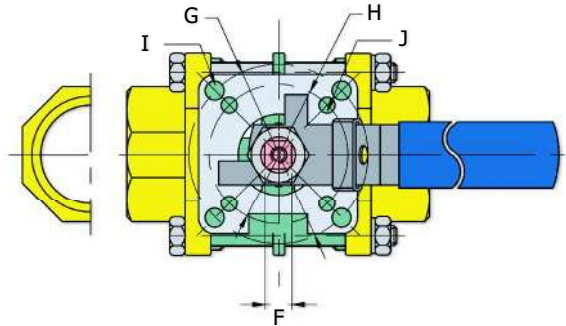
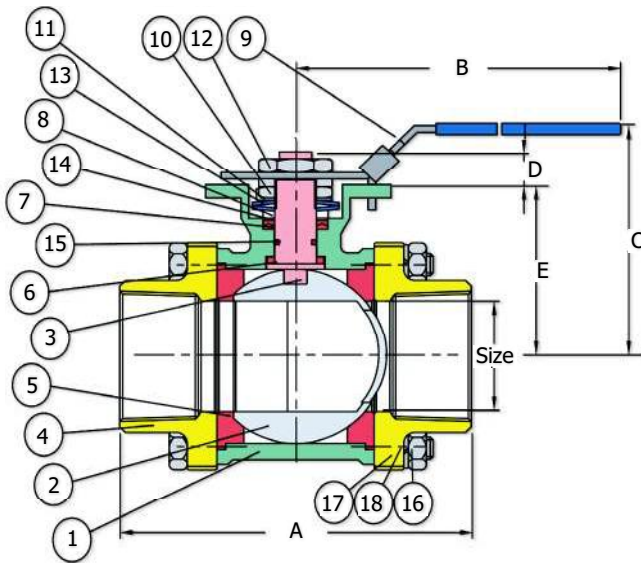


V - Series Direct Mount 1000 PSI Stainless Steel Ball Valve



Standard Features

- ASTM A351-CF8M 316L Stainless Steel Body
- 50% Stainless Steel/50% PTFE Seats
- Class VI Shut-off
- Temperature Range -18° to 428°F
- 1000 PSI (1/2" to 2"), 800 PSI (2-1/2" to 4")
- Full Port 30, 60, or 90 Degree Flow Angles
- ISO 5211/DIN 3337 Direct Mounting
- Blow-Out Proof Stem, Anti-Static Design
- Sizes 1/2" thru 4", (Opt. 1/4"-3/8" FNPT Only)
- End Connections: FNPT or Socket Weld



| Size | A | B | C | D | E | F | G | H | I | J |
|--------|------|------|------|------|------|------|------|------|------|------|
| 1/2" | 2.50 | 4.41 | 2.87 | 0.33 | 1.46 | 0.35 | 1.97 | 1.42 | 0.28 | 0.24 |
| 3/4" | 2.85 | 4.41 | 3.18 | 0.33 | 1.77 | 0.35 | 1.97 | 1.42 | 0.28 | 0.24 |
| 1" | 3.19 | 5.35 | 3.56 | 0.45 | 2.11 | 0.35 | 1.97 | 1.65 | 0.28 | 0.24 |
| 1-1/4" | 3.72 | 7.28 | 3.89 | 0.45 | 2.32 | 0.35 | 1.97 | 1.65 | 0.28 | 0.24 |
| 1-1/2" | 4.25 | 7.79 | 4.54 | 0.55 | 2.94 | 0.55 | 2.76 | 1.97 | 0.35 | 0.28 |
| 2" | 4.78 | 7.79 | 4.88 | 0.54 | 3.29 | 0.55 | 2.76 | 1.97 | 0.35 | 0.28 |
| 2-1/2" | 6.20 | 10.4 | 6.10 | 0.71 | 4.28 | 0.67 | 4.02 | 2.76 | 0.43 | 0.35 |
| 3" | 7.48 | 10.4 | 8.21 | 0.71 | 4.66 | 0.67 | 4.02 | 2.76 | 0.43 | 0.35 |
| 4" | 8.86 | 12.8 | 8.53 | 0.91 | 6.06 | 0.67 | 4.02 | 2.76 | 0.43 | 0.35 |

| No. | Part Name | Material |
|-----|-------------------|--------------------|
| 1 | Body | ASTM A351 Gr. CF8M |
| 2 | Ball | ASTM A351 Gr. CF8M |
| 3 | Stem | S.S.316 |
| 4 | End Cap | ASTM A351 Gr. CF8M |
| 5 | Seat | 50%S.S./50%PTFE |
| 6 | Thrust Washer | PTFE + 15% GF |
| 7 | Stem Packing | PTFE |
| 8 | Gland Bushing | S.S.304 |
| 9 | Handle | S.S.304 |
| 10 | Stem Nut | S.S.304 |
| 11 | Handle Washer | S.S.304 |
| 12 | Handle Nut | S.S.304 |
| 13 | Belleville Washer | S.S.304-CSP |
| 14 | Packing Follower | PTFE + 25% GF |
| 15 | Stem O-Ring | VITON |
| 16 | Body Bolt | S.S.304 |
| 17 | Bolt Washer | S.S.304 |
| 18 | Bolt Nut | S.S.304 |

