

Series:

**LH**

Discharge Bore:

**80·100mm**

Motor Output / Pole:

**3 - 30kW / 2-pole**



The LH-series is a submersible three-phase cast iron high head drainage pump. Being the pump cylindrical and slim, it can be installed in a well casing for deep well dewatering. The center flange construction assures a stable installation even if it is fixed by the discharge pipe. The top discharge, flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.\*

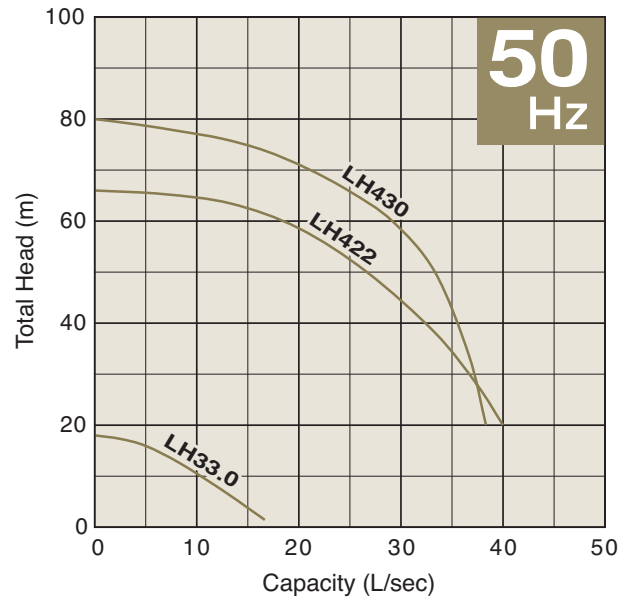
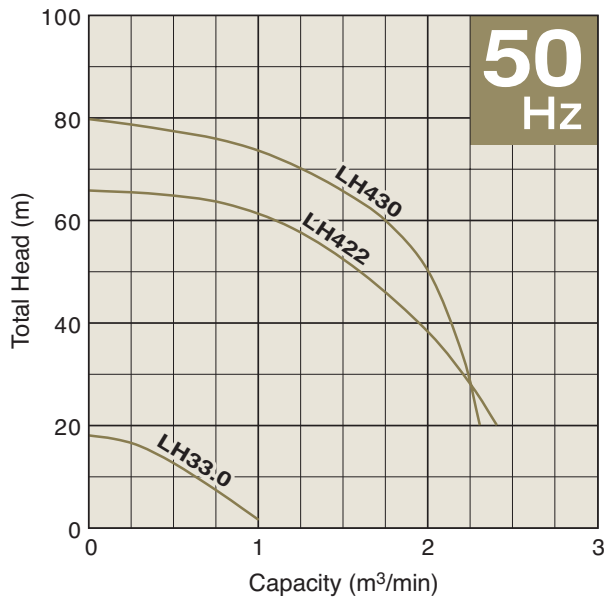
\* excluding LH33.0

**Selection Table**

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
LH33.0	80	3	3-phase	Direct on Line	2	42
LH422 (*)	100	22	3-phase	Direct on Line	2	350
LH430	100	30	3-phase	Star-Delta	2	355

\* : available for 1000V supply

**Performance Curves**



SPECIFICATIONS	Model	LH33.0	
		LH-series 3kW, 3-phase	
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 80mm (3"), BSPT Male Threaded Coupling</p> <p><b>Motor Output</b> 3kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 6.5A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 20m x 1 cable 4 x 2.0mm<sup>2</sup>, O.D. 14.4mm</p> <p><b>Dry Weight</b> (excluding cable) 42kg</p>	<p><b>Impeller</b> Semi-open impeller of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>6mm</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 380ml</p> <p><b>Motor Protection Device</b> 415V: Circle Thermal Protector (CTP) 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>		
<p><b>Optional Accessories</b></p> <p>Center Flanged Pipe &amp; BSPT Female Threaded Flange</p>	<p><b>Special Specifications (415V only)</b></p> <p>Tandem Operation Version &amp; Kit</p>		
<b>TSURUMI AUSTRALIA PTY LTD</b>			

