# $\text{Vickers}^{\text{\tiny{\circledR}}}$

# Vane Pumps



# Thru-Drive Vane Type Pump

(F3)-25VT\*(M)-\*\*A(M)2-\*\*-\*-22-\*



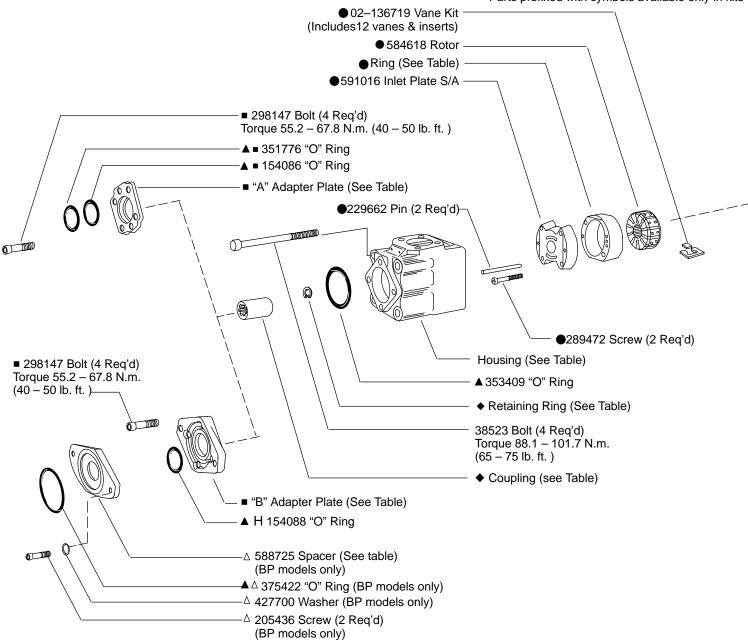
Rev. 2/98 I-3154-S

MODEL	ADAPTER PLATE	ADAPTER KIT	SPACER KIT	RETAINING RING	COUPLING	COUPLING KIT
VTA	584936	941296		223172	426770	02-136810
VTB	504000	0.44.007		89447 (1)	584926	02-136811
VTBP	584922	941297	02-136817	89447 (2)	452865	02-136812

FOR BP MODELS AN ADAPTER KIT AND SPACER KIT IS REQUIRED.

MODEL	▲ SEAL KIT	F3 SEAL KIT
25VTA	920189	920190
25VTB	920191	920192
25VTBP	02-136927	02-136928

- ▲ Included in seal kit (See Table)
- Included in cartridge kit (See Table)
- ◆ Included in coupling kit (See Table)
- Included in adapter kit (See Table)
- Included in spacer kit (BP models only)
  F3 equivalent seal kit (See Table)
  Parts prefixed with symbols available only in kits





MODEL	● RING	● CART KIT	● F3 CART KIT
25VT**12	584610	02-102532	02-102540
25VT**14	584612	02-102533	02-102541
25VT**17	584614	02-102534	02-102542
25VT**21	584616	02-102535	02-102543

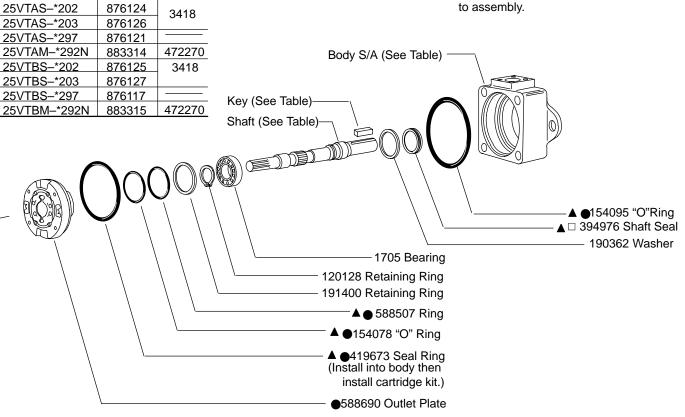
SHAFT

**KEY** 

MODEL

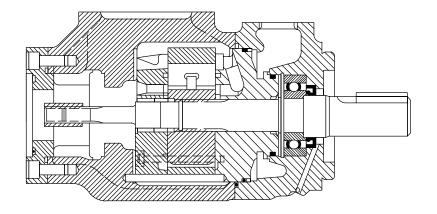
MODEL	HOUSING	BODY S/A
25VT*S**A	251263	02-136915
25VT*S**AM	478505	02-136916
25VT*M**A	251236	02-136917
25VT*M**AM	478505	02-136918

