



VANCS - SERIES - 12PN

SPECIFICATIONS

■ FEATURES

1. Channel Impeller and specially designed volute allows for efficient, high volume pumping.
2. Double inside mechanical seals (Motor side: with ceramic x carbon, Impeller side: with silicon carbide faces) running in an oil filled chamber.
3. Highly efficient, continuous duty, air filled, copper wound motor with class E, insulation minimizes the cost of operation.
4. Built in thermal & amperage sensing, protector prevents motor failure due to overloading, single phasing (in three phase units), or accidental run -dry conditions.
5. Double shielded, permanently lubricated, high temperature C3 ball bearings rated for a B-10 life of 60,000 hours, extend operational life.

6. Utilization of application appropriate FRP & stainless steel components increases corrosion resistance in a wide variety of applications.

■ APPLICATIONS

1. Residential, commercial, industrial, effluent, wastewater and site drainage.
2. Chemical spill containment.
3. Decorative waterfalls, fountains and fish ponds.
4. Raw water supply from rivers or lakes.



■ SPECIFICATIONS

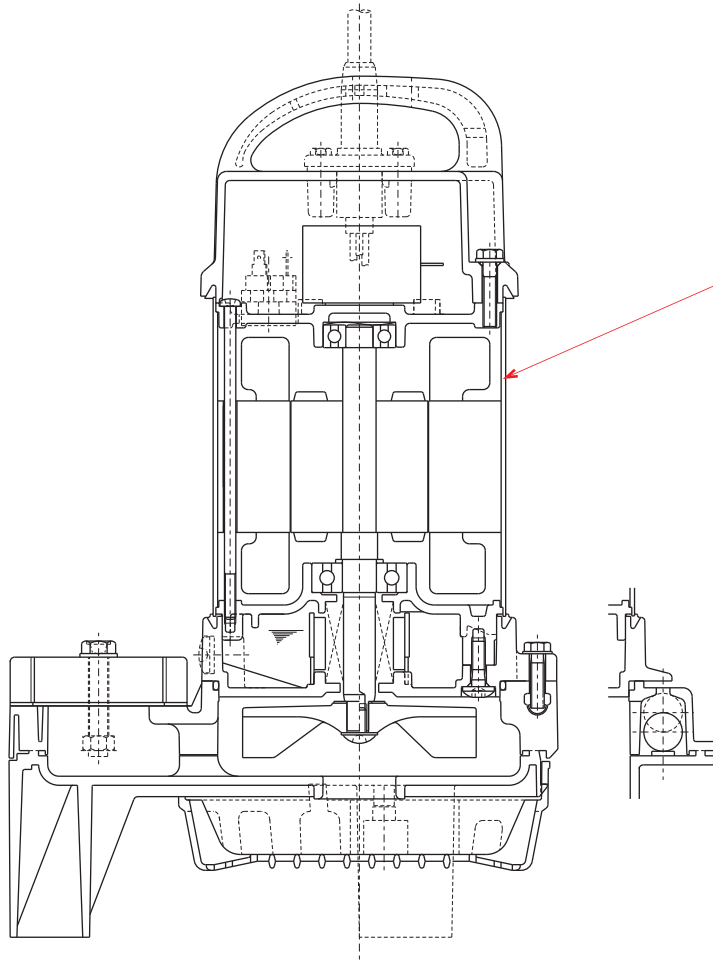
Discharge Size
 Horsepower Range
 Performance Range Capacity
 Head
 Maximum water temperature
 Materials of Construction
 Casing
 Impeller
 Shaft
 Motor Frame
 Fasteners
 Mechanical Seal
 Elastomers
 Impeller Type
 Solids Handling Capability
 Bearings
 Motor Nomenclature
 Type, Speed, Hz.
 Voltage, Phase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

■ STANDARD

3" NPT (80 mm)
 1 (0.75 kW)
 10,000 GPH (37.854 m³/h)
 23 Ft (7.0 m)
 104° F (40° C.)
 Cast Iron
 PPO Plastic w/ GF 20
 304 Stainless Steel
 304 Stainless Steel
 304 Stainless Steel
 Silicon Carbide
 NBR (Nitril Butadiene Rubber)
 Channel Impeller
 1.38" (35 mm)
 Pre-lubricated, Double Shielded
 Air Filled, 3600 Rpm, 60 Hz.
 120 V., 1 Ph.
 Class E
 Submersible Power Cable 20Ft. (6.1 m)
 Manual

