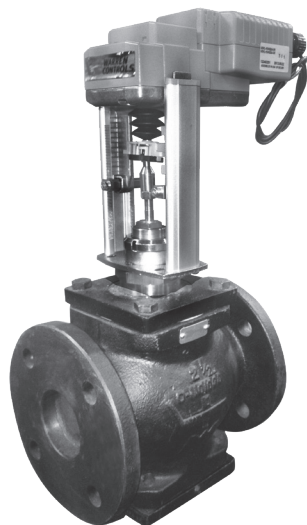
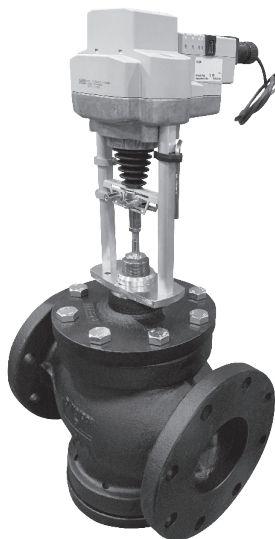


ELECTRICALLY ACTUATED

SINGLE SEATED IRON - 2 1/2" - 4"



VA2010CC-E025



VA2013CC-E029

NOTES:

- 1) Inlet Pressure cannot exceed Body Pressure-Temperature Rating.
- 2) Shut-off pressures listed are with respect to stated ANSI Leakage Classes.
- 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.

CRN
REGISTERED

► APPLICATION:

Control of Saturated Steam; Water; Water & Glycol Solutions to 60%. Seat Leakage Class ANSI III & IV.

► VALVE CONSTRUCTION:

Body: ANSI B16.1 Iron 125lb. Flange or 250lb. Flange
Trim: EQ%, Bronze or 300 Series Stainless Steel
Stem: 316 Stainless Steel
Bonnet: Brass
Packing: EPDM Lip Packing (+20 to 350°F) Standard
(EPDM is **not** suitable for use with oils, hydrocarbons, or acids.)
PTFE V-Ring, (+60 to 350°F) Optional, must be specified on order
Agency Approval: CRN # CSA - OC20496 (Excludes 250# Type 22/32)

► TRIM LIMITS (Flowing Differential Pressure):

Brz Trim: Liquid or Steam to 40 PSID
S/S Trim: Liquid or Steam 100 PSID

► ACTUATOR SPECIFICATIONS:

Control Signal: 2-10 Vdc
(4-20 mAdc with 500 ohm resistor Kit KR500-supplied with motor)
Control Action, Loss of Signal: Increasing Signal Opens Valve, Loss of Signal Closes Valve
(Default Setting)
Reversible with Switch. Can be specified when ordering.

Feedback Signal: 2-10 Vdc

Power Supply: 24 VAC/DC
Loss of Power: **E029** (FAIL LAST POSITION)
E031 (E029 w/ VMS-50 BCM, FAIL SAFE TO LOSS OF SIGNAL POSITION)
E026 (ELECTRONIC FAIL SAFE) Fail Closed (Default Setting)
Reversible with Switch. Can be specified when ordering.

Power Consumption

Running: **E026** 5W; **E029** 6W;
E031 Battery charging 12.84W; Battery charged 7.2W
Holding: **E026** 2W; **E029** 1.5W;
E031 Battery charging 8.34W; Battery charged 2.7W;

Transformer sizing: **E026** 9.5VA; **E029** 11VA;
(24VAC Class 2) **E031** N/A

Switching Power Supply **E031** 24Vdc 2.0A

Timing: See Configuration Tables

Manual Override: Hex crank (supplied with actuator)

Construction: Aluminum Die Cast and Plastic Housing
Locations: NEMA Type 2 / IP54, UL enclosure type 2

Temperature Limits: +32°F to 122°F Ambient

Mounting: Vertical above centerline of valve

Safety Agency Listing: CE, cULus

► VMS-50 BCM (BACK-UP CONTROL MODULE) SPECIFICATIONS:

Required for Fail Safe Operation with fail last position (Actuators E024 & E029)
(One VMS-50BCM can operate one, two or three actuators at a time)

The E031 includes a VMS-50 BCM. The VMS-50 BCM does not include a VMS-50 PS.

Fail Direction: Fail Safe to Loss of Signal Position

Power Requirement: 24 Vdc 2.0 A from Separate External Switching Power Supply

Power Output: 24 Vdc 48W Total

Construction: Battery w/Circuit Board & Transformer in the Nema 4x Enclosure

Mounting: Wall Mount

Dimensions: 8.75" (W) x 6.97" (H) x 5.19" (D) (See page 34)

Safety Agency Listing: Not Listed

► VMS-50 PS (SWITCHING POWER SUPPLY) SPECIFICATIONS:

Required to supply 24Vdc power to the VMS-50 BCM Back-up Control Module
The VMS-50 BCM does not include a VMS-50 PS.

