

**SPECIFICATIONS** 

Model

# 50PU2.4S

**PU-series** 

0.4kW, 1-phase

## Type of Pump

Submersible vortex pump made of 304 stainless steel and resin suitable for pumping sewage, wastewater, storm water, etc.

### Type of Fluid

Sewage, wastewater, and water carrying solid matters

Temperature: 0 to 40°C

### **Discharge Bore**

50mm

### **Motor Output**

0.4kW

## **Power Supply**

Single-phase

### **Starting Method**

Capacitor Run

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: E

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

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

Power Supply Voltages & Rated Currents

50Hz 60Hz

220V – 3.2A 110V – 5.7A 230V – 3.1A 220V – 2.9A

240V - 3.0A

## **Power Cable**

Sheath: PVC Standard Length: 5m

Standard Length: 5m 100 to 240V supply:

 $1 \times 3 \times 1.25$ mm<sup>2</sup>, O.D. 10.1mm

### Dry Weight (excluding cable)

Standard Model: 7.1kg

Auto & Auto-Alternation Model: 7.8kg

### Impeller

Vortex impeller made of glass-fiber reinforced PPO

Solids Passage 50Hz –  $\phi$ 35mm 60Hz –  $\phi$ 35mm

## **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

304 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 + Ceramic

### **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 Liquid Paraffin (ISO VG32), 240ml

### **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.

### Optional Accessories

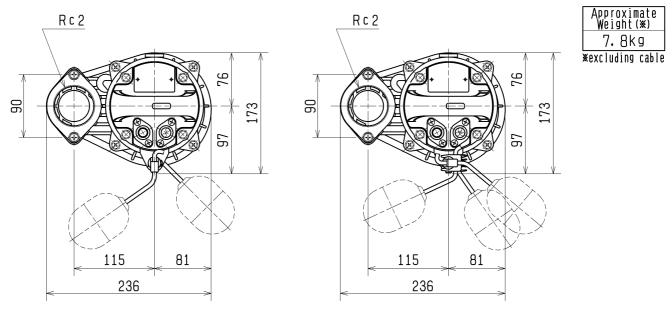
**TOK Set** (Guide Rail Fitting Type)

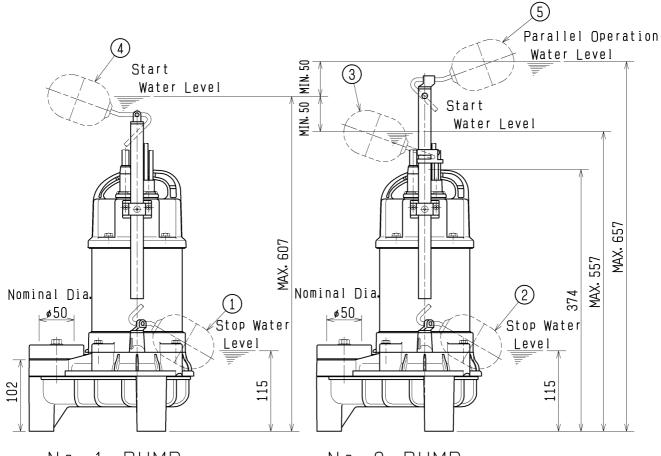
- Duckfoot Bend
- Guide Support
- Guide Hook
- Lifting Chain 4m (with Shackles)

NO. A-09947-2 PUMP PERFORMANCE CURVES TYPE Sewage MODEL 50PU2.4S -52,50PUA2.4S -52 FREQUENCY Submersible Vortex Pump 50PUW2.4S -52 50 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 50 TOTAL HEAD m M 6.5  $m^3/\min$ CAPACITY m³∕min 0.15 MOTOR OUTPUT kW0.4 PHASE × VOLTAGE φ× ٧ φX 1 CURRENT Α Α  $\min^{-1}$ POLES / REVOLUTION 2 P/s.s.3000 STARTING METHOD CAPACITOR MOTOR INSULATION CLASS Ε REMARKS: 12 + 10 100+90+ +08- 8 TOTAL MEAD 70 +6 60 +PUMP EFF 50 +40 $\pm$ 30+0.6+ OUTPUT 20+0.4+ 10+0.2+ % k W 0.1 0.2 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



TYPE Sewage Submersible Vortex Pump (Auto-Alternation) MODEL 50PUW2. 4S -52/62





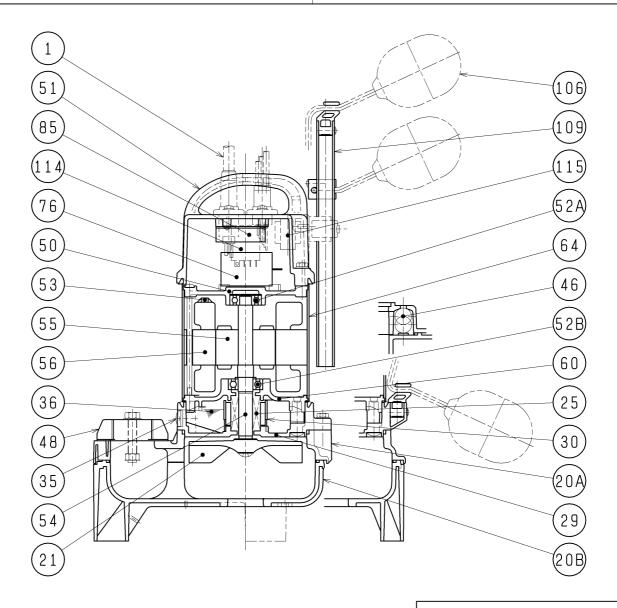
PUMP

No. 2 PUMP

No.	Item	Color	No.	Item	Color
1	No.1 Pump Stop Float	Red	4	No.1 Pump Start Float	Yellow
2	No.2 Pump Stop Float	Red		No. 1 Pump No. 2 Pump	Croon
3	No. 2 Pump Alternate Start Float	Yellow	5	Parallel Operation Float	Green



SECTIONAL DRAWING	No.	No. A-10021-3
TYPE Sewage	MODEL	40PUW2.25S -52/62
Submersible Vortex Pump(Auto-Alternation)		50PUW2.4S -52/62



REQ. SPECIFICATION

\* Upper and lower blocks form a one-piece casing.

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	53	Motor Protector	1	
20A	Upper Pump Casing	<b>*</b>	Plastic W/GF	54	Shaft	1	Stainless Steel 304
20B	Lower Pump Casing	1	Plastic	55	Rotor	1	
21	Impeller	1	Plastic W/GF	56	Stator	1	
25	Mechanical Seal	1	W-14HC	60	Bearing Housing	1	Aluminium Die Casting
29	Oil Casing	1	Plastic W/GF	64	Motor Frame	1	Stainless Steel 304
30	Oil Lifter	1	Plastic	76	Capacitor	1	
35	Oil Plug	1	Stainless Steel 304	85	Relay Unit	1	
36	Lubricant		Liquid Paraffin (ISO VG32)	106	Float Set	3	Plastic
46	Air Release Valve	1	Glass Ball	109	Float Support Pipe	1	Plastic
48	Screwed Flange	1	Plastic W/GF	114	Power Relay	1	
50	Motor Bracket	1	Aluminium Die Casting	115	Transfolmer	1	
51	Head Cover	1	Plastic W/GF				
52A	Upper Bearing	1	6201ZZC3				
52B	Lower Bearing	1	6202ZZC3				