

GPN

A special-steel impeller and suction plate have greatly increased the pump's life



Applications

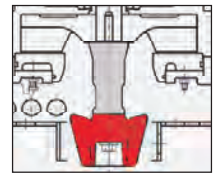
- Transferring or draining bentonite slurry in slurry-assisted bored piling or diaphragm wall construction.
- Draining water containing cement slurry, mud, and sand at a construction or civil engineering work.
- Draining aggregate wash water at a quarry or ore wash water at a mining.
- Collecting sediments at the grit chamber in a wastewater treatment plant.
- Transferring water containing iron scale in a steel work.

Features

Agitator

The agitator mounted on the motor shaft-end facilitates efficient suction of the settled slurry, sand, or mud.

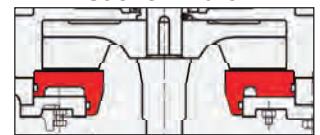
Agitator



Suction Plate

A suction plate mechanism is adopted in the GPN series pumps. If the performance drops due to wearing out of the suction plate, restoration of the performance is possible by replacing the suction plate only. It will not be necessary to replace the whole suction cover part.

Suction Plate



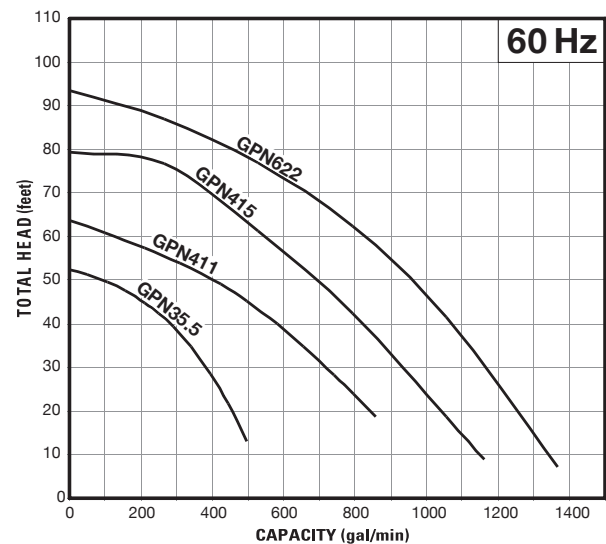
(This illustrates Model GPN622)

For the GPN622 model, it is possible to adjust the impeller clearance (to move the suction plate closer to the impeller) by merely tightening or loosening six (6) bolts, by which the dropped performance can be restored.

Major Components & Specifications

Item		Discharge bore size inches			3	4	6	
Pumping Fluid	Type of fluid		Sludge, various types of slurry, liquid containing sandy mud					
	Fluid temperature		32 ~ 104°F					
Pump	Structure	Impeller	Semi-open					
		Shaft seal	Mechanical seal					
		Bearing	Shielded ball bearing					
	Materials	Impeller	Chromium iron casting					
		Casing	Grey iron casting					
		Suction plate	Chromium iron casting					
		Shaft seal (mechanical seal)	Silicon carbide					
Motor	Type, Poles		Dry-type submersible induction motor, 4 poles					
	Insulation		Class E · B					
	Phase / Voltage		Three-phase / 208-230V, 460V, 575V					
	Motor protector (Built-in)		Circle Thermal Protector or Miniature Protector (Only GPN622)					
	Lubricant		Turbine oil (ISO VG32)					
	Materials	Frame	Grey iron casting					
Shaft		Chromium molybdenum steel						
Cable		Chloroprene rubber						
Discharge connection			NPT coupling					

