



HS SERIES HS • HSZ • HSD

Semi-Vortex - Wastewater Pump with Agitator

SPECIFICATIONS

✓ FEATURES



- Semi-vortex urethane rubber impeller with agitator suspends solids and allows for pumping of sand and stringy material.
- Highly efficient, continuous duty air-filled, copper wound motor with class E insulation minimizes the cost of operation.
- Built in thermal protection prevents motor failure due to overloading, accidental run-dry and single phasing in three phase units.
- Double inside mechanical seals with silicon carbide faces running in an oil filled chamber provide for one the most durable seal designs available.
- Double shielded, permanently lubricated, high temperature C3 ball bearings rated for a B-10 life of 60,000 hours provide for extended operational life.

✓ APPLICATIONS

- Residential, commercial, industrial wastewater and site drainage.
- Decorative waterfalls and fountains.
- Raw water supply from lakes or rivers.
- Sediment removal from small sumps or basins.

✓ SPECIFICATIONS

HS • HSZ • HSD SERIES		STANDARD	OPTIONS
Discharge Size		2" - 3" NPT (50 - 80mm)	
Horsepower Range		1/2 - 1HP (0.40 - 0.75kW)	
Performance Range	Capacity	13.2 - 61.0GPM (0.05 - 0.23m ³ /min)	
	Head	13.1 - 62.0ft. (4.0 - 18.9m)	
Maximum Water Temperature		104F° (40C°)	
Materials of Construction	Casing	Cast Iron Ductile Cast Iron (HSD)	
	Impeller	Urethane Rubber High Chrome Cast Iron (HSD)	
	Shaft	403 Stainless Steel	
	Motor Frame	Aluminum Alloy	
	Fasteners	304 Stainless Steel	
Mechanical Seal		Silicon Carbide	
Elastomers		NBR (Nitrile Butadiene Rubber)	
Impeller Type		Semi-Vortex, Solid Handling	
Solids Handling Capability		0.276" - 0.393" (7.0 - 10.0mm)	
Bearings		Prelubricated, Double Shielded	
Motor Nomenclature	Type, Speed, Hz	Air Filled, 3600RPM, 60Hz	
	Voltage, Phase	115 / 230V, 1 Phase	
	Insulation	Class E	
Accessories		Submersible Power Cable, 20' - 32' (6.2 - 10m)	Length as required
Operational Mode		Manual (HS, HSD), Automatic (HSZ)	TS-301 Float Switch

