

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

Manuals.plus /

› [Speroni](#) /

› Speroni Model H 100-9.5 Horizontal Axis Self-Priming Water Pump Instruction Manual

Speroni H 100-9.5

Speroni Model H 100-9.5 Horizontal Axis Self-Priming Water Pump

INSTRUCTION MANUAL

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Speroni Model H 100-9.5 Horizontal Axis Self-Priming Water Pump. Please read these instructions carefully before installation or operation to ensure proper use and to prevent damage or injury.

The Speroni Model H 100-9.5 is a robust three-phase, 9.2kW self-priming water pump designed for various applications, including draining clean or slightly dirty water and flood irrigation systems. It features a cast iron pump body and an open impeller, capable of a total suction lift up to 7 meters.



Figure 1: Speroni Model H 100-9.5 Horizontal Axis Self-Priming Water Pump. This image shows the pump unit, highlighting its robust cast iron construction and the general layout of the inlet and outlet ports.

2. Safety Instructions

WARNING: Failure to follow these safety instructions could result in serious injury, death, or property damage.

- **Electrical Safety:** Ensure the pump is connected to a properly grounded three-phase electrical supply. All electrical work must be performed by a qualified electrician and comply with local codes and regulations. Disconnect power before performing any maintenance or service.
- **Mechanical Safety:** Keep hands, hair, and loose clothing away from moving parts. The pump operates at high speeds and can cause severe injury.
- **Liquid Temperature:** Do not pump liquids exceeding 90°C (194°F). For home use applications according to EN 60335-2-41, the liquid temperature must not exceed 35°C (95°F). Pumping liquids outside these temperature ranges can damage the pump and create hazardous conditions.
- **Ambient Temperature:** The pump is designed for ambient temperatures up to 40°C (104°F). Operating outside this range may affect performance and longevity.
- **Installation:** Install the pump on a stable, level surface in a well-ventilated area. Ensure adequate clearance for maintenance and air circulation.

- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including safety glasses and gloves, when installing, operating, or maintaining the pump.

3. Setup and Installation

3.1 Unpacking and Inspection

Carefully remove the pump from its packaging. Inspect the pump for any signs of shipping damage. Report any damage to your supplier immediately. Ensure all components listed in the packing list are present.

3.2 Mounting

Mount the pump securely to a solid, level foundation using appropriate bolts. This will minimize vibration and ensure stable operation. The pump should be installed as close as possible to the liquid source to minimize suction lift.

3.3 Piping Connections

- **Suction Line:** The pump features a 4-inch inlet. Use a suction hose or pipe of adequate diameter, preferably the same size as the pump inlet, to minimize friction losses. Ensure the suction line is airtight to prevent air ingress, which can affect priming and pump performance. The total suction lift should not exceed 7 meters.
- **Discharge Line:** The pump features a 4-inch outlet. Connect the discharge pipe, ensuring it is properly supported to prevent strain on the pump casing. Install a check valve in the discharge line if backflow is a concern.
- **Fittings:** Use appropriate thread sealant on all pipe fittings to ensure leak-free connections.

3.4 Electrical Connection

The Speroni Model H 100-9.5 is a three-phase pump (9.2kW / 12.5HP). Connect the pump to a dedicated three-phase power supply circuit protected by an appropriately sized circuit breaker or fuse. Ensure the voltage and frequency match the pump's requirements. Verify correct motor rotation direction upon initial startup. Incorrect rotation can damage the pump.

3.5 Priming the Pump

This pump is self-priming. However, for initial startup or after extended periods of inactivity, it is recommended to fill the pump casing with water through the priming port (if available, or through the discharge port if no dedicated priming port) before starting. The internal check valve helps maintain prime, even if the suction hose is completely empty or the pump is only partially filled.

4. Operation

4.1 Pre-Operation Checklist

- Ensure all piping connections are secure and leak-free.
- Verify the pump casing is filled with water (for initial prime).
- Confirm the power supply is correctly connected and matches pump specifications.
- Ensure the suction line is submerged in the liquid to be pumped.

4.2 Starting the Pump

Turn on the electrical power supply to the pump. The pump will begin to operate and, due to its self-priming design, should establish flow within a short period. Monitor the discharge pressure and flow rate to ensure proper operation.

