

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		Impeller Semi-open single-channel impeller for solid-handling design, dynamically balanced. A sintered tungsten carbide alloy edge is blazed on the impeller vane.	
Type of Fluid Sewage, wastewater, and water carrying solid matters		Solids Passage 50Hz – 43 × 60mm 60Hz – 37 × 60mm	
Temperature: 0 to 40°C (High temperature model available on special request)		Cable Entry with Anti-Wicking Block Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.	
Discharge Bore 80mm		Bearings Permanently lubricated, deep-groove, double-shielded C3 ball bearings	
Motor Output 1.5kW		Shaft 420 stainless steel	
Power Supply Three-phase		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.	
Starting Method Direct on Line		Upper Seal Faces: Ceramic + Carbon Lower Seal Faces: SiC + SiC	
Motor Continuous-duty rated, dry-type induction motor		Oil Seal (Lip Seal) Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.	
Insulation Class: F Degree of Protection: IP68		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.	
No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min ⁻¹ (50/60Hz)		Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 900ml	
Power Supply Voltages & Rated Currents 50Hz 60Hz 380V – 3.5A 220V – 6.0A 400V – 3.5A 380V – 3.4A 415V – 3.5A 440V – 3.2A		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.	
Power Cable Sheath: PVC Standard Length: 6m 200 to 600V supply: 1 × 4 × 1.25mm ² , O.D. 11.1mm			
Dry Weight (excluding cable) Free Standing Type: 36kg Guide Rail Fitting Type: 34kg			
Optional Accessories			
Bend Set (Free Standing Type) <ul style="list-style-type: none">• Discharge Bend• Screwed Flange		External Leakage Sensor	
TOS/TS Set (Guide Rail Fitting Type) <ul style="list-style-type: none">• Duckfoot Bend• Guide Support• Guide Hook• Lifting Chain 5m (with Shackles)• JIS 10kg/cm² Screwed Flange (TOS Set only)			
TSURUMI MANUFACTURING CO., LTD.			

NO.