SPECIFICATIONS	Model	LH422	LH-series
			22kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 100mm (4"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 22kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: B, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 40A 1000V – 15.2A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 4 x 14mm<sup>2</sup>, O.D. 25.6mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G10PCP Standard Length: 20m x 1 cable 3 x 10mm<sup>2</sup> + GC control + 3 x Ground, O.D. 31.6mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 350kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>6mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6900ml</p> <p><b>Motor Protection Device</b> 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V)</p> <p><b>Special Specifications</b> (415V only)</p> <p><b>All Stainless Steel Version (316 Stainless Steel)</b> <b>High Temperature Liquids Version (60°C)</b></p>			

SPECIFICATIONS	Model	LH-series
	LH430	30kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 100mm (4"), JIS 10kg/cm<sup>2</sup> Flange</p> <p><b>Motor Output</b> 30kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Star-Delta</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 55A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 22mm<sup>2</sup> + 1 x 14mm<sup>2</sup> + 2 x 2mm<sup>2</sup>, O.D. 38.8mm</p> <p><b>Dry Weight (excluding cable)</b> 355kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>6mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6900ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p>	
<p><b>Optional Accessories</b> BSPT Female Threaded Flange</p> <p><b>Special Specifications (415V only)</b> High Temperature Liquids Version (60°C)</p>	<p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>	

Series:

**LH**

Discharge Bore:

**150mm**

Motor Output / Pole:

**15 - 110kW / 2-pole**



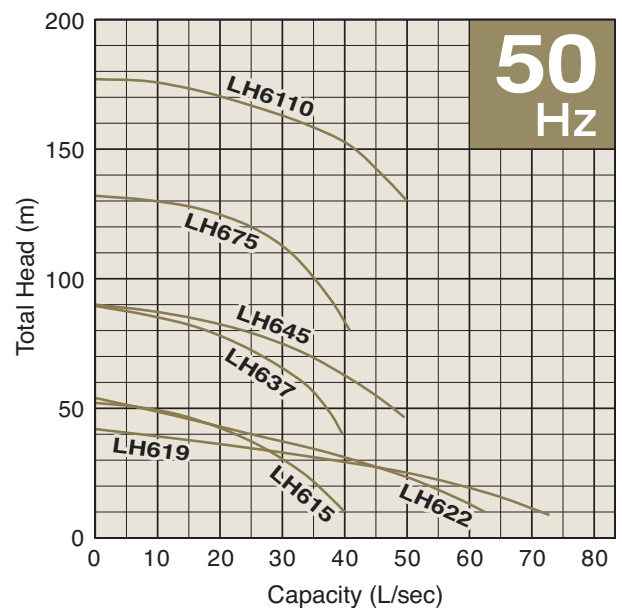
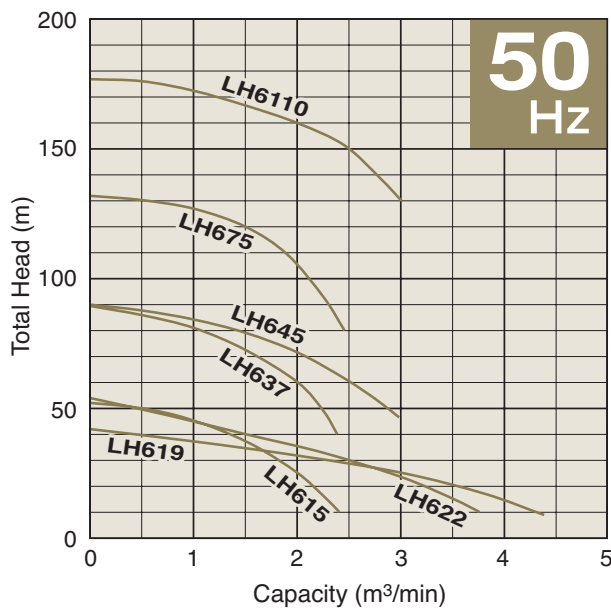
The LH-series is a submersible three-phase cast iron high head drainage pump. Being the pump cylindrical and slim, it can be installed in a well casing for deep well dewatering. The center flange construction assures a stable installation even if it is fixed by the discharge pipe. The top discharge, flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.

