

PNEUMATICALLY ACTUATED

3-WAY MIXING IRON 2-1/2" - 8"



VA3010CA-D003

► APPLICATION:

Control of Water; Water and Glycol Solutions to 60%. Valves mix 2 flows together (Converging).
Seat Leakage ANSI Class III

► VALVE 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: 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: Liquids to 40 PSID
S/S Trim: Liquids to 100 PSID

► CONTROL ACTION:

Increasing Signal Closes Lower Port/Opens Upper Port ; Operating Range may differ from Signal Range,
Use a Positioner to Match Ranges

► POSITIONER SPECIFICATIONS:

42 POSITIONER SPECIFICATIONS:

Control Signal: 3-15 PSIG (Factory Setting)
Adjustable/Non-Reversible
Air Supply/Consumption: 20 PSIG/Approx 0.012 SCFM

760P POSITIONER SPECIFICATIONS:

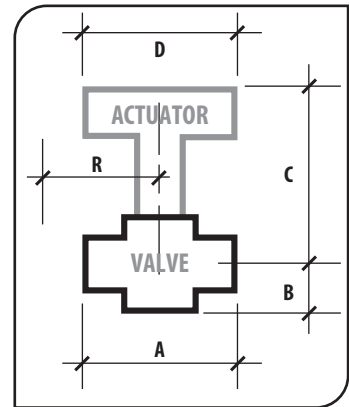
Control Signal: 3-15 PSIG (Factory Setting)
Adjustable/Reversible
Air Supply/Consumption: 20 PSIG/Approx 0.020 SCFM



VA3017CD-D032

► Dimensions (IN):

Component		Dimension by Valve Size (IN)					
Variable		2-1/2	3	4	5	6	8
A	125 FLG	9	10	13	15-3/4	17-3/4	21-3/8
A	250 FLG	9-5/8	10-3/4	13-5/8	16-5/8	18-5/8	22-3/8
B	125 FLG	7-1/16	7-15/16	9-7/8	9-1/4	9-7/8	14-1/2
B	250 FLG	7-3/8	8-5/16	10-3/16	10-3/8	11	14-1/2
C	50 Actuator	17-7/8	18-3/4	N/A	N/A	N/A	N/A
C	84 Actuator	21-1/4	22-1/8	23-1/8	22	22-3/4	N/A
C	115 Actuator	33-1/2	34-1/8	35-1/8	34	34-3/4	36-3/4
D	50 Actuator	10-1/2	10-1/2	N/A	N/A	N/A	N/A
D	84 Actuator	13-7/8	13-7/8	13-7/8	13-7/8	13-7/8	N/A
D	115 Actuator	16-3/4	16-3/4	16-3/4	16-3/4	16-3/4	16-3/4
R*	50 w/42	7-1/2	7-1/2	N/A	N/A	N/A	N/A
R*	84 w/42	9	9	9	9	9	N/A
R*	84 w/760P	8-1/8	8-1/8	8-1/8	8-1/8	8-1/8	N/A
R*	115 w/760P	11-1/4	11-1/4	11-1/4	11-1/4	11-1/4	11-1/4



Allow 4-3/4 inch clearance above actuator for removal / service (50 & 84).
Allow 6-1/8 inch clearance above actuator for removal / service (115).
*Center line of Actuator to Outside Point of Positioner



VA3013CC-D017

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.

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

Valve						50 Actuator 20 PSIG Air Supply 50		
Cv	Size (IN)	Fling	Trim	Valve Code	ALL RANGES			
					8-13 PSIG Spring Range Actuator Code	w/42 Positioner Actuator Code	SHUT OFF PSID Class III	
69	2.5	125	BRZ	VA3010CA	D001	D003	45	
69	2.5	125	S/S	VA3010CC	D001	D003	45	
69	2.5	250	BRZ	VA3010DA	D001	D003	45	
69	2.5	250	S/S	VA3010DC	D001	D003	45	
86	3	125	BRZ	VA3011CA	D001	D003	29	
86	3	125	S/S	VA3011CC	D001	D003	29	
86	3	250	BRZ	VA3011DA	D001	D003	29	
86	3	250	S/S	VA3011DC	D001	D003	29	

50 ACTUATOR SPECIFICATIONS:
 Effective Area: 50 Square Inches
 Construction: Aluminum Yoke and Diaphragm Chamber with Neoprene Diaphragm.
 Mounting: Vertical Above Valve

Shut-off values are based on 0 PSIG air pressure to the actuator when the upper port is closed and 20 PSIG air pressure to the actuator when the lower port is closed.

