**SPECIFICATIONS** 

Model

# **NK2-22**

**NK-series** 

2.2kW, 1-phase

### Type of Pump

Submersible drainage pump for construction and foundation works, floodwater drainage, etc.

### Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

### **Discharge Bore & Connection**

50mm, Hose Coupling

### **Motor Output**

2.2kW

# **Power Supply**

Single-phase

# **Starting Method**

Capacitor Start + Capacitor Run

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: B

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000/3600min-1 (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

220V – 15.5A 110V – 26.0A 230V – 13.5A 220V – 13.0A

240V - 14.5A

# **Power Cable**

Sheath: Chloroprene rubber Standard Length: 10m 200 to 240V supply: 1 x 3 x 2.0mm², O.D. 14.4mm 100 to 120V supply:

1 x 3 x 5.5mm<sup>2</sup>, O.D. 15.6mm

# Dry Weight (excluding cable)

29kg

### Impeller

Vortex impeller deigned for "high-gap structure", made of ductile cast iron

Solids Passage

50Hz − *∮*8.5mm

60Hz - ∮8.5mm

## **Cable Entry with Anti-Wicking Block**

Watertight cable entry with strain-relief device. The antiwicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

### **Bearing**

Permanently lubricated, deep-groove, double-shielded C3 ball bearings

#### Shaft

403 stainless steel

### 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.

Upper Seal Face: SiC + SiC Lower Seal Face: SiC + SiC

### **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.

Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 270ml

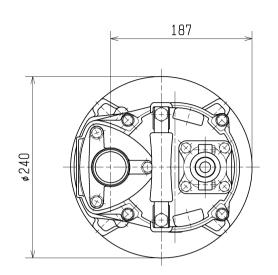
## **Motor Protection Device**

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.

NO. A-20630-1 PUMP PERFORMANCE CURVES TYPE SUBMERSIBLE GENERAL DEWATERING | MODEL FREQUENCY NK2-22 TORQUE FLOW PUMP 50 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS 50 DISCHARGE BORE MAX. 24 TOTAL HEAD M MAX. 0.52 m³/min m³/min CAPACITY 2.2 MOTOR OUTPUT k₩ k W PHASE × VOLTAGE 1 φ× ٧ φX CURRENT Α  $2 \text{ P/} \text{ S. S. } 3000 \text{ min}^{-1}$ min<sup>-1</sup> POLES / REVOLUTION P / STARTING METHOD CAPACITOR START CAPACITOR MOTOR INSULATION CLASS В REMARKS: 24 + 20 100 +90-80 ++ 16 70 +60+ + 1250 +PUMP EFF. 40+ + 830 + 3 +NUTPUT 20 + 2 + 410 + 1 +k W % 0.1 0.2 0.3 0.4 0.5 0.6 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.

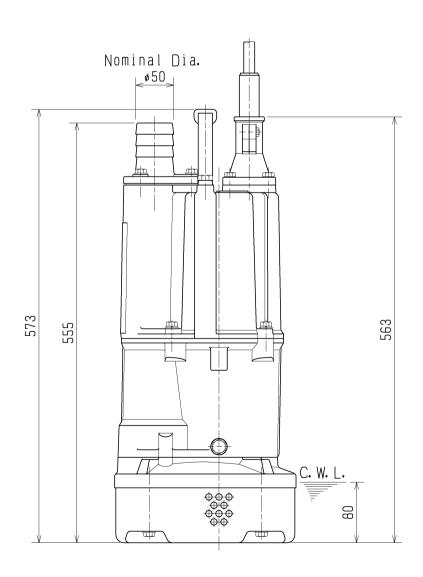


DIMENSIO	N DRAWING	No.	No.	A-20632-1
TYPE SUBMERSIBLE GEN TORQUE FLOW PUN		MODEL	NK2-15 NK2-22	



MODEL	Approximate Weight(*)			
NK2-15	29kg			
NK2-22	29kg			

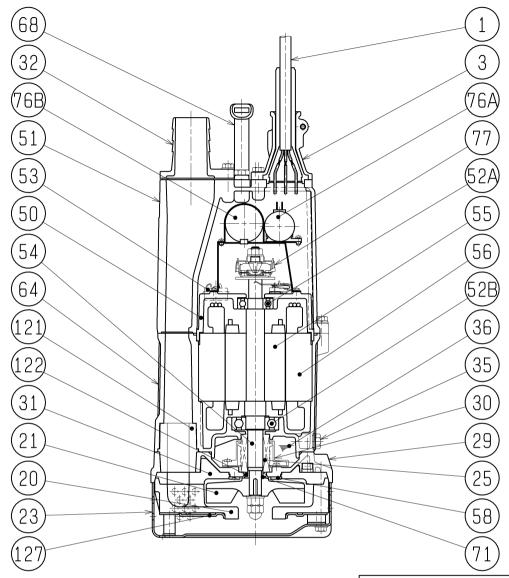
\*excluding cable



C. W. L. : Continuous running Water Level



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SECTIONAL DRAWING	No. No. A-20634-2	
TYPE SUBMERSIBLE GENERAL DEWATERING TORQUE FLOW PUMP	MODEL NK2-22	



REQ. SPECIFICATION

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath	53	Motor Protector	1	
3	Stuffing Box	1	Aluminium Die Casting	54	Shaft	1	Stainless Steel 403
20	Pump Casing	1	Butadiene Rubber + Natural Rubber	55	Rotor	1	
21	Impeller	1	Ductile Iron Casting	56	Stator	1	
23	Strainer	1	Steel Sheet	58	Protection Plate	1	Stainless Steel 304
25	Mechanical Seal	1	H-20T	64	Motor Frame	1	Aluminium Die Casting
29	Oil Casing	1	Aluminium Die Casting	68	Handle	1	Steel Sheet & Rubber
30	Oil Lifter	1	Plastic	71	Shaft Sleeve	1	Stainless Steel 304
31	Rear Liner	1	Butadiene Rubber	76A	Capacitor	1	
32	Hose Coupling	1	Aluminium Die Casting	76B	Capacitor	1	
35	Oil Plug	1	Stainless Steel 304	77	Centrifugal Switch	1	
36	Lubricant		Turbine Oil (ISO VG32)	121	Packing	1	Styrene Butadiene Rubber
50	Motor Bracket	1	Gray Iron Casting	122	V-ring	1	Nitrile Butadiene Rubber
51	Head Cover	1	Aluminium Die Casting	127	Fittings	1	Steel Sheet
52A	Upper Bearing	1	6204ZZC3				
52B	Lower Bearing	1	6305ZZC3				