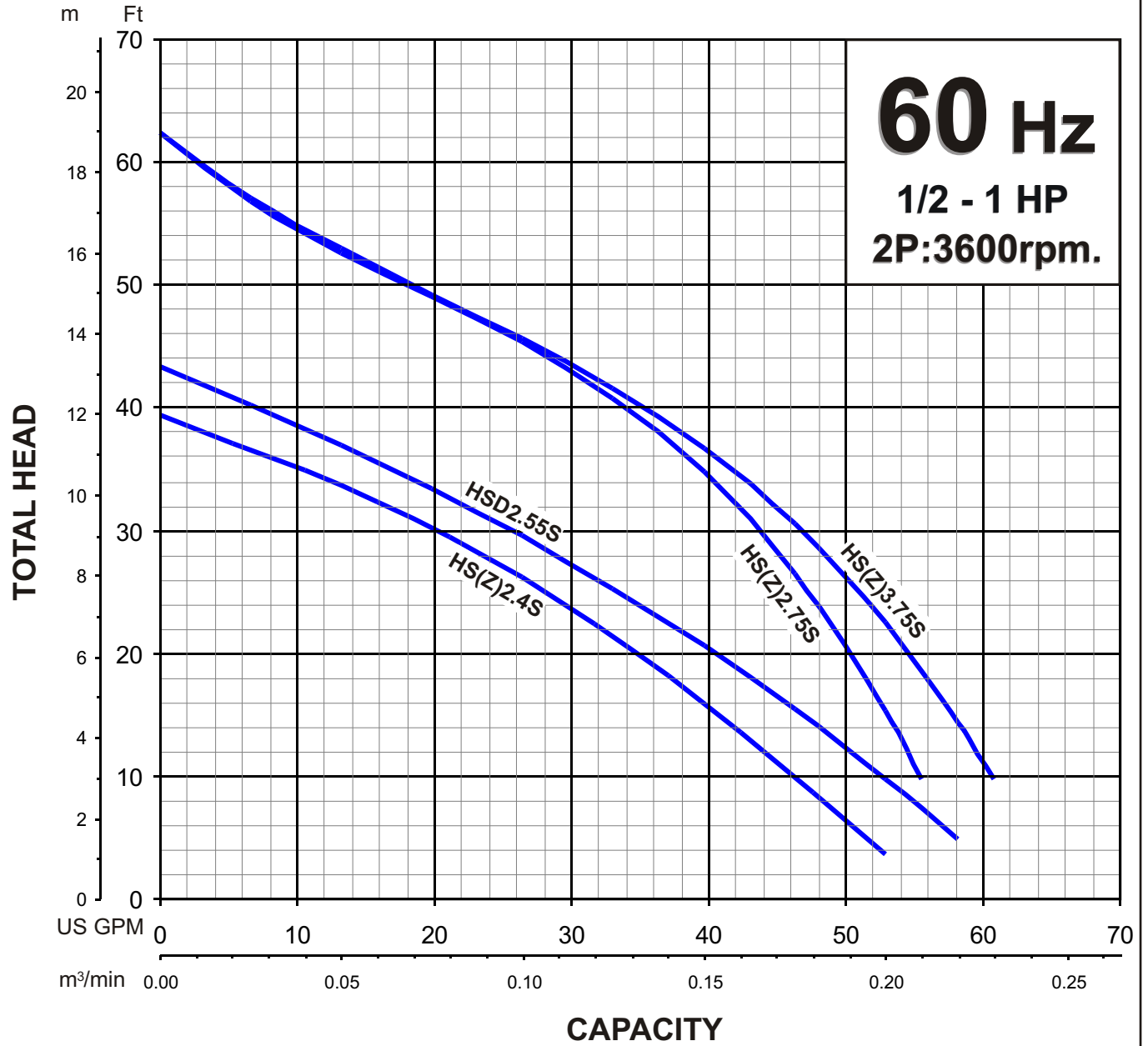


TSURUMI PUMP

HS - SERIES
SEMI-VORTEX - WASTEWATER & DEWATERING PUMP

PERFORMANCE
