

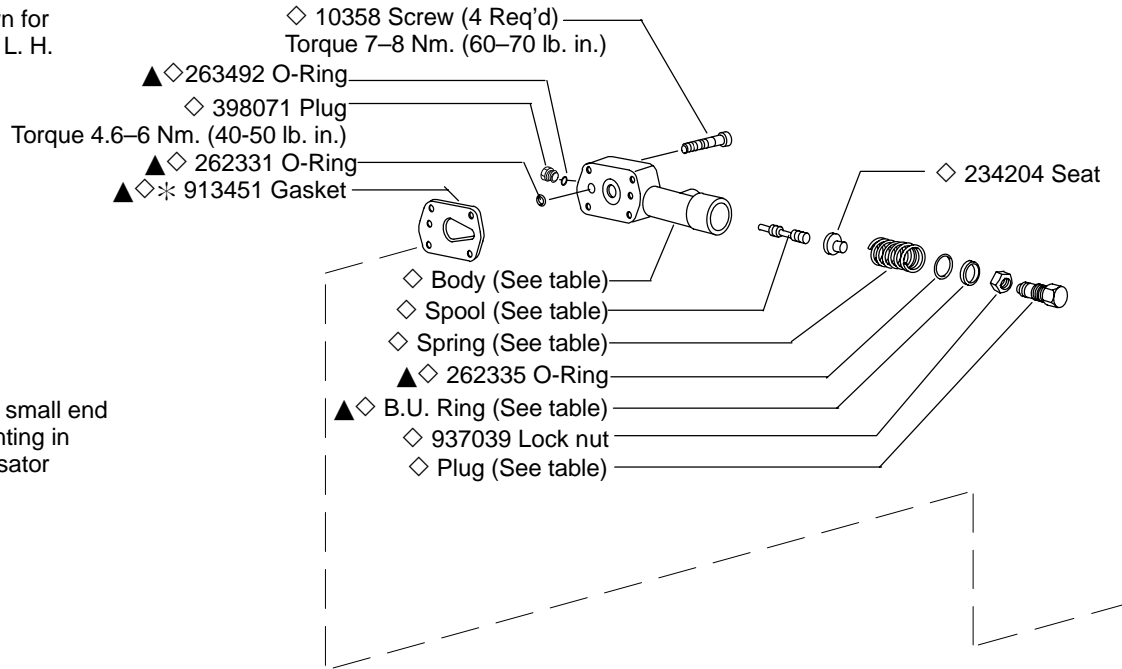


## Low Noise Industrial Piston Pump

PVQ 40-B2 \* \*\*\* - \*\* \* \* - 20 C\*\* \*\*\* \*\*\* \* - 12/13/21/30

