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.

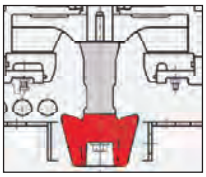
Features

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

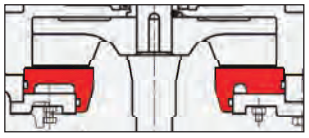
Suction Plate
A suction plate mechanism is adopted in the GPN series pumps. If the performance drops due to wearing out of the suction plate, restoration of the performance is possible by replacing the suction plate only. It will not be necessary to replace the whole suction cover part.

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.

Agitator



Suction Plate

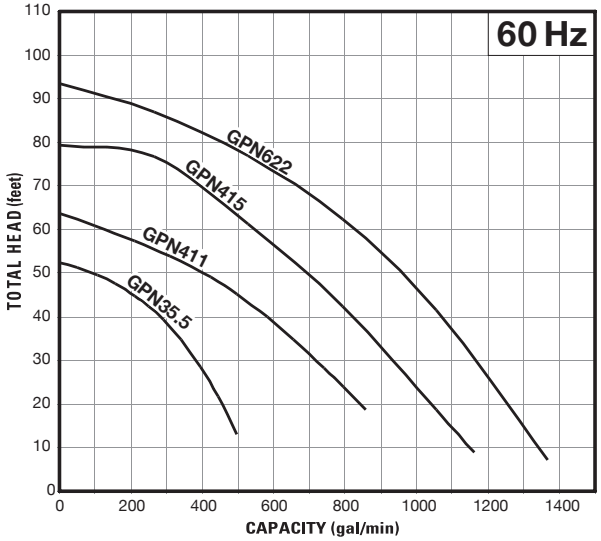


(This illustrates Model GPN622)