Direct Mount Detail

| Size | Torque in/Lb | ISO 5211 | Drive |
|--------|--------------|-----------|-------|
| 1/2" | 62.0 | F03 & F05 | 9mm |
| 3/4" | 70.8 | F03 & F05 | 9mm |
| 1" | 123.9 | F03 & F05 | 9mm |
| 1-1/4" | 194.7 | F03 & F05 | 9mm |
| 1-1/2" | 274.4 | F05 & F07 | 14mm |
| 2" | 283.2 | F05 & F07 | 14mm |
| 2-1/2" | 681.5 | F07 & F10 | 17mm |
| 3" | 743.5 | F07 & F10 | 17mm |
| 4" | 1354.2 | F07 & F10 | 17mm |

V-Series Valve Models

| 30° V-Ball | | 60° V-Ball | | 90° V-Ball | |
|----------------------|-------------|---|-------------|------------|-------------|
| FNPT | Socket Weld | FNPT | Socket Weld | FNPT | Socket Weld |
| V300 | V310 | V600 | V610 | V900 | V910 |
| Seat Material | | 50% S.S./50% PTFE (-18°F to 428°F) | | | |



Bonomi USA V-Series Control Valves are Direct Mounted

without the need for Couplings and Brackets. Providing far Superior Actuation with Zero Backlash, Side-Loading, or Extra Cost, the V-Series have Wide Rangeability of Control with 30, 60, or 90 Degree Ball Angles. And with 50/50 Seats, These



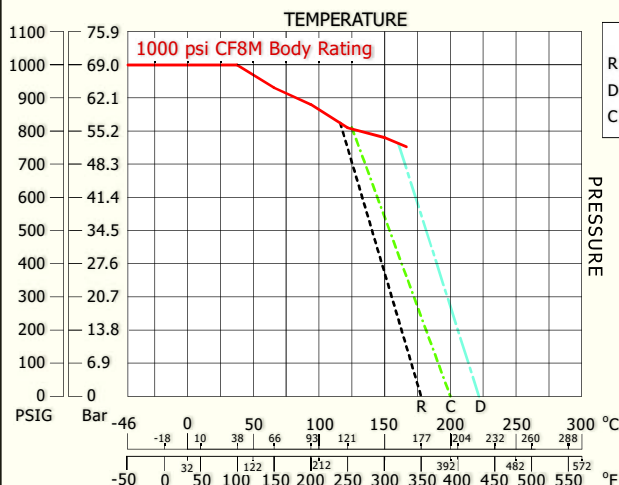
Control Valves Offer Bubble-Tight Sealing and Optimum Strength for Even the Most Harsh Environments of Liquid, Slurry, or Solid Media. The Choice of Line Size, Cv, and Actuation Is All That Is Needed to Determine the Correct Solution, and for Expert Advice, Please Contact Our Factory.

