Please note: All parts supplied are Hyflow Southeast®. The use of other manufactures’ names, part numbers, descriptions or trademarks is for cross reference and informational purposes only.
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### Single Vane Pump HT6C, HT6CM

#### Model Code

<table>
<thead>
<tr>
<th>Series</th>
<th>*M = Mobile (*omit for Industrial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Y = Metric port connection, omit for UNC</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Cam ring</th>
<th>Displacement</th>
<th>Cam ring</th>
<th>Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in³/rev (cm³/rev)</td>
<td></td>
<td>in³/rev (cm³/rev)</td>
</tr>
<tr>
<td>003/B03/R03 = 0.66 (10.8)</td>
<td>017/B17/R17 = 3.56 (58.3)</td>
<td></td>
<td></td>
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<tr>
<td>005/B05/R05 = 1.05 (17.2)</td>
<td>020/B20/R20 = 3.89 (63.8)</td>
<td></td>
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<tr>
<td>006/B06/R06 = 1.30 (21.3)</td>
<td>022/B22/R22 = 4.29 (70.3)</td>
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<tr>
<td>008/B08/R08 = 1.61 (26.4)</td>
<td>025/B25/R25 = 4.84 (79.3)</td>
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<tr>
<td>010/B10/R10 = 2.08 (34.1)</td>
<td>028/B28/R28 = 5.42 (88.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>012/B12/R12 = 2.26 (37.1)</td>
<td>031/B3/R311 = 6.10 (100.0)</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Shaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Keyed (SAE B)</td>
</tr>
<tr>
<td>2 = Keyed (no SAE)</td>
</tr>
<tr>
<td>3 = Splined (SAE B)</td>
</tr>
<tr>
<td>4 = Splined (SAE B-B)</td>
</tr>
</tbody>
</table>

#### Modification

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R00 - B1 - *</td>
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#### Seal Class

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
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<tbody>
<tr>
<td>1 = S1 - BUNA N</td>
</tr>
<tr>
<td>4 = S4 - EPDM</td>
</tr>
<tr>
<td>5 = S5 - VITON</td>
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</tbody>
</table>

#### Design Letter

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B = Industrial</td>
</tr>
<tr>
<td>C = Mobile</td>
</tr>
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</table>

#### Porting Combination: (00 = Standard)

<table>
<thead>
<tr>
<th>Porting</th>
<th>Design Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>B</td>
</tr>
<tr>
<td>01</td>
<td>B</td>
</tr>
<tr>
<td>02</td>
<td>B</td>
</tr>
<tr>
<td>03</td>
<td>B</td>
</tr>
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#### Direction of Rotation

<table>
<thead>
<tr>
<th>Rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>R = Clockwise</td>
</tr>
<tr>
<td>L = Counter-clockwise</td>
</tr>
</tbody>
</table>

---

**To change porting position, follow the steps below:**

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
HT6D, HT6DM, HT6DP

Model Code

Series
* N = Shaft seal installed reverse
* Q = Special mounting cap with orientation of 20° from standard (*omit, if not required)
* M = Mobile
* P = Mobile with double shaft seal (not for HT6DN) (*omit, if not required)

Y = Metric port connection (not for code 'Q'), omit for UNC

Cam ring Displacement Cam ring Displacement
in³/rev (cm³/rev) in³/rev (cm³/rev)
014/B14/R14 = 2.90 (47.6) 035/B35/R35 = 6.80 (111.0)
017/B17/R17 = 3.55 (58.2) 038/B38/R38 = 7.30 (111.0)
020/B20/R20 = 4.00 (66.0) 042/B42/R42 = 8.30 (136.0)
024/B24/R24 = 4.80 (79.5) 045/B45/R45 = 8.90 (145.7)
028/B28/R28 = 5.50 (89.7) 050/B50/R50 = 9.64 (158.0)
031/B31/R31 = 6.00 (98.3) 061/B61/R61 = 11.65 (191.0)
(Select 'B**' for Mobile and Industrial bi-directional)
(Select 'R**' for Mobile-spring assisted)

