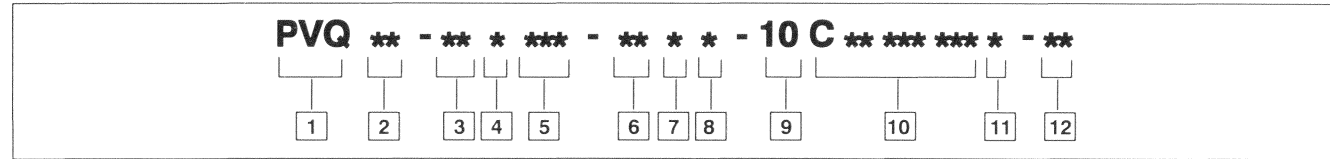


Model Code

Service Data



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)
210 bar (3000 psi)
32 – 32 CC/Rev (2.01 CIR)
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 (Inlet & Outlet) (standard)
SS – SAE O-Ring side port, 1.625 inch (Inlet & Outlet) (optional)

7 Shafts

(input)

1 – Straight keyed SAE “B” modified 2.31 inch long
3 – 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) Used to mount PVQ20/32 on PVQ40/45 “B26” thru drive

8 Seals

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

9 Pump design number

10 – 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.

CG – 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)

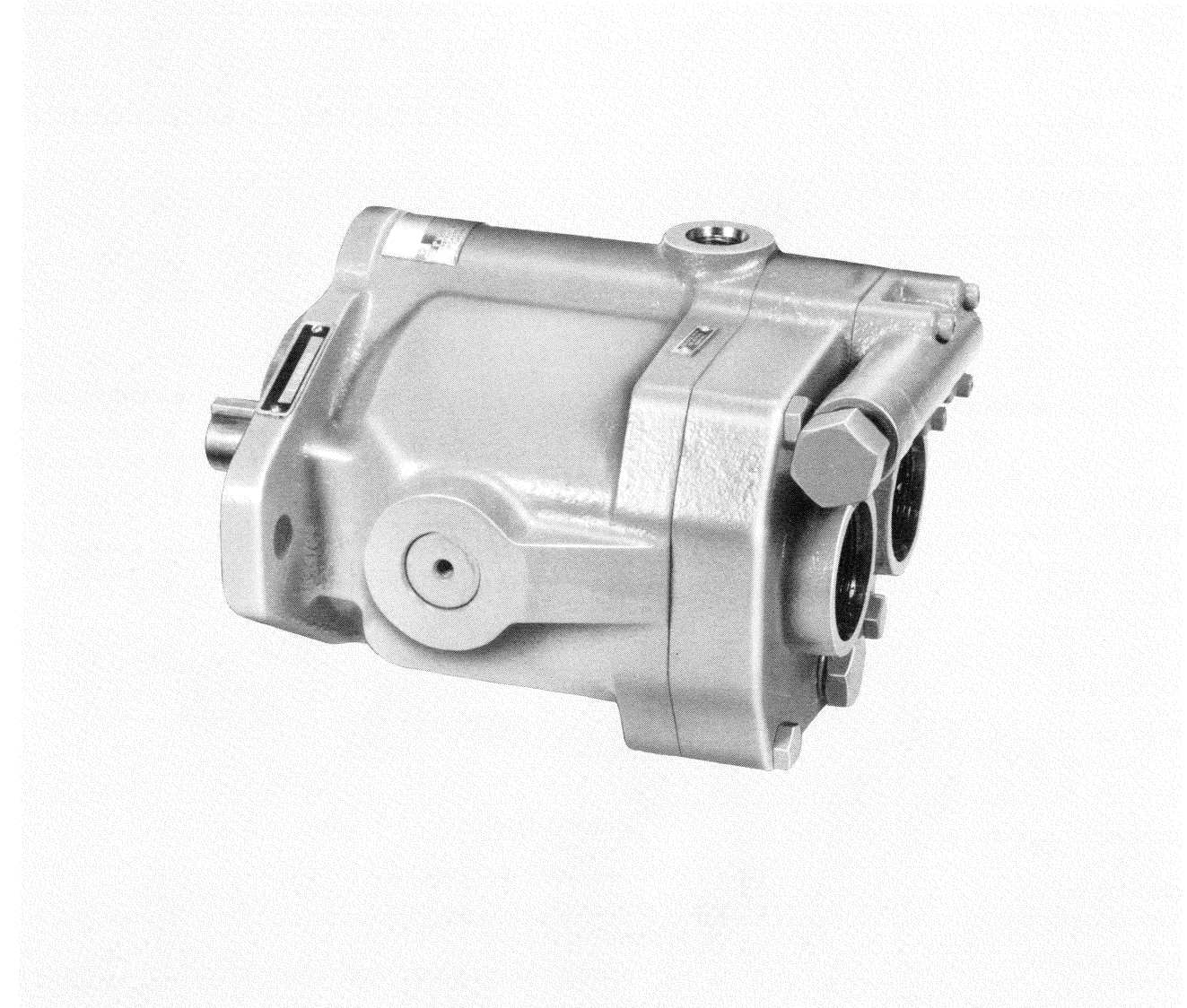
12 Control design

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


Low Noise Industrial Piston Pump

PVQ 20-B2/MB * *** – ** * * – 10 C** *** ** * – 11/12/20

PVQ 32-B2/MB * *** – ** * * – 10 C** *** ** * – 11/12/20



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U.S.A.

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

COMPENSATOR


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

- ◆ 93509 Retaining ring
- 12016 Bearing
- ▲ 317162 Gasket
- 386530 Piston
- 113000 Plug
- 1276 Screw (4 Req'd)
Torque 34–47 Nm.
(25–35 lb. ft.)
- 387828 Piston rod
- 185638 Snap ring
- ▲ 173792 O-Ring
- 186580 Plug
- ▲ 154129 O-Ring
- Valve block S/A (see table)
- 404751 Rotation plate
- ◆ 245223 Washer
- ◆ 247294 Spring
- ◆ 275474 Thrust washer
- ◆ Cylinder block (see table)
