

SPECIFICATIONS

Model

80PU22.2

PU-series

2.2kW, 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

2.2kW

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 - 5.1A 220V - 8.5A 400V - 5.1A 380V - 4.9A 415V - 5.1A 440V - 4.3A

Power Cable

Sheath: PVC

Standard Length: 6m 380 to 600V supply:

 $1 \times 4 \times 1.25$ mm², O.D. 11.1mm

200 to 240V supply:

 $1\times4\times2.0mm^2,\,O.D.\,11.8mm$

Dry Weight (excluding cable)

Standard Model: 22kg

Auto & Auto-Alternation Model: 23kg

Impeller

Vortex impeller made of glass-fiber reinforced PA+ABS

Solids Passage 50Hz – ϕ 46mm 60Hz – ϕ 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), 680ml

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)

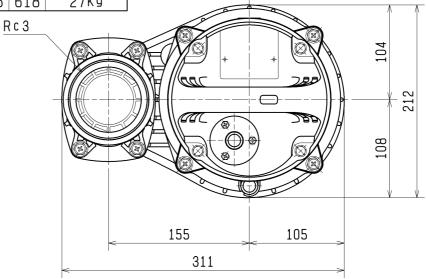
- Duckfoot Bend
- Guide Support
- Guide Hook
- · Lifting Chain 5m (with Shackles)

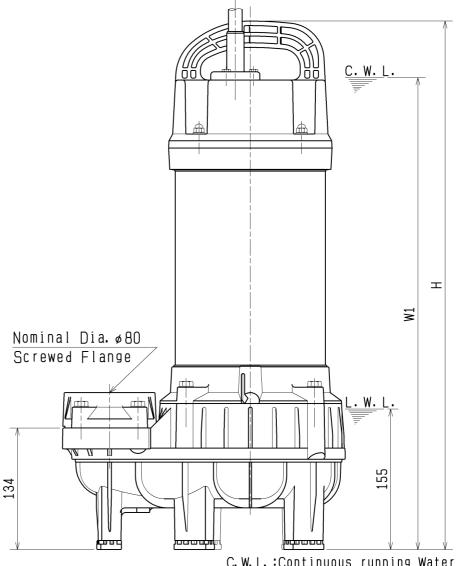
A-20157-1 NO. PUMP PERFORMANCE CURVES TYPE Sewage MODEL FREQUENCY 80PU (A/W) 22, 2 -51 Submersible Vortex Pump 50 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS 80 DISCHARGE BORE Max. 17.8 TOTAL HEAD m M Max. 0.81 m³∕min m^3/\min CAPACITY 2. 2 MOTOR OUTPUT k W kW3 PHASE × VOLTAGE φX V ٧ φX CURRENT Α min^{-1} 2 P/ S. S. 3000 POLES / REVOLUTION STARTING METHOD DIRECT ON LINE INSULATION CLASS Ε REMARKS: 24 + 20 100+90+ +08+ 16 70 ++ 12 60 +50 +PUMP 40 \pm + 8 30 + 3 +OUTPUT 20 + 2 + 410 + 1 + % k W 1.2 0.8 0.2 0.4 0.6 1.0 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



	DIMENSION DRAWING	3 No.	No. A-20161-1
TYPE	Sewage	MODEL	80PU22.2 -51/61
	Submersible Vortex Pump		80PU23.7 -51/61

MODEL	W1	Н	Approximate Weight(*)		
80PU22, 2-51/61	520	583	22kg		
80PU23.7-51/61	555	618	27kg		
*excluding cable					

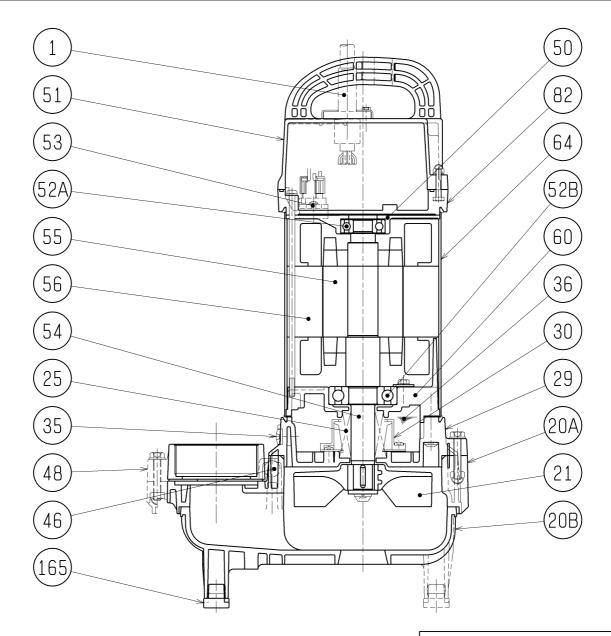




C. W. L. : Continuous running Water Level L. W. L. : Lowest running Water Level



	SECTIONAL	DRAWING	No.	No. A-20	164-1
TYPE	Sewage Submersible V	ortex Pump	MODEL	80PU22.2 -51/61 80PU23.7 -51/61	



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

*2 the wetted part

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	52A	Upper Bearing	1	6204ZZC3
20A	Upper Pump Casing	*1	Plastic W/GF	52B	Lower Bearing	1	6306ZZC3
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-25AT	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)	82	Head Cover Spacer	1	Plastic W/GF
46	Air Release Valve	1	Glass Ball	165	Rubber Foot	5	Nitrile Butadien Rubber
48	Screwed Flange	1	Plastic W/GF				
50	Motor Bracket	1	Aluminium Alloy Casting				
51	Head Cover	1	Plastic W/GF				

REQ. SPECIFICATION