

# GPN

A hard iron Impeller and suction plate greatly increase the pump durability



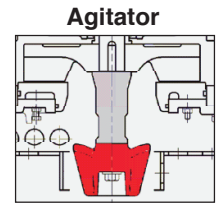
## Applications

- Pumping bentonite slurry
- Pumping water containing cement slurry, mud, and sand
- Draining aggregate wash water at a quarry or ore wash water at a mine.
- Collecting sediments at the grit chamber in a wastewater treatment plant.
- Transferring water containing iron scale in steel production.

## Features

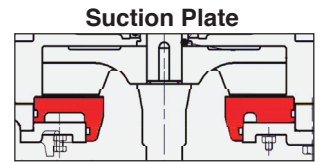
### Agitator

The shaft mounted agitator facilitates efficient suspension of 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.



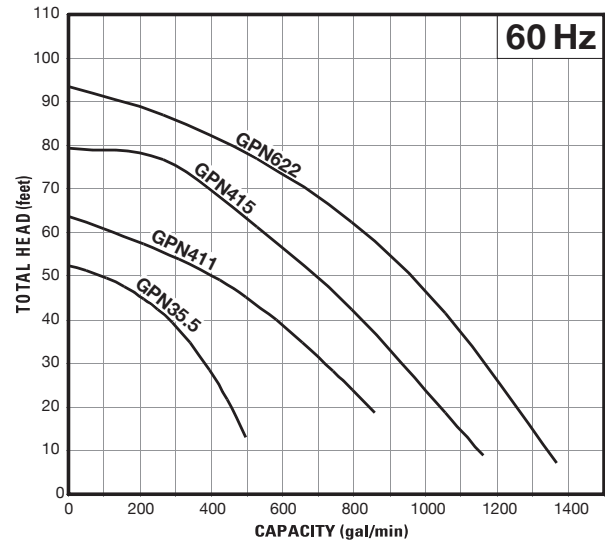
(This illustrates Model GPN622)

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 lost 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	Gray 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 • F		
	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	Gray 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

