

Piston Pumps

Low Noise Industrial Piston Pump

ENGINEERING
TOMORROW



PVQ 10—A2/MA * *** — ** * * — 10 C** *** *** * — 11/12/20

PVQ 13—A2/MA * *** — ** * * — 10 C** *** *** * — 11/12/20

AX444071217972en-000101



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

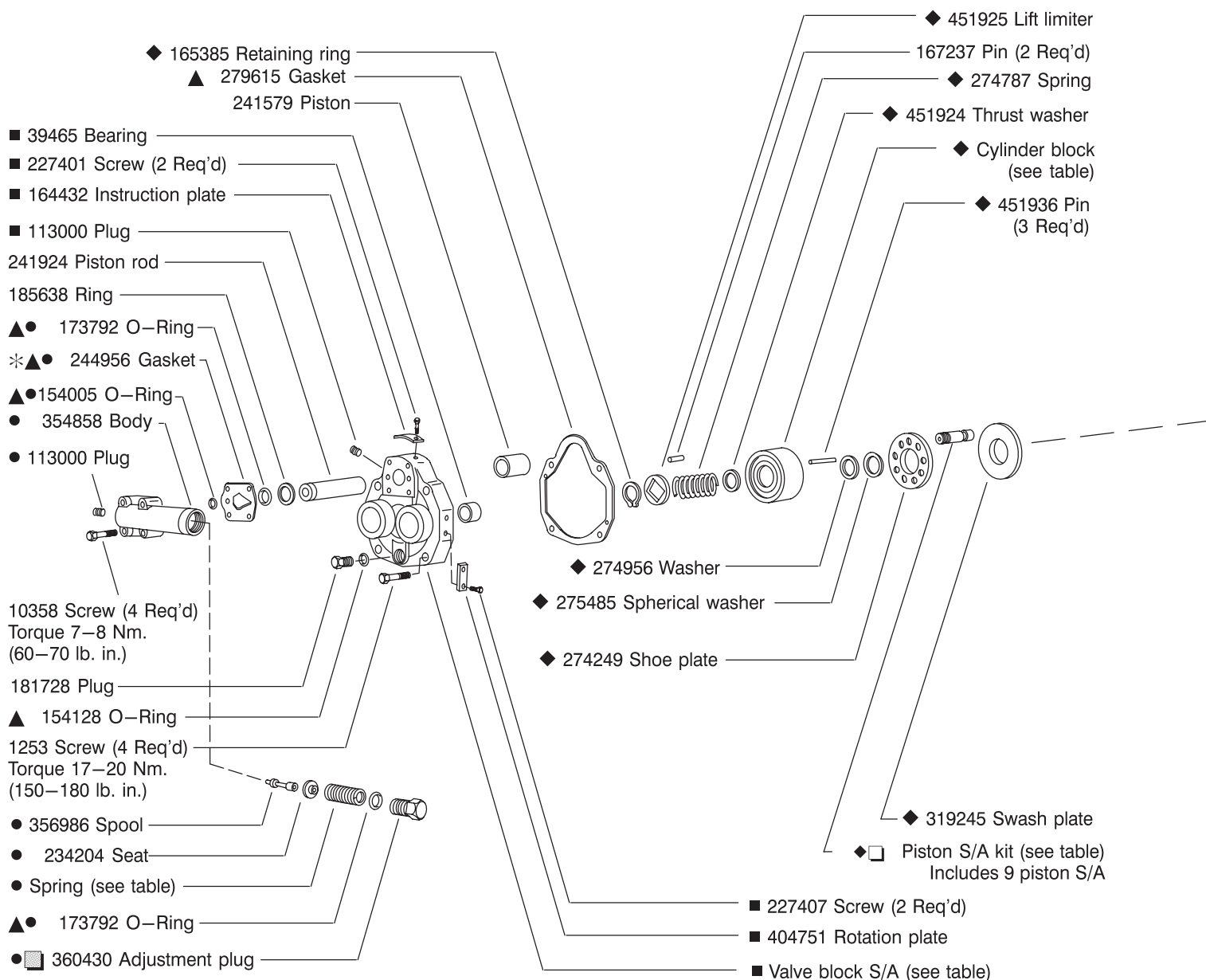
Model	●Comp. kit	●Comp. Spring	●Load Sense Spring
PVQ**C	942158	239371	—
PVQ**CM	942159	265693	—
PVQ**CG	942480	239371	—
PVQ**CMG	941353	265693	—
PVQ**C**V(C)11B	02—142729	239371	581073
PVQ**C**V(C)11P	02—142728	239371	581073
PVQ**C**V(C)24B	02—142730	239371	581072
PVQ**C**V(C)24P	02—142727	239371	581072
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.

