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KUBOTA reserves the right to change the design, technical specification and dimensions without prior notice.

For Earth, For Life

KUBOTA

Double suction volute pump
DV-L type J series
KUBOTA double suction volute pump
DV-L type J series

**Features**

1. **High efficiency**
   Higher efficiency has been achieved using the latest hydraulic analysis. This unique design provides power saving and CO₂ reduction.

2. **Enhanced suction performance**
   DV-LJ is operated with enhanced suction performance. Stable operation is made possible, even at lower water level.

3. **Easy maintenance**
   Easily replaceable string-shaped rubber gasket is employed for the upper and lower seal face, and the shaft seal water piping is incorporated into the casing. Maintenance time is shorter since a number of parts have been reduced.

4. **Increased durability and reliability**
   This pump has been developed through optimum design using the FEM structural analysis. Furthermore, standard stainless steel impeller and shaft offers better durability and corrosion protection.

5. **Light weight and compact**
   Lighter weight and compact size is achieved by full model change. Thus installation space can be saved and easier to handle.

**Application**

1. **City**
   For desalination, water intake, water transmission, pressurization, water distribution, front and back wash etc.

2. **Industry**
   For water supply, cooling water circulation etc.

3. **Irrigation**
   For agriculture, drainage etc.

4. **Building, air-conditioning**
   For water supply, fire-extinguish, etc.

**Specification detail**

- **Suction bore**: φ200~φ1350
- **Capacity**: 3.2m³/min~415m³/min
- **Total head**: 8m~180m
- **Number of poles**: 4~14P

- **Material**
<table>
<thead>
<tr>
<th>Parts Item</th>
<th>Standard Material / Eq.JIS grade</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>casing</td>
<td>Gray iron casting / FC250</td>
<td>Steel casting, Duplex SS casing</td>
</tr>
<tr>
<td>impeller</td>
<td>Stainless steel casting / SC13</td>
<td>Steel casting, Duplex SS casing</td>
</tr>
<tr>
<td>shaft</td>
<td>Stainless steel / SS343</td>
<td>Carbon Steel, Duplex SS</td>
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<tr>
<td>casing ring</td>
<td>Stainless steel / SS334</td>
<td>Any other materials</td>
</tr>
<tr>
<td>packing sleeve</td>
<td>Stainless steel / SS334</td>
<td>Any other materials</td>
</tr>
<tr>
<td>note1)</td>
<td>Different in the standard material every frame No.</td>
<td></td>
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</tbody>
</table>

- **Pump specification**
<table>
<thead>
<tr>
<th>Standard</th>
<th>Optional</th>
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</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Fresh water, River water, Industrial water, Sea water</td>
</tr>
<tr>
<td>Liquid temperature</td>
<td>0°C~30°C</td>
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<tr>
<td>Suction pressure</td>
<td>&lt;0.1MPa, &lt;0.2MPa</td>
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<tr>
<td>Flange</td>
<td>ISO, JIS, ANSI, BS</td>
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<tr>
<td>Bearing</td>
<td>Ball, Roller</td>
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<tr>
<td>Bearing lubrication</td>
<td>Grease, Oil</td>
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<td>Impeller ring</td>
<td>No provided, Adaptable</td>
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<td>Shaft seal</td>
<td>Mechanical seal</td>
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<tr>
<td>Sleeve</td>
<td>Only gland packing section, Shaft sleeves are adaptable</td>
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<td>Painting</td>
<td>Casting Internal, Epoxy resin painting, for water service, Outside surface, Epoxy resin painting</td>
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<td>Electric motor</td>
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<tr>
<td>Rotating direction</td>
<td>Clockwise (viewed from drive machine), Counter-clockwise</td>
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<tr>
<td>Output/discharge direction</td>
<td>Horizontal, Vertical</td>
</tr>
<tr>
<td>Accessory</td>
<td>Base, Foundation bolts, Coupling, Coupling cover, Priming detector, Pressure gauge</td>
</tr>
</tbody>
</table>

Note1) Contact us for any specification other than the above.
Note2) Different every frame No.
### Outline dimension (Suction bore 200 to 700)

#### Frame No. 20MA~70ME (4P)

<table>
<thead>
<tr>
<th>Frame No.</th>
<th>Motor output (kW)</th>
<th>Pole</th>
<th>D</th>
<th>L</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>Dd</th>
<th>Ed</th>
<th>H</th>
<th>PH(kW)</th>
<th>G</th>
<th>L</th>
<th>BN</th>
<th>BW</th>
<th>NN (kg)</th>
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</thead>
<tbody>
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#### Frame No. 35MA~40ME (6P)

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<th>C</th>
<th>E</th>
<th>F</th>
<th>Dd</th>
<th>Ed</th>
<th>H</th>
<th>PH(kW)</th>
<th>G</th>
<th>L</th>
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<th>NN (kg)</th>
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<td>813</td>
<td>1311</td>
<td>1294</td>
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</tr>
</tbody>
</table>

Note: 1. Dimensions of electric motor and base relative dimensions depend on output and model of electric motor. Note 2: This table shows one example for inverting totally enclosed fan-cooled electric motor. Note 2: These described weights are total of pump, electric motor and standard accessories. Note 4: All dimensions and weights are reference only and not for construction.
Rehabilitation of Babatag Pump Station (Uzbekistan)

Model | Double suction volute pump
--- | ---
Bore | 1400mm
Capacity | 266.4m³/min
Total Head | 78.28m
Motor Output | 4500kW

Note: For Irrigation Agriculture. Designed for abrasion resistance in sandy river water.