Type of Shaft Type of Shaft Type of Shaft
HT6D/HT6DN/HT6DQ HT6DM/HT6DNM/HT6DQM HT6DP/HT6DQP
1 = Keyed (SAE - C) 1 = Keyed (SAE - C) 3 = Splined (no SAE)
2 = Keyed (no SAE) 2 = Keyed (no SAE)
3 = Splined (SAE - C) 3 = Splined (SAE - C)
4 = Splined (no SAE) 4 = Splined (no SAE)
T = Splined (SAE j718c)

Modification

Seal class
1 = S1 - BUNA N
4 = S4 - EPDM
5 = S5 - VITON

Design letter
B = Industrial
C = Mobile

Porting combination: (00 = Standard)
00
01
02
03

Direction of rotation
R = Clockwise
L = Counter - clockwise

To change porting position, follow the steps below:
Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

Instructions: Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
HT6E, HT6EM, HT6EP

MODEL CODE

Series
*M = Mobile
*P = Mobile with double shaft seal
(*omit for Industrial)

Y = Metric port connection, omit for UNC

Cam ring Displacement Cam ring Displacement
in³/rev (cm³/rev) in³/rev (cm³/rev)
042/B42/R42 = 8.07 (132.30) 057/B57/R57 = 11.02 (180.70)
045/B45/R45 = 8.70 (142.40) 062/B62/R62 = 12.00 (196.70)
050/B50/R50 = 9.67 (158.50) 066/B66/R66 = 13.00 (213.30)
052/B52/R52 = 10.00 (164.80) 072/B72/R72 = 13.86 (227.10)
085/B85/R85 = 16.40 (269.80)

(Select ‘0**’ for Standard and Mobile)
(Select ‘B**’ for Mobile and Industrial bi-directional)
(Select ‘R**’ for Mobile-spring assisted)

Type of Shaft
HT6E
1 = Keyed (SAE - CC)
2 = Keyed (no SAE)
3 = Splined (SAE - C)
4 = Splined (SAE - CC)

HT6EM
1 = Keyed (SAE - CC)
2 = Keyed (no SAE)
3 = Splined (SAE - C)
4 = Splined (SAE - CC)

HT6EP
3 = Splined (no SAE)

Modification

Seal class
1 = S1 - BUNA N
4 = S4 - EPDM
5 = S5 - VITON

Design letter
A = Industrial
B = Mobile

Porting combination: (00 = Standard)

Direction of rotation
R = Clockwise
L = Counter - clockwise

To change porting position, follow the steps below:

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

Instructions: Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
HT7B, HT7BS

Model Code

Series
- HT7B series - 100 A2 HW
- ISO 2 bolts 3019 - 2 mounting flange
- HT7BS series - SAE B 2 bolts
- Mounting flange J744c

