

SPECIFICATIONS	Model	KTZ411							
		KTZ-series 11kW, 3-phase							
<p><b>Type of Pump</b> Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C (High temperature model available on special request)</p> <p><b>Discharge Bore &amp; Connection</b> 100mm, Hose Coupling</p> <p><b>Motor Output</b> 11kW</p> <p><b>Power Supply</b> Three-phase</p> <p><b>Starting Method</b> Direct on Line (Star-Delta available on special request)</p> <p><b>Motor</b> Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: F 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 border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>380V – 22.5A</td> <td>220V – 38.4A</td> </tr> <tr> <td>400V – 22.0A</td> <td>380V – 21.7A</td> </tr> <tr> <td>415V – 21.6A</td> <td>440V – 19.2A</td> </tr> </table> <p><b>Power Cable</b> Sheath: Chloroprene rubber Standard Length: 8m 380 to 600V supply: 1 x 4 x 5.5mm<sup>2</sup>, O.D. 19.8mm 200 to 240V supply: 1 x 4 x 8.0mm<sup>2</sup>, O.D. 21.7mm</p> <p><b>Dry Weight</b> (excluding cable) 130kg</p>	50Hz	60Hz	380V – 22.5A	220V – 38.4A	400V – 22.0A	380V – 21.7A	415V – 21.6A	440V – 19.2A	<p><b>Impeller</b> Semi-open Impeller made of high-chromium cast iron</p> <p>Solids Passage 50Hz – <math>\phi</math>12mm 60Hz – <math>\phi</math>12mm</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>Bearing</b> Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p><b>Shaft</b> 420 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 Face: SiC + SiC Lower Seal Face: SiC + SiC</p> <p><b>Pressure Relief Port</b> Protects the mechanical seal from over rated limits, and also protects the seal faces from abrasive particles by drawing particles away.</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), 760ml</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 – 22.5A	220V – 38.4A								
400V – 22.0A	380V – 21.7A								
415V – 21.6A	440V – 19.2A								

