

SPECIFICATIONS

Model

100B43.7

B-series

3.7kW, 3-phase

Type of Pump

Submersible cast iron pump suitable for pumping sewage, wastewater, storm water, etc.

Type of Fluid

Sewage, wastewater, and water carrying solid matters

Temperature: 0 to 40°C

(High temperature model available on special request)

Discharge Bore

100mm

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: E (available in F on special request)

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 8.2A 220V - 14.2A 400V - 7.9A 380V - 8.0A 415V - 7.7A 440V - 7.1A

Power Cable

Sheath: PVC

Standard Length: 6m 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: 84kg Guide Rail Fitting Type: 80kg

Impeller

Semi-open single-channel impeller for solid-handling design, dynamically balanced

Solids Passage 50Hz – 81 × 53mm

 $60Hz - 81 \times 47mm$

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), 1350ml

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/TS Set (Guide Rail Fitting Type)

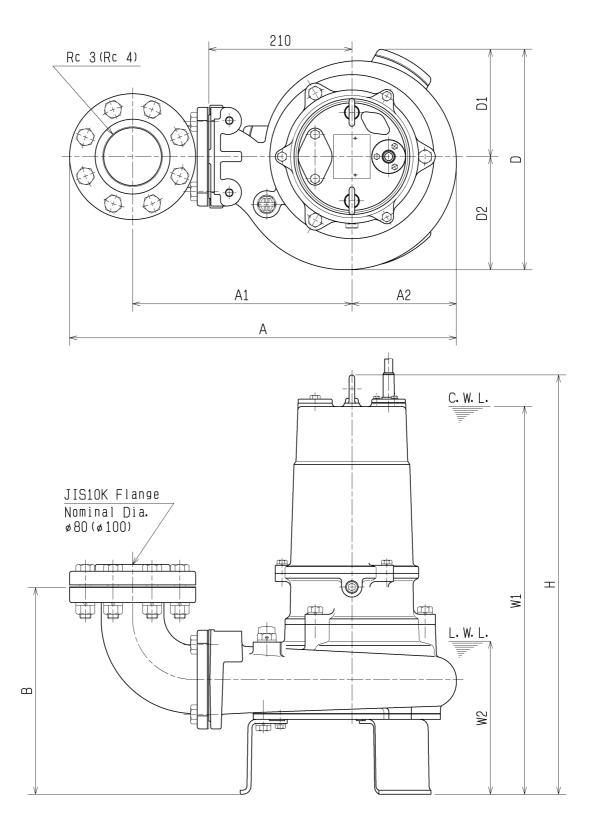
- Duckfoot Bend
- Guide Support
- Guide Hook
- · Lifting Chain 5m (with Shackles)
- JIS 10kg/cm² Screwed Flange (TOS Set only)

External Leakage Sensor

NO. A-07518-2 PUMP PERFORMANCE CURVES TYPE MODEL FREQUENCY Submersible Channel 100B43.7 -52 50 Impeller Sewage Pump TOS100B43.7 -52 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 100 11 TOTAL HEAD m m 1.0 m³/min m^3/\min CAPACITY 3.7 MOTOR OUTPUT k W k W 3 ø× PHASE × VOLTAGE V ٧ φX CURRENT А Α min⁻¹ 4 P/ s. s. 1500 min^{-1} POLES / REVOLUTION P/ STARTING METHOD DIRECT ON LINE INSULATION CLASS Ε REMARKS: 24 100+ + 20 90 + 16 +0870 +60+ + 1250 40 \pm + 8 30 + 6+ 20 + 4 +4 OUT PUT 10 + 2+ k W % m 0.4 0.8 1. 2 1.6 2.0 2.4 m³/min PUMP OUT TOTAL CAPACITY TSURUMI MFG. CO., LTD.



TYPE Sewage Submersible Channel Impeller Pump No. No. No. A-16067-3



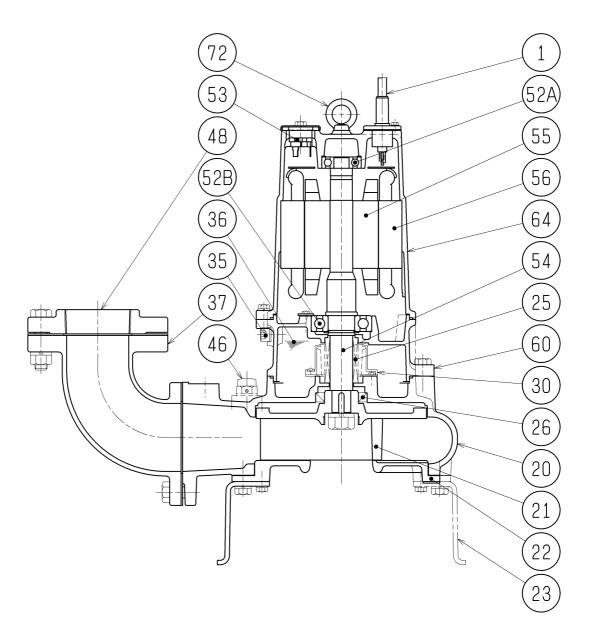
The Figure in () shows the dimensions of discharge Bore at Nominal Dia ϕ 100.

C. W. L. :Continuous running Water Level
L. W. L. :Lowest running Water Level
**excluding cable

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MODEL	A A1		A2	В	D	D1	D2	W1	W2	Н	Approximate Weight(*)		
80/100B42, 2-52/62	568 (596)	322 (337)	154	304 (329)	324	158	166	570	225	616	68kg		
80/100B43.7-52/62	574 (601)	322 (337)	159	309 (334)	333	158	175	645	235	690	84kg		



SECTIONAL DRAWIN	NG No.	No.	A-19419-2
TYPE Sewage Submersible Channel Impeller Pump	MODEL	80/100B42.2 80/100B43.7	



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	2. 2kW 3. 7kW		W				REQ. SPECIFICATION		
*1	H-30A H-35A								
* 2	2 TC456812 TC507212								
* 3	6307ZZC3 6309ZZC3			*4 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	6304ZZC3
21	Impeller		1	Gray Iron Casting	52B	Lower Bearing		1	*3
22	Suction Cover		1	Gray Iron Casting	53	Motor Protec	ctor	1	
23	Stand		3	Steel Plate	54	Shaft		1	Stainless Steel 420J2(**4)
25	Mechanical Seal		1	*1	55	Rotor		1	
26	26 Oil Seal		1	*2	56	Stator		1	
30	O 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		2	Stainless Steel 304
37	Discharge E	3end	1	Gray Iron Casting					
46	Air Release	e Valve	1	Nylon					