

**THERMAFLO**  
INCORPORATED SINCE 1986

MANUFACTURERS OF STEAM FIRED SPECIALTY EQUIPMENT  
2880 FAIR AVENUE, NEWBERRY, SC 29108 | PHONE: 704-940-1228

## JV V SERIES ELECTRONIC “V BALL” STEAM AND HIGH-TEMPERATURE HOT WATER CONTROL VALVES

The Thermaflo JVV V Ball Series Control Valve is designed for high speed 100% duty for temperature, pressure and level control applications. Specifically designed for steam, high-temperature hot water, and other rigorous control applications.

The equal percentage segmented V inner ball design provides the user with accurate control over a 300:1 flow turndown rangeability. Half the size and weight of any conventional globe control valve, the JVV is simple to install. The high-speed electronic actuator fails closed on power loss and totally eliminates air supply. The fully programmable actuator accepts 0-10V or 4-20 ma input control signal and can be split range controlled when required. The JVV Series high flow CVs reduces valve size, space and overall weight of any application in your piping system.

### JVV V-BALL STANDARD FEATURES

**PRECISION MACHINED 316 STAINLESS  
STEEL CONTROL SHAFT**

**ENGINEERED HIGH TEMPERATURE EXTENDED  
MOUNTING BRACKET**

**HIGH SPEED FAIL SAFE MODULATING ACTUATOR 0-10V  
OR 4-20MA CONTROL SIGNAL INPUT**

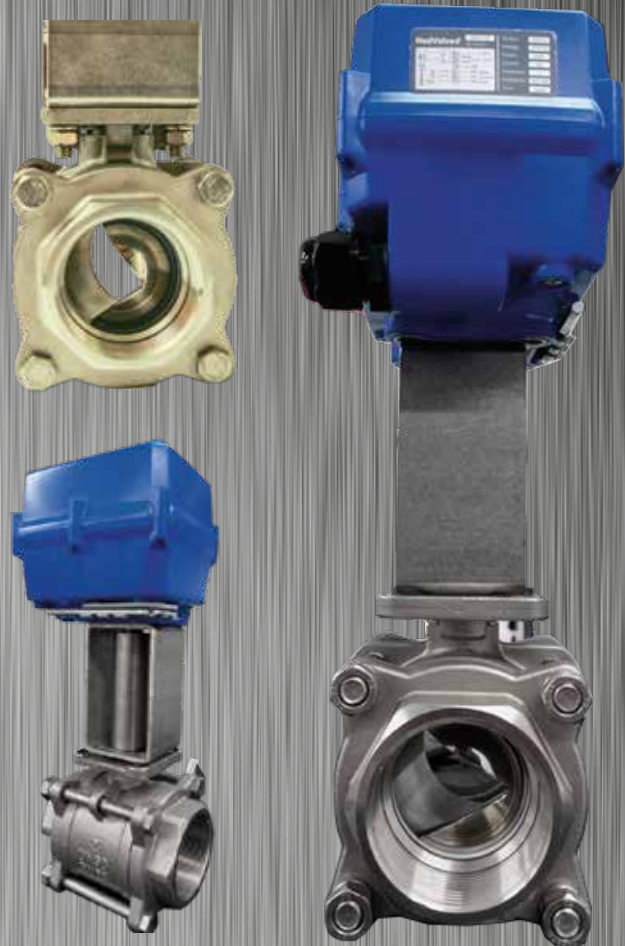
**HIGH TEMP CHEVRON SEAT AND STEM SEALS IN A  
ISO MACHINED BASE MOUNT**

**COMPLETE 316 STAINLESS STEEL  
BODY, BALL, AND STEM CONSTRUCTION**

**BUBBLE TIGHT CLASS VI STEAM AND HOT  
WATER SHUTOFF**

**HIGH V PORT CV FLOW CAPACITIES  
AND EXCELLENT EQUAL PERCENTAGE  
CHARACTERIZED FLOW**

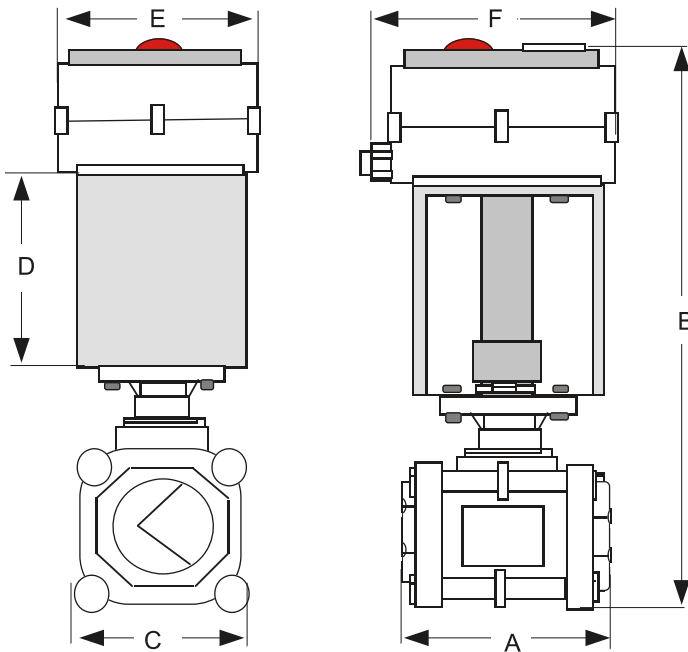
