Series 38R Self-Acting Temperature Control Valves require no external power sources and are ideal for regulating the temperature of tanks, process streams and various types of industrial equipment. The actuators are made with a rugged die-cast aluminum housing with a fully enclosed bellow assembly and internal over-range protection. Valves are offered in 1/2” through 6” connection sizes and 1/8” through 6” port sizes. The valve bodies are available in single-seated direct or reverse-acting, double-seated direct or reverse-acting, and 3-way designs with four choices of body material: bronze, cast-iron, cast-steel, and 316 stainless steel. Actuators are available with or without indicating dials or in Fail-Safe. Non-indicating actuators feature a lower profile and should be implemented where space constraints may be an issue while the indicating actuator allows the operator to verify the process temperature and aid in temperature adjustment. Fail-Safe actuators are designed to cause the valve to fail in the safe control position (open in cooling application, closed in a heating application) should some accidental damage occur to the terminal system, resulting in loss of pressure charge. Also available with the Series 38R are a wide range of capillaries, bulbs, and thermowells.

Please request a copy of our Valve Catalog, CT-VC, or visit our website at www.dwyer-inst.com to see full model information and ordering details for the 38R Series.

**SPECIFICATIONS**

**VALVE BODY**
- **Service:** Compatible liquids, gases, and steam.
- **Line Size:** 1/2" to 2".
- **Body Style:** 2-way or 3-way.
- **End Connections:** 1/2” to 2” female NPT.
- **Pressure Limit:** 250 psi (17.2 bar).
- **Wetted Materials:** Body material: Bronze or 316 SS; Trim: 316 SS; Packing: PTFE.
- **Temperature Limits:** 410°F (210°C) @ 250 psi (17.24 bar).

**ACTUATOR**
- **Power Requirements:** Fully self-contained, no external power required.
- **Indicator:** 3-1/2” dial thermometer, stainless steel case, swivel and angle adjustable (available for Indicating Actuator only).
- **Housing:** Die cast aluminum, epoxy powder coated blue finish.
- **Set Point Scale:** Integral to housing.
- **Bellows:** High-pressure brass, corrosion resistant, tinplated finish.
- **Adjustment Screws:** Brass.
- **Range Adjustment Spring:** Cadmium plated.
- **Overrange Protection:** 100°F over upper range limit for temporary situations

**Note:** See website for additional options.
### 38R Self-Acting Temperature Control Valve Model Chart

<table>
<thead>
<tr>
<th>Series</th>
<th>38R</th>
<th>Example</th>
<th>Actuator</th>
<th>Valve</th>
<th>Capillary Length</th>
<th>Thermowell</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38R</td>
<td>D00VA32</td>
<td>1</td>
<td>1/2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Direct Acting</td>
<td>No Thermowell</td>
<td>R03 30 to 115°F (-1 to 46°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D01VA32</td>
<td>1</td>
<td>1/2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Direct Acting</td>
<td>No Thermowell</td>
<td>R04 50 to 140°F (10 to 60°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D02VA32</td>
<td>1</td>
<td>1/2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Direct Acting</td>
<td>No Thermowell</td>
<td>R05 75 to 165°F (24 to 74°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D03VA32</td>
<td>1</td>
<td>1-1/4˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Direct Acting</td>
<td>No Thermowell</td>
<td>R06 105 to 195°F (41 to 91°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D04VA32</td>
<td>1</td>
<td>1-1/2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Direct Acting</td>
<td>No Thermowell</td>
<td>R07 125 to 215°F (52 to 102°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D05VA32</td>
<td>2</td>
<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Direct Acting</td>
<td>No Thermowell</td>
<td>R08 155 to 250°F (68 to 121°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R00VA32</td>
<td>1</td>
<td>1/2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R09 200 to 280°F (93 to 138°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R01VA32</td>
<td>1</td>
<td>1-1/4˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R10 225 to 315°F (107 to 157°C)</td>
</tr>
<tr>
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<td></td>
<td>R02VA32</td>
<td>1</td>
<td>1-1/2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R12 255 to 370°F (124 to 188°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R03VA32</td>
<td>2</td>
<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R13 295 to 420°F (146 to 216°C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R04VA32</td>
<td>2</td>
<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R14 310 to 440°F (154 to 227°C)</td>
</tr>
<tr>
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<td></td>
<td>R05VA32</td>
<td>2</td>
<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R01 300 to 500°F (149 to 260°C)</td>
</tr>
<tr>
<td></td>
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<td>R06VA32</td>
<td>2</td>
<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R02 325 to 625°F (163 to 324°C)</td>
</tr>
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<td>R07VA32</td>
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<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R03 350 to 750°F (171 to 399°C)</td>
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<tr>
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<td>R08VA32</td>
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<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R04 375 to 900°F (191 to 482°C)</td>
</tr>
<tr>
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<td></td>
<td>R09VA32</td>
<td>2</td>
<td>2˝ NPT Single Seat Two-Way Bronze Valve</td>
<td>Reverse Acting</td>
<td>No Thermowell</td>
<td>R05 400 to 1200°F (204 to 649°C)</td>
</tr>
</tbody>
</table>

**Actuator**
- 1: Non-Indicating Actuator
- 2: Indicating Actuator

**Bulb and Capillary**
- 01: Brass Union Connection
- 02: 316 SS Union Connection
- 03: Brass Adjustable Union Connection
- 04: 316SS Adjustable Union Connection
- 05: Brass Plain Bulb
- 06: 316 SS Plain Bulb
- 07: FEP Covered Brass Bulb
- 08: FEP Covered 316 SS Bulb
- 09: Brass Union with Stainless Steel Spiral Armor
- 10: 316 SS Union with Stainless Steel Spiral Armor

**Capillary Length**
- XX: Capillary Length in Feet. Example 36 is 36´ length

**Thermowell**
- 0: No Thermowell
- 1: 316 SS Thermowell, 1-1/4˝ External Connection
- 2: Brass Thermowell, 1-1/4˝ External Connection

**Temperature Range**
- R03 30 to 115°F (-1 to 46°C)
- R04 50 to 140°F (10 to 60°C)
- R05 75 to 165°F (24 to 74°C)
- R06 105 to 195°F (41 to 91°C)
- R07 125 to 215°F (52 to 102°C)
- R08 155 to 250°F (68 to 121°C)
- R09 200 to 280°F (93 to 138°C)
- R10 225 to 315°F (107 to 157°C)
- R12 255 to 370°F (124 to 188°C)
- R13 295 to 420°F (146 to 216°C)
- R14 310 to 440°F (154 to 227°C)