

E2 E3



Control Valves

Two position, spring return control valve


Engineering
GREAT Solutions

E2 E3

This valve is designed for on/off control for heating and cooling applications. A hysteresis synchronous motor drives the valve in one direction; a spring drives the other direction to provide “failsafe” operation. A manual opening lever is provided on all N.C. valves to allow flushing of the system after installation. The valve actuator is removable for easier installation. These valves are not recommended for “open-water” systems. All models are provided with 18” wire leads. For 3-way valves, refer to coil detail #35 in the “Coil Hook-up Design Guide” which shows a N.C., mixing position, hook-up. For N.O. operation, the A & B ports would be reversed.



Key features

- > **Synchronous Motor**
Operates at constant speed
- > **Actuator**
Removable for easy installation
- > **Manual Lever**
Allow flusing of system after installation

Technical description

Application:
Control of flow

Functions:
On/Off Control or A/B

Actuator:
Voltage: 120 or 24 VAC
Power: 6.5 Watts, 7 VA

Stroke Speed:
Power: 9-11 seconds
Spring: 4-5 seconds

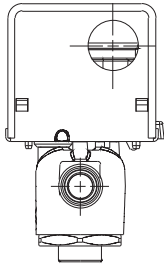
Pressure class:
300 PSI

Temperature:
200° F

Service Media:
Hot & Chilled Water (up to 50% Glycol)

Material:
Body: Forged Brass
Stem/Seat: Nickel-Plated Brass/Brass
Paddle: BUNA-N
Connections: FPT
Actuator: S.S. Base Plate, Aluminum Cover

Product Information / Cv



Size	Model	Type	End Conn.	Max ¹ GPM	Cv	Close-Off ΔP (PSI)				
						STD	OPT ²			
1/2"	E2 - VT2221G13 (-) 020	2-Way N.C.	FPT	2.2	1.0	50	75			
	E2 - VT2222G13 (-) 020			5.6	2.5	30	50			
	E2 - VT2223G13 (-) 020			7.7	3.5	20	30			
	E2 - VT2221G13 (-) 020	2-Way N.O.	FPT	2.2	1.0	50	50			
				E2 - VT2222G13 (-) 020	5.6	2.5	30	30		
				E2 - VT2223G13 (-) 020	7.7	3.5	20	20		
	E3 - VT3221G13 (-) 020	3-Way N.C. & N.O.	FPT	3.2	1.5	50	50			
				E3 - VT3222G13 (-) 020	6.7	3.0	30	30		
				E3 - VT3223G13 (-) 020	8.5	4.0	20	20		
3/4"	E2 - VT2322G13 (-) 020	2-Way N.C.	FPT	5.3	2.5	30	50			
	E2 - VT2323G13 (-) 020			7.4	3.5	20	30			
	E2 - VT2325G13 (-) 020			10.6	5.0	13	20			
	E2 - VT2327G13 (-) 020			14.8	7.0	10	15			
	E2 - VT2322G23 (-) 020	2-Way N.O.	FPT	5.3	2.5	30	30			
				E2 - VT2323G23 (-) 020	7.4	3.5	20	20		
				E2 - VT2325G23 (-) 020	10.6	5.0	13	13		
				E2 - VT2327G23 (-) 020	14.8	7.0	10	10		
	E3 - VT3322G13 (-) 020	3-Way N.C. & N.O.	FPT	6.4	3.0	30	30			
				E3 - VT3323G13 (-) 020	8.5	4.0	20	20		
				E3 - VT3325G13 (-) 020	10.6	5.0	13	13		
				E3 - VT3327G13 (-) 020	14.8	7.0	10	10		
	E2 - VT2427G13 (-) 020	2-Way N.C.	FPT	18.0	8.0	15	25			
				E2 - VT2427G23 (-) 020	2-Way N.O.	FPT	18.0	8.0	15	25
							E3 - VT3427G13 (-) 020	3-Way N.C. & N.O.	FPT	17.0

Notes

(-) denotes Voltage—specify: **A** = 24 VAC or **B** = 120 VAC; **1** - Maximum Flow based on 5 PSI pressure drop for wide open valve; **2** - close-off available with optional actuator.

See dimension drawings on reverse. All weights and dimensions given are in pounds and inches and are subject to change.

Venturi products made from fabricated materials may vary ±1/16 inch per component.

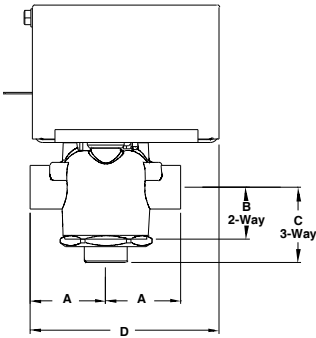
Model Order Designation

1/2" - 2-Way, CU = 2.5, 120 VAC

E2 - VT2222G13B02

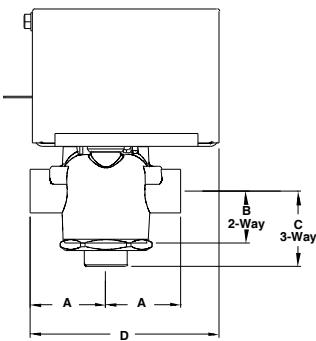
A = 24 Vac, B = 120 VAC
D = 208 Vac, U = 230 VAC

Articles



Nominal Dimensions (Inches) & Weights (Pounds)

Size	Model	Type	Weight	A	B	C	D
1/2"	E2 - VT2221G13 (-) 020	2-Way N.C.	3	1.375	.0875	1.3125	3.375
	E2 - VT2222G13 (-) 020						
	E2 - VT2223G13 (-) 020						
	E2 - VT2221G13 (-) 020	2-Way N.O.					
	E2 - VT2222G13 (-) 020						
	E2 - VT2223G13 (-) 020						
E3 - VT3221G13 (-) 020	3-Way N.C. & N.O.	3					
			E3 - VT3222G13 (-) 020				
			E3 - VT3223G13 (-) 020				



Nominal Dimensions (Inches) & Weights (Pounds) / Cv Rates

Size	Model	Type	Weight	A	B	C	D
3/4"	E2 - VT2322G13 (-) 020	2-Way N.C.	3	1.6875	.0875	1.4375	3.625
	E2 - VT2323G13 (-) 020						
	E2 - VT2325G13 (-) 020						
	E2 - VT2327G13 (-) 020	2-Way N.O.					
	E2 - VT2322G23 (-) 020						
	E2 - VT2323G23 (-) 020						
	E2 - VT2325G23 (-) 020	3-Way N.C. & N.O.					
	E2 - VT2327G23 (-) 020						
	E3 - VT3322G13 (-) 020						
	E3 - VT3323G13 (-) 020	3					
	E3 - VT3325G13 (-) 020						
	E3 - VT3327G13 (-) 020						
1"	E2 - VT2427G13 (-) 020	2-Way N.C.	3				
	E2 - VT2427G23 (-) 020	2-Way N.O.	3				
	E3 - VT3427G13 (-) 020	3-Way N.C. & N.O.	3				

