VD series Dual Pump

Nomenclature

<table>
<thead>
<tr>
<th>VD</th>
<th>A</th>
<th>R</th>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
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</table>

1 Model No.
(Applicable fluids: petroleum-based hydraulic oil)
VD: VD series Dual Pump

2 Vane pump capacity code
1: DS11P
2: DS12P
3: DS13P
4: DS14P

3 Piston pump capacity code
8: V 8 (8.0 cm³/rev)
15: V15 (14.8 cm³/rev)
38: V38 (37.7 cm³/rev)

Control method
A: Pressure compensator control

Pressure adjustment range (piston pump)
1: 0.8 to 7 MPa (8 to 70 kgf/cm²)
2: 1.5 to 14 MPa (15 to 140 kgf/cm²)
3: 3.5 to 21 MPa (35 to 210 kgf/cm²)

Direction of rotation, when viewed from the shaft end
R: Clockwise (rightward)

Design No. (The design No. is subject to change)
30: Pump model VDX-8A1R
95: Pump model VDX-15A XR, VDX-38AXR

Vane Pump Specifications

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Input rotational speed: 1800 min⁻¹, Fluid used: equivalent to ISO VG32, Fluid temperature: 40°C</th>
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<tbody>
<tr>
<td>Model code</td>
<td>Discharge rate L/min</td>
</tr>
<tr>
<td></td>
<td>0.4 MPa (4 kgf/cm²)</td>
</tr>
<tr>
<td>DS11P</td>
<td>5.0</td>
</tr>
<tr>
<td>DS12P</td>
<td>7.7</td>
</tr>
<tr>
<td>DS13P</td>
<td>12.6</td>
</tr>
<tr>
<td>DS14P</td>
<td>22.1</td>
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</tbody>
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Note: Vane pump models
DS1×P-20S5: For VDX-8A1R-30, DS1×P-20S2: For VDX-15A×R-95 or VDX-38AXR-95

Piston Pump Specifications

Relationship between the protruding length of the discharge rate adjusting screw and the discharge rate
- The discharge rate can be roughly judged from the protruding length of the discharge rate adjusting screw (L).
  (Note: The discharge rate for VDX-8A1R-30 cannot be adjusted.)

Refer to Page A-8 for other detailed specifications.
External dimension diagram

VD×-8A1R-30

Suction port G¾Bonded seal (piston pump)

Pressure adjusting screw

Discharge port G¾Bonded seal (vane pump)

Discharge port A Rc¾(vane pump)

Discharge port B Rc¾(plugged at factory) (vane pump)

Mass: 13 kg

VD×-15A×R-95

Suction port G1 O-ring boss (piston pump)

Discharge rate adjusting screw (piston pump)

Lock nut type 3, M10

Discharge port G¾Bonded seal (vane pump)

Discharge port A Rc¾(vane pump)

Discharge port B Rc¾(plugged at factory) (vane pump)

Mass: 17.2 kg

VD×-38A×R-95

Suction port G1¼O-ring boss (piston pump)

Discharge rate adjusting screw (piston pump)

Lock nut type 3, M10

Discharge port G1¼O-ring boss (piston pump)

Discharge port A Rc¾(vane pump)

Discharge port B Rc¾(plugged at factory) (vane pump)

Mass: 29 kg