

SVEN series

0.5 & 1 HP @ 3450 RPM



IMPORTANT! - Read all instructions in this manual before operating or servicing a pump.

Before installation, read the following instructions carefully. Failure to follow instruction and safety information could cause serious bodily injury, death and/or property damage. Each Barmesa product is carefully inspected to insure proper performance. Closely following these instructions will eliminate potential operating problems, assuring years of trouble-free service.

⚠ DANGER Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠ WARNING Indicates an imminently hazardous situation which, if not avoided, MAY result in death or serious injury.


⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.


IMPORTANT! - Barmesa Pumps, LLC is not responsible for losses, injury or death resulting from failure to observe these safety precautions, misuse, abuse or misapplication of pumps or equipment.

ALL RETURNED PRODUCTS MUST BE CLEANED, SANITIZED, OR DECONTAMINATED PRIOR TO SHIPMENT, TO INSURE EMPLOYEES WILL NOT BE EXPOSED TO HEALTH HAZARDS IN HANDLING SAID MATERIAL. ALL APPLICABLE LAWS AND REGULATIONS SHALL APPLY.

⚠ WARNING Installation, wiring, and junction connections must be in accordance with the National Electric Code and all applicable state and local codes. Requirements may vary depending on usage and location.

⚠ WARNING Installation and servicing is to be conducted by qualified personnel only.

 Keep clear of suction and discharge openings. Do not insert fingers in pump with power connected; the rotating cutter and/or impeller can cause serious injury.

 Always wear eye protection when working on pumps. Do not wear loose clothing that may become entangled in moving parts.

⚠ DANGER Pumps build up heat and pressure during operation. Allow time for pumps to cool before handling or servicing the pump or any accessory items associated with or near the pump.

⚠ DANGER This pump is not intended for use in swimming pools or water installations where there is human contact with pumped fluid.

⚠ DANGER Risk of electric shock. To reduce risk of electric shock, always disconnect pump from power source before handling any aspect of the pumping system. **Lock out power & tag.**

⚠ WARNING Do not use these pumps in water over 104 °F. Do not exceed manufactures recommended maximum performance, as this could cause the motor to overheat.

⚠ DANGER Do not lift, carry or hang pump by the electrical cables. Damage to the electrical cables can cause shock, burns or death. **Never** handle connected power cords with wet hands. Use appropriate lifting device.

⚠ WARNING Ground Fault Circuit Interrupter (GFCI) to be used with plug-in type power cord.

⚠ DANGER Failure to permanently ground the pump, motor and controls before connecting to power can cause shock, burns or death.

⚠ DANGER These pumps are not to be installed in locations classified as hazardous in accordance with the National Electric Code, ANSI/NFPA 70.

⚠ WARNING The Uniform Plumbing Code (UPC) states that sewage systems shall have an audio and visual alarm that signals a malfunction of the systems, that are required to reduce the potential for property damage.

IMPORTANT! - Prior to installation, record Model Number, Serial, Amps, Voltage, Phase and HP from pump name plate for the future reference. Also record the Voltage and Current Readings at Startup:

