

SPECIFICATIONS	Model	50PN2.4S							
		PN-series 0.4kW, 1-phase							
<p>Type of Pump Submersible semi-vortex pump made of 304 stainless steel and resin suitable for pumping wastewater and storm water</p> <p>Type of Fluid Wastewater and water carrying small solid matters</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore 50mm</p> <p>Motor Output 0.4kW</p> <p>Power Supply Single-phase</p> <p>Starting Method Capacitor Run</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 3.2A</td> <td>110V – 5.7A</td> </tr> <tr> <td>230V – 3.1A</td> <td>220V – 2.9A</td> </tr> <tr> <td>240V – 3.0A</td> <td></td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 5m 100 to 240V supply: 1 × 3 × 1.25mm², O.D. 10.1mm</p> <p>Dry Weight (excluding cable) Standard Model: 7.1kg Auto & Auto-Alternation Model: 7.8kg</p>	50Hz	60Hz	220V – 3.2A	110V – 5.7A	230V – 3.1A	220V – 2.9A	240V – 3.0A		<p>Impeller Vortex impeller designed for “high-gap structure”, made of glass-fiber reinforced PPO</p> <p>Solids Passage 50Hz – φ10mm 60Hz – φ10mm</p> <p>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.</p> <p>Bearings Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p>Shaft 304 stainless steel</p> <p>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.</p> <p>Upper Seal Faces: Ceramic + Carbon Lower Seal Faces: SiC + Ceramic</p> <p>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.</p> <p>Type of Lubricating Oil & Volume Liquid Paraffin (ISO VG32), 240ml</p> <p>Motor Protection Device A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p>
50Hz	60Hz								
220V – 3.2A	110V – 5.7A								
230V – 3.1A	220V – 2.9A								
240V – 3.0A									
<p>Optional Accessories</p> <p>TOK Set (Guide Rail Fitting Type)</p> <ul style="list-style-type: none"> • Duckfoot Bend • Guide Support • Guide Hook • Lifting Chain 4m (with Shackles) 									
TSURUMI MANUFACTURING CO., LTD.									