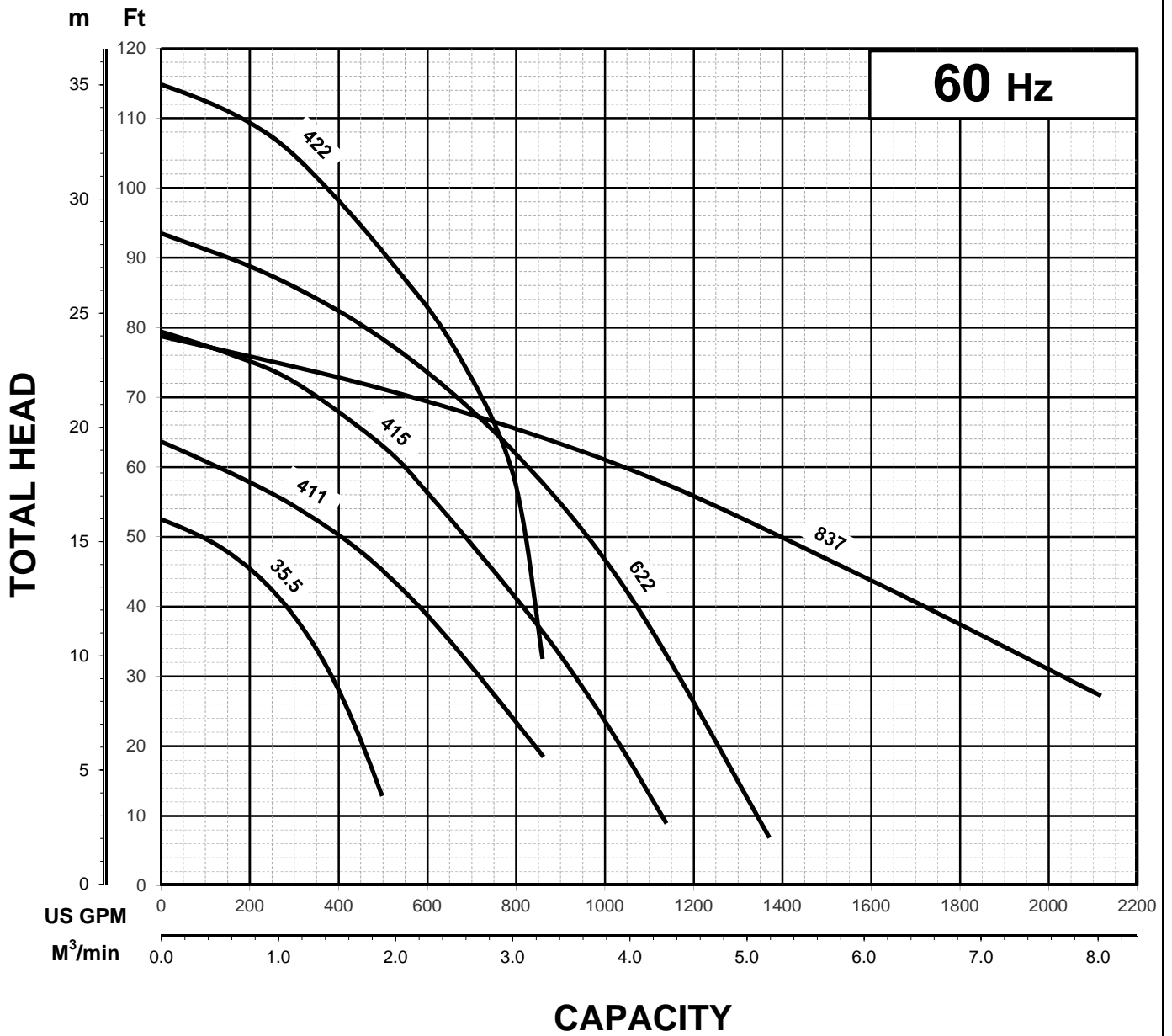


# GPN - SERIES

SUBMERSIBLE AGITATOR PUMPS

PERFORMANCE  
CURVE

## GROUP PERFORMANCE RANGE



Note

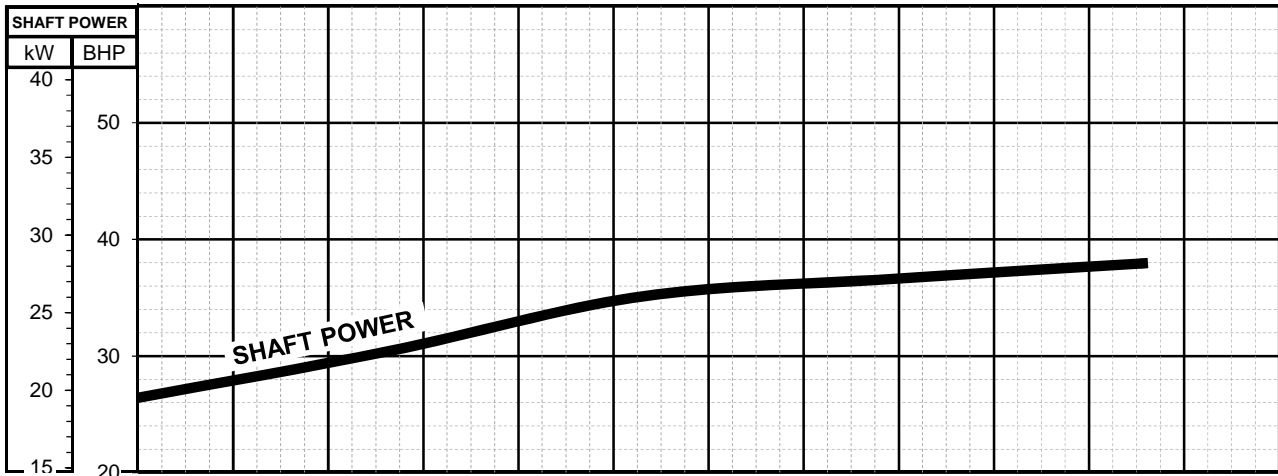
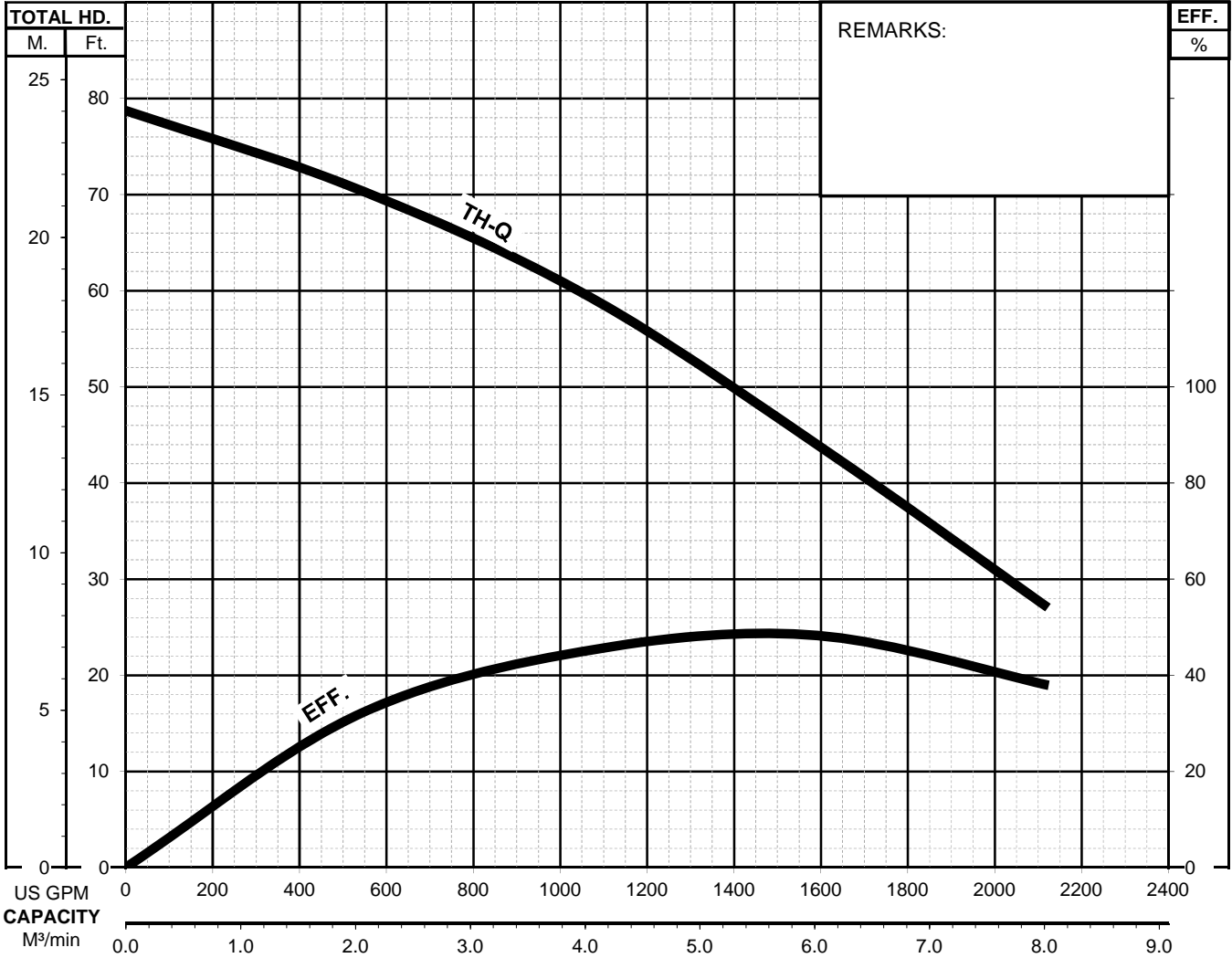


# GPN - SEREIES

SUBMERSIBLE AGITATOR PUMPS

PERFORMANCE  
CURVE

MODEL	BORE	HP	kW	RPM	SOLIDS DIA.	LIQUID	SG.	VISCOSITY	TEMP.
GPN837-61	8"/200mm	50	37	---	1.81"/46mm	Water	1.0	1.123cSt.	60°F
PUMP TYPE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS			
Agitator Pump	3	460/575	---	60	Direct On Line	F			
CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE	HZ	STARTING METHOD	INS. CLASS		
-	-	-	-	-	-	-	-		