Model Number: _____

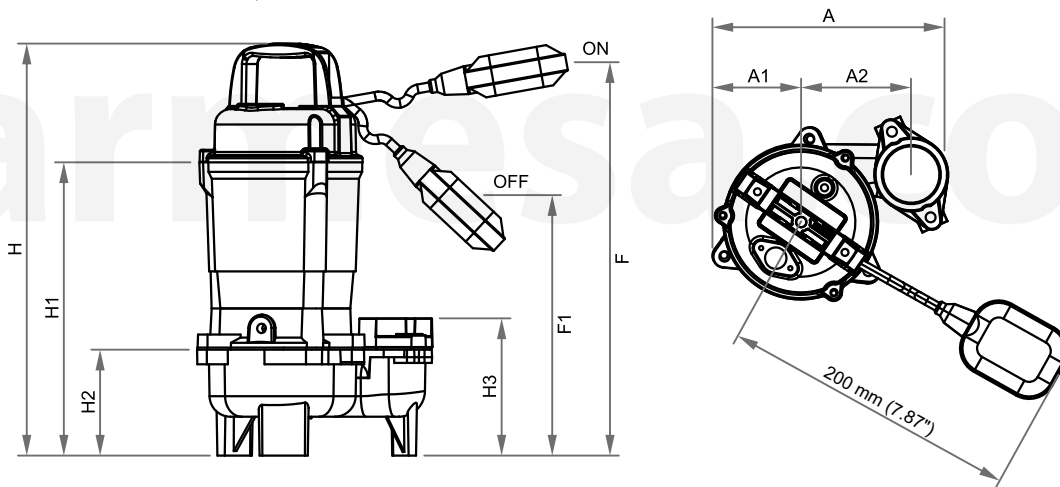
Serial: _____

Amps: _____ Volts: _____

Phase: _____ HP: _____

► Specifications

DISCHARGE:	2" NPT vertical, cast iron ASTM A-48 class 20. Adapter included.
LIQUID TEMPERATURE:	104 °F (40 °C) max.
PUMP CASING:	Cast iron ASTM A-48 class 30.
MOTOR HOUSING:	Cast iron ASTM A-48 class 30.
OIL CHAMBER:	Cast iron ASTM A-48 class 30.
IMPELLER:	8 vane, semi-open, vortex. Hytrel®
SHAFT:	410 AISI stainless steel.
HARDWARE:	304 series stainless steel and steel.
O-RINGS:	Nitrile rubber (NBR).
PAINT:	Air dry enamel, water based.
SEAL:	Double, mechanical, oil filled chamber. Upper part of carbon-ceramic, lower part of silicon carbide. Stainless steel hardware.
CORD ENTRY:	20 ft of neoprene cord, sealed against moisture.
BEARINGS:	Ball, single row, permanently oil lubricated.
MOTOR:	Dry type submersible motor, 1 & 3 phase, 115 & 230 V, 60 Hz, 3450 RPM. Insulation class B and IP68 protection class.
HANDLE:	Nylon 6.



MODEL	DIMENSIONS (inches)									WEIGHT (pounds)
	A	A1	A2	H	H1	H2	H3	F	F1	
2SVEN-051A	9.5	3.1	4.6	15.6	8.6	4	5.1	16.5	8.6	31.5
2SVEN-101A	9.5	3.1	4.6	17.3	10.4	4	5.1	18.2	10.4	38.1
2SVEN-102A	9.5	3.1	4.6	17.3	10.4	4	5.1	18.2	10.4	38.1
2SVEN-103	9.5	3.1	4.6	17.3	10.4	4	5.1	-	-	37.4

MODEL	PART No.	HP	VOLTS	PH	AMPS	RATED RPM	RATED		MAX.	
							ft	GPM	ft	GPM
2SVEN-051A	70090031	0.5	115	1	6.6	3450	19.7	35	31	73
2SVEN-101A	70090032	1	115	1	12	3450	33	45	50.8	95
2SVEN-102A	70090033	1	230	1	6	3450	33	45	50.8	95
2SVEN-103	70090035	1	230	3	4	3450	33	45	50.8	95

A = Automatic Float Switch.

1. Introduction

Purpose of this manual

The purpose of this manual is to provide necessary information for:

- Installation
- Operation
- Maintenance



CAUTION

Read this manual carefully before installing and using the product. Improper use of the product can cause personal injury and damage to property, and may void the warranty.

NOTICE

Save this manual for future reference, and keep it readily available at the location of the unit.




1.1 Safety terminology and symbols

About safety messages

It is extremely important that you read, understand, and follow the safety messages and regulations carefully before handling the product. They are published to help prevent these hazards:

- Personal accidents and health problems
- Damage to the product
- Product malfunction

Hazard levels

Hazard level	Indication
 DANGER	A hazardous situation which, if not avoided, will result in death or serious injury.
 WARNING	A hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	A hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	<ul style="list-style-type: none">• A potential situation which, if not avoided, could result in undesirable conditions.• A practice not related to personal injury.

Hazard categories

Hazard categories can either fall under hazard levels or let specific symbols replace the ordinary hazard level symbols. Electrical hazards are indicated by the following specific symbol:



ELECTRICAL HAZARD

These are examples of other categories that can occur, they fall under the ordinary hazard levels and may use complementing symbols:

- Crush hazard
- Cutting hazard
- Arc flash hazard

1.2 Product warranty

Coverage

BARMESA undertakes to remedy the following faults in products sold by the manufacturer under the following conditions:

- The faults are due to defects in design, materials or workmanship.
- The faults are reported to the manufacturer representative within the warranty period.
- The product is used only under the conditions described in this manual.
- The monitoring equipment incorporated in the product is correctly connected and in use.
- All service and repair work is done by personnel authorized by the manufacturer.
- Genuine manufacturer parts are used.

Limitations

The warranty does not cover faults caused by the following:

- Deficient maintenance.
- Improper installation.
- Modifications or changes to the product and installation carried out without consulting the manufacturer.
- Incorrectly executed repair work.
- Normal wear and tear.

BARMESA assumes no liability for the following:

- Bodily injuries.
- Material damages.
- Economic losses.

Warranty claim

BARMESA products are high-quality products with expected reliable operation and long life. However, should the need arise for a warranty claim, please contact a BARMESA representative.