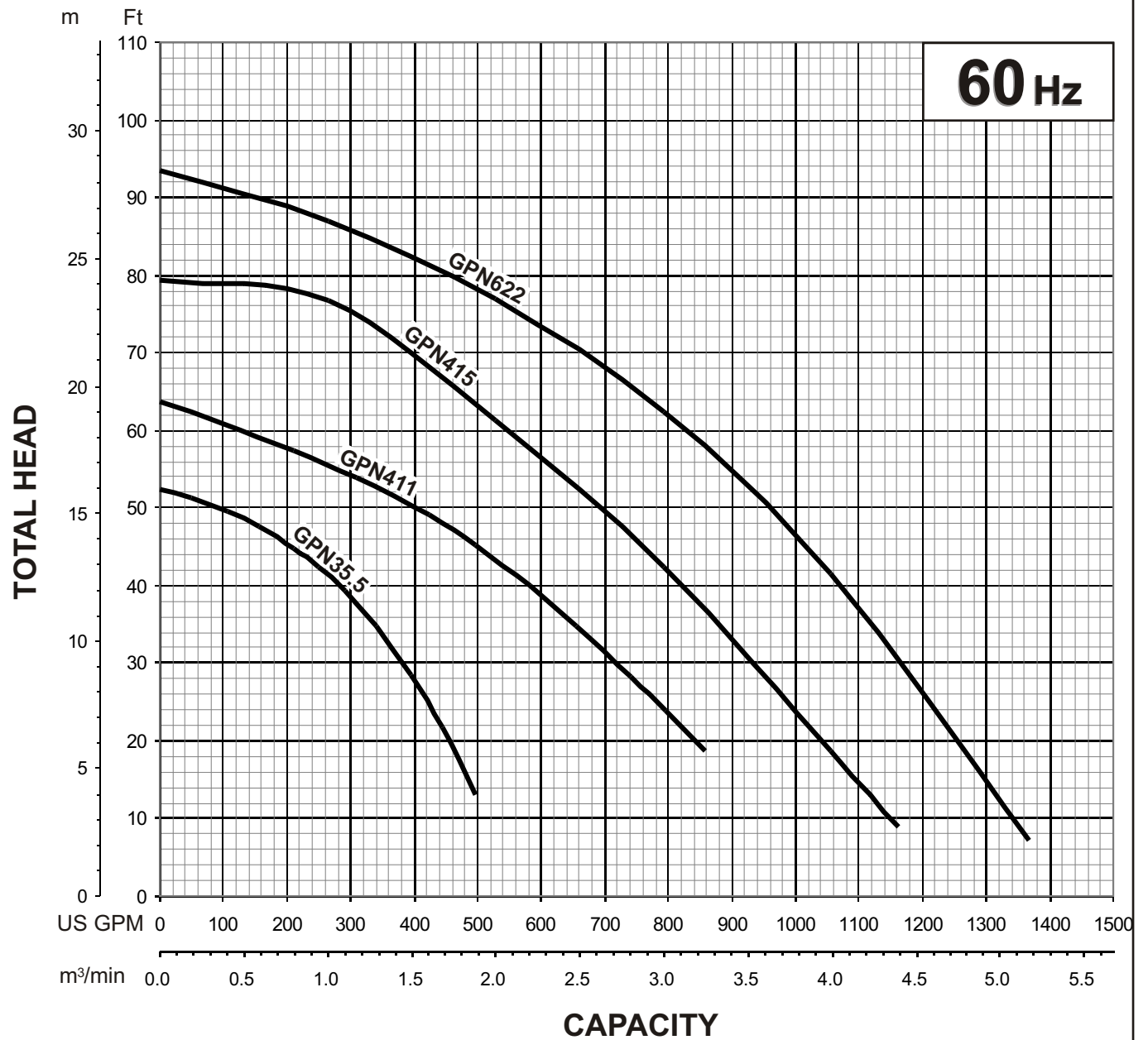
Performance Curves



Standard Specifications

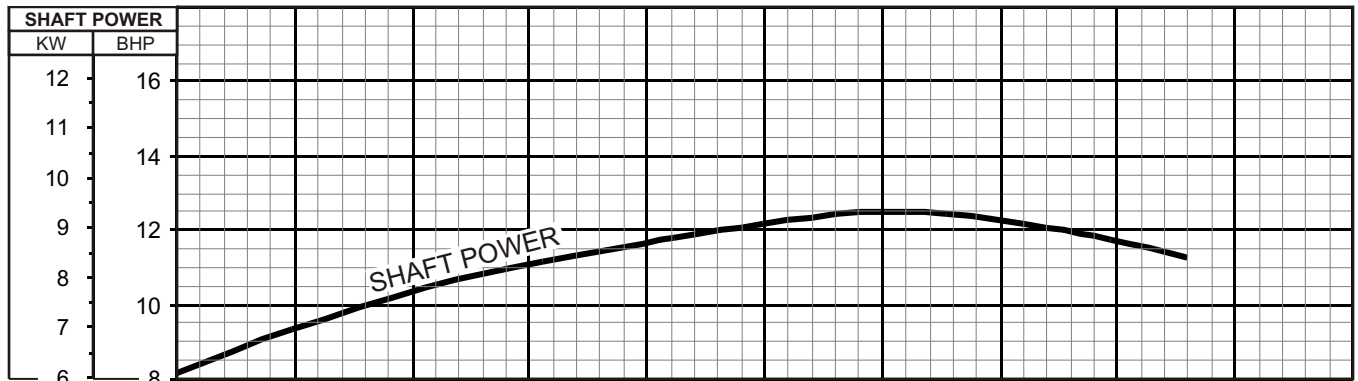
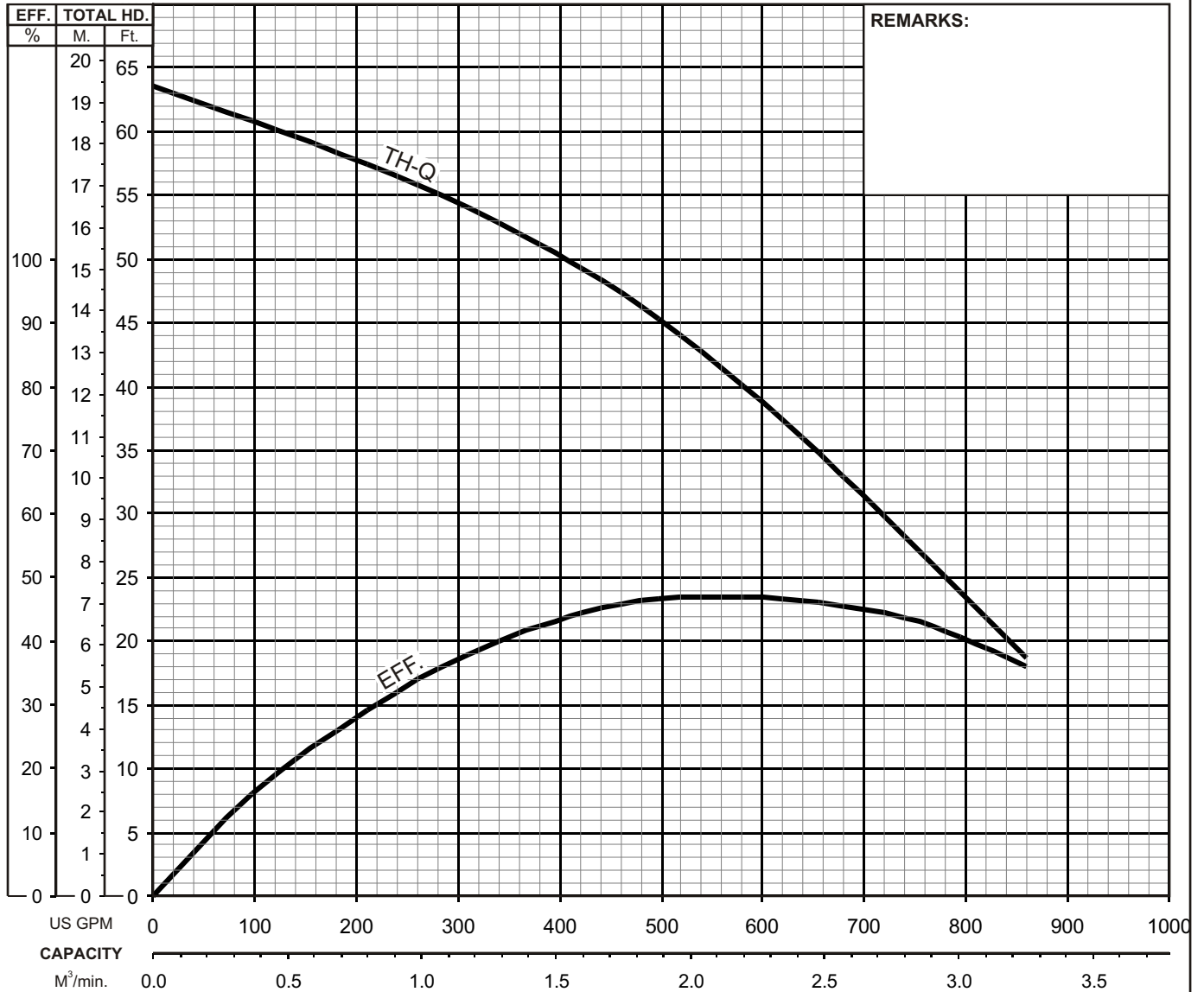
MODEL	MOTOR SPECIFICATIONS						PUMP SPECIFICATIONS			DIMENSIONS			
	Motor Output (HP)	Rated Current (A)				RPM	Discharge Size (in.)	Maximum Capacity (GPM)	Maximum Head (ft.)	Dimension (in.)		Continuous Running Water Level (in.)	Pump Weight (lbs.)
		208V	220V	460V	575V					Diameter	Height		
GPN35.5	7.5	21.1*	20.0	9.8	7.6	1720	3	497	52	19 3/16	30 9/16	10 5/8	319
GPN411	15	42.0*	39.0	19.5	14.5	1735	4	859	64	24 5/16	33 7/8	11 5/8	478
GPN415	22	55.0*	52.0	24.0	20.0	1735	4	1162	79	24 5/16	33 7/8	11 5/8	485
GPN622	30	—	—	36.5	29.5	1750	6	1368	94	28 9/16	43 3/8	11 3/4	910