■ OPTIONS

Length as Required



Current Model : 50PN2.75S-62

Motor

Model : VK2-C8

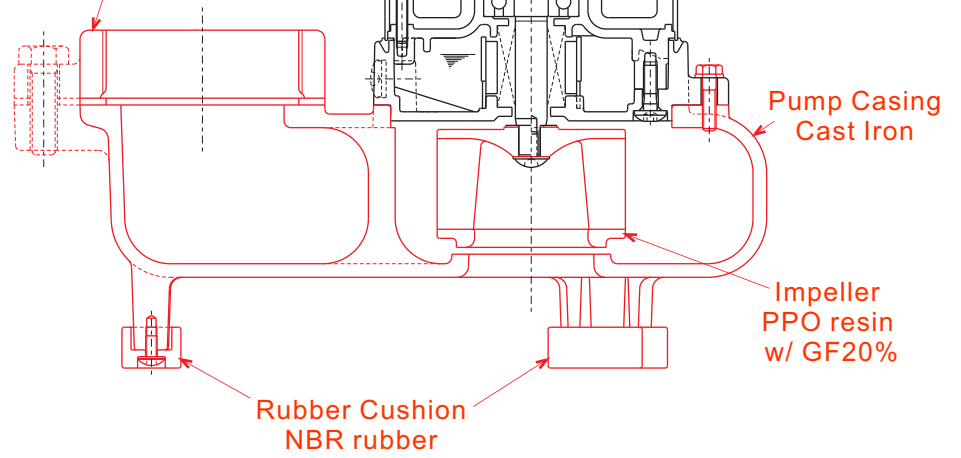
Manufacturer : Aichi-Elec

Rating

1 phase 115/120V or 230V-60Hz

Current : 8.7/8.6A or 4.6A

Companion Flange 3" NPT
Cast Iron



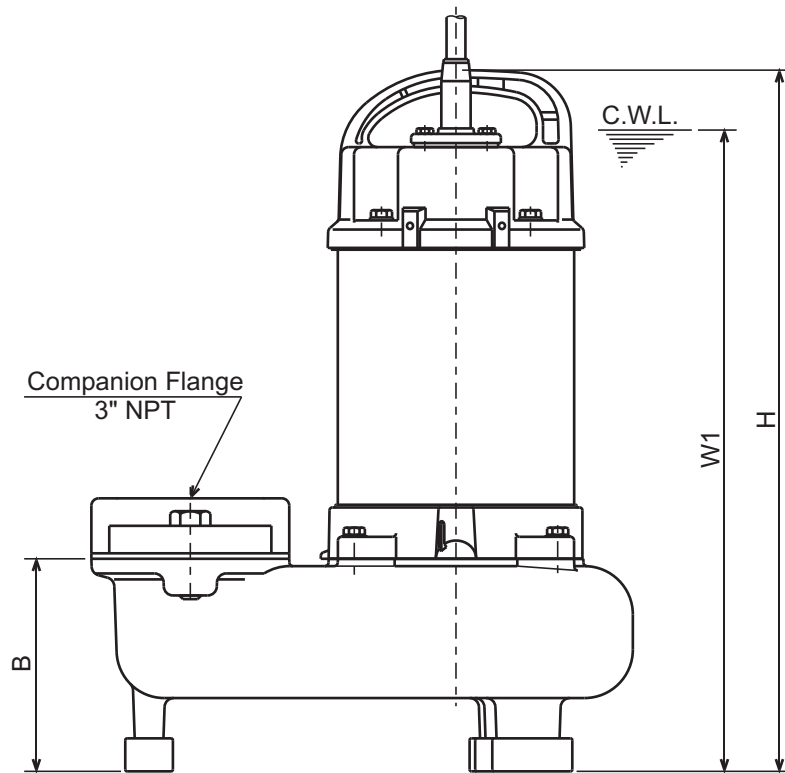
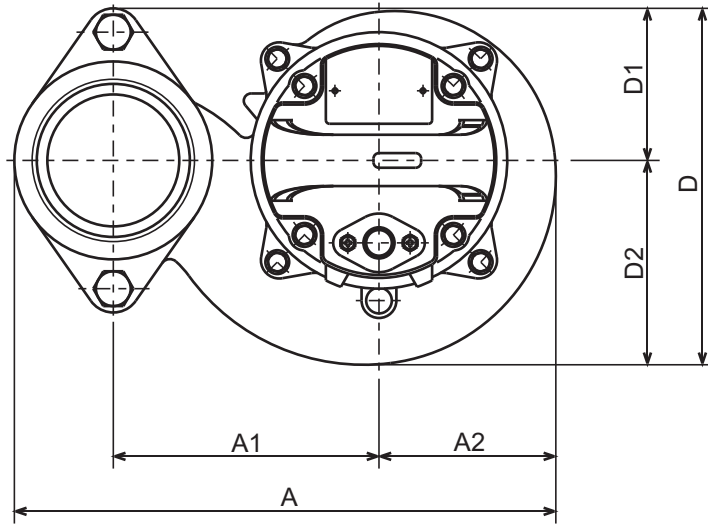
Additional Model : 12-PN



