Description

Model **11R**** are rugged oil immersed type Radial Piston Pumps and have either 5, 7 or 9 pumping elements. These pumps are valve controlled and there is no restriction on direction of rotation of the pump.

They are available with 9 displacements and 3 pressure ratings. These pumps give fixed output per revolution of the shaft.

The pumps with model **11RE*** have extension shaft for through drive and are available with extension bracket assembly for coupling a low pressure pump having standard flanges as per ISO 3019/2 (Ref. datasheet no. D 09090).

Section

**Technical specifications**

**Designation**

Model : **11R**** is a basic Radial piston pump. **11RE*** is a Radial piston pump with extension shaft.

**Design**

Radial piston, valve controlled, open execution.

**No. of pumping elements**

5, 7 or 9.

**Mounting**

Oil immersed, face mounting.

**Interface**

Factory standard.

**Direction of rotation**

**11R** - No restriction on directions of rotation.

**11RE** - Depends upon the direction rotation of pump attached.

**Connection**

**Suction port** - Sucks oil directly from tank, no suction port is provided.

**Delivery (port P)** - G1/2 female.

**Speed range**

300 to 2000 r/min.

**Flow and Pressure**

Refer Table no.1

**Torque limitations**

**Input drive shaft** - 220 Nm

**Extension shaft** - 130 Nm

**Hydraulic medium**

Mineral oil.

**Temperature range**

-20°C to + 80°C.

**Viscosity range**

10 cSt to 100 cSt.

**Fluid cleanliness required**

ISO 4406 20/18/15 or better.

**Mass**

Model : **11R5** 11.8 kg 11.9 kg 19.7 kg 19.9 kg 20.9 kg

**Performance** table no. 1

<table>
<thead>
<tr>
<th>No. of pumping elements</th>
<th>Element type</th>
<th>Geometrical displacement in cm³/r</th>
<th>Pump output in l/min At 1450 r/min</th>
<th>Maximum Operating pressure in bar</th>
<th>Pressure in bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>A</td>
<td>7.7</td>
<td>10.5</td>
<td>400</td>
<td>1.09 2.19 3.28 4.38 5.47 6.57 6.89 8.75</td>
</tr>
<tr>
<td>7</td>
<td>10.78</td>
<td>14.7</td>
<td>150</td>
<td>2.53 3.06 4.60 6.13 7.66 9.19 9.65 12.25</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>13.85</td>
<td>18.9</td>
<td>200</td>
<td>1.97 3.94 5.91 7.88 9.85 11.82 12.41 15.76</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>10.05</td>
<td>13.7</td>
<td>250</td>
<td>1.43 2.86 4.29 5.72 7.15 8.57 9.00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>14.07</td>
<td>19.2</td>
<td>315</td>
<td>2.00 4.00 6.00 8.00 10.0 12.0 12.6</td>
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</tr>
<tr>
<td>9</td>
<td>18.10</td>
<td>24.7</td>
<td></td>
<td>2.57 5.14 7.72 10.29 12.86 15.43 16.21</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12.72</td>
<td>17.3</td>
<td></td>
<td>1.81 3.62 5.43 7.23 9.04</td>
<td></td>
</tr>
<tr>
<td>7</td>
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<td>24.3</td>
<td>250</td>
<td>2.53 5.06 7.60 10.1 12.6</td>
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</tr>
<tr>
<td>9</td>
<td>22.90</td>
<td>31.2</td>
<td></td>
<td>3.26 6.51 9.77 13.02 16.28</td>
<td></td>
</tr>
</tbody>
</table>

Note: Torque limitation: The total sum of torque applied to drive the pump and the pump attached (In case model 11RE is used), at any given instance, should not exceed 220 Nm.
Unit dimensions

Pump without extension shaft
Model - 11R5, 11R7 or 11R9

Pump with extension shaft
Model - 11RE5, 11RE7 or 11RE9

Dimensions in mm.

Ordering code

11R  E  5  A  11

Radial piston, Fixed delivery, Open execution, oil immersed.

With extension shaft E
Omit, if not required.

No. of pumping elements
5 7 9

Design code subjected to change. Installation dimensions remain same for design code 11 thru 19.

Type of elements
(Flow and pressure rating Refer table no. 1)

Note: For Bell housing refer Data sheet no. D 09035 and For extension bracket refer Data sheet no. D 09090.

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