



GSZ-4/6 - SERIES
 [4Pole]HIGH VOLUME - DEWATERING PUMP
 [6Pole]HIGH VOLUME - SAND PUMP & AGITATOR PUMP

SPECIFICATIONS

FEATURES

1. Enclosed, high chrome cast iron or Stainless Steel impeller with field adjustable/replaceable wear plate provides for high wear resistance when the pumpage contains abrasive particles.
2. Highly efficient, continuous duty air filled, copper wound motor with class F, E, insulation minimizes the cost of operation.
3. Built in thermal protection prevents motor failure due to overloading, accidental run-dry and single phasing in three phase units.
4. Double inside mechanical seals with silicon carbide faces, running in an oil filled chamber, further protected by a labyrinth seal, running against a replaceable, 430 stainless steel shaft sleeve and seal pressure relief ports,-

Providing for the most durable seal design available.

5. Double shielded, permanently lubricated, high temperature C3 ball bearings rated for a B-10 life of 60,000 hours provide for extended operational life.
6. The agitator installed on the motor shaft extension forcibly agitates the fluid for easy and efficient transmission of sludge and slime. (GSZ5-37-6SK)

APPLICATIONS

1. Commercial, industrial wastewater and construction site drainage.
2. Sand & Gravel pit drainage.
3. Sediment removal from sumps or basins.



SPECIFICATIONS

- Discharge Size
- Horsepower Range
- Performance Range Capacity Head
- Maximum water temperature
- Materials of Construction
 - Casing
 - Impeller
 - Shaft
 - Motor Frame
 - Fasteners
- Seal Pressure Relief ports
- Mechanical Seal
 - Elastomers
- Impeller Type
- Solids Handling Capability
- Bearings
- Motor Nomenclature
 - Type, Speed, Hz.
 - Voltage, Phase
 - Insulation
- Accessories
- Operational Mode

STANDARD

- 6"~10" NPT (150mm ~ 250 mm)
- 30 HP.~ 100 HP. (22 kW ~ 75 kW)
- 528 ~ 4621 GPM (2.0 ~17.5 m³/min)
- 24.6 Ft. ~ 197.0 Ft. (7.5 m ~ 60.0 m)
- 104°F. (40°C.)
- Cast Iron
- High Chrome Iron/Stainless Steel
- 420 Stainless Steel
- Cast Iron/Steel Jacket
- 304 Stainless Steel
- 4P-1800RPM Motor Model
- Silicon Carbide
- NBR (Nitrile Butadiene Rubber)
- Enclosed, Open, solids handling
- 0.394 ~ 1.97" (10 - 50mm)
- Prelubricated, Double Shielded
- Air Filled, 1200 & 1800 Rpm, 60 Hz.
- 460 or 575 V., 3 Phase
- Class F or E
- Submersible Power Cable 50' (15 m)
- Manual

