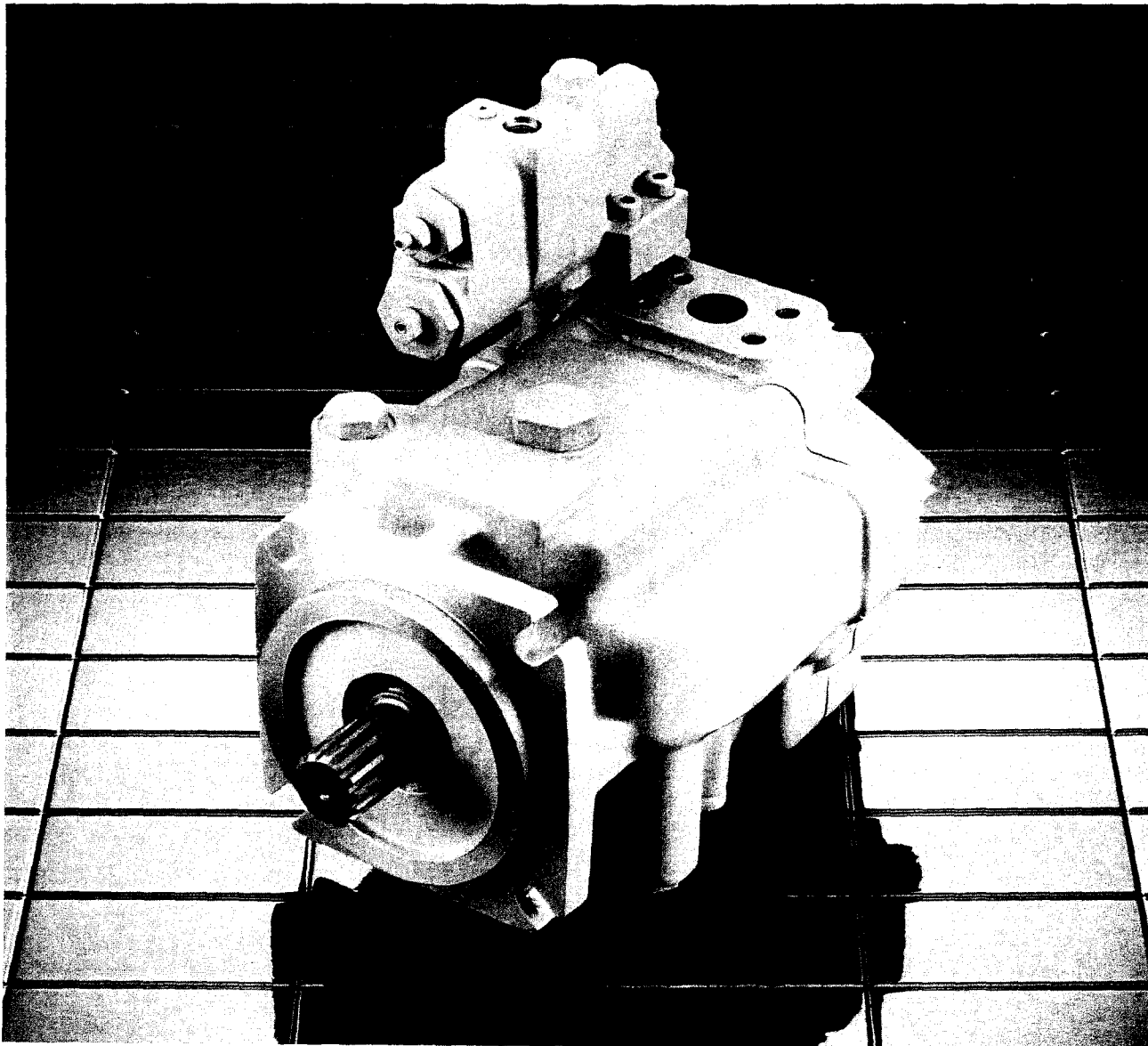


VICKERS

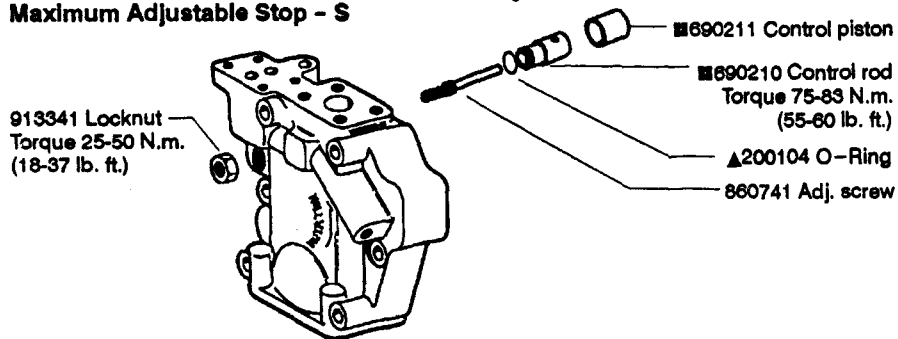
40000

PVH57 Variable Displacement Piston Pump

