

|                             |   |   |
|-----------------------------|---|---|
| <b>Series:</b><br><b>LB</b> | <b>Discharge Bore:</b><br><b>50(80)mm</b> | <b>Motor Output / Pole:</b><br><b>0.48 - 1.5kW / 2-pole</b> |
|-----------------------------|---|---|



The LB-series is a submersible single-phase portable drainage pump. Though it is a single-phase unit, the pump has the durability equivalent to three-phase drainage pumps, since the wear parts are made of abrasion-resistant materials. The top discharge, flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability. Every LB model is slim design enough to be accommodated in an 8-inch pipe. The discharge direction is selectable between vertical and inclined, which prevents folding or bending of the discharge hose.\*

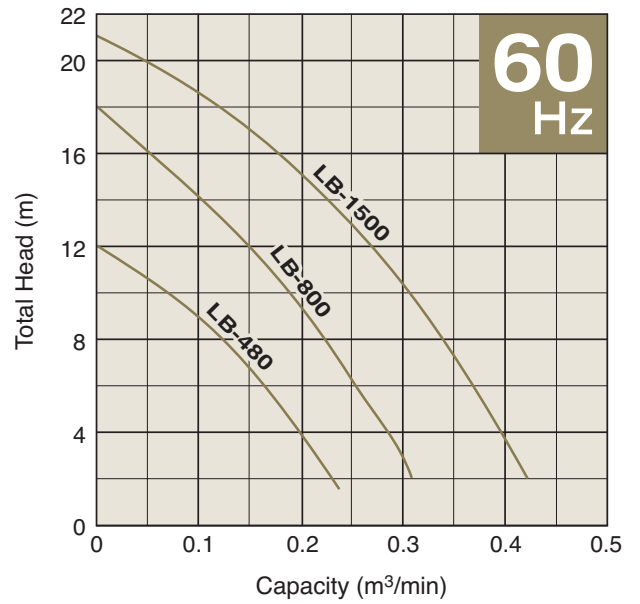
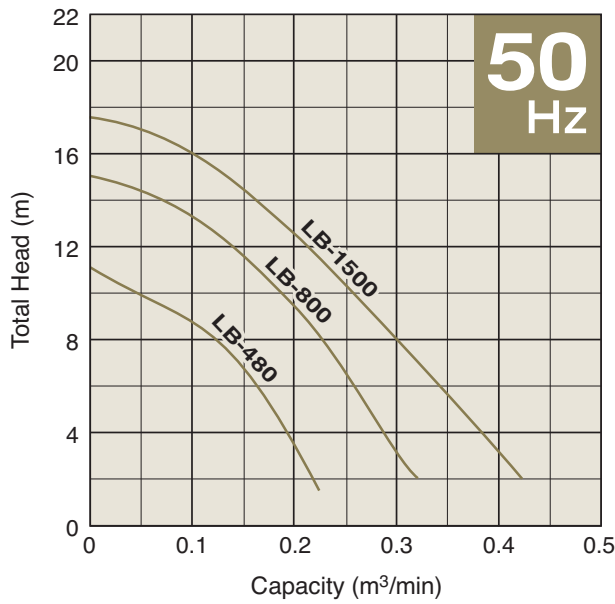
\* excluding LB-1500

**Selection Table**

| Model   | Discharge Bore<br>mm | Motor Output<br>kW | Phase   | Starting Method | Pole | Dry Weight<br>kg |
|---------|----------------------|--------------------|---------|-----------------|------|------------------|
| LB-480  | 50                   | 0.48               | 1-phase | Capacitor Run   | 2    | 10.4             |
| LB-800  | 50(80)               | 0.75               | 1-phase | Capacitor Run   | 2    | 13.1             |
| LB-1500 | 50(80)               | 1.5                | 1-phase | Capacitor Start | 2    | 33               |

● 80mm discharge bore available on special request.

**Performance Curves**



|                       |       |               |                        |
|-----------------------|-------|---------------|------------------------|
| <b>SPECIFICATIONS</b> | Model | <b>LB-480</b> | <b>LB-series</b>       |
|                       |       |               | <b>0.48kW, 1-phase</b> |