RANGE

GROUP PERFORMANCE RANGE

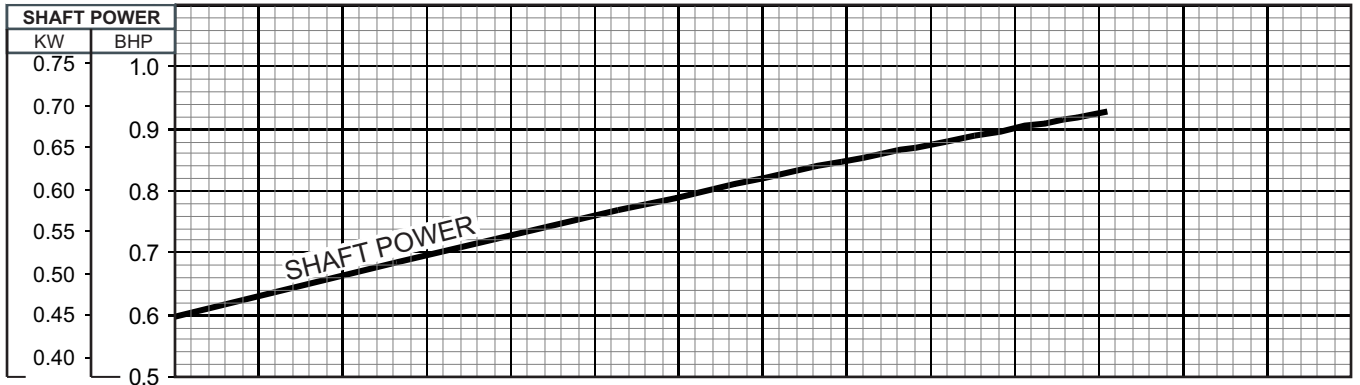
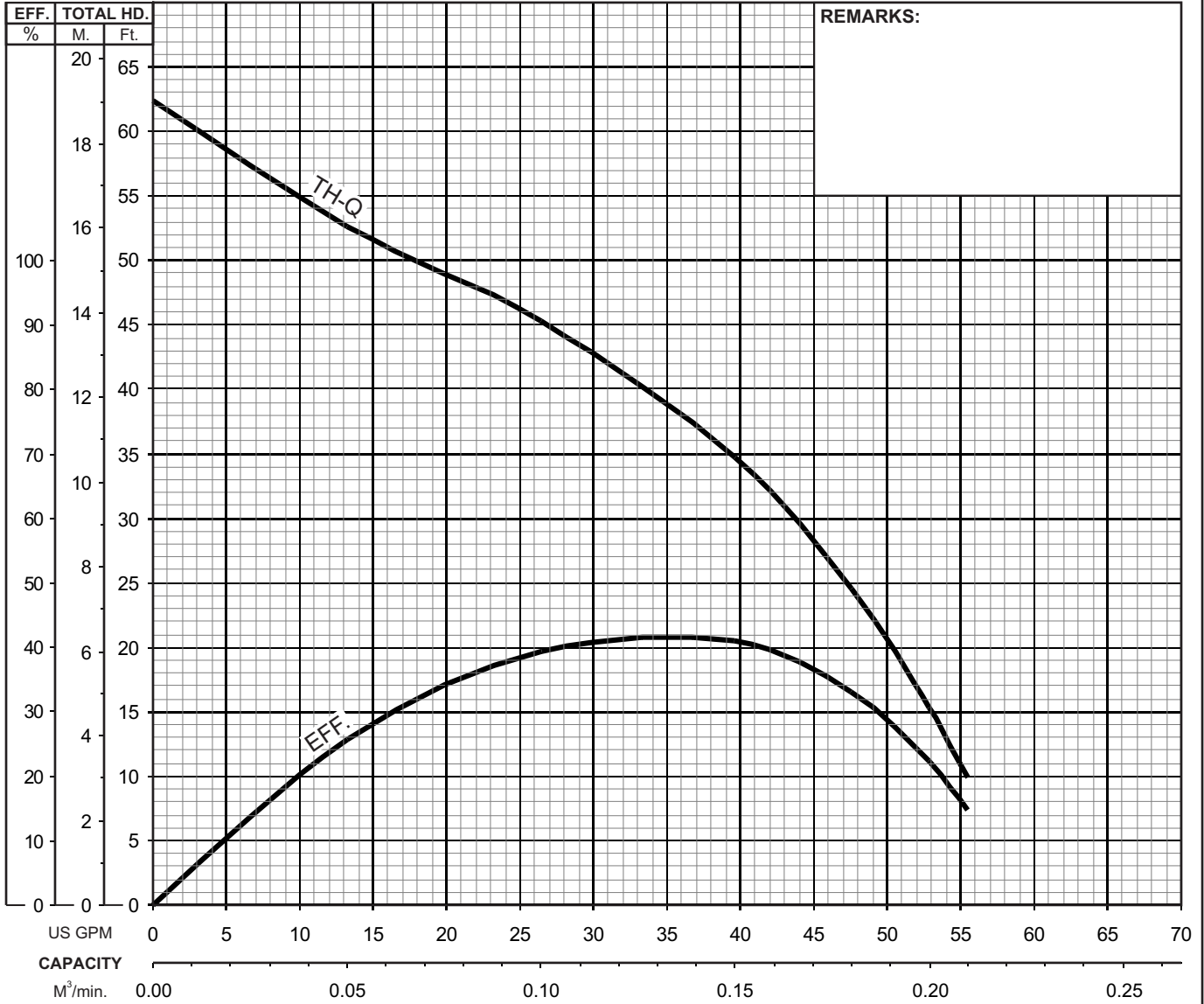