Cam ring — Displacement — Cam ring — Displacement

<table>
<thead>
<tr>
<th>Cam ring</th>
<th>Displacement</th>
<th>Cam ring</th>
<th>Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>B02</td>
<td>= 0.35</td>
<td>B09</td>
<td>= 1.71</td>
</tr>
<tr>
<td></td>
<td>(5.7)</td>
<td></td>
<td>(28.0)</td>
</tr>
<tr>
<td>B03</td>
<td>= 0.60</td>
<td>B10</td>
<td>= 1.94</td>
</tr>
<tr>
<td></td>
<td>(9.8)</td>
<td></td>
<td>(31.8)</td>
</tr>
<tr>
<td>B04</td>
<td>= 0.78</td>
<td>B11</td>
<td>= 2.13</td>
</tr>
<tr>
<td></td>
<td>(12.8)</td>
<td></td>
<td>(34.9)</td>
</tr>
<tr>
<td>B05</td>
<td>= 0.97</td>
<td>B12</td>
<td>= 2.50</td>
</tr>
<tr>
<td></td>
<td>(15.9)</td>
<td></td>
<td>(40.9)</td>
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<tr>
<td>B06</td>
<td>= 1.21</td>
<td>B14</td>
<td>= 2.75</td>
</tr>
<tr>
<td></td>
<td>(19.8)</td>
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<td>(45.1)</td>
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<tr>
<td>B07</td>
<td>= 1.37</td>
<td>B15</td>
<td>= 3.05</td>
</tr>
<tr>
<td></td>
<td>(22.5)</td>
<td></td>
<td>(50.0)</td>
</tr>
<tr>
<td>B08</td>
<td>= 1.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(24.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Type of Shaft
- HT7BS - 1 = Keyed (SAE - B)
- 2 = Keyed (ISO R775)
- 3 = Splined (SAE B)
- 4 = Splined (SAE BB)

To change porting position, follow the steps below:
Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

Instructions: Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
**HT7D, HT7DS**

**MODEL CODE**

Series

<table>
<thead>
<tr>
<th>Model Code</th>
<th>B42</th>
<th>R</th>
<th>00</th>
<th>A</th>
<th>1</th>
<th>M0</th>
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</thead>
<tbody>
<tr>
<td>HT7D/HT7DS</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Series**

HT7D - series - 125 A2 HW
ISO 2 bolts 3019-2 mounting flange
HT7DS - series - SAE C 2 bolts
Mounting flange J744c

**Cam ring — Displacement — Cam ring — Displacement**

<table>
<thead>
<tr>
<th>Cam ring</th>
<th>Displacement</th>
<th>Cam ring</th>
<th>Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>B14</td>
<td>2.68 (43.9)</td>
<td>B31</td>
<td>6.05 (28.0)</td>
</tr>
<tr>
<td>B17</td>
<td>3.36 (55.0)</td>
<td>B35</td>
<td>6.92 (113.4)</td>
</tr>
<tr>
<td>B20</td>
<td>4.03 (66.0)</td>
<td>B38</td>
<td>7.36 (120.6)</td>
</tr>
<tr>
<td>B22</td>
<td>4.29 (70.3)</td>
<td>B42</td>
<td>8.39 (137.5)</td>
</tr>
<tr>
<td>B24</td>
<td>4.95 (81.3)</td>
<td>045</td>
<td>8.89 (145.7)</td>
</tr>
<tr>
<td>B28</td>
<td>5.49 (89.9)</td>
<td>050</td>
<td>9.64 (157.9)</td>
</tr>
</tbody>
</table>

**Type of Shaft**

HT7DS
1 = Keyed (SAE - C)
2 = Keyed (no SAE)
3 = Splined (SAE - C)
4 = Splined (no SAE)

HT7DS - HT7D
5 = Keyed (ISO 3019-2-G32M)

**Modification**

Mounting w/ connection variables
4 bolts SAE flange (J518C)

<table>
<thead>
<tr>
<th>Modification</th>
<th>UNC METRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT7D</td>
<td>M0 Y0</td>
</tr>
<tr>
<td>HT7DS</td>
<td>00 M0</td>
</tr>
</tbody>
</table>

