## **Service Data**

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

# **Vane Pumps**



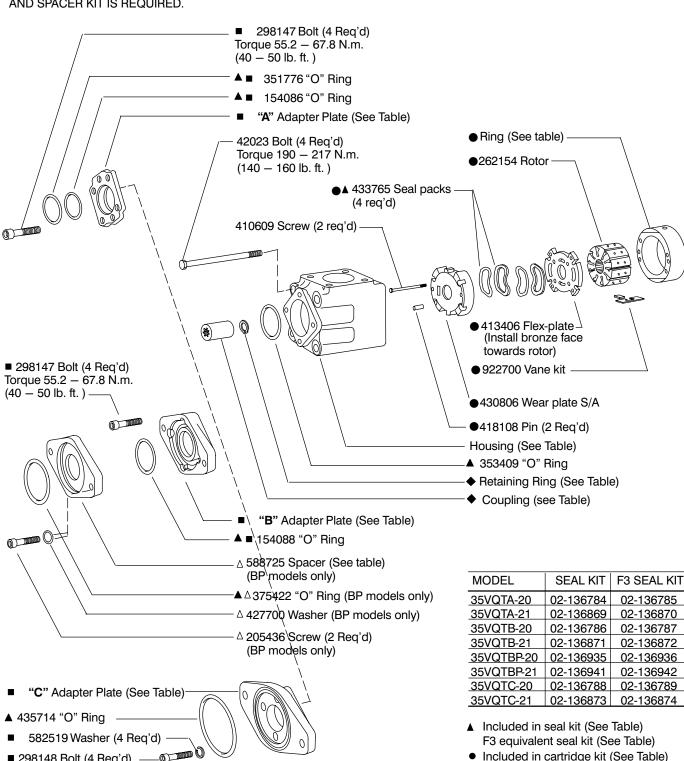
# Thru—Drive Vane Type Pump

(F3)-35VQT\*(M)-\*\*A(M)2-\*\*-\*-20/21-\*



MODEL	ADAPTER PLATE	ADAPTER KIT	SPACER KIT	RETAINING RING	COUPLING	COUPLING KIT
VQTA	584936	941296		223172	426770	02-136810
VQTB	584922	941297		83003 (1)	584924	02-136813
VQTBP	364922	941297	02-136817	83003 (2)	564924	02-136814
VQTC	581833	941298		237807	584940	02-136815

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



◆ Included in coupling kit (See Table)

■ Included in adapter kit (See Table) △ Included in spacer kit (BP models only) Parts prefixed with symbols available

only in kits

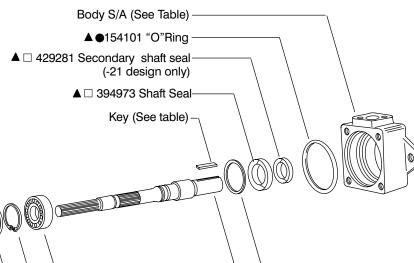
■ 298148 Bolt (4 Req'd)

Torque 55.2 - 67.8 N.m.

(40 - 50 lb. ft.)

MODEL	SHAFT	KEY
35VQTAS-202	876128	
35VQTB(P)S-202	876129	
35VQTCS-202	876130	393536
35VQTAS-203	860508	
35VQTB(P)S-203	860509	
35VQTCS-203	860510	
35VQTAS-297	876119	
35VQTB(P)S-297	876120	
35VQTCS-297	876118	

MODEL	HOUSING	BODY S/A
35VQT*S**A	250818	02-136919
35VQT*S**AM	478506	02-136920



	38441 Bearing (35VQT) 239092 Bearing (36VQT) — 119982 Retaining Ring — 193144 Retaining Ring
	▲ ●588508 Ring
	▲ ● 419674 Seal Ring (Install into body, then install catrtidge kit)
\	\   ■ 412003 Pressure plate

● 413406 Flex-plate (Install bronze face

towards rotor)

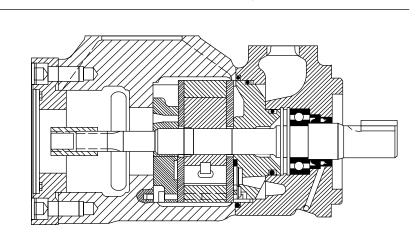
MODEL	RING	• CART KIT	F3 CART KIT
35VQT25	319396	413421	421583
35VQT30	319397	413422	421584
35VQT35		413418	421585
35VQT38	319399	413419	421586

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

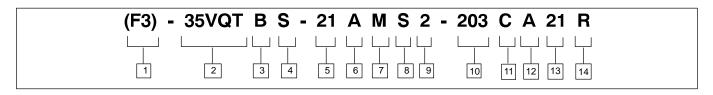
-193220 Washer Shaft (See Table)

#### 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 seals

#### 2 Intravane pump series-Thru drive

**35VQT** — Standard bearing **36VQT** — Heavy duty bearing

# 3 Thru-drive connection mounting adapter

Code	SAE Designation		
	J744C	J744Oct83	
Α	Α	82-2	
В	В	101-2	
BP	Special mounting with spacer		
	for Vickers PVE19/21		
С	C 127-2		

#### 4 Front mounting flange

Model	SAE Designation		
series	J744C	J744Oct83	
3*VQT	С	127-2	

#### 5 Geometric displacement

Code - SAE rating (USgpm) at 1200 rpm, 6.9 bar (100 psi)

Frame Size	Code	cm <sup>3</sup> /r	in <sup>3</sup> /r
3*VQT	25	81	4.94
	30	97	5.91
	35	112	6.83
	38	121	7.37

#### 6 Port connections

A - SAE 4 - bolt flange

## Metric threads on port connection

(Omit for inch threads.)

#### 8 Double shaft seal

S – Double shaft sealBlank – Single shaft seal

#### 9 Thru-drive coupling

2 — SAE splined coupling included with pump

#### 10 Shaft

202 - Straight key

203 - Straight key

**297** – Splined

#### 11 Outlet positions

(Viewed from adapter end of pump)

- A Opposite inlet port
- **B** 90° CCW from inlet
- C In line with inlet
- D 90° CW from inlet

## Adapter mounting orientation

(Viewed from adapter end of pump)

Code	<b>A</b> adapter	<b>B</b> or <b>C</b> adapter
A –	Rotated 45° CW with	In line with pump mtg. flg.
	respect to pump mtg. flg.	
B -	Rotated 45° CCW with respect to pump mtg. flg.	Rotated 90° with respect to pump mtg. flg.

#### 13 Design

- -20 design single shaft seal
- -21 design double shaft seal

#### 14 Rotation

(Viewed from shaft end of pump)

L - Left hand (counterclockwise)

**R** – Right hand (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.