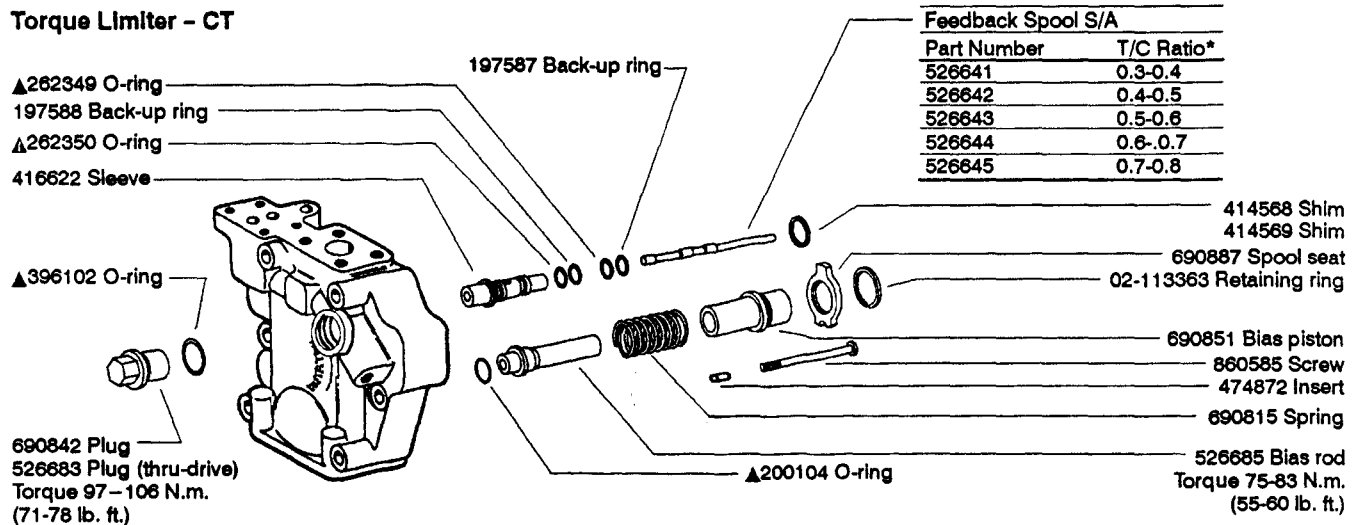


Vickers, Incorporated
A TRINOVA Company
5445 Corporate Drive
P.O. Box 302
Troy, Michigan 48007-0302