NO. A-09957-2

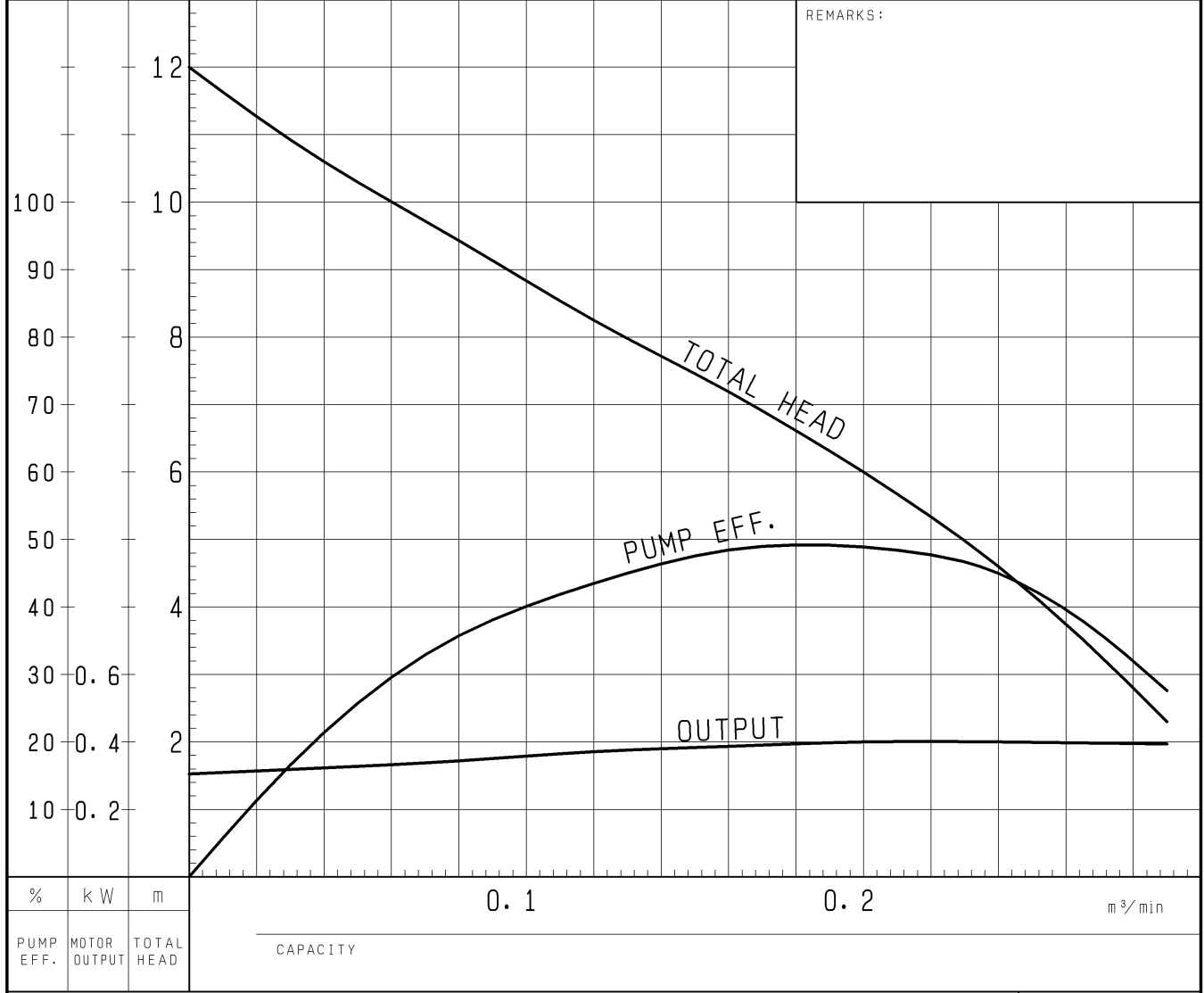
PUMP PERFORMANCE CURVES

TYPE Waste Water Submersible Vortex Pump	MODEL 50PN2.4S -52, 50PNA2.4S -52 50PNW2.4S -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME _____