**Selection Table**

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
LH615	150	15	3-phase	Direct on Line	2	213
LH619	150	19	3-phase	Direct on Line	2	350
LH622 (*)	150	22	3-phase	Direct on Line	2	360
LH637 (*)	150	37	3-phase	415V: Star-Delta 1000V: Direct on Line	2	495
LH645 (*)	150	45	3-phase	415V: Star-Delta 1000V: Direct on Line	2	510
LH675	150	75	3-phase	Star-Delta	2	865
LH6110 (*)	150	110	3-phase	415V: Star-Delta 1000V: Direct on Line	2	1210

\* : available for 1000V supply

**Performance Curves**



SPECIFICATIONS	Model	LH615	
		LH-series 15kW, 3-phase	
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 10kg/cm<sup>2</sup> Flange</p> <p><b>Motor Output</b> 15kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: B Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 26.5A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 4 x 8mm<sup>2</sup>, O.D. 21.7mm</p> <p><b>Dry Weight</b> (excluding cable) 213kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>8.5mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal</b> (Mechanical Seal) 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 3740ml</p> <p><b>Motor Protection Device</b> 415V: Circle Thermal Protector (CTP) 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> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p>BSPT Female Threaded Flange</p> <p><b>Special Specifications</b> (415V only) High Temperature Liquids Version (60°C)</p>			

SPECIFICATIONS	Model	LH619	LH-series
			19kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 10kg/cm<sup>2</sup> Flange</p> <p><b>Motor Output</b> 19kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: B Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 35A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 4 x 14mm<sup>2</sup>, O.D. 25.6mm</p> <p><b>Dry Weight</b> (excluding cable) 350kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>12mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal</b> (Mechanical Seal) 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6900ml</p> <p><b>Motor Protection Device</b> 415V: Circle Thermal Protector (CTP) 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> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p>BSPT Female Threaded Flange</p> <p><b>Special Specifications</b> (415V only) High Temperature Liquids Version (60°C)</p>			
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SPECIFICATIONS	Model	LH622	LH-series
			22kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 22kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: B, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 40A 1000V – 15.2A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 4 x 14mm<sup>2</sup>, O.D. 25.6mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G10PCP Standard Length: 20m x 1 cable 3 x 10mm<sup>2</sup> + GC control + 3 x Ground, O.D. 31.6mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 360kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>12mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6900ml</p> <p><b>Motor Protection Device</b> 415V: Circle Thermal Protector (CTP) 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> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V)</p> <p><b>Special Specifications (415V only)</b></p> <p><b>High Temperature Liquids Version (60°C)</b></p>			



SPECIFICATIONS	Model	LH637	LH-series
			37kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 37kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> 415V: Star-Delta, 1000V: Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 65A 1000V – 26.8A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 22mm<sup>2</sup> + 1 x 14mm<sup>2</sup> + 2 x 2mm<sup>2</sup>, O.D. 38.8mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G10PCP Standard Length: 20m x 1 cable 3 x 10mm<sup>2</sup> + GC control + 3 x Ground, O.D. 31.6mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 495kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: φ6mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 + Carbon Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal (Lip Seal)</b> Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 4800ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V)</p> <p><b>Special Specifications</b> (415V only)</p> <p><b>All Stainless Steel Version (316 Stainless Steel)</b> <b>High Temperature Liquids Version (60°C)</b></p>			

