

SPECIFICATIONS

Model

50SF23.7

SF-series

3.7kW, 3-phase

Type of Pump

Submersible cast iron high-head pump suitable for pumping wastewater and storm water

Type of Fluid

Wastewater and water carrying small solid matters

Temperature: 0 to 40°C

(High temperature model available on special request)

Discharge Bore

50mm

Motor Output

3.7kW

Power Supply

Three-phase

Starting Method

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

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)

2-pole, 3000/3600min⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 8.0A 400V - 7.7A 415V - 7.5A 220V - 13.8A 380V - 7.9A 440V - 6.9A

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: 59kg Guide Rail Fitting Type: 55kg

Impeller

Semi-open multi-vane impeller made of cast iron, dynamically balanced

Solids Passage

50Hz - ∮7.5mm

60Hz - ∮7.5mm

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 Set (Guide Rail Fitting Type)

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

External Leakage Sensor

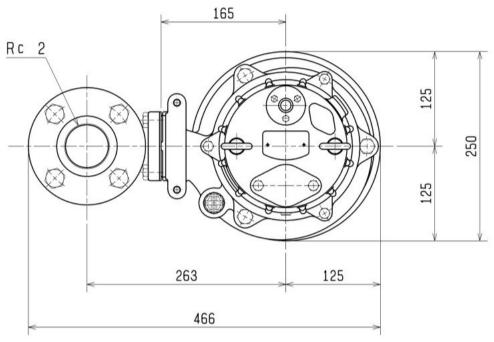
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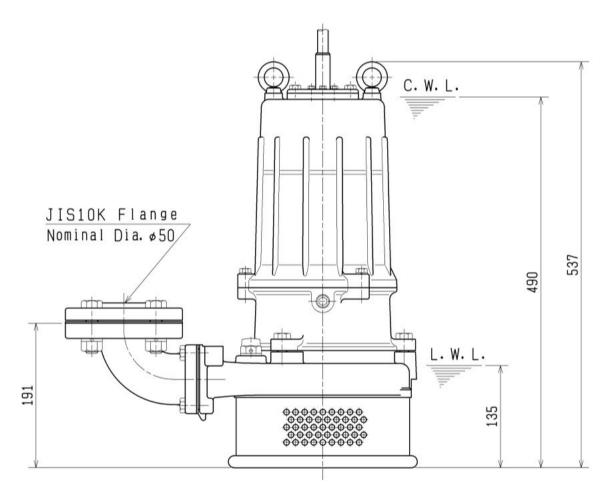
A-12145-1 NO. PUMP PERFORMANCE CURVES TYPE Waste Water Submersible MODEL 50SF (A/W) 23.7 -53 FREQUENCY Centrifugal Pump 50 TOS50SF (A/W) 23.7 -53 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. REQUIRED SPECIFICATIONS STANDARD SPECIFICATIONS DISCHARGE BORE 50 31 TOTAL HEAD m m³/min 0.3 m³/min CAPACITY 3.7 MOTOR OUTPUT k W k W 3 PHASE × VOLTAGE øΧ ٧ Ø X CURRENT A 2 P/ S. S. 3000 min-1 POLES / REVOLUTION P/ DIRECT ON LINE STARTING METHOD F INSULATION CLASS REMARKS: 60 100+ + 50 90 40 80 + 70 +TOTAL HEAD + 30 60 +PUMP EFF. 50-40+ + 20 30 + 6 + 20 + 4 + 10DUTPUT 10 + 2 -% k W m 0.2 0.3 0.4 0.5 0.6 0.1 m³/min PUMP OUT TOTAL EFF. PUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



	DIMENSION DRAWING	ì	No.	No. A-	12147-2
TYPE	Hanto Hato. Gabino.orb.to	MODEL		50SF23, 7 -53/	′6.3
	Centrifugal Pump			3001 20: 7 307	00

Approximate
Weight(*)
59kg
*excluding cable



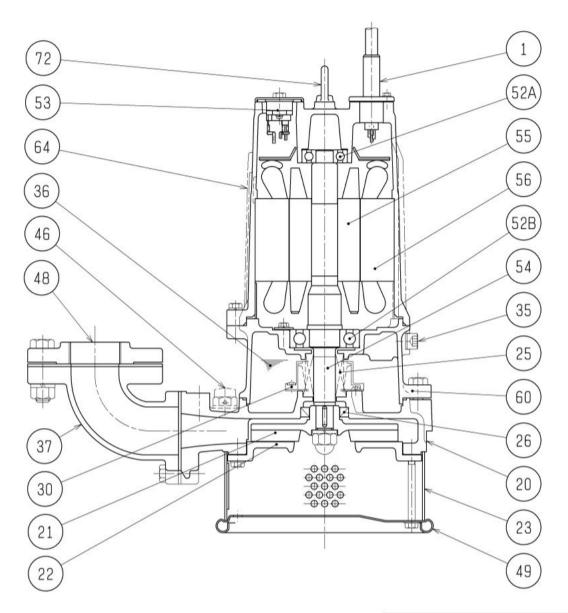


C. W. L. : Continuous Running Water Level L. W. L. : Lowest Running Water Level



SECTIONAL DRAWING No. No. A-12150-3

TYPE Waste Water Submersible Centrifugal Pump MODEL 50SF23.7 -53/63



REQ. SPECIFICATION

* the wetted part

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	49	Bottom Plate	1	Steel Sheet
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6304ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6307ZZC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer	1	Steel Sheet	54	Shaft	1	Stainless Steel 420J2(*)
25	Mechanical Seal	1	H-25A	55	Rotor	1	
26	Oil Seal	1	TC355511	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				
48	Screwed Flange	1	Gray Iron Casting				