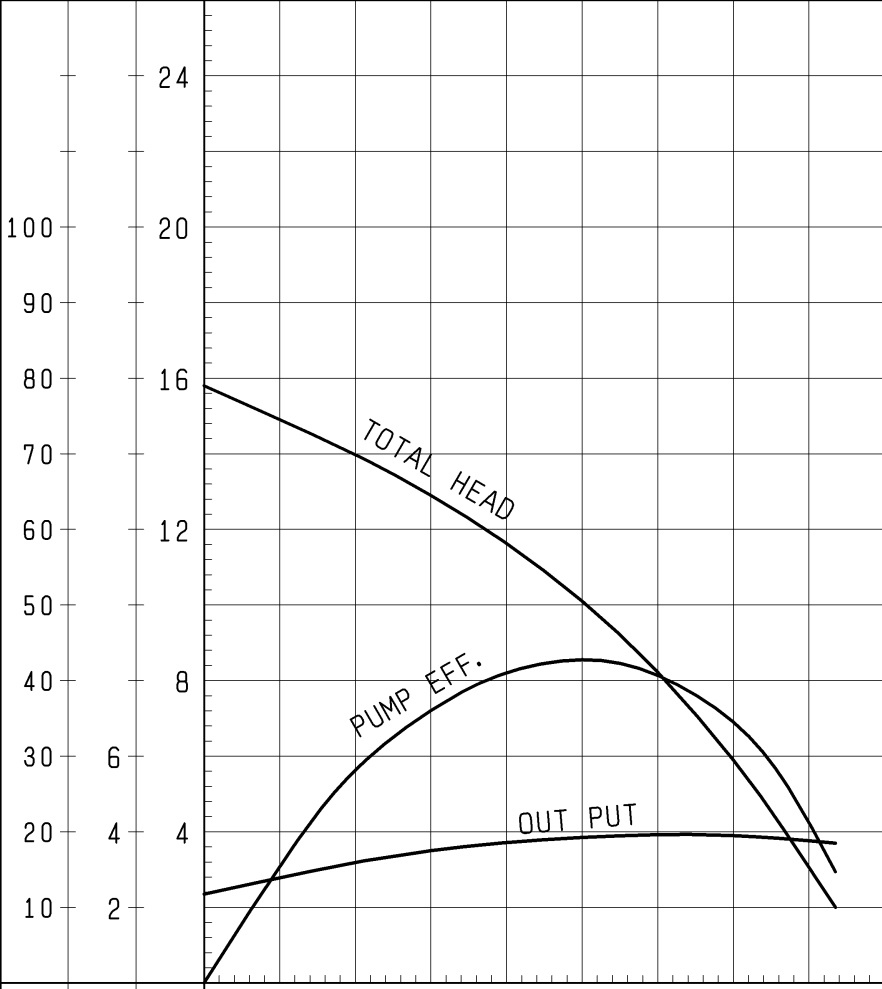


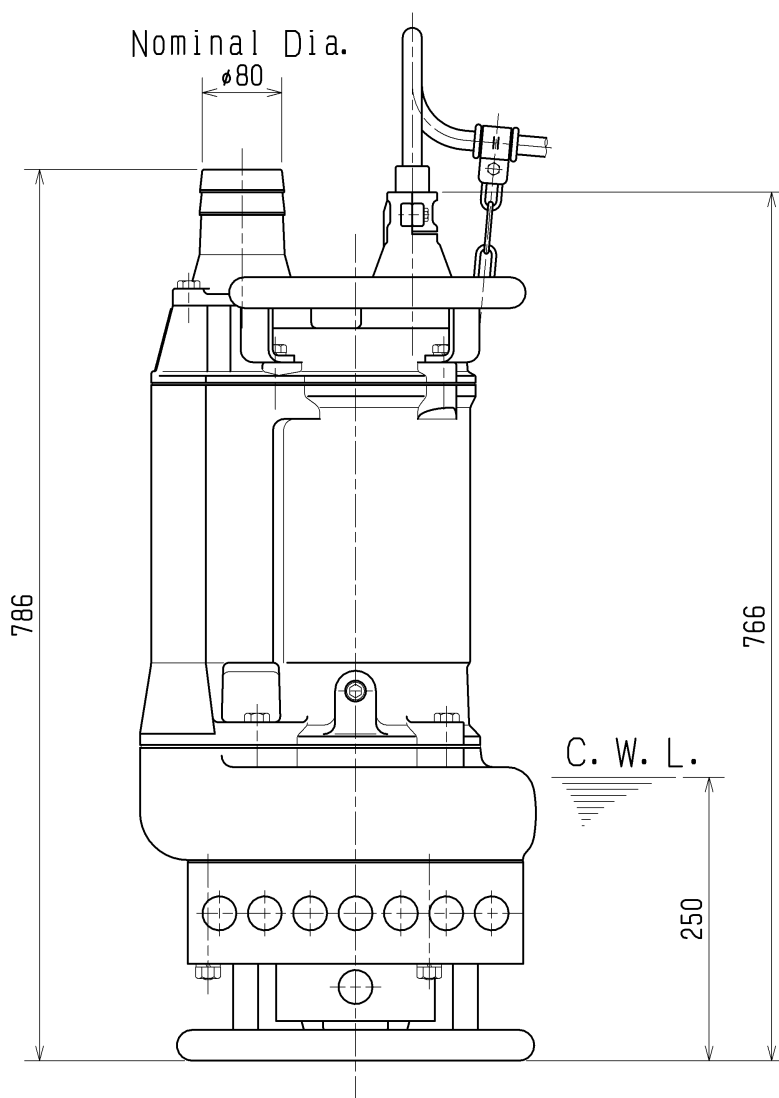
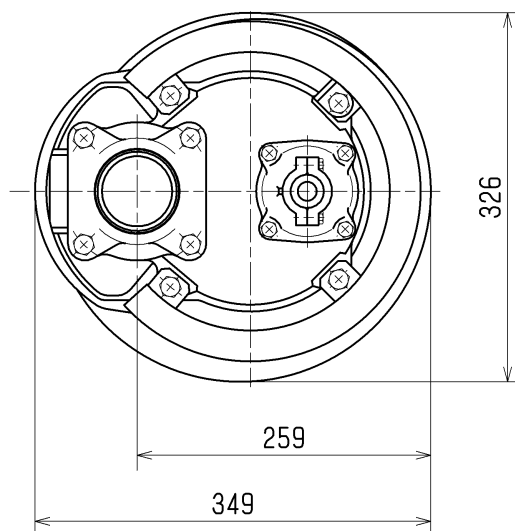
SPECIFICATIONS	Model	KRS2-80	KRS(Slurry)-series								
			4kW, 3-phase								
<p><b>Type of Pump</b> Submersible slurry pump for construction and foundation works, mining, and quarries, etc.</p> <p><b>Type of Fluid</b> Water containing sand, mud, and slurry</p> <p>Temperature: 0 to 40°C (High temperature model available on special request)</p> <p><b>Discharge Bore &amp; Connection</b> 80mm, Hose Coupling</p> <p><b>Motor Output</b> 4kW</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: E Degree of Protection: IP68</p> <p>No. of Poles &amp; Speed (Synchronous Speed) 4-pole, 1500/1800min<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 – 10.2A</td><td>220V – 16.5A</td></tr><tr><td>400V – 9.5A</td><td>380V – 9.6A</td></tr><tr><td>415V – 9.5A</td><td>440V – 8.5A</td></tr></table> <p><b>Power Cable</b> Sheath: Chloroprene rubber Standard Length: 8m 200 to 600V supply: 1 x 4 x 3.5mm<sup>2</sup>, O.D. 16.8mm</p> <p><b>Dry Weight</b> (excluding cable) 105kg</p>		50Hz	60Hz	380V – 10.2A	220V – 16.5A	400V – 9.5A	380V – 9.6A	415V – 9.5A	440V – 8.5A	<p><b>Impeller</b> Semi-open Impeller made of high-chromium cast iron</p> <p>Solids Passage 50Hz – ϕ30mm 60Hz – ϕ30mm</p> <p><b>Agitator</b> High-chromium cast iron</p> <p><b>Suction Plate</b> Made of high-chromium cast iron, excellent in abrasion-resistance</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>Oil Seal (Lip Seal)</b> Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</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), 1850ml</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 – 10.2A	220V – 16.5A										
400V – 9.5A	380V – 9.6A										
415V – 9.5A	440V – 8.5A										
TSURUMI MANUFACTURING CO., LTD.											