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

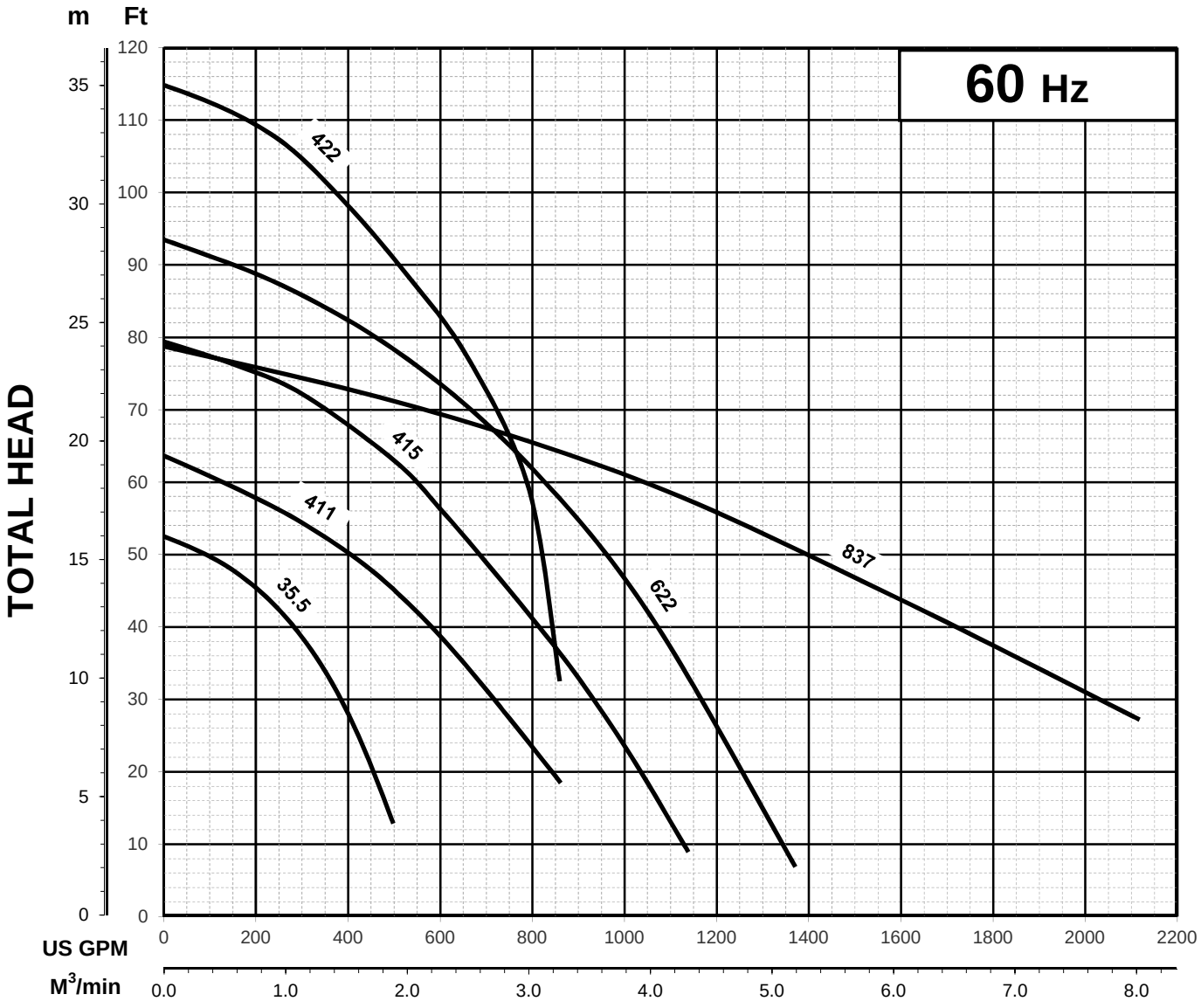
TSURUMI PUMP

GPN - SERIES

SUBMERSIBLE AGITATOR PUMPS

PERFORMANCE CURVE

GROUP PERFORMANCE RANGE



Note

Ex.