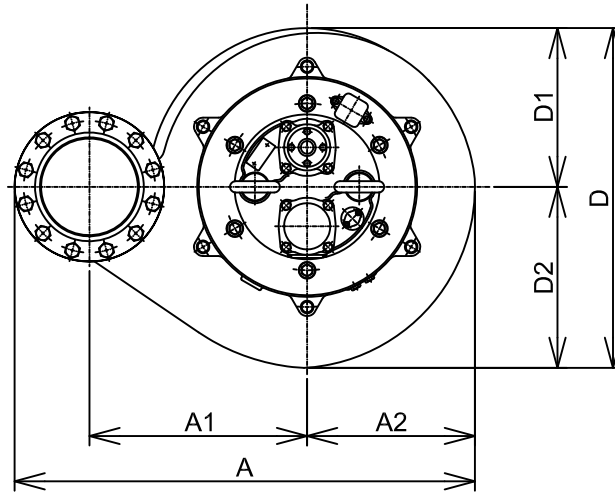




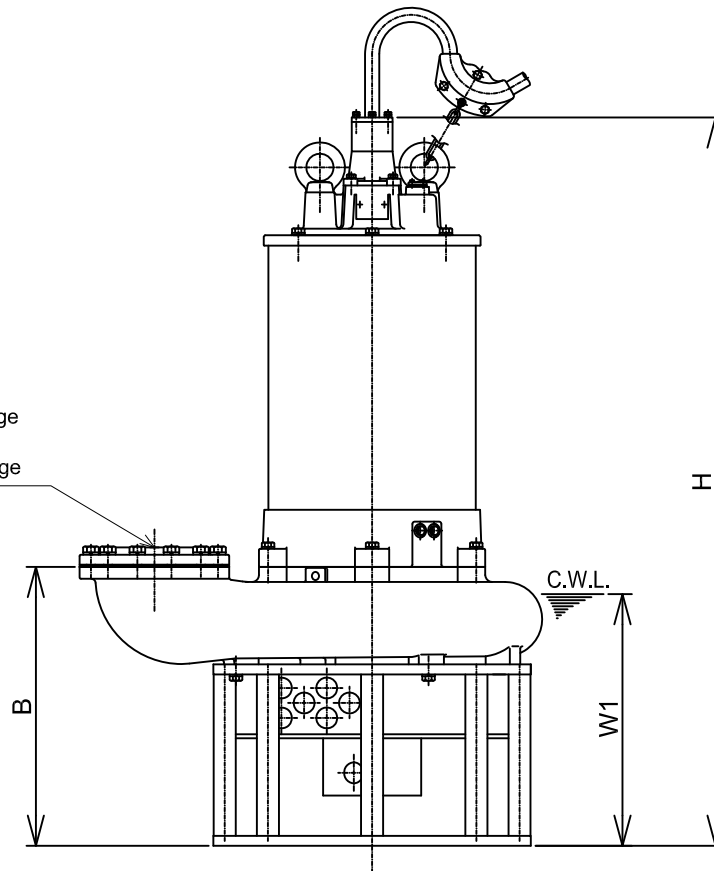
**GPN SERIES**  
SUBMERSIBLE AGITATOR PUMPS

**DIMENSIONS**

**GPN837-61**



8" JIS10K(150PSI) Flange  
with  
8"NPT Companion Flange



C.W.L. :Continuous running Water Level

**DIMENSIONS:USCS(Inch)**

Model	HP	NOM. SIZE	Pump & Motor								C.W.L.	*Wt.
			A	A1	A2	B	D	D1	D2	H	W1	(lbs.)
GPN837-61	50	8"	39 15/16	18 7/8	14 9/16	24 3/16	29 1/2	13 3/4	15 11/16	63 1/4	22	1760

