

# Piston Pumps

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## Low Noise Industrial Piston Pump

PVQ 10-A2/MA \* \*\*\* - \*\* \* \* - 10 C\*\* \*\*\* \*\*\* \* - 11/12/20  
PVQ 13-A2/MA \* \*\*\* - \*\* \* \* - 10 C\*\* \*\*\* \*\*\* \* - 11/12/20



**CAUTION**  
 Model PVQ13C compensator pressure adjustment shall not exceed 2000 psi.

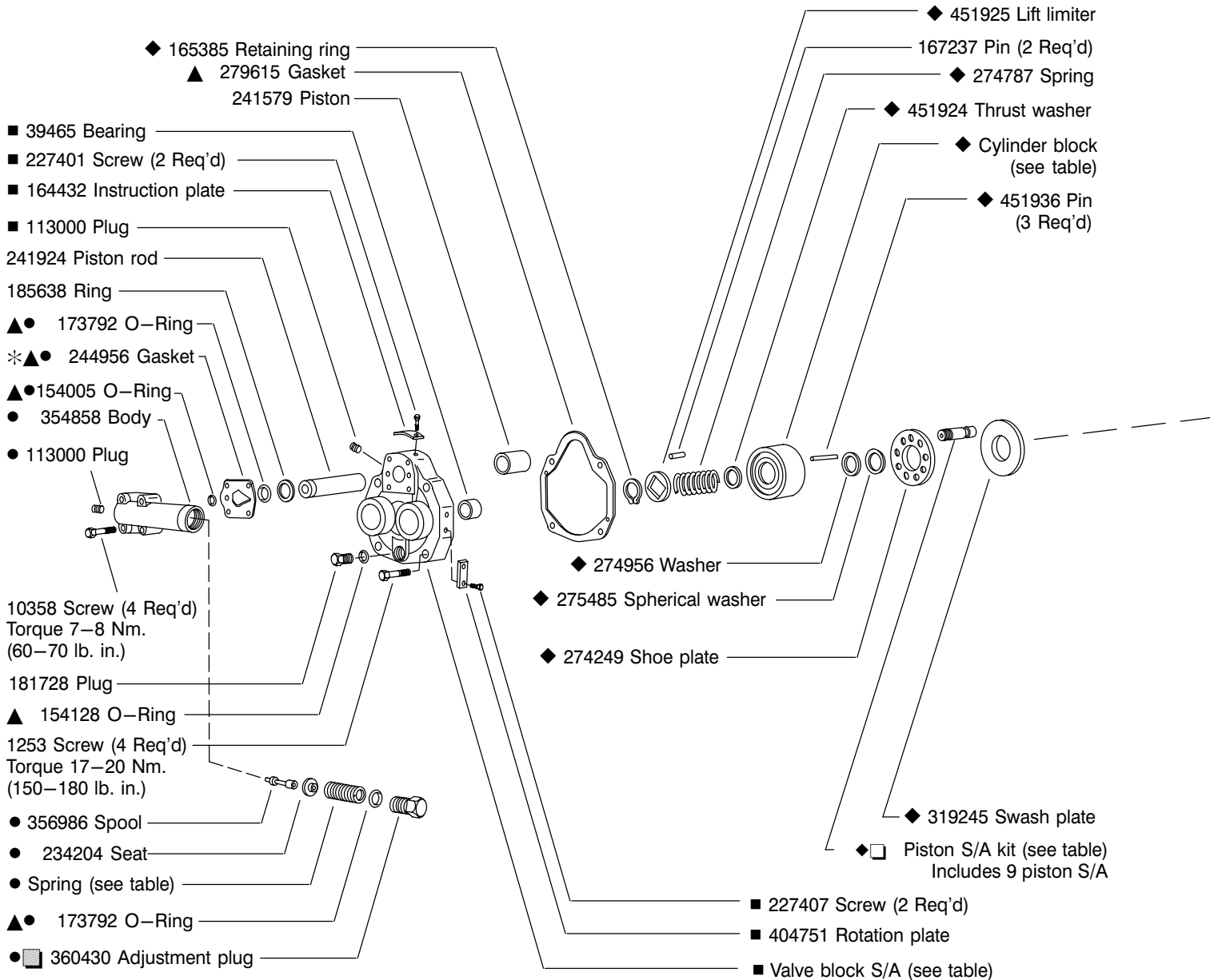
Model	●Comp. kit	●Comp. Spring	●Load Sense Spring
PVQ**C	942158	239371	—
PVQ**CM	942159	265693	—
PVQ**CG	942480	239371	—
PVQ**CMG	941353	265693	—
PVQ**C**V(C)11B	02-142729	239371	581073
PVQ**C**V(C)11P	02-142728	239371	581073
PVQ**C**V(C)24B	02-142730	239371	581072
PVQ**C**V(C)24P	02-142727	239371	581072
PVQ**CD****	(Refer to service parts information I-3255-S)		

**NOTE**

C, CM Compensator shown for right hand rotation. Rotate 180° for left hand shaft rotation and connect to left hand valve block S/A.