TSURUMI PUMP

GPN - SERIES

SUBMERSIBLE AGITATOR PUMPS

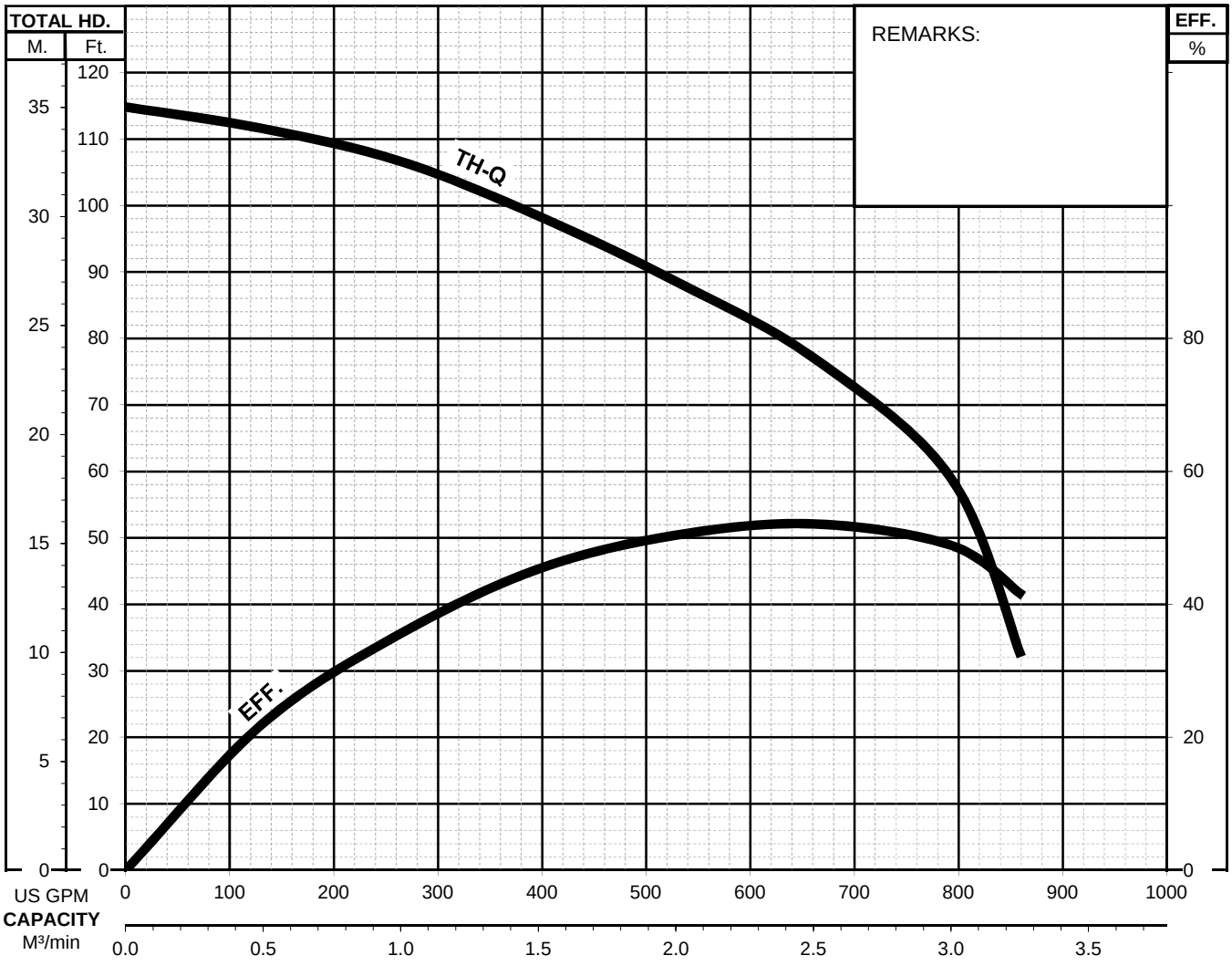
PERFORMANCE CURVE

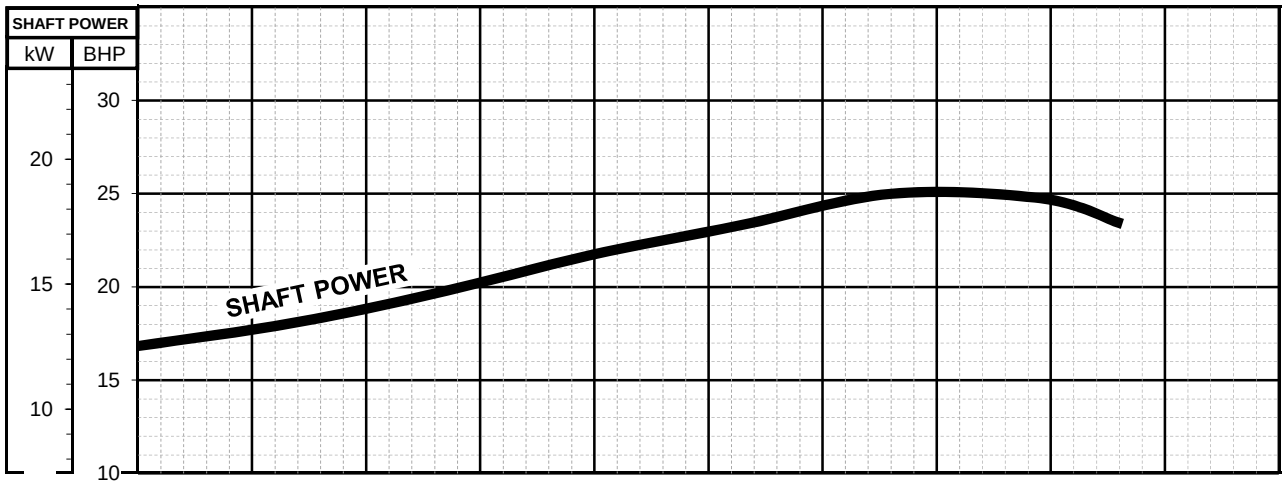
MODEL	BORE	HP	kW	RPM	SOLIDS DIA.	LIQUID	SG.	VISCOSITY	TEMP.
GPN422-61	4"/100mm	30.0	22.0	1750	1.18"/30mm	Water	1.0	1.123cSt.	60°F