A-11470-1

PUMP PERFORMANCE CURVES

TYPE Sewage Submersible
Cutter Pump

MODEL 80C (A/W) 21.5 -53
TOS80C (A/W) 21.5 -53

FREQUENCY
50 Hz

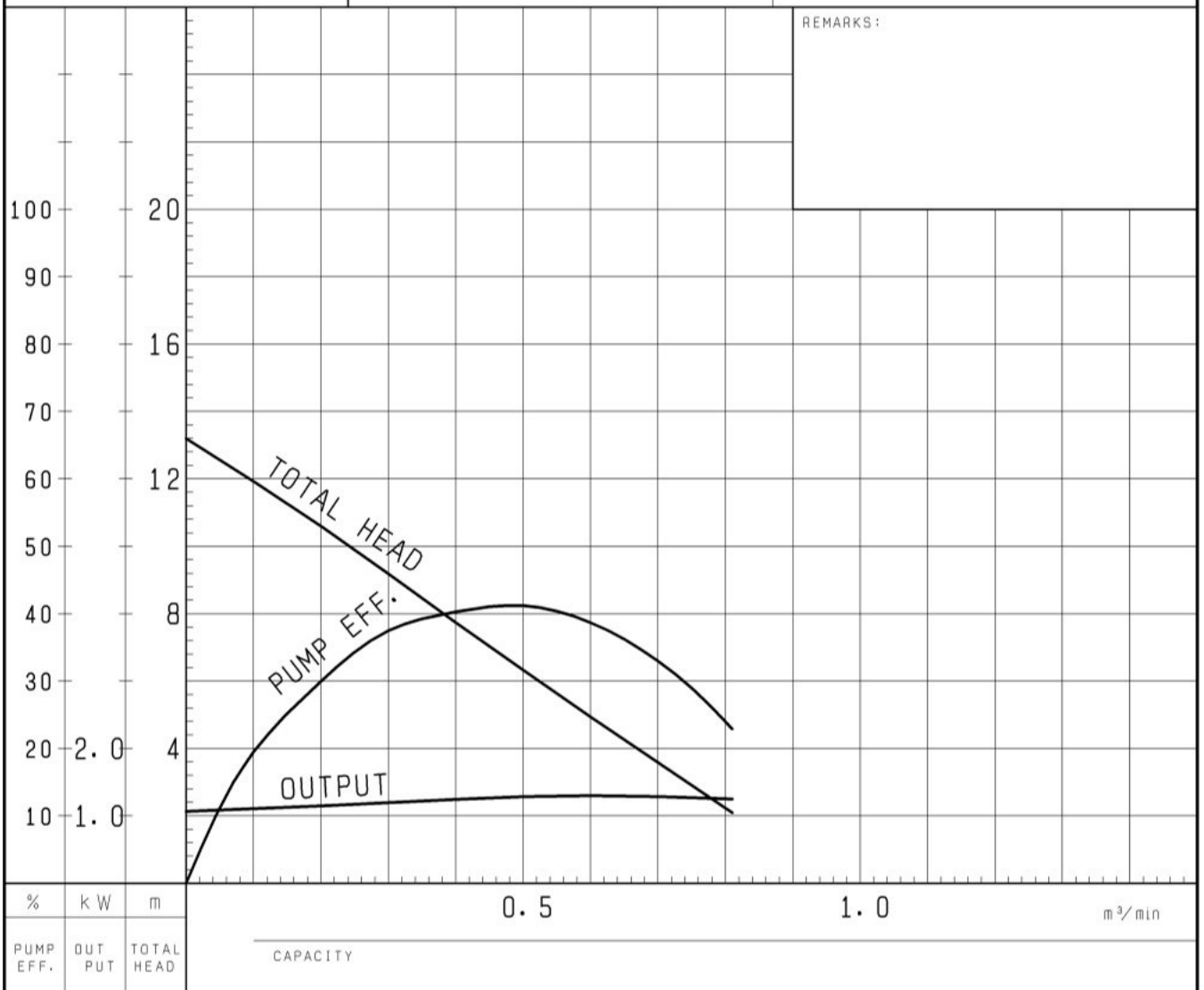
CUSTOMER'S NAME

EQUIPMENT TITLE

NO.

	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	80 mm	mm
TOTAL HEAD	7 m	m
CAPACITY	0.45 m ³ /min	m ³ /min
MOTOR OUTPUT	1.5 kW	kW
PHASE × VOLTAGE	3 φ × V	φ × V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	