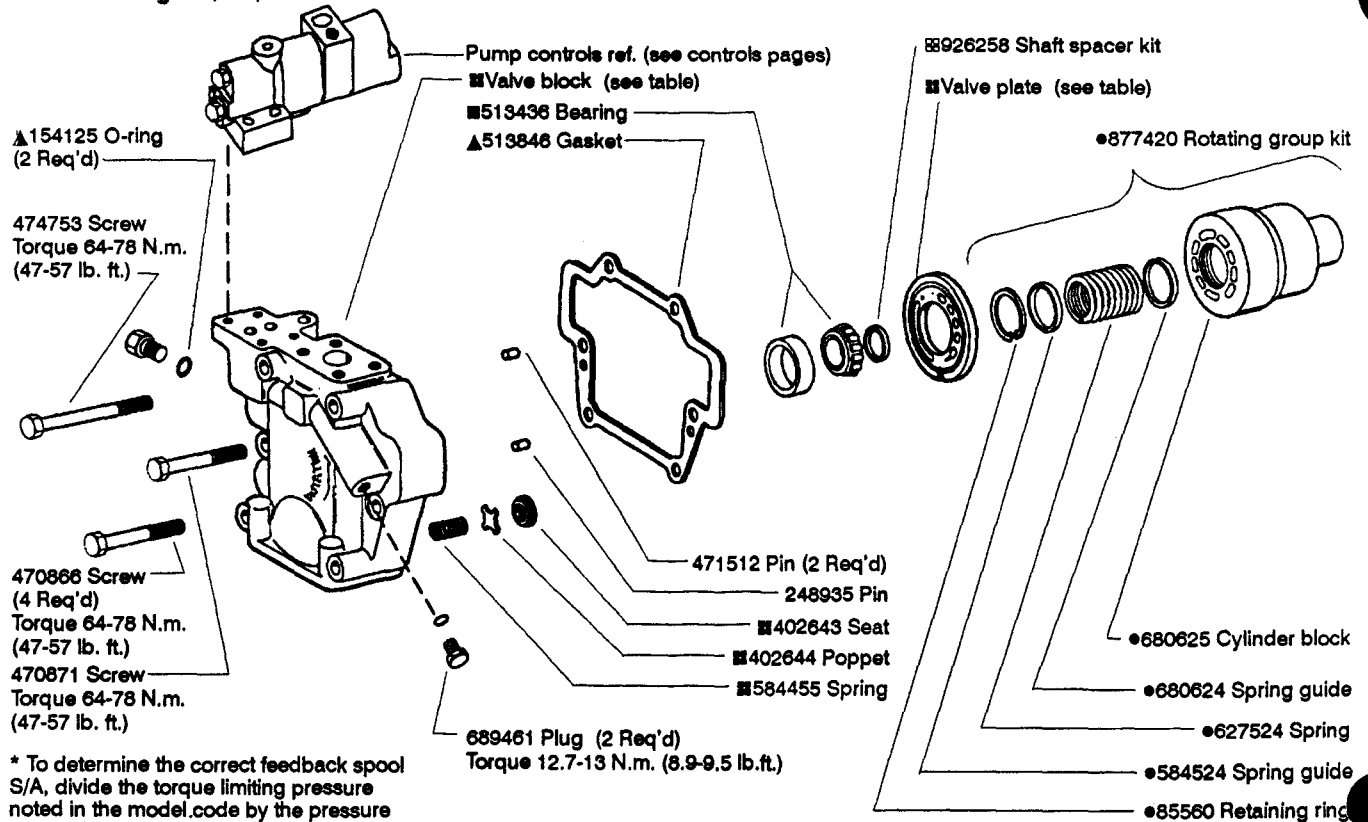
Maximum Adjustable Stop - S



Torque Limiter - CT



Load Sensing - C/CM/CMV



* To determine the correct feedback spool S/A, divide the torque limiting pressure noted in the model code by the pressure limiting control cracking pressure (i.e. T/C=Ratio). On a dual level pressure limiting control, use the high level pressure in this calculation.

Model designation	Valve Block	Valve Plate
57C-LF-10-C*	690854	680631
57C-LM-10-C*	857772	
57C-RF-10-C*	513915	680630
57C-RM-10-C*	864150	
57C-LF-10-CT	526621	680631
57C-LM-10-CT	860513	
57C-RF-10-CT	513912	680630
57C-RM-10-CT	860514	
57C-LSF-10-C	860794	680631
57C-LSM-10-C	860795	
57C-RSF-10-C	860786	680630
57C-RSM-10-C	860787	
57QIC-LF-10-C*	690854	514121
57QIC-RF-10-C*	513915	514128

Shaft	Type	Key
527166	1 - Str. keyed	114516
864342	1 - Str. keyed thru	
513839	2 - Splined	
526684	2 - Splined thru	
863083	N - Short str. keyed	472287

690832 Yoke S/A
690801 Spacer (2 Req'd)

●584512 Shoe cage

●877420 Rotating group kit

●473741 Screw
(4 Req'd)
Torque 13-15 N.m.
(9-11 lb. ft.)

Shaft (See table)

●690218 Limiter (2 Req'd)
●926257 Piston kit
▲200104 O-Ring

526614 Housing (single seal)
864204 Housing (double seal)
883084 Housing (M pilot)
864313 Housing (vertical mtg. -057 suffix)
860808 Housing (single seal 2/4 bolt -027 suffix)
860815 Housing (double seal 2/4 bolt -027 suffix)

■513433 Bearing

■513885 Saddle bearing

■513886 Saddle bearing

■690339 Screw
(2 Req'd)
Torque 3.6-4.4 N.m.
(2.3-3 lb. ft.)

