### Features
1. The pump is designed to be compact and lightweight.
2. The bearing load is small thanks to the hydraulically balanced design, allowing long life and operating economy.
3. The pump operates quietly even in high speed applications due to excellent cavitation characteristics.
4. The pump contains only a few component parts, made for easy maintenance.
5. Inlet and outlet ports can be located as desired at 90-deg intervals without restriction on their relative positions.

### Cautions on use
- Please read the Operating Manual carefully to ensure correct usage.
- The standard direction of rotation is clockwise, viewed from the shaft end.
- The standard inlet port position is at the left, viewed from the shaft end.
- The standard outlet port position is at the right, viewed from the shaft end.
- The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
- The pump cannot be used for water-glycol fluid.
- The direction of rotation can be changed on the same pump. For the changing method, please consult us.
- The pump for counterclockwise rotation has the inlet and outlet ports opposite to those on the pump for clockwise rotation.
- Please read the “Cautions on Using Pumps and Motors”, A-2 and A-3 pages.

### Description of the model designation

HVP-FA1-L2R-A

- **Model No.**
- **Direction of rotation** R: CW  L: CCW
- **Displacement**
  - 2: 2.3 q/r
  - 4: 4.3 q/r
  - 5: 7.3 q/r
  - 11: 10.9 q/r
- **Mounting method** F: Flange type  L: Foot type

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Displacement (q/r)</th>
<th>Pressure (MPa)</th>
<th>Discharge rate (L/min)</th>
<th>Input (kW)</th>
<th>Rotating speed (min⁻¹)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rated/Max.</td>
<td>0.59MPa/2MPa</td>
<td>3.9/3.6/3.4/3.0</td>
<td>0.18/0.37/0.56/0.75</td>
<td>1.0/1.0/1.0/1.0/1.0/1.0</td>
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<td>4.1/3.9/3.6</td>
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<td>1,800/1,800/900</td>
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<td>7.7/7.3/7.0</td>
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<td>12.9/12.5/12.1</td>
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<td>19.1/18.5/17.9</td>
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</tbody>
</table>

Symbol *** in the model designation indicates the mounting method. L means the foot type, and F means the flange type.

### Outside dimensions

#### HVP-FA1-L*R-A

- **Mass:** 6.3kg

#### HVP-FA1-F*R-A

- **Mass:** 4.7kg
**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Displacement (L/min)</th>
<th>Input (kW)</th>
<th>Rotating speed (min⁻¹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVP-FC1-5R-B</td>
<td>5.0</td>
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<td>0.6</td>
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<td>HVP-FC1-8R-B</td>
<td>7.6</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>HVP-FC1-11R-B</td>
<td>11.2</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>HVP-FC1-14R-B</td>
<td>14.3</td>
<td>1.3</td>
<td>1.7</td>
</tr>
<tr>
<td>HVP-FC1-17R-B</td>
<td>17.6</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>HVP-FC1-21R-B</td>
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<td>1.8</td>
<td>2.4</td>
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<tr>
<td>HVP-FC1-26R-B</td>
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<td>2.8</td>
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<td>HVP-FC1-32R-B</td>
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<tr>
<td>HVP-FC1-40R-B</td>
<td>40.0</td>
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<td>3.4</td>
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<td>HVP-FC1-56R-B</td>
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</tr>
</tbody>
</table>

**Features**

1. The bearing load is small thanks to the hydraulically balanced design, allowing long life and operating economy.
2. The pump operates quietly even in high speed applications due to excellent cavitation characteristics.
3. Since the pipe connecting port is of flange mounting type, the pump can be installed or removed without disassembling the pipe.

**Cautions on use**

- Please read the Operating Manual carefully to ensure correct usage.
- The standard direction of rotation is clockwise, viewed from the shaft end.
- Standard position of suction inlet is to left and same of discharge outlet is to right viewed from the shaft end.
- When using water-glycol hydraulic fluid, specify “Q” at the end of model designation. The maximum rotating speed, however, becomes 1,200 min⁻¹. For brand names of water-glycol hydraulic fluid, please consult us.
- Example: HVP-FC1-L26R-B-G
- The direction of rotation can be changed on the same pump. For the changing method, please consult us.
- The pump for counterclockwise rotation has the inlet and outlet ports opposite to those on the pump for clockwise rotation.
- The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
- Please read the “Cautions on Using Pumps and Motors”, A-2 and A-3 pages.