**9 NOTE**

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

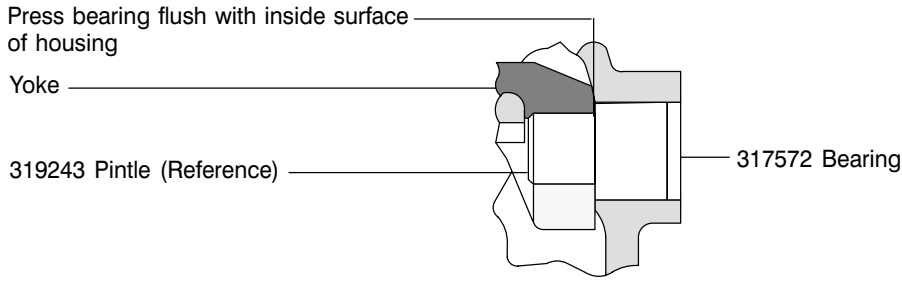


**CAUTION**



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

Valve block S/A	Right hand	Left hand
Rear ports	02-142930	02-142931
Side ports	02-142932	02-142933



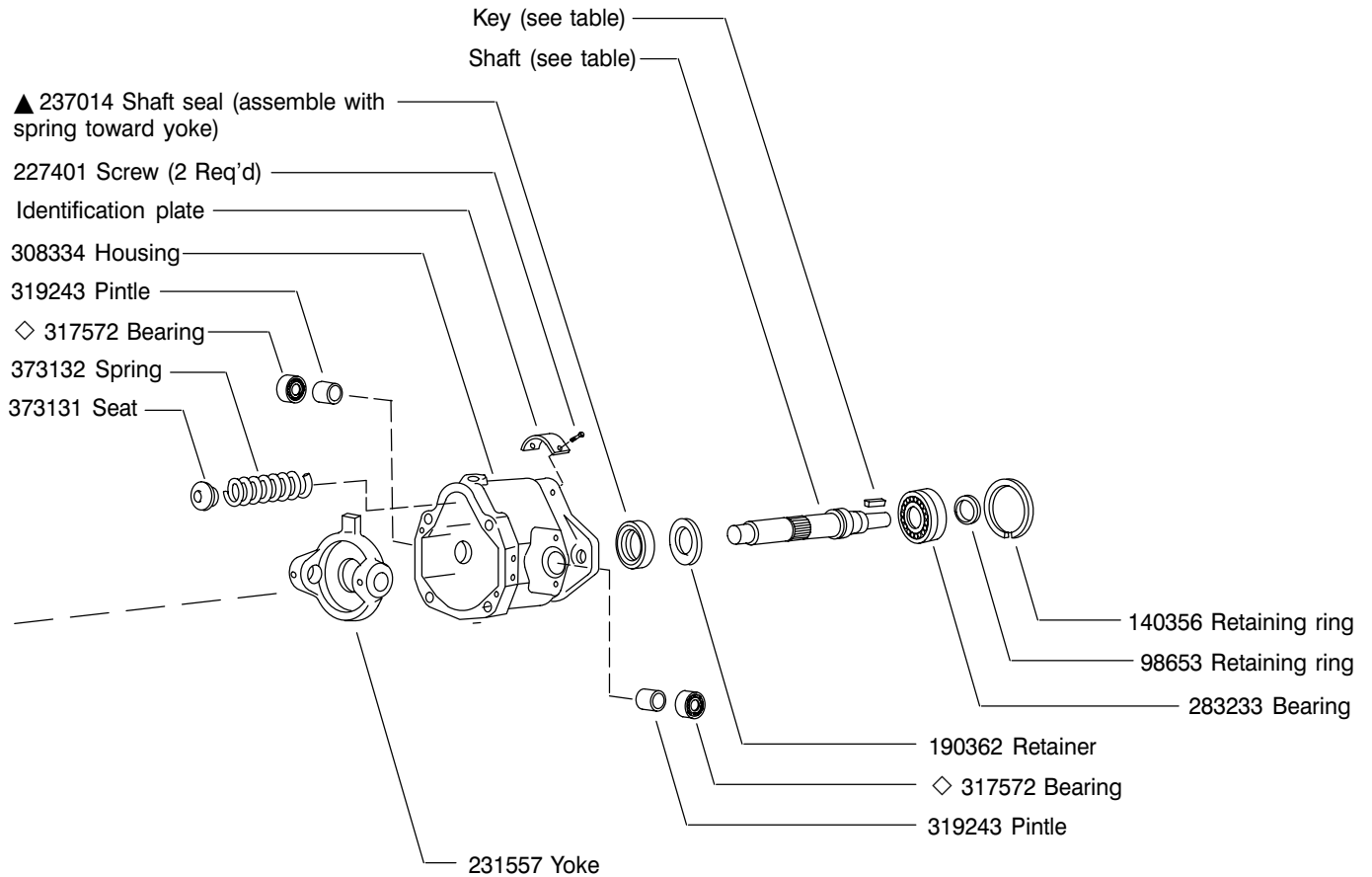
◇ **PINTLE BEARING ASSEMBLY NOTE**

The bearing O.D. surface and mating surface in the housing must be clean. Apply sealing compound (Loctite A (10-1) or equivalent) to the bearing O.D. and press in place.