Valve						84 Actuator 20 PSIG Air Supply 84				
Cv	Size (IN)	Fling	Trim	Valve Code	3-15 PSIG SPRING RANGE		ALL OTHER RANGES			
					Actuator Code	SHUT OFF PSID Class III	9-15 PSIG Spring Range Actuator Code	w/42 Positioner Actuator Code	w/760 Positioner Actuator Code	SHUT OFF PSID Class III
69	2.5	125	BRZ	VA3010CA	D004	25	D008	D012	D016	59
69	2.5	125	S/S	VA3010CC	D004	25	D008	D012	D016	59
69	2.5	250	BRZ	VA3010DA	D004	25	D008	D012	D016	59
69	2.5	250	S/S	VA3010DC	D004	25	D008	D012	D016	59
86	3	125	BRZ	VA3011CA	D004	15	D008	D012	D016	39
86	3	125	S/S	VA3011CC	D004	15	D008	D012	D016	39
86	3	250	BRZ	VA3011DA	D004	15	D008	D012	D016	39
86	3	250	S/S	VA3011DC	D004	15	D008	D012	D016	39
156	4	125	BRZ	VA3013CA	D005	6	D009	D013	D017	19
156	4	125	S/S	VA3013CC	D005	6	D009	D013	D017	19
156	4	250	BRZ	VA3013DA	D005	6	D009	D013	D017	19
156	4	250	S/S	VA3013DC	D005	6	D009	D013	D017	19
270	5	125	BRZ	VA3014CA	-	0	D009	D013	D017	11
270	5	125	S/S	VA3014CC	-	0	D009	D013	D017	11
270	5	250	BRZ	VA3014DA	-	0	D009	D013	D017	11
270	5	250	S/S	VA3014DC	-	0	D009	D013	D017	11
347	6	125	BRZ	VA3015CA	-	0	D009	D013	D017	6
347	6	125	S/S	VA3015CC	-	0	D009	D013	D017	6
347	6	250	BRZ	VA3015DA	-	0	D009	D013	D017	6
347	6	250	S/S	VA3015DC	-	0	D009	D013	D017	6

Valve						115 Actuator 20 PSIG Air Supply 115				
Cv	Size (IN)	Fling	Trim	Valve Code	3-15 PSIG SPRING RANGE		ALL OTHER RANGES			
					Actuator Code	SHUT OFF PSID Class III	9-15 PSIG Spring Range Actuator Code	w/760 Positioner Actuator Code	SHUT OFF PSID Class III	
69	2.5	125	S/S	VA3010CD	D018	44	D024	D030	91	
69	2.5	250	S/S	VA3010DD	D018	44	D024	D030	91	
86	3	125	S/S	VA3011CD	D018	28	D024	D030	61	
86	3	250	S/S	VA3011DD	D018	28	D024	D030	61	
156	4	125	S/S	VA3013CD	D019	13	D025	D031	32	
156	4	250	S/S	VA3013DD	D019	13	D025	D031	32	
270	5	125	S/S	VA3014CD	D019	7	D025	D031	19	
270	5	250	S/S	VA3014DD	D019	7	D025	D031	19	
347	6	125	S/S	VA3015CD	-	0	D025	D031	12	
347	6	250	S/S	VA3015DD	-	0	D025	D031	12	
590	8	125	S/S	VA3017FD	-	0	D026	D032	4	
590	8	250	S/S	VA3017GD	-	0	D026	D032	4	

ACTUATED ASSEMBLY BODY PRESSURE TEMPERATURE RATINGS

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

WEIGHTS

ITEM	WEIGHT (LBS)	
VALVE SIZE	125 FLG	250 FLG
2-1/2"	64	73
3"	83	94
4"	139	157
5"	157	211
6"	202	283
8"	CF	CF
ACTUATOR	LBS	
50	13	
84	48-1/2	
115	84	
POSITIONER	LBS	
42	1	
760P	8	

Actual shipping weights may vary.
 CF = Consult Factory

84 ACTUATOR SPECIFICATIONS:
 Effective Area: 84 Square Inches
 Construction: Acrylic Enamel Coated Iron Yoke and Steel Diaphragm Chamber with Buna-N Diaphragm
 Mounting: Vertical Above Valve

115 ACTUATOR SPECIFICATIONS:
 Effective Area: 115 Square Inches
 Construction: Acrylic Enamel Coated Aluminum Yoke and Steel Diaphragm Chamber with Buna-N Diaphragm
 Mounting: Vertical Above Valve

