

SPECIFICATIONS

Model

80C23.7-CR

C(CR)-series

3.7kW, 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

3.7kW

Power Supply

Three-phase

Starting Method

Direct on Line (Star-Delta available on special request)

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 - 8.0A 220V - 13.8A 400V - 7.7A 380V - 7.9A 415V - 7.5A 440V - 6.9A

Power Cable

Sheath: PVC

Standard Length: 10m 380 to 600V supply:

 $1 \times 4 \times 2.0$ mm², O.D. 11.8mm

200 to 240V supply:

 $1 \times 4 \times 3.5$ mm², O.D. 13.9mm

Dry Weight (excluding cable)

Free Standing Type: 80kg Guide Rail Fitting Type: 71kg

Impeller

Semi-open two-channel impeller for solid-handling design, made of high-chromium cast iron, dynamically balanced. A sintered tungsten carbide alloy edge is blazed on each impeller vane.

Solids Passage $50Hz - 22 \times 31.3mm$ $60Hz - 22 \times 31 mm$

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: SiC + SiC 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), 1890ml

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
- JIS 10kg/cm² Screwed Flange

TOS Set (Guide Rail Fitting Type)

- Duckfoot Bend
- Guide Support
- Guide Hook
- Lifting Chain 5m (with Shackles)
- JIS 10kg/cm² Screwed Flange

External Leakage Sensor

				NO.	J4-3431	4 - 1
PUMP	PERFOR	RMAN	CEC	CURVES)	
TYPE Submersible Cutter Sev	High Head wage Pump	MODEL T		3.7-CR-61 3.7-CR-61	FREQUENCY 60	Нz
CUSTOMER'S NAME					<u> </u>	
EQUIPMENT TITLE						
				NC).	
	STANDARD S	PECIFICA	TIONS		SPECIFICATIO	NS
DISCHARGE BORE			m m		80	m m
TOTAL HEAD	_	m		MA)	m 3 / min	
CAPACITY MOTOR OUTPUT			m³∕min kW		X. 1 3. 7	m 3/ min k W
PHASE × VOLTAGE		φ×	V	3	σ· / σ ×	V
CURRENT			Α			A
POLES / REVOLUTION	P/		min ⁻¹	2 P/	S. S. 3600	min ⁻¹
STARTING METHOD				DIREC	CT ON LINE	
INSULATION CLASS					F	
				DEMARKS		
				REMARKS:		
+ + 30						
100 + 25						
90+ +						
80+ + 20		<u></u>				
70+ +						
4.5		TEA.				
60 + 15						
50+ + =		OUMP EFF				
10						
40+ + 10						
30 - 6 -						
20 4 5		NITDUT				
		OUTPUT		 		
10 - 2 -						
% kW m 0.2	0.4	0.6	0.8	1.0	1 2	

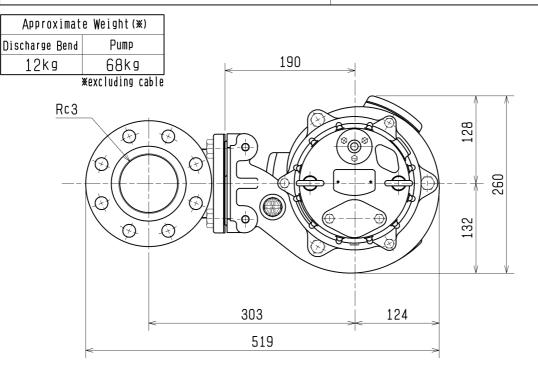
TSURUMI MFG. CO., LTD.

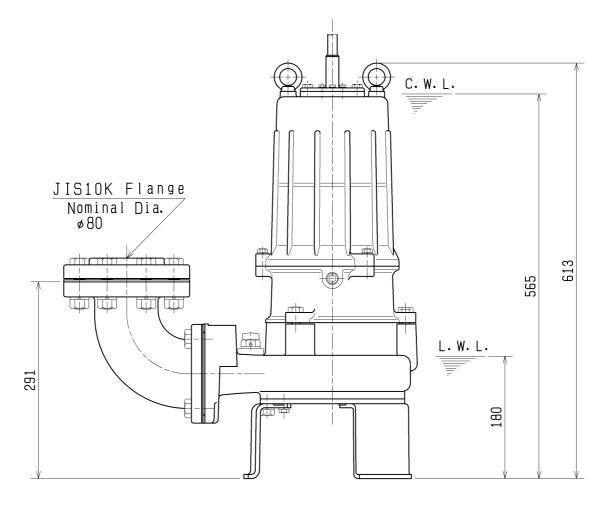
CAPACITY

PUMP MOTOR TOTAL EFF. OUTPUT HEAD



DIMENSION DRAWING	i No	No. J4-34346-1
TYPE Submersible High Head Cutter Sewage Pump	MODEL	80C23.7-CR -51/61

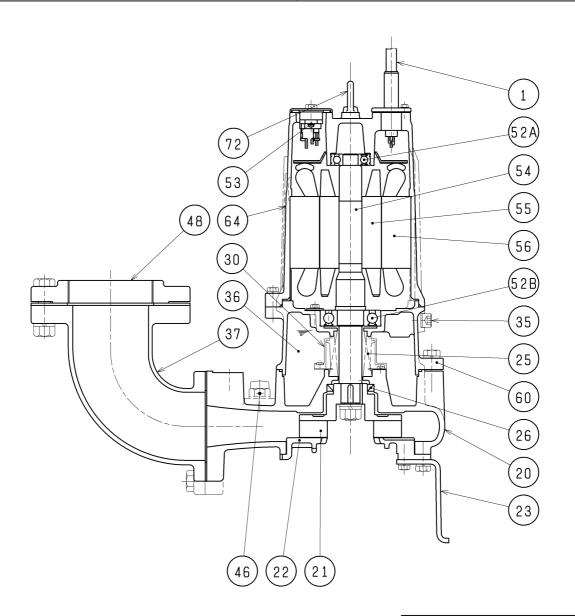




C. W. L. : Continuous Running Water Level. L. W. L. : Lowest Running Water Level.



SECTIONAL	DRAWING	No.	No. J4-34347-1
TYPE Submersible Cutter Se	High Head wage Pump	MODEL	80C23.7-CR -51/61



RE	Q. SPECIFICATION

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	52B	Lower Bearing	1	6307ZZC3
20	Pump Casing	1	Gray Iron Casting	53	Motor Protector	1	
21	Impeller	1	Chromiun Iron Casting(WC Edge)	54	Shaft	1	Stainless Steel 420J2
22	Suction Cover	1	Chromiun Iron Casting	55	Rotor	1	
23	Strainer	3	Structure Steel	56	Stator	1	
25	Mechanical Seal	1	H-30	60	Bearing Housing	1	Gray Iron Casting
26	Oil Seal	1	TC45629	64	Motor Frame	1	Gray Iron Casting
30	Oil Lifter	1	Plastic	72	Eye Bolt	2	Stainless Steel 304
35	Oil Plug	1	Stainless Steel 304				
36	Lubricant		Turbine Oil (ISO VG32)				
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				
48	Screwed Flange	1	Gray Iron Casting				
52A	Upper Bearing	1	6304ZZC3				