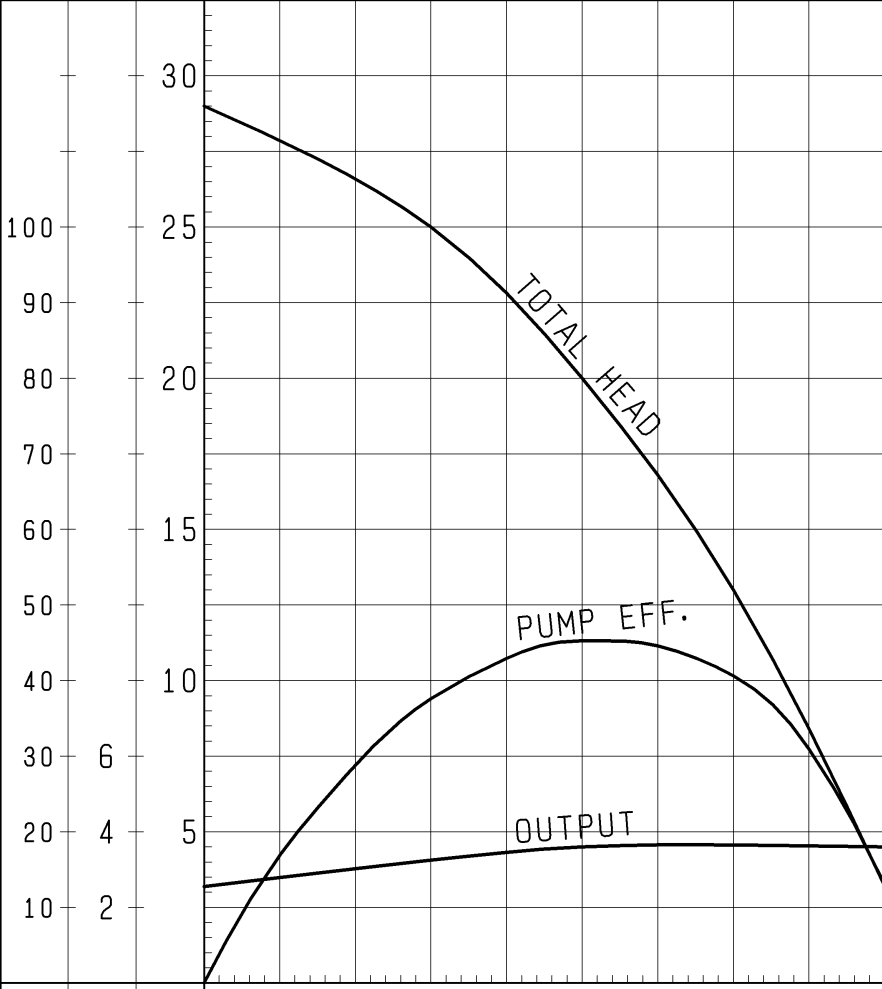
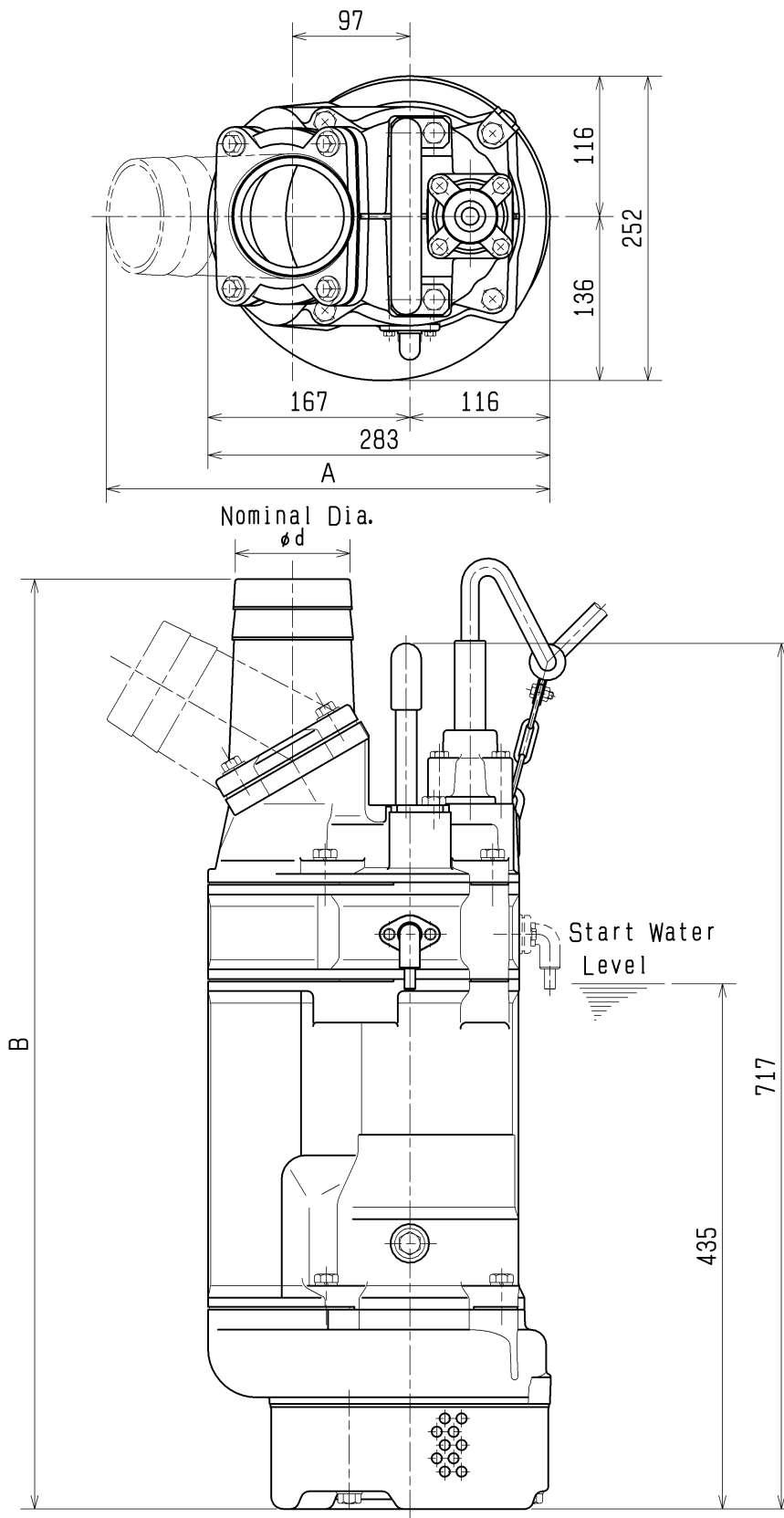