HS - SERIES SEMI-VORTEX - WASTEWATER PUMP

PERFORMANCE CURVE

MODEL	BORE	HP	KW	RPM	SOLIDS DIA	LIQUID	SG.	VISCOSITY	TEMP.
HS(Z)2.75S-62	2" / 50mm	1	0.75	3411	0.28" / 7mm	Water	1.0	1.123 cSt.	60°F
PUMP TYPE		PHASE	VOLTAGE	AMPERAGE		HZ	STARTING METHOD		INS. CLASS
Semi-Vortex - Wastewater Pump		Single	110/115, 220/230	10.0 / 9.7 , 5.1 / 4.9		60	Capacitor Start		E
CURVE No.	DATE	PHASE	VOLTAGE	AMPERAGE		HZ	STARTING METHOD		INS. CLASS
-	-	-	-	-		-	-		-

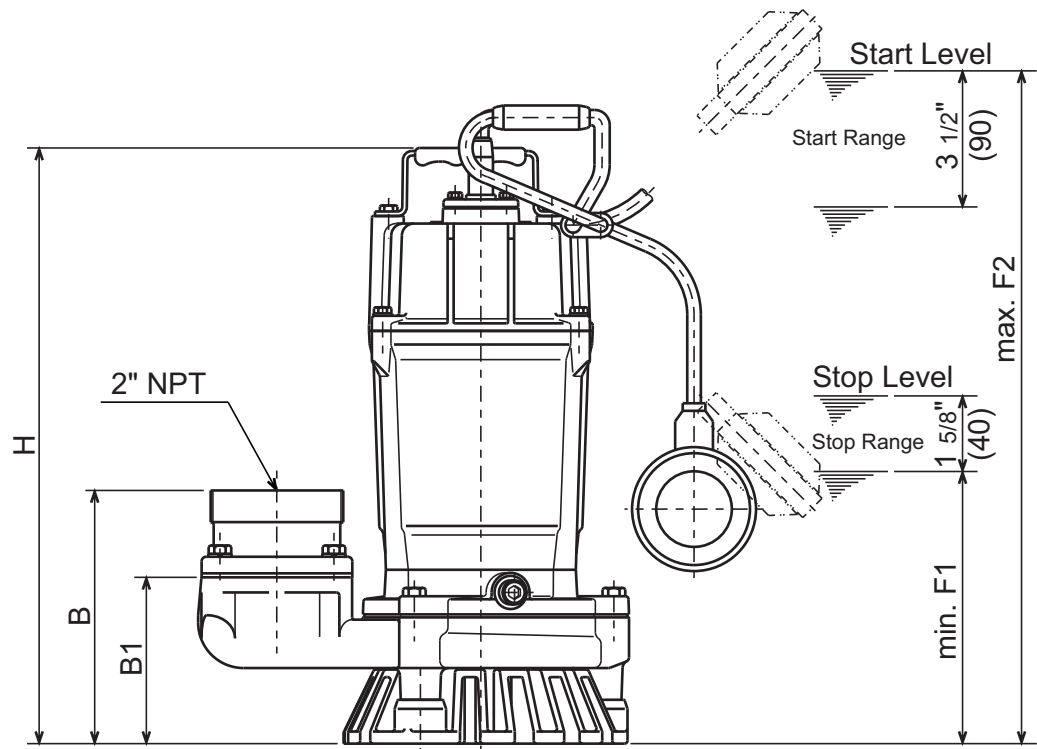
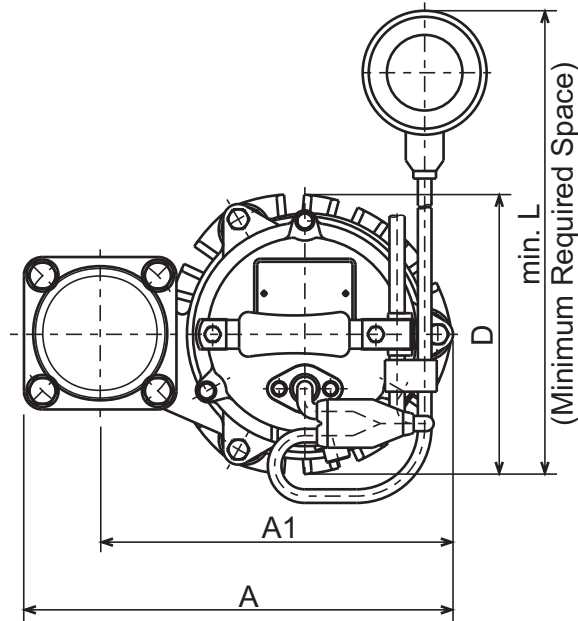