Spare parts

We guarantee that spare parts will be available for 10 years after the manufacture of this product has been discontinued.



NOTICE

When purchasing pump parts, please provide product code showed at the nameplate.

1.3 Safety



WARNING

- The operator must be aware of safety precautions to prevent physical injury.
 - Any pressure-containing device can explode, rupture or discharge its contents if it is over-pressurized. Take all necessary measures to avoid over-pressurization.
 - Operating, installing or maintaining the unit in any way that is not covered in this manual could cause death, serious personal injury, or damage to the equipment. This includes any modification to the equipment or use of parts not provided by the manufacturer. If there is a question regarding the intended use of the equipment, please contact a BARMESA representative before proceeding.
 - This manual clearly identifies accepted methods for disassembling units. These methods must be adhered to. Trapped liquid can rapidly expand and result in a violent explosion and injury. Never apply heat to impellers, propellers or their retaining devices to aid in their removal.
 - Do not change the service application without the approval of an authorized BARMESA representative.
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CAUTION

You must observe the instructions contained in this manual. Failure to do so could result in physical injury, damage, or delays.

1.4 User safety

General safety rules

- Always keep the work area clean.
 - Pay attention to the risks presented by gas and vapors in the work area.
 - Avoid all electrical dangers. Pay attention to the risks of electric shock or arc flash hazards.
 - Always bear in mind the risk of drowning, electrical accidents, and burn injuries.
-



NOTICE

Never operate a unit unless safety devices are installed. Also see specific information about safety devices in other chapters of this manual.

Electrical connections

These must be made by certified electricians in compliance with all international, national, state, and local regulations. For more information about requirements, see sections dealing specifically with electrical connections.

Hazardous liquids

The product is designed for use in liquids that can be hazardous to your health. Observe these rules when you work with the product:

- Make sure that all personnel who work with biologically hazardous liquids are vaccinated against diseases to which they may be exposed.
- Observe strict personal cleanliness.

Wash the skin and eyes

Follow these procedures for chemicals or hazardous fluids that have come into contact with your eyes or your skin:

Condition	Action
Chemicals or hazardous fluids in eyes	1. Hold your eyelids apart forcibly with your fingers. 2. Rinse the eyes with eyewash or running water for at least 15 min. 3. Seek medical attention.
Chemicals or hazardous fluids on skin	1. Remove contaminated clothing. 2. Wash the skin with soap and water for at least 1 minute. 3. Seek medical attention if necessary.

1.5 Environmental safety

The work area

Always keep the station clean to avoid and/or discover emissions.

Waste and emissions regulations

Observe these safety regulations regarding waste and emissions:

- Dispose appropriately of all waste.
- Handle and dispose of the processed liquid in compliance with applicable environmental regulations.
- Clean up all spills in accordance with safety and environmental procedures.
- Report all environmental emissions to the appropriate authorities.

Electrical installation

For electrical installation recycling requirements, consult your local electric utility.

Recycling guidelines

Always recycle according to the guidelines listed below:

- Follow local laws and regulations regarding recycling if the unit or parts are accepted by an authorized recycling company.
- If the first guideline is not applicable, then return the unit or parts to the nearest BARMESA representative.

2. Prior to operation

2.1 Inspect the product

1. Inspect the package for damaged or missing items upon delivery.
2. Unpack and verify that no damage has occurred during shipment and that bolts and nuts have not loosened.
3. File a claim with the shipping company if anything is out of order.

NOTICE

If the product has been picked up at a distributor, make a claim directly to the distributor.

2.2 Inspect the specifications

Check the nameplate of the pump unit to verify that it is the product that you have ordered. Pay particular attention to its voltage and frequency specifications.

NOTICE

If you discover any damage or discrepancy, please contact with the BARMESA dealer from whom you purchased the product or the nearest manufacturer representative office.

2.3 Product specifications



CAUTION

Do not use the product under conditions other than those specified. Doing so may lead to short, electrical shock or fire, or might inhibit the product from attaining its full potential.

2.4 Intended use

The product is intended for moving waste water, raw and clean water. If there is a question regarding the intended use of the equipment, please contact the manufacturer representative before proceeding.



WARNING

Only X-Proof approved pumps may be used in an explosive or flammable environment.

NOTICE

Do NOT use the pump in highly corrosive liquids.

3. Installation



DANGER

Disconnect and lock out electrical power before installing or servicing the unit.

WARNING

- Do not install the starter equipment in an explosive zone unless it is explosion-proof rated.
 - Make sure that the unit cannot roll or fall over and injure people or damage property.
-



WARNING

Electrical shock hazard. Check that the cable and cable entry have not been damaged during transport before installing the pump.

NOTICE

Never force piping to make a connection with a pump.