**To change porting position, follow the steps below:**

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
# HT7DSW SINGLE VANE PUMP

## MODEL CODE

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<thead>
<tr>
<th>Cam ring</th>
<th>Displacement in³/rev</th>
<th>Cam ring</th>
<th>Displacement in³/rev</th>
</tr>
</thead>
<tbody>
<tr>
<td>014/B14</td>
<td>2.68 (43.9)</td>
<td>031/B31</td>
<td>6.05 (99.1)</td>
</tr>
<tr>
<td>017/B17</td>
<td>3.36 (55.0)</td>
<td>035/B35</td>
<td>6.92 (113.4)</td>
</tr>
<tr>
<td>020/B20</td>
<td>4.03 (66.0)</td>
<td>038/B38</td>
<td>7.36 (120.6)</td>
</tr>
<tr>
<td>022/B22</td>
<td>4.29 (70.3)</td>
<td>042/B42</td>
<td>8.39 (137.5)</td>
</tr>
<tr>
<td>024/B24</td>
<td>4.95 (81.3)</td>
<td>045/B45</td>
<td>8.89 (145.7)</td>
</tr>
<tr>
<td>028/B28</td>
<td>5.49 (89.9)</td>
<td>050/B50</td>
<td>9.64 (157.9)</td>
</tr>
</tbody>
</table>

### Type of Shaft

- **X** = Keyed (SAE - C)
- **3** = Splined (SAE - C)

### Porting combination: (00 = Standard)

- **00**
- **01**
- **02**
- **03**

### Design letter

- **W1**
- **M1**

### Seal class

- **1** = S1 - BUNA N
- **4** = S4 - EPDM
- **5** = S5 - VITON

### Mounting w/ connection variables

<table>
<thead>
<tr>
<th>UNC</th>
<th>METRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>1-¼&quot;</td>
<td>2-½&quot;</td>
</tr>
</tbody>
</table>

### Direction of rotation (view on end shaft)

- **R** = Clockwise
- **L** = Counter-clockwise

---

**To change porting position, follow the steps below:**

Secure the pump and remove 4 bolts from housing. Move the housing 1 to 2 mm away from the mounting flange. Insert two bolts halfway into the housing. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
**SINGLE VANE PUMP**

**HT7E, HT7ES**

**MODEL CODE**

<table>
<thead>
<tr>
<th>Series</th>
<th>HT7E - series - 125 A2 HW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISO 2 bolts 3019 - 2 mounting flange</td>
</tr>
<tr>
<td></td>
<td>HT7ES - series - SAE C 2 bolts</td>
</tr>
<tr>
<td></td>
<td>Mounting flange J744c</td>
</tr>
</tbody>
</table>

**Cam ring**

- Displacement in³/rev (cm³/rev)
- Displacement in³/rev (cm³/rev)

<table>
<thead>
<tr>
<th>Cam ring</th>
<th>Displacement</th>
<th>Cam ring</th>
<th>Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>042</td>
<td>8.07</td>
<td>057</td>
<td>11.02</td>
</tr>
<tr>
<td>045</td>
<td>8.70</td>
<td>062</td>
<td>12.00</td>
</tr>
<tr>
<td>050</td>
<td>9.67</td>
<td>066</td>
<td>13.00</td>
</tr>
<tr>
<td>052</td>
<td>10.00</td>
<td>072</td>
<td>13.86</td>
</tr>
<tr>
<td>054</td>
<td>10.43</td>
<td>085</td>
<td>16.40</td>
</tr>
</tbody>
</table>

**Type of Shaft**

- HT7ES
  - 1 = Keyed (SAE - CC)
  - 2 = Keyed (no SAE)
  - 3 = Splined (SAE - C)
  - 4 = Splined (SAE - CC)
  - 5 = Keyed (ISO R775-G38M)

**HT7E/HT7ES - 066 - 1 R 00 - A 1 M0 * **

**Modification**

**Mounting w/ connection variables**

<table>
<thead>
<tr>
<th>4 bolts SAE flange (J518C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P = 1.5/2</td>
</tr>
<tr>
<td>S = 3&quot;</td>
</tr>
</tbody>
</table>

**Porting combination: (00 = Standard)**

- 00 = Suction port
- 01 = Pressure port
- 02 = Suction port
- 03 = Pressure port

**Seal class**

- 1 = S1 - BUNA N
- 4 = S4 - EPDM
- 5 = S5 - VITON

**Design letter**

**Direction of rotation**

- R = Clockwise
- L = Counter-clockwise

---

**To change porting position, follow the steps below:**

1. Secure the pump and remove 4 bolts from housing.
2. Move the housing 1 to 2 mm away from the mounting flange.
3. Insert two bolts halfway into the housing.
4. Install a wrench between the two bolts and turn in the desired direction, so that the required position of the pressure port, with respect to suction is obtained.
5. Reinstall the bolts and tighten to the corresponding mounting torque, as provided.

