

CH5-60 HORIZONTAL MULTISTAGE PUMP INSTRUCTION MANUAL

Please clearly read the manual before use the pumps

1. FEATURES

CH5-60 horizontal multistage centrifugal pumps series: impeller and diffuser are made of PPO project plastic, SUS304 stainless steel for shaft, iron steel for inlet and outlet, advanced design, the performance reach the advanced level of similar product, it have the features of light, good looking, corrosiveresitance, high head, high head, efficiency, endurance, etc.

CH5-60 pump motor is special product which have F class insulation, IP55 class protection, it use NSK bearing, UL&VDE certified capacitor, super mechanical seal, thermal protection.

CH5-60 pump belong to non-selfpriming centrifugal pumps, input water from the direction of shaft which is longer than normal motor.

CH5-60 series pumps is suitable for agricultural, industrial, gardening, air-conditioning, cool circulation system, high building, water supply, boiler, fishing, and so on.

2. OPERATION CONDITIONS

CH5-60 pump is suitable for non-fire, explosive clean liquid which keep away from corrosive of PPO plastic. The temperature of liquid: from +5 °C to 60 °C, max ambient +40 °C, max suction: 8 meter; max working pressure: 1Mpa, the max input pressure is limited by the max working pressure.

3. INSTALLATION ⚠

Notice:

- 3.1. Do not install the pump in the sunbaked and ainy place.
- 3.2. Install the pump to near the water as short as possible to reduce the suction.
- 3.3. Position the pump using the brackets.
- 3.4. Install the in dry and ventilated place to ensure safe operation.
- 3.5. Try to reduce the bend in pipe circuit as you can, the gradient should less than 2%
- 3.6. The connection of pipe circuit should be water-tight, the pipes should be supported separately.
- 3.7. It's appreciated to install a vacuum meter and pressure meter in the suction and discharge port to observe the situation of operation.

4. ELECTRIC CONNECTION ⚠

Danger:

4.1. Ensure the voltage(V), frequency(Hz), phase(PH) is conform with the ones marked on the label. When the Voltage $\pm 10\%$ the inset thermal protector will terminate the motor.

4.2. Pump should be reliably earthed.

4.3. The cord should meet the requirements of current.

4.4. Make sure the correct electric circuit.

5. START, OPERATION AND STOP THE PUMP ⚠

Warning:

5.1. Dry operation is prohibited to avoid burning of mechanical seal

5.2. It could rotate freely from the fan cover by screw driver.

5.3. Turn on the pump, it should be clockwise view from the fan cover end.

5.4. Fill water in the pump from the discharge valve.

5.5. Turn on the pump, and set the discharge pressure to the required.

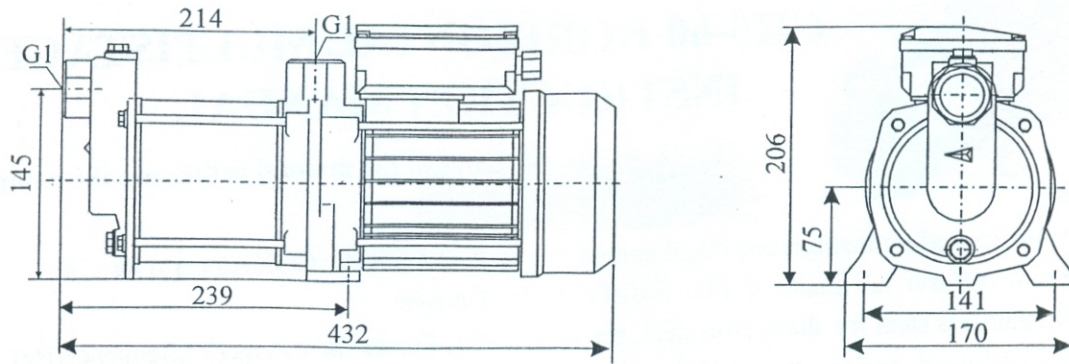
5.6. Stop the discharge valve before stop the pump and power.

