Differential Poppet Style
Relief Valves - RV and DRV Series

**Model RV**
Differential Poppet Inline Relief

The PRINCE valve model RV is a differential poppet type inline relief. The valve is made up of a relief cartridge and a cast iron valve body. The differential poppet type relief provides smooth quiet performance with a minimum variation between cracking and full flow pressures. This type relief is also less sensitive to system contamination. The model RV is well suited as a system relief up to 30 GPM and 3000 psi. It is available in two pressure ranges and both an externally adjustable and shim adjustable version.

**Valve Specifications:**
- Capacity: 30 gpm max inlet flow
- Pressure: 3000 psi max
- Weight: 3 lbs.

**Model DRV**
Differential Poppet Double Relief

The PRINCE valve model DRV is a differential poppet type double relief. This valve uses the same relief cartridge as the model RV. The double relief is used in systems that require cross over relief protection such as reversible hydraulic motor, or double acting cylinders.

**Valve Specifications:**
- Capacity: 30 gpm max inlet flow
- Pressure: 3000 psi max
- Weight: 5.5 lbs.

**Model RV-O**
Differential Poppet Relief Cartridge

The PRINCE valve model RV-0 is the differential poppet relief cartridge used in many valve models. It is available preset to install into RV valves in the field or into a custom application. This relief cartridge can also be used in the RD5100, RD5200, RD5300 and SV stack valve inlet section.

**Valve Specifications:**
- Capacity: 30 gpm max inlet flow
- Pressure: 3000 psi max

### Standard Models Available

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Model Number</th>
<th>Valve Type</th>
<th>Relief Setting</th>
<th>Port Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV-1H</td>
<td>DRV-1HH</td>
<td>Adjustable 1500-3000 PSI</td>
<td>2000 PSI @ 10 GPM</td>
<td>#12 SAE</td>
</tr>
<tr>
<td>RV-2H</td>
<td>DRV-2HH</td>
<td>Adjustable 1500-3000 PSI</td>
<td>2000 PSI @ 10 GPM</td>
<td>3/4” NPTF</td>
</tr>
<tr>
<td>RV-4H</td>
<td>DRV-4HH</td>
<td>Adjustable 1500-3000 PSI</td>
<td>2000 PSI @ 10 GPM</td>
<td>1/2” NPTF</td>
</tr>
<tr>
<td>RV-2L</td>
<td>DRV-2LL</td>
<td>Adjustable 500-1500 PSI</td>
<td>1000 PSI @ 10 GPM</td>
<td>3/4” NPTF</td>
</tr>
</tbody>
</table>

See page 23 & 24 of the Standard Product Price List for Pricing
MODEL RV AND DRV SPECIAL MODELS AND MOUNTING DIMENSIONS

SPECIAL MODEL RV RELIEF VALVES
Other relief valve models not listed on previous page are available in OEM quantities. To select a model number use the order code matrix shown at right. Consult a sales representative if options other than those listed are required.

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>PORT SIZE</th>
<th>RELIEF TYPE</th>
<th>PRESSURE SETTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV</td>
<td>1 - #12 SAE</td>
<td>H-Adjustable</td>
<td>Specify Relief Pressure in PSI. Leave Blank for Standard Setting</td>
</tr>
<tr>
<td></td>
<td>2 - 3/4 NPTF</td>
<td>L-Adjustable</td>
<td>1500-3000 PSI</td>
</tr>
<tr>
<td></td>
<td>3 - #10 SAE</td>
<td>NH-Non-Adjustable</td>
<td>500-1500 PSI</td>
</tr>
<tr>
<td></td>
<td>4 - 1/2 NPTF</td>
<td>NL-Non-Adjustable</td>
<td>1500-3000 PSI</td>
</tr>
<tr>
<td></td>
<td>5 - #8 SAE</td>
<td>NL-Non-Adjustable</td>
<td>500-1500 PSI</td>
</tr>
<tr>
<td></td>
<td>O - Cartridge</td>
<td>Only. No Body.</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL MODEL DRV RELIEF VALVES
Other relief valve models not listed on previous page are available in OEM quantities. To select a model number using the order code matrix at right. Consult a sales representative if options other than those listed are required.

RV-SERIES MOUNTING DIMENSIONS

DRV-SERIES MOUNTING DIMENSIONS

MACHINING DIMENSIONS FOR RELIEF VALVE CARTRIDGE

FIELD CONVERSION KITS:
- 660250002 ADJ. RELIEF CARTRIDGE 1500-3000 PSI RV ONLY
- 660250003 ADJ. RELIEF CARTRIDGE 500-1500 PSI
- 660250004 NON-ADJUSTABLE RELIEF CARTRIDGE 1500-3000 PSI RV ONLY
- 660250005 NON-ADJUSTABLE RELIEF CARTRIDGE 500-1500 PSI
- 660250011 ADJ. RELIEF CARTRIDGE 1500-3000 PSI DRV ONLY
- 660250012 NON-ADJUSTABLE RELIEF CARTRIDGE 1500-3000 DRV ONLY
- 660590001 RV SEAL KIT
- 660590004 DRV SEAL KIT
- 670300005 1500-3000 PSI RELIEF SPRING
- 670300006 500-1500 PSI RELIEF SPRING

* NOTE: THESE CARTRIDGES ARE THE SAME ON BOTH RV AND DRV VALVES