

**SPECIFICATIONS** 

Model

100C42.2

**C-series** 

2.2kW, 3-phase

## Type of Pump

Submersible cast iron pump with a cutting device suitable for pumping sewage and wastewater

## Type of Fluid

Sewage, wastewater, and water carrying solid matters

Temperature: 0 to 40°C

(High temperature model available on special request)

## **Discharge Bore**

100mm

## **Motor Output**

2.2kW

#### Power Supply

Three-phase

## **Starting Method**

Direct on Line

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: E (available in F on special request)

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 380V - 5.1A 400V - 5.0A 415V - 5.0A 60Hz 220V - 8.8A 380V - 4.9A 440V - 4.4A

# **Power Cable**

Sheath: PVC

Standard Length: 6m 380 to 600V supply:

 $1 \times 4 \times 1.25$ mm<sup>2</sup>, O.D. 11.1mm

200 to 240V supply:

 $1 \times 4 \times 2.0$ mm<sup>2</sup>, O.D. 11.8mm

## Dry Weight (excluding cable)

Free Standing Type: 68kg Guide Rail Fitting Type: 64kg

#### Impeller

Semi-open single-channel impeller for solid-handling design, dynamically balanced. A sintered tungsten carbide alloy edge is blazed on the impeller vane.

Solids Passage 50Hz - 67 × 56mm 60Hz - 62 × 56mm

## **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: Ceramic + Carbon

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), 1350ml

## **Motor Protection Device**

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.

# Optional Accessories

# Bend Set (Free Standing Type)

- Discharge Bend
- JIS 10kg/cm<sup>2</sup> Screwed Flange

## TOS/TS Set (Guide Rail Fitting Type)

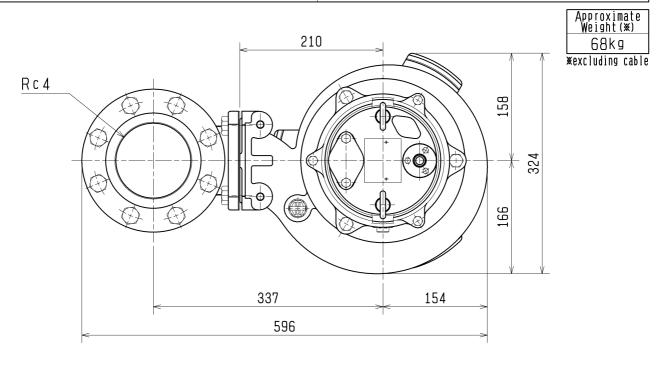
- Duckfoot Bend
- Guide Support
- Guide Hook
- · Lifting Chain 5m (with Shackles)
- JIS 10kg/cm<sup>2</sup> Screwed Flange (TOS Set only)

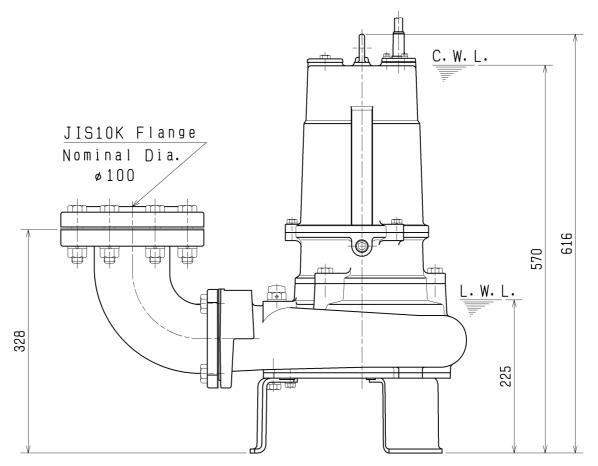
## **External Leakage Sensor**

NO. A-07850-2 PUMP PERFORMANCE CURVES TYPE MODEL FREQUENCY Submersible 100C42.2 -62 Cutter Sewage Pump 60 TOS100C42.2 -62 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 100 8 TOTAL HEAD m m 0.65 m³/min  $m^3/\min$ CAPACITY 2. 2 MOTOR OUTPUT k W k W 3 PHASE × VOLTAGE φ× ٧ ٧ φX CURRENT Α Α min<sup>-1</sup> 4 P/  $s. s. 1800 min^{-1}$ POLES / REVOLUTION P/ STARTING METHOD DIRECT ON LINE INSULATION CLASS Ε REMARKS: 24 100+ + 20 90-+ 16 +0870 ++ 12 60+50-40+ + 8 3+ 30 +OUT PUT 2+ 20+4 10+ 1+ k W % m 0.2 0.4 0.6 0.8 1.0 1. 2 m³/min PUMP OUT TOTAL CAPACITY TSURUMI MFG. CO., LTD.



DIMENSION	DRAWING	No.	No. A-11703-4
TYPE Submersible Cutter Sewa		MODEL	100C42.2 -52/62

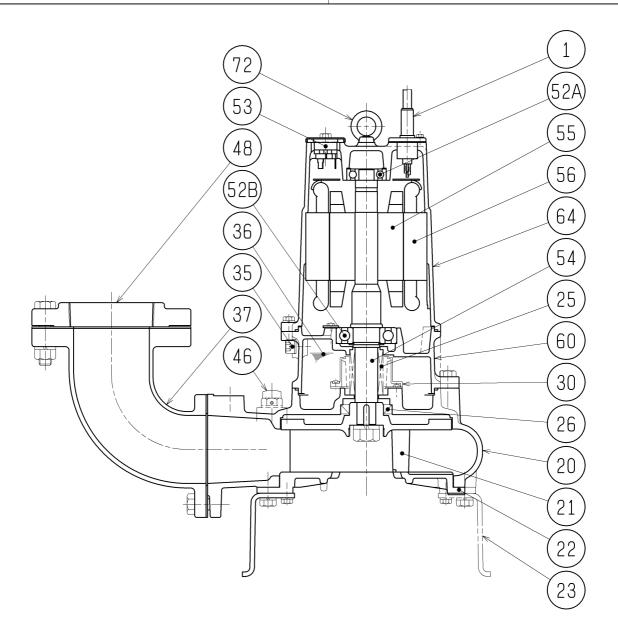




C. W. L. :Continuous runnning Water Level L. W. L. :Lowest runnning Water Level



	SECTIONAL	DRAWING	No.	No. A-11710-4
TYPE	Sewage Submersibl	e Cutter Pump	MODEL	100C42.2 -52/62



# REQ. SPECIFICATION

## \* the wetted part

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	48	Screwed Flange	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6304ZZC3
21	Impeller	1	Gray Iron Casting(WC Edge)	52B	Lower Bearing	1	6307ZZC3
22	Suction Cover	1	Ductile Iron Casting	53	Motor Protector	1	
23	Stand	3	Steel Plate	54	Shaft	1	Stainless Steel 420J2(*)
25	Mechanical Seal	1	H-30A	55	Rotor	1	
26	Oil Seal	1	TC456812	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	2	Stainless Steel 304
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				