**DESCRIPTION**

Special cavity, pressure compensating valve, bypass type, for 3 way flow control, normally closed.

**OPERATION**

The QC-CP3 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.

**FEATURES**

- Hardened parts for long life.
- Spring range from 8 to 24 bar.

**HYDRAULIC SYMBOL**

- Pressure compensator for 3 way flow control, typically used with an external orifice between ports (3) and (1). Port (1) should sense upstream pressure of orifice.

**PERFORMANCE**

Actual Test Data (Cartridge Only)

<table>
<thead>
<tr>
<th>Pressure (bar) vs. flow (lt/min)</th>
<th>For various pressure compensator settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow (lt/min)</td>
<td></td>
</tr>
<tr>
<td>023</td>
<td></td>
</tr>
<tr>
<td>018</td>
<td></td>
</tr>
<tr>
<td>014</td>
<td></td>
</tr>
<tr>
<td>008</td>
<td></td>
</tr>
<tr>
<td>015</td>
<td></td>
</tr>
<tr>
<td>010</td>
<td></td>
</tr>
<tr>
<td>005</td>
<td></td>
</tr>
<tr>
<td>000</td>
<td></td>
</tr>
</tbody>
</table>

**VALVE SPECIFICATIONS**

- Nominal Flow: 33 GPM (120 LPM)
- Rated Operating Pressure: 3500 PSI (241 bar)
- Typical Internal Leakage (150 SSU): 35 ml/min @ 250 bar
- Viscosity Range: 36 to 3000 SSU (3 to 647 cSt)
- Filtration: ISO 18/16/13
- Media Operating Temp. Range: -40° to 250°F (-40° to 120°C)
- Weight: .35 lbs (.16 kg)
- Operating Fluid Media: General Purpose Hydraulic Fluid
- Cartridge Torque Requirements: 52 ft-lbs (70 Nm)
- Cavity: T031 (Special)
- Cavity Tools Kit (form tool, reamer, tap): K-T031
- Seal Kit: 210902321

**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.
DIMENSIONS

ORDERING INFORMATION

QC-CP3 – – –

OPTIONS
Buna Standard 00
Viton Standard V0

BODIES
Blank Without Body
N 1/2" BSP Ports
S #8 SAE Ports

PRESSURE SETTINGS
008 8 bar (115 PSI) @ 60 l/min
014 14 bar (200 PSI) @ 60 l/min
018 18 bar (260 PSI) @ 60 l/min
023 23 bar (330 PSI) @ 60 l/min

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.