**Instructions:** Do not remove the housing completely from the mounting flange, remove only 1 to 2 mm to avoid the cartridge pin from moving out from the housing dowel pin hole. Make sure no piece of paint enters the gap to avoid leakage. If it is difficult to turn housing, put some hydraulic oil into the pressure port to lubricate the pressure port seals.
HT6CC, HT6CCM, HT6CCP, HT6CCZ

MODEL CODE

Series

* M = Mobile

* P = Mobile with double shaft seal

* Z = Mobile with double shaft loaded capability.

(*omit for Industrial)

Use for severe duty shaft only

(only for HT6CC and HT6CCM)

Cam ring Displacement Cam ring Displacement

(P1 & P2) in³/rev (cm³/rev) (P1 & P2) in³/rev (cm³/rev)

003/B03/R03 = 0.66 (10.80) 015/B15/R15 = 3.08 (50.50)

005/B05/R05 = 1.05 (17.20) 017/B17/R17 = 3.56 (58.30)

006/B06/R06 = 1.30 (21.30) 020/B20/R20 = 3.89 (63.80)

008/B08/R08 = 1.61 (26.40) 022/B22/R22 = 4.29 (70.30)

010/B10/R10 = 2.08 (34.10) 025/B25/R25 = 4.84 (79.30)

012/B12/R12 = 2.26 (37.10) 028/B28/R28 = 5.42 (88.80)

014/B14/R14 = 2.81 (46.00) 031/B31/R31 = 6.10 (100.00)

(Select 'B** for Mobile and Bi-directional)

(Select 'R** for Mobile-spring assisted)

Type of Shaft

HT6CC/T6CCM

1 = Keyed (no SAE)

3 = Splined (SAE-BB)

5 = Splined (SAE-B)

HT6CCW

2 = Keyed (SAE-BB)

S = Splined (DIN 5462)

HT6CCP

3 = Splined (no SAE)

4 = Splined (SAE-BB)

6 = Splined (no SAE)

S = Splined (DIN 5462)

HT6CCZ

X = Keyed Non-SAE

W = Keyed Non-SAE

V = Keyed Non-SAE

S = Splined (DIN 5462)

Modification

Port connection variables

SAE 4 bolt flange (J518c)

<table>
<thead>
<tr>
<th>Code</th>
<th>UNC</th>
<th>METRIC</th>
<th>P1</th>
<th>P2</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>OM</td>
<td>1&quot;</td>
<td>1&quot;</td>
<td>3&quot;</td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>W0</td>
<td>1&quot;</td>
<td>3/4&quot;</td>
<td>3&quot;</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1M</td>
<td>1&quot;</td>
<td>1&quot;</td>
<td>2½&quot;</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>W1</td>
<td>1&quot;</td>
<td>3/4&quot;</td>
<td>2½&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Seal class

1 = S1 - BUNA N

4 = S4 - EPDM

5 = S5 - VITON

Design letter

A = HT6CCZ

C = Industrial

D = Mobile

Porting combination: (00 = Standard)

Direction of rotation

R = Clockwise

L = Counter - clockwise
## HT6DC, HT6DCM, HT6DCP

### Model Code

<table>
<thead>
<tr>
<th>Series</th>
<th>HT6DC * W * - *35 - *10 - 1 R</th>
<th>Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*M = Mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*P = Mobile with double shaft seal</td>
<td></td>
</tr>
<tr>
<td><em>omit for industrial</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use for severe duty shaft only

(you for HT6DC and HT6DCM)

