

# Electric Motor-Actuated Two-Way Valves Submittal

## Applications:

Control of Saturated Steam; Water; Water & Glycol Solutions to 50%. Typically used in the following applications:

- **Steam to Hot Water Heat-Exchanger:** The two-way valve can be used to control the amount of steam entering the system. A typical example would be modulating the quantity of steam entering a heat-exchanger.
- **One or Two Pipe Steam heating:** Two-way valves can turn on or off the flow of steam from the boiler or other sources into a steam distribution system. A typical example would be using steam to heat radiators in a building.

## Valve Construction and Specifications:

A balanced valve that requires less force to operate than unbalanced valves

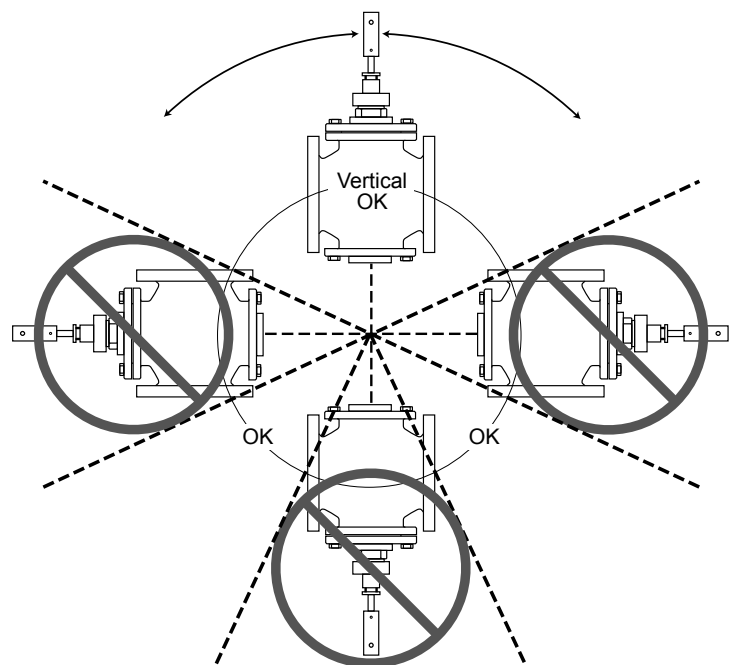
Body:	ANSI B16.1 Iron 125lb. Flange
Trim:	Bronze
Stem:	316 Stainless Steel
Bonnet:	Brass
Packing:	Guided Low-Friction TFE V-Ring, Self Adjusting
Seat Closure:	<ul style="list-style-type: none"> <li>• Single Seat ANSI Class IV shut-off with EPDM O-Ring (2 1/2" to 6" non-Bellows Valves).</li> <li>• Double Seat ANSI Class III shut-off (2 1/2" to 10" Bellows Valves and 8" to 10" non-Bellows Valves).</li> </ul>
Temperature:	<ul style="list-style-type: none"> <li>• +32°F to 300°F (2 1/2" to 6" non-Bellows Valves).</li> <li>• +32°F to 350°F (2 1/2" to 10" Bellows Valves and 8" to 10" non-Bellows Valves).</li> </ul>



## Actuator with Feed Back Specifications:

Strong electric valve actuators capable of closing large valves against high differential pressures. The direct drive and manual override features make for easy installation of the valve.

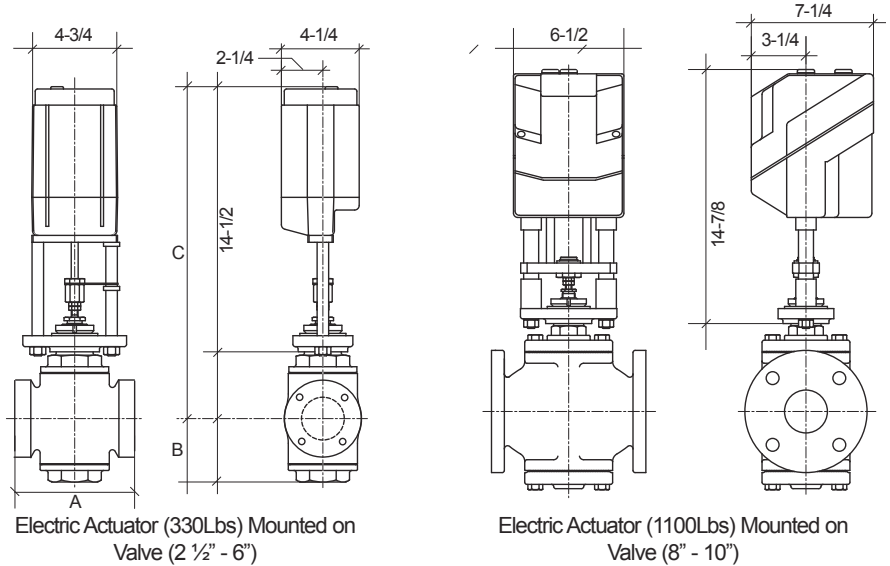
Control Input Signal:	24VAC Floating
Power Consumption:	12VA (2 1/2" - 6"), 25VA (8" - 10")
Timing:	See Configuration Tables
Feedback Signal:	Potentiometer Feedback signal.
Manual Override:	Yes, with a Hex wrench.
Construction:	Polycarbonate Motor Housing with Steel Linkage and Yoke
Locations:	NEMA Type 2 / IP54 Indoor Only
Temperature Limits:	Ambient +32°F to 122°F, 250°F at bonnet.
Mounting:	Vertical Above Centerline of Valve or any diagonal position.
Clearance:	Minimum 6" for easy cover removal or manual operation.
Stroke:	Max of 1 1/2" (2 1/2" to 6" Valves), Max of 2 1/8" (8" to 10" Valves), , self adjusting.
Position Indicator:	Built-in position indicator to show minimum and maximum openings as well as valve current position.



