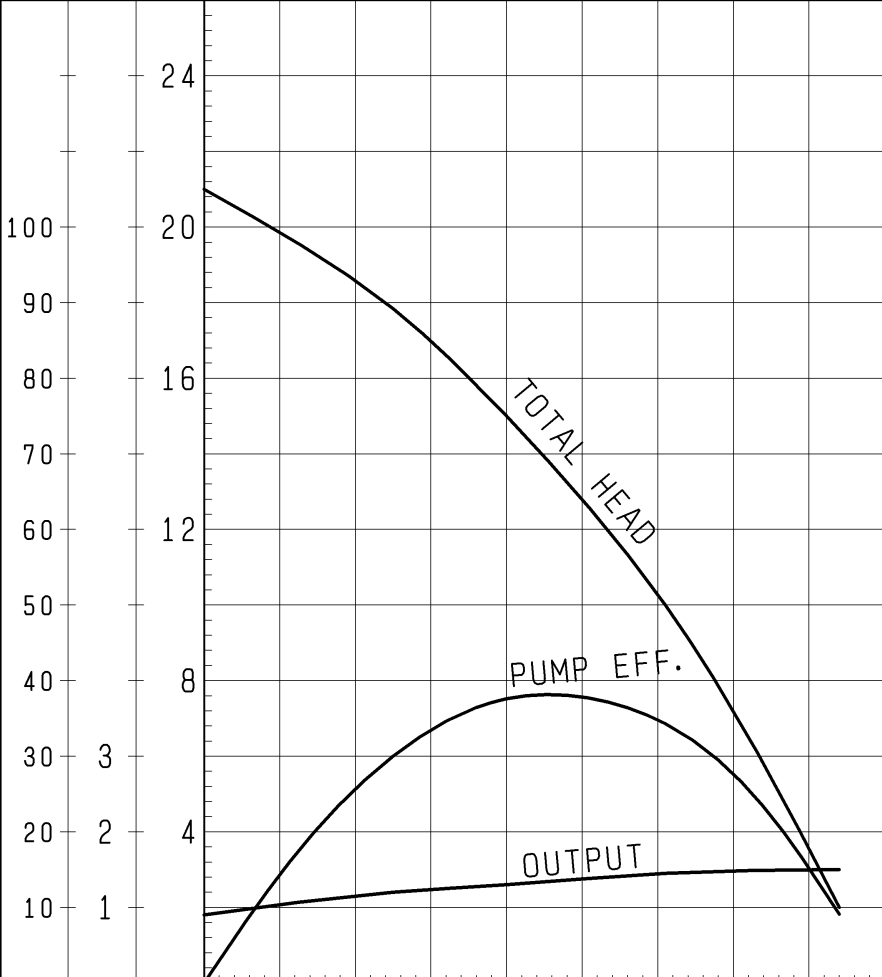


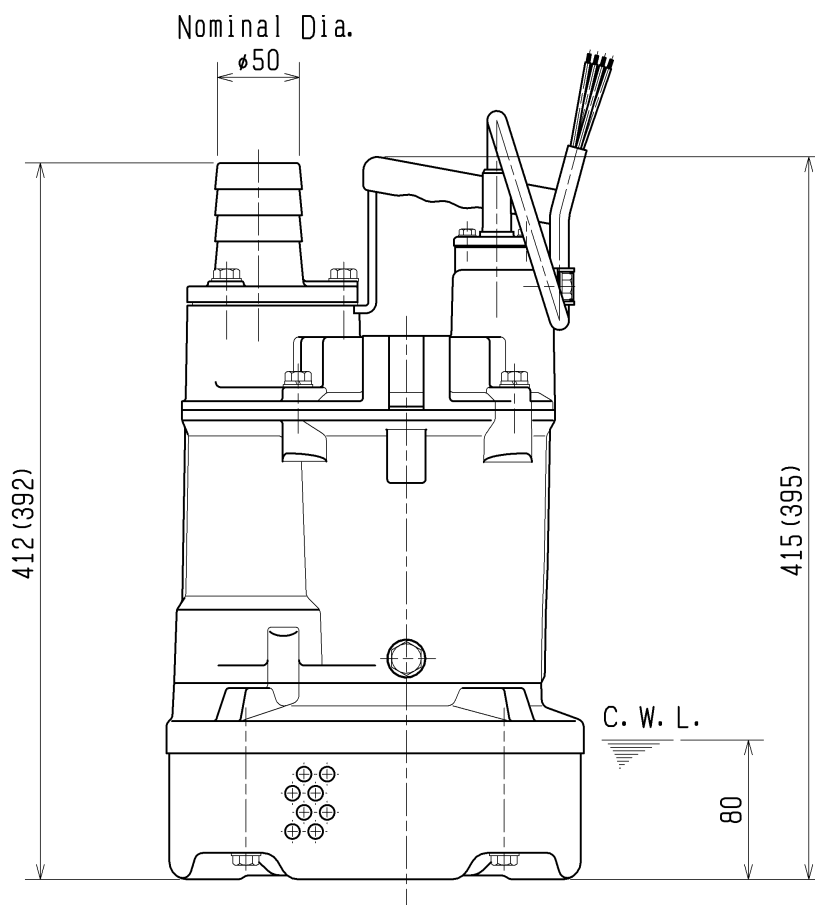
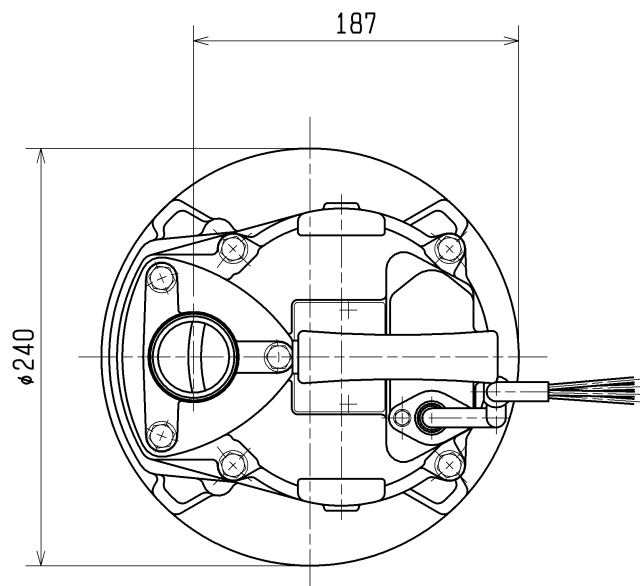
SPECIFICATIONS	Model	KTV2-15	KTV-series								
			1.5kW, 3-phase								
<p><b>Type of Pump</b> Submersible drainage pump for construction and foundation works, floodwater drainage, etc.</p> <p><b>Type of Fluid</b> Stormwater, groundwater, wash water, and sand-carrying water</p> <p>Temperature: 0 to 40°C</p> <p><b>Discharge Bore &amp; Connection</b> 50mm, Hose Coupling (80mm discharge bore available on special request)</p> <p><b>Motor Output</b> 1.5kW</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 – 3.4A</td><td>220V – 5.6A</td></tr><tr><td>400V – 3.3A</td><td>380V – 3.3A</td></tr><tr><td>415V – 3.2A</td><td>440V – 2.8A</td></tr></table> <p><b>Power Cable</b> Sheath: PVC Standard Length: 8m 200 to 600V supply: 1 x 4 x 1.25mm<sup>2</sup>, O.D. 11.1mm</p> <p><b>Dry Weight</b> (excluding cable) 21kg</p>		50Hz	60Hz	380V – 3.4A	220V – 5.6A	400V – 3.3A	380V – 3.3A	415V – 3.2A	440V – 2.8A	<p><b>Impeller</b> Vortex impeller deigned for “high-gap structure”, made of ductile cast iron</p> <p>Solids Passage 50Hz – ϕ8.5mm 60Hz – ϕ8.5mm</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> 403 stainless steel</p> <p><b>Shaft Seal</b> (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><b>OIL LIFTER</b> (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 &amp; Volume Turbine Oil (ISO VG32), 270ml</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 – 3.4A	220V – 5.6A										
400V – 3.3A	380V – 3.3A										
415V – 3.2A	440V – 2.8A										
TSURUMI MANUFACTURING CO., LTD.											