OPTIONS

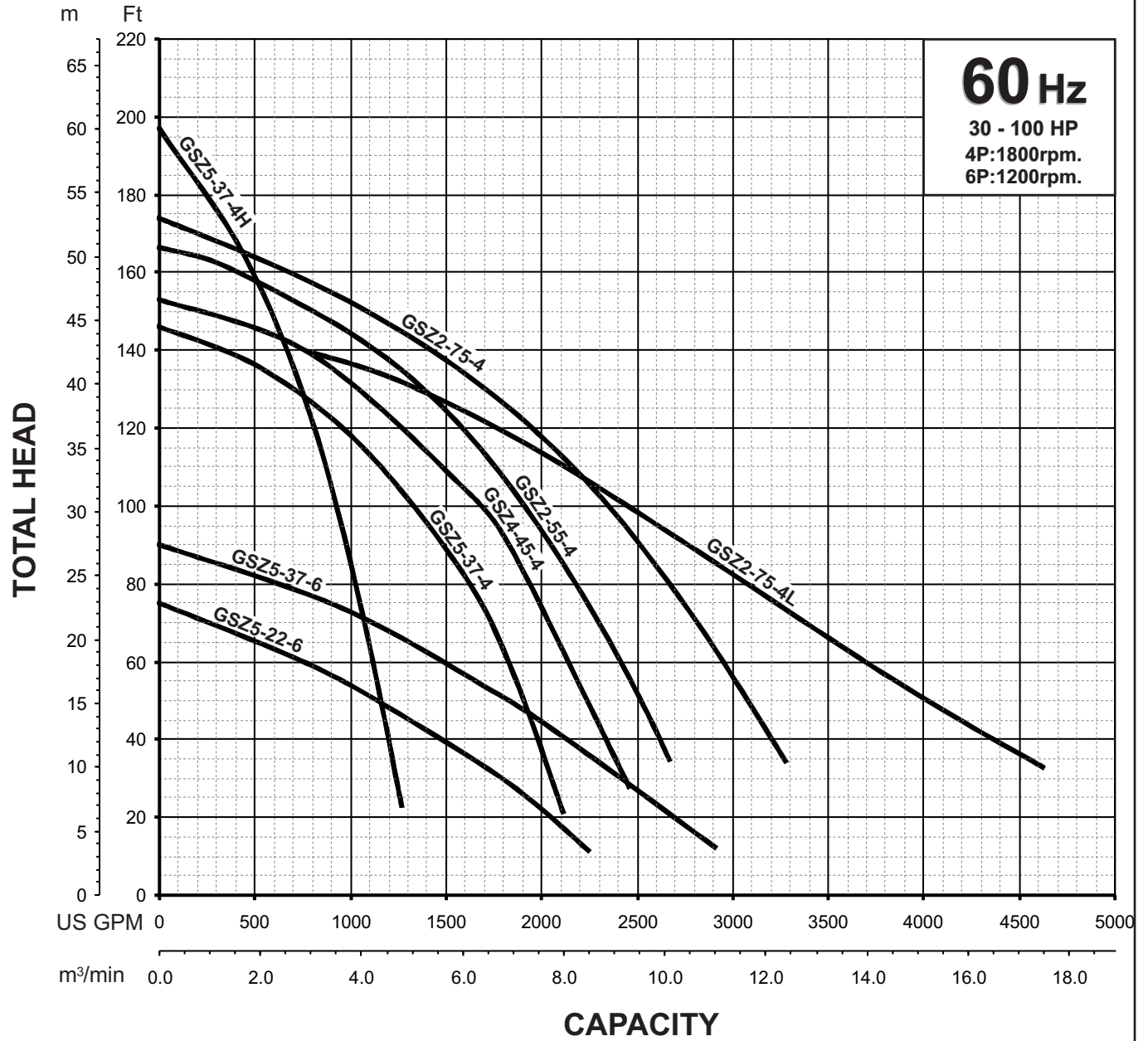
Length as Required.



GSZ - SERIES
 [4 Pole] High Volume - Dewatering Pumps
 [6 Pole] High Volume - Sand Pumps & Agitator Pump