SPECIFICATIONS	Model	LH645	LH-series
			45kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 45kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> 415V: Star-Delta, 1000V: Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 79A 1000V – 33.5A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 22mm<sup>2</sup> + 1 x 14mm<sup>2</sup> + 2 x 2mm<sup>2</sup>, O.D. 38.8mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G10PCP Standard Length: 20m x 1 cable 3 x 10mm<sup>2</sup> + GC control + 3 x Ground, O.D. 31.6mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 510kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: φ6mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 + Carbon Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal (Lip Seal)</b> Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 4800ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V) <b>Seawater-Resistant Kit</b></p> <ul style="list-style-type: none"> <li>Galvanic Anodes (with Fittings, Seal Putty)</li> <li>Seawater-Resistant Special Cast Iron Impeller</li> <li>304 Stainless Steel Eye Bolts</li> </ul> <p><b>Special Specifications</b> (415V only)</p> <p><b>High Temperature Liquids Version</b> (60°C)</p>			

SPECIFICATIONS	Model	LH-series
	LH675	75kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 20kg/cm<sup>2</sup> Flange</p> <p><b>Motor Output</b> 75kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Star-Delta</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 130A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 30mm<sup>2</sup> + 1 x 22mm<sup>2</sup> + 3 x 2mm<sup>2</sup>, O.D. 41.1mm</p> <p><b>Dry Weight</b> (excluding cable) 865kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>8mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Upper: Cylindrical roller bearing Lower: Duplex angular contact ball bearing mounted back-to-back</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal (Lip Seal)</b> Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6100ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p>	
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b></p> <p><b>Special Specifications (415V only)</b></p> <p><b>High Temperature Liquids Version (60°C)</b></p>	<p><b>Leakage Sensor (415V only)</b> Made of 304 stainless steel. It can be wired to a control panel to alert operators of water incursion into the oil chamber.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>	

SPECIFICATIONS	Model	LH6110	
		LH-series 110kW, 3-phase	
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 150mm (6"), JIS 20kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 110kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> 415V: Star-Delta, 1000V: Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 204A 1000V – 82.5A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 20m x 2 cables Cable 1: 3 x 38mm<sup>2</sup> + 1 x 22mm<sup>2</sup> + 3 x 2mm<sup>2</sup>, O.D. 35.8mm Cable 2: 3 x 38mm<sup>2</sup>, O.D. 35.9mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G35PCP Standard Length: 20m x 1 cable 3 x 35mm<sup>2</sup> + GC control + 3 x Ground, O.D. 41.7mm (acceptable Macey® 4-pin Plug)</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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>Dry Weight</b> (excluding cable) 1210kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: φ10mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Bearing</b> Upper: Cylindrical roller bearing Lower: Duplex angular contact ball bearing mounted back-to-back</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 403 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 8000ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V)</p> <p><b>Special Specifications</b> (415V only)</p> <p><b>All Stainless Steel Version (316 Stainless Steel)</b></p>	<p><b>Leakage Sensor</b> (415V only) Made of 304 stainless steel. It can be wired to a control panel to alert operators of water incursion into the oil chamber.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<b>TSURUMI AUSTRALIA PTY LTD</b>			

Series:

**LH**

Discharge Bore:

**200mm**

Motor Output / Pole:

**37 - 110kW / 2-pole**



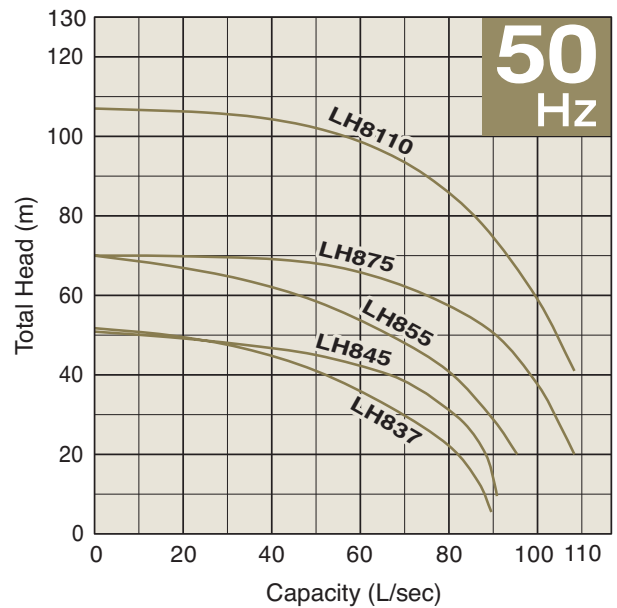
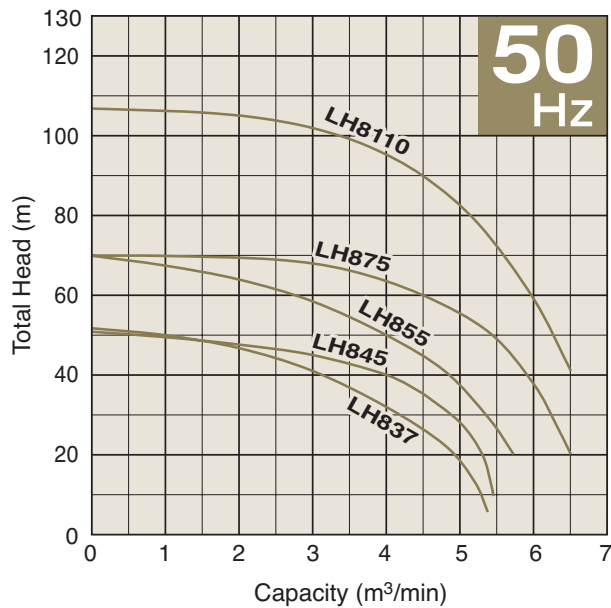
The LH-series is a submersible three-phase cast iron high head drainage pump. Being the pump cylindrical and slim, it can be installed in a well casing for deep well dewatering. The center flange construction assures a stable installation even if it is fixed by the discharge pipe. The top discharge, flow-thru design provides maximum motor cooling efficiency allowing continuous operation at low water levels and extended dry-run capability. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.

**Selection Table**

Model	Discharge Bore mm	Motor Output kW	Phase	Starting Method	Pole	Dry Weight kg
LH837 (*)	200	37	3-phase	415V: Star-Delta 1000V: Direct on Line	2	495
LH845 (*)	200	45	3-phase	415V: Star-Delta 1000V: Direct on Line	2	510
LH855	200	55	3-phase	Star-Delta	2	820
LH875	200	75	3-phase	Star-Delta	2	865
LH8110 (*)	200	110	3-phase	415V: Star-Delta 1000V: Direct on Line	2	1210

\* : available for 1000V supply

**Performance Curves**



SPECIFICATIONS	Model	LH837	LH-series
			37kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 200mm (8"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 37kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> 415V: Star-Delta, 1000V: Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 65A 1000V – 26.8A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 22mm<sup>2</sup> + 1 x 14mm<sup>2</sup> + 2 x 2mm<sup>2</sup>, O.D. 38.8mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G10PCP Standard Length: 20m x 1 cable 3 x 10mm<sup>2</sup> + GC control + 3 x Ground, O.D. 31.6mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 495kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>20mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 + Carbon Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal (Lip Seal)</b> Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 4800ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V)</p>			
<p><b>Special Specifications</b> (415V only)</p> <p><b>All Stainless Steel Version (316 Stainless Steel)</b> <b>High Temperature Liquids Version (60°C)</b></p>			

SPECIFICATIONS	Model	LH845	LH-series
			45kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 200mm (8"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 45kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> 415V: Star-Delta, 1000V: Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 79A 1000V – 33.5A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 22mm<sup>2</sup> + 1 x 14mm<sup>2</sup> + 2 x 2mm<sup>2</sup>, O.D. 38.8mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G10PCP Standard Length: 20m x 1 cable 3 x 10mm<sup>2</sup> + GC control + 3 x Ground, O.D. 31.6mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 510kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>20mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 + Carbon Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal (Lip Seal)</b> Used as a "Dust Seal"; it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 4800ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V) <b>Seawater-Resistant Kit</b></p> <ul style="list-style-type: none"> <li>Galvanic Anodes (with Fittings, Seal Putty)</li> <li>Seawater-Resistant Special Cast Iron Impeller</li> <li>304 Stainless Steel Eye Bolts</li> </ul> <p><b>Special Specifications</b> (415V only)</p> <p><b>High Temperature Liquids Version (60°C)</b></p>			