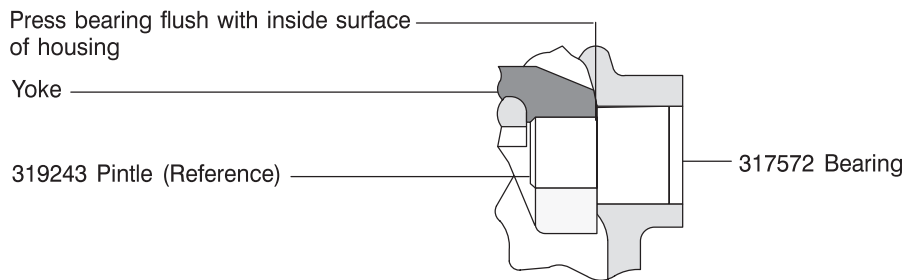


CAUTION



* 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



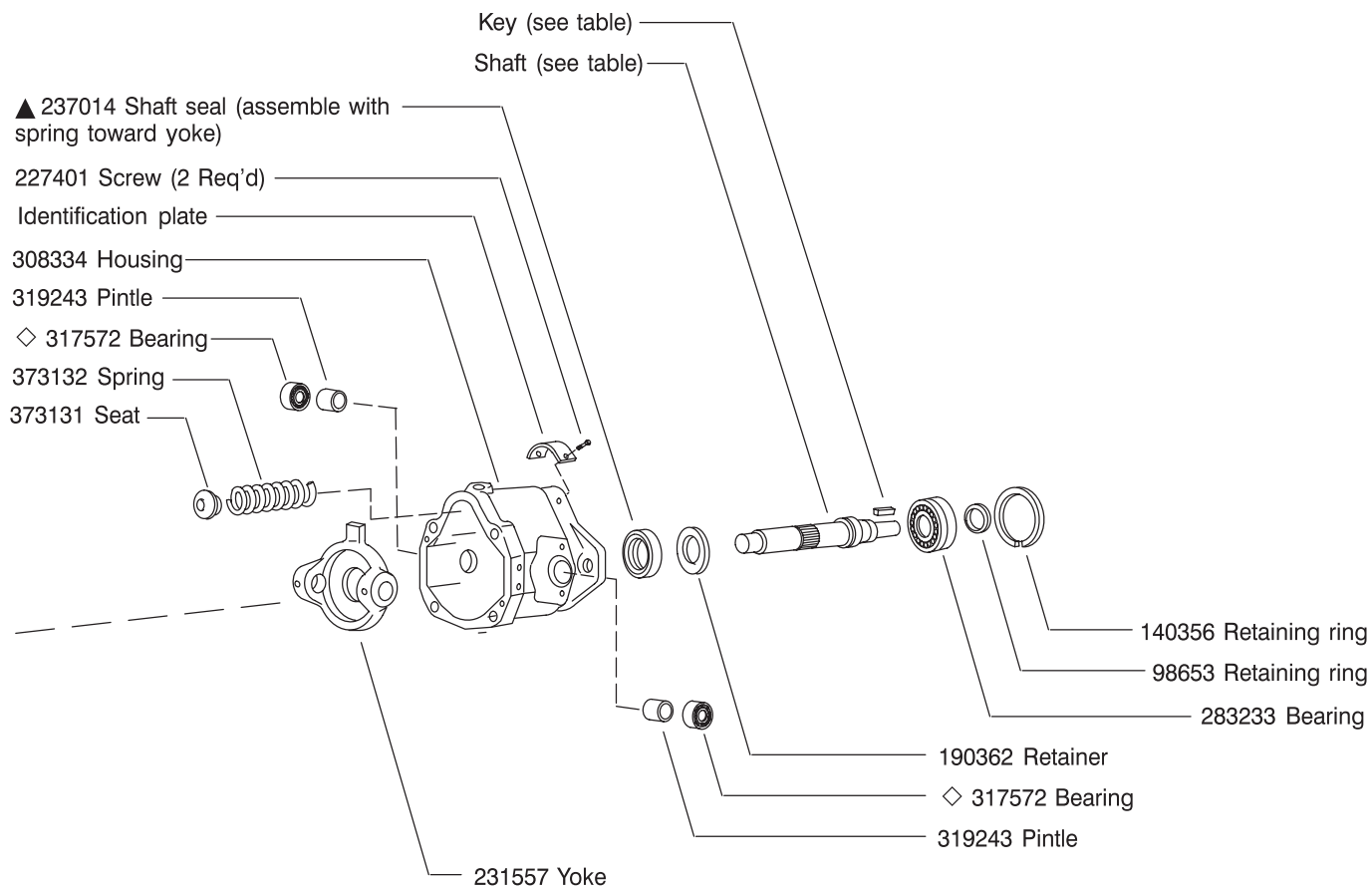
◇ PINTLE BEARING ASSEMBLY NOTE

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

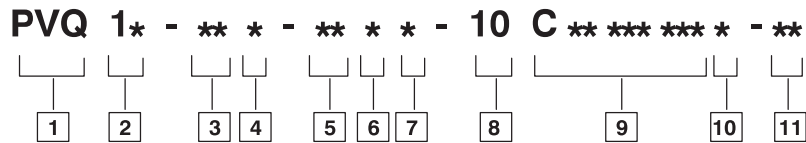
Shaft	Type	Key
266162	1	142843
286848	3	—
883030	N	472255

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

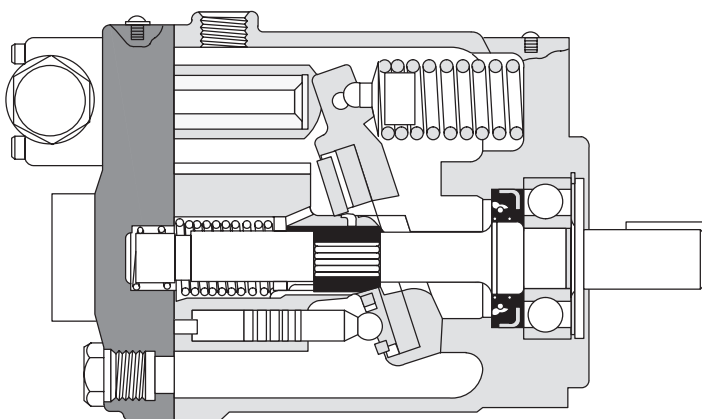
C** — Pressure compensator, PVQ10: Std.
 model is C21, indicating factory setting of
 210 bar (3000 psi). Range is 02–21 in tens
 of bar (350–3000 psi)
 PVQ13: Std. model is C14, indicating facto-
 ry setting of 140 bar (2000 psi). Range is
 02–14 in tens of bar (350–2000 psi)
CM** — Low pressure compensator, Std.
 model is CM7, indicating factory setting of
 70 bar (1000 psi). Range is 02–10 in tens of
 bar (350–1500 psi)
CV**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.
CV**P** — Pressure compensator with
 load sensing as C**V**B above, but with
 bleed down orifice plugged.
CVC**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
CVC**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

Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

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Hydro-Gear

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Daikin-Sauer-Danfoss

www.daikin-sauer-danfoss.com

**Danfoss
Power Solutions (US) Company**
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

**Danfoss
Power Solutions GmbH & Co. OHG**
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

**Danfoss
Power Solutions ApS**
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

**Danfoss
Power Solutions Trading
(Shanghai) Co., Ltd.**
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 2080 6201