■690211 Control piston

■526668 Bias piston

■526685 Spring

■526685 Bias rod
Torque 75-83 N.m.
(55-60 lb. ft.)

▲200104 O-Ring

■690210 Control rod
Torque 75-83 N.m.
(55-60 lb. ft.)

▲396102 O-Ring

513602 Plug
Torque 97-106 N.m.
(71-78 lb. ft.)

▲396098 O-Ring
186580 Plug
Torque 54-59 N.m.
(40-43 lb. ft.)

▲576601 O-Ring

470793 Screw
(3 Req'd)
Torque 7-9 N.m.
(5-6.6 lb. ft.)

526616 Cover

513439 Shaft seal
(2 Req'd - dual seal)

103824 Retaining ring
(2 Req'd - dual seal)

NOTE

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 14/12 or cleaner.

▲ Available in single shaft seal kit 02-102260
Equivalent double shaft seal kit 02-102244

● Available in rotating group kit 877420

■ Available in bearing kit 877423

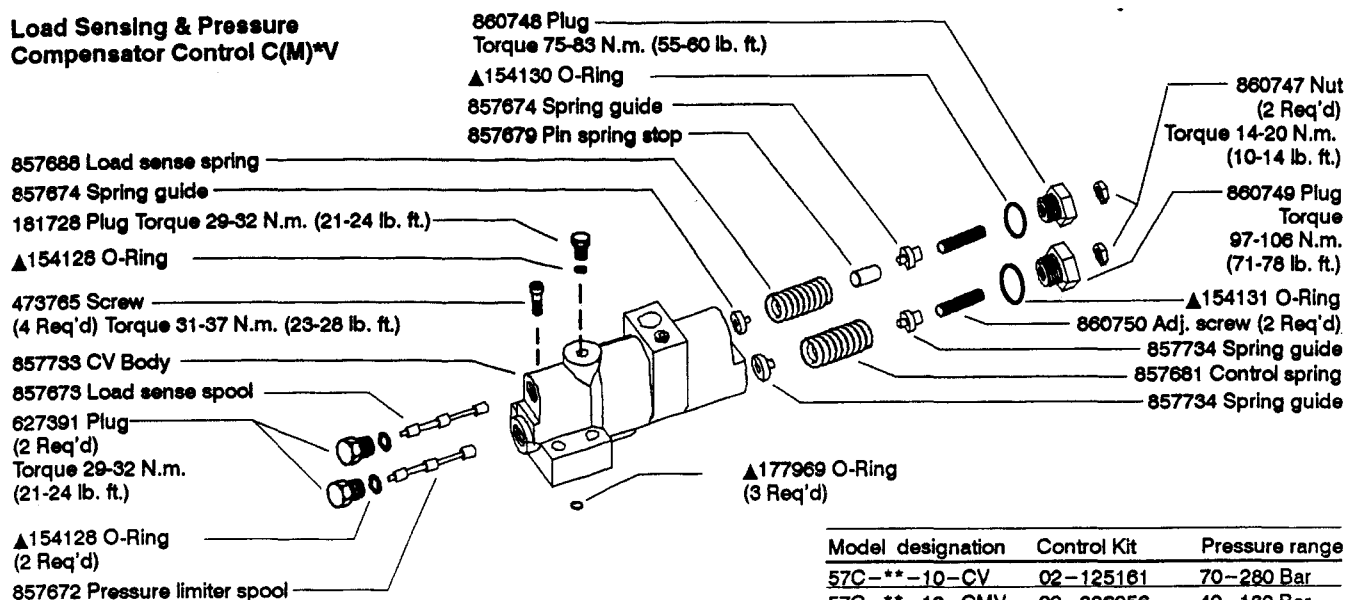
NOTE

Right hand rotation shown. View is opposite for left hand rotation. Please refer to Overhaul Manual M-2210-S.

NOTE

Use shims as required to obtain 0.01-0.10 mm (.0004-.004 in.) axial shaft endplay.

