Compact Right Angled PRV

Scope of Use / Specification Sheet

The RMC PressureGuard® Compact Right Angle Pressure Reducing Valve is used in water systems to limit the downstream pressure to the pre-set maximum. This valve is not adjustable and is ideally suited for boundary installations.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Features and Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Catalogue Number</td>
</tr>
<tr>
<td>Right Angle Compact PRV 20mm</td>
<td>PRV20R</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Forged brass</td>
</tr>
<tr>
<td>Spring chamber</td>
<td>Epoxy coated zinc alloy</td>
</tr>
<tr>
<td>Pressure plate</td>
<td>Steel (zinc plated)</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>EPDM</td>
</tr>
<tr>
<td>Seat disc</td>
<td>EPDM</td>
</tr>
<tr>
<td>Piston</td>
<td>DZR brass</td>
</tr>
<tr>
<td>Strainer</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>O-Ring</td>
<td>EPDM</td>
</tr>
<tr>
<td>Cartridge case</td>
<td>mPPE (polyphenylene ether)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>The RMC PressureGuard® Compact Right Angle Pressure Reducing Valve is suitable for use in residential installations. The valve maintains a constant maximum outlet pressure to protect downstream installations from variations in supply pressure. Installing a Pressure Reducing Valve can minimise water wastage.</td>
</tr>
</tbody>
</table>
Compact Right Angled PRV

Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Angled PRV 20mm</td>
<td>43</td>
<td>40</td>
<td>92</td>
<td>36.5</td>
<td>58</td>
</tr>
</tbody>
</table>

Note: All measurements in mm unless otherwise stated.

Technical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended operating pressure range</td>
<td>500–1600kPa</td>
</tr>
<tr>
<td>Maximum inlet pressure</td>
<td>2000kPa</td>
</tr>
<tr>
<td>Maximum supply temperature</td>
<td>80°C</td>
</tr>
<tr>
<td>Factory set pressure</td>
<td>500kPa ±10%</td>
</tr>
<tr>
<td>Fluid media</td>
<td>Water</td>
</tr>
</tbody>
</table>

Flow Characteristics

PRV20R Flow vs Pressure Drop

1000kPa Inlet Pressure – Outlet Set Pressure 500kPa

Multi-Storey Buildings

Where multiple pressure reducing valves will be used as part of a hydraulic circuit, consideration should be given to the design of the hydraulic circuit to avoid the operating condition where combined high inlet pressure/low outlet flow-rate results in high water velocity within the Pressure Reducing Valve. Where inlet pressures are likely to exceed 1000kPa, this may be achieved through staged pressure reduction measures.

Standards and Approvals

AS 1357.2
WMKA0938

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.