**Notes:**

- 1) Inlet Pressure cannot exceed Body Pressure Temperature Rating.
- 2) Shut-off PSID is per stated ANSI Shut-off Classification.
- 3) Flowing PSID for water service should be no greater than 2/3 of Inlet Pressure.
- 4) Allow 6 inch clearance above actuator for removal / service.
- 5) Mount the electric motor-actuated valve in vertical position. Do not mount valve motor upside down or sideways.
- 6) Valve Actuator can be wired either with or without a feed back signal.

**OVERALL DIMENSIONS**



Two-Way On/Off or Modulating Motorized Valve													
Valve Size	Catalog #	Flow Co-efficient CV	Dimensions			Mount	Body	Trim	Valve Body Rate Lbs	Est Shipping Weight	Max Operating Press PSI	Max Power	Approx Timing in Seconds
			A	B	C								
2 1/2"	928252-50	65	9"	4 3/4"	20"	Flanged	Iron	Bronze	125	50	90	12VA	77
2 1/2" Bellows	928152-50	70	7 3/4"	4 1/8"	20 1/8"	Flanged	Iron	Bronze	125	55	90	12VA	77
3"	928253-00	90	10"	5 3/8"	20 7/8"	Flanged	Iron	Bronze	125	65	90	12VA	77
3" Bellows	928153-00	100	9"	4 3/8"	20 11/16"	Flanged	Iron	Bronze	125	70	90	12VA	77
4"	928254-00	170	13"	6 7/8"	21 7/8"	Flanged	Iron	Bronze	125	100	70	12VA	114
4" Bellows	928154-00	200	11 3/8"	5"	23 1/2"	Flanged	Iron	Bronze	125	105	70	12VA	77
5"	928255-00	280	15 3/4"	7 7/8"	22 7/8"	Flanged	Iron	Bronze	125	155	60	12VA	128
5" Bellows	928155-00	260	12"	6 7/8"	26 15/16"	Flanged	Iron	Bronze	125	160	60	12VA	114
6"	928256-00	360	17 3/4"	8 1/2"	24 3/4"	Flanged	Iron	Bronze	125	195	40	12VA	128
6" Bellows	928156-00	350	14 1/8"	7 5/8"	28 1/16"	Flanged	Iron	Bronze	125	200	40	12VA	114
8"	928258-00	680	16 1/4"	8 3/4"	24 3/4"	Flanged	Iron	Bronze	125	290	20	25VA	114
8" Bellows	928658-0	680	16 1/4"	8 3/4"	29 3/4"	Flanged	Iron	Bronze	125	295	20	25VA	114
10"	928253-00	960	20"	9 5/8"	25 1/2"	Flanged	Iron	Bronze	125	435	10	25VA	114
10" Bellows	928653-00	960	20"	9 5/8"	30 1/2"	Flanged	Iron	Bronze	125	440	10	25VA	114

**Wiring:**

**Wiring the Power Source:**

- 1) The Valve must be powered with 24VAC. Terminal 1 is the common. Terminal 2 when powered with the common will open the valve. Terminal 3 when powered with the common will close the valve. See wiring diagram.
- 2) Do not power terminal 2 and 3 at the same time.
- 3) Equipment sourcing power must be able to handle a maximum power consumption per the motor and valve size.

**Wiring the Feed Back Signal:**

- 1) The feed back signal is three wire type. See wiring diagram.
- 1) The feed back wiring is only needed for equipment that can provide the signal voltage.