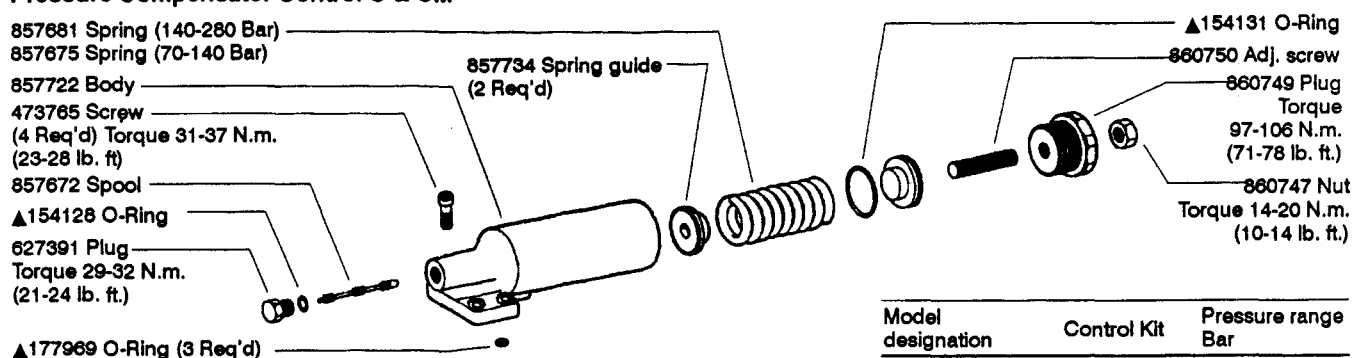
Load Sensing & Pressure Compensator Control C(M)*V



Model designation	Control Kit	Pressure range
57C-**-10-CV	02-125161	70-280 Bar
57C-**-10-CMV	02-306058	40-130 Bar

(All parts shown are included in control kit)