These requirements apply for the installation:

- Use the pump dimensional drawing in order to ensure proper installation.
- Provide a suitable barrier around the work area, for example, a guard rail.
- Check the explosion risk before you weld or use electric hand tools.
- Remove all debris from the inlet piping system before you install the pump.
- Always check the impeller rotation before lowering the pump into the pumped liquid.

3.1 Check the following before beginning installation

Insulation resistance measurement

With the motor and cable (excluding the power supply cable) immersed in water, use a Megger to measure the insulation resistance between ground and each phase of the motor, and again between each phase of the motor. The Megger should indicate an insulation resistance of not less than 20 megaohms. While making the measurement, keep the power supply cable off the ground.

We recommend that an auxiliary pump be kept on hand in case of emergency.

3.2 Installation



WARNING

Under no circumstances should the cable be pulled while the pump is being transported or installed. Attach a chain or a rope to the grip and install the pump.



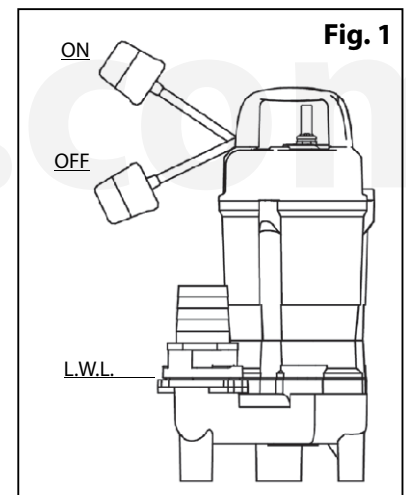
WARNING

This pump must not be installed on its side or run dry. Ensure that it is installed upright on a secure base.

Install the pump at a location in the tank where there is the least turbulence. If there is a flow of liquid inside the tank, support the piping where appropriate. Install piping so that air will not be entrapped. If piping must be installed in such a way that air pockets are unavoidable, install an air release valve wherever such air pockets are most likely to develop.

Do not allow end of discharge piping to be submerged, as backflow will result when the pump is shut down.

These pumps have installed an automatic cut-off switch (Fig. 1) to avoid dry operation.



4. Electrical wiring

1. Wiring

- Wire as indicated for the appropriate start system as shown in Fig. 2 & 3 for single phase version and Fig. 4 for three phase.
- Loose connections will stop the pump. Make sure all electrical connections are secured.
- For three-phase motors, run the pump for a short period of time (1 or 2 seconds) to check the direction of rotation of the impeller, if its recoil is counterclockwise, the direction of rotation is correct. If not, replace two of the three power leads to correct the direction of impeller rotation. Operating the pump with the rotation reversed while submerged under water will likely damage the pump, which may result in leakage and electrical shock.



WARNING

Never let the end of the cable come into contact with water.

2. Cable

- If the cable is extended, do not immerse the splice in water.
- Do not pull the cable.
- Install the cable so that it will not overheat. Overheating is caused by coiling the cable and exposing it to direct sunlight.

3. Grounding

To ground the green (yellow/green) wire. Under no circumstances should the green (yellow/green) wire be connected to the power supply directly.