Y = Metric port connection, omit for UNC

<table>
<thead>
<tr>
<th>Cam ring</th>
<th>Displacement</th>
<th>Cam ring</th>
<th>Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in³/rev (cm³/rev)</td>
<td></td>
<td>in³/rev (cm³/rev)</td>
</tr>
<tr>
<td>014/B14/R14</td>
<td>2.90 (47.60)</td>
<td>035/B35/R35</td>
<td>6.77 (111.00)</td>
</tr>
<tr>
<td>017/B17/R17</td>
<td>3.55 (58.20)</td>
<td>038/B38/R38</td>
<td>7.34 (120.30)</td>
</tr>
<tr>
<td>020/B20/R20</td>
<td>4.03 (66.00)</td>
<td>042/B42/R42</td>
<td>8.30 (136.00)</td>
</tr>
<tr>
<td>024/B24/R24</td>
<td>4.85 (79.50)</td>
<td>045/B45/R45</td>
<td>8.80 (145.70)</td>
</tr>
<tr>
<td>028/B28/R28</td>
<td>5.47 (89.70)</td>
<td>050/B50/R50</td>
<td>9.64 (158.00)</td>
</tr>
<tr>
<td>031/B31/R31</td>
<td>6.00 (98.30)</td>
<td>061/B61/R61</td>
<td>11.62 (190.50)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cam ring</th>
<th>Displacement</th>
<th>Cam ring</th>
<th>Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in³/rev (cm³/rev)</td>
<td></td>
<td>in³/rev (cm³/rev)</td>
</tr>
<tr>
<td>003/B03/R03</td>
<td>0.66 (10.80)</td>
<td>015/B15/R15</td>
<td>3.08 (50.50)</td>
</tr>
<tr>
<td>005/B05/R05</td>
<td>1.05 (17.20)</td>
<td>017/B17/R17</td>
<td>3.56 (58.30)</td>
</tr>
<tr>
<td>006/B06/R06</td>
<td>1.30 (21.30)</td>
<td>020/B20/R20</td>
<td>3.89 (63.80)</td>
</tr>
<tr>
<td>008/B08/R08</td>
<td>1.61 (26.40)</td>
<td>022/B22/R22</td>
<td>4.29 (70.30)</td>
</tr>
<tr>
<td>010/B10/R10</td>
<td>2.08 (34.10)</td>
<td>025/B25/R25</td>
<td>4.84 (79.30)</td>
</tr>
<tr>
<td>012/B12/R12</td>
<td>2.26 (37.10)</td>
<td>028/B28/R28</td>
<td>5.42 (88.80)</td>
</tr>
<tr>
<td>014/B14/R14</td>
<td>2.81 (46.00)</td>
<td>031/B31/R31</td>
<td>6.10 (100.00)</td>
</tr>
</tbody>
</table>

(Select 'B**' for Mobile and Bi-directional)

(Select 'R**' for Mobile-spring assisted)

### Type of Shaft

<table>
<thead>
<tr>
<th>HT6DC/HT6DCM</th>
<th>HT6DCW</th>
<th>HT6DCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Keyed (SAE - C)</td>
<td>5 = Keyed (no SAE)</td>
<td>3 = Splined (no SAE)</td>
</tr>
<tr>
<td>2 = Keyed (no SAE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Splined (SAE - C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Splined (no SAE)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Mounting w/ connection variables

<table>
<thead>
<tr>
<th>UNC</th>
<th>METRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>01</td>
</tr>
<tr>
<td>M0</td>
<td>M1</td>
</tr>
<tr>
<td>P2</td>
<td>1”</td>
</tr>
<tr>
<td>3/4”</td>
<td>1”</td>
</tr>
</tbody>
</table>

### Seal class

1 = S1 (for mineral oil)

4 = S4 (for fire resistant fluids)

5 = S5 (for mineral oil and fire resistant fluids)