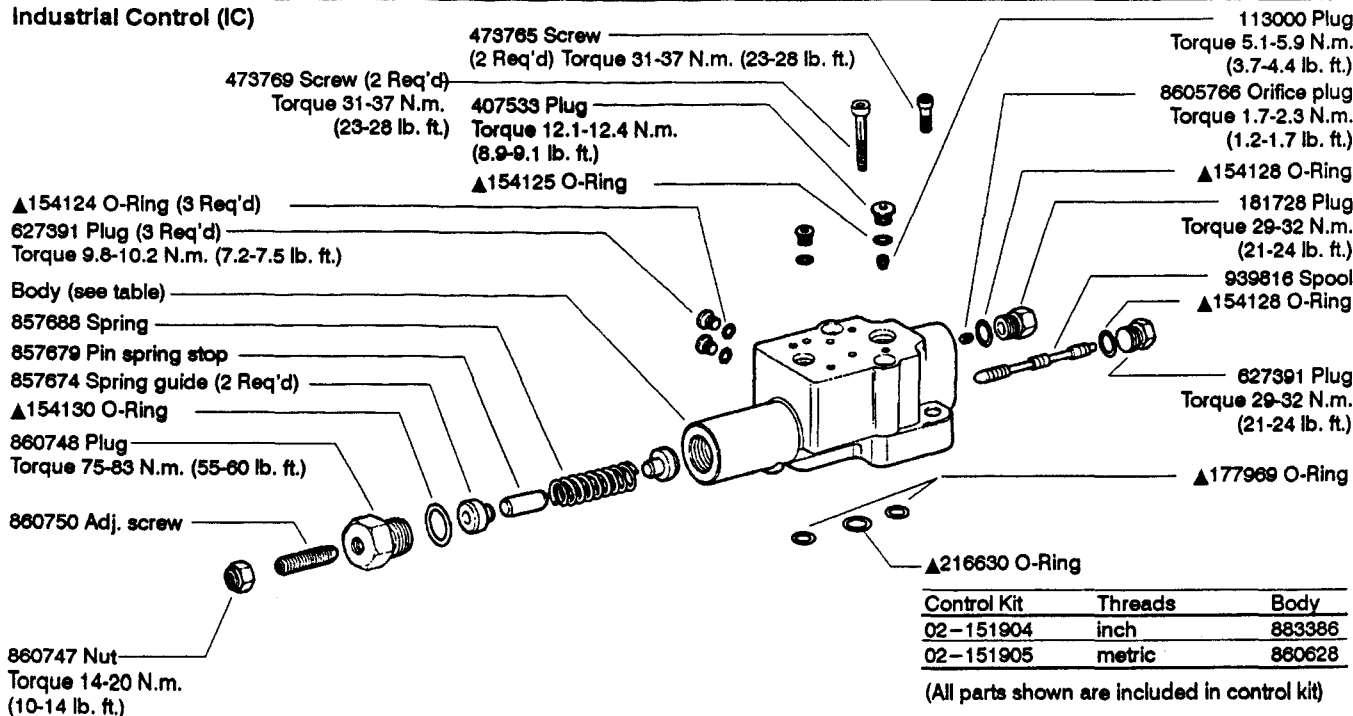
Pressure Compensator Control C & CM



Model designation	Control Kit	Pressure range Bar
57C-**-10-C	02-125160	70-250
57C-**-10-CM	02-125162	40-130

(All parts shown are included in control kit)

Industrial Control (IC)



Control Kit	Threads	Body
02-151904	inch	883386
02-151905	metric	880628

(All parts shown are included in control kit)

Pressure Compensator (CT, CVT)

201345 Screw** (4 Req'd)
Torque 21-27 N.m.
(15-20 lb. ft.)

▲177969 O-Ring **
(4 Req'd)

589330 Adj. screw

▲154126 O-Rings

591770 Plugs

▲395870 O-Ring
(2 Req'd)

▲197591 Back-up ring
(2 Req'd)

418209 Strap

1250 Screw (2 Req'd)
Torque 10-12 N.m.
(7.3-8.8 lb. ft.)

430444 Cover**

248945 Pin

577589 Spring

309594 Poppet

190054 Plug

11191 Screw (4 Req'd)
Torque 30-38 N.m.
(22-28 lb. ft.)

310206 Adj. screw

423636 Cover S/A

435260 Orifice seat

▲197605 Back-up ring

▲189344 O-Ring

248932 Pin

▲197568 Back-up ring

▲200082 O-Ring

576803 Spring guide

408458 Spring

430461 Spring seat

588997 Body S/A

▲177969 O-Ring
(5 Req'd)

Model	S/A	Plug	Pin
CT, CVT	589003	430469	248823

** Cover, screw and O-Rings are not used with load sensing S/A.

▲ Included in Seal Kit 920236

Torque Control/Load Sense S/A (CVT)

107069 Screw (4 Req'd)
Torque 21-27 N.m.
(15-20 lb. ft.)

181728 Plug
Torque 29-32 N.m.
(21-23 lb. ft.)

▼154128 O-Ring

578933 Spool

▼154124 O-Ring

378910 Plug
Torque 9.8-10.2 N.m.
(7-7.5 lb. ft.)

595478 Adj. plug

▼197574 Back-up ring

▼153950 O-Ring

1497 Nut
Torque 15-20 N.m.
(11-15 lb. ft.)

586184 Spring (ΔP bar 17-34)

586186 Spring (ΔP bar 10-16)

427391 Spring seat

627587 Load sensing S/A

▼177969 O-Ring (4 Req'd)

▼ Included in Seal Kit 920237

Thru-drive

Model designation	Valve block
57*-LAF-10-C	526660
57*-LAM-10-C	884257
57*-RAF-10-C	526658
57*-RAM-10-C	884239
57*-LAF-10-CT	526662
57*-LAM-10-CT	880515
57*-RAF-10-CT	526661
57*-RAM-10-CT	880516

Model designation	Adapter (SAE "B" & "C" pad)
57*-BF-10-C	526670
57*-BM-10-C	876393
57C-*CF-10-C	692934
57C-*CM-10-C	876391
031 Suffix A cover	939790

□ Available in adapter pad kit
876390 SAE B (inch)
876394 SAE B (metric)
876389 SAE C (inch)
876392 SAE C (metric)

474753 Screw
(2 Req'd)
Torque 64-78 N.m.
(47-57 lb. ft.)

474756 Screw (2 Req'd, SAE "A" pad)

Torque 64-78 N.m. (47-57 lb. ft.)

473817 Screw (2 Req'd, SAE "B"/"C" pad)

Torque 64-78 N.m. (47-57 lb. ft.)

