Vane Type Single Pump

45V(M)-**-A(M)(F)-**-22-*
Vane Type Single Pump

45V(M)—**A(M)(F)—**—22—*

- 580921 Outlet Support Plate
- Ring (See Table)
- 578900 Rotor
- 220888 Pin (2 Req’d)

Inlet Cover
(See Table)
61321 Bolt (4 Req’d)
Oil & Torque 360–374 N.m.
(255–275 lb.ft.)

- 02—136718 Vane Kit
  (Includes 12 Vanes & Inserts)
- 578903 Inlet Support Plate S/A
- 289476 Screw (2 Req’d)

Key (See Table)
Shaft (See Table)

131812 Bearing
102949 Retaining Ring
158630 Lock Ring

SHAF T   TYPE   KEY
233369   (1) keyed    217596
242885   (11) splined  —
361760   (86) keyed    239751
850612   (192N) keyed  472303

<table>
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<tr>
<th>MODEL</th>
<th>INLET COVER</th>
<th>BODY S/A</th>
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<tbody>
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<td>45V**A</td>
<td>229633</td>
<td>942356</td>
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<td>45VM**AM</td>
<td>478504</td>
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<td>45VM**A</td>
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<tr>
<th>MODEL</th>
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<th>CART KIT</th>
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<td>45V42</td>
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<td>45V60</td>
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- ▲ Included in cartridge kit
- ▲ Included in seal kit 919850
  F3 equivalent seal kit 919632
- ◇ Included in foot bracket kit FB—C—10
  ※ Install 419675 sealing ring into body, then install cartridge kit.

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

(F3) - 45V (M) - ** A (M) (F) - ** - 22 - **

1 Special seals
2 Series designation
45V — 138 to 193 cm³/r (8.41 to 11.75 in³/r)
3 Pilot designation
M — Metric per ISO 3019/2 100A2HW
Omit — Standard pilot
4 Geometric displacement
(Rated capacity (USgpm) at 1200 rpm, 6.9 bar (100 psi)
<table>
<thead>
<tr>
<th>Code</th>
<th>cm³/r</th>
<th>in³/r</th>
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<tr>
<td>42</td>
<td>138</td>
<td>8.41</td>
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<tr>
<td>45</td>
<td>147</td>
<td>9.00</td>
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<td>50</td>
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<tr>
<td>60</td>
<td>193</td>
<td>11.75</td>
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</table>
5 Port connections
A — SAE 4 bolt flange
6 Port connection modifier
M — Metric port connection
Omit — Inch thread port connection
(4 bolt flange)
7 Mounting
F — Foot mounting
Omit — Flange mounting
8 Shaft
1 — Straight keyed
11 — Splined
86 — Heavy duty straight keyed
192N — Straight keyed (M pilot only)
9 Outlet positions
(Viewed from cover end of pump)
A — Opposite inlet port
B — 90° CCW from inlet
C — Inline with inlet
D — 90° CW from inlet
10 Design
11 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
For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 18/13 or cleaner. OFP, OFR, and OFRS series filters are recommended.

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