**Outside dimensions**

- **HVP-FC1-L*R-B**
  - 199.5
  - 58.5
  - 49.5
  - 35
  - 3
  - 21.25
  - 21.65
  - 13
  - 5
  - Mass: 9.0 kg

- **HVP-FC1-F*R-B**
  - 199.5
  - 53.3
  - 54.7
  - 35
  - 3
  - 21.25
  - 21.65
  - 13
  - 5
  - Mass: 8.9 kg
Features
1. The bearing load is small thanks to the hydraulically balanced design, allowing long life and operating economy.
2. Simple structure assures easy maintenance.
3. Since the pipe connecting port is of flange mounting type, the pump can be installed or removed without disassembling the pipe.

Caution on use
- The standard direction of rotation is clockwise, viewed from the shaft end.
- Standard position of suction inlet is to left and the same of discharge outlet is to right viewed from the shaft end.
- The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
- When using water-glycol hydraulic fluid, specify “G” at the end of model designation. The maximum revolving speed, however, becomes 1,200 min⁻¹. For brand names of water-glycol hydraulic fluid, please consult us.

Example: HVP-FE1-L50R-A-G
- The direction of rotation can be changed on the same pump. For the changing method, please consult us.
- The pump for counterclockwise rotation has the inlet and outlet ports opposite to those on the pump for clockwise rotation.
- Please read the “Caution on Using Pumps and Motors”, A-2 and A-3 pages.

Description of the model designation

HVP-FE1-L50R-A (-G)
- Kind of hydraulic fluid
  - No code: Petroleum based hydraulic fluid
  - G: Water-glycol hydraulic fluid
- Model No.
- Direction of rotation: R: CW  L: CCW
- Displacement: 49.2 cm³/rev
- 60: 63.5 cm³/rev
- 75: 77.0 cm³/rev
- 85: 83.2 cm³/rev
- 95: 95.5 cm³/rev
- 108: 103.7 cm³/rev
- 120: 119.1 cm³/rev
- Mounting method: F: Flange type  L: Foot type
- Rated pressure
- Series code
- Fixed displacement type
- Vane pump

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Pressure (MPa)</th>
<th>Discharge rate (L/min)</th>
<th>Input (kW)</th>
<th>Rotating speed (min⁻¹)</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>0.5</td>
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<td>5</td>
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<tr>
<td>HVP-FE1-L50R-A</td>
<td>A</td>
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<td>134.1</td>
</tr>
</tbody>
</table>

Symbol “***” in the model designation indicates the mounting method.
L means the foot type, and F means the flange type.

Outside dimensions

HVP-FE1-L*R*A

HVP-FE1-F*R*A
**Features**

1. Higher performance is assured for a long period of time owing to the special hydraulic balancing method.
2. In addition to the standard type, the inlet port can be positioned at 90 degrees intervals for inlet port and 180 degrees intervals for outlet port.
3. Since the pipe connecting port is of flange mounting type, the pump can be installed or removed without disassembling the pipe.

**Cautions on use**

Please read the Operating Manual carefully to ensure correct usage.

- The standard direction of rotation is clockwise, viewed from the shaft end.
- Standard position of suction inlet is to left and the same of discharge outlet is to right viewed from the shaft end.
- The pump can be used for R & O type and abrasion-resistant type hydraulic fluid applications.
- When water-glycol hydraulic fluid is used, a standard pump can be used. Maximum rotation speed, however, becomes 1,200 min⁻¹. For brand names of hydraulic fluid, please consult us.
- Rotating direction cannot be changed on the same pump.
- Please read the "Cautions on Using Pumps and Motors", A-2 and A-3 pages.

**Description of the model designation**

- **HVP-FC2-L17R-A**
  - Vane pump
  - Fixed displacement type
  - Series code
  - Rated pressure

  - Model No.
  - Direction of rotation: R: CW  L: CCW
  - Displacement: 17: 17 cm³/rev
  - Mounting method: F: Flange type  L: Foot type

**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Displacement (cm³/rev)</th>
<th>Pressure (kPa)</th>
<th>Discharge rate (L/min)</th>
<th>Input (kW)</th>
<th>Rotating speed (min⁻¹)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>86.5</td>
<td>10.5MPa</td>
<td>5.8</td>
<td>750</td>
</tr>
</tbody>
</table>

**Outside dimensions**

- **HVP-FC2-L'R-A**
- **HVP-FC2-F'R-A**

Mass: 25.0kg

Mass: 21.9kg