

VM1500E • VM5000E Actuators



VM1500E Actuator on 2 Inch Valve



VM5000E Actuator on 6 Inch Valve

APPLICATION:

The **VM1500E and VM5000E Motor-Actuators** use a 24VAC power supply. The actuators drive a valve's plug into position with respect to the signal from a controller and self-adjust to the valve's travel. The actuators fail in the last position on loss of power. A **VMS-25 Power Pack** is required for fail safe operation.

ACTUATOR SPECIFICATIONS:

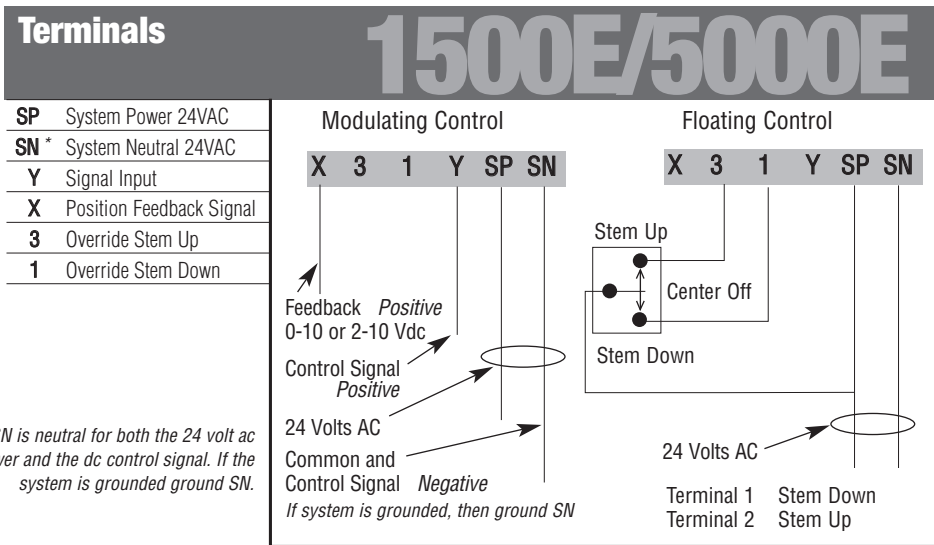
Control Signal: 4-20 mAdc (Factory Setting), 0-20 mAdc, 0-10 Vdc or 2-10 Vdc and Floating, Self-Adjusting, Field (Dip Switch) Selectable
 Control Action: See Below
 Power Consumption: **VM1500E:** 12VA
 VM5000E: 25VA
 Timing: **VM1500E:** 102 seconds/inch
 VM5000E: 76 seconds/inch
 Feedback Signal: 0-10 Vdc or 2-10 Vdc (Modulating Control Only)
 Manual Override: YES
 Construction: Polycarbonate Motor Housing with Steel Linkage and Yoke.
 Case has one 1/2 NPSM Conduit Adapter
 Connections: Coded Screw Terminals
 Locations: NEMA Type 2 / IP54 Indoor Only
 Temperature Limits: Ambient: 32°F - 122°F
 Mounting: Vertical Above Centerline of Valve

CONTROL ACTION:

Single and Double-Seated Valves:
 Increasing Signal Closes Valve (Factory Setting) Reversible

3-Way Mixing and Diverting Valves:
 Increasing Signal Closes Lower Port / Opens Upper Port (Factory Setting) Reversible

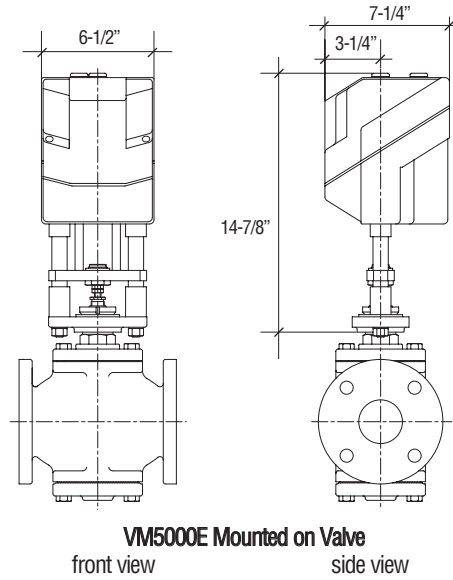
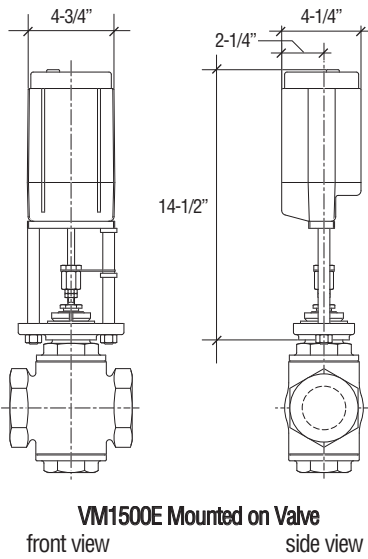
ACTUATOR WIRING DIAGRAM:



**SN is neutral for both the 24 volt ac power and the dc control signal. If the system is grounded ground SN.*

Control Signal Override:
 Connect terminal 3 to SN to raise the stem.
 Connect terminal 1 to SN to lower the stem.
 The actuator moves to the end position and remains there until the jumper is disconnected.

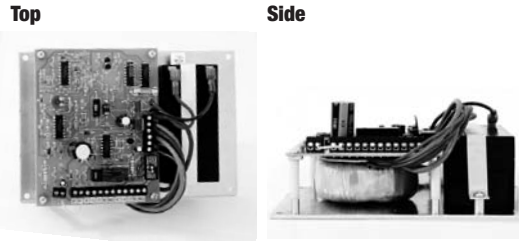
OVERALL DIMENSIONS:



POWER PACK SPECIFICATIONS:

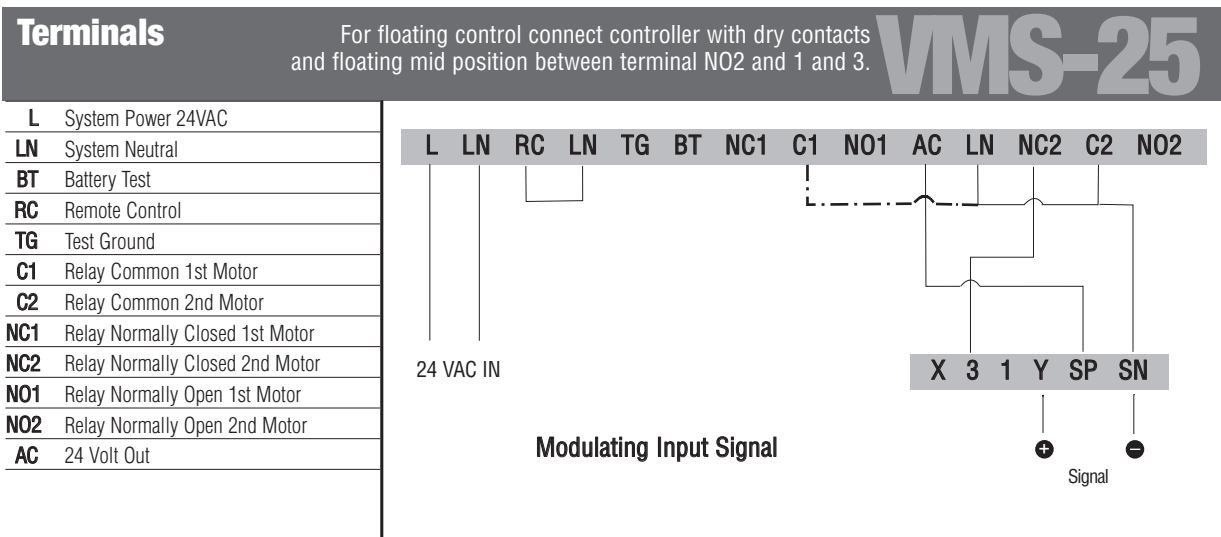
Required for Fail Safe Operation
(One VMS-25 can operate two VM1500 or one VM5000E at a time)

- Fall Direction: Field Selectable
- Power Consumption: 24VAC, 40VA
- Construction: Battery w/Circuit Board & Transformer, Components Only
- Locations: NEMA Type 2 / IP54 Indoor Only
- Mounting: Panel Mount
- Approx LxWxH: 7-1/2 in. x 5 in. x 3 in.



VMS-25 Power Pack

POWER PACK WIRING DIAGRAM:



Operation:

Proportional Normal: Terminal AC is connected to 24 VAC building power. Terminal LN supplies power to SN. Actuator responds to modulating input signal.
Power Failure: Terminal AC changes to 24V square wave from inverter. Terminal C2 connects to Terminal NC2. Terminal NC2 supplies power to Terminal 1 or 3 to drive actuator to fail safe position.