NO. A-21609-1T

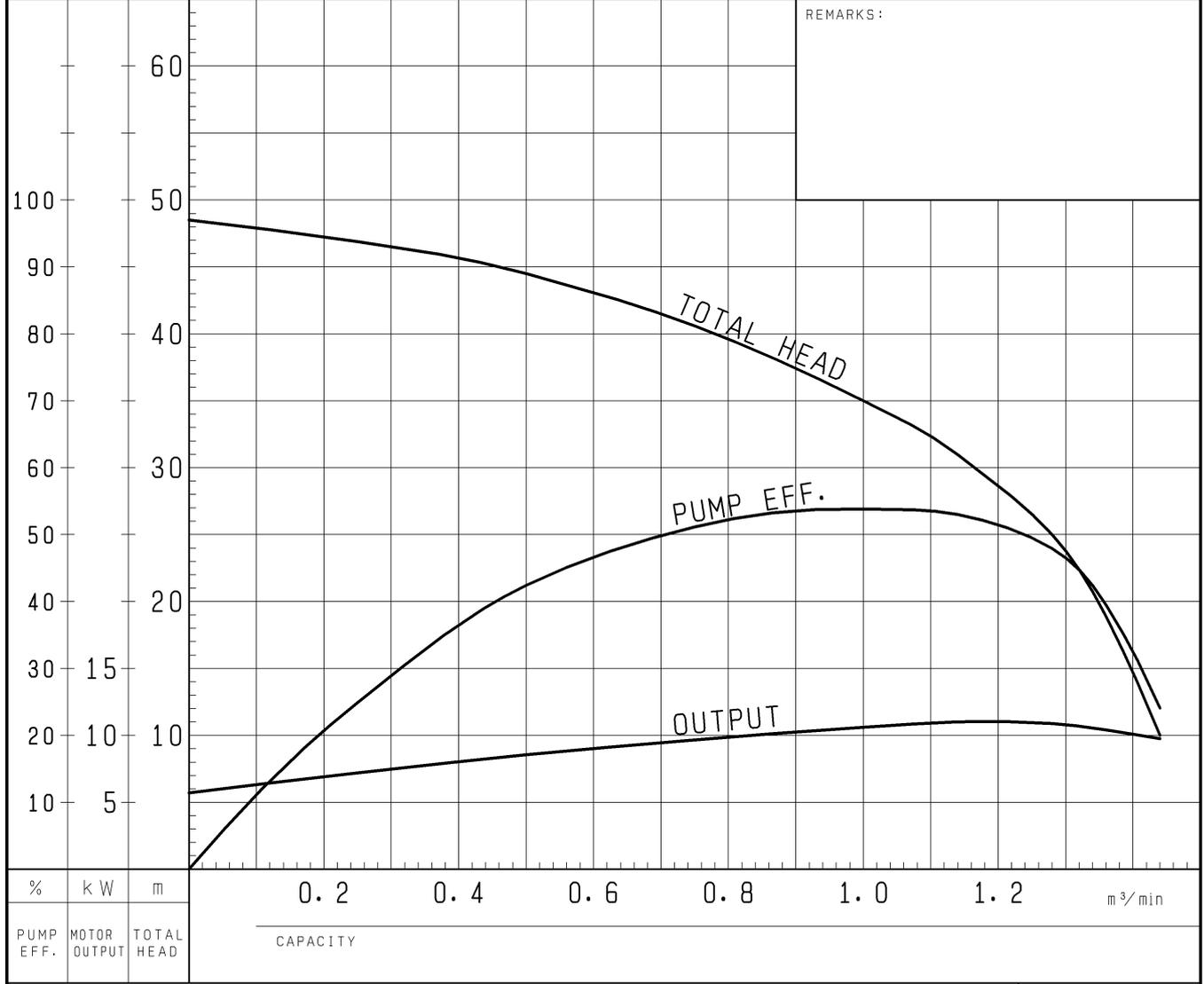
# PUMP PERFORMANCE CURVES

TYPE SUBMERSIBLE GENERAL DEWATERING PUMP	MODEL KTZ411 -53	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

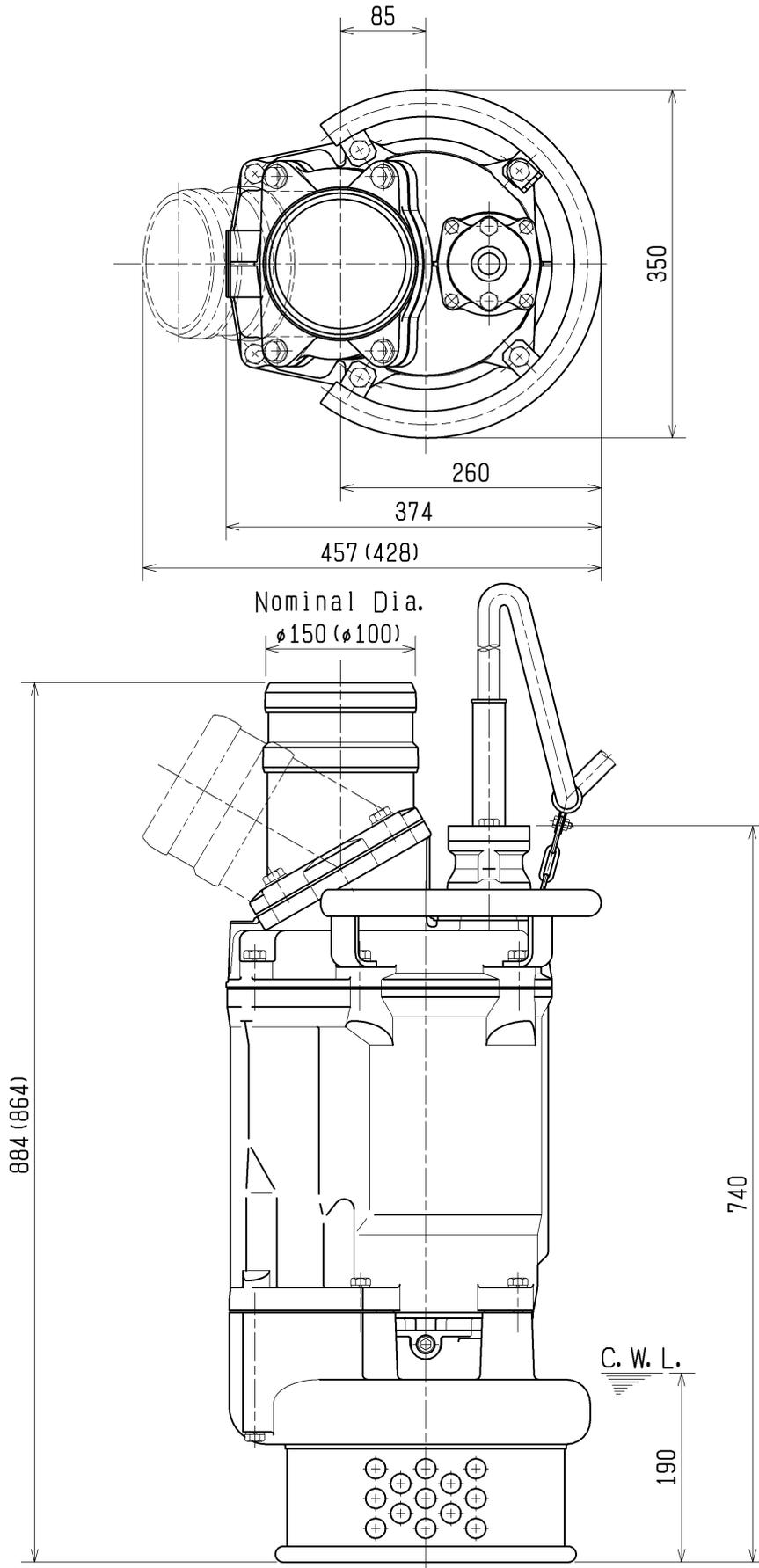
EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	100 mm	mm
TOTAL HEAD	MAX. 48.5 m	m
CAPACITY	MAX. 1.44 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	11 kW	kW
PHASE x VOLTAGE	3 $\phi$ x V	$\phi$ 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	F	



TSURUMI MFG. CO., LTD.

