Series 3PBV
Automated Ball Valve - Three-Way Plastic
Electric and Pneumatic Actuators

The Series 3PBV is ideal for mixing or diverting services in industrial, chemical, turf and irrigation, and pool and spa applications, as well as for use with potable water. The valve features a 3-seat design for efficient automation, reinforced TFE seats and EPDM seals for longer life, and an all PVC construction for lightweight durability at a lightweight cost. Valves also come standard with field selectable NPT or socket process connections.

Valves are constructed of anodized aluminum and are epoxy coated for years of corrosion and internally loaded springs return the valve to its original position. Also available is the Spring return pneumatic actuators use the air supply to drive the valve stem one direction, standard 115 VAC supply, and are available in either two-position or proportional control.

1. Select Two-position actuators use the 115 VAC input to drive each of the valve ports open or closed, while the modulating actuator accepts a 4 to 20 mA input for infinite valve positioning.

How To Order:
1. Select Model No. to specify pipe size and actuator.
2. Choose a Port Configuration to determine valve flow path.

Example: 3PBVPSR204-L3

### Cv Values

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tr>
<td>1/2&quot;</td>
<td>13.7</td>
<td>4.55</td>
<td>8.85</td>
<td>2.45</td>
<td>3.85</td>
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<td>3/4&quot;</td>
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<td>10.2</td>
<td>17.2</td>
<td>6.65</td>
<td>9.50</td>
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<tr>
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<td>18.6</td>
<td>32.2</td>
<td>17.2</td>
<td>14.4</td>
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<tr>
<td>1-1/4&quot;</td>
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<td>33.3</td>
<td>32.2</td>
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<td>27.3</td>
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<td>84.0</td>
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<tr>
<td>2&quot;</td>
<td>224</td>
<td>85.4</td>
<td>143</td>
<td>84.0</td>
<td>63.0</td>
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</tbody>
</table>

### SPECIFICATIONS

**Service:** Compatible liquids or gases. 
**Body:** 3-way. 
**Line Size:** 1/2" to 2".

#### Electric Actuators

- **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" to 1-1/2": .55 A, 2": .75 A; Modulating: .75 A. 
- **Cycle Time:** (per 90°): Two position: 1/2" to 1-1/2": 2.5 s, 2": 5 s; Modulating: 5 s. 
- **Duty Cycle:** Two position: 1/2" to 1-1/2": 75%, 2": 25%; Modulating: 75%. 
- **Enclosure Rating:** NEMA 4. Optional NEMA 7 (Class 1, Div. II groups A, B, C, D). 
- **Housing Material:** Aluminum with thermal bonding polyester powder finish. 

#### Pneumatic “DA” and “SR” Series

- **Type:** DA series is double acting and SR series is spring return (rack and pinion). 
- **Normal Supply Pressure:** 80 psig (5.5 bar). 
- **Maximum Supply Pressure:** 120 psig (8 bar).
- **Air Connections:** DA/SR1 to 5: 1/8” female NPT, all other sizes: 1/4” female NPT. 
- **Air Consumption (per stroke):** DA1: 2.32 in³; DA2, SR2: 9.34 in³; SR3: 17.21 in³. 
- **Cycle Time (per 90°):** DA1: .03 s; DA: .04 s; SR2: .09 s; SR3: .14 s. 
- **Housing Material:** Anodized aluminum body and epoxy coated aluminum end caps. 
- **Temperature Limit:** -4 to 180°F (-20 to 82°C). 
- **Accesory Mounting:** NAMUR standard. 
- **Standard Features:** Visual position indicator.

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### Charts

- **CV Values Chart**
- **How To Order**

### Tables

- **Series 3PBV Automated Ball Valves - 3-Way Plastic**

### Diagrams

- **Valve Diagram**
- **Actuator Diagram**

**Filters and Regulators:** See pages 527-530

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