4.3 Monitoring Operation

During operation, regularly check for unusual noises, excessive vibration, or leaks. Ensure the motor is not overheating. The pump's internal check valve prevents the siphon effect when stopping and ensures automatic re-start each time, even

if partially filled.

4.4 Stopping the Pump

To stop the pump, simply turn off the electrical power supply. If the pump will be out of service for an extended period, especially in freezing conditions, drain the pump and piping to prevent damage.

5. Maintenance

WARNING: Always disconnect power to the pump before performing any maintenance or inspection.

5.1 Regular Checks

- **Visual Inspection:** Periodically inspect the pump for any signs of wear, corrosion, or damage. Check for leaks around seals and connections.
- **Noise and Vibration:** Listen for unusual noises or excessive vibration, which may indicate a problem with bearings, impeller, or motor.
- **Electrical Connections:** Ensure all electrical connections are tight and free from corrosion.

5.2 Cleaning

If pumping slightly dirty water, periodically inspect the impeller and pump casing for debris buildup. Clean as necessary to maintain optimal performance. Ensure the pump is thoroughly flushed with clean water after use with dirty liquids.

5.3 Mechanical Seal

The pump is equipped with a Ceramic/Graphite/NBR mechanical seal. If leakage occurs from the seal area, it may indicate wear and require replacement. This should be performed by a qualified technician.

5.4 Winterization

In areas subject to freezing temperatures, drain the pump completely and disconnect all piping if the pump will not be used for an extended period. This prevents damage from freezing water.

6. Troubleshooting

Before attempting any repairs, ensure the pump is disconnected from the power supply.

Problem	Possible Cause	Solution
Pump does not start	No power supply; Blown fuse/tripped breaker; Motor fault.	Check power connections; Reset breaker/replace fuse; Consult a qualified electrician.
Pump runs but no water flow	Pump not primed; Air leak in suction line; Suction line blocked; Impeller clogged.	Re-prime the pump; Check all suction connections for leaks; Clear suction line; Inspect and clean impeller.
Low flow or pressure	Partial blockage in suction/discharge; Air leak in suction line; Worn impeller; Motor running slow.	Inspect and clear piping; Check suction connections; Inspect impeller for wear; Verify correct electrical supply.
Excessive noise or vibration	Cavitation (air in pump); Misalignment; Worn bearings; Loose mounting.	Ensure pump is fully primed and suction line is airtight; Check alignment; Inspect bearings; Tighten mounting bolts.

Problem	Possible Cause	Solution
Water leaking from pump	Loose pipe connections; Worn mechanical seal; Cracked casing.	Tighten connections; Replace mechanical seal (professional service recommended); Replace pump casing if cracked.

7. Specifications

Feature	Detail
Model Number	H 100-9.5
Type	Horizontal Axis Self-Priming Water Pump with Open Impeller
Phase	Three Phase
Nominal Power	9.2 kW (12.5 HP)
Port Size (Inlet/Outlet)	4" Inlet / 4" Outlet
Max. Suction Lift	Up to 7 meters (23 ft)
Max. Liquid Temperature (Home Use EN 60335-2-41)	35°C (95°F)
Max. Liquid Temperature (Other Uses)	90°C (194°F)
Max. Ambient Temperature	40°C (104°F)
Pump Body Material	Cast Iron
Motor Support Material	Cast Iron
Impeller Material	Cast Iron
Shaft with Rotor Material	Stainless Steel AISI 304
Mechanical Seal	Ceramic/Graphite/NBR
Weight	103 kg (227 lbs)
ASIN	B0F8RDLJLR

8. Warranty Information

Specific warranty terms and conditions for the Speroni Model H 100-9.5 pump are provided by the manufacturer or seller at the time of purchase. Please refer to your purchase documentation or contact your supplier for detailed warranty information, including coverage period and claims procedures.

9. Customer Support

For technical assistance, spare parts, or service inquiries regarding your Speroni Model H 100-9.5 pump, please contact the authorized dealer or the manufacturer's customer support department. Have your model number (H 100-9.5) and purchase date available when contacting support.