EQUIPMENT TITLE _____ NO. _____

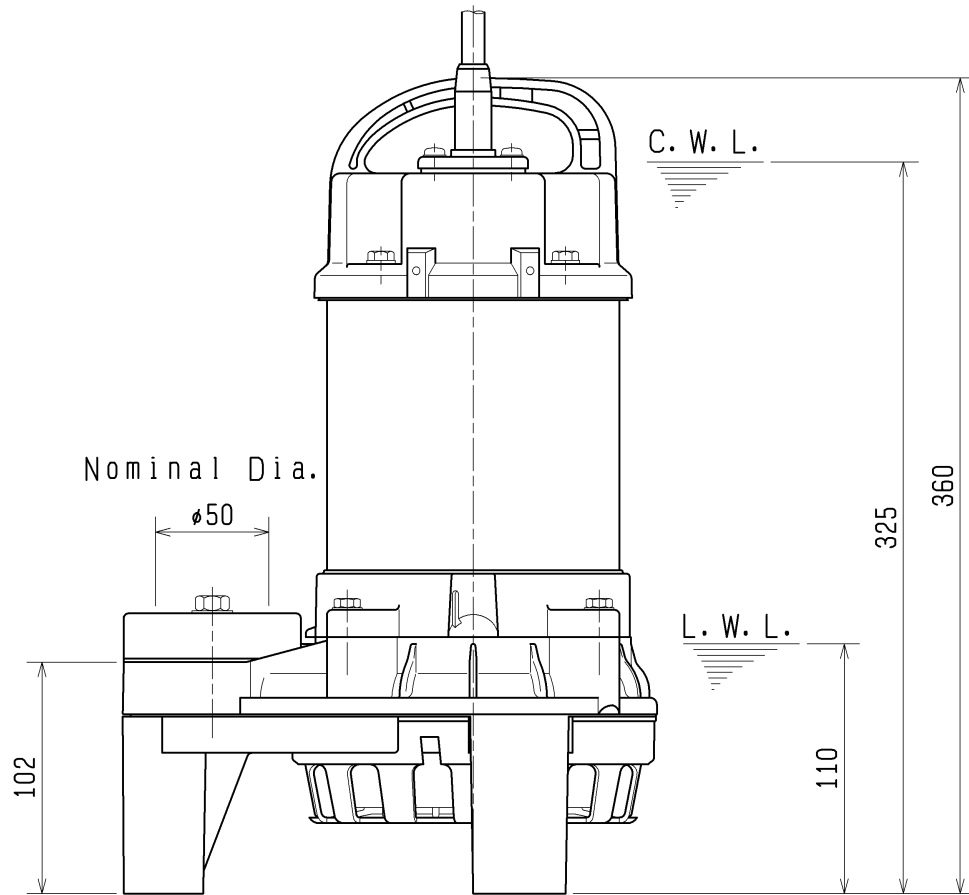
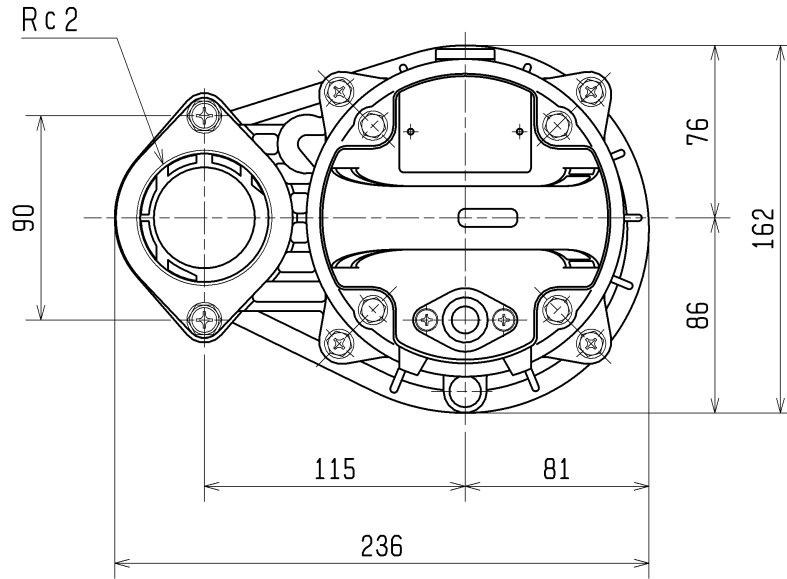
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	9.3 m	m
CAPACITY	0.08 m ³ /min	m ³ /min
MOTOR OUTPUT	0.4 kW	kW
PHASE x VOLTAGE	1 φ × V	φ × V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	CAPACITOR MOTOR	
INSULATION CLASS	E	