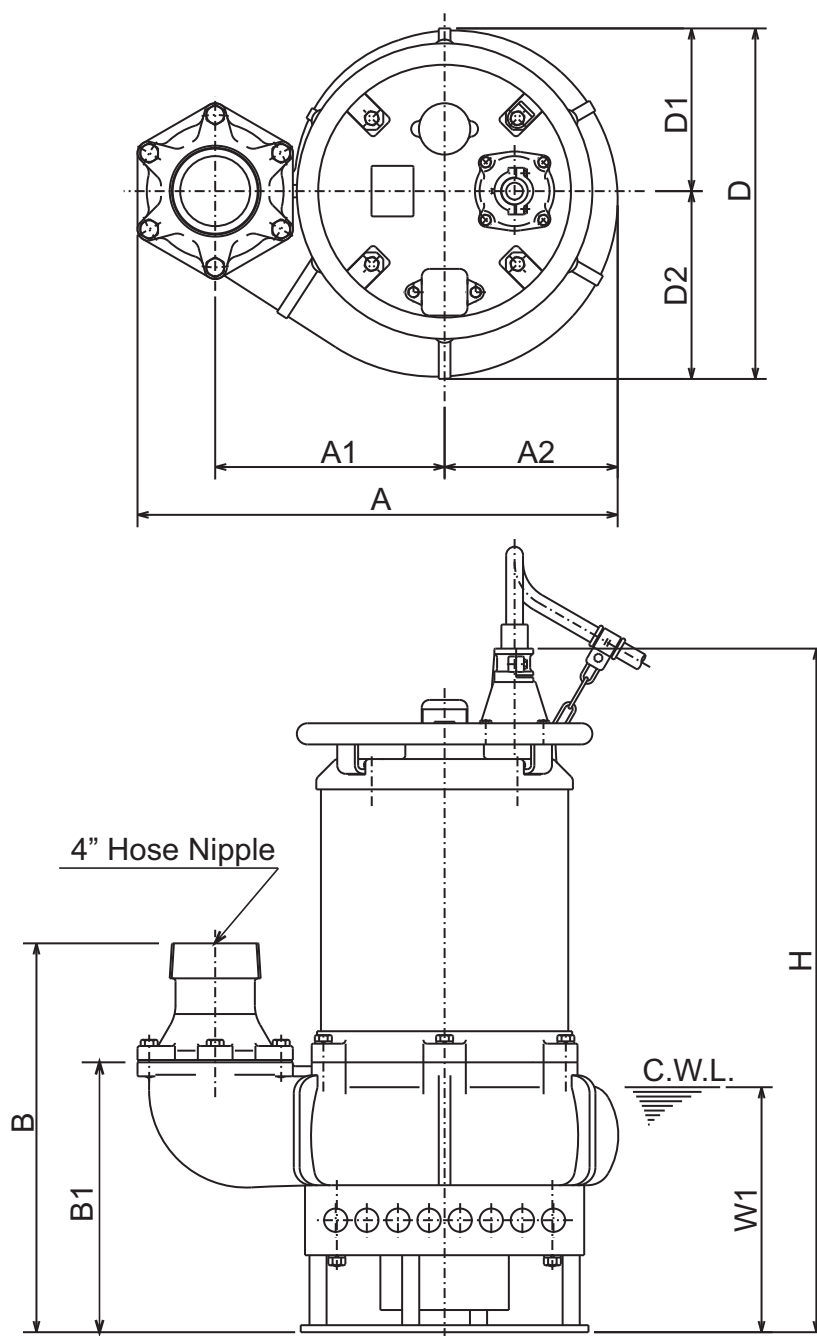
* : Same motor 208 & 220V

**TSURUMI PUMP****GPN - SERIES**
SUBMERSIBLE AGITATOR PUMPS**PERFORMANCE**
RANGE**GROUP PERFORMANCE RANGE**


TSURUMI PUMP
**GPN - SERIES
SUBMERSIBLE AGITATOR PUMPS**
**PERFORMANCE
CURVE**

MODEL	BORE	HP	KW	RPM	SOLIDS DIA	LIQUID	SG.	VISCOSITY	TEMP.
GPN411-61	4"/100mm	15	11	1735	1.18"/30mm	Water	1.0	1.123 cSt.	60°F