PERFORMANCE RANGE

GROUP PERFORMANCE RANGE

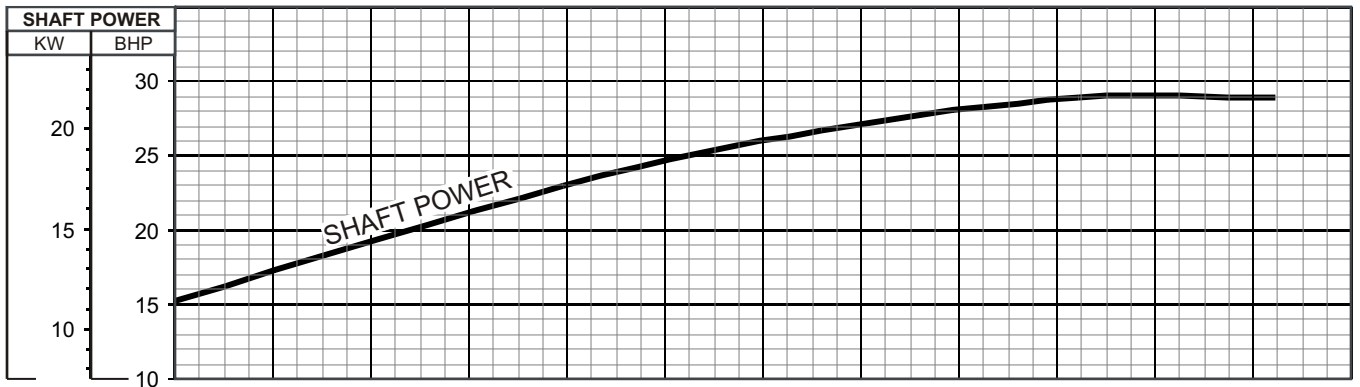
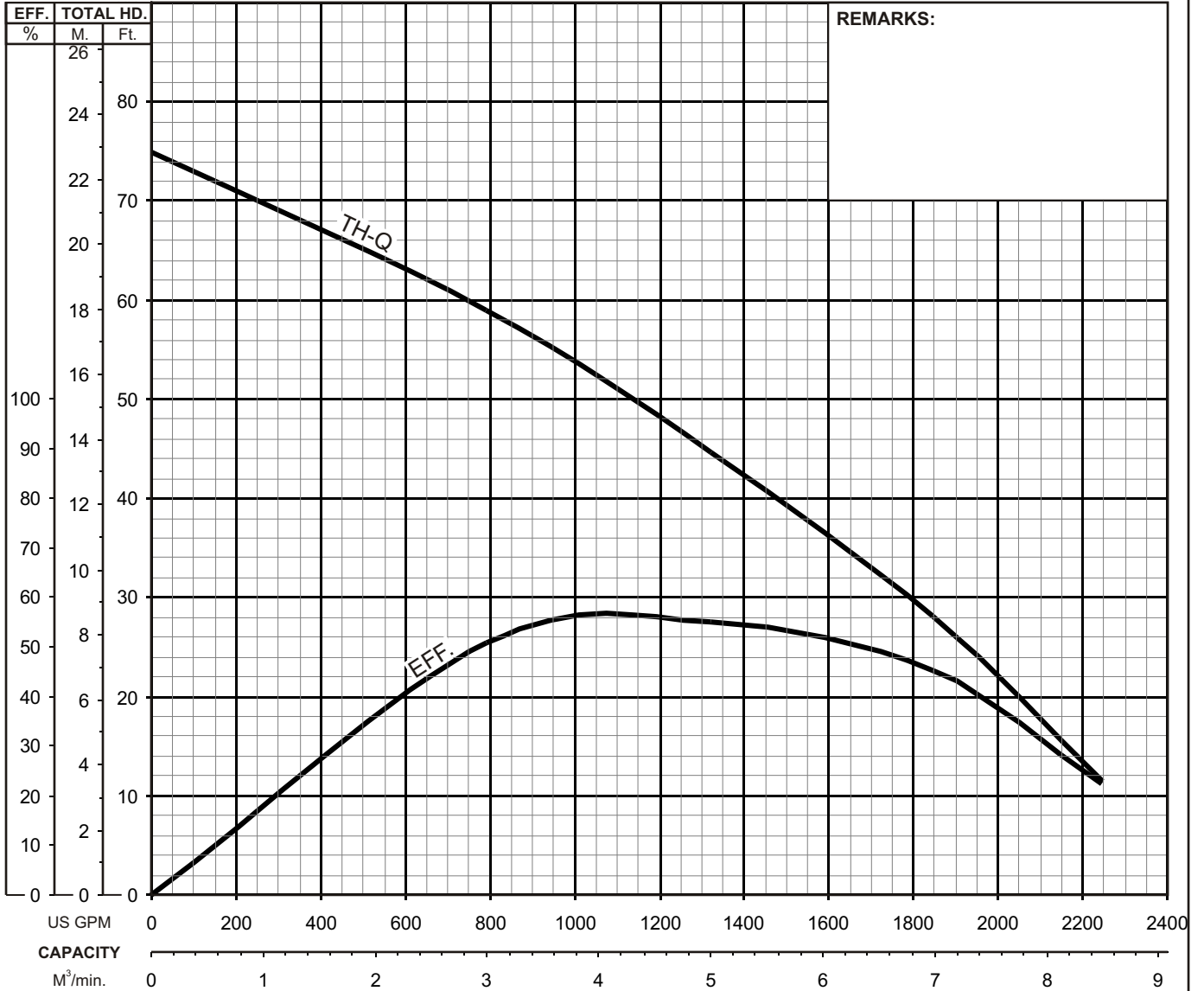