HS - SERIES
SEMI-VORTEX - WASTEWATER PUMP (AUTO-TYPE)

DIMENSIONS

HSZ2.75S-62



DIMENSIONS:USCS (Inch)

Model	HP	NOM. SIZE	Pump & Motor						Space min. L	Stop min. F1	Start max. F2	Wt. (lbs.)
			A	A1	B	B1	D	H				
HSZ2.75S-62	1	2"	11 7/16	9 3/16	6 3/4	4 5/16	7 5/16	15 5/16	13 1/2	7 1/8	17 1/2	37

DIMENSIONS:METRIC (mm)

Model	kW	NOM. SIZE	Pump & Motor						Space min. L	Stop min. F1	Start max. F2	Wt. (kg)
			A	A1	B	B1	D	H				
HSZ2.75S-62	0.75	50	290	233	173	110	185	389	340	180	445	16.7

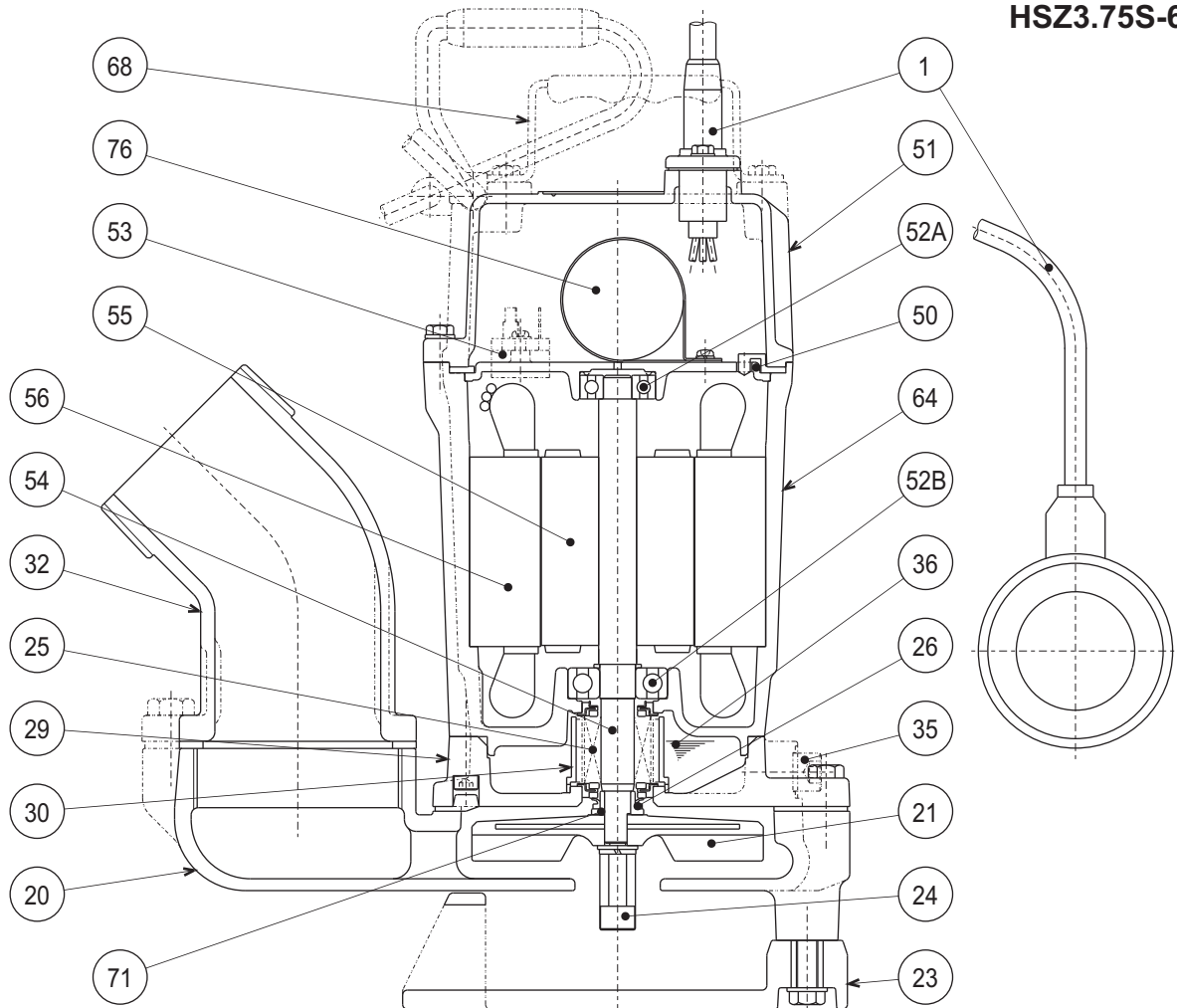


TSURUMI PUMP

HS - SERIES
SEMI-VORTEX - WASTEWATER PUMP (AUTO-TYPE)

SECTIONAL VIEW

HSZ2.75S-62
HSZ3.75S-62



ITEM#	DESCRIPTION	MAIN MATERIAL / NOTE	RELATED ASTM, AISI CODE	RELATED EN CODE	Q'TY
1	Power Cable w/ Float Set	PVC Sheath AWG14/3-32ft w/ PP Resin + Chloroprene Sheath Cable			1
20	Pump Casing	Ductile Cast Iron	A536 65-45-12	EN 1563 GJS-450-10	1
21	Impeller	Urethane Rubber			1
