J Series Electric Zone Valves — Two-Way Spring Open (Normally Open), On/Off Control

Description

This electric zone valve with forged brass body offers two-way spring open (normally open), on/off 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

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

Standard Closeoff

Selection Chart

Valve Model Code Number					Actuator Model Code Number G Style Actuators have Standard Pressure Closeoff H Style Actuators have High Pressure Closeoff			
					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	
Standard Temp	High Temp	Size, in.	Cv	Closeoff, psig	24 VAC, 60 Hz JG23A020 JH23A020	120 VAC, 60 Hz JG23B020 JH23B020	24 VAC, 60 Hz JG24A020 JH24A020	120 VAC, 60 Hz JG24B020 JH24B020
Sweat Connections — Standard Pressure Closeoff								
JT2211	**JS2211**	1/2	1.0	60	JT2211G23A020	JT2211G23B020	JS2211G24A020	JS2211G24B020
JT2212	**JS2212**	1/2	2.5	40	JT2212G23A020	JT2212G23B020	JS2212G24A020	JS2212G24B020
JT2213	**JS2213**	1/2	3.5	25	JT2213G23A020	JT2213G23B020	JS2213G24A020	JS2213G24B020
JT2312	**JS2312**	3/4	2.5	40	JT2312G23A020	JT2312G23B020	JS2312G24A020	JS2312G24B020
JT2313	**JS2313**	3/4	3.5	25	JT2313G23A020	JT2313G23B020	JS2313G24A020	JS2313G24B020
JT2417	**JS2417**	1	8.0	17	JT2417G23A020	JT2417G23B020	JS2417G24A020	JS2417G24B020
JT2517	**JS2517**	1-1/4	8.0	17	JT2517G23A020	JT2517G23B020	JS2517G24A020	JS2517G24B020
NPT Connections — Standard Pressure Closeoff								
JT2221	**JS2221**	1/2	1.0	60	JT2221G23A020	JT2221G23B020	JS2221G24A020	JS2221G24B020
JT2222	**JS2222**	1/2	2.5	40	JT2222G23A020	JT2222G23B020	JS2222G24A020	JS2222G24B020
JT2223	**JS2223**	1/2	3.5	25	JT2223G23A020	JT2223G23B020	JS2223G24A020	JS2223G24B020
JT2322	**JS2322**	3/4	2.5	40	JT2322G23A020	JT2322G23B020	JS2322G24A020	JS2322G24B020
JT2323	**JS2323**	3/4	3.5	25	JT2323G23A020	JT2323G23B020	JS2323G24A020	JS2323G24B020
JT2427	**JS2427**	1	8.0	17	JT2427G23A020	JT2427G23B020	JS2427G24A020	JS2427G24B020
Inverted Flare Connections — Standard Pressure Closeoff								
JT2343	**JS2343**	3/4	3.5	25	JT2343G23A020	JT2343G23B020	JS2343G24A020	JS2343G24B020
Sweat Connections — High Pressure Closeoff								
JT2211	**JS2211**	1/2	1.0	75	JT2211H23A020	JT2211H23B020	JS2211H24A020	JS2211H24B020
JT2212	**JS2212**	1/2	2.5	50	JT2212H23A020	JT2212H23B020	JS2212H24A020	JS2212H24B020
JT2213	**JS2213**	1/2	3.5	30	JT2213H23A020	JT2213H23B020	JS2213H24A020	JS2213H24B020
JT2312	**JS2312**	3/4	2.5	50	JT2312H23A020	JT2312H23B020	JS2312H24A020	JS2312H24B020
JT2313	**JS2313**	3/4	3.5	30	JT2313H23A020	JT2313H23B020	JS2313H24A020	JS2313H24B020
JT2417	**JS2417**	1	8.0	20	JT2417H23A020	JT2417H23B020	JS2417H24A020	JS2417H24B020
JT2517	**JS2517**	1-1/4	8.0	20	JT2517H23A020	JT2517H23B020	JS2517H24A020	JS2517H24B020
NPT Connections — High Pressure Closeoff								
JT2221	**JT2221**	1/2	1.0	75	JT2221H23A020	JT2221H23B020	JS2221H24A020	JS2221H24B020
JT2222	**JT2222**	1/2	2.5	50	JT2222H23A020	JT2222H23B020	JS2222H24A020	JS2222H24B020
JT2223	**JT2223**	1/2	3.5	30	JT2223H23A020	JT2223H23B020	JS2223H24A020	JS2223H24B020
JT2322	**JT2322**	3/4	2.5	50	JT2322H23A020	JT2322H23B020	JS2322H24A020	JS2322H24B020
JT2323	**JT2323**	3/4	3.5	30	JT2323H23A020	JT2323H23B020	JS2323H24A020	JS2323H24B020
JT2427	**JT2427**	1	8.0	20	JT2427H23A020	JT2427H23B020	JS2427H24A020	JS2427H24B020
Inverted Flare Connections — High Pressure Closeoff								
JT2343	**JS2343**	3/4	3.5	30	JT2343H23A020	JT2343H23B020	JS2343H24A020	JS2343H24B020

J Series Electric ZoneValves — Two-Way Spring Open (Normally Open), 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 — Two-Way Spring Open (Normally Open), On/Off Control			
Service[1]			Hot Water, Chilled Water, and 50/50 Glycol Solutions for HVAC Systems
Fluid Temperature Limits	**Water**	**JT Series**	32 to 200°F (0 to 93°C)
		JS Series	32 to 250°F (0 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 to 104°F (0 to 40°C)
		JS Series	32 to 169°F (0 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.