The Series WE31 incorporates a full port 3-way SS ball valve for great flow rates with minimal pressure drop. The valve features a blow-out-proof stem for added safety, reinforced PTFE seats and seals for longer life, and a 316 SS (ASTM CF8M) ball for better performance. Actuators are directly mounted creating a compact assembly for tight spaces. Limit switches are able to be mounted directly to the valves allowing for remote position indication.

The Series WE31 can be configured with either an electric or pneumatic actuator. Electric actuators are available in weatherproof or explosion-proof, a variety of supply voltages and two-position or modulating control. Two-position actuators use the supply voltage to drive the valve open or closed, while the modulating actuator accepts a 4 to 20 mA input for valve positioning. Actuators feature thermal overload protection and permanently lubricated gear train.

**SPECIFICATIONS**

**VALVE**
- **Service:** Compatible liquids and gases.
- **Body:** 3-way.
- **Line Sizes:** 1/2 to 2”.
- **End Connections:** Female NPT.
- **Pressure Limits:** 28” Hg to 1000 psi (-0.7 to 69 bar) up to 250°F.
- **Wetted Materials:**
  - Body and ball: 316 SS (CF8M);
  - Stem: 316 SS;
  - Seat: RTFE/PTFE;
  - Seal, Washer, and Packing: PTFE.
- **Temperature Limits:** -20 to 392°F (-29 to 200°C).

**ACTUATORS**
- **Pneumatic “DA” and “SR” Series**
  - **Type:** DA series is double acting and SR series is spring return (rack and pinion).
  - **Normal Supply Pressure:**
    - DA: 40 to 115 psi (2.7 to 7.9 bar);
    - SR: 80 psi (5.5 bar).
  - **Maximum Supply Pressure:** 120 psi (8.6 bar).
  - **Air Connections:**
    - DA01: 1/8” female NPT;
    - DA02 to DA04: 1/4” female NPT;
    - SR03 to SR07: 1/4” female NPT.
  - **Housing Material:** Anodized aluminum body and epoxy coated aluminum end caps.
  - **Temperature Limits:** -40 to 176°F (-40 to 80°C).
  - **Accessory Mounting:** NAMUR standard.
- **Electric “TD” and “MD” Series**
  - **Power Requirements:** 110 VAC, 220 VAC, 24 VAC or 24 VDC (MD models not available in 24 VDC).
  - **Power Consumption:** See instruction manual.
  - **Cycle Time (per 90°):**
    - TD01: 4 s;
    - MD01: 10 s;
    - TD02 and MD02: 20 s;
    - TD03 and MD03: 30 s.
  - **Duty Rating:** 85%.
  - **Enclosure Rating:** NEMA 4X (IP67).
  - **Housing Material:** Powder coated aluminum.
  - **Temperature Limits:** -22 to 140°F (-30 to 60°C).
  - **Electrical Connection:** 1/2” female NPT.
  - **Modulating Input:** 4 to 20 mA.
  - **Standard Features:** Manual override, position indicator, and TD models come with two limit switches.
- **Electric “TI” and “MI” Series**
  - **Power Requirements:** 110 VAC, 220 VAC, 24 VAC or 24 VDC.
  - **Power Consumption:** See instruction manual.
  - **Cycle Time (per 90°):** See instruction manual.
  - **Duty Rating:** See instruction manual.
  - **Enclosure Rating:** NEMA 7, designed to meet hazardous locations: Class I, Group C & D; Class II, Group E, F & G; Division I & II.
  - **Housing Material:** Powder coated aluminum.
  - **Temperature Limits:** -40 to 140°F (-40 to 60°C).
  - **Electrical Connection:** 1/2” female NPT.
  - **Modulating Input:** 4 to 20 mA.
  - **Standard Features:** Position indicator and two limit switches.
### Popular Models

<table>
<thead>
<tr>
<th>Size</th>
<th>Cv (gal/min)</th>
<th>Hand Operated Model</th>
<th>Double Acting Pneumatic Model</th>
<th>Spring Return Pneumatic Model</th>
<th>NEMA 4X Two-Position Electric (110 VAC) Model</th>
<th>NEMA 4X Modulating Electric (110 VAC) Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2”</td>
<td>11</td>
<td>WE31-CHD00-T1</td>
<td>WE31-CDAA02-T2</td>
<td>WE31-CSRO2-T2</td>
<td>WE31-CTD01-T2-A</td>
<td>WE31-CMD01-T2-A</td>
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<tr>
<td>3/4”</td>
<td>14</td>
<td>WE31-DHD00-T1</td>
<td>WE31-DA02-T2</td>
<td>WE31-DSR02-T2</td>
<td>WE31-DTD01-T2-A</td>
<td>WE31-DM02-T2-A</td>
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<td>1”</td>
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<td>WE31-EHD00-T1</td>
<td>WE31-EDA03-T2</td>
<td>WE31-ESR04-T2</td>
<td>WE31-ETD02-T2-A</td>
<td>WE31-EMD02-T2-A</td>
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<td>1-1/4”</td>
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<td>WE31-FHD00-T1</td>
<td>WE31-FDA03-T2</td>
<td>WE31-FSR05-T2</td>
<td>WE31-FTD02-T2-A</td>
<td>WE31-FMD02-T2-A</td>
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<tr>
<td>1-1/2”</td>
<td>84</td>
<td>WE31-GHD00-T1</td>
<td>WE31-GDA04-T2</td>
<td>WE31-GSR06-T2</td>
<td>WE31-GTD03-T2-A</td>
<td>WE31-GMD03-T2-A</td>
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<tr>
<td>2”</td>
<td>90</td>
<td>WE31-HHD00-T1</td>
<td>WE31-HDA04-T2</td>
<td>WE31-HSR07-T2</td>
<td>WE31-HTD03-T2-A</td>
<td>WE31-HMD03-T2-A</td>
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</table>

### WE31 Hand Operated and Pneumatic Actuator Model Chart

<table>
<thead>
<tr>
<th>Example Series</th>
<th>WE31</th>
<th>CSRO2</th>
<th>T1</th>
<th>WE31-CSRO2-T1-AA00</th>
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<tbody>
<tr>
<td>Size and Range</td>
<td>WE31</td>
<td>CHD00</td>
<td>1/2” Hand</td>
<td>316 SS 3-Way NPT</td>
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<tr>
<td>Valve Position</td>
<td>T1</td>
<td>Flow Path A</td>
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<tr>
<td>Solenoid</td>
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<td>No Solenoid</td>
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<td></td>
</tr>
<tr>
<td>Solenoid Voltage</td>
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<tr>
<td>Actuator and Switches</td>
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<td></td>
</tr>
</tbody>
</table>

### ACCESSORIES

- R2-2120, Air Regulator
- AFR2-2, Instrument Air Filter Regulator
- VB-01, Volume Booster

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**Flow Paths**

- **T** Port Ball
  - T1 Flow Path A
  - T2 Flow Path B
  - T3 Flow Path C
  - T4 Flow Path D

- **L** Port Ball
  - L1 Flow Path E