

## Primary Temperature Control Valve

### Description

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.

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 both storage, instantaneous and heat exchange (continuous flow) type water heaters, boilers and solar systems.

PTCV is available in a 20 mm configuration.



### 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
- ❖ Union connections
  - » Valve easy to install and easy to remove for servicing of strainers
- ❖ Safer installations
  - » More accurate control of outlet temperature

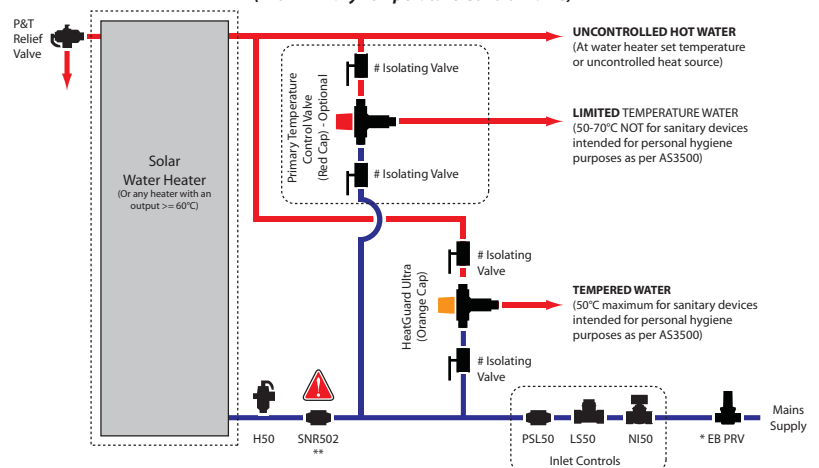
- ❖ Strainers upstream of check valves
  - » Protects valve and check valves from impurities in the water supply
- ❖ Tamper-proof adjustment
  - » Special adjuster key eliminates chances of accidental adjustment
- ❖ Dezincification resistant
  - » Meets Australian Standard for potable water supply
- ❖ Individually tested and calibrated
  - » Every valve is tested to ensure higher quality and performance

### 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.**

### Typical Solar Tempering Valve Installation (with Primary Temperature Control Valve)



Heater System to be plumbed as per AS3500 and manufacturer's instructions. Drain lines where required by AS3500 must comply with AS3500.

# Optional, recommended for ease of maintenance, should be a full flow ball valve.  
\* Installing a PRV at the boundary is recommended to regulate downstream pressure and is mandated in some states. Consult local water authorities for further information.  
\*\* A high temperature non-return valve should be installed. Consult your water heater manufacturer for further information

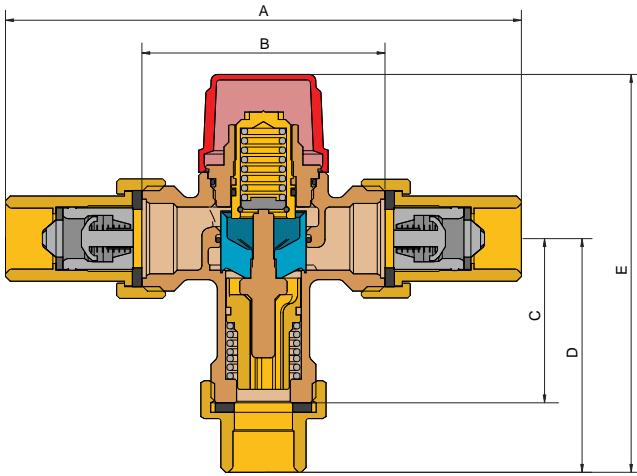
# Primary Temperature Control Valve

## Specification

Cold water supply temperature:	5° C - 30° C
Hot water supply temperature:	60° C - 99° 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: (Between hot supply and outlet temperature)	15° C
Supply pressure, static:	1600 kPa maximum
Supply pressure imbalance, dynamic: (At time of commissioning)	2 : 1 maximum <sup>2</sup>
Maximum permitted pressure variation in either supply, in order to control outlet temperature to ±3° C: (From supply pressure at commissioning)	±10% maximum <sup>3,4</sup>
Minimum flow rate:	4 litres/min.
Maximum flow rate:	33 litres/min.
Fittings Supplied	Male BSP Thread

### 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.



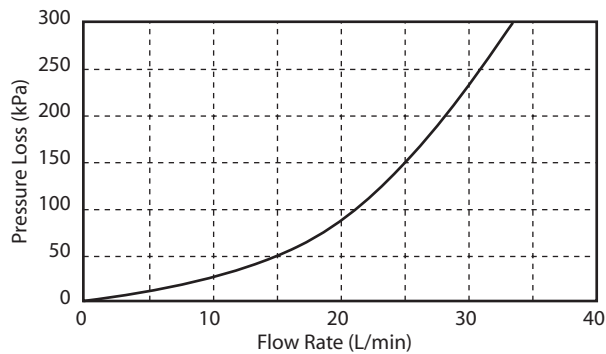
## Dimensions

Model	A	B	C	D	E
Primary Temperature Control Valve	163	77	52	73	126

## Catalogue Number

Model	Catalogue Number
Primary Temperature Control Valve	MIX11092

## Flow Characteristics



## Materials

Body:	Forged brass
Internal Components:	DZR Brass
Seals:	Viton
Springs:	Stainless steel
Piston:	Polysulphone
Fittings:	DZR brass
Strainers:	Stainless Steel
Non-Return Cartridges:	PPO-GF (Noryl®)