



PE-2YSA 'Aqueous' Parts Washer Pump

Epoxy encapsulated, 300 GPH centrifugal pump is designed to be used in submerged parts washer / Skimarator/ coalescer applications only. 390-09663 Nylon volute, epoxy filled polyester and aluminium motor housing. 72" power cord no plug, with 1/2" MNPT brass conduit connector at pump housing. 1/4" MNPT discharge. For pumping unheated metal parts cleaning solvent which is UL classified as PJQU, as described in the Gas and Oil Equipment Directory. These refined petroleum distillates are free from tendency to heat spontaneously; they have a closed cup flash point no lower than 100i½° F.

CAUTION: the low flash point of these combustible liquids does present a moderate fire hazard. Operating the pump fully submerged offers added protection from fire risk. For other solvent handling precautions, consult the material safety data sheet (OSHA-20 form, or equivalent), for the solvent used.

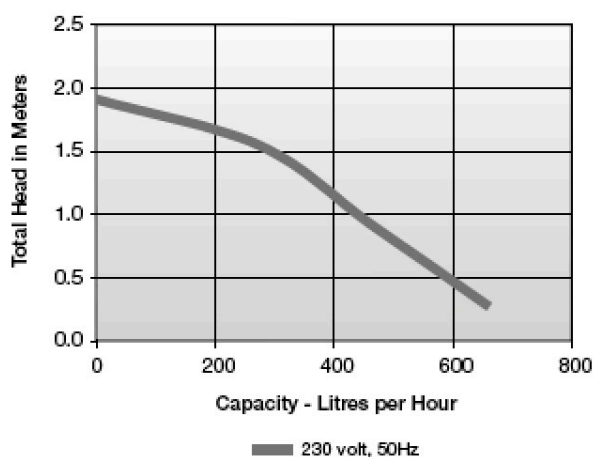
Use only UL approved Metal Parts Cleaning Solvents. The use of fluids such as gasoline, and lower flash point solvents is dangerous and may cause explosions of fire. Solvents other than UL approved metal parts cleaning solvents will void the warranty of this product.

- 1/40 HP oil-filled motor
- Polyester housing
- Rated for continuous duty
- IP 68

| | |
|--------------------|----------------------------|
| Capacity: | 1098 LPM @ 0.31m |
| Shut Off: | 2.53m |
| Discharge: | 12.5mm threaded |
| Electrical: | 230V, 50Hz, 0.4A, 45 Watts |
| MODEL: | 14940101 |



Performance Curves



**AQUEOUS SOLUTIONS OR UL LISTED
SOLVENTS ONLY**

(USE SUBMERSED ONLY)



PE-2YSA

Introduction

NOTE: This pump is intended for use only in parts cleaners listed by Underwriters Laboratories. The combination of the fluid pumped, the pump, and the design of the parts washer will determine if additional safety devices such as low liquid level cut off are required. Refer to parts washer manufacturer's instructions to see if this is required.

The PE-1YSA and PE-2YSA are designed for submerged use only. The pump motors are encapsulated in an epoxy resin and are intended to pump the following fluids:

Metal parts cleaning solvents - Unheated metal parts cleaning solvents (classified as PJQU as described in the Gas and Oil Equipment Directory). These solvents are refined petroleum distillates, which are free from tendency to heat spontaneously. They have a closed cup flash point not lower than 100°F. The low flash point of these combustible liquids does present a moderate fire hazard. Operating the pump fully submerged offers added protection from fire risk. **Aqueous cleaning solutions** - These are water-based solutions that should not be used in excess of 140°F and a maximum pH of 12. These are typical fluids that are compatible with the pump materials.

1. The low flash point of these combustible liquids does present a moderate fire hazard. Operating the pump fully submerged offers added protection from fire risk. For other solvent handling precautions, consult the material safety data sheet (OSHA-20 form, or equivalent) for the solvent used.
2. Use any metal parts cleaning solvents that are UL approved or aqueous cleaning solutions. The use of fluids such as gasoline and lower flash point solvents is dangerous and may cause explosions or fire.

INSTALLATION

The power cord supplied with this pump should not be in contact with solution. The solution may attack the cord insulation causing cord to become stiff or lowering the insulating properties. The pump is supplied with a three conductor power cord. The third conductor is to ground the pump to prevent possible electrical shock hazard.

1. Seal the power cord inside of liquid-tight, 1/2" NPT, steel intermediate metal conduit. Use caution to ensure the cord will have no nicks or cuts.
2. Consult the pump nameplate data for proper voltage and frequency. The black (or brown) and white (or blue) wires are live and the green (or green/ yellow) wire is the ground wire.
3. Be sure that the pump is fully submerged in the cleaning solution.
4. Connect the pump power cord to a properly grounded, grounding-type receptacle.
5. The pump must be protected by a GFCI (Ground Fault Circuit Interrupter) when pumping water-based solutions.

MAINTENANCE

DISCONNECT THE PUMP FROM THE POWER SOURCE BEFORE ATTEMPTING TO SERVICE OR REMOVE ANY COMPONENT!

1. This unit is permanently lubricated. Oiling is not required.
2. Periodic cleaning of the pump parts will prolong the LIFE and EFFICIENCY of the pump. Refer to Figure 2 for the assembly and disassembly of the pumping head.
3. Lightly clean any corrosion or debris which may clog the impeller. Use a brush and penetrating oil and lightly scrape.
NOTE: Do not allow sediment from parts being washed to build up and restrict the flow of fluid into the pump.
4. Turn the impeller by hand to make sure it is free. If it does not turn or if pump is tripping circuit breaker, or not operating properly after cleaning, return to Little Giant. Do not attempt repairs yourself. If it does turn replace volute and re-install into parts washer.
5. Be certain power cord is protected from solvent and contains no nicks or cuts.



SAFETY INFORMATION

1. Before servicing the pump, see solvent and equipment manufacturer's instructions for further safety information and possible hazards.
2. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).
3. This pump must be properly grounded while in use to protect the operator from electrical shock.
4. The pump must be protected by a GFCI (Ground Fault Circuit Interrupter) when pumping water-based solutions.
5. Always disconnect power source before working on the pump. If the power disconnect point is out of sight, lock in the open position and tag to prevent unexpected application of power.
6. Do not attempt to make your own parts cleaners.

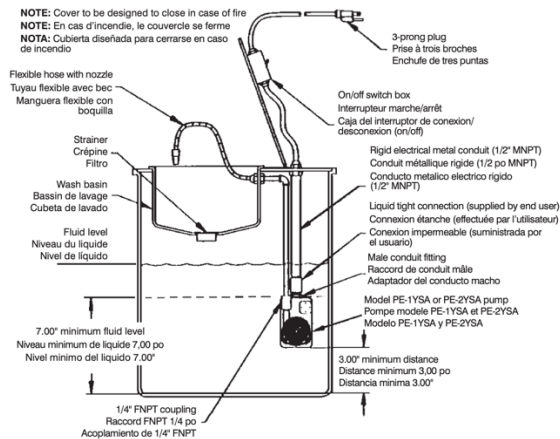


Figure 1 - Typical Installation

TROUBLESHOOTING

1. Should the unit fail to operate, check the following:
 - a. Power supply and connections?
 - b. Is the pump below liquid level?
 - c. Is air trapped in the pump head?
 - d. Is there sediment build-up over pump inlet?
2. An air lock or bubble will prevent the unit from pumping. Trapped air can usually be removed by turning the pump off and restarting. Ensure that the discharge line is sloping upward to prevent formation of air pockets.
3. If these operations do not restore the unit to full service, call your dealer or service technician.