Vane Type Double Pump

(F3) – 4535V(M) – **A(M)**(F) – ** – 22 – *
MODEL | ROTOR | VANE KIT | RING | INLET PLATE | COVER END CART. KIT | COVER END F3 CART. KIT
--- | --- | --- | --- | --- | --- | ---
4535V***25 | 575478 | 02—136717 | 576210 | 02—102556 | 02—102564
4535V***30 | | | 576212 | 02—102557 | 02—102565
4535V***35 | | | 576214 | 02—102558 | 02—102566
4535V***38 | | | 575476 | 02—102559 | 02—102567

- 580921 Outlet Plate
- Ring (See Table)
- 578903 Inlet Plate
- 578900 Rotor
- 220888 Pin (2 Req’d)
- 280031 Pin (2 Req’d)
- Inlet Plate (See Table)
- Ring (See Table)
- Vane Kit (See Table)
- (Includes 12 Vanes & Inserts)
- Rotor (See Table)

- 02—136716 Vane Kit (Includes 12 Vanes & Inserts)
- 289476 Screw (2 Req’d)
- Housing S/A (See Table)
- 289475 Screw (2 Req’d)
- 575479 Outlet Plate
- ▲ 419674 Seal Ring
- ▲ 154084 “O”Ring
- ▲ 588508 Ring
- ▲ 154101 “O”Ring
- Cover (See Table)

269879 Bolt (4 Req’d)
Torque 360 — 374 N.m.
(255 — 275 lb. ft.)

- Included in shaft end cartridge kit
- Included in cover end cartridge kit
- Included in seal kit 922866
- F3 equivalent seal kit 919346
- Included in foot bracket kit FB—C—10
- Assemble seal with spring loaded sealing member towards bearing. Seals to be completely wetted with oil prior to assembly.
- Install 419675 sealing ring into body, then install cartridge kit.
### Table 1: Shaft End Components

<table>
<thead>
<tr>
<th>MODEL</th>
<th>RING</th>
<th>Shaft End</th>
<th>Shaft End</th>
</tr>
</thead>
<tbody>
<tr>
<td>4535V42</td>
<td>581679</td>
<td>02–102572</td>
<td>02–102576</td>
</tr>
<tr>
<td>4535V50</td>
<td>581680</td>
<td>02–102574</td>
<td>02–102577</td>
</tr>
<tr>
<td>4535V60</td>
<td>578904</td>
<td>02–102575</td>
<td>02–102578</td>
</tr>
</tbody>
</table>

### Table 2: Housing Components

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COVER</th>
<th>HOUSING S/A</th>
<th>BODY S/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>4535V**A</td>
<td>270679</td>
<td>379585</td>
<td>942356</td>
</tr>
<tr>
<td>4535VM**A</td>
<td>270679</td>
<td>02–136925</td>
<td></td>
</tr>
<tr>
<td>4535VM**AM</td>
<td>478512</td>
<td>875811</td>
<td>02–136926</td>
</tr>
</tbody>
</table>

### Diagram
- **Key (See Table)**
- **Shaft (See Table)**
- **Body S/A (See Table)**
- **205077 Foot Bracket**
- **205533 Screw (2 Req’d)**
- **394974 Shaft Seal**
- **194678 Retainer**
- **131812 Bearing**
- **102949 Retaining Ring**
- **158630 Retaining Ring**
- **588509 Ring**
- **154087 “O” Ring**
- **419675 Seal Ring**
- **154107 “O” Ring**

### Table 3: Shaft Components

<table>
<thead>
<tr>
<th>SHAFT</th>
<th>TYPE</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>289083</td>
<td>(1) keyed</td>
<td>217596</td>
</tr>
<tr>
<td>289084</td>
<td>(11) splined</td>
<td>—</td>
</tr>
<tr>
<td>361763</td>
<td>(86) keyed</td>
<td>239751</td>
</tr>
<tr>
<td>850615</td>
<td>(192N) keyed</td>
<td>472303</td>
</tr>
</tbody>
</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

(F3) - 4535V (M) - ** A (M) ** (F) - * * * - 22 - *

1 Special seals
2 Series designation
Displacements cm³/r (in³/r)
Model Shaft end Cover end
4535V 138 - 193 81 - 121
(5.41 - 11.75) (4.84 - 7.37)
3 Pilot designation
M — Metric per ISO 2019/2 100A2HW
Omit — Standard pilot
4 Geometric displacement
Shaft end pump
(Rated capacity (USgpm) at
1200 rpm, 6.9 bar (100 psi)
Frame size Code cm³/r in³/r
4535V 25 81 4.94
30 97 5.91
35 112 6.63
38 121 7.37
5 Port connections
A — SAE 4 bolt flange
6 Port connection modifier
M — Metric port connection
(4 bolt flange)
Omit — Inch thread port connection
(4 bolt flange)
7 Geometric displacement
Cover end pump
(Rated capacity (USgpm) at
1200 rpm, 6.9 bar (100 psi)
Frame size Code cm³/r in³/r
4535V 25 81 4.94
30 97 5.91
35 112 6.63
38 121 7.37
8 Mounting
F — Foot mounting
Omit — Flange mounting
9 Shaft
1 — Straight keyed
11 — Splined
86 — Heavy duty straight keyed
192N — Straight keyed (M pilot only)
10 Port orientation
(Viewed from cover end of pump)
With no. 1 outlet opposite inlet
AA — No. 2 outlet opposite inlet
AB — No. 2 outlet 90° CCW from inlet
AC — No. 2 outlet inline with inlet
AD — No. 2 outlet 90° CW from inlet
With no. 1 outlet 90° CCW from inlet
BA — No. 2 outlet opposite inlet
BB — No. 2 outlet 90° CCW from inlet
BC — No. 2 outlet inline with inlet
BD — No. 2 outlet 90° CW from inlet
With no. 1 outlet inline with inlet
CA — No. 2 outlet opposite inlet
CB — No. 2 outlet 90° CCW from inlet
CC — No. 2 outlet inline with inlet
CD — No. 2 outlet 90° CW from inlet
With no. 1 outlet 90° CW from inlet
DA — No. 2 outlet opposite inlet
DB — No. 2 outlet 90° CCW from inlet
DC — No. 2 outlet inline with inlet
DD — No. 2 outlet 90° CW from inlet
11 Design
12 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 the outlet support plate. Reinstall the two screws hand tight. Use pump cover to align all sections of the cartridge. Carefully remove the cover and tighten the screws.

When ordering spare cartridge parts, it is recommended they be obtained in cartridge kits. Kits are assembled and tested 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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