Input: 115 VAC 50/60 Hz 1.5A

Power Output: 24 Vdc 2.0 A

Input Connector: Three Pin Input Plug

Construction: Molded Plastic

Dimensions: 4.31" (L) x 2.16" (W) x 1.62" (H)

Safety Agency Listing: UL Listed

Note: If the building already has a 24 Vdc circuit rated at or above 2.0 Amps that is available for use with the VMS-50 BCM, then the VMS-50 PS is not required.

► **ACTUATOR & VALVE CONFIGURATIONS:** Select Valve & Actuator Code in Tables:

Fail Safe					ACTUATOR CODE E026			
Cv	Size (IN)	FLNG	Trim	Valve Code	SHUT-OFF (PSID)		Max Timing (SEC)	
					CL III	CL IV	Motor	Fail Safe
65	2.5	125	BRZ	VA2010CA	71	55	90	35
65	2.5	125	S/S	VA2010CC	71	55	90	35
65	2.5	250	BRZ	VA2010DA	71	55	90	35
65	2.5	250	S/S	VA2010DC	71	55	90	35
90	3	125	BRZ	VA2011CA	47	34	90	35
90	3	125	S/S	VA2011CC	47	34	90	35
90	3	250	BRZ	VA2011DA	47	34	90	35
90	3	250	S/S	VA2011DC	47	34	90	35

Fail Last Position/ Fail Safe					ACTUATOR CODE E029/E031				
Cv	Size (IN)	FLNG	Trim	Valve Code	Fail Last Position (Actuator Code)	Fail Safe w/VMS50 (Actuator Code)	SHUT-OFF (PSID)		Max Timing (SEC)
							CL III	CL IV	Motor
65	2.5	125	BRZ	VA2010CA	E029	E031	175	170	90
65	2.5	125	S/S	VA2010CC	E029	E031	175	170	90
65	2.5	250	BRZ	VA2010DA	E029	E031	186	170	90
65	2.5	250	S/S	VA2010DC	E029	E031	186	170	90
90	3	125	BRZ	VA2011CA	E029	E031	127	113	90
90	3	125	S/S	VA2011CC	E029	E031	127	113	90
90	3	250	BRZ	VA2011DA	E029	E031	127	113	90
90	3	250	S/S	VA2011DC	E029	E031	127	113	90
170	4	125	BRZ	VA2013CA	E029	E031	69	59	90
170	4	125	S/S	VA2013CC	E029	E031	69	59	90
170	4	250	BRZ	VA2013DA	E029	E031	69	59	90
170	4	250	S/S	VA2013DC	E029	E031	69	59	90

ACTUATED ASSEMBLY BODY PRESSURE TEMPERATURE RATINGS

TEMP.	125 FLG	250 FLG
+20 to 150° F	175	400
350° F	125	280

Ratings are PSIG
Pressure boundary meets ANSI B16.1

WEIGHTS

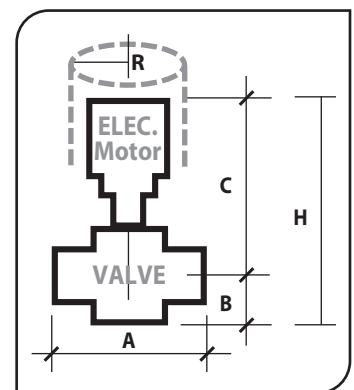
ITEM	WEIGHT (LBS)	
	VALVE SIZE (IN)	125 FLG
2-1/2	55	64
3	72	77
4	119	131
ACTUATOR	LBS	
E026	8-1/2	
E029/E031	8-1/2	
BCM	LBS	
VMS-50	4-1/2	

Actual shipping weights may vary.

► **Dimensions (IN):**

Component	Variable	Dimension by Valve Size (IN)		
		2-1/2	3	4
A	125 FLG	9	10	13
A	250 FLG	9-5/8	10-3/4	13-5/8
B		4-3/4	5-3/8	6-3/8
C	E026/E029/E031	17-3/4	18-5/8	19-5/8
H	E026/E029/E031	22-1/2	24	26
R*	E026	8-3/4	8-3/4	-
R*	E029/E031	7-1/2	7-1/2	7-1/2

*Center line of Valve to Outside Actuator



Allow 6 inch clearance above actuator for removal / service.