SPECIFICATIONS	Model	KTZE33.7	KTZE-series								
			3.7kW, 3-phase								
<p>Type of Pump Submersible automatic high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p>Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore & Connection 80mm, Hose Coupling</p> <p>Motor Output 3.7kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: F 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><tr><td>50Hz</td><td>60Hz</td></tr><tr><td>380V – 8.0A</td><td>220V – 13.8A</td></tr><tr><td>400V – 7.7A</td><td>380V – 8.2A</td></tr><tr><td>415V – 7.5A</td><td>440V – 7.2A</td></tr></table> <p>Power Cable Sheath: Chloroprene rubber Standard Length: 8m 200 to 600V supply: 1 x 4 x 2.0mm², O.D. 14.4mm</p> <p>Dry Weight (excluding cable) 69kg</p>		50Hz	60Hz	380V – 8.0A	220V – 13.8A	400V – 7.7A	380V – 8.2A	415V – 7.5A	440V – 7.2A	<p>Impeller Semi-open Impeller made of high-chromium cast iron</p> <p>Solids Passage 50Hz – ϕ8.5mm 60Hz – ϕ8.5mm</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>Bearing Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p>Shaft 420 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 Face: SiC + SiC Lower Seal Face: SiC + SiC</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</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 Turbine Oil (ISO VG32), 1250ml</p> <p>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.</p>	
50Hz	60Hz										
380V – 8.0A	220V – 13.8A										
400V – 7.7A	380V – 8.2A										
415V – 7.5A	440V – 7.2A										
<p>Optional Accessory</p> <p>Extension Electrode</p>											
TSURUMI MANUFACTURING CO., LTD.											