### Design letter

B = Industrial

C = Mobile

### Porting combination: (00 = Standard)

### Direction of rotation

R = Clockwise

L = Counter-clockwise
**HT6ED, HT6EDM, HT6EDP**

**MODEL CODE**

- **Series**
  - *M* = Mobile
  - *P* = Mobile with double shaft seal
  - (*omit for Industrial*)

- **Y** = Metric port connection, omit for UNC

**Cam ring**

- Displacement
  - in³/rev (cm³/rev)

042/R42 = 8.07 (132.30)
045/R45 = 8.70 (142.40)
050/R50 = 9.67 (158.50)
052/R52 = 10.00 (164.80)

062/R62 = 12.00 (196.70)
066/R66 = 13.00 (213.30)
072/R72 = 13.86 (227.10)
085/R85 = 16.40 (269.80)

**Modification**

- P1
- P2

**Porting combination: (00 = Standard)**

- 014/B14/R14 = 2.90 (47.60)
- 020/B20/R20 = 4.00 (66.00)
- 024/B24/R24 = 4.85 (79.50)
- 028/B28/R28 = 5.00 (89.70)
- 031/B31/R31 = 6.00 (98.30)
- 035/B35/R35 = 6.80 (111.00)

- 038/B38/R38 = 7.30 (120.30)
- 042/B42/R42 = 8.30 (136.00)
- 045/B45/R45 = 8.90 (145.70)
- 050/B50/R50 = 9.64 (158.00)

**Type of Shaft**

- HT6ED
  - 1 = Keyed (SAE - CC)
  - 2 = Keyed (no SAE)
  - 3 = Splined (SAE - C)
  - 4 = Splined (SAE - CC)

- HT6EDM
  - 1 = Keyed (SAE - CC)
  - 2 = Keyed (no SAE)

- HT6EDP
  - 3 = Splined (no SAE)
  - 4 = Splined (no SAE)
  - T = Splined (SAE J718c)

**Seal class**

- 1 = S1 - BUNA N
- 4 = S4 - EPDM
- 5 = S5 - VITON

**Direction of rotation**

- R = Clockwise
- L = Counter-clockwise

**Notes**

- (Select ‘R**’ for Mobile-spring assisted)
- (Select ‘B**’ for Mobile and Bi-directional)
- (Select ‘R**’ for Mobile-spring assisted)
## HT7ED, HT7EDS

### Model Code

**Series**
- HT7ED - ISO - 2 bolts 3019-2
- Mounting flange 125 B4 HW
- HT7EDS - SAE - C 2 Bolts
- Mounting flange J744

**Cam ring** | **Displacement** | **Cam ring** | **Displacement**
--- | --- | --- | ---
042 | 8.07 (132.30) | 057 | 11.02 (180.70)
045 | 8.70 (142.40) | 062 | 12.00 (196.70)
050 | 9.67 (158.50) | 066 | 13.00 (213.30)
052 | 10.00 (164.80) | 072 | 13.86 (227.10)
054 | 10.43 (170.90) | 085 | 16.40 (269.80)

**Cam ring** | **Displacement** | **Cam ring** | **Displacement**
--- | --- | --- | ---
B14 | 2.68 (43.9) | B31 | 6.05 (99.1)
B17 | 3.36 (55.0) | B35 | 6.92 (113.4)
B20 | 4.03 (66.0) | B38 | 7.36 (120.6)
B22 | 4.29 (70.3) | B42 | 8.39 (137.5)
B24 | 4.95 (81.3) | B45 | 8.89 (145.7)
B28 | 5.49 (89.9) | B50 | 9.64 (157.9)

**Type of Shaft**
- **HT7EDS**
  - 1 = Keyed (SAE - CC)
  - 2 = Keyed (no SAE)
  - 3 = Splined (SAE - C)
  - 4 = Splined (SAE - CC)