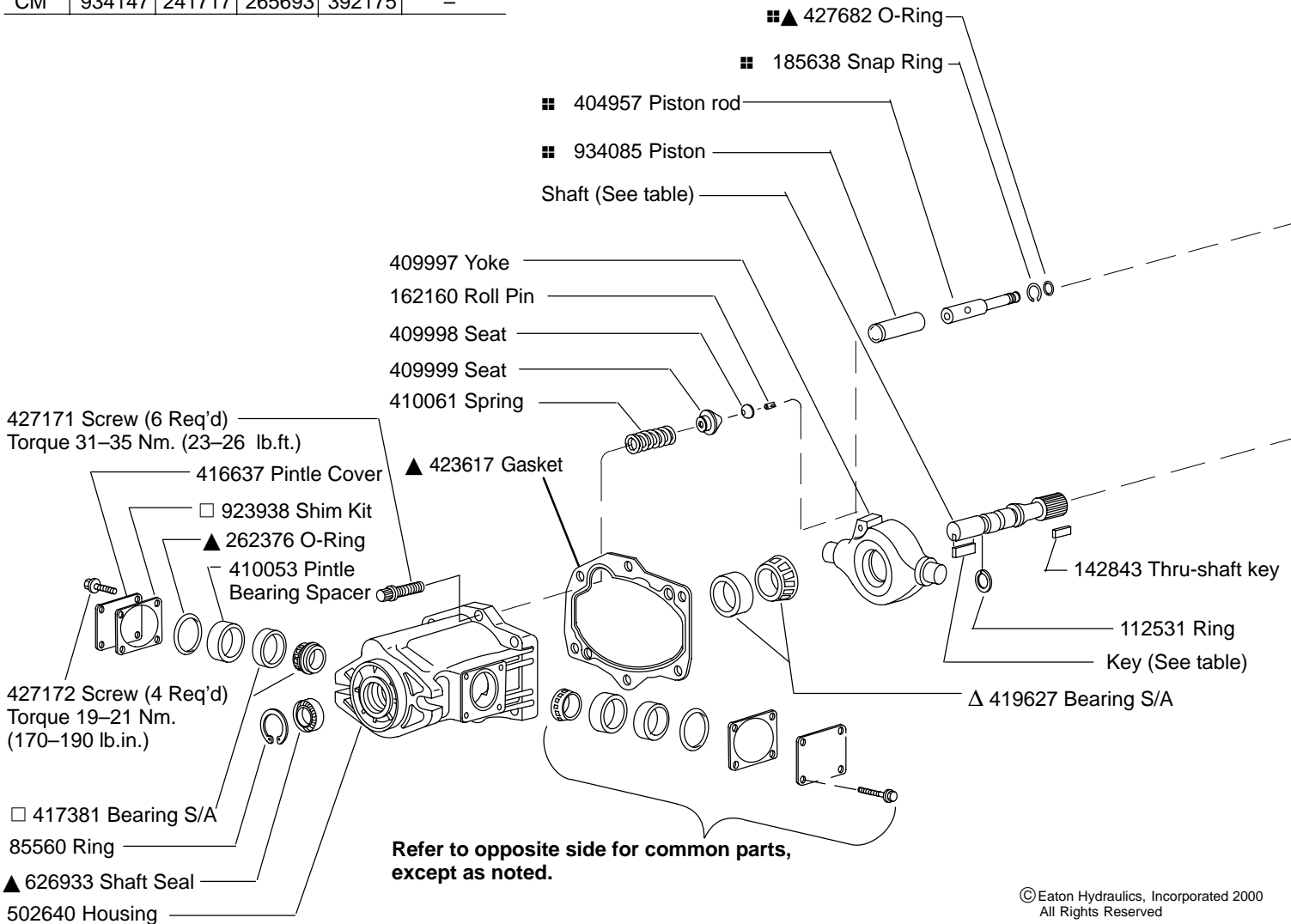
PVQ 45-B2 \* \*\*\* - \*\* \* \* - 20 C\*\* \*\*\* \*\*\* \* - 12/13/21/30