Fig. 2

**Single phase
(non-automatic)**

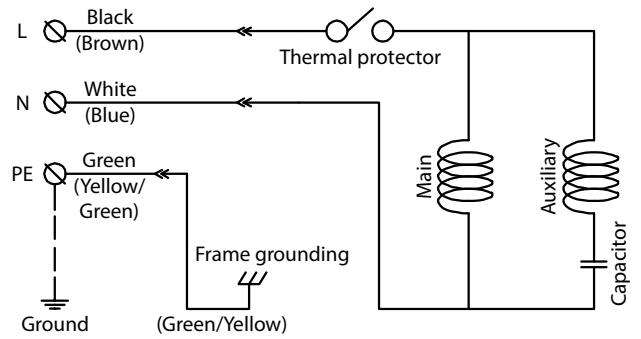


Fig. 3

**Single phase
(automatic)**

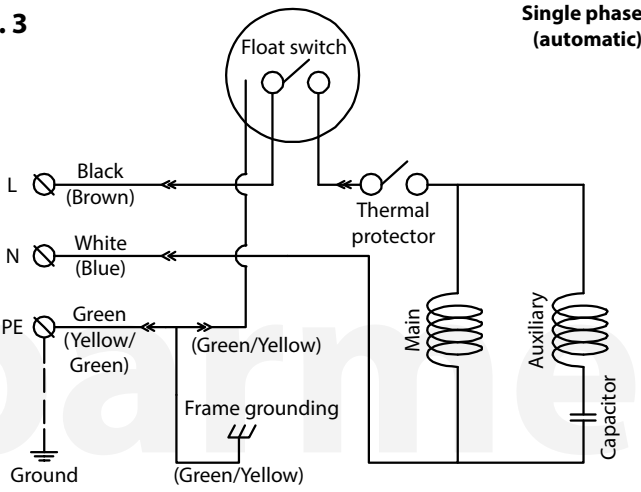
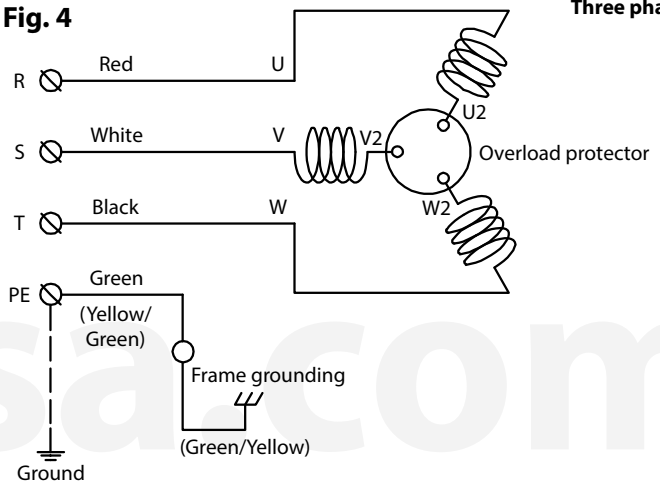


Fig. 4

Three phase



WARNING

Use short circuit breakers to prevent danger of electrical shock.



WARNING

Never start the pump while it is suspended, as the pump may jerk and cause serious accident involving injury.

5. Operation

Before starting the pump

- After completing installation, measure the insulation resistance again as described in **Installation**.
- Check water level. If the pump is operated continuously for an extended period of time in a dry condition or at the lowest water level, the motor protector will shut off the power. Constant operating in above condition will shorten pump life time. Do not start the pump again in such a situation before the motor has completely cooled.

Test operation

1. Turn the operating switch on and off a couple of times to check switch function. For the automatic pump, floating switch must be raised for the pump to start.
2. Next, check direction of rotation. If discharge volume is low or unusual sounds are heard when the pump is operating, rotation direction is reversed. When this happens, reverse two of the wires.

6. Maintenance

Check pressure, output, voltage, current and other specifications. Unusual readings may indicate a possible trouble situation. Refer to Troubleshooting and correct as soon as possible.

Daily inspections

Check current and ammeter fluctuation daily. If ammeter fluctuation is large, even though within the limits of pump rating, foreign matter may be clogging the pump. If the amount of liquid discharged suddenly decreases, foreign matter may be blocking the suction inlet.

Regular inspections

- **Monthly inspections:** measure the insulation resistance. The value should be greater than 1 Mohm. If the resistance begins to drop rapidly even with an initial lecture above 1 Mohm, it may be an indication that there are problems and repair is necessary.
- **Annual inspections:** to prolong the service life of the mechanical seal by replacing the oil in the mechanical seal chamber once a year. Water mixed with the oil or cloudy textures are indications of a defective mechanical seal requiring replacement. When replacing the oil, lay the pump on its side with filler plug on top. Fill suitable amount turbine oil no. 32 (ISOVG-32).
- **Inspections at 3-5 years intervals:** perform an overhaul of the pump. These intervals will help to avoid possible failures in the future.

