SPECIFICATIONS	Model	40TM2.25	TM-series
			0.25kW, 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
40mm

Motor Output
0.25kW

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 – 0.9A	220V – 1.6A
400V – 0.9A	380V – 0.9A
415V – 1.0A	440V – 0.8A

Power Cable
Sheath: PVC
Standard Length: 6m
200 to 600V supply:
1 × 4 × 1.25mm^2, O.D. 11.1mm

Dry Weight (excluding cable)
Standard Model: 5.7kg
Automatic Model: 6.2kg

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

Solids Passage
50Hz – ϕ10mm
60Hz – ϕ10mm

Cable Entry with Anti-Wicking Block
Watertight cable entry with strain-relief device. The anti-wicking 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-10191-1

PUMP PERFORMANCE CURVES

TYPE	MODEL	FREQUENCY
Sea Water Submersible Titanium Seawater Pump	40TM2.25 -52 40TMA2.25 -52	50 Hz

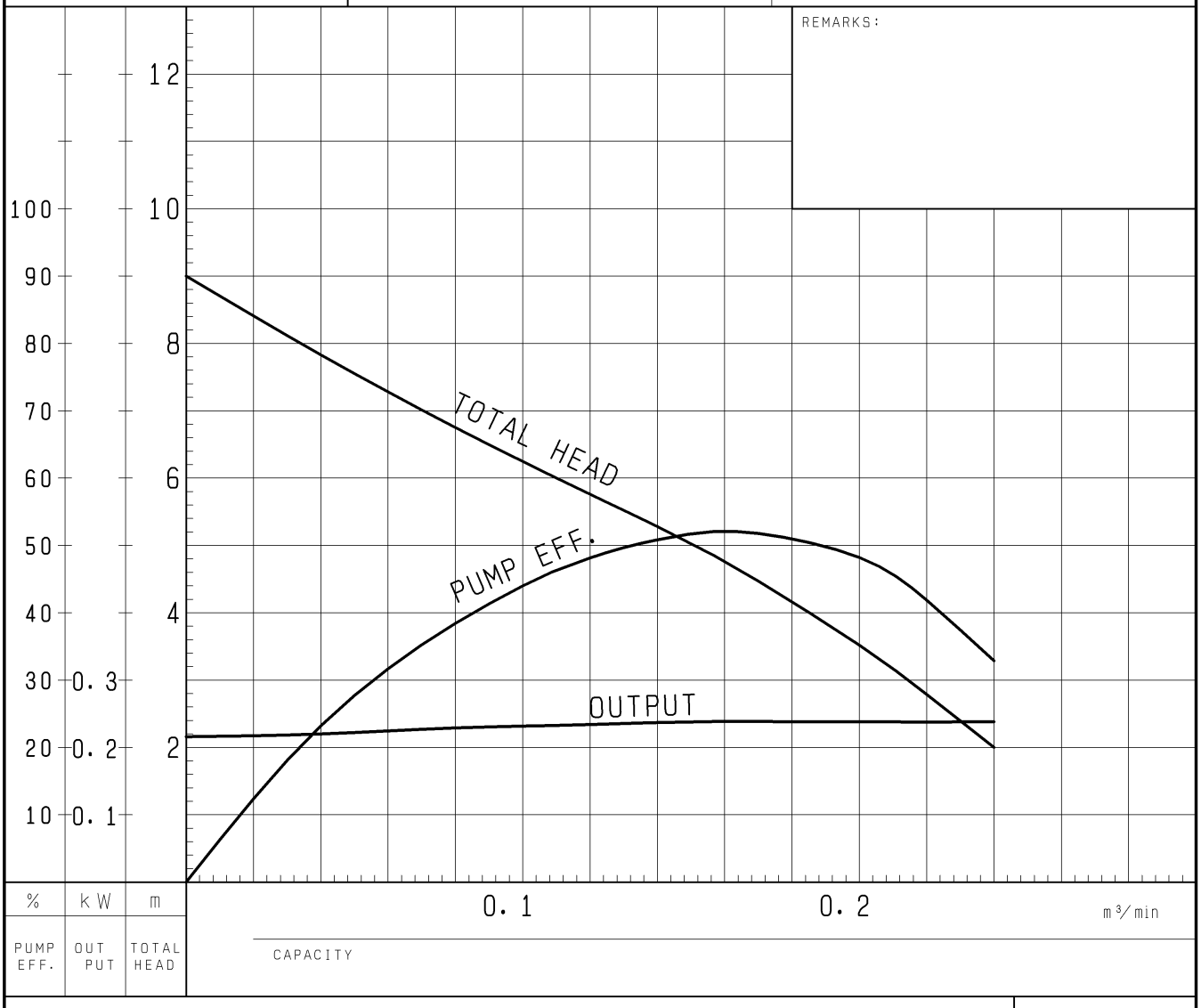
CUSTOMER'S NAME

EQUIPMENT TITLE

NO.