Cv Versus Valve Opening Percentage

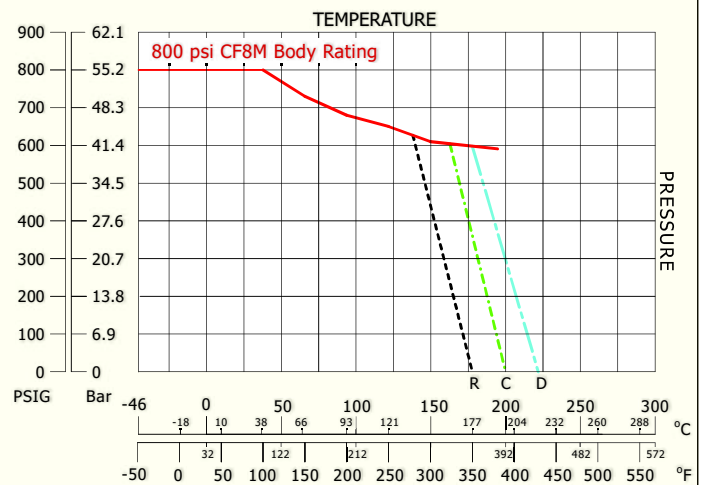
| Size | V-Ball Angle | Class VI S/O | Low % | Control Zone | | | | | | | | | Full Open |
|--------|--------------|--------------|-------|--------------|-------|-------|-------|--------|--------|--------|--------|--------|-----------|
| | | | | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | |
| 1/2" | 30 | 0.00 | 0.04 | 0.24 | 0.47 | 0.77 | 1.19 | 1.84 | 2.46 | 3.42 | 4.63 | 5.57 | |
| | 60 | 0.00 | 0.04 | 0.29 | 0.74 | 1.11 | 1.83 | 2.91 | 4.31 | 7.01 | 9.45 | 12.79 | |
| | 90 | 0.00 | 0.06 | 0.47 | 0.85 | 1.27 | 2.11 | 3.22 | 4.77 | 8.31 | 11.59 | 14.72 | |
| 3/4" | 30 | 0.00 | 0.07 | 0.29 | 0.63 | 1.02 | 1.56 | 2.44 | 3.26 | 4.52 | 6.12 | 7.31 | |
| | 60 | 0.00 | 0.07 | 0.36 | 0.94 | 1.48 | 2.42 | 3.86 | 5.26 | 9.24 | 12.43 | 16.27 | |
| | 90 | 0.00 | 0.08 | 0.61 | 1.10 | 1.71 | 2.69 | 4.27 | 6.25 | 10.85 | 15.30 | 19.39 | |
| 1" | 30 | 0.00 | 0.09 | 0.45 | 1.25 | 2.07 | 3.56 | 5.32 | 7.69 | 10.51 | 12.85 | 15.49 | |
| | 60 | 0.00 | 0.10 | 0.70 | 1.75 | 2.77 | 5.14 | 8.01 | 11.89 | 18.71 | 23.23 | 32.81 | |
| | 90 | 0.00 | 0.11 | 1.00 | 2.77 | 5.10 | 7.74 | 12.2 | 17.32 | 24.47 | 26.81 | 43.88 | |
| 1-1/4" | 30 | 0.00 | 0.05 | 0.47 | 1.35 | 2.49 | 4.13 | 6.11 | 8.81 | 11.75 | 14.86 | 17.36 | |
| | 60 | 0.00 | 0.07 | 0.66 | 2.04 | 3.42 | 6.45 | 10.79 | 15.41 | 22.34 | 33.39 | 43.43 | |
| | 90 | 0.00 | 0.08 | 0.80 | 2.91 | 5.52 | 10.23 | 17.27 | 19.51 | 34.93 | 51.75 | 65.82 | |
| 1-1/2" | 30 | 0.00 | 0.07 | 0.66 | 1.87 | 3.40 | 5.66 | 8.36 | 12.14 | 16.17 | 20.45 | 23.88 | |
| | 60 | 0.00 | 0.09 | 0.93 | 2.82 | 4.70 | 8.89 | 14.84 | 21.16 | 30.73 | 45.87 | 59.75 | |
| | 90 | 0.00 | 0.10 | 1.07 | 4.00 | 7.45 | 14.08 | 23.78 | 26.77 | 48.05 | 71.17 | 90.50 | |
| 2" | 30 | 0.00 | 0.09 | 1.19 | 3.80 | 7.53 | 12.27 | 17.85 | 26.45 | 36.46 | 48.10 | 55.84 | |
| | 60 | 0.00 | 0.11 | 1.53 | 5.79 | 10.41 | 20.58 | 34.10 | 48.74 | 69.05 | 104.23 | 135.77 | |
| | 90 | 0.00 | 0.17 | 1.90 | 7.28 | 13.59 | 25.37 | 42.30 | 55.55 | 87.04 | 129.77 | 167.36 | |
| 2-1/2" | 30 | 0.00 | 0.09 | 1.16 | 4.44 | 7.91 | 13.40 | 20.05 | 30.44 | 41.92 | 69.78 | 76.95 | |
| | 60 | 0.00 | 0.13 | 1.46 | 5.91 | 11.88 | 23.24 | 37.94 | 59.30 | 83.30 | 113.64 | 162.55 | |
| | 90 | 0.00 | 0.18 | 1.86 | 7.28 | 16.45 | 31.15 | 53.54 | 77.87 | 118.29 | 177.33 | 239.42 | |
| 3" | 30 | 0.00 | 0.13 | 1.21 | 4.16 | 9.49 | 15.97 | 26.78 | 38.92 | 53.30 | 69.78 | 85.92 | |
| | 60 | 0.00 | 0.15 | 2.91 | 6.73 | 15.81 | 29.38 | 46.34 | 73.58 | 106.72 | 149.89 | 193.22 | |
| | 90 | 0.00 | 0.20 | 4.13 | 8.66 | 21.10 | 41.09 | 69.31 | 105.90 | 161.04 | 237.24 | 359.22 | |
| 4" | 30 | 0.00 | 0.16 | 1.75 | 7.84 | 18.61 | 35.21 | 58.61 | 87.88 | 127.45 | 158.53 | 196.34 | |
| | 60 | 0.00 | 0.26 | 2.22 | 12.46 | 33.68 | 63.00 | 106.27 | 160.48 | 233.98 | 329.51 | 437.40 | |
| | 90 | 0.00 | 0.35 | 4.36 | 19.70 | 50.31 | 91.82 | 157.45 | 240.50 | 365.15 | 546.65 | 830.90 | |