PUMP TYPE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS			
Agitator Pump	3	208-220/460/575	42.0-39.0 / 19.5 / 14.5	60	Direct On Line	B			
CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS		
-	-	-	-	-	-	-	-		



GPN411-61
GPN415-61


C.W.L. : Continuous running Water Level

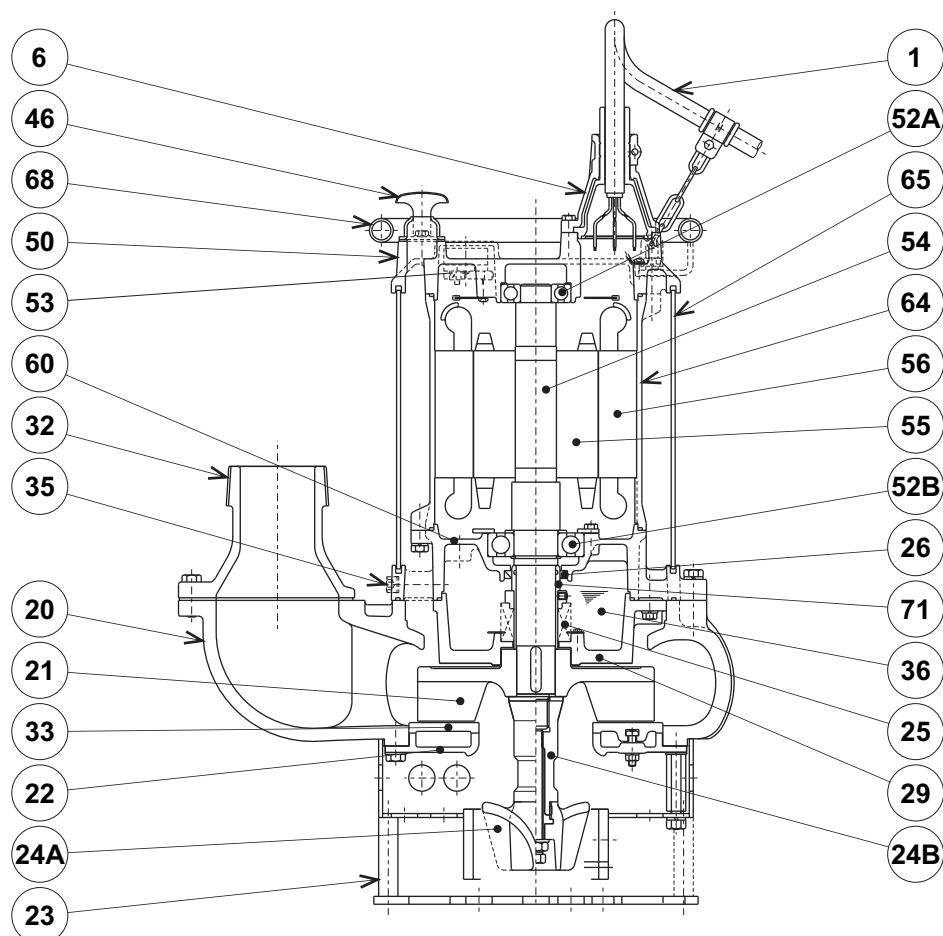
DIMENSIONS:USCS (Inch)