GSZ-6 SERIES HIGH VOLUME - SAND PUMPS

PERFORMANCE CURVE

| MODEL | BORE | HP | KW | RPM | SOLIDS DIA | LIQUID | SG. | VISCOSITY | TEMP. |
|-------------------------|----------|-------|---------|----------|------------|--------|-----------------|-----------|------------|
| GSZ5-22-6 | 8"/200mm | 30 | 22 | 1160 | 1.97"/50mm | Water | 1.0 | 1.123 cSt | 60°F |
| PUMP TYPE | | PHASE | VOLTAGE | AMPERAGE | | HZ | STARTING METHOD | | INS. CLASS |
| High Volume - Sand Pump | | 3 | 460/575 | 41 / 33 | | 60 | Direct On Line | | F |
| CURVE No. | DATE | PHASE | VOLTAGE | AMPERAGE | | HZ | STARTING METHOD | | INS. CLASS |
| - | - | - | - | - | | - | - | | - |

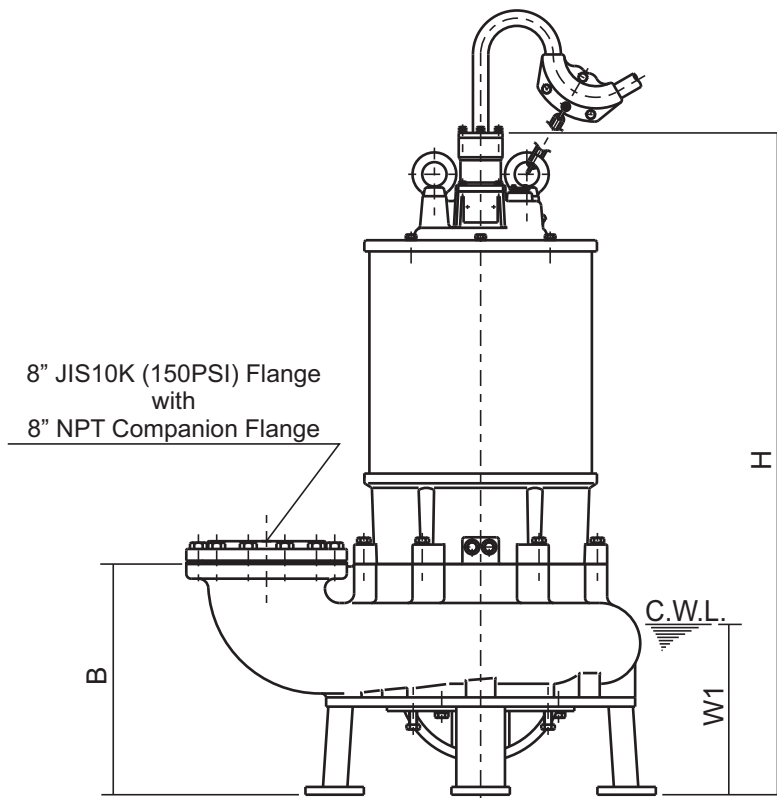
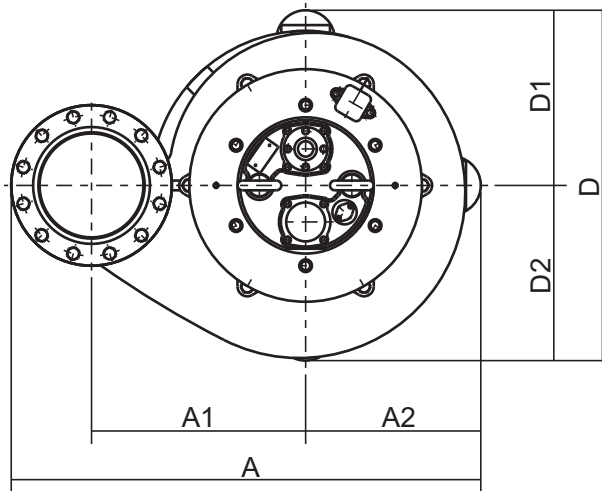




GSZ-6 SERIES
HIGH VOLUME - SAND PUMPS

DIMENSIONS

GSZ5-22-6



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.) |
| GSZ5-22-6 | 30 | 8" | 38 | 17 5/16 | 14 3/16 | 18 11/16 | 28 3/8 | 14 3/16 | 14 3/16 | 53 9/16 | 13 3/4 | 1610 |