23	Suction Strainer	PVC			1
24	Agitator	Steel	A283 Grade D	EN 10025 S275	1
25	Mechanical Seal	Silicon Carbide / W-14VL			1
26	V-Ring	Nitrile Butadiene Rubber			1
29	Oil Casing	Ductile Cast Iron	A536 65-45-12	EN 1563 GJS-450-10	1
30	Oil Lifter	PBT Resin			1
32	Discharge Connection	Cast Iron / NPT 2" or 3"	A48M Class30B	EN 1561 GJL-200	1
35	Oil Plug	Stainless Steel	S 30400	1.4301	1
36	Lubricant	Turbine Oil ISO VG32 or SAE10W-20			1
50	Motor Bracket	Aluminum Alloy Die Casting	B85 383.0	EN 1706 AC-46100	1
51	Motor Head Cover	Aluminum Alloy Die Casting	B85 383.0	EN 1706 AC-46100	1
52A	Upper Bearing	#6201ZZC3			1
52B	Lower Bearing	#6302ZZC3			1
53	Motor Protector				1
54	Shaft	Stainless Steel	S 40300	1.4000	1
55	Rotor				1
56	Stator				1
64	Motor Housing	Aluminum Alloy Die Casting	B85 383.0	EN 1706 AC-46100	1
68	Handle	Steel (Hot Rolled) + NR Rubber	A1011	EN 10111	1
71	Shaft Sleeve	Stainless Steel	S 30400	1.4301	1
76	Capacitor				1