Pressure - Temperature Chart

1,000 PSI (1/2" to 2") Pressure-Temperature Chart



800 PSI (2-1/2" to 4") Pressure-Temperature Chart



V - Series Characterized Ball Valve with Pneumatic Automation

- Constant Torque, Twin Rack and Pinion Pneumatic Actuators
- -4 to 185°F Standard, Optional -40 to 185°F and -4 to 320°F
- Direct Mount Assemblies, Optional Stand-Off Extension ISO x ISO
- In Double Acting or Spring Return Configurations

Electro-Pneumatic (EP) Model

| Model | V-Ball | Valve Connection |
|----------|-----------|------------------|
| EPV300DA | 30 Degree | Threaded |
| EPV300SR | | |
| EPV600DA | 60 Degree | |
| EPV600SR | | |
| EPV900DA | 90 Degree | |
| EPV900SR | | |
| EPV310DA | 30 Degree | Socket Weld |
| EPV310SR | | |
| EPV610DA | 60 Degree | |
| EPV610SR | | |
| EPV910DA | 90 Degree | |
| EPV910SR | | |

Standard Features

- 4 to 20mA Input Signal
- Zero-Hysteresis
- Stainless Steel gauges
- Split-Control Position Indicator
- NEMA 4, 4x, 7 Case
- One 1/2" FNPT Conduit Connection
- Stainless Steel Bracket/Hardware

Optional Features

- 4 to 20mA Feedback Signal
- Dual SPDT Mechanical Switches



Pneumatic-Pneumatic (PP) Model

| Model | V-Ball | Valve Connection |
|----------|-----------|------------------|
| PPV300DA | 30 Degree | Threaded |
| PPV300SR | | |
| PPV600DA | 60 Degree | |
| PPV600SR | | |
| PPV900DA | 90 Degree | |
| PPV900SR | | |
| PPV310DA | 30 Degree | Socket Weld |
| PPV310SR | | |
| PPV610DA | 60 Degree | |
| PPV610SR | | |
| PPV910DA | 90 Degree | |
| PPV910SR | | |

Standard Features

- 3 to 15 PSI Input Signal
- Zero-Hysteresis
- Stainless Steel gauges
- Split-Control Position Indicator
- 1/4" FNPT Air Connections
- Stainless Steel Bracket/Hardware

Optional Features

- 4 to 20mA Feedback Signal
- Dual SPDT Mechanical Switches



V - Series Characterized Ball Valve With Electronic Automation

Electronic Positioner Standard Features

- Dual Analog Input Signal 0-10VDC or 4-20mA
- Multiple Supply Voltages: 12VDC, 24V AC/DC, 100-240VAC
- Dual DIN PG11 (Std.) or 1/2" FNPT (Opt.) Conduit Connection
- On-Board 0-10VDC Power Supply for Remote Panel OP
- Dual Auxiliary User Switch Contacts SPST
- Analog Position Feedback 0-10VDC or 4-20mA Output
- Manual Over-Ride and Position Indicator
- ISO5211/DIN3337 Direct Mount Standard
- Internal Condensation Compensation
- -4° to 140°F Ambient Temperature
- +/- 3% Total Travel Accuracy
- IP65-IP67 NEMA 4x Enclosure
- UL/CE Certified

*** = Electric Supply Voltages

| | |
|------------|-----|
| 12VDC | 021 |
| 24V AC/DC | 022 |
| 100-240VAC | 023 |

Electronic Positioner (EV) Model

| Model | V-Ball | Valve Connection |
|-----------|-----------|------------------|
| EV300-*** | 30 Degree | Threaded |
| EV600-*** | 60 Degree | |
| EV900-*** | 90 Degree | |
| EV310-*** | 30 Degree | Socket Weld |
| EV610-*** | 60 Degree | |
| EV910-*** | 90 Degree | |