PUMP TYPE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS
Dewatering Pump	3	460 / 575	36.5 / 29.5	60	Direct On Line	F

CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS
-	-	-	-	-	-	-	-

REMARKS:





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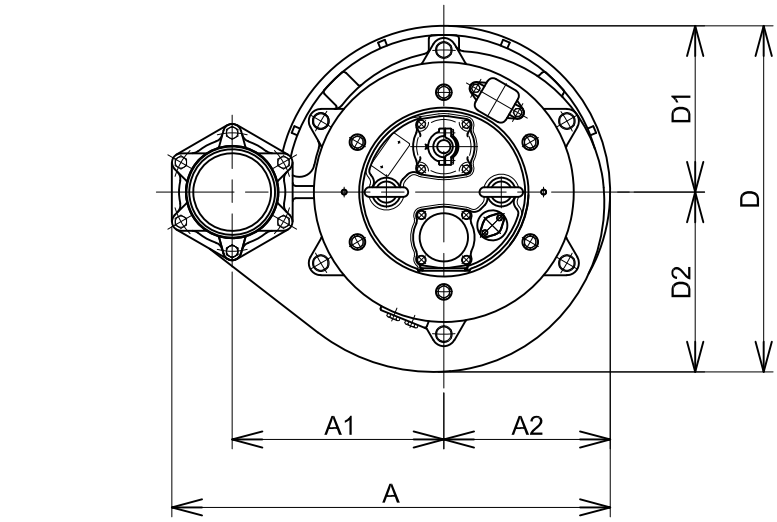
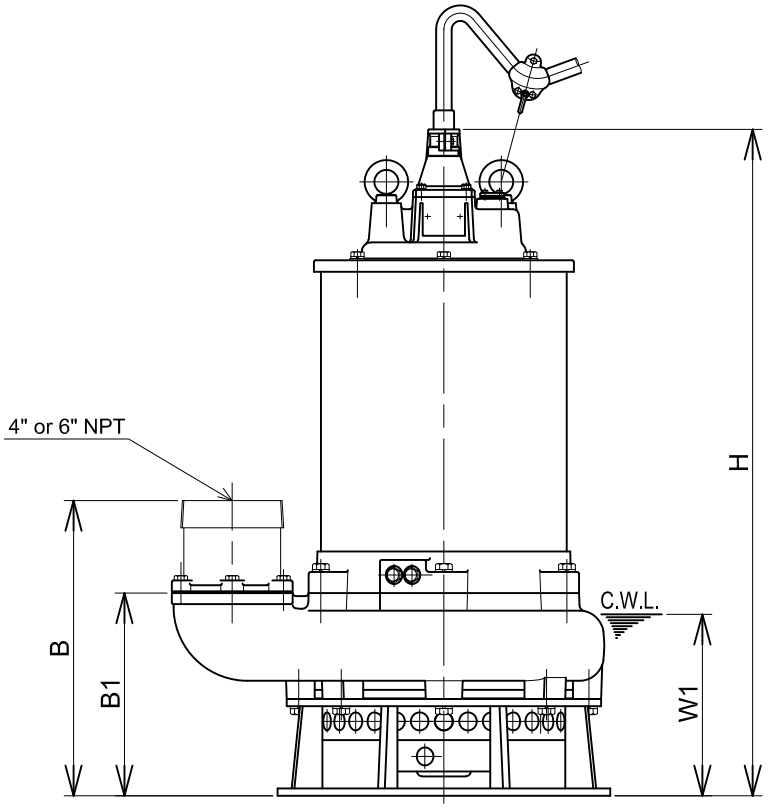
TSURUMI PUMP

GPN SERIES
SUBMERSIBLE AGITATOR PUMPS

DIMENSIONS

GPN422 -61
GPN622 -61





C.W.L. :Continuous running Water Level

DIMENSIONS:USCS (Inch)