Nippon Steel & Sumitomo Metal Corporation (Japan)

Model | Double suction volute pump
--- | ---
Bore | 450mm
Capacity | 28.7 m³/min
Total Head | 40.0 m
Motor Output | 300kW

Note: KUBOTA supplied a great number of products to Nippon Steel, one of the largest iron steel manufacturers in Japan.

Sg. Dua Water Treatment Plant (Malaysia)

Model | Double suction volute pump
--- | ---
Bore | 600mm
Capacity | 50.5 m³/min
Total Head | 79.0 m
Motor Output | 1000kW

Note: For City Water Supply. Distributing treated water to the people and industries in Penang State, Malaysia.

Bang Khen Transmission Pumping Station Metropolitan Waterworks Authority (Thailand)

Model | Double suction volute pump
--- | ---
Bore | 1350mm
Capacity | 300.0 m³/min
Total Head | 35.0 m
Motor Output | 2200kW

Note: For City Water Supply. Supply water to the capital of Thailand, Bangkok, in the main pump station of MWA.

---

Typical construction drawing

Suction bore 800 to 1350

- **No.** | **Parts name** | **No.** | **Parts name** | **No.** | **Parts name**
--- | --- | --- | --- | --- | ---
1 | Upper casing | 6 | Bearing support(1) | 11 | String shaped rubber packing (1)
2 | Lower casing | 7 | Bearing support(2) | 12 | String shaped rubber packing (2)
3 | Impeller | 8 | Bearing cover | 13 | String shaped rubber packing (3)
4 | Shaft | 9 | Bearing(1) | 14 | String shaped rubber packing (4)
5 | Impeller nut | 10 | Bearing(2) | 15 | Oil ring
6 | Impeller set ring | 16 | Key (for Impeller) | 17 | Oil ring guide
7 | Packing sleeve | 17 | Key (for Coupling) | 18 | Distance ring
8 | Gland packing | 18 | O-ring(1) | 19 | Deflector
9 | Casing ring | 19 | O-ring(2) | 20 | Bearing washer
10 | Gland | 20 | O-ring(3) | 21 | Bearing nut
11 | Lantern ring | 21 | O-ring(4) | 22 | Inspection cover

Note: Above drawing shows typical construction drawing. Bearing arrangement depends on the type of lubricant or type of bearing.
### Nippon Coke & Engineering. Corporation (Japan)

**Model**
- Double suction volute pump

**Bore**
- 700mm

**Capacity**
- 84.3m³/min

**Total Head**
- 61.0m

**Motor Output**
- 1250kW

**Note**
- For Industrial Use. Deliver desulfurization sorbent for protection of environment.

---

### Jebel Ali Power and Desalination Station (UAE)

**Model**
- Double suction volute pump

**Bore**
- 700mm

**Capacity**
- 73.7m³/min

**Total Head**
- 41.0m

**Motor Output**
- 690kW

**Note**
- For Desalination Plant. High corrosion resistant duplex stainless steel is used in delivering sea water.

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### Oita Co-operative Thermal Power Corporation (Japan)

**Model**
- Double suction volute pump

**Bore**
- 800mm

**Capacity**
- 106.7m³/min

**Total Head**
- 26.0m

**Motor Output**
- 570kW

**Note**
- For Power Plant. Deliver cooling water to the facilities in the power plant.

---

### Baosteel Group Corp. (China)

**Model**
- Double suction volute pump

**Bore**
- 350mm

**Capacity**
- 21.7m³/min

**Total Head**
- 127.0m

**Motor Output**
- 710kW

**Note**
- For Industrial Use. Baosteel has used Kubota pumps since establishment.

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### Fuji River Transmission Pumping Station (Japan)

**Model**
- Double suction volute pump

**Bore**
- 1200mm

**Capacity**
- 261.0m³/min

**Total Head**
- 60.0m

**Motor Output**
- 3100kW

**Note**
- For Industrial Use. Deliver water from Fuji River to nearby industrial area.

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### Chongqing Water works (China)

**Model**
- Double suction volute pump

**Bore**
- 350mm

**Capacity**
- 18.0m³/min

**Total Head**
- 79.0m

**Motor Output**
- 315kW

**Note**
- Vibration problem been solved by replacement of the others into Kubota. A great number of pumps are supplied these days.