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 t	hat requires less force to operate than unbalanced valves	20.3.
Body:	ANSI B16.1 Iron 125lb. Flange	A 199
Trim:	Bronze	
Stem:	316 Stainless Steel	
Bonnet:	Brass	
Packing:	Guided Low-Friction TFE V-Ring, Self Adjusting	
Seat Closure:	 Single Seat ANSI Class IV shut-off with EPDM O-Ring (2 ¹/₂" to 6" non-Bellows Valves). 	
	 Double Seat ANSI Class III shut-off (2 ½" to 10" Bellows Valves 	
	and 8" to 10" non-Bellows Valves).	
Temperature:	 +32°F to 300°F (2 ½" to 6" non-Bellows Valves). 	
-	 +32°F to 350°F (2 ½" to 10" Bellows Valves and 8" to 10" non-Bellow 	s Valves).

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 ½" - 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 $\frac{1}{2}$ " (2 $\frac{1}{2}$ " to 6" Valves),						
	Max of 2 $\frac{1}{8}$ " (8" to 10" Valves), ,						
	self adjusting.						
Position Indicator:	Built-in position indicator to show						
	minimum and maximum openings						
	as well as valve current position.						





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Notes:

- 1) Inlet Pressure cannot exceed Body Pressure Temperature Rating.
- Shut-off PSID is per stated ANSI Shutoff Classification.
- 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



Electric Actuator (330Lbs) Mounted on Valve (2 1⁄2" - 6")

Electric Actuator (1100Lbs) Mounted on Valve (8" - 10")

24VDC Power Source

R W B

2

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Common

Open Close

Power the

Actuator

3

4 5

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Two-Way On/Off or Modulating Motorized Valve													
		Flow Co-efficient	Dimensions					Valve Body Rate	Est Shipping	Max Operating	Max	Approx Timing in	
Valve Size	Catalog #	CV	Α	В	С	Mount	Body	Trim	Lbs	Weight	Press PSI	Power	Seconds
2 1⁄2"	928252-50	65	9"	4 ¾"	20"	Flanged	Iron	Bronze	125	50	90	12VA	77
2 1/2" Bellows	928152-50	70	7 ¾"	4 1⁄8"	20 1⁄8"	Flanged	Iron	Bronze	125	55	90	12VA	77
3"	928253-00	90	10"	5 ¾"	20 1⁄8"	Flanged	Iron	Bronze	125	65	90	12VA	77
3" Bellows	928153-00	100	9"	4 ¾"	20 11/16"	Flanged	Iron	Bronze	125	70	90	12VA	77
4"	928254-00	170	13"	6 ½"	21 7⁄8"	Flanged	Iron	Bronze	125	100	70	12VA	114
4" Bellows	928154-00	200	11 ¾"	5"	23 ½"	Flanged	Iron	Bronze	125	105	70	12VA	77
5"	928255-00	280	15 ¾"	7 1⁄8"	22 1⁄8"	Flanged	Iron	Bronze	125	155	60	12VA	128
5" Bellows	928155-00	260	12"	6 %"	26 15/16"	Flanged	Iron	Bronze	125	160	60	12VA	114
6"	928256-00	360	17 ¾"	8 ½"	24 ¾"	Flanged	Iron	Bronze	125	195	40	12VA	128
6" Bellows	928156-00	350	14 ½"	7 %"	28 1/16"	Flanged	Iron	Bronze	125	200	40	12VA	114
8"	928258-00	680	16¼"	8 ¾"	24¾"	Flanged	Iron	Bronze	125	290	20	25VA	114
8" Bellows	928658-0	680	16¼"	8 ¾"	29¾"	Flanged	Iron	Bronze	125	295	20	25VA	114
10"	928253-00	960	20"	9 % "	25 ½"	Flanged	Iron	Bronze	125	435	10	25VA	114
10" Bellows	928653-00	960	20"	9 ⁵ ∕8"	30 ½"	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.



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Feed Back Signal

WRB

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Feed Back

Signal