Low Noise Industrial Piston Pump
PVQ 20–B2/MB * *** – ** – 10 C** **** * – 11/12/20
PVQ 32–B2/MB * *** – ** – 10 C** **** * – 11/12/20
CAUTION
※ Position gasket with small end of teardrop hole pointing in direction of compensator adjusting plug.

COMPENSATOR
※ A 244956 Gasket
A 154005 O-Ring
A 354858 Body
□ 113000 Plug
10358 Screw (4 Req’d)
Torque 7–8 Nm.
(60–70 lb. in.)
A 356986 Spool
A 234204 Seat
A Spring (see table)
A 173792 O-Ring
□ 360430 Adjustment plug

NOTE
Compensator shown for left hand shaft rotation. Rotate 180° for right hand shaft rotation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Valve block S/A</th>
<th>Right hand</th>
<th>Left hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVQ20</td>
<td>Rear ports</td>
<td>02-142934</td>
<td>02-142935</td>
</tr>
<tr>
<td></td>
<td>Side ports</td>
<td>02-142936</td>
<td>02-142937</td>
</tr>
<tr>
<td>PVQ32</td>
<td>Rear ports</td>
<td>02-142938</td>
<td>02-142939</td>
</tr>
<tr>
<td></td>
<td>Side ports</td>
<td>02-142940</td>
<td>02-142941</td>
</tr>
<tr>
<td>PVQ20</td>
<td>Thru—drive</td>
<td>02-143198</td>
<td>02-143199</td>
</tr>
<tr>
<td>PVQ32</td>
<td>Thru—drive</td>
<td>02-143200</td>
<td>02-143201</td>
</tr>
</tbody>
</table>

Cylinder block
C 245223 Washer
C 247294 Spring
C 275474 Thrust washer
C Cylinder block (see table)
C 248812 Pin (3 Req’d)

Piston S/A kit (see table)
Includes 9 piston S/A
C 423324 Spherical washer
C 275961 Shoe plate
C 239077 Swash plate
C 227407 Screw (2 Req’d)

<table>
<thead>
<tr>
<th>Model</th>
<th>Cylinder block</th>
<th>Piston S/A kit</th>
<th>Rotating group kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVQ20</td>
<td>321703</td>
<td>944047</td>
<td>938276</td>
</tr>
<tr>
<td>PVQ32</td>
<td>260860</td>
<td>941887</td>
<td>938273</td>
</tr>
</tbody>
</table>

© Eaton Hydraulics, Incorporated 2000
All Rights Reserved
CAUTION

Model PVQ32C compensator pressure adjustment shall not exceed 2000 psi.

NOTE
See model code for pressure range settings of individual compensator kits.

### Model
- **PVQ**
  - **C**: 942158, 239371
  - **CM**: 942159, 265693
  - **CG**: 942480, 239371
  - **CMG**: 941353, 265693
  - ****C**: 942129, 239371, 581073
  - **C**11B: 02–142729, 239371
  - **C**11P: 02–142728, 239371
  - **C**24B: 02–142730, 239371, 581072
  - **C**24P: 02–142727, 239371, 581072
- **PVQ**CD****: (Refer to service parts information 1–3255–S)

### Non Thru-Drive Shaft

<table>
<thead>
<tr>
<th>Shaft</th>
<th>Type</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>270369</td>
<td>1</td>
<td>58303</td>
</tr>
<tr>
<td>292077</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>883219</td>
<td>N</td>
<td>472270</td>
</tr>
<tr>
<td>875820</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

### 343573 Shaft seal (assemble with spring toward inside of unit)

- 227401 Screw (2 Req’d)
- Name plate
- 357652 Housing
- 164432 Instruction plate
- 227401 Screw (2 Req’d)
- 317239 Spring
- 278634 Spring
- 240535 Seat
- 1306 Screw (2 Req’d)
  Torque 102–108 Nm. (75–80 lb. ft.)
- 342743 Yoke

### Thru-Drives

<table>
<thead>
<tr>
<th>Model</th>
<th>Shaft</th>
<th>Coupling</th>
<th>Snap Ring</th>
<th>O–Ring</th>
<th>Input Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVQ**A9</td>
<td>883302</td>
<td>426770</td>
<td>223172</td>
<td>351776</td>
<td>1 Str. Keyed SAE B</td>
</tr>
<tr>
<td>PVQ**A11</td>
<td>860501</td>
<td>577937</td>
<td>92757</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Couplings, coupling retaining rings, O–rings, cap screws and washers must be ordered separately to mount rear pump.

