Vane Type Double Pump
2520VQ Series - 20 Design
USE THE REPLACEMENT PARTS SHOWN ON THIS DRAWING TO SERVICE A 2520V-10/12 UNIT. CARTRIDGES MUST BE REPLACED AS A KIT. INDIVIDUAL PARTS OF A CARTRIDGE ARE NOT INTERCHANGEABLE.

NOTE: FLEX SIDEPLATE KITS INCLUDE (4) F3 SEAL PACKS.

NOTE: BRONZE FACES MUST BE INSTALLED TOWARD THE ROTOR.

SHOWN IN FOOT BRACKET KIT FB-B-10

RING OUTLET SUPPORT PLATE

SEAL PACK (4 REQ'D)

FLEX-SIDE PLATE KIT

ROTOR VANE KIT (10 VANES & 10 INSERTS)

THESE PARTS ARE INCLUDED IN CARTRIDGE KIT

INSTALL SEAL RING IN BODY OR COVER, THEN INSTALL CARTRIDGE KIT.

NOTE: ASSEMBLE SEAL FLUSH TO PILOT FACE WITH SPRING FACING INWARD AS SHOWN.

ASSEMBLE SEAL WITH SPRING TOWARD BEARING.

WIPE O.D. OF SEAL WITH OIL BEFORE PRESSING INTO BODY. APPLY GREASE TO SEAL I.D. BEFORE INSTALLATION OF SHAFT.

INCLUDED IN FOOT BRACKET KIT FB-B-10

NOTE: BRONZE FACES MUST BE INSTALLED TOWARD THE ROTOR.
Model Code

(F3) - 2520 VQ ** A ** - * 1 ** * 20 (x) - 28 *

1. Viton seals (Omit if not required.)
2. Series designation
   - 2520VQ, Double Pump
   - 2620VQ, Double Pump
3. Intra–vane pump
4. USgpm capacity (Shaft end pump)
   - SAE rating 1200 rpm–100 psi (7 bar)
   - 12 – 12 USgpm
   - 14 – 14 USgpm
   - 17 – 17 USgpm
5. SAE port connections
   Models Without Flow Control
<table>
<thead>
<tr>
<th>Code</th>
<th>Inlet</th>
<th>Outlet #1</th>
<th>Outlet #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4 bolt</td>
<td>4 bolt</td>
<td>4 bolt</td>
</tr>
<tr>
<td>C</td>
<td>4 bolt</td>
<td>SAE St.</td>
<td>SAE St.</td>
</tr>
<tr>
<td>E</td>
<td>4 bolt</td>
<td>4 bolt</td>
<td>Thd.</td>
</tr>
<tr>
<td>F</td>
<td>4 bolt</td>
<td>4 bolt</td>
<td>Thd.</td>
</tr>
</tbody>
</table>
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<tr>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>4 bolt</td>
<td>SAE St.</td>
<td>SAE St.</td>
<td>Thd.</td>
</tr>
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<td>E</td>
<td>4 bolt</td>
<td>4 bolt</td>
<td>SAE St.</td>
<td>Thd.</td>
</tr>
</tbody>
</table>
6. USgpm capacity (Cover end pump)
   - SAE rating 1200 rpm–100 psi (7 bar)
   - 5 – 5 USgpm
   - 8 – 8 USgpm
   - 9 – 9 USgpm
7. Outlet port positions continued
   (Viewed from cover end of pump)
   - With # 1 outlet inline with inlet:
     - CA – # 2 outlet – 135° CCW from inlet
     - CB – # 2 outlet – 45° CCW from inlet
     - CC – # 2 outlet – 45° CW from inlet
     - CD – # 2 outlet – 135° CW from inlet
   - With # 1 outlet 90° CCW from inlet:
     - DA – # 2 outlet – 135° CCW from inlet
     - DB – # 2 outlet – 45° CCW from inlet
     - DC – # 2 outlet – 45° CW from inlet
     - DD – # 2 outlet – 135° CW from inlet
8. Shaft type
   - 1– Straight with square key standard
   - 11– Splined
   - 123–Splined
9. Outlet port positions
   (Viewed from cover end of pump)
   - With # 1 outlet opposite inlet:
     - AA – # 2 outlet – 135° CCW from inlet
     - AB – # 2 outlet – 45° CCW from inlet
     - AC – # 2 outlet – 45° CW from inlet
     - AD – # 2 outlet – 135° CW from inlet
   - With # 1 outlet 90° CCW from inlet:
     - BA – # 2 outlet – 135° CCW from inlet
     - BB – # 2 outlet – 45° CCW from inlet
     - BC – # 2 outlet – 45° CW from inlet
     - BD – # 2 outlet – 135° CW from inlet
10. Controlled flow rate
   (Models with flow control)
   - 2 – 2 USgpm
   - 4 – 4 USgpm
   - 6 – 6 USgpm
   - 7 – 7 USgpm
11. Relief valve setting
   (Models with flow control)
   - C – 750 PSI
   - D – 1000 PSI
   - E – 1250 PSI
   - F – 1500 PSI
   - G – 1750 PSI
   - H – 2000 PSI
   - I – 2250 PSI
   - J – 2500 PSI
   * 20 PSI pump only (not for 12 & 14 ring sizes).
12. Design
   (Viewed from shaft end of pump)
   - L – Left hand (CCW rotation)
   Omitted – Right hand rotation
13. Mounting
   (Viewed from shaft end of pump)
   - 282 – SAE 2–bolt mounting
   - 283 – Foot mounting

NOTE
Standard right hand shaft rotation cartridges shown. Reverse for left hand rotation; refer to note.

Cover end cartridge R. H. Rotation

Sharp Edges of Vane Must Lead in Direction of Rotation

Shaft end cartridge R. H. Rotation

Sharp Edges of Vane Must Lead in Direction of Rotation

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.

NOTE
For satisfactory service life of these components, use full flow filtration to provide fluid which meets ISO cleanliness code 16/13 or cleaner. Selections from pressure, return, and in-line filter series are recommended.