



For 3-Wire Floating or Proportional Control of VSBT and VMBT Series Globe Valves

General

The MVT Series valve actuators are designed for 3-wire floating / on-off or proportional voltage / current control of VSBT and VMBT series globe valves.

The MVT Series actuator features a reversible synchronous motor which drives the valve stem up and down by rotation of a threaded spindle through a gear train. An internal magnetic hysteresis coupling acts as a torque limiting device, eliminates the need of position switches and enhances the overall reliability of the actuator. Position feedback is not available.

The thermostat or controller to be used should be selected or adjusted to complement the stroke time of the MVT Series actuators..

Field Selection

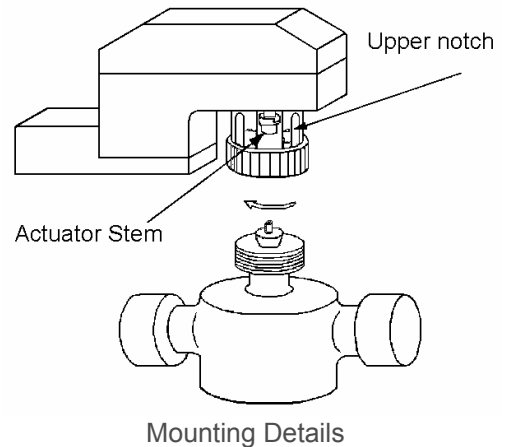
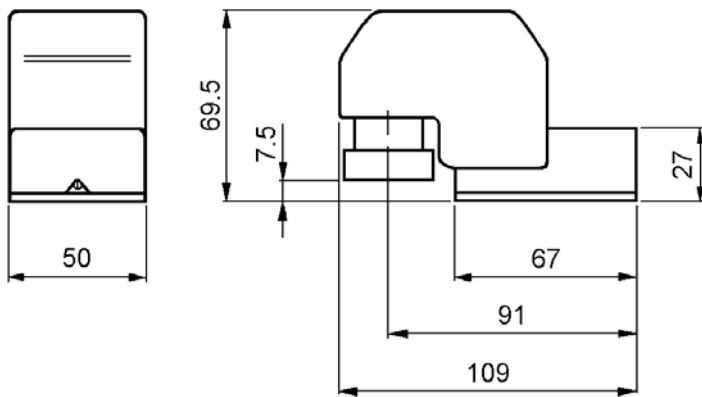
For best control results, the MVT actuator can be controlled by virtually any proportional voltage input. The circuit board allows the user to select one of seven different operating voltage ranges, as well as the direction of stroke.



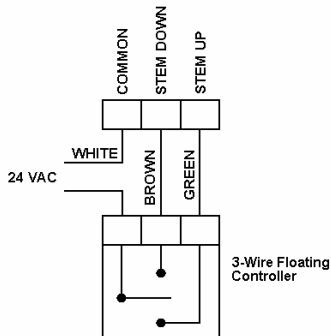
Specifications

Model Numbers	MVT44	MVT56	MVT57
Control Signal	3-Wire Floating (Incremental) or on/off	(0-10,6-9,0-4,2-10, 4-7,6-10,8-11) VDC	0-10 VDC
Input Impedance	N/A	100 k Ω	
Power Supply	24 VAC (+15%, -10%), 50/60 Hz		
Power consumption	0.5 VA		
Stroke Time	30 sec (50 Hz) or 25 sec (60 Hz)		
Maximum Stroke	6.5 mm		
Close-off Force	200 N (100 lbf)		
Ambient Operating Limits	-15...50 °C RH 80%		
Agency Approval	CE Mark Compliant		
Shipping Weight	0.25 kg (0.55 lbs)		

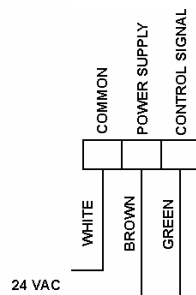
Dimensions in mm



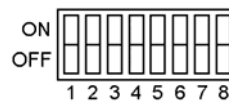
MVT44



MVT5



MVT wiring diagrams



RANGE	DIP NR.
0..10 V	2
6..9 V	3
0..4 V	4
2..10 V	5
4..7 V	6
6..10 V	7
8..11 V	8

- The actuator is factory set for 0 to 10 VDC signal for direct acting. The control operating range can also be changed by repositioning one of the DIP switch 2 to 8 to the "ON" position.
- position, corresponding to the desired
- voltage range. To change the control action to reverse, reposition DIP switch 1 to "OFF" position.

Mounting

For ease of installation, the MVT Series actuator mounts directly onto the VSBT and VMBT Series valve in minutes, without the need for linkages or time-consuming field calibration of its travel or span. Before mounting the actuator onto the valve, be sure that both valve body and actuator are in fully open positions and stem engaged at upper notch position which is factory set.