

## 3-Way Mixing Iron w/VM Motors

## 2-1/2" - 6"

### APPLICATION:

Control of Water; Water & Glycol Solutions to 50%.  
Valves mix two flows together (Converging). Seat Closure ANSI Class III\*

### CONSTRUCTION:

Body: ANSI B16.1 Iron 125lb. Flange or 250lb. Flange  
Trim: Linear, Bronze or 300 Series Stainless Steel  
Stem: 316 Stainless Steel  
Bonnet: Brass  
Packing: Guided Low-Friction TFE V-Ring, Self Adjusting

### TRIM LIMITS(Flowing Differential Pressure):

Brz Trim: Liquids to 40 PSID  
S/S Trim: Liquids to 100 PSID

### BODY PRESSURE-TEMPERATURE RATINGS:

Temp.	125 FLG (ratings are PSIG)	250 FLG (ratings are PSIG)
+32 to 150° F	175	400
350° F	125	280
400° F	-	250

### NOTES:

- 1) Inlet Pressure cannot exceed Body Pressure-Temperature Rating.
- 2) Shut-off PSID is per stated ANSI Shut-off Classification.
- 3) Flowing PSID for water service should be no greater than 2/3 of Inlet Pressure unless verified for absence of cavitation with Warren Valve Sizing Program.

### VMS-25 Power Pack Specifications:

Required for Fail Safe Operation (one VMS-25 can operate two VM1500E or one VM5000E at a time)

Fail Direction: Field Selectable to Close Upper Port or Close Lower Port on Loss of Power

Power Consumption: 24VAC, 40VA  
Construction: Battery w/Circuit Board & Transformer, Components Only

Mounting: Panel Mount  
Approximate LxWxH: 7-1/2" x 5" x 3"

### CONFIGURATIONS:

Select Valve and Actuator Code in Tables:

Valve						VM1500E Actuator 24 VAC Supply			
Cv	Size (IN)	Flng.	Trim	Valve Code	Shut Off PSID	Fail Safe w/VMS-25	Fail Last Position	Approx Timing (SEC)	
						Actuator Code	Actuator Code		
65	2.5	125	BRZ	VA3010CA	51	E016	E017	77	
65	2.5	125	S/S	VA3010CC	51	E016	E017	77	
65	2.5	250	BRZ	VA3010DA	51	E016	E017	77	
65	2.5	250	S/S	VA3010DC	51	E016	E017	77	
85	3	125	BRZ	VA3011CA	33	E016	E017	77	
85	3	125	S/S	VA3011CC	33	E016	E017	77	
85	3	250	BRZ	VA3011DA	33	E016	E017	77	
85	3	250	S/S	VA3011DC	33	E016	E017	77	
190	4	125	BRZ	VA3013CA	16	E016	E017	140	
190	4	125	S/S	VA3013CC	16	E016	E017	140	
190	4	250	BRZ	VA3013DA	16	E016	E017	140	
190	4	250	S/S	VA3013DC	16	E016	E017	140	

Valve						VM5000E Actuator 24 VAC Supply			
Cv	Size (IN)	Flng.	Trim	Valve Code	Shut Off PSID	Fail Safe w/VMS-25	Fail Last Position	Approx Timing (SEC)	
						Actuator Code	Actuator Code		
65	2.5	125	BRZ	VA3010CA	175	E018	E019	57	
65	2.5	125	S/S	VA3010CC	175	E018	E019	57	
65	2.5	250	BRZ	VA3010DA	208	E018	E019	57	
65	2.5	250	S/S	VA3010DC	208	E018	E019	57	
85	3	125	BRZ	VA3011CA	142	E018	E019	57	
85	3	125	S/S	VA3011CC	142	E018	E019	57	
85	3	250	BRZ	VA3011DA	142	E018	E019	57	
85	3	250	S/S	VA3011DC	142	E018	E019	57	
190	4	125	BRZ	VA3013CA	77	E018	E019	105	
190	4	125	S/S	VA3013CC	77	E018	E019	105	
190	4	250	BRZ	VA3013DA	77	E018	E019	105	
190	4	250	S/S	VA3013DC	77	E018	E019	105	
240	5	125	BRZ	VA3014CA	48	E018	E019	105	
240	5	125	S/S	VA3014CC	48	E018	E019	105	
240	5	250	BRZ	VA3014DA	48	E018	E019	105	
240	5	250	S/S	VA3014DC	48	E018	E019	105	
305	6	125	BRZ	VA3015CA	32	E018	E019	105	
305	6	125	S/S	VA3015CC	32	E018	E019	105	
305	6	250	BRZ	VA3015DA	32	E018	E019	105	
305	6	250	S/S	VA3015DC	32	E018	E019	105	

### Actuator Specifications:

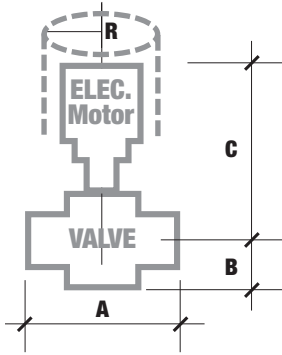
Control Signal: 4-20 mAdc (Factory Setting), 0-20 mAdc, 0-10 Vdc, or 2-10 Vdc, and Floating. Self-Adjusting, Field-Selectable  
Control Action: Increasing Signal Closes Lower Port / Opens Upper Port (Factory Setting) - Reversible  
Power Consumption: VM1500E : 12VA / VM5000E : 25VA  
Timing: See Configuration Tables  
Feedback Signal: 0-10 Vdc or 2-10 Vdc  
Manual Override: Yes  
Construction: Polycarbonate Motor Housing with Steel Linkage and Yoke  
Locations: NEMA Type 2 / IP54 Indoor Only  
Temperature Limits: Ambient... +32F to 122F  
Mounting: Vertical Above Centerline of Valve

\*For additional applications, shut-offs, and products call: 800-922-0085 or visit: [www.WarrenControls.com](http://www.WarrenControls.com)

2-1/2" – 6"

# 3-Way Mixing Iron w/VM Motors

# Electric Motor-Actuated Valves



### ROUGHING DIMENSIONS (Inches):

Component		Dimension by Valve Size (Inches)				
variable		2-1/2	3	4	5	6
A	125 FLG	9	10	13	15-3/4	17-3/4
A	250 FLG	9-5/8	10-3/4	13-5/8	16-5/8	18-5/8
B	125 FLG	7-1/8	8	9-7/8	9-1/4	9-7/8
B	250 FLG	7-3/8	8-3/8	10-1/4	10-3/8	11
C	VM1500E Actuator	20	20-7/8	21-7/8	N/A	N/A
C	VM5000E Actuator	20-3/8	21-1/4	22-1/4	21-1/8	21-7/8
R*	VM1500E Actuator	3-1/4	3-1/4	3-1/4	N/A	N/A
R*	VM5000E Actuator	5	5	5	5	5

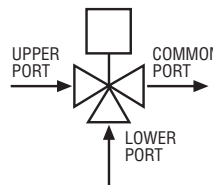
Allow 6 inch clearance above actuator for removal / service.

\*Centerline of Valve to Outside Actuator

### WEIGHTS:

Item	Weight	
Valve Size (in.)	125FLG (LBS.)	250FLG (LBS.)
2-1/2	64	73
3	83	94
4	139	157
5	157	211
6	202	283
Actuator	LBS.	
VM1500E	8-1/2	
VM5000E	22-1/2	
Power Pack	LBS.	
VMS-25	3	

Actual shipping weights may vary.



VA3010CA-E017



VA3013CC-E019

