LM plunger pump

High pressure Reciprocating Plunger Pump Model LM is generally very efficient and suitable for high heads at low flows.

Triplex Plunger Pumps are self priming as it can draw liquid from a level below the suction flange even if the suction pipe is not evacuated. Plunger pumps are not tolerant to solid particles. Here, pistons are reciprocated using crankshaft, not cam type mechanism. Pressure Jet industrial High Pressure Triplex Plunger Pumps are positive displacement Triplex plunger pumps. In a reciprocating pump, a volume of liquid is drawn into the cylinder through the suction valve on the intake stroke and is discharged under positive pressure through the outlet valves on the discharge stroke. Flow rate of pump is directly proportional to its SPM (Strokes per minute). Pressure Jet Triplex plunger pumps have three synchronized plungers that discharge liquids at high pressure with minimum pulsation. Our high pressure triplex plunger pumps include both industrial triplex piston and Triplex Plunger Pump designs.

Applications:

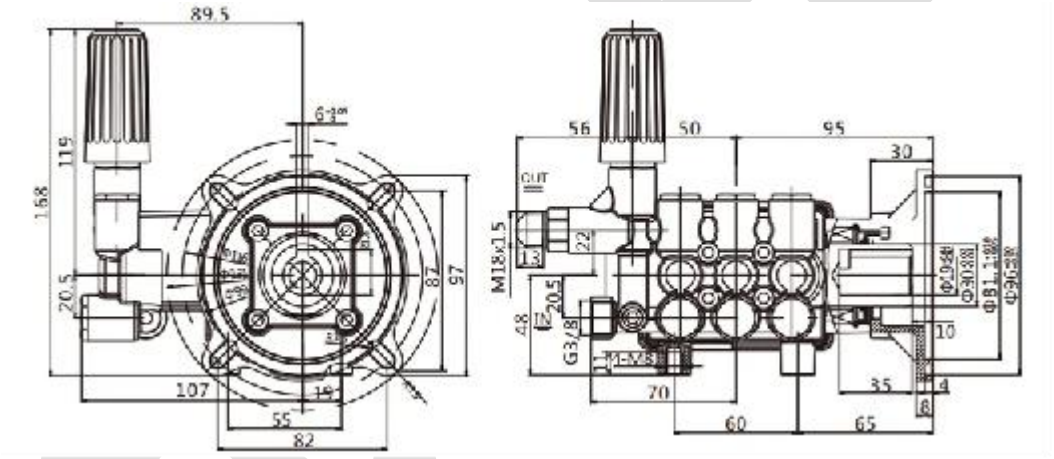
Cooling
Misting Machine
Green house
Misting, Cooling & Fogging
Commercial Contractor Cleaning

Specifications Details:

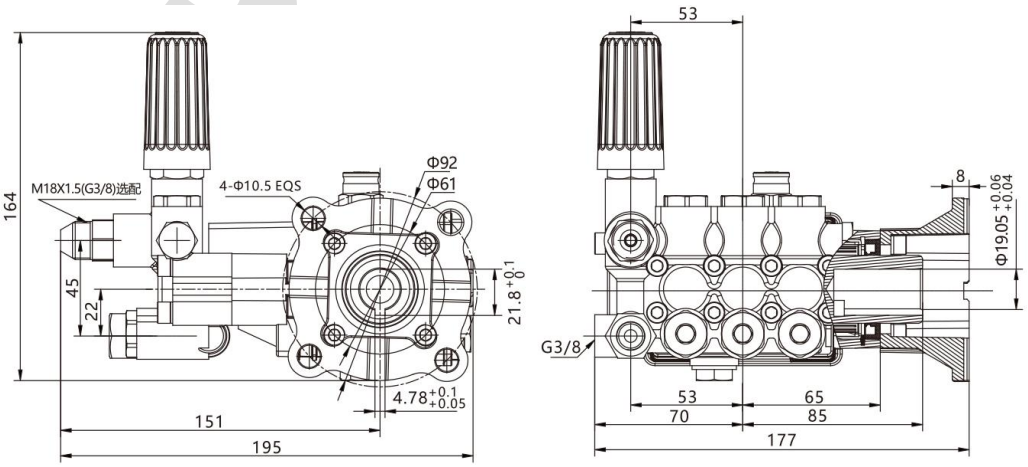
Model	Flow		Pressure		Power		Speed	Plunger Dia	Stroke	Weight	Oil Type	Oil Capacity
	l/min	gpm	bar	psi	hp	kw	rpm	mm	mm	KGS		mL
LM0210	2	0.5	100	1450	0.75	0.55	1450	15	3	3.6	15W-40	130
LM0410	4	1.1	100	1450	1	0.75	1450	15	6.5	3.6	15W-40	130
LM0610	6	1.6	100	1450	1.5	1.1	1450	15	7	3.6	15W-40	130
LM0810	8	2.1	100	1450	2	1.5	2000	15	7	3.6	15W-40	130
LM0910	9	2.4	100	1450	3	2.2	2800	15	6.5	3.6	15W-40	130
LM1010	10	2.6	100	1450	3	2.2	2800	15	7	3.6	15W-40	130
LM1210	12	3.2	100	1450	3	2.2	3400	15	7	3.6	15W-40	130
LM1215	12	3.2	150	2175	6	4	3400	15	7	3.6	15W-40	130

