



*Submersible Seawater Pumps*

***Titanium***

**TM**



### **Amazingly versatile**

- Pumping seawater out the bilge and pits of vessels;
- Circulating seawater in the fish reserves of restaurants and fishing boats;
- Supplying seawater to fish reserves and fish reserve tank trucks.



● Cleaning the deck of a fishing boat.



● Circulating seawater in the reserve of a crab dealer.



● Supplying seawater to a prawn farm.

# The TM-series revolutionizes seawater pumping operation

## Special Features

Titanium is an ideal marine pump material for its superb corrosion resistivity but has been little used because it's expensive.

Tsurumi's Marinemate submersible seawater pumps have resolved the price problem by combining titanium with resin for their strategic components.

This has added more virtues: lighter, tougher and stronger to stand corrosion than conventional equivalents.

### Titanium in all wet parts

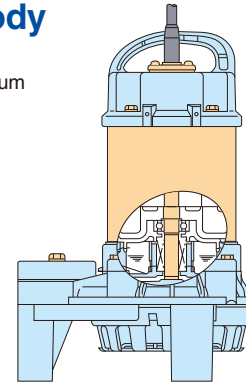
Titanium is used in all the wet metal parts of Marinemate pumps. Titanium has a far stronger oxide film on its surface than stainless steel does. This prevents the pumps from being corroded in the seawater which has a very high chlorine ion concentration.

### Know-how in every part

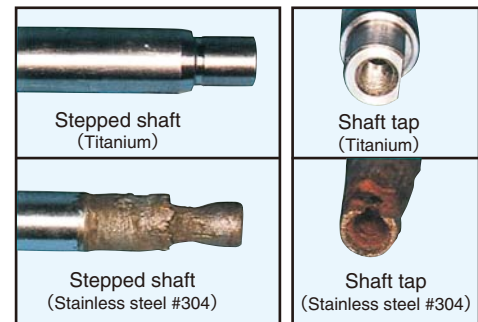
The Tsurumi's unique know-how and concepts are utilized in every part of the pump such as, anti-wicking cable entry, motor protection device, and dual inside mechanical seal, etc. which have been well proven in the reliability and durability.

## Construction materials of pump body

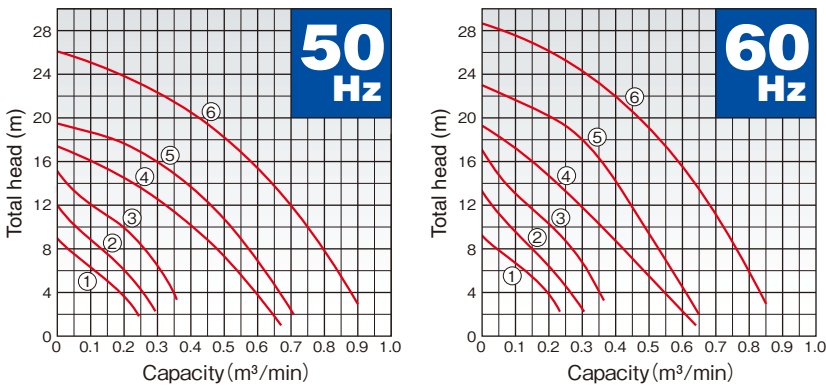
- Titanium
- Resin



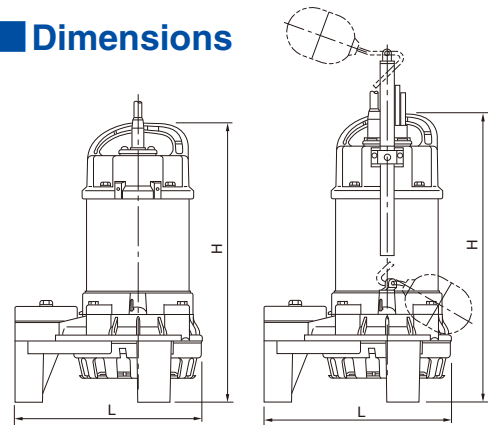
## Corrosion tests (6 months)



## Performance curves



## Dimensions



## Standard specifications 50/60Hz

Curve No.	Discharge Bore mm	Standard Model	Automatic Model	Motor Output kW	Phase	Speed (S.S.) min <sup>-1</sup>	Starting Method	Solids Passage mm	Dimensions L x H mm		Dry Weight kg		Cable Length m
									Standard Model	Automatic Model	Standard Model	Automatic Model	
1	40	40TM2.25S	40TMA2.25S	0.25	Single	3000/3600	Capacitor Run	10	236×360	236×374	6.7	7.2	5
1	40	40TM2.25	40TMA2.25	0.25	Three	3000/3600	D.O.L.	10	236×349	236×363	5.7	6.2	6
2	50	50TM2.4S	50TMA2.4S	0.4	Single	3000/3600	Capacitor Run	10	236×360	236×374	6.7	7.2	5
2	50	50TM2.4	50TMA2.4	0.4	Three	3000/3600	D.O.L.	10	236×360	236×374	6.6	7.1	6
3	50	50TM2.75	50TMA2.75	0.75	Three	3000/3600	D.O.L.	10	236×374	236×388	7.8	8.4	6
4	50	50TM21.5	50TMA21.5	1.5	Three	3000/3600	D.O.L.	20	295×435	295×435	14.9	15.6	6
5	80	80TM22.2	80TMA22.2	2.2	Three	3000/3600	D.O.L.	20	311×559	311×559	21	22	6
6	80	80TM23.7	80TMA23.7	3.7	Three	3000/3600	D.O.L.	20	311×594	311×594	26	27	6

We reserve the right to change the specifications and designs for improvement without prior notice.

**TSURUMI**  
MANUFACTURING CO., LTD.

Your Dealer