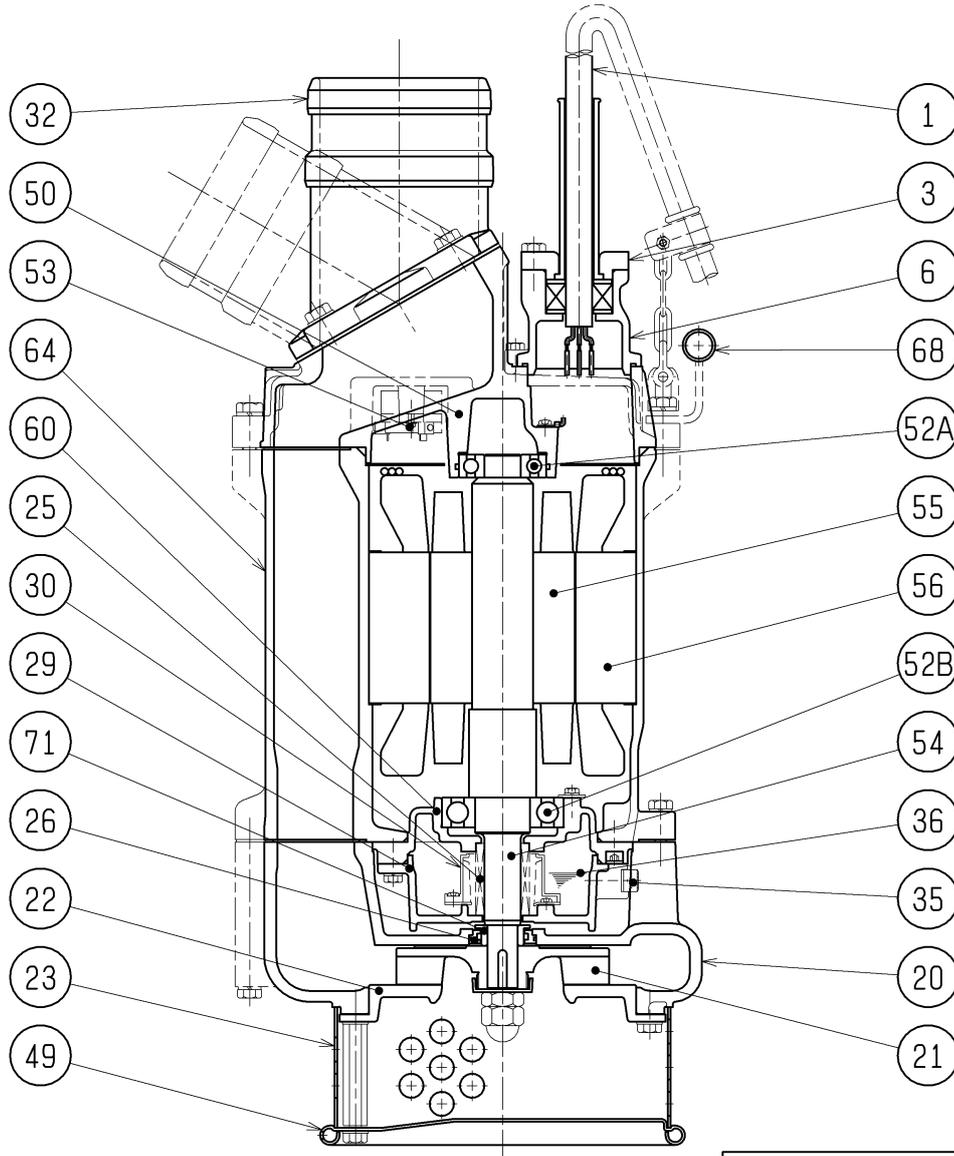
<b>DIMENSION DRAWING</b>		No.	No. A-21613-1T
TYPE	SUBMERSIBLE GENERAL DEWATERING PUMP	MODEL	KTZ411 -53/63 KTZ611 -53/63



The Figure in ( ) shows the dimensions of KTZ411.

C. W. L. :Continuous running Water Level

<b>SECTIONAL DRAWING</b>		No.	No. A-21614-1T
TYPE	SUBMERSIBLE GENERAL DEWATERING PUMP	MODEL	KTZ411 -53/63 KTZ611 -53/63



REQ. SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	1	Chloroprene Sheath	49	Bottom Plate	1	Steel Sheet
3	Gland	1	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
6	Stuffing Box	1	Gray Iron Casting	52A	Upper Bearing	1	6306ZZC3
20	Pump Casing	1	Gray Iron Casting	52B	Lower Bearing	1	6309ZZC3
21	Impeller	1	Chromium Iron Casting	53	Motor Protector	1	
22	Suction Cover	1	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
23	Strainer	1	Steel Sheet	55	Rotor	1	
25	Mechanical Seal	1	H-30T	56	Stator	1	
26	Labyrinth Ring	1	Stainless Steel 304	60	Bearing Housing	1	Gray Iron Casting
29	Oil Casing	1	Gray Iron Casting	64	Motor Frame	1	Gray Iron Casting
30	Oil Lifter	1	Plastic	68	Handle	1	Carbon Steel Pipe & Structure Steel
32	Hose Coupling	1	Gray Iron Casting	71	Shaft Sleeve	1	Stainless Steel 403
35	Oil Plug	1	Stainless Steel 304				
36	Lubricant		Turbine Oil (ISO VG32)				