

Single-Seated Cylinder Balanced Iron w/VM Motors

2-1/2" – 6"

Electric Motor-Actuated Valves

APPLICATION:

Control of Saturated Steam; Water; Water & Glycol Solutions to 50%. Seat Closure ANSI Class III*

CONSTRUCTION:

Body: ANSI B16.1 Iron 125lb. Flange or 250lb. Flange
 Trim: EQ%, Bronze or 300 Series Stainless Steel
 Cylinder Seal: EPDM (BRZ Trim) O-Ring
 Fluoraz 797 (300 SS Trim) O-Ring
 Stem: 316 Stainless Steel
 Bonnet: Brass
 Packing: Guided Low-Friction TFE V-Ring, Self Adjusting

TRIM LIMITS(Flowing Differential Pressure):

Brz Trim: Liquid or Steam to 40 PSID
 S/S Trim: Liquid or Steam 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

CYLINDER SEAL TEMPERATURE LIMITS:

+32 to 300° F (BRZ Trim)
 +32 to 300° F (125 FLG w/300 SS Trim)
 +32 to 400° F (250 FLG w/300 SS Trim)

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 or Open Valve 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"

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 Valve (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 more Details:

VM Motor-Actuator Product Sheet - pg. 85 (BAC Catalog)

CONFIGURATIONS:

Select Valve and Actuator Code in Tables:

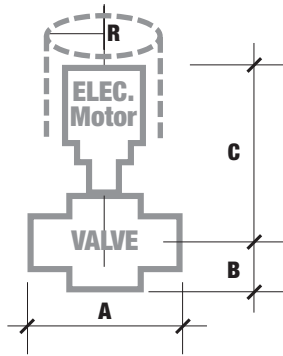
Valve					VM1500E Actuator 24 VAC Supply			
Cv	Size (IN)	Flng.	Trim	Valve Code	Shut Off PSID	Fail Safe w/VMS-25	Fail Last Position	Approx Timing (SEC)
						Actuator Code	Actuator Code	
65	2.5	125	BRZ	VA2310CA	175	E016	E017	77
65	2.5	125	S/S	VA2310CC	175	E016	E017	77
65	2.5	250	BRZ	VA2310DA	346	E016	E017	77
65	2.5	250	S/S	VA2310DC	346	E016	E017	77
90	3	125	BRZ	VA2311CA	175	E016	E017	77
90	3	125	S/S	VA2311CC	175	E016	E017	77
90	3	250	BRZ	VA2311DA	265	E016	E017	77
90	3	250	S/S	VA2311DC	265	E016	E017	77
170	4	125	BRZ	VA2313CA	149	E016	E017	77
170	4	125	S/S	VA2313CC	149	E016	E017	116
170	4	250	BRZ	VA2313DA	149	E016	E017	116
170	4	250	S/S	VA2313DC	149	E016	E017	116
280	5	125	BRZ	VA2314CA	80	E016	E017	116
280	5	125	S/S	VA2314CC	80	E016	E017	116
280	5	250	BRZ	VA2314DA	80	E016	E017	116
280	5	250	S/S	VA2314DC	80	E016	E017	116
360	6	125	BRZ	VA2315CA	23	E016	E017	116
360	6	125	S/S	VA2315CC	23	E016	E017	116
360	6	250	BRZ	VA2315DA	23	E016	E017	116
360	6	250	S/S	VA2315DC	23	E016	E017	116

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	VA2310CA	175	E018	E019	57
65	2.5	125	S/S	VA2310CC	175	E018	E019	57
65	2.5	250	BRZ	VA2310DA	400	E018	E019	57
65	2.5	250	S/S	VA2310DC	400	E018	E019	57
90	3	125	BRZ	VA2311CA	175	E018	E019	57
90	3	125	S/S	VA2311CC	175	E018	E019	57
90	3	250	BRZ	VA2311DA	400	E018	E019	57
90	3	250	S/S	VA2311DC	400	E018	E019	57
170	4	125	BRZ	VA2313CA	175	E018	E019	86
170	4	125	S/S	VA2313CC	175	E018	E019	86
170	4	250	BRZ	VA2313DA	400	E018	E019	86
170	4	250	S/S	VA2313DC	400	E018	E019	86
280	5	125	BRZ	VA2314CA	175	E018	E019	86
280	5	125	S/S	VA2314CC	175	E018	E019	86
280	5	250	BRZ	VA2314DA	400	E018	E019	86
280	5	250	S/S	VA2314DC	400	E018	E019	86
360	6	125	BRZ	VA2315CA	175	E018	E019	86
360	6	125	S/S	VA2315CC	175	E018	E019	86
360	6	250	BRZ	VA2315DA	400	E018	E019	86
360	6	250	S/S	VA2315DC	400	E018	E019	86

Electric Motor-Actuated Valves

2-1/2" – 6"

Single-Seated Cylinder Balanced Iron w/VM Motors



ROUGHING DIMENSIONS (IN):

Component		Dimension by Valve Size (IN)				
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		4-3/4	5-3/8	6-3/8	5-3/4	6-1/2
C	VM1500E Actuator	20-1/2	21-3/8	22-1/2	23	23-5/8
C	VM5000E Actuator	20-7/8	21-3/4	22-7/8	23-3/8	24
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	
	125FLG (LBS)	250FLG (LBS)
Valve Size (IN)		
2-1/2	55	66
3	75	80
4	127	139
5	149	181
6	197	256
Actuator	LBS	
VM1500E	8-1/2	
VM5000E	22-1/2	
Power Pack	LBS	
VMS-25	3	

Actual shipping weights may vary.



VA2310CA-E016



VA2315CC-E018

