

SPECIFICATIONS

Model

400B637

B-series

37kW, 3-phase

Type of Pump

Submersible cast iron pump suitable for pumping sewage, wastewater, storm water, etc.

Type of Fluid

Sewage, wastewater, and water carrying solid matters

Temperature: 0 to 40°C

(High temperature model available on special request)

Discharge Bore

400mm

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)

6-pole, 1000/1200min⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 81A 220V - 139A 400V - 79A 380V - 80A 415V - 80A 440V - 70A

Power Cable

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

 $1 \times 4 \times 14$ mm², O.D. 21.7mm

 $1 \times 3 \times 14$ mm², O.D. 19.7mm

 $1 \times 4 \times 1.25$ mm², O.D. 11.1mm

200 to 240V supply:

 $1 \times 4 \times 22$ mm², O.D. 28.8mm

 $1 \times 3 \times 22$ mm², O.D. 26.1mm

 $1 \times 4 \times 1.25$ mm², O.D. 11.1mm

Dry Weight (excluding cable)

Free Standing Type: 925kg Guide Rail Fitting Type: 855kg

Impeller

Shrouded two-channel impeller for solid-handling design, dynamically balanced

Solids Passage

50Hz - 190 x 130mm

60Hz - 200 × 100mm

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.

Bearings

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 Faces: SiC + SiC Lower Seal Faces: SiC + SiC

Oil Seal (Lip Seal)

Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

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), 9500ml

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.

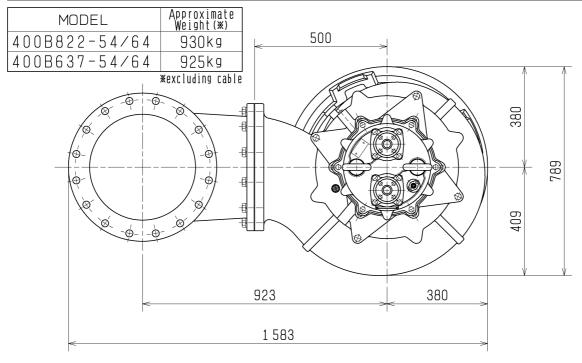
Leakage Sensor

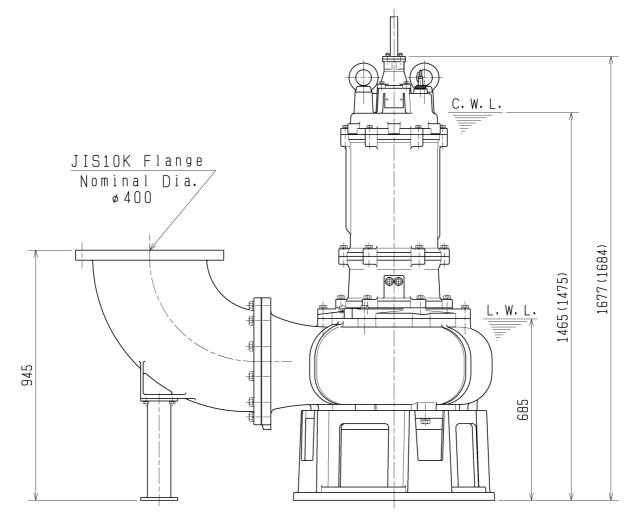
Made of 304 stainless steel. It can be wired to a control panel to alert operators of water incursion into the oil chamber.

NO. A-16505-1 PUMP PERFORMANCE CURVES Sewage Submersible Model 400B637 -53 TYPE FREQUENCY Channel Impeller Pump T0400B637 -53 50 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS 400 DISCHARGE BORE 7 TOTAL HEAD m m 20 m³/min m³/min CAPACITY 37 MOTOR OUTPUT k W k W 3 Ø× PHASE × VOLTAGE φX CURRENT Α min⁻¹ 6 P/ s. s. 1000 min⁻¹ POLES / REVOLUTION P/ STARTING METHOD STAR-DELTA F INSULATION CLASS REMARKS: - 24 100+ + 20 90+ 80+ + 16 70 +60+ + 12TOTAL HEAD 50 +40+ + 830 + 40+ OUTPUT 20 + 30 + 410+20+ % k W 10 20 m³/min PUMP OUT TOTAL EFF. PUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



DIMENSION DRAWING	No.	No. A-19296-2
TYPE Sewage Submersible Channel Impeller Pump		400B822 -54/64 400B637 -54/64





The Figure in () shows the dimensions of 400B637.

C. W. L. :Continuous running Water Level L. W. L. :Lowest running Water Level



SECTIONAL DRAWING No. A-19318-1 No. TYPE MODEL Sewage Submersible 400B637 -54/64 Channel Impeller Pump 3 1 6 72 (50) 53 (52A) 64 ⁽⁵⁵⁾ (60 (56) (37) (36` (52B) (71)(54) (35A) 90) 26 (25) (46) Ш 30 (35B) 29 31 (20) 21 34 22 23 REQ. SPECIFICATION | No. | DESCRIPTION | Q'TY | MATERIAL / NOTE | No. | DESCRIPTION | Q'TY | MATERIAL / NOTE

1110.	DESCRIFTION	LQ II	MAILNIAL / NOIL	1110.	DESCRILLION	U II	MAILNIAL / NOIL
1 Cabtyre Cable	Cahturo Cahlo	2	Chloroprene Sheath (For the Power)	36	Lubricant		Turbine Oil (ISO VG32)
	1	PVC Sheath (For the Control)	37	Discharge Bend	1	Gray Iron Casting	
3	Gland	2	Gray Iron Casting	46	Air Release Valve	1	Nylon
6	Stuffing Box	2	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6310ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6315ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	3	
23	Strainer Stand	1	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-60	55	Rotor	1	
26	Oil Seal	1	TC11014014	56	Stator	1	
29	Oil Casing	1	Gray Iron Casting	60	Bearing Housing	1	Gray Iron Casting
30	Oil Lifter	1	Steel Plate	64	Motor Frame	1	Gray Iron Casting
31	Wear Ring	1	Gray Iron Casting	71	Shaft Sleeve	1	Stainless Steel 304
34	Mouth Ring	1	Gray Iron Casting	72	Eye Bolt	2	Structure Steel
35A	Oil Plug	2	Stainless Steel 304	90	Leakage Sensor(Electrode)	1	Stainless Steel
35B	Oil Plug	1	Stainless Steel 304				

TSURUMI MFG. CO., LTD