

PNEUMATICALLY ACTUATED

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



VA3210CA-D003



VA3213CA-D016



VA3217CB-D031

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.
- 4) The difference between the upper port and the lower port pressure must not exceed 50 PSID.

► APPLICATION:

Control of Water; Water and Glycol Solutions to 60%. Valves divert one flow into two directions (Diverting). Seat Leakage ANSI Class II.

► 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
 O-Ring: EPR +20 to 300°F (2-1/2 thru 5 in); +20 to 150°F (6 & 8 in)
 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:

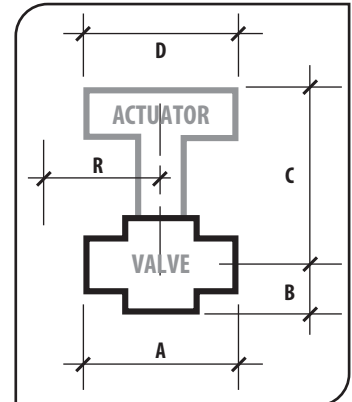
Control Signal: 3-15 PSIG (Factory Setting)
 Adjustable/Non-Reversible
 Air Supply/Consumption: 20 PSIG/Approx 0.012 SCFM

760P POSITIONER SPECIFICATIONS:

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

► Dimensions (IN):

Component	Dimension by Valve Size (IN)						
Variable	2-1/2	3	4	5	6	8	
A	125 FLG	9	10	13	12	14-1/8	16-1/4
A	250 FLG	9-5/8	10-3/4	13-5/8	12-7/8	14-1/2	16-1/4
B	125 FLG	7-1/16	7-15/16	9-7/8	10-1/2	11-1/16	11-13/16
B	250 FLG	7-3/8	8-5/16	10-3/16	10-15/16	11-1/2	12-5/16
C	50 Actuator	17-7/8	18-3/4	19-1/2	N/A	N/A	N/A
C	84 Actuator	21-1/4	22-1/8	22-7/8	23-1/2	24-1/8	N/A
C	115 Actuator	N/A	N/A	N/A	N/A	37-1/4	37-5/8
D	50 Actuator	10-1/2	10-1/2	10-1/2	N/A	N/A	N/A
D	84 Actuator	13-7/8	13-7/8	13-7/8	13-7/8	N/A	N/A
D	115 Actuator	N/A	N/A	N/A	N/A	16-3/4	16-3/4
R*	50 w/42	7-1/2	7-1/2	7-1/2	N/A	N/A	N/A
R*	84 w/42	9	9	9	9	N/A	N/A
R*	84 w/760P	8-1/8	8-1/8	8-1/8	8-1/8	N/A	N/A
R*	115 w/760P	N/A	N/A	N/A	N/A	11-1/4	11-1/4



Allow 4-5/8 inch clearance above actuator for removal / service (50 & 84).
 Allow 5-1/8 inch clearance above actuator for removal / service (115).
 *Center line of Actuator to Outside Point of Positioner

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

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

Valve					50 Actuator 20 PSIG Air Supply 50		
					ALL RANGES		
Cv	Size (IN)	Flng	Trim	Valve Code	8-13 PSIG Spring Range Actuator Code	w/42 Positioner Actuator Code	SHUT OFF PSID
							Class II
68	2.5	125	BRZ	VA3210CA	D001	D003	100
68	2.5	125	S/S	VA3210CC	D001	D003	100
68	2.5	250	BRZ	VA3210DA	D001	D003	100
68	2.5	250	S/S	VA3210DC	D001	D003	100
85	3	125	BRZ	VA3211CA	D001	D003	100
85	3	125	S/S	VA3211CC	D001	D003	100
85	3	250	BRZ	VA3211DA	D001	D003	100
85	3	250	S/S	VA3211DC	D001	D003	100
160	4	125	BRZ	VA3213CA	D001	D003	100
160	4	125	S/S	VA3213CC	D001	D003	100
160	4	250	BRZ	VA3213DA	D001	D003	100
160	4	250	S/S	VA3213DC	D001	D003	100

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.

ACTUATED ASSEMBLY BODY PRESSURE TEMPERATURE RATINGS

TEMP.	125 FLG (PSIG)	250 FLG (PSIG)
+20 to 150° F	175	400
300° F	140	310

Valve					84 Actuator 20 PSIG Air Supply 84			
					ALL RANGES			
Cv	Size (IN)	Flng	Trim	Valve Code	9-15 PSIG Spring Range Actuator Code	w/42 Positioner Actuator Code	w/760 Positioner Actuator Code	SHUT OFF PSID
								Class II
68	2.5	125	BRZ	VA3210CA	D008	D012	D016	125
68	2.5	125	S/S	VA3210CC	D008	D012	D016	125
68	2.5	250	BRZ	VA3210DA	D008	D012	D016	125
68	2.5	250	S/S	VA3210DC	D008	D012	D016	125
85	3	125	BRZ	VA3211CA	D008	D012	D016	125
85	3	125	S/S	VA3211CC	D008	D012	D016	125
85	3	250	BRZ	VA3211DA	D008	D012	D016	125
85	3	250	S/S	VA3211DC	D008	D012	D016	125
160	4	125	BRZ	VA3213CA	D008	D012	D016	125
160	4	125	S/S	VA3213CC	D008	D012	D016	125
160	4	250	BRZ	VA3213DA	D008	D012	D016	125
160	4	250	S/S	VA3213DC	D008	D012	D016	125
195	5	125	BRZ	VA3214CA	D009	D013	D017	125
195	5	125	S/S	VA3214CC	D009	D013	D017	125
195	5	250	BRZ	VA3214DA	D009	D013	D017	125
195	5	250	S/S	VA3214DC	D009	D013	D017	125

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

Valve					115 Actuator 20 PSIG Air Supply 115		
					ALL RANGES		
Cv	Size (IN)	Flng	Trim	Valve Code	9-15 PSIG Spring Range Actuator Code	w/760 Positioner Actuator Code	SHUT OFF PSID
							Class II
270	6	125	BRZ	VA3215CB	D025	D031	125
270	6	125	S/S	VA3215CD	D025	D031	125
270	6	250	BRZ	VA3215DB	D025	D031	125
270	6	250	S/S	VA3215DD	D025	D031	125
425	8	125	BRZ	VA3217CB	D025	D031	125

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.

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

