

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

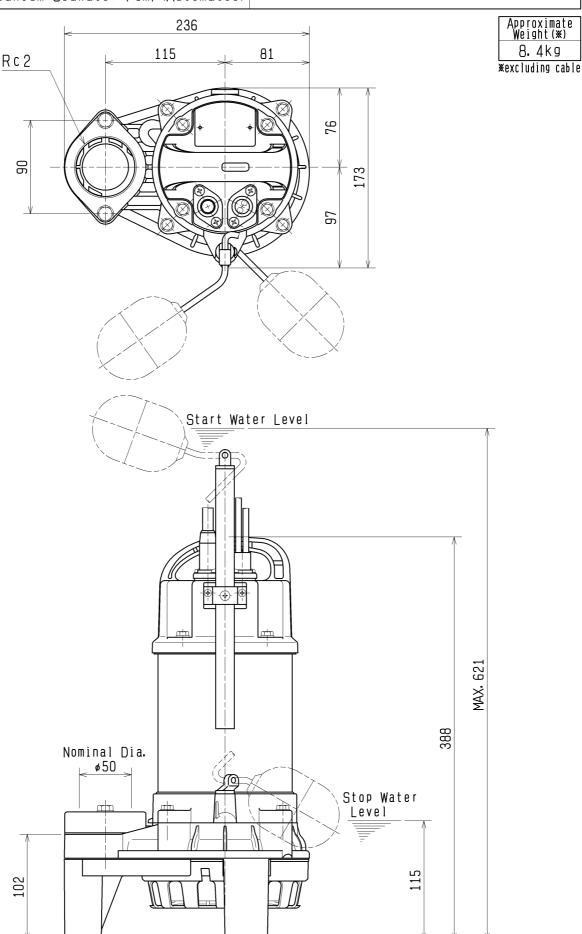
Motor Protection Device

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.



DIMENSION DRAWING No. A-10211-2 No. TYPE Sea Water Submersible MODEL 50TMA2.75 -52/62 Titanium Seawater Pump (Automatic)



TSURUMI

MFG.

Approximate Weight(*)

8.4kg

🥥 Tsurumi Pump SECTIONAL DRAWING No. No. A-10217-4 MODEL40TMA2.25 -52/62,50TMA2.4 -52/62 TYPE Sea Water Submersible 50TMA2.75 -52/62 Titanium Seawater Pump (Automatic) 1 51 106 114 109 53 115 50 52A 55 64 56 46 52B 36 35 60 25 20A 30 20B 29 23 54 21 REQ. SPECIFICATION * 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 Cabtyre Cable 1 PVC Sheath 52A Upper Bearing 1 6201ZZC3 20A Upper Pump Casing Plastic W/GF 52B Lower Bearing 6302ZZC3 1 20B Lower Pump Casing Plastic 53 Motor Protector Plastic W/GF 21 | Impeller 54 | Shaft 1 Titanium 23 Strainer Plastic 55 Rotor 1 25 Mechanical Seal W-14HC 56 Stator 29 Oil Casing Plastic W/GF 60 Bearing Housing Aluminium Die Casting 30 Oil Lifter 1 Plastic 64 Motor Frame 1 Titanium 106 Float 35 Oil Plug Titanium Plastic

109 Float Support Pipe

114 Power Relay

115 Transfolmer

Plastic

1

1

1

Liquid Paraffin (ISO VG32)

Aluminium Die Casting

Glass Ball

1

Plastic W/GF

Plastic W/GF

36 Lubricant

46 Air Release Valve

48 Screwed Flange

50 Motor Bracket

51 Head Cover