The CVLS vertical turbine pump is designed for a very wide range of applications. The construction is based on a modular concept.

Number of column pipes and stages, types of impellers and bowls, sealing systems, bearing arrangements and the material selection will meet any requirements within its working area.

When increasing the flow capacity, the fluid velocity in the pipe system can be maintained by fitting an enlarged discharged port, matching the pipe work.

- Reliable design
- Low speed
- Length up to 30 metres
- Easy to service
- Long shaft lifetime
IRON PUMP A/S has designed, developed and produced pumps for more than 100 years. We supply a wide range of high quality pumps, all able to be individually adapted and customized to meet client demands.

Every pump is assembled and tested at our in-house production and test facility to ensure quality. They can all be delivered with the most common certification regarding use in marine applications, as well as for material-environment- and quality assurance.

<table>
<thead>
<tr>
<th>Pump Size</th>
<th>Capacity (m³/h)</th>
<th>Differential pressure (bar)</th>
<th>Speed (rpm)</th>
<th>Temperature (°C)</th>
<th>Length of pump (metres) approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 - 100</td>
<td>100</td>
<td>12</td>
<td>3600</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>200 - 400</td>
<td>1200</td>
<td>10</td>
<td>1800</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>400 - 600</td>
<td>6000</td>
<td>6</td>
<td>1200</td>
<td>60</td>
<td>20</td>
</tr>
</tbody>
</table>

The maximum values mentioned above are combinations of the stated parameters.

**Design features**

1. Standard, the pumps prime mover is a vertically mounted electrical motor but other types of prime movers can also be utilized, such as hydraulic motors or angle gears.

2. Coupling type:
   - Pump size 65 - 100: Flexible
   - Pump size 200 - 400: Spacer
   - Pump size 400 - 600: Flexible & split seal

3. Lubrication of the axial load bearings:
   - Pump size 65 – 100: Grease lubricated
   - Pump size 200 – 400: Oil bath
   - Pump size 400 – 600: Grease lubricated

4. Intermediate couplings are made from aluminium bronze (JM-7), or stainless steel (AISI 329).

5. Intermediate shafts are made from stainless steel (AISI 329).

6. Intermediate sleeve bearings are lubricated by the media. External lubrication can be fitted in longer pumps, or if not operating frequently, or if pumped liquids contain impurities.

7. The pump bowls are fitted with interchangeable sleeve bearings. Wear rings are standard.

8. If required, a strainer can be fitted to the pump inlet.

**NB:** Intermediate bearings and shafts can be assembled up-side down to extend the lifetime of the shafts by four.