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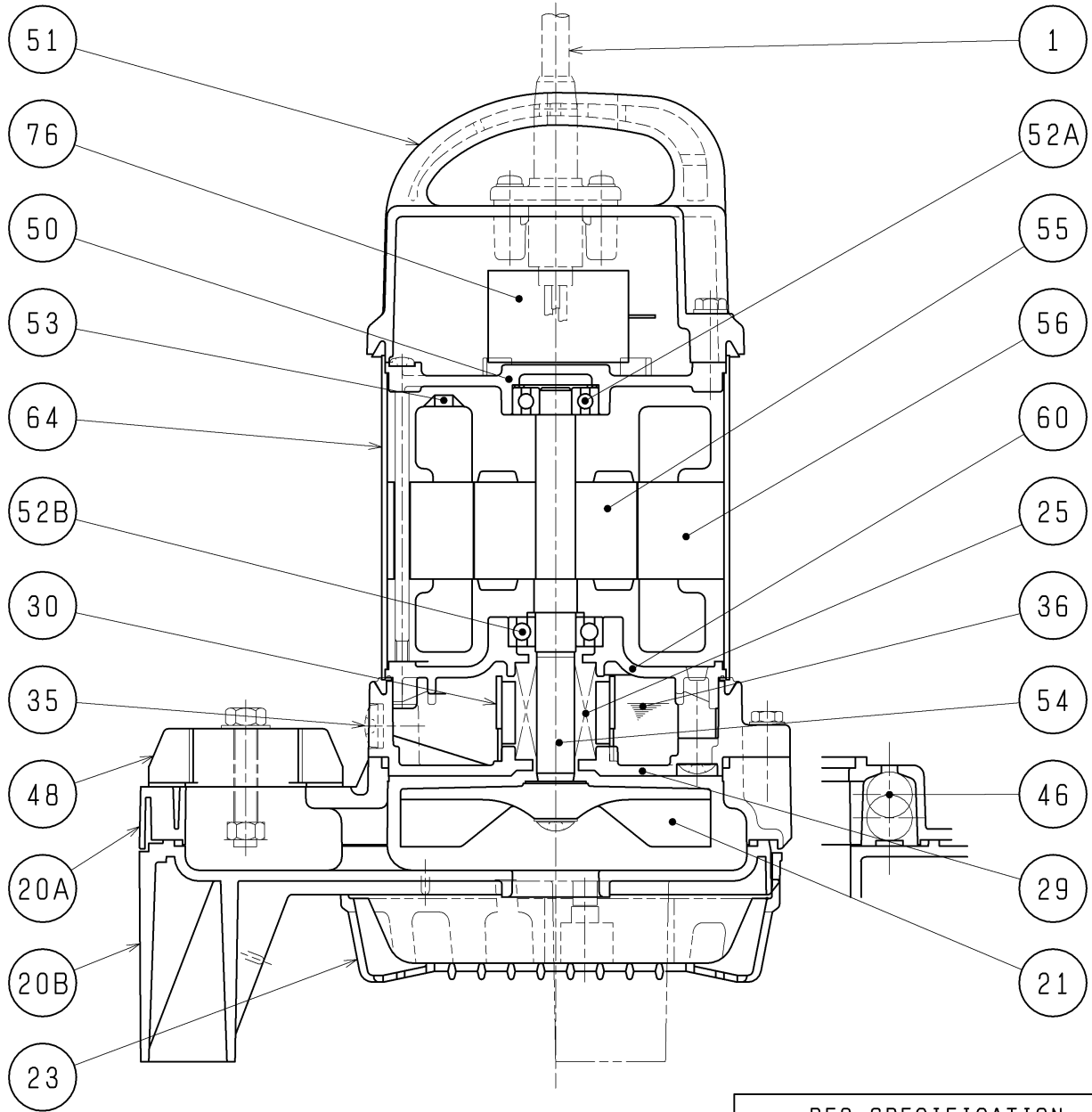
DIMENSION DRAWING		No.	No. A-09995-2
TYPE	Waste Water Submersible Vortex Pump	MODEL	50PN2.4S -52/62

Approximate Weight (※)
7.1kg
※excluding cable



C.W.L. : Continuous running Water Level
L.W.L. : Lowest running Water Level

SECTIONAL DRAWING		No.	No. A-10025-3
TYPE	Waste Water Submersible Vortex Pump	MODEL	40PN2.25S -52/62 50PN2.4S -52/62



REQ. SPECIFICATION	

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

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	51	Head Cover	1	Plastic W/GF
20A	Upper Pump Casing	*1	Plastic W/GF	52A	Upper Bearing	1	6201ZZC3
20B	Lower Pump Casing		Plastic	52B	Lower Bearing	1	6202ZZC3
21	Impeller	1	Plastic W/GF	53	Motor Protector	1	
23	Strainer	1	Plastic	54	Shaft	1	Stainless Steel 304
25	Mechanical Seal	1	W-14HC	55	Rotor	1	
29	Oil Casing	1	Plastic W/GF	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Aluminium Die Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Stainless Steel 304
36	Lubricant		Liquid Paraffin (ISO VG32)	76	Capacitor	1	
46	Air Release Valve	1	Glass Ball				
48	Screwed Flange	1	Plastic W/GF				
50	Motor Bracket	1	Aluminium Die Casting				