				NO.	A-22022-1																									
PUMP PERFORMANCE CURVES																														
TYPE Submersible Slurry Pump			MODEL KRS2-80		FREQUENCY 50 Hz																									
CUSTOMER'S NAME																														
EQUIPMENT TITLE																														
NO.																														
		STANDARD SPECIFICATIONS		REQUIRED SPECIFICATIONS																										
DISCHARGE BORE		80 mm		mm																										
TOTAL HEAD		10 m		m																										
CAPACITY		1.0 m <sup>3</sup> /min		m <sup>3</sup> /min																										
MOTOR OUTPUT		4.0 kW		kW																										
PHASE × VOLTAGE		3 φ × V		φ × V																										
CURRENT		A		A																										
POLES / REVOLUTION		4 P / S. S. 1500 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 2.4. The left y-axis represents Head in meters (m), ranging from 0 to 24. The right y-axis represents Pump Efficiency in percent (%), ranging from 0 to 100. The 'TOTAL HEAD' curve starts at approximately 16m at 0 capacity and decreases to about 10m at 1.6 m<sup>3</sup>/min. The 'PUMP EFF.' curve starts at 0, peaks at approximately 42% efficiency at 1.0 m<sup>3</sup>/min, and then decreases. The 'OUT PUT' curve starts at approximately 2.5 kW at 0 capacity and increases to about 4.0 kW at 1.6 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>OUT PUT (kW)</th></tr></thead><tbody><tr><td>0.0</td><td>16.0</td><td>0</td><td>2.5</td></tr><tr><td>0.4</td><td>14.0</td><td>25</td><td>3.0</td></tr><tr><td>0.8</td><td>11.5</td><td>38</td><td>3.5</td></tr><tr><td>1.2</td><td>8.5</td><td>42</td><td>4.0</td></tr><tr><td>1.6</td><td>10.0</td><td>35</td><td>4.0</td></tr></tbody></table>				CAPACITY (m <sup>3</sup> /min)	TOTAL HEAD (m)	PUMP EFF. (%)	OUT PUT (kW)	0.0	16.0	0	2.5	0.4	14.0	25	3.0	0.8	11.5	38	3.5	1.2	8.5	42	4.0	1.6	10.0	35	4.0			
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%	kW	m	CAPACITY																											
PUMP EFF.	MOTOR OUTPUT	TOTAL HEAD	m <sup>3</sup> /min																											
TSURUMI MFG. CO., LTD.																														

DIMENSION DRAWING		No.		No.	A-22028-1
TYPE	Submersible Slurry Pump		MODEL	KRS2-80	