12-PN
HIGH VOLUME POND PUMP

DIMENSIONS

12-PN



Companion Flange
3" NPT

C.W.L. :Continuous running Water Level

DIMENSIONS:USCS (Inch)

| Model | HP | NOM. SIZE | Pump & Motor | | | | | | | | C.W.L. W1 | Wt. (lbs.) |
|-------|----|-----------|--------------|---------|---------|--------|---------|-------|-------|---------|-----------|------------|
| | | | A | A1 | A2 | B | D | D1 | D2 | H | | |
| 12-PN | 1 | 3" | 11 5/8 | 5 11/16 | 3 13/16 | 4 9/16 | 7 11/16 | 3 1/4 | 4 3/8 | 15 1/16 | 13 3/4 | 31.9 |

DIMENSIONS:METRIC (mm)

| Model | kW | NOM. SIZE | Pump & Motor | | | | | | | | C.W.L. W1 | Wt. (kg) |
|-------|------|-----------|--------------|-----|----|-----|-----|----|-----|-----|-----------|----------|
| | | | A | A1 | A2 | B | D | D1 | D2 | H | | |
| 12-PN | 0.75 | 80 | 296 | 145 | 97 | 116 | 195 | 83 | 112 | 383 | 350 | 14.5 |

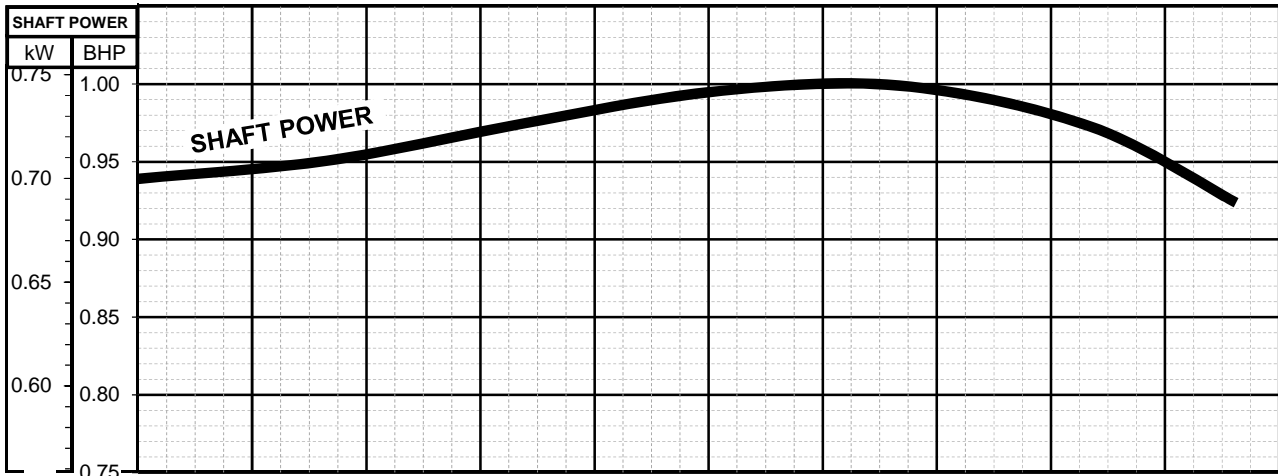
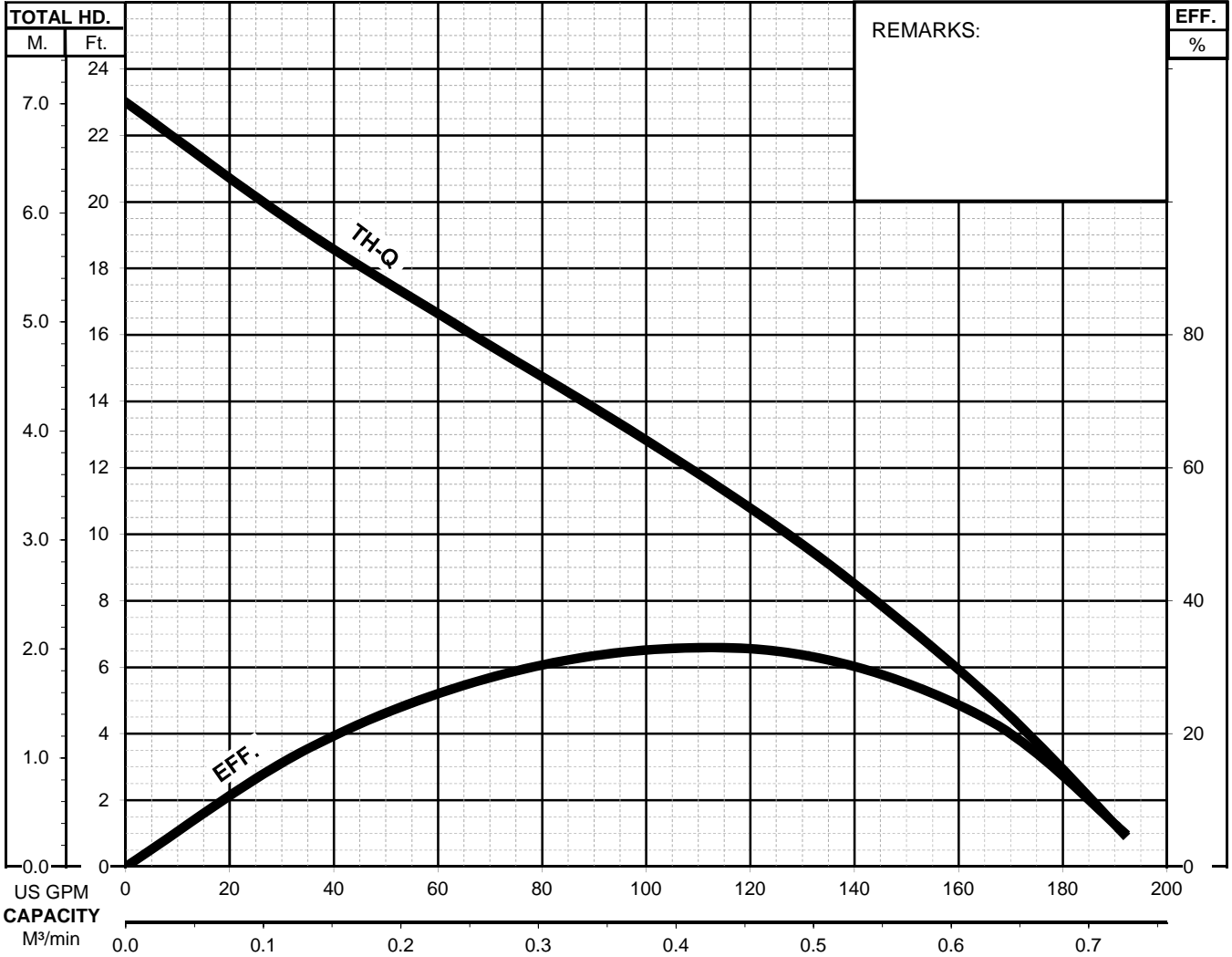


12-PN

HIGH VOLUME POND PUMP

PERFORMANCE
CURVE

| MODEL | | BORE | HP | KW | RPM | SOLIDS DIA. | LIQUID | SG. | VISCOSITY | TEMP. |
|-----------------------|------|---------|-------------|-----|-----------------|-------------|--------|-----------------|-----------|------------|
| 12-PN | | 3"/80mm | 1.0 | 0.8 | 3374 | 1.38"/35mm | Water | 1.0 | 1.123cSt. | 60°F |
| PUMP TYPE | | PHASE | VOLTAGE | | AMPERAGE | | HZ | STARTING METHOD | | INS. CLASS |
| High Volume Pond Pump | | 1 | 110/115/120 | | 9.0 / 8.7 / 8.6 | | 60 | Direct On Line | | E |
| CURVE No. | DATE | PHASE | VOLTAGE | | AMPERAGE | | HZ | STARTING METHOD | | INS. CLASS |
| - | - | - | - | | - | | - | - | | - |