|   |             |      |             |             |             |             |             |  |   |
|---|-------------|------|-------------|-------------|-------------|-------------|-------------|--|---|
| <p><b>Type of Pump</b><br/>Submersible drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b><br/>Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b><br/>50mm, Multi-directional Hose Coupling</p> <p><b>Motor Output</b><br/>0.48kW</p> <p><b>Power Supply</b><br/>Single-phase</p> <p><b>Starting Method</b><br/>Capacitor Run</p> <p><b>Motor</b><br/>Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E<br/>Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed)<br/>2-pole, 3000/3600min<sup>-1</sup> (50/60Hz)</p> <p>Power Supply Voltages &amp; Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 3.1A</td> <td>110V – 6.1A</td> </tr> <tr> <td>230V – 2.9A</td> <td>220V – 3.0A</td> </tr> <tr> <td>240V – 2.7A</td> <td></td> </tr> </table> <p><b>Power Cable</b><br/>Sheath: PVC<br/>Standard Length: 5m<br/>100 to 240V supply:<br/>1 x 3 x 1.25mm<sup>2</sup>, O.D. 10.1mm</p> <p><b>Dry Weight (excluding cable)</b><br/>10.4kg</p> | 50Hz        | 60Hz | 220V – 3.1A | 110V – 6.1A | 230V – 2.9A | 220V – 3.0A | 240V – 2.7A |  | <p><b>Impeller</b><br/>Vortex impeller deigned for “high-gap structure”, made of urethane rubber</p> <p>Solids Passage<br/>50Hz – ϕ6mm<br/>60Hz – ϕ6mm</p> <p><b>Cable Entry with Anti-Wicking Block</b><br/>Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p><b>Bearing</b><br/>Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b><br/>403 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b><br/>Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Face: Ceramic + Carbon<br/>Lower Seal Face: SiC + Ceramic</p> <p><b>V-Ring</b><br/>Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p><b>OIL LIFTER</b><br/>Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil &amp; Volume<br/>Turbine Oil (ISO VG32), 155ml</p> <p><b>Motor Protection Device</b><br/>A miniature thermal protector is embedded in winding of the motor. Directly cuts the motor circuit if excessive heat builds up in the motor.</p> |
| 50Hz  | 60Hz        |      |             |             |             |             |             |  |   |
| 220V – 3.1A   | 110V – 6.1A |      |             |             |             |             |             |  |   |
| 230V – 2.9A   | 220V – 3.0A |      |             |             |             |             |             |  |   |
| 240V – 2.7A   |             |      |             |             |             |             |             |  |   |

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| <p style="background-color: #eee; padding: 2px;"><b>Optional Accessory</b></p> <p><b>Multi-directional Male Threaded Coupling</b></p> | <p style="background-color: #eee; padding: 2px;"><b>Special Specifications</b></p> <p><b>Three-phase Power Supply</b></p> |
|---|---|

|                       |       |               |                        |
|-----------------------|-------|---------------|------------------------|
| <b>SPECIFICATIONS</b> | Model | <b>LB-800</b> | <b>LB-series</b>       |
|                       |       |               | <b>0.75kW, 1-phase</b> |

|  |              |      |             |              |             |             |             |  |  |
|--|--------------|------|-------------|--------------|-------------|-------------|-------------|--|--|
| <p><b>Type of Pump</b><br/>Submersible drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b><br/>Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b><br/>50mm, Multi-directional Hose Coupling<br/>(80mm discharge bore available on special request)</p> <p><b>Motor Output</b><br/>0.75kW</p> <p><b>Power Supply</b><br/>Single-phase</p> <p><b>Starting Method</b><br/>Capacitor Run</p> <p><b>Motor</b><br/>Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E<br/>Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed)<br/>2-pole, 3000/3600min<sup>-1</sup> (50/60Hz)</p> <p>Power Supply Voltages &amp; Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 4.7A</td> <td>110V – 10.8A</td> </tr> <tr> <td>230V – 4.5A</td> <td>220V – 5.4A</td> </tr> <tr> <td>240V – 4.4A</td> <td></td> </tr> </table> <p><b>Power Cable</b><br/>Sheath: PVC<br/>Standard Length: 5m<br/>200 to 240V supply:<br/>1 x 3 x 1.25mm<sup>2</sup>, O.D. 10.1mm<br/>100 to 120V supply:<br/>1 x 3 x 2.0mm<sup>2</sup>, O.D. 10.9mm</p> <p><b>Dry Weight</b> (excluding cable)<br/>13.1kg</p> | 50Hz         | 60Hz | 220V – 4.7A | 110V – 10.8A | 230V – 4.5A | 220V – 5.4A | 240V – 4.4A |  | <p><b>Impeller</b><br/>Vortex impeller deigned for “high-gap structure”, made of urethane rubber</p> <p>Solids Passage<br/>50Hz – ϕ6mm<br/>60Hz – ϕ6mm</p> <p><b>Cable Entry with Anti-Wicking Block</b><br/>Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p><b>Bearing</b><br/>Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b><br/>403 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b><br/>Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Face: Ceramic + Carbon<br/>Lower Seal Face: SiC + Ceramic</p> <p><b>V-Ring</b><br/>Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p><b>OIL LIFTER</b><br/>Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil &amp; Volume<br/>Turbine Oil (ISO VG32), 155ml</p> <p><b>Motor Protection Device</b><br/>A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.</p> |
| 50Hz   | 60Hz         |      |             |              |             |             |             |  |  |
| 220V – 4.7A  | 110V – 10.8A |      |             |              |             |             |             |  |  |
| 230V – 4.5A  | 220V – 5.4A  |      |             |              |             |             |             |  |  |
| 240V – 4.4A  |              |      |             |              |             |             |             |  |  |

