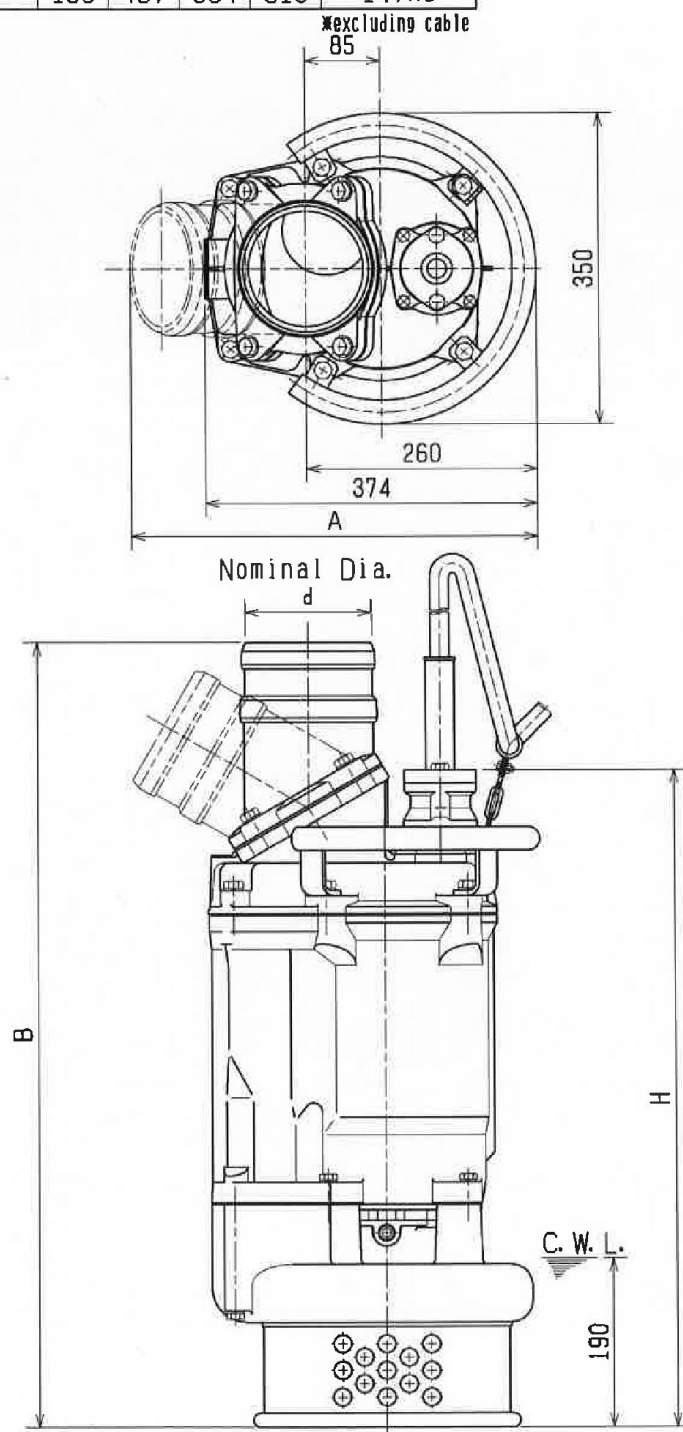


SPECIFICATIONS	Model	KTZ615	KTZ-series
			15kW, 3-phase
Type of Pump Submersible high head drainage pump for construction and foundation works, floodwater drainage, etc.	Impeller Semi-open impeller made of high-chromium cast iron		
Type of Fluid Stormwater, groundwater, wash water, and sand-carrying water	Solids Passage 50Hz- ϕ 20mm 60Hz- ϕ 20mm		
Temperature: 0 to 40°C	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.		
Discharge Bore & Connection 150mm, Multi-directional Hose Coupling	Bearing Permanently lubricated; deep-groove, double-shielded C3 ball bearings		
Motor Output 15kW	Shaft 420 stainless steel		
Power Supply Three-phase	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.		
Starting Method Direct on Line (Star-Delta available on special request)	Upper Seal Face: SiC + SiC Lower Seal Face: SiC + SiC		
Motor Continuous-duty rated, dry-type induction motor	Labyrinth Ring Made of 304 stainless steel, equipped to provide a better countermeasure against wear caused by high pressure generated in the casing.		
Insulation Class: F Degree of Protection: IP68	Pressure Relief Ports Protect the mechanical seal against excessive pressure, and also protect the seal faces from abrasive particles by drawing the particles away.		
No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min ⁻¹ (50/60Hz)	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.		
Power Supply Voltages & Rated Currents 50Hz 380V – 29.5A 400V – 28.3A 415V – 27.4A	Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 820ml		
Power Cable Sheath: Chloroprene rubber Standard Length: 8m 380 to 600V supply: 1 x 4 x 5.5mm ² , O.D. 19.8mm	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.		
Dry Weight (excluding cable) 147kg			
TSURUMI MANUFACTURING CO., LTD.			