Model	HP	NOM. SIZE	Pump & Motor									C.W.L.	*Wt. (lbs.)
			A	A1	A2	B	B1	D	D1	D2	H	W1	
GPN411-61	15	4"	24 5/16	11 5/8	8 3/4	19 11/16	13 11/16	17 3/4	8 1/4	9 2/4	34 5/8	12 3/8	478
GPN415-61	20	4"	24 5/16	11 5/8	8 3/4	19 11/16	13 11/16	17 3/4	8 1/4	9 2/4	34 5/8	12 3/8	485

DIMENSIONS:METRIC (mm)

Model	kW	NOM. SIZE	Pump & Motor									C.W.L.	*Wt. (kg)
			A	A1	A2	B	B1	D	D1	D2	H	W1	
GPN411-61	11	100	617	295	223	500	347	451	209	242	879	315	217
GPN415-61	15	100	617	295	223	500	347	451	209	242	879	315	220

*Excluding Cable


TSURUMI PUMP
GPN - SERIES
SUBMERSIBLE AGITATOR PUMPS
SECTIONAL VIEW

GPN411-61
GPN415-61

ITEM#	DESCRIPTION	MAIN MATERIAL / NOTE	RELATED ASTM, AISI CODE	RELATED EN CODE	Q'TY
1	Power Cable (GPN411-61)	Chloroprene Sheath AWG8/4-50ft			1
	Power Cable (GPN415-61)	Chloroprene Sheath AWG6/4-50ft			1
6	Stuffing Box	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
20	Pump Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
21	Impeller	High Chrome Cast Iron	A532 Class III Type A	DIN 1695 G-X260Cr27	1
22	Suction Cover	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
23	Strainer Stand	Steel (Cold Rolled) + Steel Pipe	A109/A1008 + A53 Type F	EN 10130 + DIN 1615 St33	1
24A	Agitator	High Chrome Cast Iron	A532 Class III Type A	DIN 1695 G-X260Cr27	1
24B	Clutch	Malleable Cast Iron (Hardened)	A47M Grade 22010	EN 1562 GJMB-350-10	1
25	Mechanical Seal	Silicon Carbide / NH-50			1
26	Oil Seal	Nitrile Butadiene Rubber / TC-55729			1
29	Oil Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
32	Discharge Connection	Cast Iron / NPT 4"	A48M Class30B	EN 1561 GJL-200	1
33	Suction Plate	High Chrome Cast Iron	A532 Class III Type A	DIN 1695 G-X260Cr27	1
35	Oil Plug	Stainless Steel	S 30400	1.4301	1
36	Lubricant	Turbine Oil ISO VG32 or SAE10W/20W			
46	Air Valve	Steel (Cold Rolled)	A109/A1008	EN 10130	1
50	Motor Head Cover	Cast Iron	A48M Class25B	EN 1561 GJL-150	1
52A	Upper Bearing	#6307ZZC3			1
52B	Lower Bearing	#6310ZZC3			1
53	Motor Protector				1
54	Shaft	Chrome-Molybden Alloy H-Steel	AISI 4135H	ISO 683-1 34CrMo4	1
55	Rotor				1
56	Stator				1
60	Bearing Housing	Cast Iron	A48M Class25B	EN 1561 GJL-150	1
64	Motor Housing	Cast Iron	A48M Class25B	EN 1561 GJL-150	1
65	Outer Cover	Steel	A283 Grade D	EN 10025 S275	1
68	Handle	Steel Pipe + Steel	A53 Type F + A283 Grade D	DIN 1615 St33 + EN 10025 S275	1
71	Shaft Sleeve	Stainless Steel	S 30400	1.4301	1