

SPECIFICATIONS

Model

80C21.5

C-series

1.5kW, 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

80mm

Motor Output

1.5kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

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 - 3.5A220V - 6.0A380V - 3.4A400V - 3.5A 415V - 3.5A 440V - 3.2A

Power Cable

Sheath: PVC

Standard Length: 6m 200 to 600V supply:

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

Dry Weight (excluding cable)

Free Standing Type: 36kg Guide Rail Fitting Type: 34kg

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 $50Hz - 43 \times 60mm$ $60Hz - 37 \times 60mm$

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), 900ml

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
- 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)

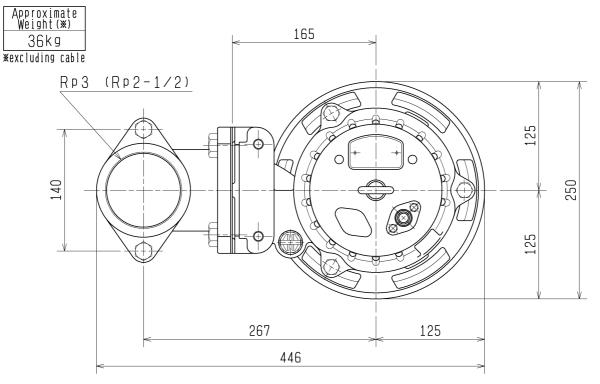
External Leakage Sensor

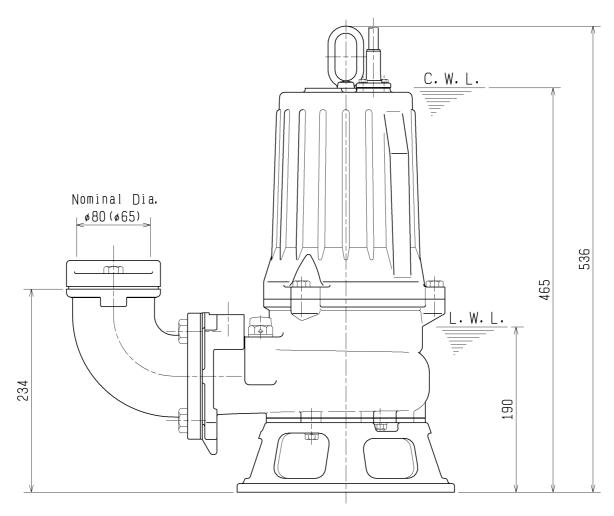
				NO.	A-11471-2		
PUMP	PERFO	RMAN	CEC	CURVES)		
TYPE Sewage Submer				W) 21.5 -62 W) 21.5 -62			
CUSTOMER'S NAME	ter Pump	103	OUC (A)	W) 21. 5 - 62	2 bU Hz		
EQUIPMENT TITLE		NO.					
	STANDARD S	BPECIFICA	TIONS	REQUIRED SPECIFICATIONS			
DISCHARGE BORE	80				m m		
TOTAL HEAD		7			m		
CAPACITY MOTOR OUTPUT		0.4	m³∕min kW		m³√min kW		
PHASE × VOLTAGE	1.0		V	φ ×			
CURRENT			А		А		
POLES / REVOLUTION	2 P/	s. s. 36	00 min ⁻¹	P/	min ⁻¹		
STARTING METHOD	DIRECT ON LINE						
INSULATION CLASS		F					
				REMARKS:			
-							
100+ + 20							
90+ + =							
80+ + 16							
70+ +							
60 + 12							
50 + 12							
	An						
40+ + 8							
30 - 8							
20-2.0-4							
10-1. 0	PUT		<u> </u>				
% kW m	0.	5		1.0	m³/min		
PUMP OUT TOTAL CAPACITY	Y						

TSURUMI MFG. CO., LTD.



	DIMENSION	DRAWING	No.	No.	A-11472-3
TYPE	Sewage Submersibl	e Cutter Pump	MODEL	80C21.5 -5	52/62





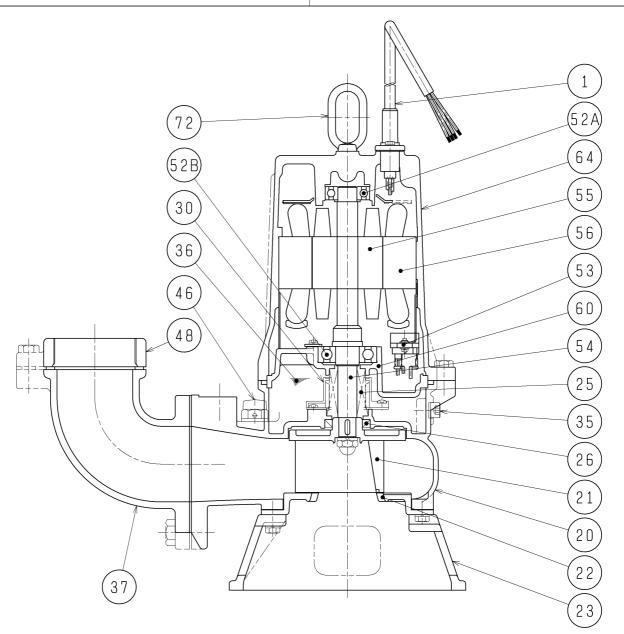
The Figure in () shows the dimensions of discharge Bore at Nominal $\phi\,65.$

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



SECTIONAL DRAWING No. No. A-11475-5

TYPE Sewage Submersible Cutter Pump MODEL 80C21.5 -52/62



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	6204ZZC3
21	Impeller	1	Gray Iron Casting(WC Edge)	52B	Lower Bearing	1	6305ZZC3
22	Suction Cover	1	Ductile Iron Casting	53	Motor Protector	1	
23	Strainer Stand	1	Gray Iron Casting	54	Shaft	1	Stainless Steel 420J2(*)
25	Mechanical Seal	1	H-20A	55	Rotor	1	
26	Oil Seal	1	TC32488	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	1	Stainless Steel 304
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				