470866 Screw
(2 Req'd)
Torque 64-78 N.m.
(47-57 lb. ft.)

526682 Coupling (SAE "A")
526694 Coupling (SAE "B")
526696 Coupling (SAE "C")

576601 O-ring (SAE "A" pad)

▶□401525 O-Ring (SAE "B" adapter)

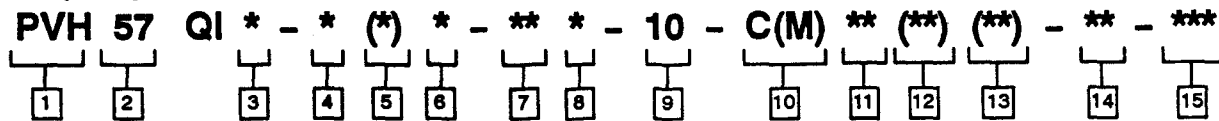
□353264 O-Ring (SAE "C" adapter)

▶ Available in single shaft seal kit 02-102260
Equivalent double shaft seal kit 02-102244

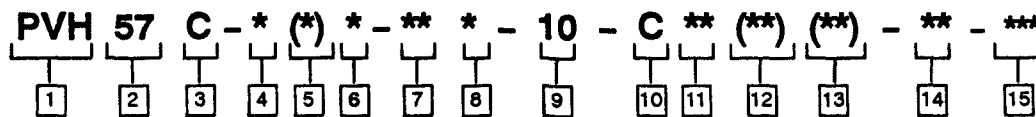
Rear Pump

Model Codes

Industrial pumps



Mobile pumps



1 Piston pump, variable displacement

2 Maximum geometric displacement
57 = 57.4 cm³/r (3.5 in³/r)

3 Mounting flange, prime mover end
C = SAE "C" 4-bolt type (SAE J744-127-4)
M = ISO 3019/2-125B4HW (Option for PVH57 and PVH74 only)

4 Shaft rotation, viewed at prime mover end
R = Right hand, clockwise (Standard on QI models)
L = Left hand, counterclockwise (Optional on QI models)

5 Configuration
Blank = Non-thru-drive (single pump)
A = Thru-drive pump with SAE "A" 2-bolt rear flange mounting (SAE J744-82-2)
B = Thru-drive pump with SAE "B" 2- and 4-bolt rear flange mountings† (SAE J744-101-2/4)
C = Thru-drive pump with SAE "C" 2- and 4-bolt rear flange mountings† (SAE J744-127-2/4)
S = Adjustable maximum volume stop (non-thru-drive and non-torque-control pumps only)

6 Main ports
F = SAE 4-bolt flange pads (standard)
M = SAE 4-bolt pads with metric mounting bolt threads

7 Shaft-end type, at prime mover end
N = ISO 3014/2- Short straight E32N keyed
1 = SAE "C" Straight (J744-32-1) keyed
2 = SAE "C" Splined 14 tooth (J744-32-4) 12/24 D.P.

8 Shaft seal, prime mover end
S = Single, one-way (standard)
D = Double, two-way (optional)
Recommended on second pump of tandem assembly (PVH**/PVH**) and on "wet mount" applications.

9 Pump design number
10 (Subject to change. Installation dimensions unaltered for design numbers 10 to 19 inclusive.)

10 Pressure compensator adjustment range
C = 70-250 bar (1015-3625 psi) (standard)
CM = 40-130 bar ((580-1885 psi) (optional QI version)
IC = Industrial control, 20 bar (290 psi) differential pressure setting

11 Pressure compensator factory setting in tens of bar
25 = Normal factory setting of 250 bar for "C" models.
7 = Normal factory setting of 70 bar for "CM" models.

12 Additional control functions
Blank = No additional controls
V = Load sensing, 20 bar (290 psi) differential pressure setting
T = Torque limiter
VT = Load sensing and torque limiter

13 Torque limiter factory setting
** = Customer desired torque limiter setting specified in ten bar (145 psi) increments, e.g.:
8 = 80 bar (1160 psi);
18 = 180 bar (2610 psi).
The torque setting range is from 30-80% of the specified compensator setting.

14 Control design number
31 = C, CM, or C**V controls.
13 = C**T controls
14 = C**VT controls
31 = IC controls

15 Special features suffix
027= Composite 2-bolt/4-bolt mounting conforming to SAE "C"
031= Thru-drive SAE "A" pad cover
041= No case-to-inlet relief (for use with supercharged circuits, 50 psi max.)
057= Shaft-up operation (vertical mount)

† Built from pump with SAE "A" rear pad to which suitable flange adapter is bolted. For best availability and flexibility, order PVH SAE "A" thru-drive pump and SAE "B" or "C" adapter kit separately.