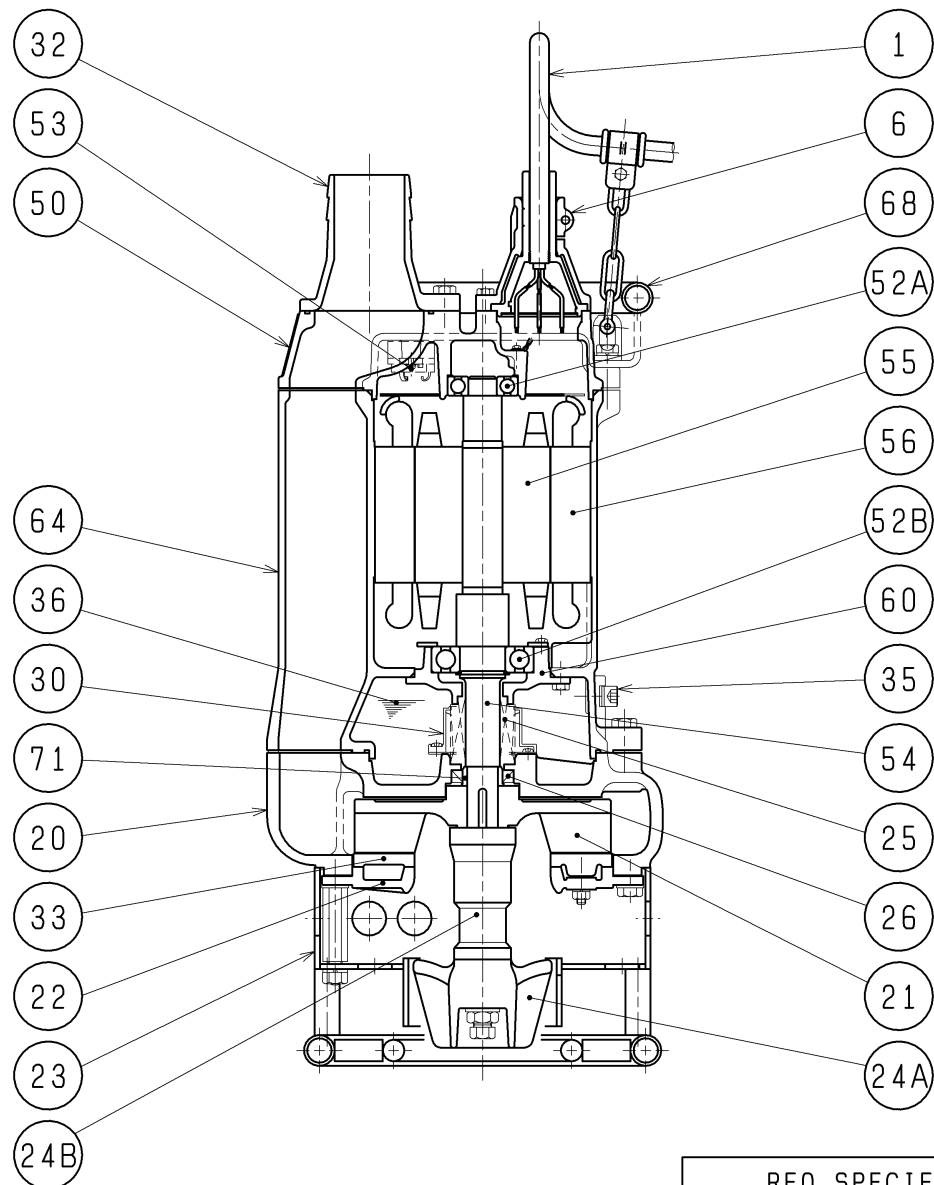
Approximate Weight(※)
105kg

※excluding cable



C.W.L. :Continuous running Water Level

SECTIONAL DRAWING		No.	No.	A-22031-1
TYPE	Submersible Slurry Pump	MODEL	KRS2-80	



#### REQ. SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath	36	Lubricant		Turbine Oil (ISO VG32)
6	Stuffing Box	1	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6305ZZC3
21	Impeller	1	Chromium Iron Casting	52B	Lower Bearing	1	6308ZZC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer Stand	1	Steel Sheet & Carbon Steel Pipe	54	Shaft	1	Stainless Steel 420J2
24A	Agitator	1	Chromium Iron Casting	55	Rotor	1	
24B	Connecting Rod	1	Malleable Iron Casting (Quenching)	56	Stator	1	
25	Mechanical Seal	1	H-30	60	Bearing Housing	1	Gray Iron Casting
26	Oil Seal	1	TC355511	64	Motor Frame	1	Gray Iron Casting
30	Oil Lifter	1	Plastic	68	Handle	1	Steel Sheet & Carbon Steel Pipe
32	Hose Coupling	1	Gray Iron Casting	71	Shaft Sleeve	1	Stainless Steel 403
33	Suction Plate	1	Chromium Iron Casting				
35	Oil Plug	1	Stainless Steel 304				

TSURUMI MFG. CO., LTD.