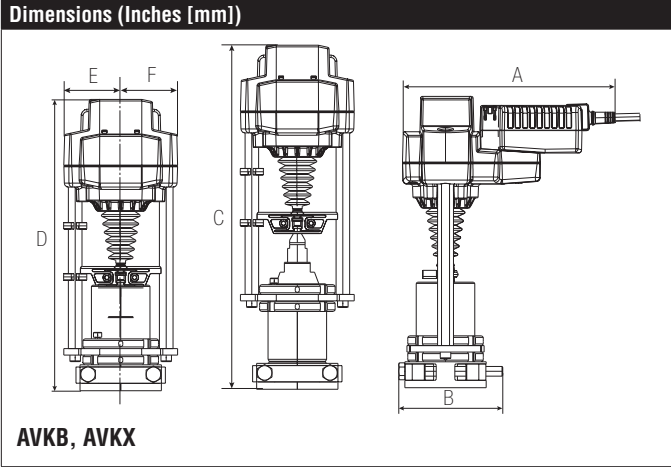
	Non-Spring	Electronic Fail-Safe
FGVL	EVB(X), RVB(X)	AVKB(X)

Dimensions (Inches [mm])



A	B	C	D	E	F
9.2" [234]	5.00" [127.0]	16.73" [425]	14.00" [356]	2.78" [71]	

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A	B	C	D	E	F
10.25" [260]	5.00" [127.0]	16.73" [425]	14.00" [356]	2.78" [71]	

EVB24-SR

Modulating, Non-Spring Return, Linear, 24 V, for 2 to 10 VDC or 4 to 20 mA



Technical Data

Power Supply	24 VAC \pm 20%, 50/60 Hz, 24 VDC \pm 10%
Power Consumption Running	5 W
Power Consumption Holding	1.5 W
Transformer Sizing	7.5 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 Ω , 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	2" [50 mm]
Linear Force	562 lbf [2500 N force]
Direction of Rotation (Motor)	reversible with built-in 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
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)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	5.7 lb [2.6 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.

Wiring Diagrams
INSTALLATION NOTES

- Actuators may also be powered by 24 VDC.
- 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.

