

**SPECIFICATIONS** 

Model

# 80PU21.5

**PU-series** 

1.5kW, 3-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**

80mm

### **Motor Output**

1.5kW

### **Power Supply**

Three-phase

### **Starting Method**

Direct on Line

#### 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 380V - 4.1A 220V - 6.6A 400V - 4.0A 380V - 3.9A 415V - 4.0A 440V - 3.6A

## **Power Cable**

Sheath: PVC

Standard Length: 6m 200 to 600V supply:

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

### Dry Weight (excluding cable)

Standard Model: 16kg

Auto & Auto-Alternation Model: 16.9kg

#### Impeller

Vortex impeller made of glass-fiber reinforced PPO

Solids Passage 50Hz –  $\phi$ 46mm 60Hz –  $\phi$ 46mm

### **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 + SiC

#### 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), 500ml

#### **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

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

- Duckfoot Bend
- Guide Support
- Guide Hook
- Lifting Chain 5m (with Shackles)

				NO.	A-1833	38-1
PUMP	PERFO	RMAN	CE C	CURVES	ı	
TYPE Sewage Submersible Vo	rtex Pump	MODEL 80	PU(A/W	) 21. 5 -52	FREQUENC 5	Y 0 0 H z
CUSTOMER'S NAME						
EQUIPMENT TITLE						
				<u>NO</u>	J	
	STANDARD	SPECIFICA	TIONS	REQUIRED S	SPECIFICAT	IONS
DISCHARGE BORE		80	mm			mm
TOTAL HEAD		9.5	m			Ш
CAPACITY		0.4	m³/min			m³/min
MOTOR OUTPUT	3	1.5	k W			k W V
PHASE × VOLTAGE CURRENT	3	φ×	V A		φ×	V A
POLES / REVOLUTION	2 P/	s. s. 3(		P /		min <sup>-1</sup>
STARTING METHOD		T ON LI				
INSULATION CLASS		E E				
E				REMARKS:		
+ + 24						
100+ + 20						
90+ +						
80+ + 16						
70						
60 + 12						
	TAO .					
50++	Ç. ( )					
40 + 8						
30 - 1. 5	NIT	+				
20 +1. 0+ 4 OUTF	701					
		\				
10-0.5-			H			
		<u> </u>	<u> </u>			
% kW m 0.2	2 0.4	0.6	0.8	1.0	1.2	m³/min
PUMP MOTOR TOTAL CAPACIT	Y					
l TSUR	UMI MFG.	CO	I TD.			



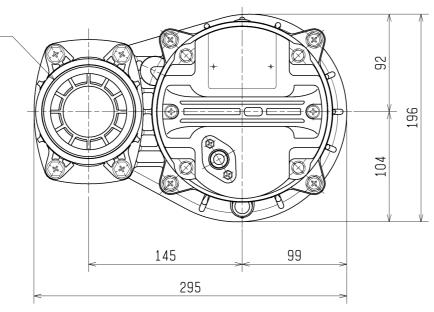
	DIMENSION	DRAWING	No.	No. A-18340-1
TYPE	Sewage	Sewage		80PU21.5 -52/62
	Submersible V	ortex Pump		000021.5 -52/02

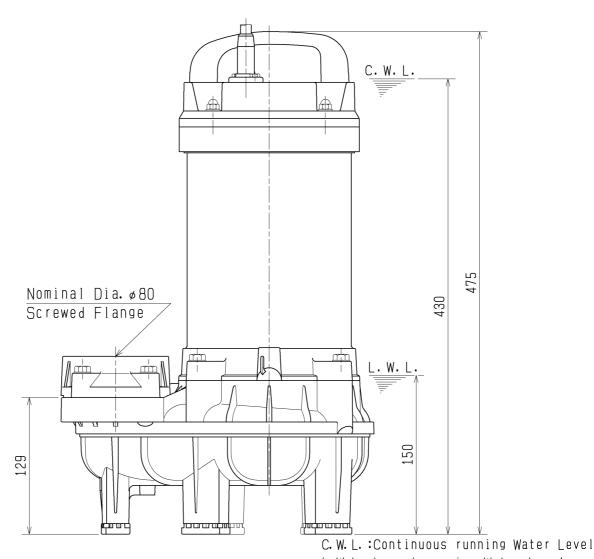
Approximate
Weight (%)

16. Okg

\*excluding cable

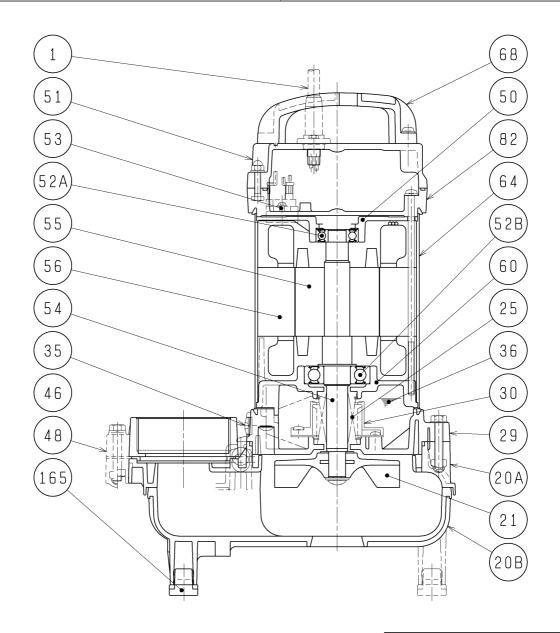
Rc3







_				
	SECTIONAL DRAW	ING	No.	No. A-18343-1
TYPE	Sewage Submersible Vortex P	MODEL		80PU21.5 -52/62
	Januarainie Anirev I	u III P		



\*1 Upper and lower blocks form a one-piece casing.

\*2 the wetted part

<u>~</u>	the wetter part						
No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	52A	Upper Bearing	1	6203ZZC3
20A	Upper Pump Casing	<b>*</b> 1	Plastic W/GF	52B	Lower Bearing	1	6305ZZC3
20B	Lower Pump Casing	] 1	Plastic W/GF	53	Motor Protector	1	
21	Impeller	1	Plastic W/GF	54	Shaft	1	Stainless Steel 304(*2)
25	Mechanical Seal	1	H-20A	55	Rotor	1	
29	Oil Casing	1	Plastic W/GF	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Aluminium Alloy Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Stainless Steel 304
36	Lubricant		Liquid Paraffin (ISO VG32)	68	Handle	1	Plastic
46	Air Release Valve	1	Glass Ball	82	Head Cover Spacer	1	Plastic W/GF
48	Screwed Flange	1	Plastic W/GF	165	Rubber Foot	5	Nitrile Butadien Rubber
50	Motor Bracket	1	Aluminium Alloy Casting				
51	Head Cover	1	Plastic W/GF				

REQ. SPECIFICATION