Parts needing replacement

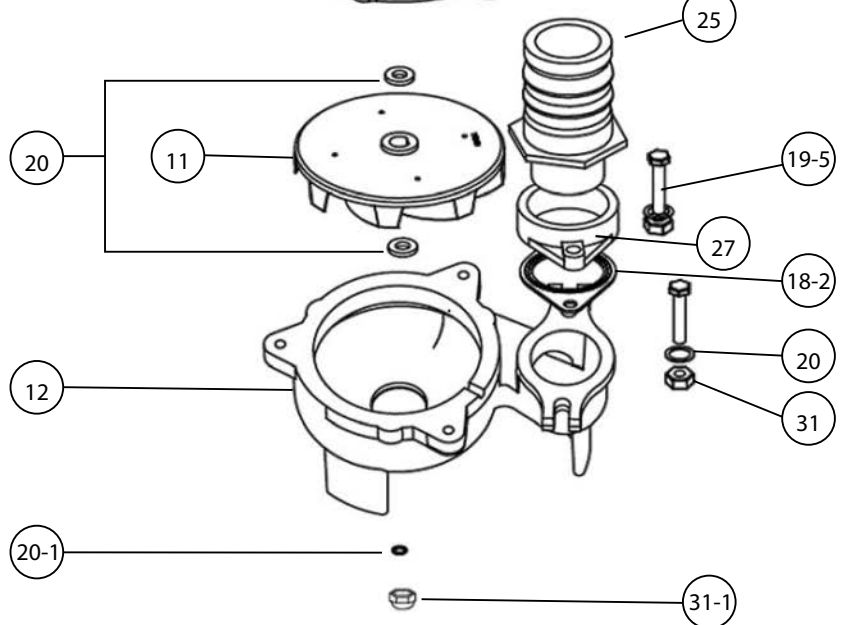
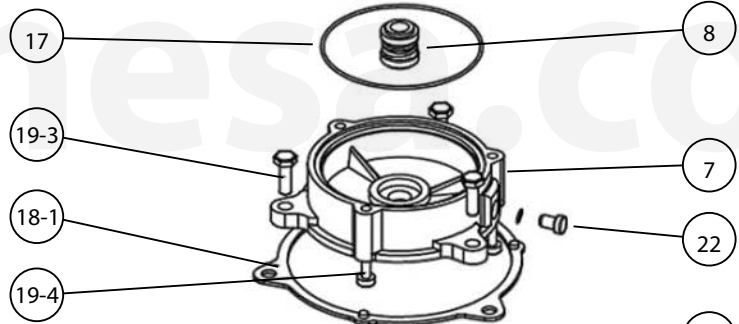
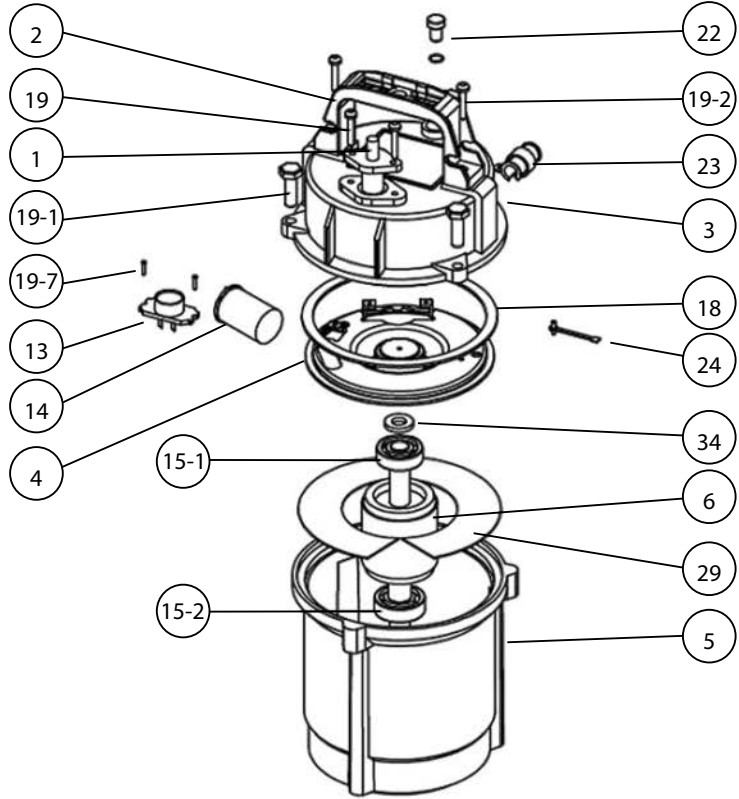
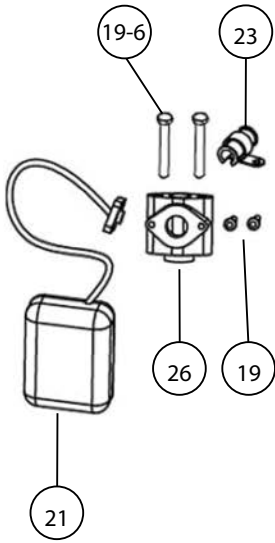
Replace the appropriate part when the following conditions appear:

Replaceable part	Mechanical seal	Oil filler plug O-ring	Lubricating oil	O-ring
Condition	Oil in mechanical seal chamber	Inspect or replace the oil	Oil is clouded or dirty	Overhaul the pump
Frequency	Annual	Half a year	Half a year	Annual

Note: above replacement schedule is based on normal operating conditions.