**C\*\*, CM\*\* Compensator** shown for R. H. rotation. Rotate 180° for L. H. shaft rotation.

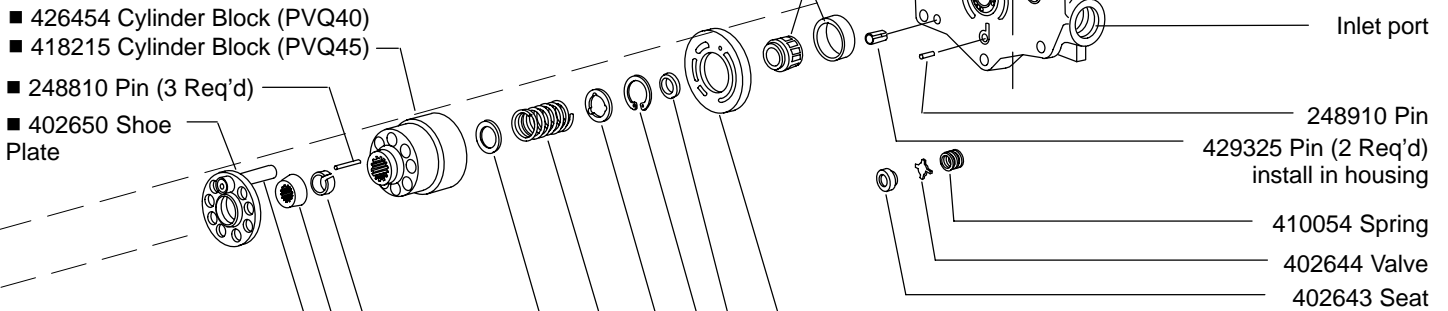
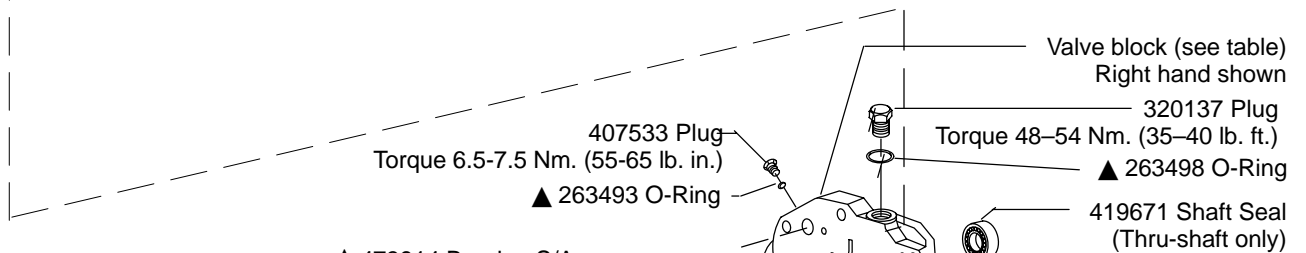
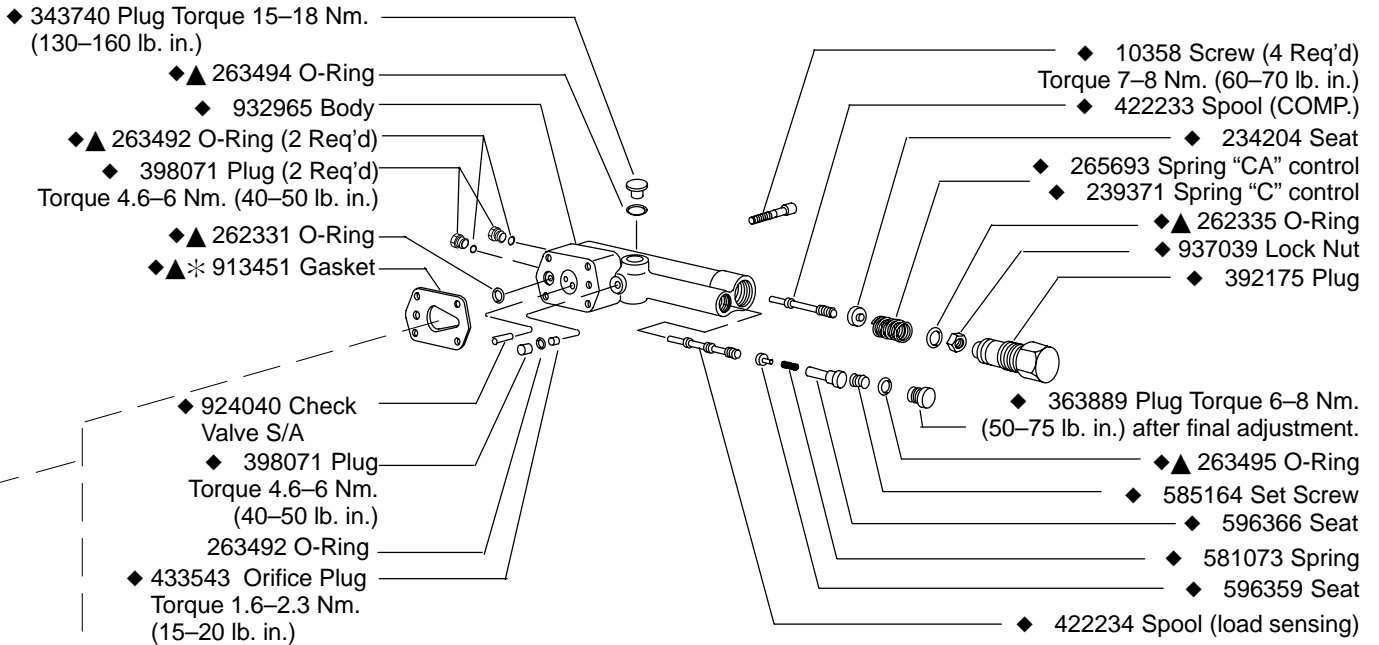


