**Series BV3-TC** ball valves feature sanitary clamp end 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, NEMA 4 (IP66), powered by standard 115 VAC supply, and are available in either two-position or proportional control. Two-position actuators use the 115 VAC input to drive the valve open or closed, while the modulating actuator accepts a 4 to 20 mA input for infinite valve positioning. Actuator features thermal overload protection and a permanently lubricated gear train.

**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
- **Temperature Limit:** -40 to 450°F (-20 to 232°C)
- **Other Materials:** Body seal, thrust washer: PTFE

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**ACTUATORS**
- **Electric**
  - **Power Requirements:** 120 VAC, 50/60 Hz, single phase. Optional 220 VAC, 24 VAC, 12 VDC, and 24 VDC
  - **Power Consumption (Locked Rotor Current):** Two position: 1/2”: 0.55 A, 3/4” to 2”: 0.75 A, 2-1/2” and 3”: 1.1 A, 4”: 1.5 A. Modulating: 1/4” to 3/4”: 0.55 A, 1” to 1-1/2”: 0.75 A, 2”: 0.75 A, 2-1/2”: 0.75 A, 3”: 1.1 A, 4”: 1.5 A.
  - **Cycle Time (per 90°):** Two position: 1/2”: 2.5 s, 3/4” and 1” s: 1-1/2”: 10 s, 2”: 15 s, 4”: 12 s; Modulating: 1/2” to 1-1/2”: 10 s, 2”: 20 s, 2-1/2” to 4”: 30 s.
  - **Duty Cycle:** Electric two position 1/2”, 75%; All Others: 25%; Modulating: 75%.
  - **Enclosure Rating:** NEMA 4. Optional NEMA 7.
  - **Housing Material:** Aluminum with thermal bonding polyester powder finish.

**OPTIONS**
- **Modulating Input:** NAMUR
- **Accessory Mounting:** NAMUR standard.
- **Standard Features:** Position indicator.

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**Pneumatic Spring Return**
- **Model:** SR1, SR2, SR3, SR4, SR5, SR6
- **Position Indicator:** SR2, SR3, SR4, SR5, SR6
- **Temperature Limit:** 0 to 150°F (-18 to 65°C)
- **Electrical Connection:** 1/2” female NPT
- **Modulating Input:** 4 to 20 mA
- **Material Features:** Manual override and position indicator except modulating units.

**Pneumatic “DA” and “SR” Series**
- **Model Type:** DA Series is double acting and SR Series is spring return (rack and pinion).
- **Normal Supply Pressure:** 80 psi (5.6 bar)
- **Maximum Supply Pressure:** 130 psig (8.0 bar)
- **Air Connections:** DA/SR1 to 5: 1/8” female NPT, all others: 1/4” female NPT.

**Electrical Consumption (per stroke):** DA1: 2.32 in³; DA2, SR2: 9.34 in³; DA3, SR3: 17.21 in³; DA4, SR4: 20.5 in³; DA5, SR5: 66.75 in³; DA7, SR7: 103.74 in³; SR8: 122.05 in³; SR9: 215.11 in³.

**Cycle Time (per 90°):** DA1: 0.3 s; DA2: 0.55 s; DA3: 0.6 s; DA4: 0.8 s; DA5: 1.6 s; SR2: 0.9 s; SR3: 1.3 s; SR4: 1.7 s; SR5: 28 s; SR6: 39 s; SR7: 60 s; SR8: 90 s; SR9: 1.75 s.

**Housing Material:** Anodized aluminum body and epoxy coated aluminum end caps.

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

**ACCESSORY MOUNTING**
- **NAMUR standard**

**EXPLOSION PROOF ELECTRIC ACTUATORS**
- **-add “-EX” to model number**

**ELECTRICAL ACTUATOR SUPPLY VOLTAGES**
- **Contact factory for model number change**

**SOLENOID VALVE** - See Model SV3.