**HT7ED-HT7EDS**
- 01 M1

**Modification**
- Mounting w/ connection variables
  - 4 bolts SAE flange J518c

**Porting combination:** (00 = Standard)

**Design letter**

**Seal class**
- 1 = S1 - BUNA N
- 4 = S4 - EPDM
- 5 = S5 - VITON

**Direction of rotation**
- R = Clockwise
- L = Counter - clockwise
### HT7EE, HT7EES

#### Model Code

**Series**
- HT7EE Series - 250 B4HW
- ISO 3019 - 2 mounting flange
- HT7EES Series - SAE 4 bolts
- Mounting flange J744c

**Cam ring** | **Displacement** | **Cam ring** | **Displacement**
---|---|---|---
042 = 8.07 (132.3) | 057 = 11.18 (183.2) | 045 = 8.77 (142.5) | 062 = 12.0 (196.6) | 050 = 9.67 (158.5) | 066 = 13.0 (213.0) | 052 = 10.0 (163.8) | 072 = 13.86 (227.1) | 054 = 10.43 (170.9) | 085 = 16.40 (268.7)

**Type of Shaft**
- HT7EE
  - 2 - Keyed G45N (ISO 3019-2)
- HT7EES
  - 1 - Keyed (SAE CC)
  - 3 - Splined (SAE CC)
  - 4 - Splined (SAE D&E)
  - 5 - Keyed (SAE D & E)

---

### To change porting position, follow the steps below:

1. Secure pump and remove the 4 bolts from the mounting flange.
2. Turn the mounting flange 1 to 2 mm away from the housing. Insert one bolt halfway to mounting flange.
3. Install a wrench between the shaft and the bolt and turn in the desired way, so that the required position of the P1 port, with respect to suction is obtained.
4. Reinstall and tighten the bolts to the specified mounting torque as provided on page 2.
5. Follow the same procedure for changing the P2 port position.

**Instruction:** Remove the mounting flange/end cap 1 to 2 mm only (do not completely remove the mounting flange/end cap) to avoid the cartridge pin from moving out of the housing dowel pin hole. Make sure that there are no foreign piece objects that enters into the gap to avoid leakage. If it is difficult to turn mounting flange/end cap put some hydraulic oil in to the pressure port to lubricate the pressure port seals.
HYFLOW SOUTHEAST, INC. VANE PUMP WARRANTY

The Hyflow Southeast vane pump and other parts covered in this catalog are warranted for a period of (1) one year (12 months) from the date of service or 1-1/2 years (18 months) from date of build against any defect in material and workmanship which existed at the time of sale by Hyflow Southeast Inc., according to the following provisions, subject to the requirements that the vane pump must be used only in the appropriate applications and following the Installation and Owner’s Manual instructions.

If during the warranty period the vane pump fails due to a defect in any part in material or workmanship that existed at the time of the sale by Hyflow Southeast Inc., the defective part will be repaired or replaced, at the discretion of Hyflow Southeast Inc., at no charge, if the defective part is returned to Hyflow Southeast Inc. with transportation prepaid. Authorization from your sales representative is required to initiate the warranty.

**WARNING:** The above warranty shall terminate if any alterations or repairs are made to the vane pump other than at Hyflow Southeast Inc.

The foregoing warranty is in lieu of all other obligations and liabilities, including negligence and all warranties of merchantability and suitability, expressed or implied, and state Hyflow Southeast’ entire and exclusive liability and buyer’s exclusive remedy for any claim of damages in connection with the sale, repair or replacement of the above goods, their design, installation or operation. Hyflow Southeast Inc. will in no event be liable for any direct, indirect, special, incidental or consequential damages whatsoever, and our liability under no circumstances will exceed the contract price for the goods for which liability is claimed.

Hyflow Southeast Inc. is not liable for any repair related cost incurred to the Buyer at any time if the repair is conducted by the buyer without written authorization from Hyflow Southeast Inc.