	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	40 mm	mm
TOTAL HEAD	6.5 m	m
CAPACITY	0.08 m³/min	m³/min
MOTOR OUTPUT	0.25 kW	kW
PHASE × VOLTAGE	3 φ × V	φ × V
CURRENT	A	A
POLES / REVOLUTION	2 P / S.S. 3000 min⁻¹	P / min⁻¹
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	E	

REMARKS:



%	kW	m
PUMP EFF.	OUT PUT	TOTAL HEAD

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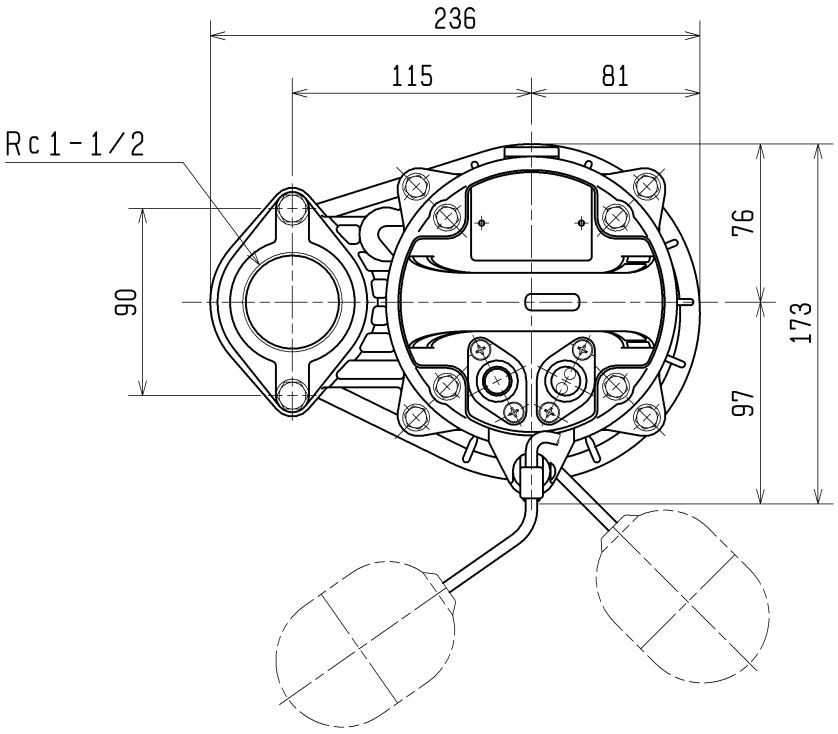
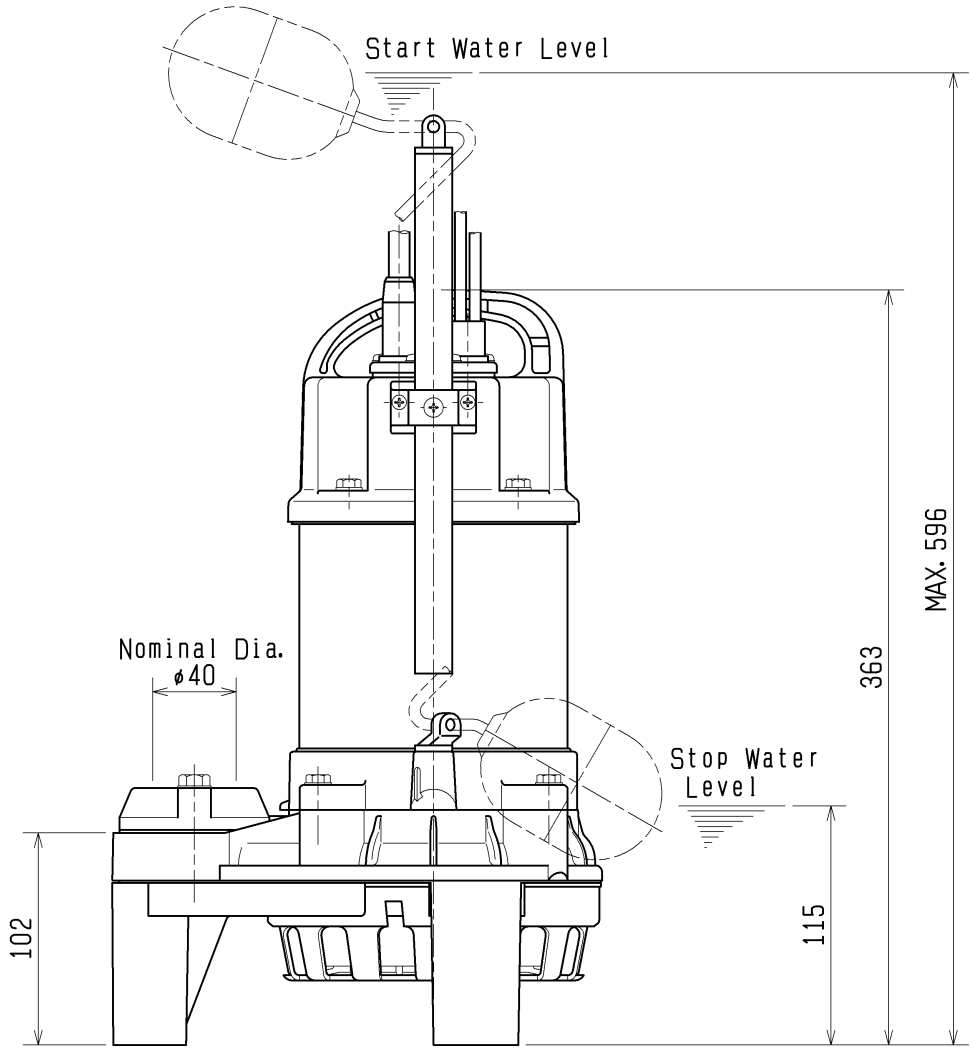
TSURUMI PUMP