Motor output	0.5 ~ 1 HP
Mechanical seal	Ø 0.55"
Oil filler plug O-ring	(inner diameter) x (outer diameter) x (thickness) = 0.29" x 0.57" x 0.14"
Lubricating oil (turbine oil no. 32)	175 cc

7. Repair parts



7. Repair parts

ITEM	NAME	MATERIAL	PHOTO
1	CABLE	H07RN-F/ SJTOW/STOW	
2	HANDLE	NYLON 6	
3	MOTOR COVER	CAST IRON ASTM A-48 CLASS 30	
4	BRACKET	STEEL	
5	MOTOR HOUSING + STATOR	CAST IRON ASTM A-48 CLASS 30	
6	SHAFT WITH ROTOR	AISI 410	
7	OIL CHAMBER	CAST IRON ASTM A-48 CLASS 30	
8	MECHANICAL SEAL	UPPER: CA/CE LOWER: SIC/SIC	
11	IMPELLER	HYTREL	
12	PUMP CASING	CAST IRON ASTM A-48 CLASS 30	

ITEM	NAME	MATERIAL	PHOTO
13	PROTECTOR (1 PHASE)	KLIXON	
13	PROTECTOR (3 PHASE)	KLIXON	
14	CAPACITOR	-	
15-1	UPPER BEARING	-	
15-2	LOWER BEARING	-	
17	O-RING	NBR	
21	FLOAT SWITCH (OPTIONAL)	-	
25	PLASTIC HOSE TAIL	-	
27	FLANGE	CAST IRON ASTM A-48 CLASS 20	

ITEM	NAME	MATERIAL
18	GASKET	NBR
18-1	GASKET	NBR
18-2	GASKET	NBR
19	SCREW	AISI 304
19-1	SCREW	AISI 304
19-2	SCREW	AISI 304
19-3	SCREW	AISI 304
19-4	SCREW	STEEL
19-5	SCREW	AISI 304
19-6	SCREW	AISI 304
19-7	SCREW	STEEL

ITEM	NAME	MATERIAL
20	WASHER	AISI 304
20-1	SPRING WASHER	AISI 304
22	SCREW W/ O-RING	AISI 304 / NBR
23	CABLE SEAT	NYLON 66 / NBR
24	GROUND LINE AND SCREW	STEEL
26	T ADAPTER (OPTIONAL)	-
29	INSULATING PAPER	-
31	NUT	AISI 304
31-1	NUT	AISI 304
34	CORRUGATED SPRING	STEEL

8. Disassembly and Assembly

8.1 Disassembly

When disassembling the pump, have a piece of cardboard or wooden board ready to place the different parts on as you work. Do not pile parts on top of each other. They should be laid out neatly in rows. The O-ring and gasket cannot be used again once they are removed. Have replacement parts ready. Disassemble in the following order, referring to the parts list drawing.



ELECTRICAL HAZZARD

Be sure to cut off power source before disassembly.

1. Remove pump casing bolts, raise the motor section and remove pump casing.
2. Remove shaft head bolt and impeller.
3. Remove oil filler plug and drain lubricating oil.
4. Remove intermediate casing bolts and oil chamber. (Remember that any lubricating oil remaining in the mechanical seal chamber will flow out.)
5. Carefully remove mechanical seal, beware of not to scratch sliding surface of motor shaft.

8.2 Assembly

Re-assemble in reverse order of disassembly.

Be careful of the following points:

1. During re-assembly, rotate the impeller by hand and check for smooth rotation. If rotation is not smooth, perform steps 3 through 5 again.
2. Upon completion of re-assembly step 1, rotate the impeller by hand from the suction inlet and check that it rotates smoothly without touching the suction cover before operating the pump.

NOTE: Barmesa Pumps, LLC assumes no responsibility for damage or injury due to disassembly in the field. Disassembly of the pumps or supplied accessories other than at Barmesa Pumps or its authorized service centers, automatically voids warranty.

