YP15 Series

Model number

YP15 S 11 A 2 H 1 - L XXX

1. Series number
   YP15 series
2. Size
   Position of ports
   A: side ports
   D: rear ports
3. Mounting
   H: horizontal 2 bolts
   Shaft end
   1: SAE Spline 9 teeth
4. Rotation viewing from shaft end
   L = counterclockwise
   R = clockwise
5. Code number in 3 figures

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Displacement cm³</th>
<th>in³</th>
<th>Rated pressure MPa</th>
<th>bar</th>
<th>psi</th>
<th>Max. peak pressure MPa</th>
<th>bar</th>
<th>psi</th>
<th>Speed min⁻¹</th>
<th>Inlet pressure</th>
<th>Mass kg / lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5.10</td>
<td>0.311</td>
<td>20.6</td>
<td>206</td>
<td>2987</td>
<td>22.6</td>
<td>226</td>
<td>3277</td>
<td>500</td>
<td>-0.20 to 1.0</td>
<td>1.8 / 3.96</td>
</tr>
<tr>
<td>7</td>
<td>7.00</td>
<td>0.427</td>
<td>8.02</td>
<td>8.02</td>
<td>489</td>
<td>22.6</td>
<td>226</td>
<td>3277</td>
<td>500</td>
<td>-0.02 to 0.1</td>
<td>1.8 / 3.96</td>
</tr>
<tr>
<td>8</td>
<td>8.50</td>
<td>0.580</td>
<td>9.50</td>
<td>9.50</td>
<td>580</td>
<td>22.6</td>
<td>226</td>
<td>3277</td>
<td>500</td>
<td>-2.9 to -14.5</td>
<td>1.9 / 4.18</td>
</tr>
<tr>
<td>11</td>
<td>11.00</td>
<td>0.669</td>
<td>11.00</td>
<td>11.00</td>
<td>669</td>
<td>22.6</td>
<td>226</td>
<td>3277</td>
<td>3500</td>
<td>-2.9 to -14.5</td>
<td>2.2 / 4.84</td>
</tr>
<tr>
<td>12</td>
<td>12.00</td>
<td>0.733</td>
<td>12.00</td>
<td>12.00</td>
<td>733</td>
<td>22.6</td>
<td>226</td>
<td>3277</td>
<td>3100</td>
<td>-2.9 to -14.5</td>
<td>2.3 / 5.06</td>
</tr>
<tr>
<td>14</td>
<td>13.90</td>
<td>0.848</td>
<td>13.90</td>
<td>13.90</td>
<td>848</td>
<td>20.6</td>
<td>206</td>
<td>2987</td>
<td>3500</td>
<td>-2.9 to -14.5</td>
<td>2.3 / 5.06</td>
</tr>
<tr>
<td>16</td>
<td>15.90</td>
<td>0.970</td>
<td>15.90</td>
<td>15.90</td>
<td>970</td>
<td>17.2</td>
<td>172</td>
<td>2494</td>
<td>3100</td>
<td>-2.9 to -14.5</td>
<td>2.3 / 5.06</td>
</tr>
</tbody>
</table>

Typical assembly

Item No. | Name             | QTY | Material
---------|------------------|-----|---------|
1        | Front cover      | 1   | Aluminum alloy
2        | Body             | 1   | Aluminum alloy
3        | Drive gear       | 1   | Alloy steel
4        | Driven gear      | 1   | Alloy steel
5        | Side plate       | 2   | Special alloy steel
6        | Bush             | 2   | Special alloy steel
7        | Bush             | 2   | Special alloy steel
8        | Steel ball       | 2   | Alloy steel
9        | Gasket           | 2   | Nitrile rubber
10       | Gasket           | 1   | Nitrile rubber
11       | Bolt             | 4   | Alloy steel
12       | Washer           | 4   | Carbon steel
13       | Oil seal         | 1   | Nitrile rubber
14       | Retainer ring    | 1   | Carbon steel

NOTES: “QTY” shows the amount per one
**Outline dimensions**

**YP15\(\Delta\)A2H□-L (Side ports)**

**YP15\(\Delta\)D2H□-L (Rear ports)**

NOTE 1. Figure shown indicated counterclockwise rotation “L” viewing from shaft end. Clockwise rotation “R” is mirror image of this.

2. Unless otherwise specified, tolerance on dimension are ±1.0 mm.

<table>
<thead>
<tr>
<th>Size</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>87.2</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>104.5</td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

**Shaft end**

SAE Spline (Some dimensions are different form SAE standard.) : 9 teeth

- No. of teeth : 9
- D.P. : 16/32
- Pressure angle : 30°
- Over pin dia. : 18.427±
- 18.358
- Pin dia. : φ3.048
YP15 Series Performance curves

OIL: ISO VG32 Hydraulic Fluid at 40°C

YP15-5

YP15-7

YP15-8

YP15-9.5
YP15 Series Performance curves

OIL: ISO VG32 Hydraulic Fluid at 40°C

YP15-11

YP15-12

YP15-14

YP15-16

Shimadzu Corporation Fluidics Systems Division

The appearances and specifications are subject to change for reasons of improvement without notice.