J Series Electric Zone Valves — Two-Way Spring Open (Normally Open), Modulating Control Catalog Page

2019-10-22

LIT-1900191

Description

Figure 1: JM Series Two-Way Spring-Return Modulating Zone Valve



This electric zone valve with forged brass body offers two-way spring open (normally open), modulating control for hot or chilled water applications.

Refer to the *J Series Electric Zone Valves Product Bulletin (LIT-977282)* for important product application information.

Features

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

Selection chart

Valve	Size, in.	Cv	Closeoff, psig	Actuator	
				Three-wire floating	0 to 10 VDC proportional
				JT13A000	JP13A000
Two-way — sweat connections					
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
Two-way — NPT connections					
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

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Valve	Size, in.	Cv	Closeoff, psig	Actuator	
				Three-wire floating	0 to 10 VDC proportional
				JT13A000	JP13A000
JM2327	3/4	7.5	35	JM2327T23A000	JM2327P23A000
JM2427	1	8	35	JM2427T23A000	JM2427P23A000

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.

Repair information

If the J Series Zone Valve fails to operate within its specifications, replace the valve body, actuator, or entire assembly. For replacement parts, contact the nearest Johnson Controls® representative.

Technical specifications

Table 1: Technical specifications

J Series Electric Zone Valves —Two-Way Spring Open (Normally Open), Modulating Control		
Service[1]		Hot Water, Chilled Water, and 50/50 Glycol Solutions for HVAC Systems
Fluid temperature limits	Water	32°F to 200°F (0°C 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°F to 125°F (0°C 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 VDC to 10 VDC (1 VDC to 9 VDC actual) factory setting,0 VDC to 5 VDC, 5 VDC 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 the VDI 2035 Guideline for recommended proper water treatment.

WARNING

This product is made of copper alloy, which contains lead. The product is therefore not to be used on drinking water.

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⚠ WARNING

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

⚠ WARNING

WARNING: BRASS MAY CONTAIN LEAD

To fulfill our obligations towards Article 33, in accordance to the European REACH Regulation No 1907/2006 EC, we hereby inform you that this article contains the following Substances of Very High Concern mentioned on the Candidate list: Lead

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

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