



# Submersible Seawater Pumps *Titanium* TM (Manual) / TMA (Automatic)



MADE IN  
JAPAN

## Corrosion Resistance ECO-Friendly

Food Grade Lubricant used is Fish Friendly

### ■ Application Examples

1. Pumping of seawater out of bilge and pits of vessels
2. Circulating seawater in the fish reserves of restaurants and fishing boats
3. Supplying of seawater to fish reserves and fish reserve tank trucks
4. Circulating of seawater in marine aquarium



# Titanium Plus Resin Construction Revolutionizes Seawater Pumping Operations

## Special Features

Titanium is an ideal material for marine pump due to its superb corrosion resistance but is not widely used because it is 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.

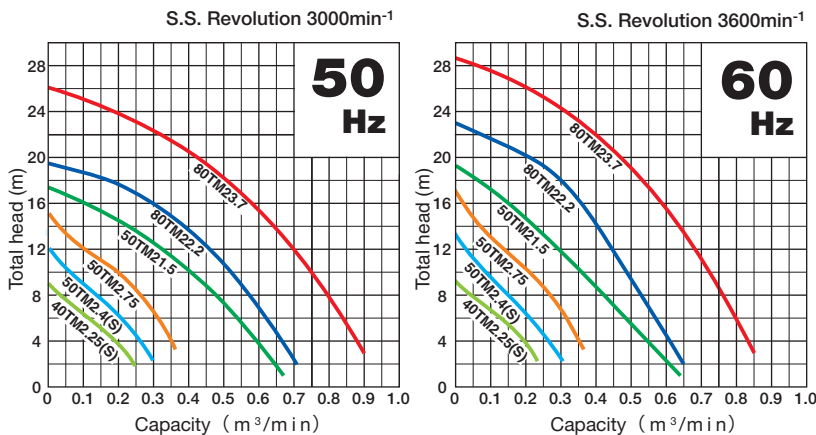
## Titanium in all Wetted Parts

Titanium is used in all metal parts of Tsurumi's Marinemate pump which will be in contact with seawater. Titanium has a stronger oxide film on its surface than stainless steel does. This prevents the pumps from being corroded in 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 reliability and durability.

## Performance Curves



## Specifications

Discharge Bore mm	Standard Model	Automatic Model	Motor Output kW	Phase	Starting Method	Impeller Passage mm	Dimensions L x H mm		Dry Weight kgs		Standard Cable Length m
							Standard Model	Automatic Model	Standard Model	Automatic Model	
40	40TM2.25S	40TMA2.25S	0.25	Single	Capacitor run	10	236X360	236X374	6.7	7.2	5
40	40TM2.25	40TMA2.25	0.25	Three	D.O.L.	10	236X349	236X363	5.7	6.2	6
50	50TM2.4S	50TMA2.4S	0.4	Single	Capacitor run	10	236X360	236X374	6.7	7.2	5
50	50TM2.4	50TMA2.4	0.4	Three	D.O.L.	10	236X360	236X374	6.6	7.1	6
50	50TM2.75	50TMA2.75	0.75	Three	D.O.L.	10	236X374	236X388	7.8	8.4	6
50	50TM2.15	50TMA2.15	1.5	Three	D.O.L.	20	295X435	295X435	14.9	15.6	6
80	80TM22.2	80TMA22.2	2.2	Three	D.O.L.	20	311X559	311X559	21	22	6
80	80TM23.7	80TMA23.7	3.7	Three	D.O.L.	20	311X594	311X594	26	27	6

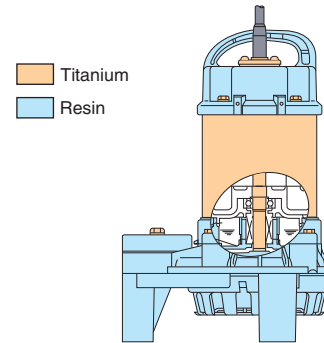
**1 year warranty against manufacturing defects**

\* Mishandling or wear & tear will not be considered as part of warranty claim.

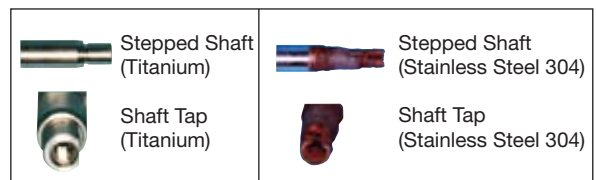
We reserve the right to change the specifications and designs for improvement without prior notice.

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## Construction Materials of Pump Body



## Corrosion Test (6 months)



## Dimensions

