

## LZV SERIES MOTORIZED VALVES

### DESCRIPTION

LZV series motorized valves are used to control flow in chilled or hot water systems, and low pressure steam systems up to 15 PSI. The valve is driven by a hysteresis synchronous motor with spring return. Normally open and normally closed actuator models are available.

### FEATURES

- Suitable for Heating/Cooling or Low Pressure Steam Systems
- Long Life Synchronous Motor
- Stainless Steel Shaft with EPDM Ball and Seals
- Can be used on applications with high make up water
- “Sure Lock” connection between valve body and actuator
- Euro styled fireproof plenum rated engineered housing
- High differential pressure close off, low noise
- Universal Replacement for most competitive models
- 5 Year – 5/25 legendary guarantee



### SEQUENCE OF OPERATION

When a signal is received from a thermostat or other control device, the valve is energized allowing chilled/hot water to flow through the valve. When the room temperature rises (heating) or falls (cooling) to its set point, the thermostat de-energizes the valve. The valve returns to the closed position via a return spring and flow is interrupted. An optional end switch rated at 250 VAC, 3 Amps is available to switch auxiliary loads.

### AVAILABLE MODELS

LZV series motorized valve base plates and covers are made of engineered ABS plenum fire rated plastic. All LZV Series valves feature high differential pressure close off, low noise and reliable characteristics. They are designed to withstand high temperature conditions for maximum application flexibility including concealed fan coil applications.

LZV series motorized valves feature **“Sure Lock”** actuator and valve body connections to ensure proper engagement of the body to the actuator.

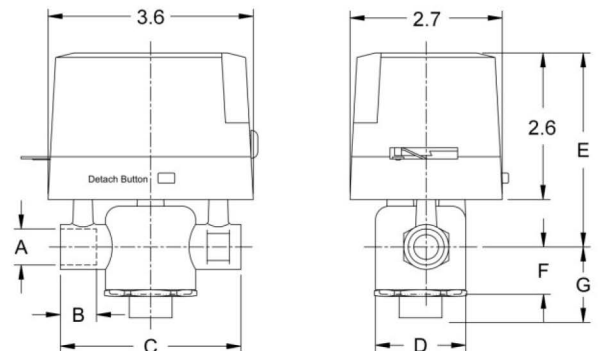
## MATERIAL AND TECHNICAL DATA

MATERIAL	VALVE BODY	Forged brass
	SEAL MATERIAL	EPDM
	CHASSIS & COVER	Fire rated ABS engineered plastic
WORKING MEDIA	chilled / hot water / low pressure steam to 15 PSI / Glycol mix, up to 50%	
FLUID TEMPERATURE	36 to 201 °F	
PRESSURE RATING	300 PSI	
INPUT VOLTAGE	24 VAC / End Switch: 250 VAC; 3 Amps	
POWER	6.5 W	
DRIVING PARTS	Driven by synchronous motor / spring return	
OPERATION TIMING	Motor: fully open 15 sec after power on / Spring: 5 to 7sec after power off	
AMBIENT TEMPERATURE	32~140 °F	
STORAGE TEMPERATURE	-4 to 149 °F Max. no condensation	

ITEM #	MODEL	TYPE	Cv	SIZE	CLOSE-OFF PRESSURE	POWER SUPPLY
800-703	LZV-2	Normally closed 2-Way	3.8	1/2"	44PSI	24Vac, 50-60HZ
800-704NE	LZV-2		5.4	3/4"	22PSI	
800-704	LZV-2		5.4		22PSI	
800-705	LZV-2		8.0	1"	11.6PSI	
800-706	LZV-2		11.7	1-1/4"	11.6PSI	
800-713	LZV-3	3-Way On/Off Zone Valve	3.8	1/2"	29PSI	
800-714	LZV-3		5.4	3/4"	22PSI	
800-715	LZV-3		6.7	1"	14.5PSI	
800-716	LZV-3		9.8	1-1/4"	11.6 PSI	

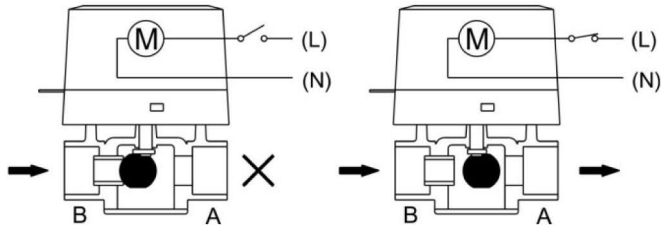
MODEL	DIMENSIONS (SWEAT)						
	A	B	C	D	E	F (2-way)	G (3-way)
1/2", 2-Way	5/8	0.63	3.1	1.58	3.5	0.83	--
1/2", 3-Way	5/8	0.63	3.1	1.58	3.5	--	1.26
3/4", 2-Way	7/8	0.75	3.1	1.58	3.5	0.83	--
3/4", 3-Way	7/8	0.75	3.1	1.58	3.5	--	1.26
1", 2-Way	1-1/8	0.78	3.5	1.8	3.5	0.94	--
1", 3-Way	1-1/8	0.78	3.5	1.8	3.5	--	1.42
1-1/4", 2-Way	1-3/8	0.79	3.7	1.8	3.5	0.94	--
1-1/4", 3-Way	1-3/8	0.79	3.7	1.8	3.5	--	1.73