		NO.		A-15436-2																													
PUMP PERFORMANCE CURVES																																	
TYPE		Submersible Dewatering Pump		MODEL KTV2-15																													
				FREQUENCY 60 Hz																													
CUSTOMER'S NAME																																	
EQUIPMENT TITLE																																	
NO.																																	
		STANDARD SPECIFICATIONS		REQUIRED SPECIFICATIONS																													
DISCHARGE BORE		50 mm		mm																													
TOTAL HEAD		15 m		m																													
CAPACITY		0.2 m <sup>3</sup> /min		m <sup>3</sup> /min																													
MOTOR OUTPUT		1.5 kW		kW																													
PHASE × VOLTAGE		3 φ × V		φ × V																													
CURRENT		A		A																													
POLES / REVOLUTION		2 P / S. S. 3600 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 KTV2-15 pump. The x-axis represents Capacity in m<sup>3</sup>/min, ranging from 0 to 0.5. The left y-axis has two scales: Total Head in meters (m) from 10 to 24, and Motor Output in kilowatts (kW) from 1 to 10. The right y-axis represents Pump Efficiency in percent (%), ranging from 10 to 100. The 'TOTAL HEAD' curve starts at approximately 21.5 m at 0 capacity and decreases to about 10 m at 0.4 m<sup>3</sup>/min. The 'PUMP EFF.' curve starts at 0% at 0 capacity, peaks at approximately 38% efficiency at a capacity of 0.25 m<sup>3</sup>/min, and then declines. The 'OUTPUT' curve starts at about 1.2 kW at 0 capacity and increases to approximately 1.5 kW at 0.4 m<sup>3</sup>/min.</p> <table border="1"><caption>Approximate data points from the performance curves</caption><thead><tr><th>Capacity (m<sup>3</sup>/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>21.5</td><td>0</td><td>1.2</td></tr><tr><td>0.1</td><td>19.5</td><td>25</td><td>1.3</td></tr><tr><td>0.2</td><td>17.0</td><td>35</td><td>1.4</td></tr><tr><td>0.25</td><td>15.5</td><td>38</td><td>1.45</td></tr><tr><td>0.3</td><td>13.5</td><td>35</td><td>1.48</td></tr><tr><td>0.4</td><td>10.0</td><td>25</td><td>1.5</td></tr></tbody></table>				Capacity (m <sup>3</sup> /min)	Total Head (m)	Pump Efficiency (%)	Motor Output (kW)	0.0	21.5	0	1.2	0.1	19.5	25	1.3	0.2	17.0	35	1.4	0.25	15.5	38	1.45	0.3	13.5	35	1.48	0.4	10.0	25	1.5		
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CAPACITY																																	
PUMP EFF.		MOTOR OUTPUT		TOTAL HEAD																													
TSURUMI MFG. CO., LTD.																																	

DIMENSION DRAWING		No.	No.	A-22069-1
TYPE	Submersible Dewatering Pump	MODEL	KTV2-15 KTV2-22	

