RMC’s Primary Temperature Control Valve (PTCV) is a temperature control valve that mixes hot water with cold water to deliver blended water at a constant temperature throughout an entire house, building or system.

Catalogue Numbers

Primary Temperature Control Valve MIX11092

PTCV is suitable for domestic and commercial applications requiring controlled delivery of water heated above temperatures suitable for sanitary devices intended for personal hygiene. PTCV is compatible with both storage, instantaneous and heat exchange (continuous flow) type water heaters, boilers and solar systems.

PTCV is available in a 20 mm configuration.

Application

RMC’s PTCV is a temperature control valve for use in hot water distribution systems where temperature control is needed at temperatures higher than those suitable for sanitary devices intended for personal hygiene. Fitting the valve at the hot water source ensures the delivery of constant temperature hot water throughout the system, whilst preventing delivery of superheated water.

RMC’s PTCV is NOT INTENDED FOR USE as a tempering valve under any circumstances.

Features and Benefits

- Mixes hot water and cold water to deliver blended water
- Ideal for industrial and commercial applications requiring blended water
- Controls maximum temperature of delivered water
- Can be installed on water heater systems to prevent superheated water being delivered
- Valve easy to install and easy to remove for servicing of strainers
- Safer Installations
- More accurate control of outlet temperature
- Tamper-proof adjustment
- Special adjuster key eliminates chances of accidental adjustment
- Dezincification resistant
- Meets Australian Standard for potable water supply
- Individually tested and calibrated
- Every valve is tested to ensure higher quality and performance
- Strainers upstream of check valves
- Protects valve and check valve from impurities in the water supply
### Primary Temperature Control Valve

**Dimensions**

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Temperature Control Valve</td>
<td>163</td>
<td>77</td>
<td>41</td>
<td>52</td>
<td>73</td>
<td>126</td>
</tr>
</tbody>
</table>

**Flow Characteristics**

- **Cold water supply temperature:** 5°C - 30°C
- **Hot water supply temperature:** 60°C - 90°C
- **Optimum outlet temperature range:** 50°C - 70°C
- **Set temperature:** Factory set to 63°C
- **Accuracy of outlet temperature:** ±3°C
- **Minimum temperature differential:** 15°C
- **Supply pressure, static:** 200 kPa - 1600 kPa maximum
- **Supply pressure imbalance, dynamic:** 2 : 1 maximum
- **Maximum permitted pressure variation in either supply, in order to control outlet temperature to ±3°C:** ±10% maximum
- **Minimum flow rate:** 4 litres/min.
- **Maximum flow rate:** 33 litres/min.
- **Fittings Supplied:** Male BSP Thread

**Materials**

- **Body:** Forged Brass
- **Internal Components:** DZR Brass
- **Seals:** Viton
- **Springs:** Stainless Steel
- **Piston:** Polysulfone
- **Fittings:** DZR Brass
- **Strainers:** Stainless Steel
- **Non-Return Cartridges:** PPO-GF (Noryl®)/EPDM

**Notes:**

1. The maximum permitted ratio of supply pressures, under dynamic (flow) conditions. For optimum performance it is recommended that the hot and cold pressures at commissioning are as close as possible to equal.

2. The maximum permitted variation in either supply pressure from the pressure at commissioning in order to control the outlet temperature to ±3°C.

3. Note that rapid changes in supply pressure can result in a spike in the outlet temperature beyond ±3°C. Following a rapid change in supply pressure it may take a number of seconds for the temperature to return to within a ±3°C limit. Steps should be taken on-site to eliminate any cause of rapid supply pressure variation.

4. Under flow conditions dynamic pressure should exceed 100 kPa.