

Hydronic Zone Valves

13 & 1300 Series

For High and Low Capacity Applications

Designed for Long Life and Superior Performance

13 Series

The robust construction of a White-Rodgers “13 Series” hydronic zone valve ensures years of reliable operation. Intelligent design enables the zone valve to resist extremely high temperatures while providing a positive closure and even surface wear.

Features:

- Designed for 2-way straight-through positioning, with stainless steel return spring for a fail-safe position
- Valve body and crank arm assemblies made from one-piece cast brass construction
- Durable and precise 14-gauge gears produced by Swiss watch manufacturer
- Recessed “O” ring utilized to provide a positive seal
- EDPM swing-type ball valve resists temperatures up to 230 degrees F
- Powered by electric, synchronous motor for longer life
- Motor features two-position (on-off) control of fluid flow
- Leaflet and screw mounting for easy motor replacement
- Easy motor wires connection
- Manual lever on most valves (except normally open)
- Molded valve cover provides electrical components extra protection from excess moisture
- Several piping options: sweat or NPT bodies, inverted flare, and flare fitting end connections for the standard copper tubing



1300 Series

There are two types of White-Rodgers “1300 Series” zone valves available, 2-wire and 3-wire, for zoning hydronic systems up to 50 PSI. The valves operate quietly and efficiently, providing years of reliable service.

Features:

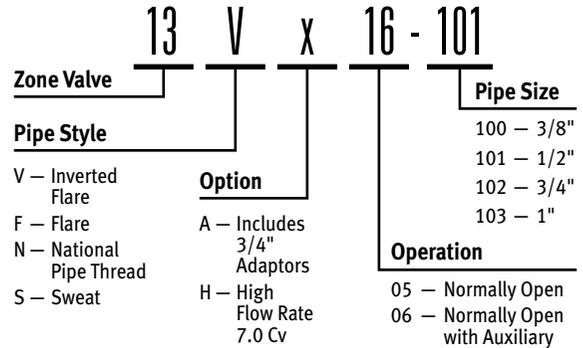
- Two types available: 2-wire and 3-wire
- For zoning hydronic systems up to 50 PSI
- Self-aligning barrel-type valve stem design
- Made of a corrosion-resistant stainless steel
- Uses line pressure to seal off without binding on opening and closing
- Motor can be easily removed without draining the system, meaning less mess
- Automatic recycling manual operator shows valve position at all times
- Screw terminal wiring panel for added convenience
- Built-in auxiliary contacts to control burner or circulator relay



Hydronic Zone Valves

13 Series

Nomenclature



Specifications

24 VAC input power	50/60 Hz
3.5 Cv flow capacity rating	18" leads
20 PSI close-off pressure	Manual lever
142 PSI maximum pressure	

Selection Chart

Model Number	Tubing Size (I.D. Pipe)	Pipe Connection	Auxiliary Switch	De-Energized Position	Replaces
13V16-101	1/2"	Inverted Flare	Yes	NC	V8043E1129 VT234G13A02A
13V06-101	1/2"	Inverted Flare	Yes	NO	VT2343G23A02A
13F15-100	3/8"	Flare	No	NC	V8043A1003 VT2253G13A020
13FA15-100	3/8"	Flare	No	NC	V8043C1033 VT2253G13A0200F
13S16-101	1/2"	Sweat	Yes	NC	V8043E1004 VT2213G13A02A
13S16-102	3/4"	Sweat	Yes	NC	V8043E1012 VT2313G13A02A
13S16-103	1"	Sweat	Yes	NC	V8043E1020 VT2415G13A02A
13SH16-102**	3/4"	Sweat	Yes	NC	
13SH16-103**	1"	Sweat	Yes	NC	V8043E1079 VT2417G13A02A**
13N16-101	1/2"	NPT	Yes	NC	VT2223G23A020
13N16-102	3/4"	NPT	Yes	NC	V8043E1145 VT2323G13A02A
13N16-103	1"	NPT	Yes	NC	VT2427G13A02A
13NH16-102**	3/4"	NPT	Yes	NC	
13NH16-103**	1"	NPT	Yes	NC	

** valves are 7.0 Cv; Honeywell and Erie valves are 8.0 Cv

Replacement Parts

Model No.	Description
F19-0737	Replacement motor and bracket (for all models)
Z12ADINV	Adaptor, inverted flare pipe to 1/2" sweat
Z34ADINV	Adaptor, inverted flare pipe to 3/4" sweat

1300 Series

1311 Series Specifications

3-wire

24 VAC thermostat circuit rating 0.4A
(valve current is 0.4A only during opening or closing. For proper anticipation, select thermostat designed for use with a 3-wire zone valve)

Time cycle: 45 seconds/open; 45 seconds/close

1361 Series Specifications

2-wire

24 VAC thermostat circuit rating 0.2A
(valve current is 0.52A when opening but 0.2A when fully open; therefore set anticipator for 0.2A)

Time cycle: 45 seconds/open; 60 seconds/close

Selection Chart

Model Number	Tubing Size (I.D. Pipe)	Friction Loss Equivalents		ΔP	Max. P	Temp.
		Cv Factor	Ft. of Tubing			
1311/1361 - 102	3/4"	23.5	2-1/2	15 PSI	50 PSI	240°F (116°C)
1311/1361 - 103	1"	37.0	4	15 PSI	50 PSI	240°F (116°C)
1311/1361 - 104	1-1/4"	42.2	7	15 PSI	50 PSI	240°F (116°C)

Replacement Parts

Model No.	Description
F19-0097	Replacement motor for 3-wire zone valve
F19-0104	Replacement motor for 2-wire zone valve