SPECIFICATIONS	Model	LH855	LH-series
			55kW, 3-phase
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 200mm (8"), JIS 10kg/cm<sup>2</sup> Flange</p> <p><b>Motor Output</b> 55kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Star-Delta</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 97A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 30mm<sup>2</sup> + 1 x 22mm<sup>2</sup> + 3 x 2mm<sup>2</sup>, O.D. 41.1mm</p> <p><b>Dry Weight</b> (excluding cable) 820kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: φ20mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Upper: Cylindrical roller bearing Lower: Duplex angular contact ball bearing mounted back-to-back</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal</b> (Mechanical Seal) 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 Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal</b> (Lip Seal) Used as a "Dust Seal"; it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6100ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p><b>Leakage Sensor</b> (415V only) Made of 304 stainless steel. It can be wired to a control panel to alert operators of water incursion into the oil chamber.</p> <p><b>Galvanic Anode</b> Made of aluminum alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b></p> <p><b>Special Specifications</b> (415V only)</p> <p><b>High Temperature Liquids Version</b> (60°C)</p>			



SPECIFICATIONS	Model	LH875	
		LH-series 75kW, 3-phase	
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 200mm (8"), JIS 10kg/cm<sup>2</sup> Flange</p> <p><b>Motor Output</b> 75kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Star-Delta</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 130A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 10m x 1 cable 6 x 30mm<sup>2</sup> + 1 x 22mm<sup>2</sup> + 3 x 2mm<sup>2</sup>, O.D. 41.1mm</p> <p><b>Dry Weight</b> (excluding cable) 865kg</p>	<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: <math>\phi</math>20mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Upper: Cylindrical roller bearing Lower: Duplex angular contact ball bearing mounted back-to-back</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal</b> (Mechanical Seal) 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 Lower Seal Face: SiC + SiC</p> <p><b>Oil Seal</b> (Lip Seal) Used as a "Dust Seal"; it protects the mechanical seal from abrasive particles.</p> <p><b>Labyrinth Ring</b> Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 6100ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p><b>Leakage Sensor</b> (415V only) Made of 304 stainless steel. It can be wired to a control panel to alert operators of water incursion into the oil chamber.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>		
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange Seawater-Resistant Kit</b></p> <ul style="list-style-type: none"> <li>Galvanic Anodes (with Fittings, Seal Putty)</li> <li>Seawater-Resistant Special Cast Iron Impeller</li> <li>304 Stainless Steel Eye Bolts</li> </ul> <p><b>Special Specifications</b> (415V only)</p> <p><b>High Temperature Liquids Version (60°C)</b></p>			