☐ Assemble shaft seal with spring loaded
sealing member towards bearing. Seals
to be completely wetted with oil prior
to assembly.

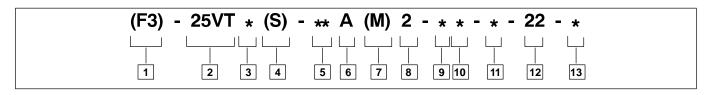


# NOTE

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.



# **Model Code**



#### 1 Viton seals

Omit - Standard

### 2 Thru drive series designation

**25VT** - 40 to 67 cm<sup>3</sup>/r (2.47 to 4.13 in<sup>3</sup>/r)

# Rear pump mounting SAE (ISO 3019/1) 2 – bolt

**A** – 2-bolt SAE "A" **B** – 2-bolt SAE "B"

**BP** – 2-bolt SAE "B" to mount PVE19/21 (Includes spacer)

#### 4 Pilot designation

**M** – ISO 3019/2 100A2HW **S** – SAE – J744 flange

### 5 Geometric displacement

(Rated capacity (USgpm) at 1200 rpm, 6.9 bar (100 psi)

Frame Size	Code	cm <sup>3</sup> /r	in <sup>3</sup> /r
25V	12	40	2.47
Т	14	45	2.78
	17	55	3.39
	21	67	4.13

#### 6 Port connections

A - SAE 4 - bolt flange

### 7 Threads (4 bolt flange port)

M – Metric threads(4 bolt flange)Omit – Inch threads

### 8 Thru-drive coupling

2 - Coupling (included with pump)

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Pump series	Tail shaft pump requirements
25VTA	SAE "A" size w/30_ involute spline, 9T 16/32 D.P.
25VTB	SAE "B" size w/30_ involute spline, 13T 16/32 D.P.

### 9 Shaft

202 – SAE 'B' square key
 203 – SAE 'BB' square key
 292N – ISO key 7mm x 8mm (M pilot only)

**297** – 13T 16/32 splined SAE 'B'

### 10 Outlet positions

(Viewed from adapter end of pump)

A - Opposite inlet port

B - 90° CCW from inlet

C - Inline with inlet

D - 90° CW from inlet

# 11 Thru-drive adapter orientation

(Viewed from adapter end of pump)

#### A adapter

- A Rotate 45° CW with respect to pump mounting flange
- **B** Rotate 45° CCW with respect to pump mounting flange

#### B adapter

- A Inline with pump mounting flange
- B Rotate 90° with respect to pump mounting flange

## 12 Design

#### 13 Rotation

(Viewed from shaft end of pump)

L - Left hand for counterclockwise

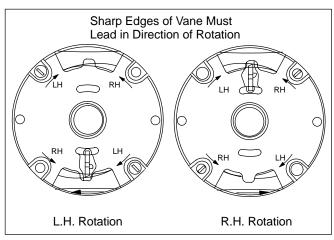
R - Right hand for clockwise

#### **NOTE**

To reverse cartridge kit rotation, remove the two screws and reverse the location of the inlet support plate and outlet support plate. Re–install the two screws hand tight. Use pump cover to align all sections of the cartridge. Carefully remove the cover and tighten the screws.

#### **NOTE**

When ordering spare cartridge parts, it is recommended they be obtained in cartridge kits. Kits are assembled and tested by Vickers for either right or left hand rotation. If left hand rotation is required, it should be specified on parts order by adding suffix "L" to cartridge kit number.



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