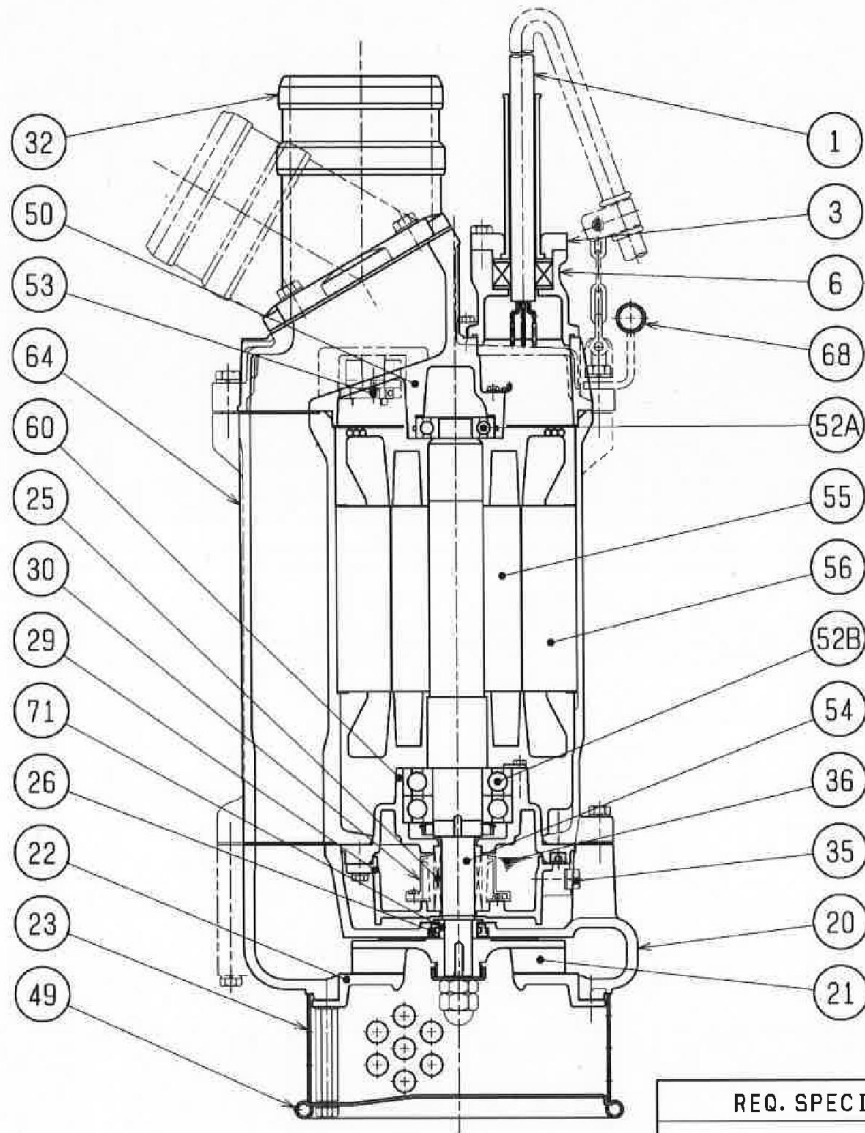
DIMENSION DRAWING			No.	No.
TYPE	Submersible Dewatering Pump		MODEL	KTZ411 -53/63 KTZ415 -51 KTZ611 -53/63 KTZ615 -51

MODEL	d	A	B	H	Approximate Weight (※)
KTZ411-53/63	100	428	864	740	133kg
KTZ611-53/63	150	457	884	740	133kg
KTZ415-51	100	428	934	810	146kg
KTZ615-51	150	457	954	810	147kg



C. W. L. :Continuous running Water Level

SECTIONAL DRAWING		No.	No.
TYPE	Submersible Dewatering Pump	MODEL	KTZ415 -51 KTZ615 -51



REQ. SPECIFICATION

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	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	6309ZZD2C3
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)				

PUMP PERFORMANCE CURVES			
TYPE Submersible Dewatering Pump	MODEL KTZ615 -51 FREQUENCY 50 Hz		
CUSTOMER'S NAME _____ EQUIPMENT TITLE _____ NO. _____			
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS	
DISCHARGE BORE	150 mm	mm	
TOTAL HEAD	MAX. 39.5 m	m	
CAPACITY	MAX. 2.8 m ³ /min	m ³ /min	
MOTOR OUTPUT	15 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		
<div style="float: right; width: 20%;">REMARKS:</div> <p>The graph plots three performance metrics against capacity (m³/min) on the x-axis (0 to 2.8). The left y-axis has two scales: meters (0-60) and kilowatts (0-15). The right y-axis has a scale for percentage (0-100). The 'TOTAL HEAD' curve starts at 39.5m and decreases. The 'PUMP EFF.' curve starts at 0%, peaks at ~60% efficiency (15 kW) at 1.6 m³/min, and then declines. The 'OUTPUT' curve starts at ~5 kW and rises to ~15 kW at 2.8 m³/min.</p>			
%	kW	m	
PUMP EFF.	MOTOR OUTPUT	TOTAL HEAD	CAPACITY
TSURUMI MFG. CO., LTD.			