**Series BV3-TC** ball valves feature sanitary clamp ends for easy line removal. The sanitary polish is ideal for use in pharmaceutical, food & beverage, and chemical processing systems, while the cavity filler aids to reduce product entrapment, and the full bore design provides consistent flow characteristics. Best of all, Dwyer Instruments sanitary ball valves are economical and durable.

The BV3 Series is an economical automated valve package with either an electric or pneumatic actuator. Electrically actuated models are weatherproof, providing a NEMA 4/IP65 rating, for use in demanding environments. The actuators are specifically designed for sanitary applications, with a sanitary polish that meets the requirements for pharmaceutical, food & beverage, and chemical processing systems. Series BV3-TC includes the BV3DA, BV3SR, BV3V models, each with unique features tailored to specific applications.

### FEATURES
- **Ideal sanitary ball valve for high purity applications** including food & beverage, pharmaceutical and biotech industries
- **3-piece SS investment cast body**
- **240 grit internal polish**
- **Polished clamp end to sanitary finish**
- **Cavity filler to reduce the threat of product entrapment**

### SPECIFICATIONS
- **Body:** 3-piece
- **Line Size:** 1/2” to 4”
- **End Connections:** Tri-Clamp
- **Pressure Limit:** 1/2” to 2”: 1000 psi (69 bar) WOG, 2-1/2” to 4”: 800 psi (55 bar) WOG
- **Wetted Materials:** Body, end cap, stem: 316 SS; Ball: 316 SS; Seat, stem seal: PTFE
- **Body seal, thrust washer:** PTFE
- **Other Materials:** 316 SS; Ball: 316 SS; Seat, stem seal: PTFE
- **Temperature Limit:** -40 to 180°F (-40 to 82°C)
- **Modulating:** Input: 4 to 20 mA
- **Electrical Connection:** 1/2” female NPT
- **Cycle Time:** Two position: 1/2” to 1-1/2”: 0.75 A, 2": 0.75 A, 2-1/2”: 0.75 A, 3/4” to 1-1/2”: 0.75 A, 2”: 0.75 A, 2-1/2”: 0.75 A, 3” to 3-1/2”: 1.1 A, 4” to 5.5 A
- **Power Consumption Locked Rotor Current:** Two position: 1/2” to 2-1/2”:age: 0.55 A, 3/4” to 2”: 0.75 A, 2": 0.75 A, 2-1/2”: 0.75 A, 3” to 3-1/2”: 1.1 A, 4” to 5.5 A
- **Air Consumption (per stroke):** DA1: 2.32 in³; DA2: 9.34 in³; DA3: 17.21 in³; DA4: 20.53 in³; DA5: 46.84 in³; DA6: 66.75 in³; DA7: 103.74 in³; DA8: 122.05 in³; DA9: 215.11 in³; DA10: 295 in³
- **Maximum Air Supply Pressure:** 130 psi (8.6 bar)
- **Air Connections:** DA1/2:1 to 5: 1/8” female NPT, all other sizes: 1/4” female NPT
- **Air Consumption (per stroke):** DA1: 2.32 in³; DA2: 9.34 in³; DA3: 17.21 in³; DA4: 20.53 in³; DA5: 46.84 in³; DA6: 66.75 in³; DA7: 103.74 in³; DA8: 122.05 in³; DA9: 215.11 in³; DA10: 295 in³
- **Cycle Time (per 90°):** DA1: .05 s; DA2: .06 s; DA3: .08 s; DA4: .18 s; DA5: .32 s; DA6: .54 s; DA7: .87 s; DA8: .9 s; DA9: 1.75 s
- **Housing Material:** Aluminum with epoxy coated aluminum end caps
- **Temperature Limit:** -4 to 180°F (20 to 82°C)

### OPTIONS
- **Explosion Proof Electric Actuators** add “EX” to model number
- **Solenoil Valve** - See Model SV3

### NOTES
- All spring return actuators are factory standard as spring (fail) close.
- For fillers and regulators see pages 548-550 & 552.

**CONTACT US**

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**AUTOMATED BALL VALVE - THREE-PIECE SS SANITARY**

**Electric and Pneumatic Actuators**

**Operating Pressure:** 0 to 150°F (-18 to 65°C)

**Temperature Limit:** 0 to 150°F (-18 to 65°C)

**Electrical Connection:** 1/2” female NPT

**Modulating Input:** 4 to 20 mA

**Body Specification:**
- **3-piece SS investment cast body**
- **Sanitary clamp end to sanitary finish**
- **Polished internal surface**

**Valve Specifications:**
- **Wetted Materials:**
  - Body, end cap, stem: 316 SS
  - Ball: 316 SS
  - Seat, stem seal: PTFE
- **Body seal, thrust washer:** PTFE

**Electrical Actuator Specifications:**
- **Power Requirements:** 120 VAC, 50/60 Hz, single phase.
- **Modulating Input:** 4 to 20 mA
- **Cycle Time:**
  - Two position: 1/2” to 1-1/2”: 0.75 A, 2": 0.75 A, 2-1/2”: 0.75 A, 3” to 3-1/2”: 1.1 A, 4” to 5.5 A
- **Air Consumption:** DA1: 2.32 in³; DA2: 9.34 in³; DA3: 17.21 in³; DA4: 20.53 in³; DA5: 46.84 in³; DA6: 66.75 in³; DA7: 103.74 in³; DA8: 122.05 in³; DA9: 215.11 in³; DA10: 295 in³
- **Cycle Time (per 90°):**
  - DA1: 0.05 s; DA2: 0.06 s; DA3: 0.08 s; DA4: 0.18 s; DA5: 0.32 s; DA6: 0.54 s; DA7: 0.87 s; DA8: 0.9 s; DA9: 1.75 s

**Housing Material:**
- Aluminum with epoxy coated aluminum end caps

**Temperature Limit:** -4 to 180°F (-20 to 82°C)

**Accessory Mounting:** NAMUR standard.

**Standard Features:**
- Position indicator