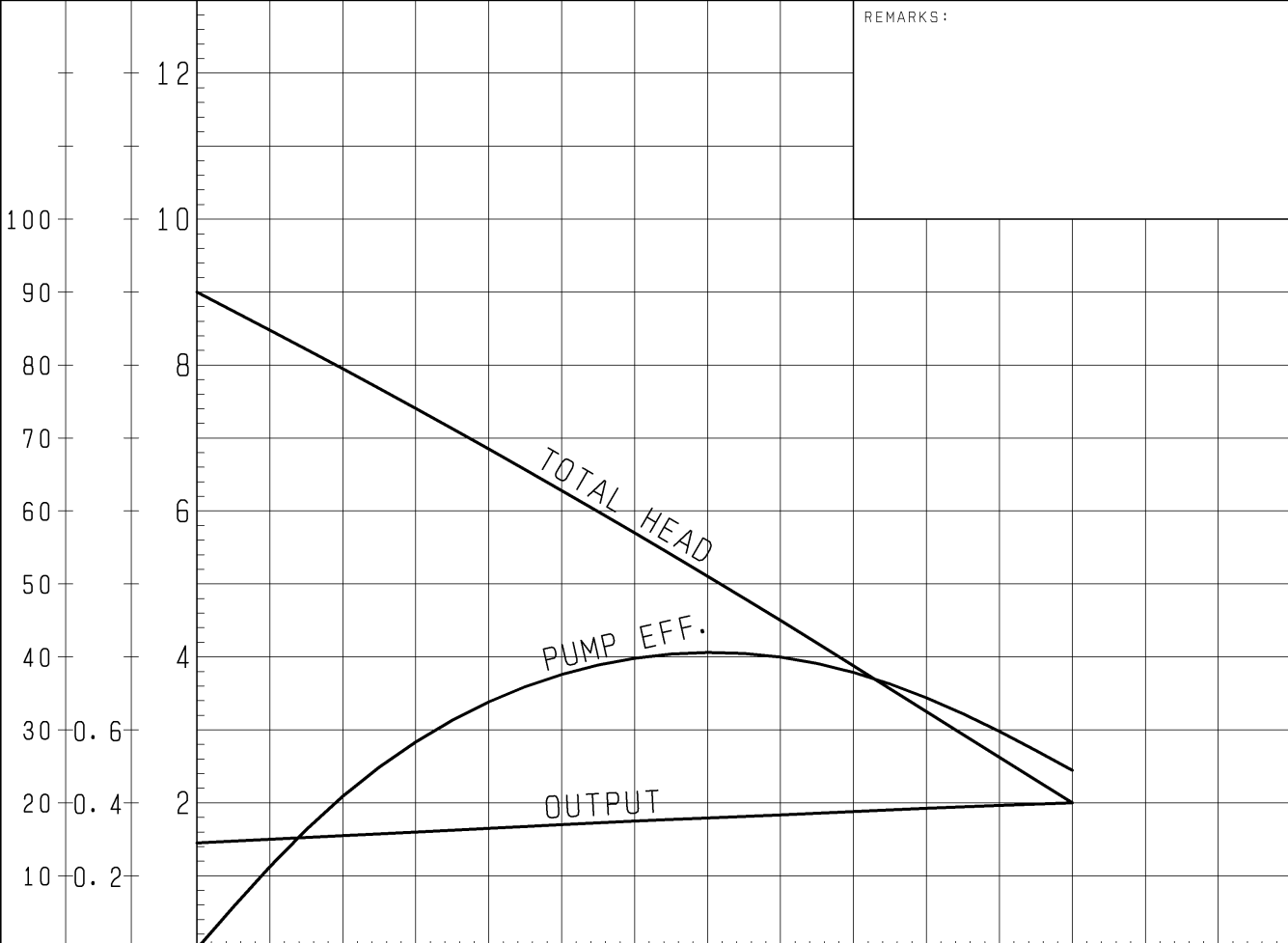
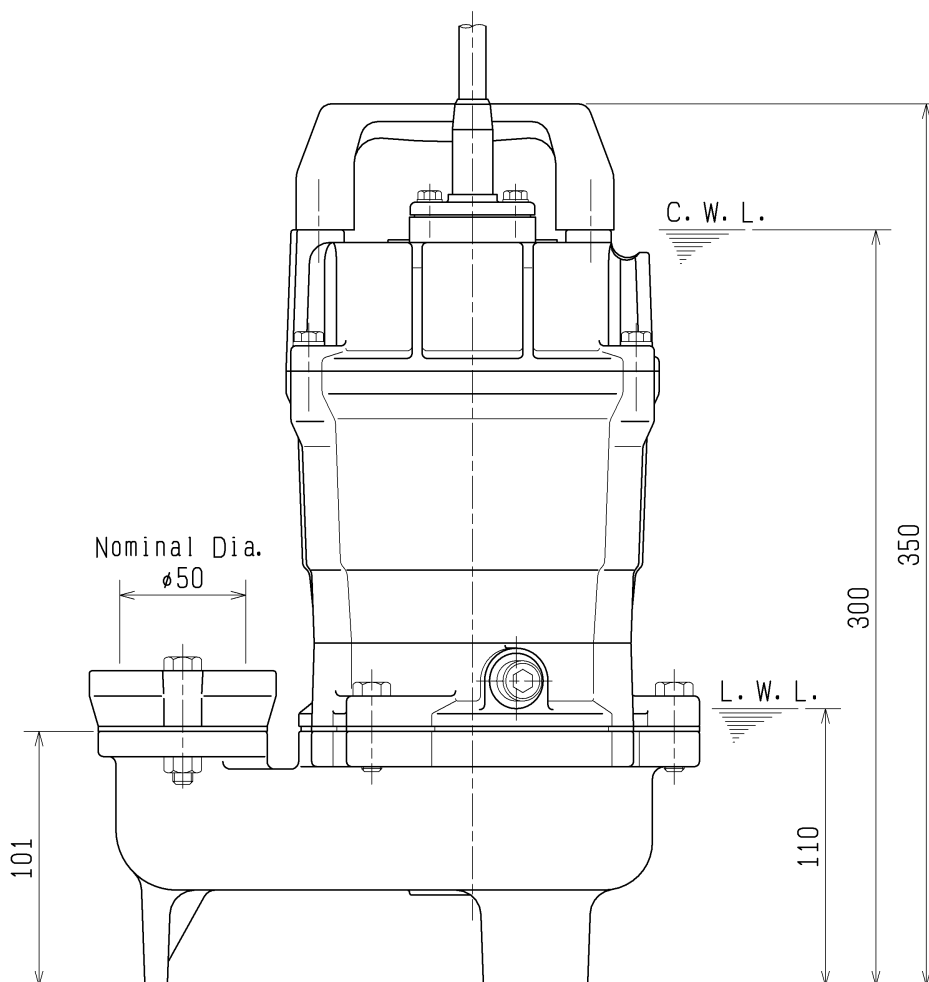
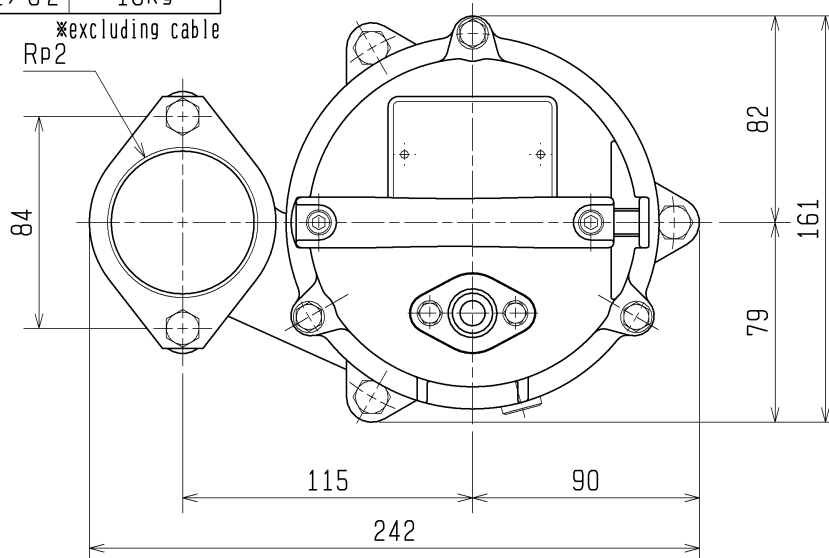