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| <p style="background-color: #eee; padding: 2px;"><b>Optional Accessory</b></p> <p><b>Multi-directional Male Threaded Coupling</b></p> | <p style="background-color: #eee; padding: 2px;"><b>Special Specifications</b></p> <p><b>Three-phase Power Supply</b></p> |
|---|---|

| SPECIFICATIONS | Model | LB-1500                     |  |
|----------------|-------|-----------------------------|--|
|                |       | LB-series<br>1.5kW, 1-phase |  |

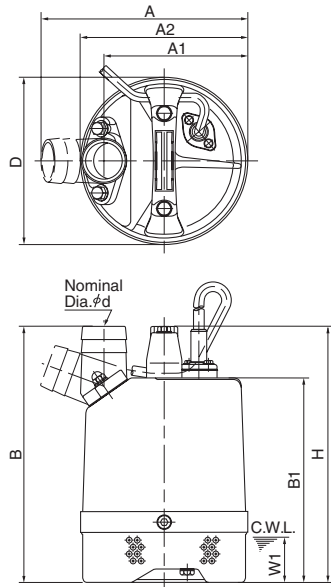
|  |              |      |              |              |              |              |              |  |  |
|--|--------------|------|--------------|--------------|--------------|--------------|--------------|--|--|
| <p><b>Type of Pump</b><br/>Submersible drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b><br/>Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b><br/>50mm, Hose Coupling<br/>(80mm discharge bore available on special request)</p> <p><b>Motor Output</b><br/>1.5kW</p> <p><b>Power Supply</b><br/>Single-phase</p> <p><b>Starting Method</b><br/>Capacitor Start</p> <p><b>Motor</b><br/>Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: B<br/>Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed)<br/>2-pole, 3000/3600min<sup>-1</sup> (50/60Hz)</p> <p>Power Supply Voltages &amp; Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 14.1A</td> <td>110V – 27.1A</td> </tr> <tr> <td>230V – 15.7A</td> <td>220V – 13.7A</td> </tr> <tr> <td>240V – 16.3A</td> <td></td> </tr> </table> <p><b>Power Cable</b><br/>Sheath: Chloroprene rubber<br/>Standard Length: 10m<br/>200 to 240V supply:<br/>1 x 3 x 2.0mm<sup>2</sup>, O.D. 14.4mm<br/>100 to 120V supply:<br/>1 x 3 x 3.5mm<sup>2</sup>, O.D. 15.6mm</p> <p><b>Dry Weight</b> (excluding cable)<br/>33kg</p> | 50Hz         | 60Hz | 220V – 14.1A | 110V – 27.1A | 230V – 15.7A | 220V – 13.7A | 240V – 16.3A |  | <p><b>Impeller</b><br/>Semi-open impeller made of high-chromium cast iron</p> <p>Solids Passage<br/>50Hz – ϕ6mm<br/>60Hz – ϕ6mm</p> <p><b>Cable Entry with Anti-Wicking Block</b><br/>Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p><b>Bearing</b><br/>Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b><br/>403 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b><br/>Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Face: SiC + SiC<br/>Lower Seal Face: SiC + SiC</p> <p><b>V-Ring</b><br/>Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p><b>OIL LIFTER</b><br/>Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil &amp; Volume<br/>Turbine Oil (ISO VG32), 350ml</p> <p><b>Motor Protection Device</b><br/>A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.</p> |
| 50Hz   | 60Hz         |      |              |              |              |              |              |  |  |
| 220V – 14.1A   | 110V – 27.1A |      |              |              |              |              |              |  |  |
| 230V – 15.7A   | 220V – 13.7A |      |              |              |              |              |              |  |  |
| 240V – 16.3A   |              |      |              |              |              |              |              |  |  |

|   |   |
|---|---|
| <p><b>Optional Accessory</b></p> <p><b>Male Threaded Coupling</b></p> | <p><b>Special Specifications</b></p> <p><b>Three-phase Power Supply</b></p> |
|---|---|

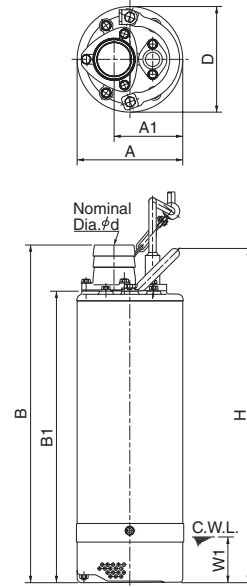
|                   |       |                          |                  |
|-------------------|-------|--------------------------|------------------|
| <b>DIMENSIONS</b> | Model | <b>LB-480 to LB-1500</b> | <b>LB-series</b> |
|                   |       |                          | <b>50mm</b>      |

C. W. L. : Continuous Running Water Level

LB-480  
LB-800



LB-1500



Unit: mm

| Model   | d      | A   | A1  | A2  | B   | B1  | D   | H   | W1 |
|---------|--------|-----|-----|-----|-----|-----|-----|-----|----|
| LB-480  | 50     | 233 | 162 | 189 | —   | 228 | 187 | 286 | 50 |
| LB-800  | 50(80) | 230 | 160 | 186 | 338 | 283 | 187 | 341 | 50 |
| LB-1500 | 50(80) | 187 | 122 | —   | 600 | 518 | 187 | 593 | 80 |