Model	HP	NOM. SIZE	Pump & Motor									C.W.L.	*Wt.
			A	A1	A2	B	B1	D	D1	D2	H	W1	(lbs.)
GPN422-61	30	4"	28 9/16	13 3/4	10 13/16	19 3/16	13 3/16	22 1/2	10 13/16	11 11/16	43 3/8	11 3/4	915
GPN622-61	30	6"	28 9/16	13 3/4	10 13/16	19 3/16	13 3/16	22 1/2	10 13/16	11 11/16	43 3/8	11 3/4	915

DIMENSIONS:METRIC (mm) *Excluding Cable

Model	kW	NOM. SIZE	Pump & Motor									C.W.L.	*Wt.
			A	A1	A2	B	B1	D	D1	D2	H	W1	(kg)
GPN422-61	22	100	725	350	275	488	335	572	275	297	1102	300	415
GPN622-61	22	150	725	350	275	488	335	572	275	297	1102	300	415

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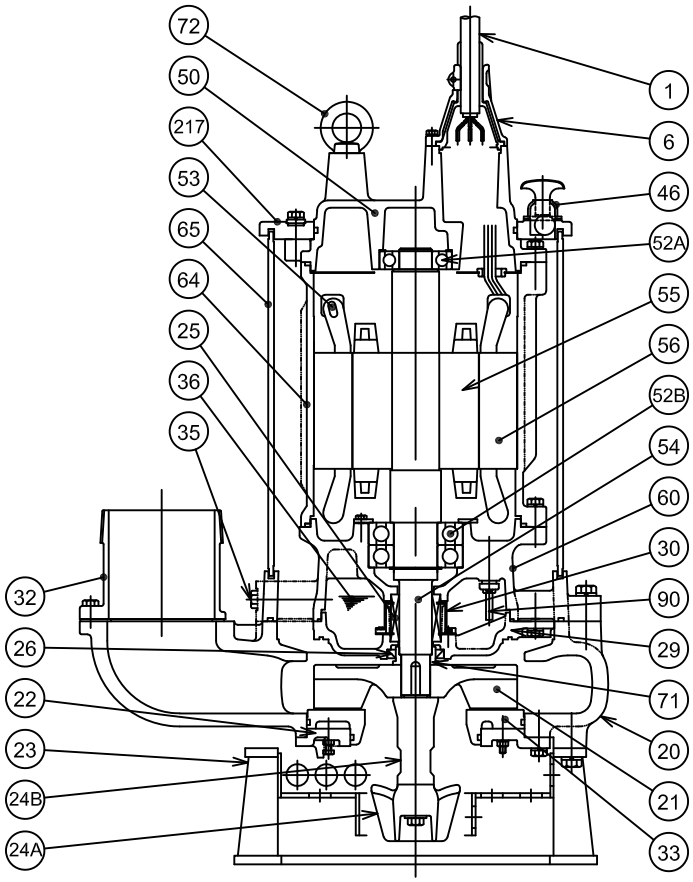
TSURUMI PUMP

GPN SERIES
SUBMERSIBLE AGITATOR PUMPS

SECTIONAL VIEW

GPN422 -61
GPN622 -61



ITEM#	DESCRIPTION	MAIN MATERIAL / NOTE	RELATED ASTM, AISI CODE	RELATED EN CODE	Q'TY
1	Power Cable	Chloroprene Sheath AWG 6/4 , 14/3 -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 / H-50			1
26	Oil Seal	Nitrile Butadiene Rubber / TC-608212			1
29	Oil Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
30	Oil Lifter	PBT Resin			1
32	Discharge Connection	Cast Iron / NPT 6"	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	2
36	Lubricant	Turbine Oil ISO VG32 or SAE 10W-20			
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	#6309ZZC3			1
52B	Lower Bearing	#6312ZZD2C3			1
53	Motor Protector				3
54	Shaft	Chrome-Molybdenum 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
71	Shaft Sleeve	Stainless Steel	S 40300	1.4000	1
72	Lifting Lug Bolt	Steel	A283 Grade D	EN 10025 S275	2
90	Leak Sensor (Electrode)	Stainless Steel	S 30300	1.4305	1
217	Fixing Plate	Cast Iron	A48M Class30B	EN 1561 GJL-200	1