

SPECIFICATIONS

Model

100C43.7

C-series

3.7kW, 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

3.7kW

Power Supply

Three-phase

Starting Method

Direct on Line (Star-Delta available on special request)

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⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 8.2A 220V - 14.2A 380V - 8.0A 400V - 7.9A440V - 7.1A 415V - 7.7A

Power Cable

Sheath: PVC

Standard Length: 6m 380 to 600V supply:

 $1 \times 4 \times 2.0$ mm², O.D. 11.8mm

200 to 240V supply:

 $1 \times 4 \times 3.5$ mm², O.D. 13.9mm

Dry Weight (excluding cable)

Free Standing Type: 84kg Guide Rail Fitting Type: 80kg

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 $50Hz - 70 \times 81mm$ 60Hz - 64 × 81mm

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/cm² Screwed Flange

TOS/TS Set (Guide Rail Fitting Type)

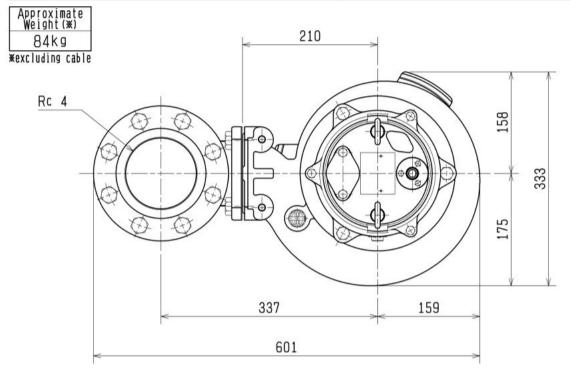
- · Duckfoot Bend
- · Guide Support
- Guide Hook
- · Lifting Chain 5m (with Shackles)
- JIS 10kg/cm² Screwed Flange (TOS Set only)

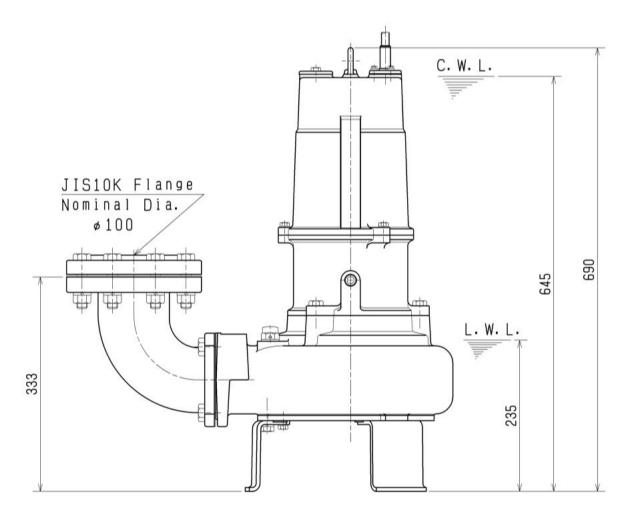
External Leakage Sensor

NO. A-07851-3 PUMP PERFORMANCE CURVES MODEL TYPE 100C43.7 -E1 FREQUENCY Submersible 50 Cutter Sewage Pump TOS100C43.7 - F1 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. REQUIRED SPECIFICATIONS STANDARD SPECIFICATIONS DISCHARGE BORE 100 TOTAL HEAD 11 m 0.7 m³/min m³/min CAPACITY 3. 7 MOTOR OUTPUT k W k W 3 ø× PHASE × VOLTAGE ٧ Ø X CURRENT A min⁻¹ 4 P/ S. S. 1500 min⁻¹ POLES / REVOLUTION P/ DIRECT ON LINE STARTING METHOD E INSULATION CLASS REMARKS: 24 100+ 20 90 80 -- 16 70-12 60 +50-40 -- 8 30+ 6+ 20+ 4+4 OUT PUT 10+ 2+ % k W 1.6 m 0.8 1. 2 2.0 2.4 0.4 m³/min PUMP OUT TOTAL EFF. PUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



	DIMENSION	DRAWING	No.	N	0. A-11704-4
TYPE	Submersible Cutter Sewa	ige Pump	MODEL	100C43.7	- E1

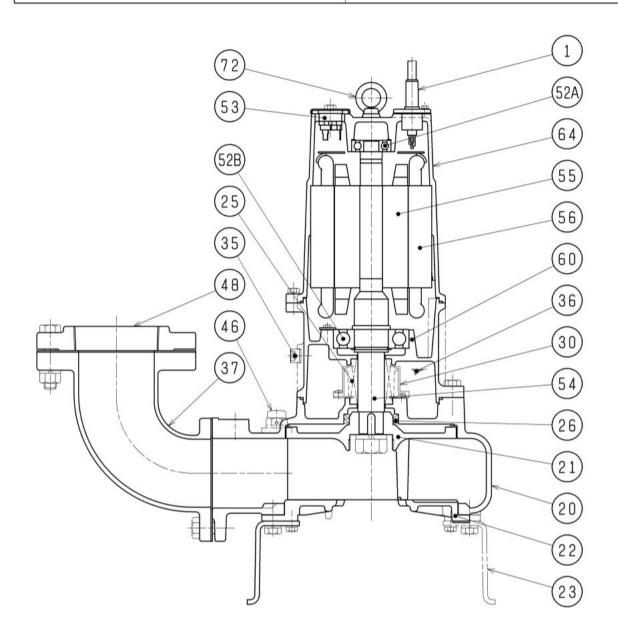




C. W. L. : Continuous runnning Water Level L. W. L. : Lowest runnning Water Level



SEC	CTIONAL	DRAWING	No.	N	o. A-11711-4
TYPE Sew	age Submersibl	e Cutter Pump	MODEL	100C43.7	- E1



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	6309ZZC3
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-35A	55	Rotor	1	
26	Oil Seal	2	VC58726	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				