SPECIFICATIONS	Model	50UT2.4	UT-series								
			0.4kW, 3-phase								
<p><b>Type of Pump</b> Submersible cast iron vortex pump suitable for pumping sewage and wastewater</p> <p><b>Type of Fluid</b> Sewage, wastewater, and water carrying solid matters</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore</b> 50mm</p> <p><b>Motor Output</b> 0.4kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 2-pole, 3000/3600min<sup>-1</sup> (50/60Hz)</p> <p>Power Supply Voltages &amp; Rated Currents</p> <table><tr><td>50Hz</td><td>60Hz</td></tr><tr><td>380V – 1.2A</td><td>220V – 2.2 A</td></tr><tr><td>400V – 1.3A</td><td>380V – 1.2 A</td></tr><tr><td>415V – 1.4A</td><td>440V – 1.05A</td></tr></table> <p><b>Power Cable</b> Sheath: PVC Standard Length: 5m 200 to 600V supply: 1 × 4 × 1.25mm<sup>2</sup>, O.D. 11.1mm</p> <p><b>Dry Weight</b> (excluding cable) 13kg</p>		50Hz	60Hz	380V – 1.2A	220V – 2.2 A	400V – 1.3A	380V – 1.2 A	415V – 1.4A	440V – 1.05A	<p><b>Impeller</b> Vortex impeller made of glass-fiber reinforced PPO</p> <p>Solids Passage 50Hz – ϕ35mm 60Hz – ϕ35mm</p> <p><b>Cable Entry with Anti-Wicking Block</b> 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><b>Bearings</b> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 403 stainless steel</p> <p><b>Shaft Seal (Mechanical Seal)</b> 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: Ceramic + Carbon</p> <p><b>OIL LIFTER (Patented)</b> 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 &amp; Volume Turbine Oil (ISO VG32), 160ml</p> <p><b>Motor Protection Device</b> 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.</p>	
50Hz	60Hz										
380V – 1.2A	220V – 2.2 A										
400V – 1.3A	380V – 1.2 A										
415V – 1.4A	440V – 1.05A										
<p><b>Optional Accessories</b></p> <p><b>TOK Set</b> (Guide Rail Fitting Type)</p> <ul style="list-style-type: none"><li>• Duckfoot Bend</li><li>• Guide Support</li><li>• Guide Hook</li><li>• Lifting Chain 4m (with Shackles)</li></ul>											
TSURUMI MANUFACTURING CO., LTD.											