**VALVE POSITION FEEDBACK AND ALARMS**



- MAX OPERATING PRESSURE/TEMPERATURE 450F @ 200 PSIG (HIGHER RATINGS AVAILABLE)
- MAXIMUM AMBIENT TEMPERATURE: 120F
- CUSTOM SLOTTED BALL AND CVS AVAILABLE
- SIZES: 1/2" THRU 3" CONNECTIONS: NPT OR SOCKET WELD UP TO 8" 150/300 LB AVAILABLE
- MATERIALS OF CONSTRUCTION: 316 STAINLESS STEEL BODY, BALL, AND STEAM
- REINFORCED HIGH TEMPERATURE TEFLON SEATS

**SIZING NOTES:**

1. OPTIMUM CONTROL RANGE 30% TO 90%.
2. CV REDUCED 30% WHEN INSTALLING IN A PIPE WHERE VALVE SIZE IS MORE THAN HALF THE PIPE SIZE. EXAMPLE 2" PIPE AND CONTROL VALVE SIZE 3/4"



**DIMENSIONS (Shown in Inches)**

VALVE SIZE	A	B	C	D	E	F
1/2"	2.5	14	2	6	3	4
3/4"	2.9	14	2	6	3	4
1"	3.4	14.5	2.2	6	3	4
1.25"	3.7	14.6	2.9	6	4	6
1.5"	4.3	15	3.2	6	4	6
2"	5.8	15.3	3.5	6	4	6
3"	8	21	9	6	4	6

**NOTE:** Dimensions may change with inlet pressures over 150 psig due to actuator selection. Consult Factory.

3" Valve is 150lb Flanged Connection

**POWER REQUIREMENTS**

**S80** 60w at 24 VDC

Note: The actuator can accept 24VAC Power DC is recommended for 100% duty cycle

**FLOW PERFORMANCE DATA VALVE**  
CV % of Opening 90% Segmented V

SIZE	30%	50%	80%	100%
1/2"	.85	2	8	14
3/4"	1	2.6	10	20
1"	2.7	7.7	24	43
1.25"	3	10.2	34	65
1.5"	3	14	48	90
2"	7.2	25	87	167
3"	8.65	42	161	359

**JVV V BALL SERIES MODEL NUMBER DESIGNATION**

SIVALVE SIZE: 1/2", 3/4", 1", 1.25", 1.5", 2", 3"  
VALVE CONSTRUCTION: S 316 STAINLESS STEEL

ALL TRIMS ARE 316 STAINLESS STEEL BALL AND STEM  
VALVE SEATS RT REINFORCED TEFLON 400F

END CONNECTIONS SE SCREWED ENDS 150LB FLG 3" ONLY

SW SOCKET WELD FAIL POSITION FC FAIL CLOSED

FO FAIL OPEN CONTROL PORT V90 90 DEGREPORT

INPUT SIGNAL

1 0-10 VOLTS 2 4-20 MA

JVV-1" SRT-SE-FCV90-1 NEMA 2 4 (OPTIONAL)