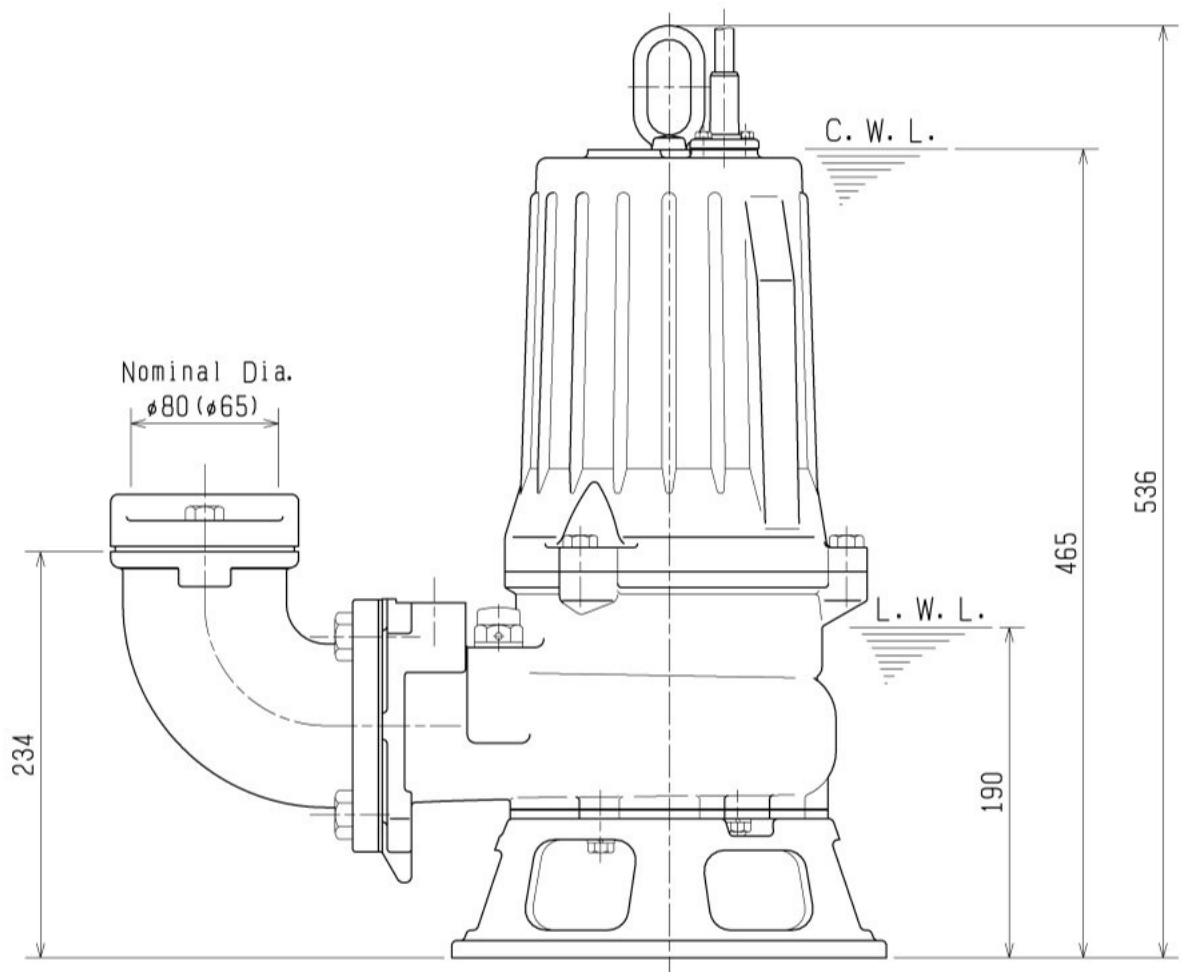
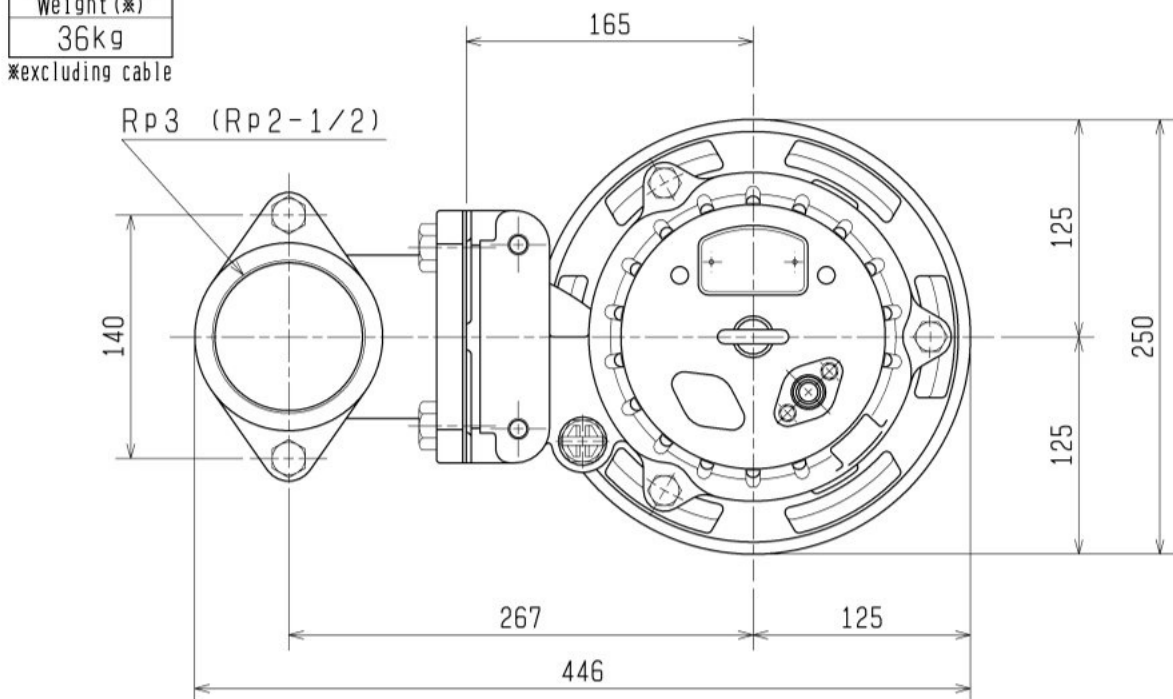
REMARKS:



TSURUMI MFG. CO., LTD.