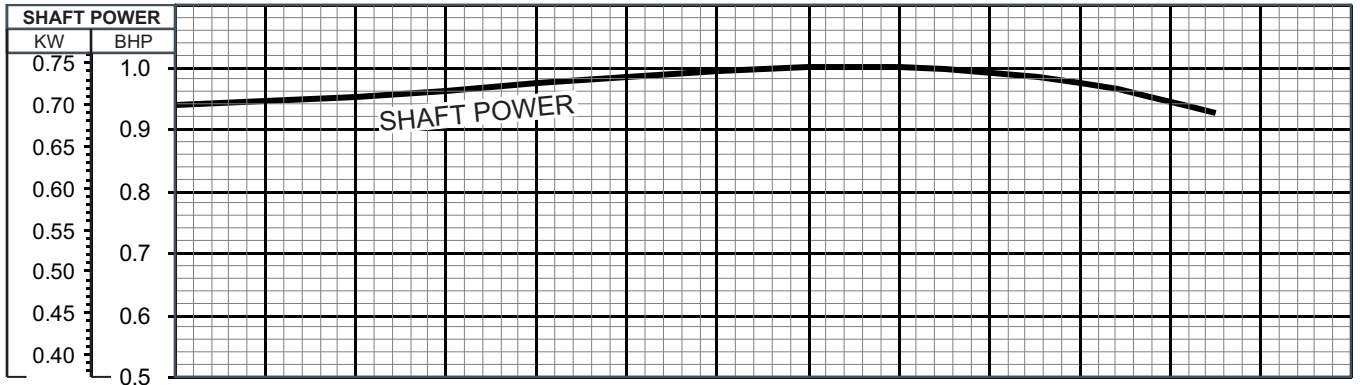
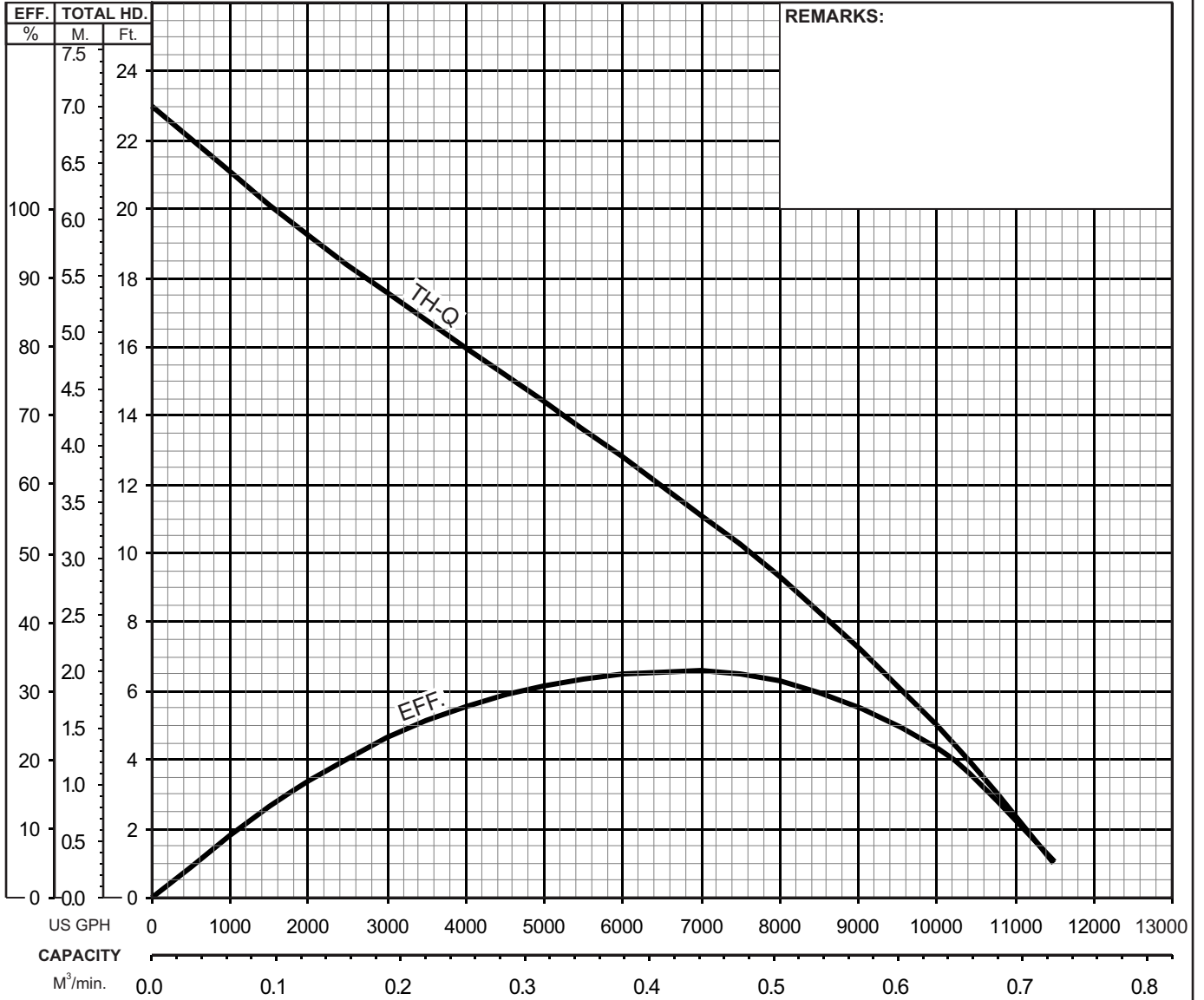