## DIMENSIONS (inches)

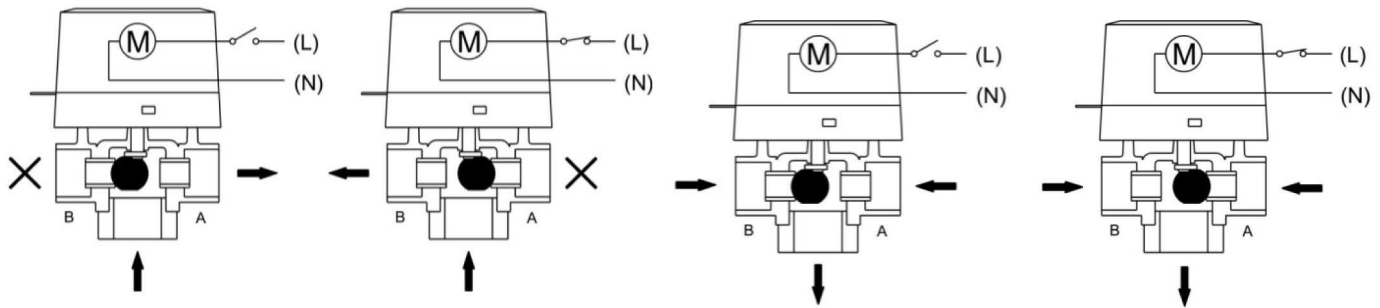


## APPLICATION DIAGRAMS

### 2-way normally closed valve



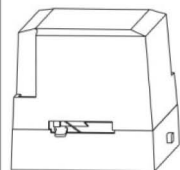
### 3-way diverting valve



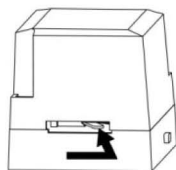
## INSTALLATION

### Assembly/Disassembly

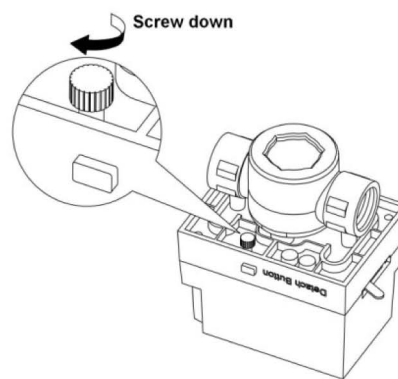
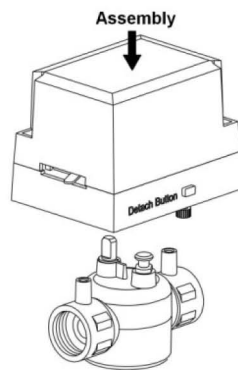
#### Assembly



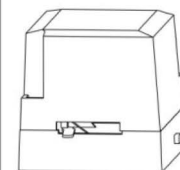
The normal position of the lever is at position "AUTO".



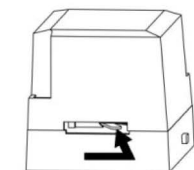
Push the lever to position "MANU" and fix it in the notch.



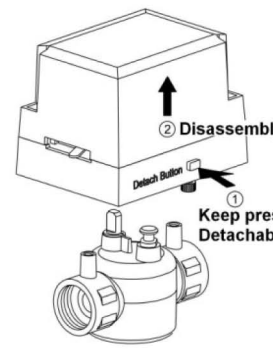
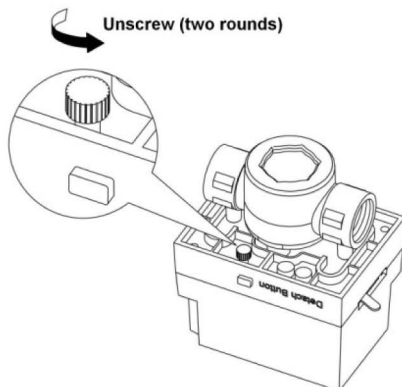
#### Disassembly



The normal position of the lever is at position "AUTO".

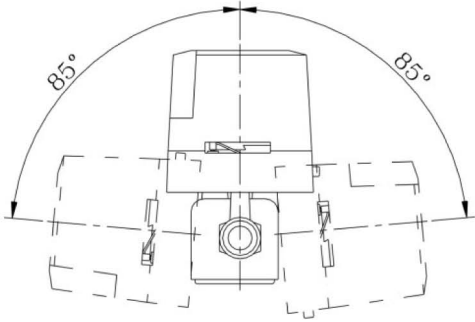


Push the lever to position "MANU" and fix it in the notch.





**INSTALLATION** Continued

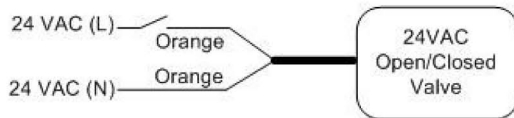
**Permitted angle of installation**



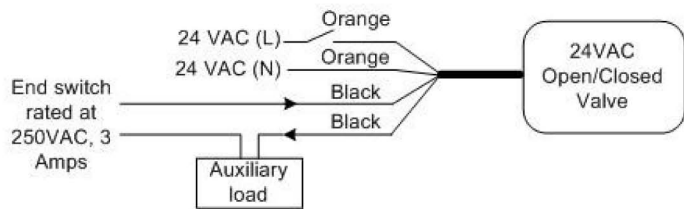
**\* Notice:** When the valve is mounted on a vertical pipe, care must be taken so that condensation does not drip on the valve.

 **Notice:** After installation, You must remove the lever stop before the valve is used. 

**Wiring Diagrams**



24 VAC Actuator wiring detail



24 VAC Actuator wiring detail with end switch