*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) |
| GSZ5-22-6 | 22 | 200 | 965 | 440 | 360 | 474 | 720 | 360 | 360 | 1360 | 350 | 730 |

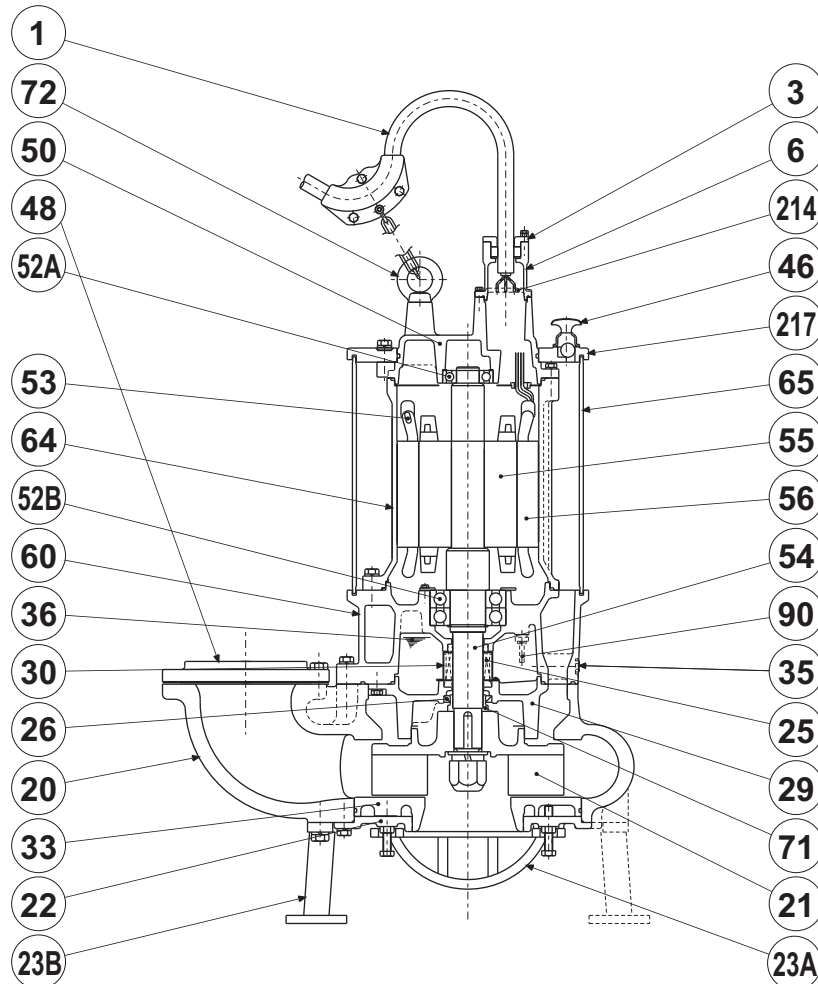


TSURUMI PUMP

**GSZ-6 SERIES
HIGH VOLUME - SAND PUMP**

SECTIONAL VIEW

GSZ5-22-6



| ITEM# | DESCRIPTION | MAIN MATERIAL / NOTE | ASTM, AISI CODE | RELATED EN CODE | Q'TY |
|-------|-------------------------|---------------------------------------|-------------------|---------------------|------|
| 1 | Power Cable | Chloroprene Sheath AWG 6/4, 1/3 -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† TypeA | DIN 1695 G-X260Cr27 | 1 |
| 22 | Suction Cover | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |
| 23A | Suction Strainer | Steel | A283 Grade D | EN 10025 S275 | 1 |
| 23B | Pump Stand | Steel | A283 Grade D | EN 10025 S275 | 1 |
| 25 | Mechanical Seal | Silicon Carbide / H-60 | | | 1 |
| 26 | Oil Seal | NBR / TC-709513 | | | 1 |
| 29 | Oil Casing | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |
| 30 | Oil Lifter | Steel (Cold Rolled) | A109/A1008 | EN 10130 | 1 |
| 33 | Suction Plate | High Chrome Cast Iron | A532 Class† TypeA | DIN 1695 G-X260Cr27 | 1 |
| 35 | Oil Plug | Stainless Steel | S 30400 | 1.4301 | 2 |
| 36 | Lubricant | Turbine Oil ISO V G32 or SAE 10W-20 | | | |
| 46 | Air Release Valve | Steel (Cold Rolled) | A109/A1008 | EN 10130 | 1 |
| 48 | Companion Flange | Cast Iron / NPT8" JIS10K | A48M Class30B | EN 1561 GJL-200 | 1 |
| 50 | Motor Bracket | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |
| 52A | Upper Bearing | #6309ZZC3 | | | 1 |
| 52B | Lower Bearing | #6314ZZD2C3 | | | 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 Class30B | EN 1561 GJL-200 | 1 |
| 64 | Motor Housing | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |
| 65 | Outer Cover | Steel Pipe | A53 Type F | DIN 1615 St 33 | 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 |
| 214 | Blind Cover | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |
| 217 | Fixing Plate | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |


