

J Series

# Electric Zone Valves – Two-Way Spring Open (Normally Open), Modulating Control

## Description

This electric zone valve with forged brass body offers two-way spring open (normally open), modulating control for hot or chilled water applications. For complete details, refer to *J Series Electric Zone Valves Product Bulletin (LIT-977282)*.

## Features

- economical control of hot or chilled water (up to 50% glycol) for fan coil, baseboard radiator and VAV reheat applications.
- 0 to 10 VDC proportional and three wire floating control.
- 32 to 200°F (0 to 93°C) fluid temperature rating
- 32 to 125°F (0 to 52°C) ambient temperature rating
- 300 psig Static Pressure Rating
- 20 to 30 VAC 50/60 Hz
- forged brass body



**JM Series Two-Way Spring Return Modulating Zone Valve**

## Selection Chart

Valve	Size	Cv	Close-off	Actuator	
				Three Wire Floating	0 to 10 VDC Proportional
				JT13A000	JP13A000
<b>Two-Way – Sweat Connections</b>					
JM2211	1/2"	1	50	JM2211T23A000	JM2211P23A000
JM2212	1/2"	2	50	JM2212T23A000	JM2212P23A000
JM2213	1/2"	4	35	JM2213T23A000	JM2213P23A000
JM2312	3/4"	2	50	JM2312T23A000	JM2312P23A000
JM2313	3/4"	4	35	JM2313T23A000	JM2313P23A000
JM2317	3/4"	7.5	35	JM2317T23A000	JM2317P23A000
JM2413	1"	4	35	JM2413T23A000	JM2413P23A000
JM2417	1"	8	35	JM2417T23A000	JM2417P23A000
JM2517	1-1/4"	8	35	JM2517T23A000	JM2517P23A000
<b>Two-Way – NPT Connections</b>					
JM2221	1/2"	1	50	JM2221T23A000	JM2221P23A000
JM2222	1/2"	2	50	JM2222T23A000	JM2222P23A000
JM2223	1/2"	4	35	JM2223T23A000	JM2223P23A000
JM2322	3/4"	2	50	JM2322T23A000	JM2322P23A000
JM2323	3/4"	4	35	JM2323T23A000	JM2323P23A000
JM2327	3/4"	7.5	35	JM2327T23A000	JM2327P23A000
JM2427	1"	8	35	JM2427T23A000	JM2427P23A000

## Repair Information

If the J Series Electric Zone Valve – Two-Way Spring Open, Modulating Control fails to operate within its specifications, replace the unit. For a replacement valve, contact the nearest Johnson Controls® representative.

**Note:** Actuators and valve bodies can be ordered separately using the actuator and valve code numbers shown. JM Series Modulating Three-Way Electric Zone Valves must be piped in a mixing configuration only.

## Technical Specifications

J Series Electric Zone Valves – Two-Way Spring Open, Modulating Control		
Service <sup>1</sup>	Hot Water Chill Water, and 50/50 Glycol Solutions for HVAC Systems	
Fluid Temperature Limits	Water	32 to 200°F (0 to 93°C)
	Steam	Not rated for steam service
Valve Body Pressure Rating	300 psig (2,067 kPa)	
Leakage	0.01% of Maximum Flow per ANSI/FCI 70-2 Class IV	
Ambient Operating Temperature Limits	32 to 125°F (0 to 52°C)	
Cycle Time	Full Close to Full Open 150 seconds	
Control Signal	"T" Type Actuator	24 VAC, 60 Hz, Three-Wire Floating Control
	"P" Type Actuator	0 to 10 VDC (1 to 9 VDC Actual) Factory Setting, 0 to 5 VDC, 5 to 10 VDC jumper selectable
Control Action	"P" Type Actuator	Factory Setting: Direct Acting Valve opens Port "B" as signal increases. Jumper selectable
Power Requirements	1.6 VA	
Electrical Connection	Terminal Block	
Materials	Body	Brass
	Stem	Brass (Hard Chrome Plated)
	Base Plate and Bearing Plate	Stainless Steel
	Actuator Housing	High Temperature Plastic
	Valve Plug	High Temperature Thermoplastic Rubber
	Stem Seals	Viton™ O-rings

1. Refer to VDI 2035 Standard for recommended proper water treatment.