**DF-PCR PRESSURE COMPENSATING REGULATOR VALVE**

**DESCRIPTION**

**OPERATION**
The DF-PCR-0P with an orifice between ports (3) and (1) maintains a constant flow rate from (3) regardless of load pressure changes in the system upstream of (3), or in the bypass leg at (2) as long as pressure at (2) is less than (1). The valve’s spool maintains a constant differential pressure across an external orifice, thereby regulating the hydraulic flow rate from (3) to (2) (see options table for pressure ranges). When used with an orifice as described above, as a priority type regulator, delivering pump flow first to (3), then bypassing excess to (2). All ports may be fully pressurized. The DF-PCR-0V with a dump valve and a pilot relief valve at (1) acts as main stage of a ventable relief valve.

**FEATURES**
- Hardened parts for long life.
- Industry common cavity.

**HYDRAULIC SYMBOL**

![Hydraulic Symbol]

**PERFORMANCE**
Actual Test Data (Cartridge Only)

**VALVE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Flow</td>
<td>10 GPM (38 LPM)</td>
</tr>
<tr>
<td>Rated Operating Pressure</td>
<td>3500 PSI (241 bar)</td>
</tr>
<tr>
<td>Seat Ratio</td>
<td>Area of Pilot is equal to the area at Port (3)</td>
</tr>
<tr>
<td>Viscosity Range</td>
<td>36 to 3000 SSU (3 to 647 cSt)</td>
</tr>
<tr>
<td>Filtration</td>
<td>ISO 18/16/13</td>
</tr>
<tr>
<td>Media Operating Temp. Range</td>
<td>-40° to 250°F (~-40° to 120°C)</td>
</tr>
<tr>
<td>Weight</td>
<td>.19 lbs (.09 kg)</td>
</tr>
<tr>
<td>Operating Fluid Media</td>
<td>General Purpose Hydraulic Fluid</td>
</tr>
<tr>
<td>Cartridge Torque Requirements</td>
<td>30 ft-lbs (40.6 Nm)</td>
</tr>
<tr>
<td>Cavity</td>
<td>DELTA 3W</td>
</tr>
<tr>
<td>Cavity Form Tool (Finishing)</td>
<td>40500001</td>
</tr>
<tr>
<td>Seal Kit</td>
<td>21191206</td>
</tr>
</tbody>
</table>

**WARNING:** the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

**Can be used as a logic element.**

DF-PCR-0P is commonly used as a bypass flow regulator (80 PSI recommended).

DF-PCR-0V is commonly used as the main stage of a ventable relief valve (40 and 80 PSI recommended).
DIMENSIONS

ORDERING INFORMATION

DF-PCR

OPTIONS
Buna, Pilot to Close  0P
Viton, Pilot to Close  VP
Buna, Vent to Open  0V
Viton, Vent to Open  VV

BODIES
Blank  N
Without Body  1/4" NPTF Ports
#6 SAE Ports  S

PRESSURE SETTING

0040  40 PSI
0080  80 PSI
0150  150 PSI
0200  200 PSI

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Body Weight: .76 lbs (.35 kg)