12-PN HIGH VOLUME POND PUMP

PERFORMANCE CURVE

| MODEL | BORE | HP | KW | RPM | SOLIDS DIA | LIQUID | SG. | VISCOSITY | TEMP. |
|-----------------------|-----------|-----------------|-----------------|----------|-----------------|-----------------|------------|-----------|-------|
| 12-PN | 3" / 80mm | 1 | 0.75 | 3374 | 1.38" / 35mm | Water | 1.0 | 1.123 cSt | 60°F |
| PUMP TYPE | PHASE | VOLTAGE | AMPERAGE | HZ | STARTING METHOD | INS. CLASS | | | |
| High Volume Pond Pump | Single | 110 / 115 / 120 | 9.5 / 9.2 / 9.1 | 60 | Capacitor-Start | E | | | |
| CURVE No. | DATE | PHASE | VOLTAGE | AMPERAGE | HZ | STARTING METHOD | INS. CLASS | | |
| - | - | - | - | - | - | - | - | | |

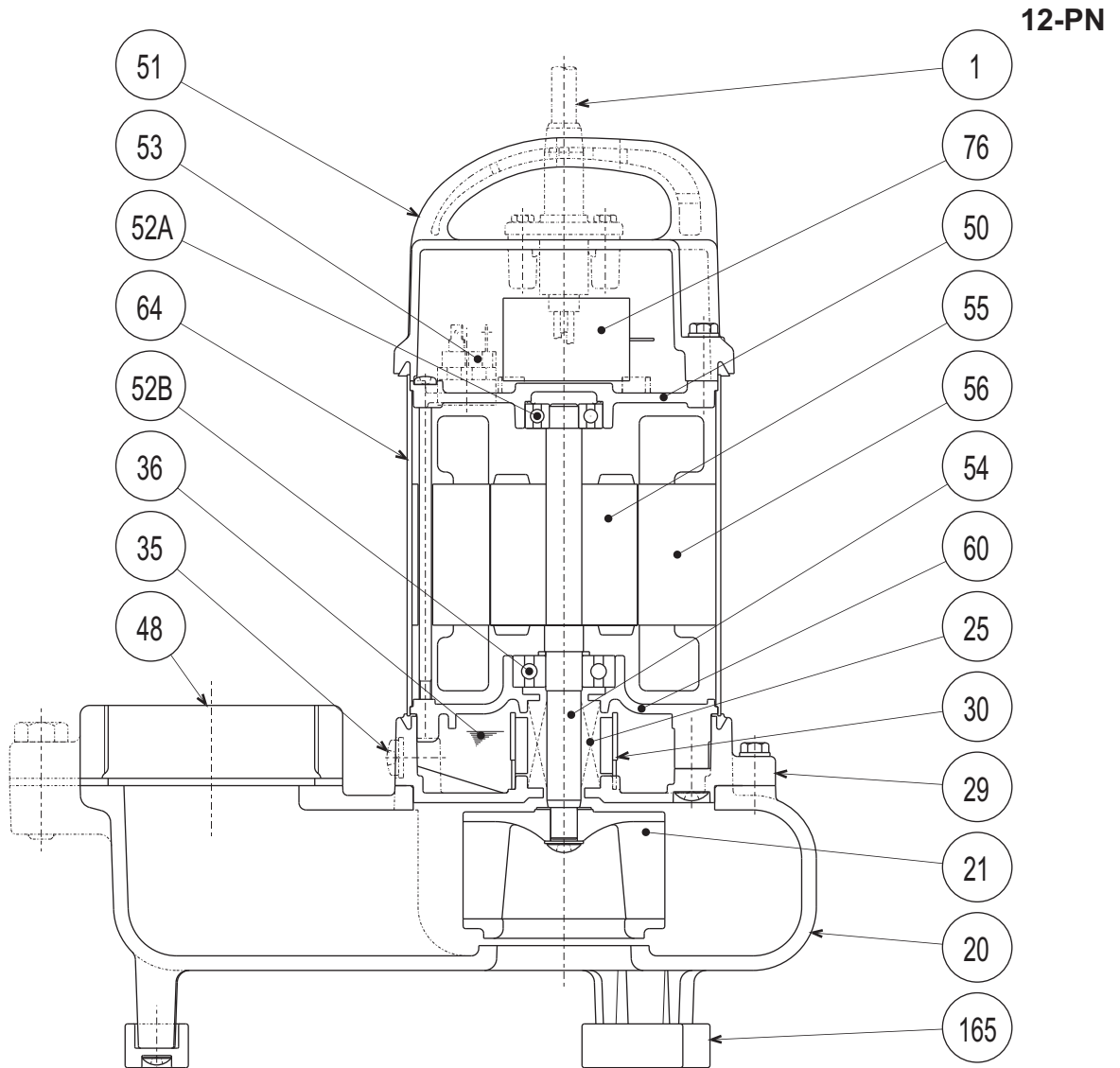




TSURUMI PUMP

**12-PN
HIGH VOLUME POND PUMP**

SECTIONAL VIEW



| PART# | DESCRIPTION | MAIN MATERIAL / NOTE | RELATED ASTM, AISI CODE | RELATED EN CODE | QTY |
|-------|------------------|----------------------------|-------------------------|------------------|-----|
| 1 | Power Cable | PVC Sheath AWG16/3-20ft | | | 1 |