TSURUMI PUMP
**GSZ-6 SERIES
HIGH VOLUME - SAND PUMPS**
**SAMPLE
SPECIFICATIONS**

1. SCOPE OF SUPPLY -

Furnish and install TSURUMI Model _____ Submersible Pump(s).
Each unit shall be capable of delivering _____ GPM (_____ m³/min) at _____ Feet (_____ m) TDH.
The pump(s) shall be designed to pump waste water without damage during operation. The pump(s) shall be designed so that the shaft power required (BHP)/(kW) shall not exceed the motor rated output throughout the entire operating range of the pump performance curve.

2. MATERIALS OF CONSTRUCTION -

Construction of major parts of the pumping unit(s) shall be gray cast iron, ASTM A48 CLASS 35. Impellers and field adjustable/replaceable wear plate shall be high chrome cast iron. Impellers shall be of the multi-vane semi-open design equipped with back pump out vanes and shall be slip fit to the shaft and key driven. Internal and external surfaces coming into contact with the pumpage shall be protected by a fused polymer coating. All exposed fasteners shall be stainless steel. All units shall be furnished with 150 lb. (10 kg/cm²) flat face flange and NPT companion flange.

3. MECHANICAL SEAL -

All units shall be furnished with a dual inside mechanical shaft seal located completely out of the pumpage, running in a separate oil filled chamber and further protected by an exclusionary oil seal located between the bottom seal faces and the fluid being pumped. The oil chamber shall be fitted with a device that shall provide positive lubrication of the top mechanical seal, (down to one third of the standard oil level). The device shall not consume any additional electrical power. Mechanical seals shall be rated to preclude the incursion of water up to 42.6 PSI. (98.4 Ft.) submergence. Units shall have silicon carbide versus silicon carbide upper and lower mechanical seal faces. Mechanical seal hardware shall be stainless steel. All unit(s) shall be fitted with a replaceable 403 stainless steel shaft sleeve.

4. MOTOR-

The pump motor(s) shall be _____ Hp., _____ kW., _____ V., 60 Hz. 3 Phase and shall be NEMA MG-1, Design Type B equivalent. Motor(s) shall be rated at _____ full load amps. Motor(s) shall have a 1.15 service factor and shall be rated for 20 starts per hour. Motor(s) shall be air filled, copper wound, class F insulated with built in thermal protection for each winding. Motor shaft shall be 420 stainless steel and shall be supported by two high temperature ball bearings, with a B-10 life rating at best efficiency point of 60,000 hours. The bottom bearing shall be two row, double shielded, C3, deep groove type ball bearing. The top bearing on all units shall be single row, double shielded, C3, deep groove type ball bearing. Motors shall be D.O.L. or star-delta start (50 Hp), and shall be suitable for across the line start or variable speed applications, utilizing a properly sized variable frequency drive. Motor shall incorporate a steel water cooling jacket.

5. POWER CABLE AND CABLE ENTRANCE -

The pump power cable shall be suitable for submersible pump applications and shall be field replaceable utilizing standard submersible pump cable. The cable entrance shall incorporate built in strain relief and a combination three way mechanical compression sealing. The cable entrance assembly shall contain an anti-wicking block to eliminate water incursion into the motor due to capillary wicking should the power cable be accidentally damaged.