**\* CAUTION**  
 Position gasket with small end of teardrop hole pointing in direction of compensator adjusting plug.

Type	Body	Spool	Spring	Plug	B.U. Ring
C	934147	241717	239371	392175	–
CG	932966	296234	239371	944255	997049
CM	934147	241717	265693	392175	–



**C\*\*V(C)\*\*B Compensator** shown for R. H. rotation. Rotate 180° for L. H. shaft rotation.  
See table for compensator kit part number.



**Non Thru-Drive Shafts**

Shaft	Type	Key
433559	1	22971
428883	2	58303
424544	3	_____
423415	4	_____
860881	N	472270
627172	28	_____

- 410050 Pin Retainer
- 402580 Spherical Washer
- 923939 Piston & Shoe S/A (PVQ40)
- 923946 Piston & Shoe S/A (PVQ45) (includes 9 pistons & shoes)

- Wafer Plate (See table)
- △ 942401 Bearing Spacer Kit (chamfer toward shaft shoulder)
- 99907 Ring
- 423386 Spring Washer
- 402579 Spring Red
- 404932 Spring Washer

**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.

- ◆◆ Included in compensator kit
- ▲ Included in standard seal kit 02-348242
- △ Included in shaft bearing kit 923988
- Included in yoke bearing kit 923987
- Rotating group kit 923948 (PVQ40)
- Rotating group kit 923947 (PVQ45)
- Included in piston rod kit 02-328397



**CAUTION**

Model PVQ45C compensator pressure adjustment shall not exceed 2750 psi.

**NOTE**

See model code **10** for pressure range settings of individual compensator kits.

Model	Comp. Kit	Comp. Spring	Load Sense Spring	
PVQ40-C21-12	02-348260	239371	-	
PVQ45-C19-12	02-348261			
PVQ**-CM7-12	02-348259	265693		
PVQ**-CG-30	02-348262	239371		
PVQ40-C21V11B-13	02-348193			581073
PVQ40-C21VC24B-13	02-348250			581072
PVQ40-C21V11P-13	02-348247			581073
PVQ40-C21VC24P-13	02-348248			581072
PVQ45-C19V11B-13	02-348251			581073
PVQ45-C19VC24B-13	02-348249			581072
PVQ45-C19V11P-13	02-348252		581073	
PVQ45-C19VC24P-13	02-348253		581072	
PVQ**CD****	(Refer to service parts information I-3255-S)			

Model	Shaft end rotation	Wafer plate	Valve block	Thru-drive valve block	O-Ring		
PVQ45*R*SS	Right hand (CW)	629539	933002	-	-		
PVQ40*R*SS			933017				
PVQ45*R*SE							
PVQ40*R*SE	Left hand (CCW)	631476	933016				
PVQ45*L*SS			933007				
PVQ40*L*SS							
PVQ45*L*SE							
PVQ40*L*SE	Right hand (CW)	629539	-			937476	351776
PVQ4**RAFS						627149	375422
PVQ4**RBSS	Left hand (CCW)	631476				933000	351776
PVQ4**LAFS				933021	375422		
PVQ4**LBSS							