\*Excluding Cable

**DIMENSIONS:METRIC(mm)**

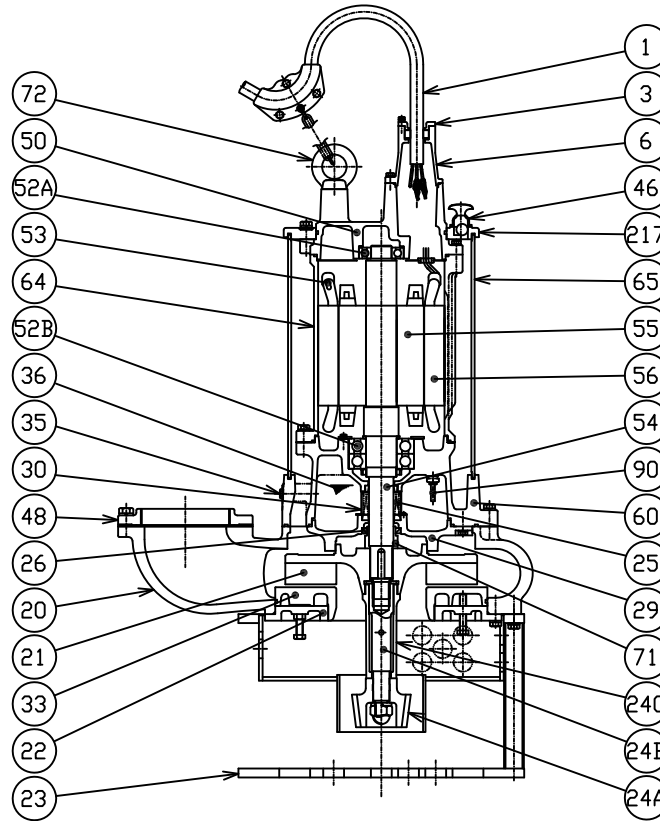
Model	kW	NOM. SIZE	Pump & Motor								C.W.L.	*Wt.
			A	A1	A2	B	D	D1	D2	H	W1	(kg)
GPN837-61	37	200	1015	480	370	615	749	350	399	1606	560	800



**GPN SERIES**  
SUBMERSIBLE AGITATOR PUMPS

**SECTIONAL VIEW**

**GPN837-61**



PART#	DESCRIPTION	MAIN MATERIAL / NOTE	RELATED ASTM,AISI CODE	RELATED EN CODE	QTY
1	Power Cable	Chloroprene Sheath AWG 4/3, 6/1, 14/3 -50ft			1
3	Gland	Cast Iron	A48M Class30B	EN 1561 GJL-200	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 TypeA	DIN 1695 G-X260Cr27	1
22	Suction Cover	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
23	Suction Strainer	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 TypeA	DIN 1695 G-X260Cr27	1
24B	Clutch	Steel	A283 Grade D	EN 10025 S275	1
24C	Clutch	Ductile Cast Iron	A536 65-45-12	EN 1563 GJS-450-10	1
25	Mechanical Seal	Silicon Carbide / H-60			1
26	Oil Seal	NBR / TC709513			1
29	Oil Casing	Cast Iron	A48M Class30B	EN 1561 GJL-200	1
30	Oil Lifter	PBT Resin			1
33	Suction Plate	High Chrome Cast Iron	A532 Class III TypeA	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 Release Valve	Steel (Cold Rolled)	A109 / A1008	EN 10130	1
48	Companion Flange	Cast Iron / NPT 8" JIS10K	A48M Class30B	EN 1561 GJL-200	1
50	Motor Bracket	Cast Iron	A48M Class35B	EN 1561 GJL-250	1
52A	Upper Bearing	#6310ZZC3			1
52B	Lower Bearing	#6315ZZD2C3			1
53	Motor Protector				3
54	Shaft	Stainless Steel	S 42000	1.4021	1
55	Rotor				1
56	Stator				1
60	Bearing Housing	Cast Iron	A48M Class35B	EN 1561 GJL-250	1
64	Motor Housing	Cast Iron	A48M Class35B	EN 1561 GJL-250	1
65	Outer Cover	Steel Pipe (& Steel)	A53 Type F (& A283 Grade D)	DIN 1615 St 33 (& 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	1
90	Leak Sensor (Electrode)	Stainless Steel	S 30300	1.4305	1
217	Fixing Plate	Cast Iron	A48M Class30B	EN 1561 GJL-200	1