DIMENSION DRAWING		No.	No.
TYPE	Sewage Submersible Cutter Pump	MODEL	80C21.5 -53/63

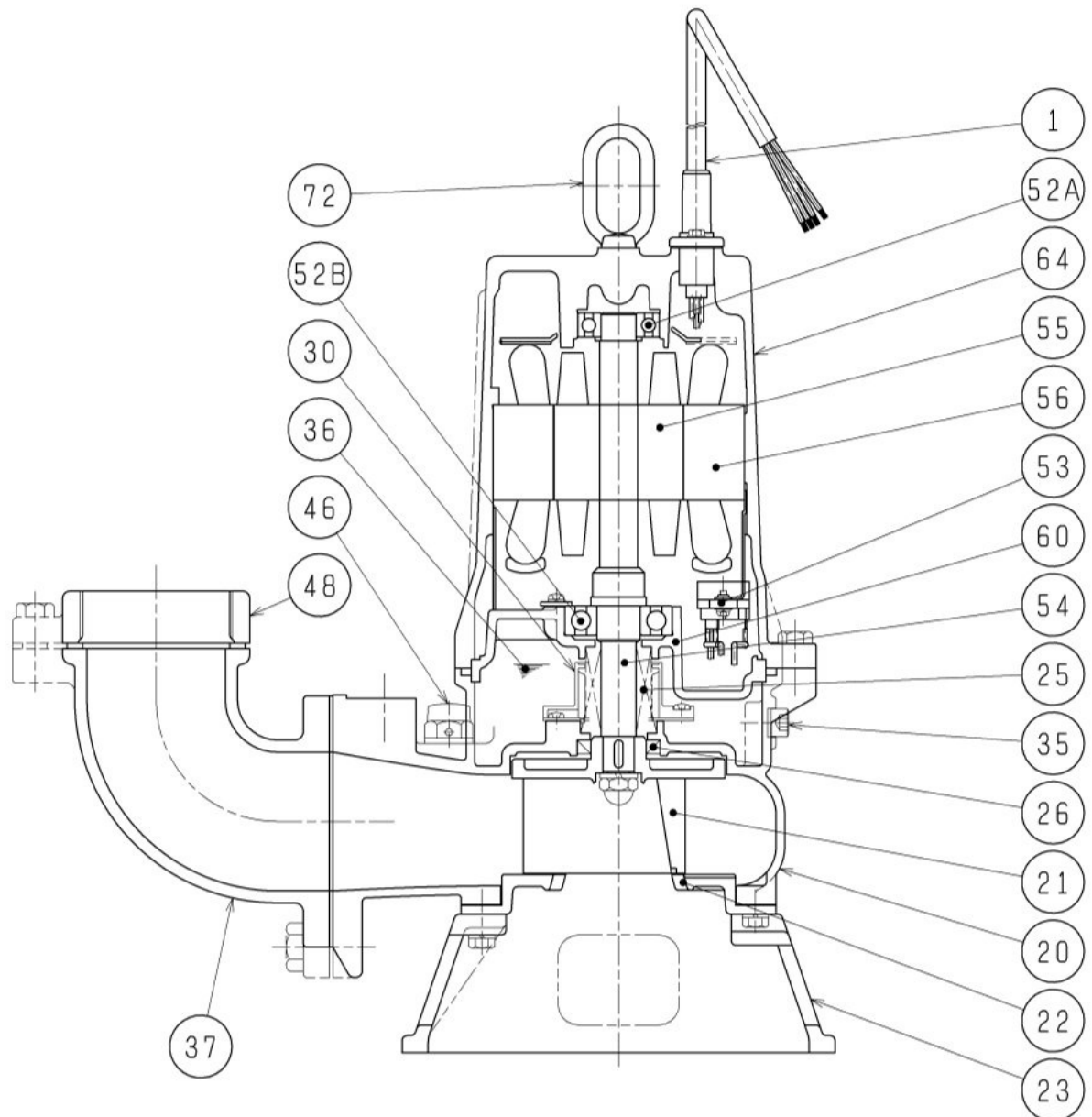
Approximate Weight (※)
36kg
※excluding cable



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 -53/63	



REQ. SPECIFICATION

※ the wetted part

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	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				