

SPECIFICATIONS

Model

50TM2.75

TM-series

0.75kW, 3-phase

Type of Pump

Submersible semi-vortex pump made of titanium and resin suitable for pumping seawater

Type of Fluid

Seawater

Temperature: 0 to 40°C

Discharge Bore

50mm

Motor Output

0.75kW

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 - 2.0A 220V - 3.2A 400V - 1.9A 380V - 1.8A 415V - 1.9A 440V - 1.6A

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)

Standard Model: 7.8kg Automatic Model: 8.4kg

Impeller

Vortex impeller designed for "high-gap structure", made of glass-fiber reinforced PPO

Solids Passage 50Hz – ∮10mm 60Hz – ∮10mm

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

Titanium

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 + Ceramic

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), 240ml

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.

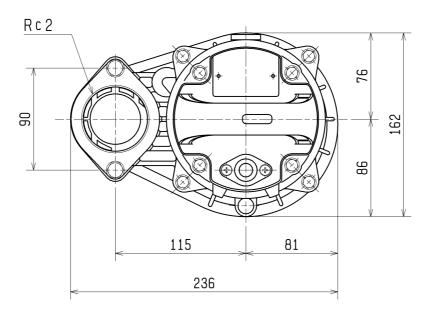
NO. A-10197-1 PUMP PERFORMANCE CURVES MODEL 50TM2.75 -52 TYPE Sea Water Submersible FREQUENCY Titanium Seawater Pump 50TMA2.75 -52 50 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 50 TOTAL HEAD m m 11.5 m³∕min m^3/\min CAPACITY 0.13 MOTOR OUTPUT 0.75 k W kWPHASE × VOLTAGE φ× V ٧ 3 φX CURRENT Α А min^{-1} min⁻¹ POLES / REVOLUTION P/ 2 P/S.S.3000 STARTING METHOD DIRECT ON LINE INSULATION CLASS Ε REMARKS: 24 100+ + 20 90+ +08+ 16 70+ TOTAL HEAD + 1260+50 +40+ + 8DUTPUT 30+0.8+ 20+0.6+4 10+0.4-% k W 0.4 0.5 0.6 0.1 0.2 0.3 m³/min PUMP OUT TOTAL EFF. PUT HEAD CAPACITY TSURUMI MFG. CO., LTD.

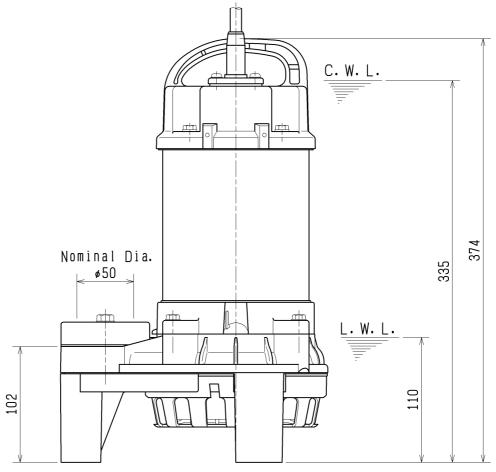


DI	MENSION	DRAWING	No.	No	A-10210-2
TYPE :	Sea Water Sub	omersible	MODEL	50TM2.75 -52/62	
	Titanium Sea	awater Pump			

Approximate Weight(*) 7.8kg

*excluding cable





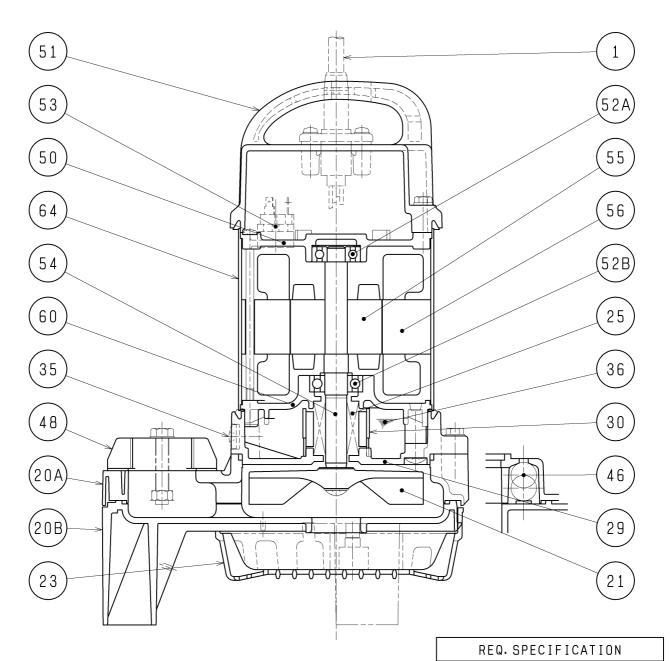
C. W. L.: Continuous running Water Level

L.W.L.: Lowest running Water Level



 SECTIONAL DRAWING
 No.
 No.
 A-10216-4

 TYPE
 Sea Water Submersible Titanium Seawater Pump
 MODEL 40TM 2. 25 -52/62, 50TM 2. 4 -52/62
 -52/62, 50TM 2. 4 -52/62



* All metal parts (including cable gland, bolts, nuts, washers, etc.) contacting with liquid are made of TITANIUM.

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

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	50	Motor Bracket	1	Aluminium Die Casting
20A	Upper Pump Casing	*	Plastic W/GF	51	Head Cover	1	Plastic W/GF
20B	Lower Pump Casing	1	Plastic	52A	Upper Bearing	1	6201ZZC3
21	Impeller	1	Plastic W/GF	52B	Lower Bearing	1	6302ZZC3
23	Strainer	1	Plastic	53	Motor Protector	1	
25	Mechanical Seal	1	W-14HC	54	Shaft	1	Titanium
29	Oil Casing	1	Plastic W/GF	55	Rotor	1	
30	Oil Lifter	1	Plastic	56	Stator	1	
35	Oil Plug	1	Titanium	60	Bearing Housing	1	Aluminium Die Casting
36	Lubricant		Liquid Paraffin (ISO VG32)	64	Motor Frame	1	Titanium
46	Air Release Valve	1	Glass Ball				
48	Screwed Flange	1	Plastic W/GF				