				NO.	A-20678-1																				
PUMP PERFORMANCE CURVES																									
TYPE		Sewage Submersible Vortex Pump		MODEL 50UT2.4 -52																					
				FREQUENCY 50 Hz																					
CUSTOMER'S NAME																									
EQUIPMENT TITLE																									
NO.																									
		STANDARD SPECIFICATIONS		REQUIRED SPECIFICATIONS																					
DISCHARGE BORE		50 mm		mm																					
TOTAL HEAD		MAX. 9.0 m		m																					
CAPACITY		MAX. 0.3 m <sup>3</sup> /min		m <sup>3</sup> /min																					
MOTOR OUTPUT		0.4 kW		kW																					
PHASE x VOLTAGE		3 φ x V		φ x V																					
CURRENT		A		A																					
POLES / REVOLUTION		2 P / S. S. 3000 min <sup>-1</sup>		P / min <sup>-1</sup>																					
STARTING METHOD		DIRECT ON LINE																							
INSULATION CLASS		E																							
				REMARKS:																					
 <p>The graph displays three performance curves for the pump. The x-axis represents Capacity in m<sup>3</sup>/min, ranging from 0 to 0.3. The left y-axis represents Head in meters (m) and Efficiency in percent (%), ranging from 0 to 12. The right y-axis represents Motor Output in kW, ranging from 0 to 1.0. The 'TOTAL HEAD' curve starts at approximately 9.0 m at 0 capacity and decreases linearly to about 2.5 m at 0.3 m<sup>3</sup>/min. The 'PUMP EFF.' curve starts at 0, peaks at approximately 4.2% efficiency at a capacity of about 0.18 m<sup>3</sup>/min, and then decreases. The 'OUTPUT' curve starts at approximately 0.15 kW at 0 capacity and increases slightly to about 0.2 kW at 0.3 m<sup>3</sup>/min.</p> <table border="1"><thead><tr><th>CAPACITY (m<sup>3</sup>/min)</th><th>TOTAL HEAD (m)</th><th>PUMP EFF. (%)</th><th>OUTPUT (kW)</th></tr></thead><tbody><tr><td>0.0</td><td>9.0</td><td>0.0</td><td>0.15</td></tr><tr><td>0.1</td><td>7.5</td><td>3.5</td><td>0.16</td></tr><tr><td>0.2</td><td>6.0</td><td>4.2</td><td>0.17</td></tr><tr><td>0.3</td><td>2.5</td><td>3.0</td><td>0.20</td></tr></tbody></table>				CAPACITY (m <sup>3</sup> /min)	TOTAL HEAD (m)	PUMP EFF. (%)	OUTPUT (kW)	0.0	9.0	0.0	0.15	0.1	7.5	3.5	0.16	0.2	6.0	4.2	0.17	0.3	2.5	3.0	0.20		
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TSURUMI MFG. CO., LTD.																									