- ◆ 248812 Pin (3 Req'd)
- ◆ 423324 Spherical washer
- ◆ 275961 Shoe plate
- ◆ Piston S/A kit (see table)
Includes 9 piston S/A
- ◆ 239077 Swash plate
- ◆ 227407 Screw (2 Req'd)

Model	◆Cylinder block	□◆Piston S/A kit	◆ Rotating group kit
PVQ20	321703	942047	938276
PVQ32	260860	941887	938273

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

Model	■ Valve block S/A	Right hand	Left hand
PVQ20	Rear ports	02-142934	02-142935
	Side ports	02-142936	02-142937
PVQ32	Rear ports	02-142938	02-142939
	Side ports	02-142940	02-142941
PVQ20	Thru-drive	02-143198	02-143199
PVQ32	Thru-drive	02-143200	02-143201

CAUTION
 □ Model PVQ32C compensator pressure adjustment shall not exceed 2000 psi.

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

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)		

Non Thru-Drive Shaft

Shaft	Type	Key
270369	1	58303
292077	3	—
883219	N	472270
875620	28	—

- 58303 Key
- Shaft (see 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
- 120428 Retaining ring
- 119982 Retaining ring
- 284397 Bearing
- 274382 Retainer
- ▲ 166360 O-Ring (2 Req'd)
- 265425 Pintle (2 Req'd)
- 12016 Bearing (2 Req'd)
- 167237 Pin (2 Req'd)

Thru-Drives

5	Model	Shaft	Coupling	Snap Ring	O-Ring	7	Input Type
	PVQ**A9	883302	426770	223172	351776	1	Str. Keyed SAE B
	PVQ**A11	860501	577937	92757			

Couplings, coupling retaining rings, O-rings, capscrews 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. OFF, 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.

- ▲ 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