Variable Displacement Piston Pumps with Pressure Compensator

PVE19/21-**-*-20-C***-1*
PVE19/21-**-*-30-C***-1*
C, CG & CV Compensator
(Shown for right hand shaft rotation.
Rotate 180° for left hand shaft rotation.)

NOTE
The "CVP" compensator may be ordered as a complete factory tested part by ordering part number shown in table below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Body</th>
<th>Spool</th>
<th>Spring</th>
<th>&quot;O&quot; Ring</th>
<th>Back-up Ring</th>
<th>Plug</th>
<th>Compensator S/A Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVE**-C-10</td>
<td>241568</td>
<td>241717</td>
<td>239371</td>
<td>▲262335</td>
<td>241621</td>
<td>02-334115</td>
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<tr>
<td>PVE**-CG-10</td>
<td>412890</td>
<td>296234</td>
<td>278711</td>
<td>417649</td>
<td>▲287144</td>
<td>942440</td>
<td></td>
</tr>
</tbody>
</table>

- 234204 Seat
- 10358 Screw (4 req’d)
- Torque 60-70 lb. in.
- 262331 “O” Ring
- 913451 Gasket
- 185638 Retaining Ring

**CAUTION**
Position gasket with small end of teardrop hole pointing in direction of compensator adjusting plug.

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CVP (C) Compensator
(Shown for right hand shaft rotation.
Rotate 180° for left hand shaft rotation.
See table below for 'CVP' S/A part number.)

Adjust compensator, then drill thru with a 01089 drill. Insert lockwire thru seal, then compress seal with a suitable tool.

Model | CVP-12 S/A | CVPC-12 S/A
--- | --- | ---
PVE19 | 924061 | 924062
PVE21 | 924063 | 924064

<table>
<thead>
<tr>
<th>Model</th>
<th>Rotation Viewed from Shaft End</th>
<th>-20 Valve Block</th>
<th>-30 Valve Block</th>
<th>Wafer Plate</th>
<th>Cylinder Block</th>
<th>Piston Shoe S/A</th>
<th>■ Includes 9 Piston Shoe S/A</th>
<th>■ Rotating Group</th>
<th>■ Rotating Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVE19-R</td>
<td>C/Wise</td>
<td>423337</td>
<td>429729</td>
<td>425412</td>
<td>426454</td>
<td>923939</td>
<td>923948</td>
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<tr>
<td>PVE19-L</td>
<td>CC/Wise</td>
<td>423329</td>
<td>435281</td>
<td>425415</td>
<td>426454</td>
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<tr>
<td>PVE21-R</td>
<td>C/Wise</td>
<td>423337</td>
<td>429729</td>
<td>425413</td>
<td>418215</td>
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<tr>
<td>PVE21-L</td>
<td>CC/Wise</td>
<td>423329</td>
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<td>418215</td>
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<td>923947</td>
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</tbody>
</table>

- Included in 923960 Compensator Piston & Rod S/A Kit
- Included in 923987 Yoke Bearing Kit
- Included in 923988 Shaft Bearing Kit
Model Code

Model Series
PVE - Pump, variable displacement, series inline piston unit

Flow Rating
@ 1800 rpm
19 – 19 USgpm
21 – 21 USgpm

Mounting
F - Foot mounting
Omit - For flange

Shaft Rotation
(Viewed from shaft end)
R - Right Hand (CW)
L - Left Hand (CCW)

Input Shaft
1 - SAE B-B straight thread
2 - SAE B-B 15 tooth spline
9 - SAE B 13 tooth spline

Pump Design
20 - Single drain port
30 - Dual drain port

Control Type & Design
C-10 - Pressure compensated (PVE19, 250-3000 psi)
(PVE21, 250-2700 psi)
CG-10 - Remote control pressure compensator adjustable from 350-3000 psi using an external relief valve
CV-10 - Load sensing PVE19/21
CVP-12 - Load sensing (160 PSID) with pressure compensation PVE 19/21
CVPC-12 - Load sensing (350 PSID) with pressure compensation PVE19/21

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 20/18/15 or cleaner. Selections from Eaton OFP, OFR and OFRS series are recommended.