| 20 | Pump Casing | Cast Iron | A48M Class30B | EN 1561 GJL-200 | 1 |
| 21 | Impeller | PPO Plastic w/GF20 | | | 1 |
| 25 | Mechanical Seal | Silicon Carbide / W-14HL | | | 1 |
| 29 | Oil Casing | PPS Plastic w/(GF+MD)50 | | | 1 |
| 30 | Oil Lifter | PBT Plastic | | | 1 |
| 35 | Oil Plug | Stainless Steel | S 30400 | 1.4301 | 1 |
| 36 | Lubricant | White Mineral Oil ISO VG32 | | | |
| 48 | Companion Flange | Cast Iron / NPT 3" | A48M Class30B | EN 1561 GJL-200 | 1 |
| 50 | Motor Bracket | Aluminum Alloy Die Casting | B85 383.0 | EN 1706 AC-46100 | 1 |
| 51 | Motor Head Cover | PPS Plastic w/(GF+MD)50 | | | 1 |
| 52A | Upper Bearing | #6201ZZC3 | | | 1 |
| 52B | Lower Bearing | #6302ZZC3 | | | 1 |
| 53 | Motor Protector | | | | 1 |
| 54 | Shaft | Stainless Steel | S 30400 | 1.4301 | 1 |
| 55 | Rotor | | | | 1 |
| 56 | Stator | | | | 1 |
| 60 | Bearing Housing | Aluminum Alloy Die Casting | B85 383.0 | EN 1706 AC-46100 | 1 |
| 64 | Motor Housing | Stainless Steel | S 30400 | 1.4301 | 1 |
| 76 | Capacitor | | | | 1 |
| 165 | Rubber Cushion | Nitril Butadiene Rubber | | | 3 |