

## Application

## Operation

## Default/Configuration

The default set up for a SGVL 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 Schneider valve.

## Suitable Actuators

|  | Non-Spring |
| :---: | :---: |
| SGVL | $\operatorname{LVB}(X), \operatorname{SVB}(X)$ |$\quad \operatorname{LVKB}(X), \operatorname{SVKB}(X) \quad$.



LVB, LVX, SVB, SVX

| A | B | C |
| :---: | :---: | :---: |
| $6.0 "[152]$ | $3.8^{\prime \prime}[97]$ | $7.9 "[201]$ |


| Technical Data |  |
| :---: | :---: |
| Fluid | chilled or hot water and steam |
| Applicable Valve Size | $\begin{aligned} & 1 / 2^{\prime \prime}[13], 3 / 4^{\prime \prime}[19], 1^{\prime \prime}[25], 1-1 / 4^{\prime \prime}[32], 1-1 / 2^{\prime \prime} \\ & {[38], 2^{\prime \prime}[50]} \end{aligned}$ |
| Hardware | SS and Nickel plated steel |
| Stem Adaptor | steel |
| Frame, plate, base | aluminum |
| Collar | aluminum (fits VB7 1/2" to 2" NB9 1/2"-1-1/4" valves) also fits post 1994 1-1/2" to $2^{\prime \prime}$ valves |
| Coupling | GF Nylon supplied |
| Stroke | 0.95 " [24 mm] |
| Mounting Position | $360^{\circ}$ |
| Weight | 1.1 lb [ 0.50 kg ] |
| Fluid Temp Range (water) | Please Refer to Manufacturer's Valve Specifications |




| Technical Data |  |
| :---: | :---: |
| Power Supply | 24 VAC, $\pm 20 \%, 50 / 60$ Hz, 24 VDC, $\pm 10 \%$ |
| Power consumption in operation | 3 W |
| Power consumption in rest position | 2 W |
| Transformer sizing | 7 VA (class 2 power source) |
| Electrical Connection | 18 GA plenum cable, $3 \mathrm{ft}\left[1 \mathrm{~m}\right.$ ], with $1 / 2^{\prime \prime}$ conduit connector, degree of protection NEMA 2 / IP54 |
| Overload Protection | electronic throughout full stroke |
| Electrical Protection | actuators are double insulated |
| Operating Range | 2... 10 V (default), 4... 20 mA w/ ZG-R01 (500 $\Omega, 1 / 4$ W resistor), variable (VDC, PWM, on/ off, floating point) |
| Operating range Y variable | Start point $0.5 . . .30 \mathrm{~V}$ End point 2.5... 32 V |
| Input Impedance | $100 \mathrm{k} \Omega$ for $2 \ldots . .10 \mathrm{~V}(0.1 \mathrm{~mA}), 500 \Omega$ for $4 . . .20 \mathrm{~mA}, 1500 \Omega$ for PWM, On/Off and Floating point |
| Position Feedback | 2... 10 V |
| Stroke | 0.75 " [19 mm] |
| Actuating force motor | 340 lbf [1500 N] |
| Direction of motion motor | selectable with switch |
| Direction of motion fail-safe | reversible with switch |
| Position indication | Mechanically, with pointer |
| Manual override | 4 mm hex crank (shipped w/actuator) |
| Running Time (Motor) | default 90 s , variable 35... 150 s |
| Running time fail-safe | <35 s |
| Bridging time | 2 s delay before fail-safe activates |
| Pre-charging time | 5... 20 s |
| Ambient humidity | max. 95\% r.H., non-condensing |
| Ambient temperature | $-22 . . .122^{\circ} \mathrm{F}\left[-30 \ldots .50^{\circ} \mathrm{C}\right]$ |
| Storage temperature | -40...176 ${ }^{\circ} \mathrm{F}$ [-40...80$\left.{ }^{\circ} \mathrm{C}\right]$ |
| Degree of Protection | IP54, NEMA 2, UL Enclosure Type 2 |
| Housing material | Die cast aluminium and plastic casing |
| Agency Listing | 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 | $45 \mathrm{~dB}(\mathrm{~A})$ |
| Noise level, fail-safe | $60 \mathrm{~dB}(\mathrm{~A})$ |
| Servicing | maintenance-free |
| Quality Standard | ISO 9001 |
| Weight | 3.53 lb [1.6 kg] |

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## Wiring Diagrams <br> ※ <br> INSTALLATION NOTES



Actuators may be connected in parallel. Power consumption and input impedance must be observed.

Actuators may also be powered by 24 VC.
A $500 \Omega$ resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VC.
Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.
For triac sink the common connection from the actuator must be connected to the hot connection of the controller. Contact closures A \& B also can be triacs. A \& B should both be closed for the triac source and open for triac sink.
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.


On/Off


Floating Point


VC / 4 to 20 mA


Override Control Min, Mid, Max Positions


[^0]:    $\dagger$ 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 .

