Solar Non-Return Valves

Scope of Use / Specification Sheet

The RMC Solar Non-Return Valve is a high temperature non-return suitable for use on solar water heater systems.

### Features and Benefits
- Solid brass construction
- Robust and reliable components
- High temperature resistant internals
- Tolerant of extreme temperatures found in uncontrolled heat source applications
- Dezincification resistant
- Meets Australian Standard for potable water supply
- Suitable for horizontal or vertical installation

### Materials
<table>
<thead>
<tr>
<th>Body</th>
<th>DZR Brass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check Valve</td>
<td>Ultem</td>
</tr>
<tr>
<td>O-Ring</td>
<td>EPDM</td>
</tr>
</tbody>
</table>

### Application
RMC Solar Non-Return Valves should be installed such that the direction of flow allows unheated water to travel in one direction, whilst preventing the return flow of heated water.

RMC recommends the use of a Solar Non-Return Valve on any water heater system where an uncontrolled heat source is used, or where the supply temperature may exceed the rated supply temperature of a regular non-return valve.

### Description
RMC Solar Non-Return Valves prevent the backflow of heated water from a water heater to the mains line. This serves the dual purpose of protecting the mains supply from contamination and prevents the loss of water that has already been heated.

Solar and uncontrolled heating systems present an increased hazard to downstream components as water can become superheated and potentially flash to steam. Only high temperature non-return valves such as the Solar Non-Return Valve should be used in these circumstances.
Solar Non-Return Valves

Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Supply Temperature</td>
<td>170°C *</td>
</tr>
<tr>
<td>Maximum Supply Pressure</td>
<td>1400kPa</td>
</tr>
<tr>
<td>Maximum Flow Rate</td>
<td>90 L/min</td>
</tr>
<tr>
<td>Inlet Thread</td>
<td>½” BSP Male Tapered</td>
</tr>
<tr>
<td>Outlet Thread</td>
<td>¾” BSP Male Tapered</td>
</tr>
<tr>
<td>Body Finish</td>
<td>Machined Brass</td>
</tr>
</tbody>
</table>

Notes

* Product is rated for use in water up to a maximum temperature of 170°C for no longer than 3 minutes duration, no more than once a day.

Note direction of flow when installing valve, as marked on the body.

Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Width (W)</th>
<th>Height (H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNR505</td>
<td>84</td>
<td>33</td>
</tr>
</tbody>
</table>

Note: All measurements in mm unless otherwise stated.

Flow Characteristics

![Flow Rate vs Pressure Drop Graph]

Warranty

Reliance Worldwide Corporation (Aust.) Pty. Ltd. (RWC) will either replace or repair any defective goods where the defect arose as a result of manufacture within the warranty period. You may contact RWC at the phone number, address or e-mail shown below for further information or to make a claim.


Installation

Installation is subject to the requirements of the applicable regulatory authority, the National Construction Code Volume Three – Plumbing Code of Australia, associated reference standards as applicable at the time and AS/NZS 3500.1.

Standards and Approvals

AS 1357.1
LIC WMKA 0938
SAI GLOBAL