Dimensions:

LM0210/LM0410/LM0610/LM0810:



LM0910/LM1010/LM1210/LM1215:



Instructions for use

1. The pump should be installed on a flat base less than 15 degrees to ensure the best lubrication conditions

2. Confirm the inlet size of the high-pressure pump piping. The inlet pipe diameter should be 1.5-2 times the inlet size of the pump. The inlet and outlet of the pump must be equipped with hoses to avoid pressure and fluctuations generated by the system. It is best to install accumulators to avoid bending of pipes.

3. The water supply pressure should be 1.5-8kg / cm2. The water supply temperature is below 70 degrees. The water supply system of the high-pressure pump must avoid the entry of air to ensure that the pump parts are not damaged.
Direction of rotation: The direction of rotation of the high-pressure pump is the direction in which the top of the pulley must face the pump head.

4. Before starting the motor-pump system, the following must be done
1). Check whether the crankcase lubricating oil is normal. If the oil level indicator of the gear box has only one engraved line, the oil level cannot be lower than the engraved line, but not higher than the engraved line 5mm. If the oil level indicator of the gear box has two Each line, the oil level is between the two lines.
2) Confirm that the valves of all pipes have been opened, and the medium can flow into the inlet of the pump and exhaust the air inside the system.
3) The operation of the high-pressure pump is not allowed to exceed the specified pressure, flow and speed.
4) Before spraying, the high-pressure nozzle should confirm whether the spray direction is safe. If there are unsafe factors, they should be eliminated in time to ensure safe production.

5. In order to remove the water in the pump to facilitate the placement in the freezing point environment, the pump can run for no more than 10 seconds under the condition of no water inlet.

6. For the system where the overflow valve is installed, the overflow pipe must be a hose. The overflow pipe should not be connected to the water inlet of the pump, but should be connected to the water tank or sewer.

7. When used for water storage tank, the suction line should use a hose of less than 3 meters, and the water level should be set higher than the height of the pump. If the water supply pressure does not reach the required pressure, it is recommended to use a booster pump.

8. Clean water should be used for the water supply, and a filter should be used on the supply line to prevent the inhalation of foreign objects.

9. Before operating the high-pressure pump, loosen the pressure regulating valve, and then gradually increase the pressure as needed after operation.

10. Lubricating oil should use SAE20W-50 or the same level of lubricating oil.

11. Lubricating oil should be replaced after 50 hours of initial use, and every 500 hours thereafter.

12. The water inlet filter should be regularly checked and cleaned.

13. All moving parts of the plunger pump must not be in a dry state.

14. High-pressure pumps are not allowed to use acidic, alkaline or corrosive liquids.

Troubleshooting

Malfunction	Cause	Solution
The pump is running but does not absorb water	problem with the water supply	Open the water supply valve Confirm whether the water supply line is in a folded state Do not allow air to enter the water supply line
The pump is running but fails to meet the pressure requirements	Water supply line is blocked Air in the pump One-way valve fails or foreign matter enters Pressure regulating valve malfunctions or foreign matter enters	Check the suction line Check the suction line Wash or replace Wash or replace replace replace

	Nozzle failure Seal failure	
1. Sudden vibration when the pump is running 2. Unstable pressure / pulsation, no pressure operation	Inhaled air One-way valve fails or foreign matter enters Damaged O-ring at the lower end of the check valve Check valve damaged overall Component wear The inlet pipe is blocked and the water intake is blocked Idling Accumulator without pressure	Check the suction line Clean safety valve and replace Replace O-ring Replace check valve Replace components Check whether the system is clogged and air leaks, the pump inlet pipe size is appropriate Check whether the inlet pipe is blocked and the size is appropriate Repressurize or replace the accumulator
Pressure drop, sudden pressure drop in the pipeline	Seal wear Valve spring broken Worn or damaged nozzle Drain valve blocked Worn or damaged hose Due to throttling, the pump is idling Uninstall	Replace the seal assembly Replace the spring Replace the nozzle Cleaning valve assembly Repair / Replace Check the inlet pipe at the entrance Check if it works
Running noise	Bearing wear	Replace the bearing and

	Idling	refuel Check whether the inlet pipe is blocked and the size is appropriate
Excessive unloading of overflow saliva	Plunger wear Component / seal wear Too much vacuum Plunger break Inlet pressure is too high	Replace plunger Adjust or replace the seal assembly Reduce the vacuum on the suction side Replace plunger Reduce inlet pressure
The crankcase temperature is too high	Wrong choice of lubricant Crankcase oil volume is not suitable	Choose the right lubricant Adjust the oil level to the appropriate amount
Crankcase water intake	Humidity is too high Seal wear	Reduce oil seal interval Replace the seal