# DOUBLE SEATED BALANCED IRON (NORMALLY OPEN) 2-1/2" - 10"

VA2210CA-D002

VA2214CC-D011

## ▸ APPLICATION:

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

## ▸ 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 350ºF) Standard<br>(EPDM is **not** suitable for use with oils, hydrocarbons, or acids.)<br>PTFE V-Ring, (+60 to 350ºF) Optional, must be specified on order |
| Agency Approval: | CRN # CSA - OC20496 (Excludes 250# Type 22/32) |

## ▸ TRIM LIMITS (Flowing Differential Pressure):

| | |
|---|---|
| Brz Trim: | Liquids or Steam to 40 PSID |
| S/S Trim: | Liquids or Steam 100 PSID |

## ▸ CONTROL ACTION:

Increasing Signal Closes Valve; Operating Range may differ from Signal Range, Use a Positioner to Match Ranges

## ▸ POSITIONER SPECIFICATIONS:

### 42 POSITIONER SPECIFICATIONS:

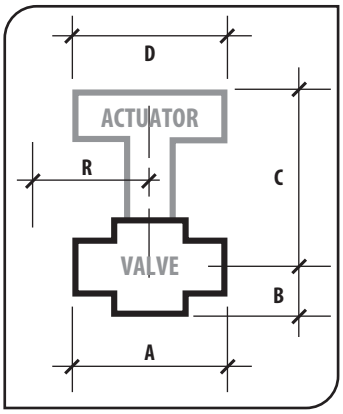
| | |
|---|---|
| Control Signal: | 3-15 PSIG (Factory Setting)<br>Adjustable/Non-Reversible |
| Air Supply/Consumption: | 20 PSIG/Approx 0.012 SCFM |

### 760P POSITIONER SPECIFICATIONS:

| | |
|---|---|
| Control Signal: | 3-15 PSIG (Factory Setting)<br>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 | 10 |
| A | 125 FLG | 7-3/4 | 9 | 11-3/8 | 12 | 14-1/8 | 16-1/4 | 20 |
| A | 250 FLG | 8-3/8 | 9-3/4 | 12 | 12-7/8 | 14-1/2 | 16-1/4 | 21-3/8 |
| B | | 4-1/8 | 4-3/8 | 5 | 6-7/8 | 7-5/8 | 8-7/8 | 10-7/8 |
| C | 50 Actuator | 17-1/2 | 17-3/4 | 19-1/4 | N/A | N/A | N/A | N/A |
| C | 84 Actuator | 20-7/8 | 21-1/8 | 22-5/8 | 23-5/8 | 24-1/2 | 25-5/8 | 27-1/4 |
| D | 50 Actuator | 10-1/2 | 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 | 13-7/8 | 13-7/8 |
| R* | 50 w/42 | 7-1/2 | 7-1/2 | 7-1/2 | N/A | N/A | N/A | N/A |
| R* | 84 w/42 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| R* | 84 w/760P | 8-1/8 | 8-1/8 | 8-1/8 | 8-1/8 | 8-1/8 | 8-1/8 | 8-1/8 |




Allow 4-7/8 inch clearance above actuator for removal / service (50 & 84).
*Center line of Actuator to Outside Point of Positioner

**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.

# DOUBLE SEATED BALANCED IRON (NORMALLY OPEN) 2-1/2" - 10"

## ▸ 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 | 3-8 PSIG Spring Range Actuator Code | w/42 Positioner Actuator Code | SHUT OFF PSID Class III |
| 70 | 2.5 | 125 | BRZ | VA2210CA | D000 | D002 | 100 |
| 70 | 2.5 | 125 | S/S | VA2210CC | D000 | D002 | 100 |
| 70 | 2.5 | 250 | BRZ | VA2210DA | D000 | D002 | 100 |
| 70 | 2.5 | 250 | S/S | VA2210DC | D000 | D002 | 100 |
| 100 | 3 | 125 | BRZ | VA2211CA | D000 | D002 | 100 |
| 100 | 3 | 125 | S/S | VA2211CC | D000 | D002 | 100 |
| 100 | 3 | 250 | BRZ | VA2211DA | D000 | D002 | 100 |
| 100 | 3 | 250 | S/S | VA2211DC | D000 | D002 | 100 |
| 200 | 4 | 125 | BRZ | VA2213CA | D000 | D002 | 100 |
| 200 | 4 | 125 | S/S | VA2213CC | D000 | D002 | 100 |
| 200 | 4 | 250 | BRZ | VA2213DA | D000 | D002 | 100 |
| 200 | 4 | 250 | S/S | VA2213DC | D000 | D002 | 100 |

