

SPECIFICATIONS

Model

GPN415

GPN-series

15kW, 3-phase

Type of Pump

Submersible slurry pump for construction and foundation works, mining, and quarries, etc.

Type of Fluid

Water containing sand, mud, and slurry

Temperature: 0 to 40°C

(High temperature model available on special request)

Discharge Bore & Connection

100mm, Hose Coupling

Motor Output

15kW

Power Supply

Three-phase

Starting Method

Direct on Line (Star-Delta available on special request)

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: B

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 30.0A 220V - 50.2A 400V - 28.5A 380V - 29.1A 415V - 27.5A 440V - 25.1A

Power Cable

Sheath: Chloroprene rubber Standard Length: 10m 380 to 600V supply: 1 x 4 x 8mm², O.D. 21.7mm 200 to 240V supply: 1 x 4 x 14mm², O.D. 25.6mm

Dry Weight (excluding cable)

Free Standing Type: 220kg Guide Rail Fitting Type: 217kg

Impeller

Semi-open Impeller made of high-chromium cast iron

Solids Passage 50Hz – ϕ 30mm 60Hz – ϕ 30mm

Agitator

High-chromium cast iron

Suction Plate

Made of high-chromium cast iron, excellent in abrasion-resistance

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

Chromium molybdenum steel

Shaft Seal (Mechanical Seal)

Furnished with a mechanical seal located in oil chamber. The seal face always runs in a clean environment.

Seal Face: SiC + SiC

Type of Lubricating Oil & Volume

Turbine Oil (ISO VG32), 2500ml

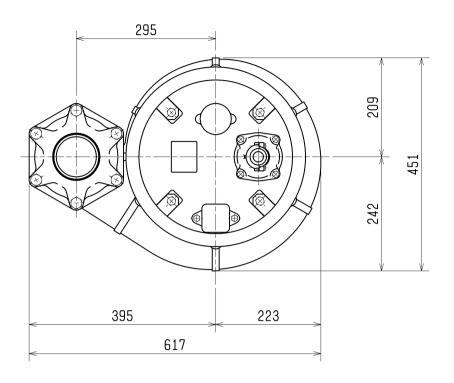
Motor Protection Device

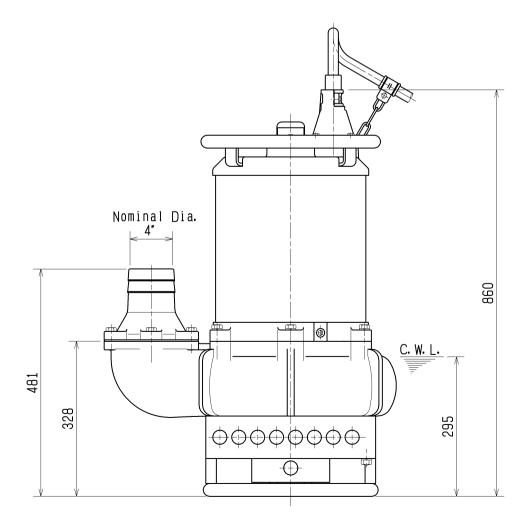
A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.

J4-40820-1 NO. PUMP PERFORMANCE CURVES TYPE MODEL FREQUENCY SUBMERSIBLE PUMP GPN415-61 60 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. REQUIRED SPECIFICATIONS STANDARD SPECIFICATIONS DISCHARGE BORE 100 21.3 TOTAL HEAD m 1.3 m³/min CAPACITY m³/min 15 MOTOR OUTPUT k₩ ΚW 3 ø× 460 PHASE × VOLTAGE φX CURRENT 24 Α 4 P/ S. S. 1800 min^{-1} POLES / REVOLUTION STARTING METHOD DIRECT ON LINE INSULATION CLASS В REMARKS: 24 Predicted Performance Curves + 20 100 +90 80++ 16 70 +PUMP EFF 60+ + 1250 +40+ + 830+15+OUTPUT 20+10+410 + 5+ % k W 2 5 6 1 3 4 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



	DIMENSION	DRAWING	No.	No.	J4-40823-1
TYPE	SUBMERSIBL	E PUMP	MODEL	GPN415-51	./61

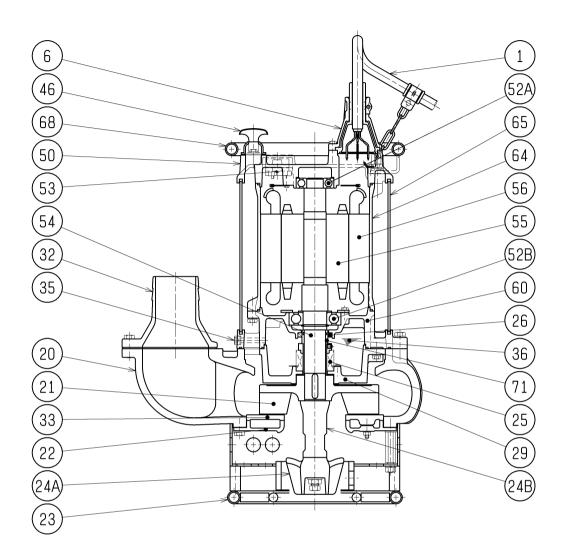




C.W.L.:Continuous Running Water Level



SECTIONA	L DRAWING	No.	No. J4-40824-1
TYPE SUBMERS	IBLE PUMP M	ODEL (GPN415-51/61



REQ. SPECIFICATION

No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath *1	46	Air Release Valve	1	Steel Sheet
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	6307ZZC3
21	Impeller	1	Chromium Iron Casting	52B	Lower Bearing	1	6310ZZC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer Stand	1	Carbon Steel Pipe & Steel Sheet	54	Shaft	1	Chromium Molybdenum Steel
24A	Stirrer	1	Chromium Iron Casting	55	Rotor	1	
24B	Connecting Rod	1	Malleable Iron Casting(Quenching)	56	Stator	1	
25	Mechanical Seal	1	NH-50	60	Bearing Housing	1	Gray Iron Casting
26	Oil Seal	1	TC55729	64	Motor Frame	1	Gray Iron Casting
29	Oil Casing	1	Gray Iron Casting	65	Outer Cover	1	Structure Steel
32	Hose Coupling	1	Gray Iron Casting	68	Handle	1	Carbon Steel Pipe
33	Suction Plate	1	Chromium Iron Casting	71	Shaft Sleeve	1	Stainless Steel 304
35	Oil Plug	1	Stainless Steel 304				
36	Lubricant		Turbine Oil (ISO VG32)				