**CAUTION**

Do not allow sealing compound to contact the bearing needles.



Model	Cylinder block	□ Piston S/A kit	◆ Rotating group kit
PVQ10	677061	942229	875775
PVQ13	677060	942230	875773

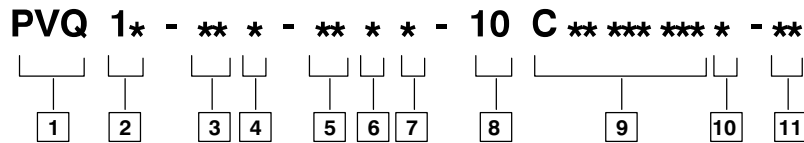
Shaft	Type	Key
266162	1	142843
286848	3	—
883030	N	472255

**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.

- ▲ Standard seal kit 919191  
F3 equivalent seal kit 919308
- Compensator kit (see table)
- Valve block S/A (see table)
- ◆ Rotating group kit (see table)
- Piston S/A kit (see table)

# Model Code



## 1 PVQ Series

**P** – Inline piston pump  
**V** – Variable volume  
**Q** – Quiet series

## 2 Displacement

(CC/Rev & Pressure ratings)

**10** – 10 CC/Rev (.64 CIR)  
 210 bar (3000 psi)  
**13** – 13 CC/Rev (.84 CIR)  
 140 bar (2000 psi)

## 3 Mounting flange

**A2** – SAE “A” 2–bolt  
**MA** – ISO 3019/2 “A” 2–bolt (available with “N” driveshaft only)

## 4 Rotation

(viewed from shaft end)

**R** – Right hand (CW), (standard)  
**L** – Left hand (CCW), (optional)

## 5 Ports

(type and location)

**SE** – O-ring boss rear port,  
 1.0625 inch (Inlet & Outlet) (standard)  
**SS** – O-ring boss side port, 1.3125  
 inch (Inlet & Outlet) (optional)

## 6 Shafts

(input)

**1** – Straight keyed SAE “A” modified  
 .75 inch Dia. x 1.75 inch long  
**3** – Splined SAE “A” modified 9T, 16/32  
 DP major Dia. fit  
**N** – ISO 3019/2 short straight keyed  
 (available with “MA” mounting only)

## 7 Seals

**S** – Buna N (standard)  
**F** – Fluorocarbon, (optional)

## 8 Pump design number

**10** – First design

## 9 Control type

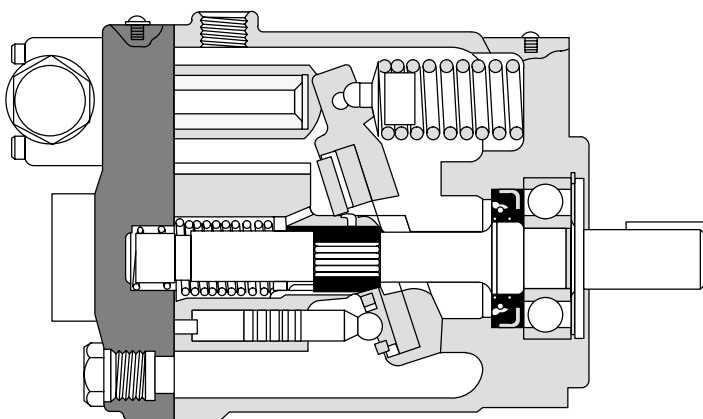
**C\*\*** – Pressure compensator, PVQ10: Std.  
 model is C21, indicating factory setting of  
 210 bar (3000 psi). Range is 02–21 in tens  
 of bar (350–3000 psi)  
 PVQ13: Std. model is C14, indicating factory  
 setting of 140 bar (2000 psi). Range is  
 02–14 in tens of bar (350–2000 psi)  
**CM\*\*** – 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 PVQ10 compen-  
 sator 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.  
**CG** – Pressure compensator modified  
 for hydraulic remote control.  
**CD\*\*** – Electric dual range compensator.  
 PVQ10: 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). PVQ13: Std. model  
 is CD1407, indicating settings of 140 and 70  
 bar, adjustment ranges are 20–140 bar  
 (high) and 20–100 bar (low).

## 10 Control option

**Blank** – Without adjustable Max. displace-  
 ment stop (standard)  
**D** – Max. adjustable displacement stop  
 (optional)

## 11 Control design

**11** – For C\*\* & CM\*\*  
**11** – For C\*\*D & CM\*\*D  
**12** – For C\*\*V(C)\*\*B & C\*\*V(C)\*\*P  
**20** – CD\*\*\* & CG



Typical Sectional View