

J Series Electric Zone Valves — Three-Way Spring Return, On/Off Control

Description

J Series Electric Zone Valves accurately control the flow of saturated steam, hot water, and chilled water through coils and heat exchanges of all types.

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

Features

- forged brass body and hard chrome-plated brass stem
- provides economical control of hot or chilled water for fan coil, baseboard radiator, and VAV reheat applications
- On/Off control from a two-wire thermostat
- 300 psig system operating pressure
- 400 psig static pressure rating
- can be piped for mixing or diverting configuration



Standard Closeoff

- buna-N (standard temperature) or nitrile disk (high temperature) provides tight closeoff
- 1/2 in., 3/4 in., and 1 in. line sizes



High Closeoff

- sweat, NPT, or inverted flare end connections
- actuator can be factory or field installed
- actuator snaps in place for easy removal and assembly during installation

Selection Chart

Note: Three-way valves are shipped from the factory in the normally closed configuration (Port B closed); for normally open configuration, simply turn the valve around during installation.

Valve Model Code Number					Actuator Model Code Number G Style Actuators have Standard Pressure Closeoff H Style Actuators have High Pressure Closeoff			
Standard Temp	High Temp	Size, in.	Cv	Closeoff, psig	Standard Temperature Rating: 200°F (93°C) Fluid, 104°F (40°C) Ambient		High Temperature Rating: 250°F (121°C) Fluid, 15 psig Steam, 169°F (76°C) Ambient	
					24 VAC, 60 Hz	120 VAC, 60 Hz	24 VAC, 60 Hz	120 VAC, 60 Hz
					JG13A020 JH13A020	JG13B020 JH13B020	JG14A020 JH14A020	JG14B020 JH14B020
Sweat Connections — Standard Pressure Closeoff								
JT3213	JS3213	1/2	4.0	25	JT3213G13A020	JT3213G13B020	JS3213G14A020	JS3213G14B020
JT3315	JS3315	3/4	5.0	20	JT3315G13A020	JT3315G13B020	JS3315G14A020	JS3315G14B020
JT3417	JS3417	1	8.0	17	JT3417G13A020	JT3417G13B020	JS3417G14A020	JS3417G14B020
JT3517	JS3517	1-1/4	8.0	17	JT3517G13A020	JT3517G13B020	JS3517G14A020	JS3517G14B020
NPT Connections — Standard Pressure Closeoff								
JT3223	JS3223	1/2	4.0	25	JT3223G13A020	JT3223G13B020	JS3223G14A020	JS3223G14B020
JT3325	JS3325	3/4	5.0	20	JT3325G13A020	JT3325G13B020	JS3325G14A020	JS3325G14B020
JT3427	JS3427	1	8.0	17	JT3427G13A020	JT3427G13B020	JS3427G14A020	JS3427G14B020
Inverted Flare Connections — Standard Pressure Closeoff								
JT3343	JS3343	3/4	4.0	25	JT3343G13A020	JT3343G13B020	JS3343G14A020	JS3343G14B020
Sweat Connections — High Pressure Closeoff								
JT3213	JS3213	1/2	4.0	30	JT3213H13A020	JT3213H13B020	JS3213H14A020	JS3213H14B020
JT3315	JS3315	3/4	5.0	25	JT3315H13A020	JT3315H13B020	JS3315H14A020	JS3315H14B020
JT3417	JS3417	1	8.0	20	JT3417H13A020	JT3417H13B020	JS3417H14A020	JS3417H14B020
JT3517	JS3517	1-1/4	8.0	20	JT3517H13A020	JT3517H13B020	JS3517H14A020	JS3517H14B020
NPT Connections — High Pressure Closeoff								
JT3223	JS3223	1/2	4.0	30	JT3223H13A020	JT3223H13B020	JS3223H14A020	JS3223H14B020
JT3325	JS3325	3/4	5.0	25	JT3325H13A020	JT3325H13B020	JS3325H14A020	JS3325H14B020
JT3427	JS3427	1	8.0	20	JT3427H13A020	JT3427H13B020	JS3427H14A020	JS3427H14B020
Inverted Flare Connections — High Pressure Closeoff								
JT3343	JS3343	3/4	4.0	30	JT3343H13A020	JT3343H13B020	JS3343H14A020	JS3343H14B020

J Series Electric Zone Valves — Three-Way Spring Return, On/Off Control (Continued)

Repair Parts

Inverted Flare Fittings

Code Number	Description	Length, in. (mm)
J647-601	For 1/2 in. (5/8 in. O.D.) Copper Tubing	15/16 (24)
J647-602	For 1/2 in. (5/8 in. O.D.) Copper Tubing	1-11/16 (43)
J647-603	For 1/2 in. (5/8 in. O.D.) Copper Tubing	3 (76)
J647-604	For 3/4 in. (7/8 in. O.D.) Copper Tubing	1-27/32 (47)
J647-605	For 1/2 in. (5/8 in. O.D.) Copper Tubing	1-15/16 (49)
J647-606	For 1 in. (1-1/8 in. O.D.) Copper Tubing	2-3/8 (60)



J647-601 J647-602 J647-603 J647-604 J647-605 J647-606
Inverted Flare Fittings

Technical Specifications

J Series Electric Zone Valves — Three-Way Spring Return, On/Off Control			
Service ¹		Hot Water, Chilled Water, and 50/50 Glycol Solutions for HVAC Systems	
Fluid Temperature Limits	Water	JT Series	32°F to 200°F (0°C to 93°C)
		JS Series	32°F to 250°F (0°C to 121°C)
	Steam	JT Series	Not Rated for Steam Service
		JS Series	15 psig (103 kPa) Saturated Steam
Valve Body Pressure Rating		300 psig (2,067 kPa)	
Leakage		Bubble-Tight Shutoff	
Ambient Operating Temperature Limits	JT Series	32°F to 104°F (0°C to 40°C)	
	JS Series	32°F to 169°F (0°C to 76°C)	
Cycle Time		Power Stroke 9 to 11 Seconds, Spring Return 4 to 5 Seconds	
Control Signal		24 VAC or 120 VAC, 60 Hz, Two-Wire On/Off	
Power Requirements		7 VA	
Electrical Connection		18 in. (457 mm) Wire Leads	
Materials	Body		Brass
	Stem		Brass (Hard Chrome Plated)
	Base Plate and Bearing Plate		Stainless Steel
	Actuator Housing		Stainless Steel
	Actuator Cover		Aluminum
	Valve Paddle	JT Series	Buna-N Rubber
		JS Series	Saturated Nitrile
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.

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: 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