SPECIFICATIONS	Model	LH8110	
		LH-series 110kW, 3-phase	
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 200mm (8"), JIS 10kg/cm<sup>2</sup> Flange w/ BSPT Female Threaded Flange (Option for 415V)</p> <p><b>Motor Output</b> 110kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> 415V: Star-Delta, 1000V: Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: 415V: F, 1000V: F or H Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000min<sup>-1</sup> (50Hz)</p> <p>Power Supply Voltages &amp; Rated Currents 50Hz 415V – 204A 1000V – 82.5A</p> <p><b>Power Cable</b> 415V: PCP sheathed 600V cable (H07RN-F equiv.) Standard Length: 20m x 2 cables Cable 1: 3 x 38mm<sup>2</sup> + 1 x 22mm<sup>2</sup> + 3 x 2mm<sup>2</sup>, O.D. 35.8mm Cable 2: 3 x 38mm<sup>2</sup>, O.D. 35.9mm</p> <p>1000V: PCP sheathed, Type 241.1, 1.1kV Mining cable PLATINUM®, Type 241.1G35PCP Standard Length: 20m x 1 cable 3 x 35mm<sup>2</sup> + GC control + 3 x Ground, O.D. 41.7mm (acceptable Macey® 4-pin Plug)</p> <p><b>Dry Weight</b> (excluding cable) 1210kg</p>		<p><b>Impeller</b> Closed impeller made of high-chromium cast iron</p> <p>Solids Passage: φ20mm</p> <p><b>Mouth Ring</b> Made of high-chromium cast iron, excellent in abrasion-resistance</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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> Upper: Cylindrical roller bearing Lower: Duplex angular contact ball bearing mounted back-to-back</p> <p><b>Shaft</b> 420 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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 Lower Seal Face: SiC + SiC</p> <p><b>Labyrinth Ring</b> Made of 403 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.</p> <p><b>Pressure Relief Ports</b> Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.</p> <p><b>OIL LIFTER</b> 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 Turbine Oil (ISO VG32), 8000ml</p> <p><b>Motor Protection Device</b> 415V: Miniature Thermal Protector (MTP) A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p> <p>1000V: MTP &amp; Ground-Check Diode The MTPs are connected with a diode (3A-1000V) in series into the Ground-Check circuit in the motor. If excessive heat builds up and the bimetal strip opens, or Ground-fault happens, the power supply can be shut off by using an external control panel.</p> <p><b>Leakage Sensor (415V only)</b> Made of 304 stainless steel. It can be wired to a control panel to alert operators of water incursion into the oil chamber.</p> <p><b>Galvanic Anode</b> Made of aluminium alloy. It protects the pump from electric corrosion.</p>	
<p><b>Optional Accessories</b></p> <p><b>BSPT Female Threaded Flange</b> (Standard for 1000V)</p> <p><b>Special Specifications (415V only)</b></p> <p><b>All Stainless Steel Version (316 Stainless Steel)</b></p>			

**DIMENSIONS**

Model

**LH33.0 to LH8110**

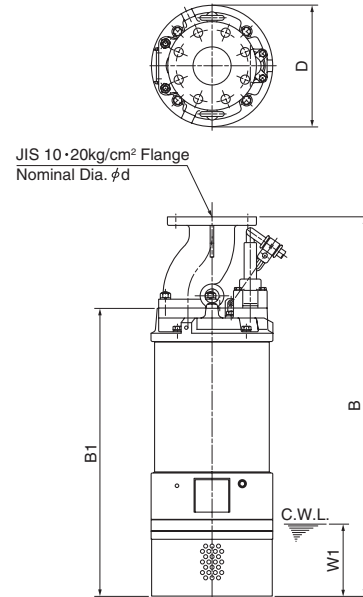
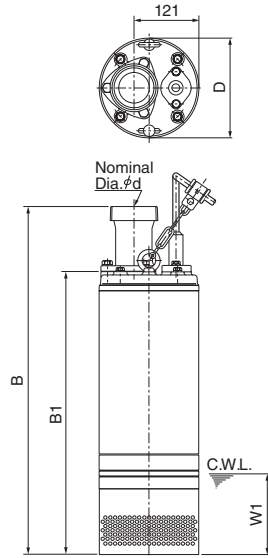
**LH-series**

**80 - 200mm**

LH33.0

100-200mm model

C. W. L. : Continuous Running Water Level



Unit: mm

Model	d	B	B1	D	W1
LH33.0	80	645	524	185	150
LH422 (*)	100	1352	1051	420	250
LH430	100	1352	1051	420	250
LH615	150	1014	777	330	185
LH619	150	1423	1072	420	270
LH622 (*)	150	1423	1072	420	270
LH637 (*)	150	1448	1027	530	180
LH645 (*)	150	1448	1027	530	180
LH675	150	1676	1300	563	200
LH6110 (*)	150	1887	1485	616	200
LH837 (*)	200	1488	1027	530	180
LH845 (*)	200	1488	1027	530	180
LH855	200	1716	1300	563	200
LH875	200	1716	1300	563	200
LH8110 (*)	200	1887	1485	616	200

\* : available for 1000V supply