Vane Type Single Pump

(F3)-V10(*) Series -10 & 20 Designs
SAE rated capacity (V10/F/P cartridge kits)

<table>
<thead>
<tr>
<th>USgpm</th>
<th>Rotor</th>
<th>Vane Kit</th>
<th>Ring</th>
<th>Pin (V10)</th>
<th>Pin (V10F/V10P)</th>
<th>Bolt (V10)</th>
<th>Bolt (V10F)</th>
<th>Bolt (V10P)</th>
<th>Cart. Kit</th>
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<td>432511</td>
<td>295346</td>
<td>923498</td>
</tr>
</tbody>
</table>

**V10P Cover Option**
Bolt (4 Req’d) (See Table)
Torque 41–61 N.m.
(35–45 lb. ft.)

V10P Cover Option
(See Table)

320353 Plug
154129 "O" Ring
389460 Spring
386524 Piston
388262 Cover

941038 Shim Kit

V10 Cover Option
(See Table)

363889 / 7075 Plug

374865 Plug
154129 "O" Ring
392886 Spring
Control Valve S/A

2706 Seat
82800 Poppet

**Pressure setting – V10P/V10F (Omit for V10)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Pressure setting V10P/V10F</th>
<th>V10P Spring</th>
<th>V10F control S/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>250 PSI</td>
<td>229613</td>
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<tr>
<td>B</td>
<td>500 PSI</td>
<td>233018</td>
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<td>C</td>
<td>750 PSI</td>
<td>223794</td>
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<tr>
<td>D</td>
<td>1000 PSI</td>
<td>232795</td>
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<tr>
<td>E</td>
<td>1250 PSI</td>
<td>232796</td>
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<tr>
<td>F</td>
<td>1500 PSI</td>
<td>232797</td>
<td></td>
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<tr>
<td>G</td>
<td>1750 PSI</td>
<td>232798</td>
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<td>H</td>
<td>2000 PSI</td>
<td>232799</td>
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<td>J</td>
<td>2250 PSI</td>
<td>233019</td>
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<tr>
<td>K</td>
<td>2500 PSI</td>
<td>233020</td>
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### Table

<table>
<thead>
<tr>
<th>Model</th>
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<tbody>
<tr>
<td>V10-*<strong>-</strong>-<strong>-</strong>-20</td>
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<td>V10-*<strong>-</strong>-<strong>-</strong>-20</td>
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<td>V10-*<strong>-</strong>-<strong>-</strong>-10</td>
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</tbody>
</table>

**Model Details**

- **V10-***-**-**-**-**
  - 148423 Bearing
  - 106641 Retaining ring
  - Pin (2 Req’d) (See Table)
  - Vane Kit includes 12 vanes (See Table)
  - 345262 Spring
  - Key (See table)

**Bracket kit model number**

FB–**A–**10 (Includes screws)

**Shaft (See table)**

- 87541 Retaining ring

**263585 Shaft seal** (Must be bottomed against shoulder when installed.)

**Typical Cutaway View**

---

**Table: Models, Shafts, Keys, Nuts, and Shaft Types**

<table>
<thead>
<tr>
<th>Model</th>
<th>Shaft</th>
<th>Key</th>
<th>Nut</th>
<th>Shaft type</th>
</tr>
</thead>
<tbody>
<tr>
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<td>374338</td>
<td>142843</td>
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<td>382250</td>
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</tbody>
</table>
Model Code

(F3) - V 10 - (P) - ** - ** (*) - (*) ** - *** L

1 Special seals
   F3 – Special “O”Rings & seals for mineral oil & fire resistant fluid

2 Vane Pump

3 Series 10

4 Pump cover options
   F – Flow control cover
   P – Priority valve cover
   Omitted – Standard cover

5 Mounting
   1 – 2 Bolt flange (SAE “A” size)
   2 – Foot bracket at 12 O’Clock
   (Viewed from shaft end)
   23 – Foot bracket at 3 O’Clock
   26 – Foot bracket at 6 O’Clock
   29 – Foot bracket at 9 O’Clock

6 Inlet port connections
   F – 1.156 DIS. port
   H – 1” O.D. tube connection
   K – 1 5/16–12 UN 2B thread
   P – 1” NPT thread
   S – 1 5/16–12 straight thread
   T – 1 3/16–12 straight thread

7 SAE rated ring capacity USGPM
   (1200 RPM – 100 PSI)
   1 – 1 USgpm
   2 – 2 USgpm
   3 – 3 USgpm
   4 – 4 USgpm
   5 – 5 USgpm
   6 – 6 USgpm
   7 – 7 USgpm

8 Outlet port connections
   V10 standard cover
   K – 1 5/16–12 UN 2B thread
   P – 1” NPT thread
   S – 1 5/16–12 straight thread
   T – 1 3/16–12 straight thread

   V10F Flow control cover
   Pressure
   P – 3/4–16 straight thread
   T – 3/4–16 straight thread
   Tank
   P – 1/2” NPT thread
   T – 3/4–16 straight thread

   V10P Priority valve cover
   Primary outlet
   K – 9/16–18 straight thread
   Secondary outlet
   K – 3/4–16 straight thread
   Tank
   K – 9/16–18 straight thread

9 Shaft types
   1 – Straight–keyed
   3 – Threaded
   4 – Threaded
   6 – Straight stub–keyed
   11 – Spline–9 tooth
   12 – Spline–13 tooth
   27 – Tang
   34 – Threaded
   38 – Spline–13 tooth

10 Pressure port positions
   (Viewed from cover end)
   A – Opposite inlet
   B – 90° CCW from inlet
   C – Inline with inlet
   D – 90° CCW from inlet

11 Flow rate in USGPM through orifice in cover
   1 – 1 USGPM (V10P)
   2 – 2 USGPM (V10F)

12 Pressure setting, V10F & V10P
   (Omit for standard cover)
   Code
   A – 250 psi
   B – 500 psi
   C – 750 psi
   D – 1000 psi
   E – 1250 psi
   F – 1500 psi
   G – 1750 psi
   H – 2000 psi
   J – 2250 psi
   K – 2500 psi

13 Design & Modification

14 Special feature suffix

15 Rotation
   (Viewed from shaft end of pump)
   L – Left hand for counterclockwise

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