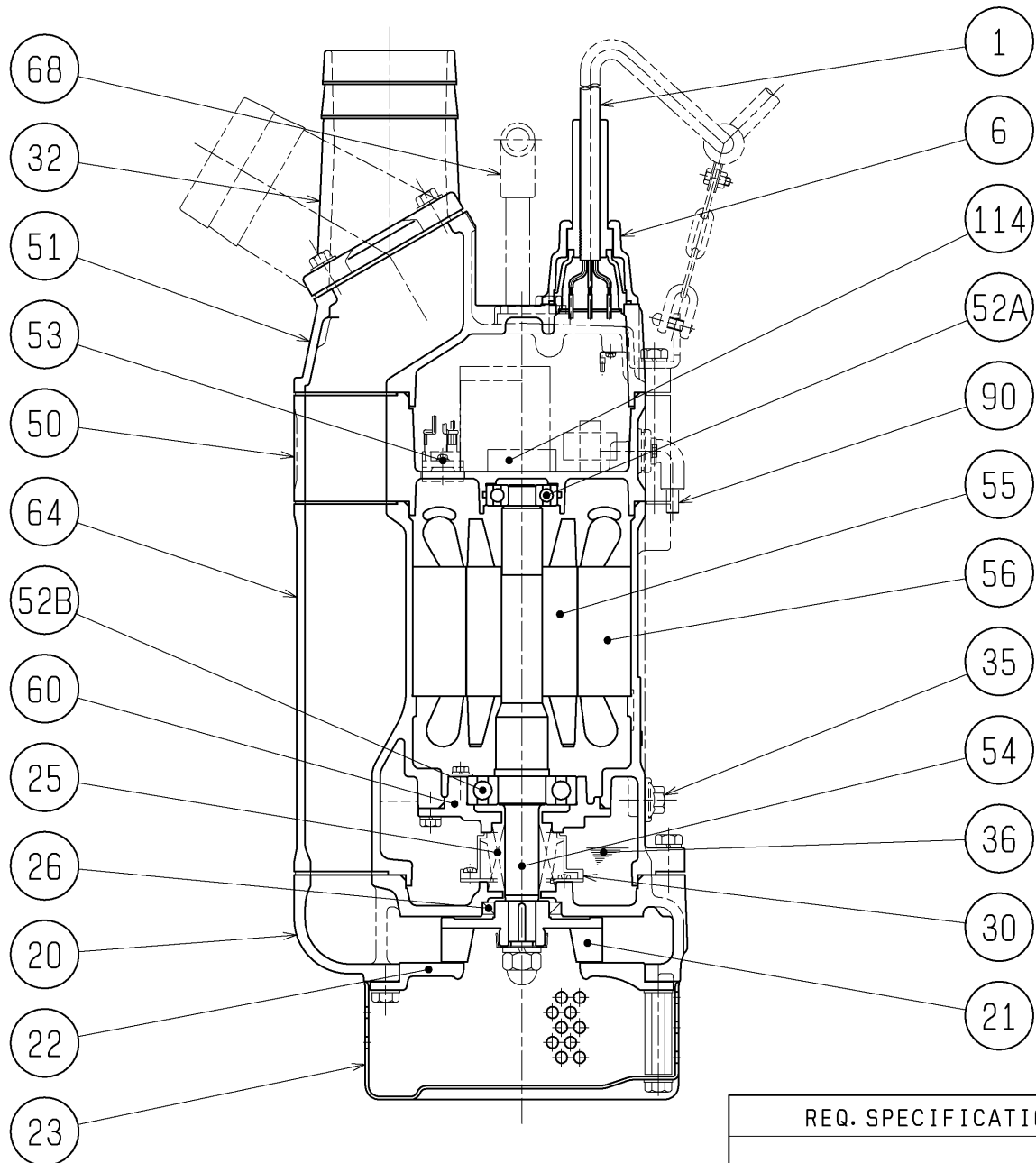
		NO.		A-21041-1																																	
PUMP PERFORMANCE CURVES																																					
TYPE		SUBMERSIBLE GENERAL DEWATERING PUMP		MODEL																																	
		KTZE33.7 -51		FREQUENCY																																	
				50 Hz																																	
CUSTOMER'S NAME																																					
EQUIPMENT TITLE																																					
NO.																																					
		STANDARD SPECIFICATIONS		REQUIRED SPECIFICATIONS																																	
DISCHARGE BORE		80 mm		mm																																	
TOTAL HEAD		MAX. 29 m		m																																	
CAPACITY		MAX. 0.9 m ³ /min		m ³ /min																																	
MOTOR OUTPUT		3.7 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		F																																			
				REMARKS:																																	
 <p>The graph plots three performance metrics against capacity (m³/min). The y-axis has three scales: Total Head (m) from 10 to 30, Pump Efficiency (%) from 20 to 100, and Motor Output (kW) from 1 to 10. The x-axis ranges from 0 to 1.2 m³/min. The 'TOTAL HEAD' curve starts at approximately 29 m at 0 capacity and decreases to about 12 m at 0.9 m³/min. The 'PUMP EFF.' curve starts at 0% at 0 capacity, peaks at about 45% efficiency at 0.5 m³/min, and then declines. The 'OUTPUT' curve starts at about 1.5 kW at 0 capacity and rises to a plateau of approximately 4.5 kW between 0.6 and 0.9 m³/min.</p> <table border="1"><caption>Approximate data points from the performance curves</caption><thead><tr><th>Capacity (m³/min)</th><th>Total Head (m)</th><th>Pump Efficiency (%)</th><th>Motor Output (kW)</th></tr></thead><tbody><tr><td>0.0</td><td>29</td><td>0</td><td>1.5</td></tr><tr><td>0.2</td><td>26</td><td>30</td><td>2.5</td></tr><tr><td>0.4</td><td>22</td><td>40</td><td>3.5</td></tr><tr><td>0.5</td><td>19</td><td>45</td><td>4.0</td></tr><tr><td>0.6</td><td>16</td><td>42</td><td>4.5</td></tr><tr><td>0.8</td><td>12</td><td>30</td><td>4.5</td></tr><tr><td>0.9</td><td>12</td><td>25</td><td>4.5</td></tr></tbody></table>				Capacity (m³/min)	Total Head (m)	Pump Efficiency (%)	Motor Output (kW)	0.0	29	0	1.5	0.2	26	30	2.5	0.4	22	40	3.5	0.5	19	45	4.0	0.6	16	42	4.5	0.8	12	30	4.5	0.9	12	25	4.5		
Capacity (m³/min)	Total Head (m)	Pump Efficiency (%)	Motor Output (kW)																																		
0.0	29	0	1.5																																		
0.2	26	30	2.5																																		
0.4	22	40	3.5																																		
0.5	19	45	4.0																																		
0.6	16	42	4.5																																		
0.8	12	30	4.5																																		
0.9	12	25	4.5																																		
CAPACITY																																					
PUMP EFF.																																					
MOTOR OUTPUT																																					
TOTAL HEAD																																					
TSURUMI MFG. CO., LTD.																																					