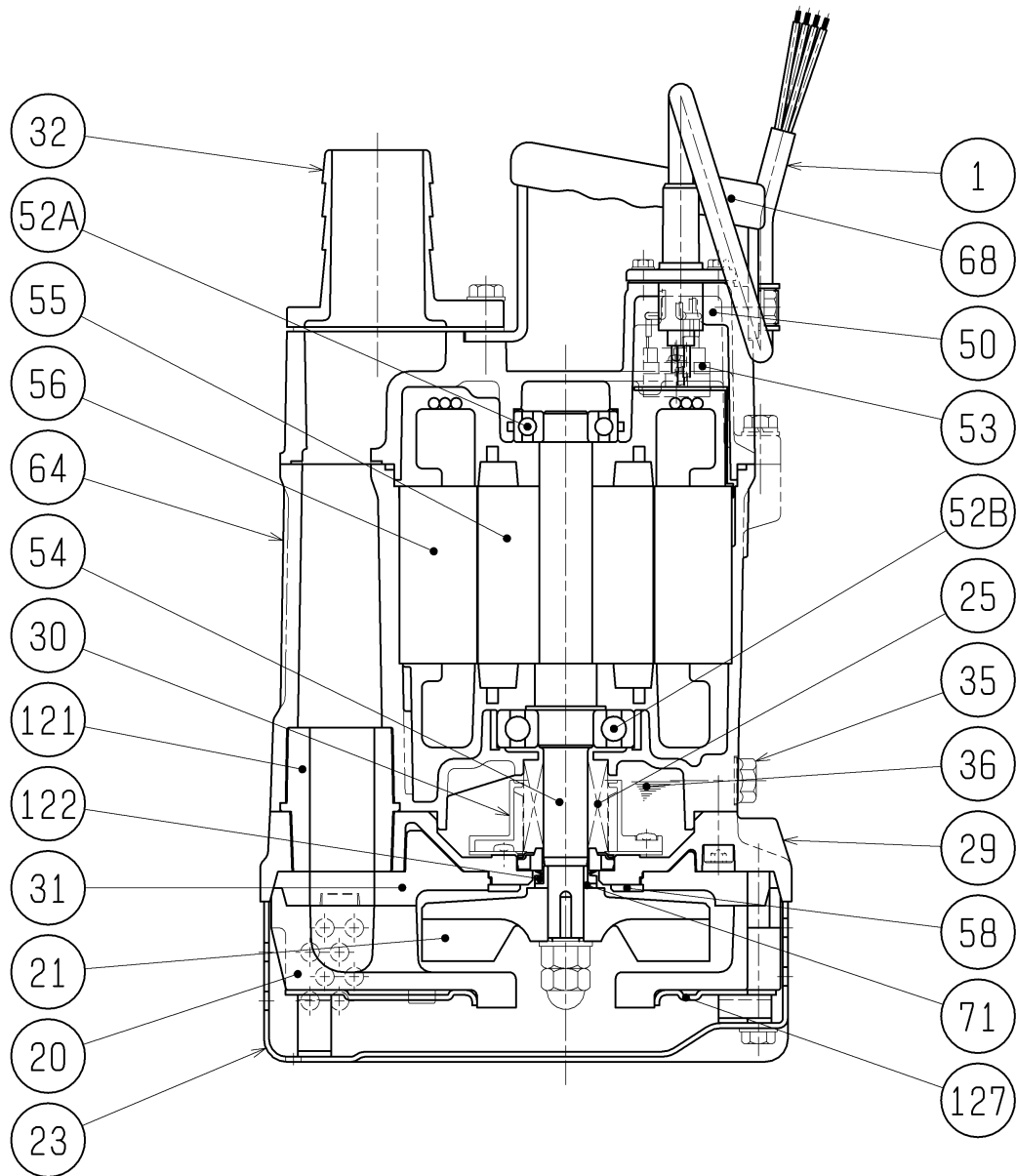
MODEL	Approximate Weight (kg)
KTV2-15	21kg
KTV2-22	23kg

※excluding cable



The Figure in ( ) shows the dimensions of KTV2-15.  
C. W. L. :Continuous running Water Level

SECTIONAL DRAWING		No.	No.	A-22076-1
TYPE	Submersible Dewatering Pump	MODEL	KTV2-15 KTV2-22	



#### REQ. SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cabtyre Cable	1	PVC Sheath	53	Motor Protector	1	
20	Pump Casing	1	Butadiene Rubber + Natural Rubber	54	Shaft	1	Stainless Steel 403
21	Impeller	1	Ductile Iron Casting	55	Rotor	1	
23	Strainer Stand	1	Steel Sheet	56	Stator	1	
25	Mechanical Seal	1	H-20T	58	Protection Plate	1	Stainless Steel 304
29	Oil Casing	1	Aluminium Die Casting	64	Motor Frame	1	Aluminium Die Casting
30	Oil Lifter	1	Plastic	68	Handle	1	Steel Sheel & Rubber
31	Rear Liner	1	Butadiene Rubber	71	Shaft Sleeve	1	Stainless Steel 304
32	Hose Coupling	1	Aluminium Die Casting	121	Packing	1	Styrene Butadiene Rubber
35	Oil Plug	1	Stainless Steel 304	122	V-ring	1	Nitrile Butadiene Rubber
36	Lubricant		Turbine Oil (ISO VG32)	127	Fixing Plate	1	Steel Sheet
50	Motor Bracket	1	Aluminium Die Casting				
52A	Upper Bearing	1	6204ZZC3				
52B	Lower Bearing	1	6305ZZC3				