DIMENSION DRAWING	No.		No.	A-10205-2
TYPE Sea Water Submersible Titanium Seawater Pump(Automatic)	MODEL	40TMA2.25 -52/62		

Approximate Weight(※)
6.2kg

※excluding cable





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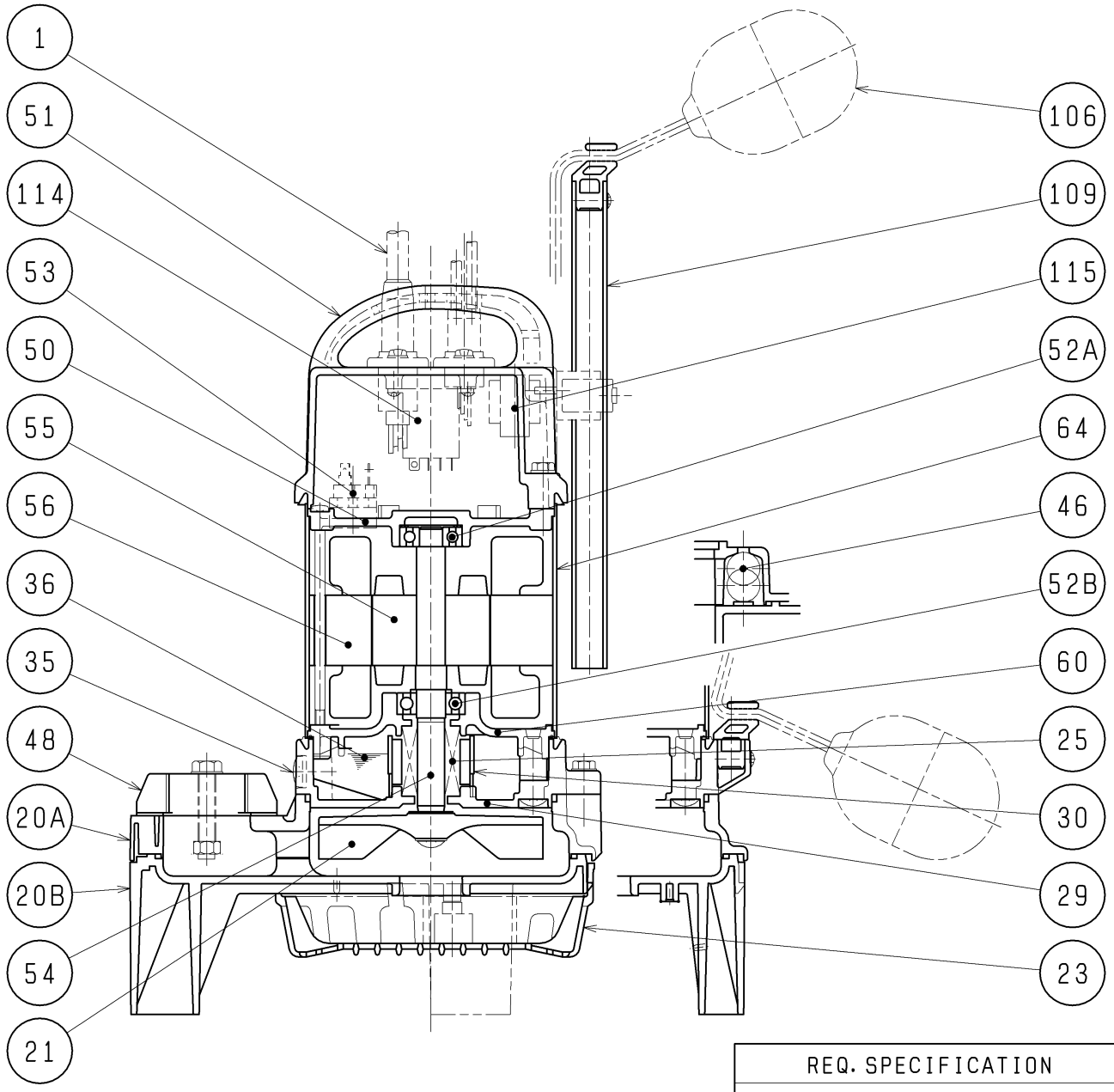
unit:mm

TSURUMI PUMP

SECTIONAL DRAWING	No.		No.	A-10217-4
TYPE Sea Water Submersible Titanium Seawater Pump(Automatic)		MODEL40TMA2.25 -52/62, 50TMA2.4 -52/62 50TMA2.75 -52/62		



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
1	Cabtyre Cable	1	PVC Sheath	52A	Upper Bearing	1	6201ZZC3
20A	Upper Pump Casing	※1	Plastic W/GF	52B	Lower Bearing	1	6302ZZC3
20B	Lower Pump Casing		Plastic	53	Motor Protector	1	
21	Impeller	1	Plastic W/GF	54	Shaft	1	Titanium
23	Strainer	1	Plastic	55	Rotor	1	
25	Mechanical Seal	1	W-14HC	56	Stator	1	
29	Oil Casing	1	Plastic W/GF	60	Bearing Housing	1	Aluminium Die Casting
30	Oil Lifter	1	Plastic	64	Motor Frame	1	Titanium
35	Oil Plug	1	Titanium	106	Float	2	Plastic
36	Lubricant		Liquid Paraffin (ISO VG32)	109	Float Support Pipe	1	Plastic
46	Air Release Valve	1	Glass Ball	114	Power Relay	1	
48	Screwed Flange	1	Plastic W/GF	115	Transfolmer	1	
50	Motor Bracket	1	Aluminium Die Casting				
51	Head Cover	1	Plastic W/GF				

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