6. MAINTENANCE ⚠

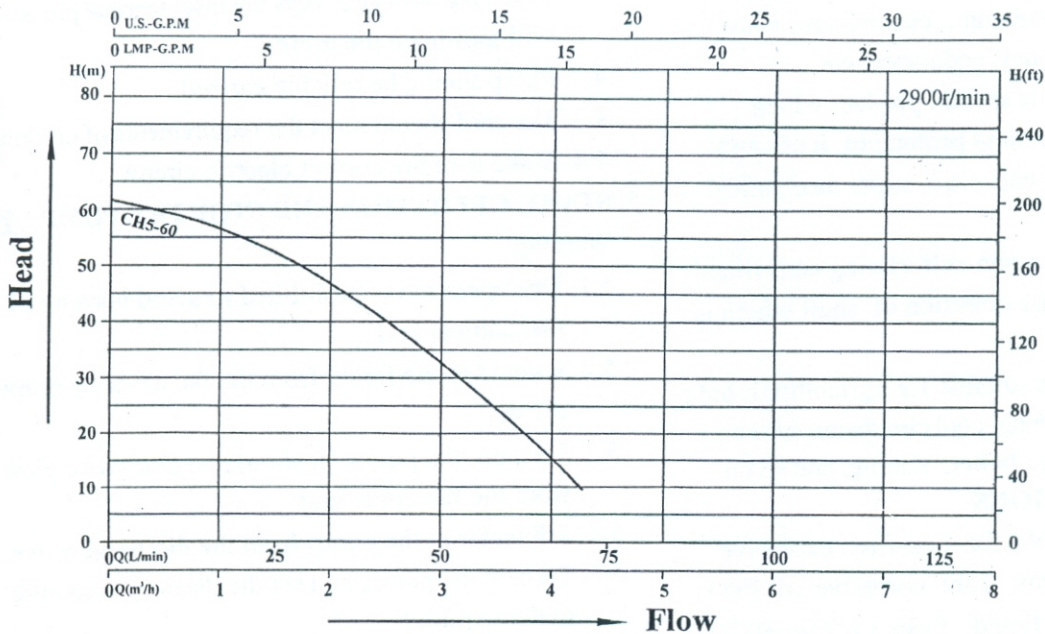
Notice:

- 6.1. It is prohibited to start the pump frequently, it should stop the switch when the power is interrupt.
- 6.2. It is no allowed to use the suction valve to adjust flow.
- 6.3. When the water is insufficient, it should stop the motor.
- 6.4. If there is some abnormal, please stop the motor and check.
- 6.5. If the pump is ideal for long time or low temperature, water should be drained to avoid damage the pump body.

7. INSTALLATION SIZE



8. PERFORMANCE CURVE



9. TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Pump does no turn	Motor rocked Voltage is not suitable Fuse or thermal protection off	Dismantle connecting pipe, sending service center Check voltage according to nameplate Check fuse or thermal protection
Pump not pumping properly	Too much high head Too low water level Bottom valve not in water No water Leakage of inlet pipe	Check the height of installation if its meet head Check the height of suction and reassembling Making adjustable for inlet pipeline into water Draining water into pump body Check the leakage of pipe
Pump running without head	Bottom valve blocked Service corrosive of impeller Bottom valve not in water No priming water Leakage of inlet pipe	Check the height suction and reinstallation Replacing the impeller Enough water level for inlet Put priming water into pump body Check the leakage of pipe
Flow obviously decreasing	Bottom valve blocked Too much higher of head Too lower water level Serious damage impeller	Cleaning and replacing bottom valve Check the height of installation in comply with normal bend Check the suction and reinstallation Replacing the impeller
Overheating of motor	Voltage is not suitable Not ventilated in the operation room	Contact electric power company supply stable manostat Supply good ventilation
Pump stop after start shortly	Motor blocked Too low voltage Not ventilated in the operation room	Dismantle the connection pipe and send to service center Contact electric power company supply stable manostat Supply good ventilation