**Shut-off values are based on 20 PSIG air pressure to the actuator when the valve is closed.**

### 50 ACTUATOR SPECIFICATIONS:

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

| Valve | | | | | 84 Actuator 20 PSIG Air Supply 84 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3-15 PSIG SPRING RANGE | | ALL OTHER RANGES | | | |
| Cv | Size (IN) | Flng | Trim | Valve Code | Actuator Code | SHUT OFF PSID Class III | 3-9 PSIG Spring Range Actuator Code | w/42 Positioner Actuator Code | w/760 Positioner Actuator Code | SHUT OFF PSID Class III |
| 70 | 2.5 | 125 | BRZ | VA2210CA | D004 | 175 | D006 | D010 | D014 | 175 |
| 70 | 2.5 | 125 | S/S | VA2210CC | D004 | 175 | D006 | D010 | D014 | 175 |
| 70 | 2.5 | 250 | BRZ | VA2210DA | D004 | 400 | D006 | D010 | D014 | 400 |
| 70 | 2.5 | 250 | S/S | VA2210DC | D004 | 400 | D006 | D010 | D014 | 400 |
| 100 | 3 | 125 | BRZ | VA2211CA | D004 | 175 | D006 | D010 | D014 | 175 |
| 100 | 3 | 125 | S/S | VA2211CC | D004 | 175 | D006 | D010 | D014 | 175 |
| 100 | 3 | 250 | BRZ | VA2211DA | D004 | 400 | D006 | D010 | D014 | 400 |
| 100 | 3 | 250 | S/S | VA2211DC | D004 | 400 | D006 | D010 | D014 | 400 |
| 200 | 4 | 125 | BRZ | VA2213CA | D004 | 175 | D006 | D010 | D014 | 175 |
| 200 | 4 | 125 | S/S | VA2213CC | D004 | 175 | D006 | D010 | D014 | 175 |
| 200 | 4 | 250 | BRZ | VA2213DA | D004 | 312 | D006 | D010 | D014 | 400 |
| 200 | 4 | 250 | S/S | VA2213DC | D004 | 312 | D006 | D010 | D014 | 400 |
| 260 | 5 | 125 | BRZ | VA2214CA | D005 | 175 | D007 | D011 | D015 | 175 |
| 260 | 5 | 125 | S/S | VA2214CC | D005 | 175 | D007 | D011 | D015 | 175 |
| 260 | 5 | 250 | BRZ | VA2214DA | D005 | 202 | D007 | D011 | D015 | 400 |
| 260 | 5 | 250 | S/S | VA2214DC | D005 | 202 | D007 | D011 | D015 | 400 |
| 350 | 6 | 125 | BRZ | VA2215CA | D005 | 125 | D007 | D011 | D015 | 175 |
| 350 | 6 | 125 | S/S | VA2215CC | D005 | 125 | D007 | D011 | D015 | 175 |
| 350 | 6 | 250 | BRZ | VA2215DA | D005 | 125 | D007 | D011 | D015 | 400 |
| 350 | 6 | 250 | S/S | VA2215DC | D005 | 125 | D007 | D011 | D015 | 400 |
| 680 | 8 | 125 | BRZ | VA2217CA | - | 0 | D007 | D011 | D015 | 175 |
| 680 | 8 | 125 | S/S | VA2217CC | - | 0 | D007 | D011 | D015 | 175 |
| 680 | 8 | 250 | BRZ | VA2217DA | - | 0 | D007 | D011 | D015 | 400 |
| 680 | 8 | 250 | S/S | VA2217DC | - | 0 | D007 | D011 | D015 | 400 |
| 960 | 10 | 125 | BRZ | VA2219CE | - | 0 | D007 | D011 | D015 | 175 |
| 960 | 10 | 125 | S/S | VA2219CG | - | 0 | D007 | D011 | D015 | 175 |
| 960 | 10 | 250 | BRZ | VA2219DE | - | 0 | D007 | D011 | D015 | 306 |
| 960 | 10 | 250 | S/S | VA2219DG | - | 0 | D007 | D011 | D015 | 306 |

**Shut-off values are based on 20 PSIG air pressure to the actuator when the valve is closed.**

### 84 ACTUATOR SPECIFICATIONS:

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

### 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" | 32 | 42 |
| 3" | 42 | 54 |
| 4" | 77 | 96 |
| 5" | 124 | 162 |
| 6" | 169 | 220 |
| 8" | 290 | 380 |
| 10" | 435 | 540 |
| ACTUATOR | LBS | |
| 50 | 13 | |
| 84 | 48-1/2 | |
| POSITIONER | LBS | |
| 42 | 1 | |
| 760P | 8 | |

Actual shipping weights may vary.