D I M E N S I O N D R A W I N G		No.		No.	A-21046-1
TYPE	SUBMERSIBLE GENERAL DEWATERING PUMP	MODEL	KTZE23.7 -51/61, KTZE33.7 -51/61 KTZE43.7 -51/61		



				*excluding cable	
MODEL	d	A	B	Approximate Weight (※)	
KTZE23. 7-51/61	50	342	755	69kg	
KTZE33. 7-51/61	80	347	755	69kg	
KTZE43. 7-51/61	100	367	770	69kg	

SECTIONAL DRAWING		No.	No.	A-21048-2
TYPE	SUBMERSIBLE GENERAL DEWATERING PUMP	MODEL	KTZE23.7 -51/61, KTZE33.7 -51/61 KTZE43.7 -51/61	



REQ. SPECIFICATION

※ the wetted part

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath	52A	Upper Bearing	1	6304ZZC3
6	Stuffing Box	1	Gray Iron Casting	52B	Lower Bearing	1	6307ZZC3
20	Pump Casing	1	Gray Iron Casting	53	Motor Protector	1	
21	Impeller	1	Chromium Iron Casting	54	Shaft	1	Stainless Steel 420J2(※)
22	Suction Cover	1	Ductile Iron Casting	55	Rotor	1	
23	Strainer Stand	1	Steel Sheet	56	Stator	1	
25	Mechanical Seal	1	H-25T	60	Bearing Housing	1	Gray Iron Casting
26	Oil Seal	1	TC40588	64	Motor Frame	1	Gray Iron Casting
30	Oil Lifter	1	Plastic	68	Handle	1	Carbon Steel Pipe & Structure Steel
32	Hose Coupling	1	Aluminium Die Casting	90	Level Sensor(Electrode)	1	
35	Oil Plug	1	Stainless Steel 304	114	Relay Unit	1	
36	Lubricant		Turbine Oil (ISO VG32)				
50	Motor Bracket	1	Gray Iron Casting				
51	Head Cover	1	Gray Iron Casting				