### NOTE

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 16/13 or cleaner. OFP, OFR, and OFRS series filters are recommended.

### NOTE

Rotation plate shown for right hand shaft rotation. Assemble on opposite side of valve plate for left hand rotation.

### NOTE

- Standard seal kit 919682
- F3 equivalent seal kit 919686
- Compensator kit (see table)
- Valve block S/A (see table)
- Rotating group kit (see table)
- Piston S/A kit (see table)
- Piston/Rod S/A kit 942327
Model Code

PVQ

1. PVQ Series
   P = Inline piston pump
   V = Variable volume
   Q = Quiet series

2. Displacement
   (CC/Rev & Pressure ratings)
   20 = 20 CC/Rev (1.28 CIR)
   32 = 32 CC/Rev (2.01 CIR)
   210 bar (3000 psi)
   140 bar (2000 psi)

3. Mounting flange
   B2 = SAE “B” 2–bolt
   MB = ISO 3019/2 “B” 2–bolt (available with “N” drive shaft only)

4. Rotation
   (viewed from shaft end)
   R = Right hand (CW) (standard)
   L = Left hand (CCW) (optional)

5. Thru drive
   (without coupling) Available with side ports only.
   Blank = No thru drive
   A9 = SAE “A” 2–bolt with 9T shaft
   A11 = SAE “A” 2–bolt with 11T shaft

6. Ports
   (type and location)
   SE = SAE O–Ring rear port, 1.625 inch
   SS = SAE O–Ring side port, 1.625 inch

7. Shafts
   (input)
   1 = Straight keyed SAE “B” modified
   2 = Splined SAE “B” modified 13T, 16/32 DP major dia. fit
   N = ISO 3019/2 short straight keyed (available with “MB” mounting only) Not available on thru–drives
   28 = 26 Tooth splined shaft (Vickers)

8. Seals
   S = Buna N (standard)
   F = Fluorocarbon (optional)

9. Pump design number
   P = First design

10. Control type
    C** = Pressure compensator, PVQ20: Std. model is C21, indicating factory setting of 210 bar (3000 psi). Range is 02–21 in tens of bar (350–3000 psi)
    PVQ32: Std. model is C14, indicating factory setting of 140 bar (2000 psi). Range is 02–14 in tens of bar (350–2000 psi)
    CM** = Low pressure compensator, Std. model is CM7, indicating factory setting of 70 bar(1000 psi). Range is 02–10 in tens of bar (350–1500 psi)
    C**V**B = Pressure compensator C**, as above, with load sensing. Std. load sensing setting is 11 bar (160 psi). Range 10–17 bar (150–250 psi), with bleed down orifice.
    Example: C21V11B indicates compensator with 210 bar pressure setting and 11 bar load sense differential.
    C**V**P = Pressure compensator with load sensing as C**V**B above, but with bleed down orifice plugged.
    C**VC**B = Pressure compensator with load sensing. Compensator same as C** above. Std. load sensing setting is 24 bar (350 psi). Range 17–31 bar (250–450 psi), with bleed down orifice
    C**VC**P = Pressure compensator with load sensing. Same as C**VC**B above, but with bleed down orifice plugged.
    C** = Pressure compensator modified for hydraulic remote control.
    CD** = Electric dual range compensator. PVQ20: Std. model is CD2110, indicating dual pressure settings of 210 and 100 bar, adjustment ranges are 20–210 bar (high) and 20–100 bar (low). PVQ32: Std. model is CD1407, indicating settings of 140 and 70 bar, adjustment ranges are 20–140 bar (high) and 20–100 bar (low).

11. Control option
    Blank = Without adjustable Max. displacement stop (standard)
    D = Max. adjustable displacement stop (optional)

12. Control design
    11 = For C** & CM**
    11 = For C**D & CM**D
    12 = For C**VC**B & C**VC**P
    20 = CD*** & CG

Eaton
14615 Lone Oak Road
Eden Prairie, MN 55344
USA
Tel: 952 937-9800
Fax: 952 974-7722
www.hydraulics.eaton.com

Eaton
20 Rosamond Road
Footscray
Victoria 3011
Australia
Tel: (61) 3 9319 8222
Fax: (61) 3 9318 5714

Eaton
46 New Lane, Havant
Hampshire PO9 2NB
England
Tel: (44) 23 92 486 451
Fax: (44) 23 92 487 110

© 2002 Eaton Corporation
All rights reserved
Printed in USA
Document No. 1-3233-S
July 2002