Use NACHI hydraulics to save energy

Example of system configuration (machining center)

When the pressure switch reaches its upper limit, it stops the motor. The hydraulic pressure that is accumulated in the accumulator maintains the pressure in the circuit (compensates for cylinder operation and compensates for leak while maintaining pressure), and when the pressure switch reaches its lower limit, it starts the motor again. (Use the pressure switch signal to start and stop the motor.)

Hydraulic circuit

The pressure switch, accumulator, filter kit, and reducing valve are options. Select these options according to your application.

Valve block can be installed

Energy saving

Power consumption: 50W(*1)
(approx. 95% down)

Low noise

57 dB (A) during operation
Zero noise during stop

Low heat output

Oil temperature is room temperature + 7°C(*1)

Compact

35% smaller footprint compared to our standard unit

Leak compensation

Option
When accumulator is installed
Pressure is maintained even when it’s stopped to improve energy saving

(*1) These values are measured in machining center of our factory. They depend on the hydraulic circuit and the size and number of hydraulic cylinders installed on the machine.
### Package specifications

<table>
<thead>
<tr>
<th></th>
<th>NRP-10-12-10</th>
<th>NRP-10-24-10</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump capacity</td>
<td>3.0cm³/rev</td>
<td>5.0cm³/rev</td>
<td></td>
</tr>
<tr>
<td>Motor output - Number of poles</td>
<td>1.2kW-4P</td>
<td>2.4kW-4P</td>
<td></td>
</tr>
<tr>
<td>Rate of loaded operating time (per minute)</td>
<td>15% (9seconds)</td>
<td>10% (6seconds)</td>
<td></td>
</tr>
<tr>
<td>Tank specification</td>
<td>Resin tank (10 liter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure switch</td>
<td>1 output point (open collector)</td>
<td>Fixed pressure type</td>
<td></td>
</tr>
<tr>
<td>Accumulator</td>
<td>0.7 liters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reducing valve</td>
<td>Pressure adjustment range: 1.5 to 7.0 MPa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank specifications</td>
<td>Steel-plate tank (10 liter)</td>
<td>Steel-plate tank has a special design number</td>
<td></td>
</tr>
</tbody>
</table>

### Explanation of model number

**NRP-10-12-AFGP-10**
- **Design number**
- **Pressure switch option**
  - P: With pressure switch
  - Blank: Without pressure switch
- **Reducing valve option**
  - G: With reducing valve
  - Blank: Without reducing valve
- **Filter option**
  - F: With high-pressure filter kit
  - Blank: Without filter kit
- **Accumulator option**
  - A: With accumulator
    - (gas pressure 7.0MPa)
  - Blank: Without accumulator
- **Maximum output of package**
  - (with pump assembly)
  - 12: 1.2 kW, 3cm³/rev
  - 24: 2.4 kW, 5cm³/rev
- **Tank capacity**: 10L

### Dimension Table

<table>
<thead>
<tr>
<th>Output - Number of pole (kW - P)</th>
<th>Dimension (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-1.2</td>
<td>H 598 K 157 TA 92 TH 120</td>
<td>28.5</td>
</tr>
<tr>
<td>24-2.4</td>
<td>H 563 K 175 TA 100 TH 128</td>
<td>32.0</td>
</tr>
</tbody>
</table>

### Installation dimension

**Handling precaution**
- This power package is hydraulic system package for intermittent (on-off) operation. Do not operate it continuously. Read the operating instruction.
- There is risk of damaging the equipment if the motor or hydraulic oil overheats because of mis-operation or excessive operation under load.
- The accumulator is filled with nitrogen gas, so you must release the gas before disposing.
- Contact us for more information about shipping and installing the accumulator, which are subject to regulation.

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