9. Troubleshooting

Symptom	Possible Cause(s)	Corrective Action
Does not start. Starts, but immediately stops.	<ol style="list-style-type: none"> (1) Power failure (2) Large discrepancy between power source and voltage (3) Significant drop in voltage (4) Motor phase malfunction (5) Electric circuit connection faulty (6) Faulty connection of control circuit (7) Fuses are blown (8) Faulty magnetic switch (9) Water is not at level indicated by float (10) Float is not in appropriate level (11) Float is not effective (12) Short circuit breaker is functioning (13) Foreign matter clogging pump (14) Motor burned out (15) Motor bearing broken 	<ol style="list-style-type: none"> (1)~(3) Contact electric power company and devise counter-measures (4) Inspect electric circuit (5) Correct wiring (6) Inspect connections and magnetic coil (7) Check circuit then replace fuse (8) Replace with correct one (9) Raise water level (10) Adjust the position of float (11) Repair or replace (12) Repair location of short circuit (13) Remove foreign matter (14) Repair or replace (15) Repair or replace
Operates, but stops after a while.	<ol style="list-style-type: none"> (1) Prolonged dry operation has activated motor protector and caused pump to stop (2) High liquid temperature has activated motor protector and caused pump to stop (3) Reverse rotation 	<ol style="list-style-type: none"> (1) Raise water level to C.W.L. (2) Lower liquid temperature (3) Correct rotation
Does not pump. Inadequate volume.	<ol style="list-style-type: none"> (1) Reverse rotation (2) Significant drop in voltage (3) Operating a 60 Hz pump with 50 Hz (4) Discharge head is high (5) Large piping loss (6) Low operating water level causes air suction (7) Leaking from discharge piping (8) Clogging of discharge piping (9) Foreign matter in suction inlet (10) Foreign matter clogging pump (11) Worn impeller 	<ol style="list-style-type: none"> (1) Correct rotation (see Operation) (2) Contact electric power company (3) Check nameplate (4) Recalculate and adjust (5) Recalculate and adjust (6) Raise water level or lower pump (7) Inspect, repair (8) Remove foreign matter (9) Remove foreign matter (10) Remove foreign matter (11) Replace impeller
Over current.	<ol style="list-style-type: none"> (1) Unbalanced current and voltage (2) Significant voltage drop (3) Motor phase malfunction (4) Operating 50 Hz pump on 60 Hz (5) Reverse rotation (6) Low head. Excessive volume of water (7) Foreign matter clogging pump (8) Motor bearing is worn out or damaged 	<ol style="list-style-type: none"> (1) Contact electric power company (2) Contact electric power company and devise counter-measure (3) Inspect connections and magnetic switch (4) Check nameplate (5) Correct rotation (see Operation) (6) Replace pump with high head pump (7) Remove foreign matter (8) Replace bearing
Pump vibrates; excessive operating noise.	<ol style="list-style-type: none"> (1) Reverse rotation (2) Pump clogged with foreign matter (3) Piping resonates (4) Strainer is closed too far 	<ol style="list-style-type: none"> (1) Correct rotation (2) Disassemble and remove foreign matter (3) Improve piping (4) Open strainer

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BARMESA PUMPS FACTORY WARRANTY

Barmesa Pumps warrants that products of our manufacture will be free of defects in material and workmanship under normal use and service for 18 months from date of manufacture or 12 months from installation date whichever occurs first. This warranty gives you specific legal rights, which vary from state to state.

This warranty is a limited warranty, and no warranty related claims of any nature whatsoever shall be made against Barmesa Pumps, until the ultimate consumer or his/her successor notifies us in writing of the defect and delivers the product and/or defective part(s) freight prepaid to our factory or nearest authorized service station as instructed by Barmesa Pumps. THERE SHALL BE NO FURTHER LIABILITY, WHETHER BASED ON WARRANTY, NEGLIGENCE OR OTHERWISE. PRODUCT SHALL BE EITHER REPLACED OR REPAIRED AT THE ELECTION OF BARMESA PUMPS. Guarantees relating to performance specifications provided in addition to the foregoing material and workmanship warranties on a product manufactured by Barmesa Pumps, if any, are subject to possible factory testing. Any additional guarantees, in the nature of certified performance specifications or time frame must be in writing and such writing must be signed by our authorized factory manager at time of order placement and/or at time of quotation. Due to inaccuracies in field testing and should a conflict arises between the results of field testing conducted by or for the user, Barmesa Pumps reserves the right to have the product returned to our factory for additional testing.

This warranty shall not apply when damage is caused by (1) improper installation, (2) improper voltage, (3) lightning, (4) excessive sand or other abrasive material, (5) corrosion build-up due to excessive chemical content or (6) uncontrollable acts of god. Any modification of the original equipment will also void the warranty. We will not be responsible for loss, damage or labor cost due to interruption of service caused by defective pumps, parts or systems. Barmesa Pumps will not accept charges incurred by others without our prior written approval.

This warranty is void if our inspection reveals the product was used in a manner inconsistent with normal industry practice and/or our specific recommendations. The purchaser is responsible for communication of all necessary information regarding the application and use of the product. UNDER NO CIRCUMSTANCES WILL WE BE RESPONSIBLE FOR ANY OTHER DIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO TRAVEL EXPENSES, CONTRACTOR FEES, UNAUTHORIZED REPAIR SHOP EXPENSES, LOST PROFITS, LOST INCOME, LABOR CHARGES, DELAYS IN PRODUCTION, IDLE PRODUCTION, WHICH DAMAGES ARE CAUSED BY ANY DEFECTS IN MATERIAL AND/OR WORKMANSHIP AND/OR DAMAGE OR DELAYS IN SHIPMENT. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTY. No rights extended under this warranty shall be assigned to any other person, whether by operation of law or otherwise, without our prior written approval.

IMPORTANT!

If you have a claim under the provision of the warranty, contact Barmesa Pumps or your authorized Barmesa Pumps Distributor:
warranty@barmesapumps.com
www.barmesapumps.com

