**SPECIFICATIONS** 

Model

# LH637

**LH-series** 

37kW, 3-phase

## Type of Pump

Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.

### Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

### **Discharge Bore & Connection**

150mm, JIS 10kg/cm<sup>2</sup> Screwed Flange

## **Motor Output**

37kW

### **Power Supply**

Three-phase

### **Starting Method**

Star-Delta

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000/3600min-1 (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 70A 220V - 120A 400V - 67A 380V - 69A 415V - 65A 440V - 60A

## **Power Cable**

Sheath: Chloroprene rubber Standard Length: 10m 380 to 600V supply:

6 x 22mm<sup>2</sup>

1 x | 1 x 14mm<sup>2</sup> | O.D. 38.8mm

\2 x 2mm²/

200 to 240V supply:

6 x 30mm<sup>2</sup>

1 x | 1 x 22mm<sup>2</sup> | O.D. 41.1mm

2 x 2mm<sup>2</sup>

## Dry Weight (excluding cable)

495kg

#### Impeller

Closed Impeller made of high-chromium cast iron

Solids Passage 50Hz – ∮6mm

60Hz - ∮6mm

## **Mouth Ring**

Made of high-chromium cast iron, excellent in abrasion-resistance

### **Cable Entry with Anti-Wicking Block**

Watertight cable entry with strain-relief device. The antiwicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

#### **Bearing**

Permanently lubricated, deep-groove, double-shielded C3 ball bearings

#### Shaft

420 stainless steel

#### Shaft Seal (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.

Upper Seal Face: SiC + Carbon Lower Seal Face: SiC + SiC

#### **Pressure Relief Port**

Protects the mechanical seal from over rated limits, and also protects the seal faces from abrasive particles by drawing particles away.

#### **OIL LIFTER** (Patented)

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.

Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 4800ml

## **Motor Protection Device**

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.

#### **Galvanic Anode**

Protects the pump from electric corrosion, made of aluminium alloy

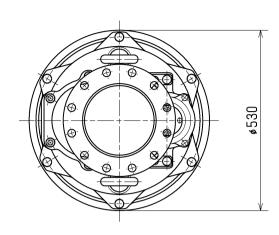
NO. A-22214-1 PUMP PERFORMANCE CURVES Submersible MODEL FREQUENCY LH637 -60 60 High-Head Dewatering Pump Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS 150 DISCHARGE BORE 80 / 60 TOTAL HEAD m 1 / 2 m³∕min m³/min CAPACITY 37 MOTOR OUTPUT k₩ k₩ 3 ø× PHASE × VOLTAGE φX CURRENT Α  $2 \text{ P/ } \text{S. S. } 3600 \text{ min}^{-1}$ POLES / REVOLUTION P/ STARTING METHOD STAR DELTA F INSULATION CLASS REMARKS: +120 100+ +100 90+ TOTAL HEAD 80+ + 8070+ 60+ + 60PUMP EFF 50+40+ + 4030 + 40+ OUTPUT 20 + 30 + 2010+20+ k W 2.0 3.0 1.0 1.5 2.5 0.5 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.

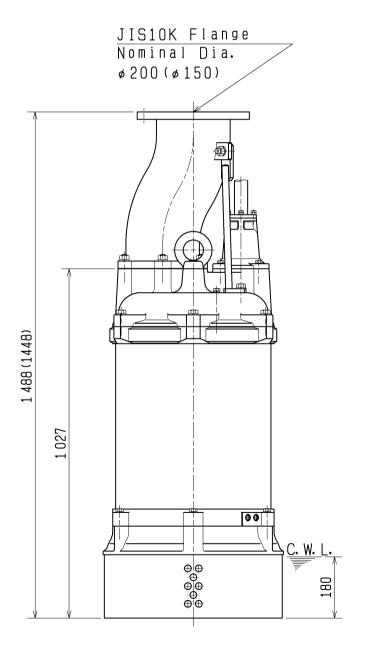


DIMENSION DRAWING	No. No. A-22229-1
TYPE Submersible	MODEL LH637 -50/60, LH645 -50/60
High-Head Dewatering Pump	LH837 -50/60,LH845 -50/60

MODEL	Approximate Weight(*)			
LH637-50/60	495kg			
LH645-50/60	510kg			
LH837-50/60	495kg			
LH845-50/60	510kg			

\*excluding cable



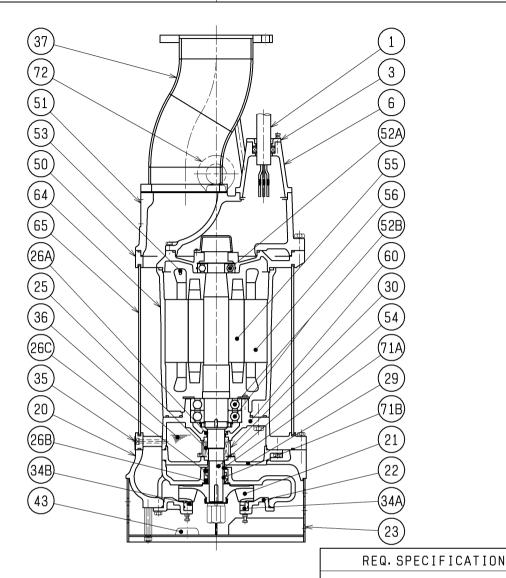


The Figure in ( ) shows the dimensions of LH637 and LH645.

C. W. L. : Continuous running Water Level



SECTIONAL DRAWING	No. No. A-22231-2
TYPE Submersible	MODEL LH637 -50/60, LH645 -50/60
High-Head Dewatering Pump	LH837 -50/60,LH845 -50/60



\* the wetted part

* the welled Pail							
No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath	43	Cathodic Protection Plate	3	Aluminium Alloy
3	Gland	1	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
6	Stuffing Box	1	Gray Iron Casting	51	Head Cover	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6310ZZC3
21	Impeller	1	Chromium Iron Casting	52B	Lower Bearing	1	6314ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	3	
23	Strainer Stand	1	Structure Steel	54	Shaft	1	Stainless Steel 420J2(*)
25	Mechanical Seal	1	HT-4550N	55	Rotor	1	
26A	Oil Seal	1	SC50689	56	Stator	1	
26B	Oil Seal	1	TCN487012	60	Bearing Housing	1	Gray Iron Casting
26C	Labyrinth Ring	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
29	Oil Casing	1	Gray Iron Casting	65	Outer Cover	1	Structure Steel
30	Oil Lifter	1	Plastic	71A	Upper Shaft Sleeve	1	Stainless Steel 403
34A	Suction Mouth	1	Gray Iron Casting	71B	Lower Shaft Sleeve	1	Stainless Steel 403
34B	Mouth Ring	1	Chromium Iron Casting	72	Eyebolt	2	Structure Steel
35	Oil Plug	2	Stainless Steel 304				
36	Lubricant		Turbine Oil(ISO VG32)				
37	Discharge Pipe	1	Structure Steel & Carbon Steel Pipe				