Thru-Drive Shafts

<b>5</b> Model	Shaft	<b>7</b> Input Type
PVQ**A9	883098	2 Str. Keyed SAE B-B
	586131	4 Splined SAE B-B
PVQ**B26	677131	2 Str. Keyed SAE B-B
	423416	4 Splined SAE B-B

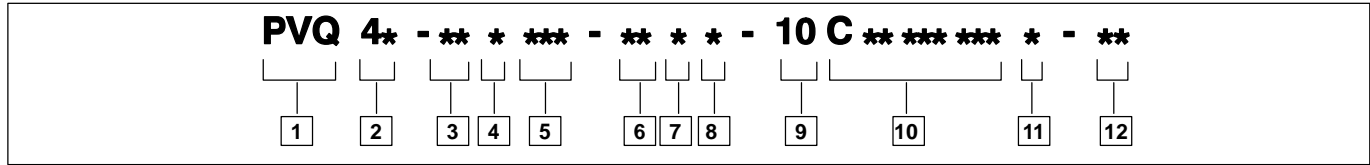
Thru-Drive Couplings

Thru-Drive Model Code	Coupling	O-Ring	Model Code Rear Pump	Rear Pump Shaft Type
PVQ**A9	864224	351776	PVQ10	3
			V10	11
			V20	62
PVQ**B26	627168	375422	PVE12	28
			PVQ40/45	28
			PVQ20/32	28
			2520V	166
	475134			

Thru-Drive Couplings	Type	Description
864224	A	"A" 9 tooth spline
627168	B	26 tooth
475134	B	Step coupling 26 to 15 tooth "B-B" spline

Rear pump, couplings, O-rings, capscrews and washers must be ordered separately to mount rear pump.

# Model Code



## 1 PVQ Series

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

## 2 Displacement

(CC/Rev & Pressure ratings)

**40** – 40 CC/Rev (2.50 CIR)  
 210 bar (3000 psi)  
**45** – 45 CC/Rev (2.75 CIR)  
 190 bar (2700 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

**B13** – SAE “B” 2-bolt with 13T shaft

**B26** – SAE “B” 2-bolt with 26T shaft

(Available only with #4 main input shaft)

## 6 Ports

(type and location)

**SE** – Inch O-Ring boss rear port (standard)

**SS** – Inch O-Ring boss side port (optional)

**FS** – Flange side port (SAE “A” thru-drive only)

## 7 Shafts

(input)

**1** – Straight keyed SAE “B” (not on thru drives)

**2** – Straight keyed SAE “B–B”

**3** – Splined SAE “B” modified 13T, 16/32 DP flat root side fit (not on thru drives)

**4** – Splined SAE “B–B” modified 15T, 16/32 DP flat root side fit

**N** – ISO 3019/2 short straight keyed (available with “MB” mounting only) Not available on thru-drives.

**28** – 26 tooth splined shaft (Vickers) Used to mount PVQ40/45 on PVQ40/45 thru-drive pump

## 8 Seals

**S** – Buna N (standard)

**F** – Fluorocarbon (optional)

## 9 Pump design number

**10** – First design

## 10 Control type

**C\*\*** – Pressure compensator, PVQ40: Std. model is C21, indicating factory setting of 210 bar (3000 psi). Range is 02–21 in tens of bar (350–3000 psi)

PVQ45: Std. model is C19, indicating factory setting of 190 bar (2750 psi).

Range is 02–19 in tens of bar (350–2750 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 PVQ40 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.

**CG** – Pressure compensator modified for hydraulic remote control.

**CD\*\*\*\*** – Electric dual range compensator. PVQ40: 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). PVQ45: Std. model is CD1910, indicating settings of 190 and 100 bar, adjustment ranges are 20–190 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

**12** – C\*\*, C\*\*D, CM\*\* & CM\*\*D

**13** – C\*\*V(C)\*\*B & C\*\*V(C)\*\*P

**21** – CD\*\*\*\* & UV

**30** – CG