Thru—Drive
Vane Type Pump

(F3)—25VQT*(M)—**A(M)2—**—*—20/21—*
NOTE
FOR BP MODELS AN ADAPTER KIT
AND SPACER KIT IS REQUIRED.

298147 Bolt (4 Req’d)
Torque 55.2 – 67.8 N.m.
(40 – 50 lb. ft.)

351776 “O” Ring

154086 “O” Ring

“A” Adapter Plate (See Table)

38523 Bolt (4 Req’d)
Torque 65—75 lb. ft.
(88—101 N.m.)

433763 Seal packs
(4 req’d)

413834 Screw (2 req’d)

298147 Bolt (4 Req’d)
Torque 55.2 – 67.8 N.m.
(40 – 50 lb. ft.)

154088 “O” Ring

“B” Adapter Plate (See Table)

154088 “O” Ring

588725 Spacer (See table)
(BP models only)

375422 “O” Ring (BP models only)

427700 Washer (BP models only)

205436 Screw (2 Req’d)
(BP models only)

MODEL | SEAL KIT | F3 SEAL KIT
--- | --- | ---
25VQTA-20 | 920239 | 920240
25VQTA-21 | 02-136865 | 02-136866
25VQTB-20 | 02-136782 | 02-136783
25VQTB-21 | 02-136867 | 02-136868
25VQTB-20 | 02-136933 | 02-136934
25VQTB-21 | 02-136940 | 02-136941

▲ Included in seal kit (See Table)
F3 equivalent 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)

Parts prefixed with symbols available
only in kits
<table>
<thead>
<tr>
<th>MODEL</th>
<th>SHAFT</th>
<th>KEY</th>
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<tbody>
<tr>
<td>25VQTAS–202</td>
<td>876124</td>
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<tr>
<td>25VQTAS–203</td>
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<td>35VQTAS–297</td>
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<td>35VQTBT(P)S</td>
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<table>
<thead>
<tr>
<th>MODEL</th>
<th>HOUSING</th>
<th>BODY S/A</th>
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<tbody>
<tr>
<td>25VQT*S**A</td>
<td>251263</td>
<td>02-136915</td>
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<tr>
<td>25VQT*S**AM</td>
<td>478505</td>
<td>02-136916</td>
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</tbody>
</table>

- Body S/A (See Table)
- ▲●154095 "O" Ring
- □ □ 429283 Secondary shaft seal (-21 design only)
- ▲ 394976 Shaft Seal
- Key (See Table)
- 1705 Bearing (25VQT)
- 23270 Bearing (26VQT)
- 120128 Retaining Ring
- 191400 Retaining Ring
- ▲●588507 Ring
- ▲●154078 "O" Ring
- ▲● 419673 Seal Ring (Install into body, then install cartridge kit)
- ● 419079 Pressure plate
- ● 415220 Flex-plate (Install bronze face towards rotor)
- □ Assemble 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. OFR, OFR, and OFRS series filters are recommended.
Model Code

(F3) - 25VQT B S - 21 A M S 2 - 203 C A 21 R

1. Viton seals
   Omit - Standard seals

2. Intravane pump series-Thru drive
   25VQT - Standard bearing
   26VQT - Heavy duty bearing

3. Thru-drive connection mounting adapter
   Code | SAE Designation          
       | J744C   | J744Oct83 |
A     | A       | 82-2      |
B     | B       | 101-2     |
BP    | Special mounting with spacer for Vickers PVE19/21

4. Front mounting flange
   Model series | SAE Designation          
               | J744C   | J744Oct83 |
3*VQT | C       | 127-2     |

5. Geometric displacement
   Code - SAE rating (USgpm) at 1200 rpm, 6.9 bar (100 psi)
   | Size | Code | cm³/r | in³/r |
   |      |      |       |       |
   2*VQT | 12  | 40   | 2.47  |
   |      | 14  | 45   | 2.78  |
   |      | 17  | 55   | 3.39  |
   |      | 21  | 67   | 4.13  |

6. Port connections
   A - SAE 4 - bolt flange
   Blank - Single shaft seal

7. Metric threads on port connection
   (Omit for inch threads.)

8. Double shaft seal
   S - Double shaft seal
   Blank - Single shaft seal

9. Thru-drive coupling
   2 - SAE splined coupling included with pump

10. Shaft
    202 - Straight key
       203 - Straight key
       297 - Spline

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

12. Adapter mounting orientation
    (Viewed from adapter end of pump)
    Code | A adapter          | B or C adapter          
    A     | Rotated 45° in line with pump mtg. flg. 
    | CW with respect to pump mtg. flg. |
    B     | Rotated 45°        | Rotated 90°             
    | CCW 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.

![Sharp Edges of Vane Must Lead in Direction of Rotation]

L.H. Rotation  
R.H. Rotation