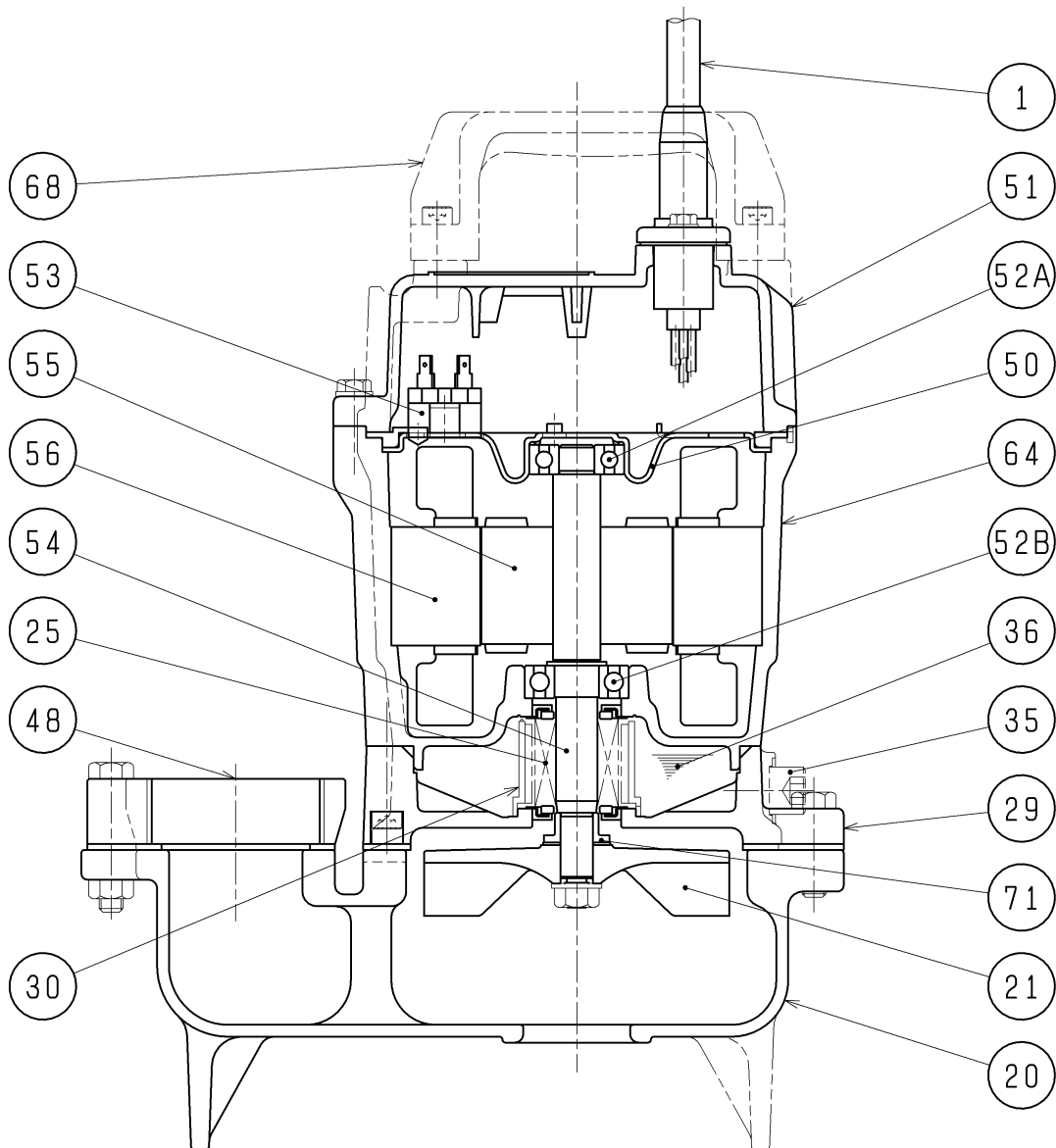
DIMENSION DRAWING		No.	No.	A-20690-1
TYPE	Sewage Submersible Vortex Pump	MODEL	5OUT2.4S -52/62 5OUT2.4 -52/62	

MODEL	Approximate Weight (kg)
5OUT2.4S-52/62	13.5kg
5OUT2.4 -52/62	13kg



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

SECTIONAL DRAWING		No.	No.	A-20699-2
TYPE	Sewage Submersible Vortex Pump	MODEL	50UT2.4 -52/62	



#### REQ. SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	52A	Upper Bearing	1	6201ZZC3
20	Pump Casing	1	Gray Iron Casting	52B	Lower Bearing	1	6202ZZC3
21	Impeller	1	Plastic W/GF	53	Motor Protector	1	
25	Mechanical Seal	1	W-14VCA	54	Shaft	1	Stainless Steel 403
29	Oil Casing	1	Gray Iron Casting	55	Rotor	1	
30	Oil Lifter	1	Plastic	56	Stator	1	
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
36	Lubricant		Turbine Oil (ISO VG32)	68	Handle	1	Plastic
48	Screwed Flange	1	Gray Iron Casting	71	Shaft Sleeve	1	Stainless Steel 304
50	Motor Bracket	1	Steel Sheet				
51	Head Cover	1	Gray Iron Casting				