
240V OIL TRANSFER PUMP

L-OTP240V



lubemate 
by macnaught

lubematebymacnaught.com.au

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DESCRIPTION

The L-OTP240V is a 240 volt electric self-priming rotary gear pump, equipped with a by-pass valve. The electric motor is a 4-pole, closed type (Protection class IP55), self-ventilating, mounting type pump.

TECHNICAL INFORMATION

Current - AC

Voltage - 240 volts

Frequency - 50HZ

Power (nominal) - 110 watt

Pressure - 10 BAR (145psi)

Flow rate - 40 LPM (free flow)

Temperature - -10°C / +60°C

Relative Humidity - Max 90%

Note: The power consumed will depend on the installation and the oil viscosity.

The maximum acceptable power variations

Voltage +/- 5% of the nominal value

Frequency +/- 2% of the nominal value

Note: The pump has a continuous duty cycle

Caution:

The pump must only run for 2 minutes in by-pass mode

This pump is suitable for maximum oil viscosity of 1000Cst @ 20deg C (SAE140 @ 20deg C)

DO NOT use this pump with Gasoline, flammable liquids, water, liquid food products, chemicals or solvents.

DO NOT use this pump with waste oils or oils that contain particles or contaminants.

PRELIMINARY INSPECTION

1. Open carton and check the pump for any signs of damage.
2. Clean the inlet and outlet openings with care, removing any dust or packing residue.
3. Make sure that the motor shaft turns freely.
4. Check that the electrical information corresponds with what is shown on the label.

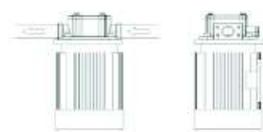
INSTALLATION

The pump can be installed in the following ways:

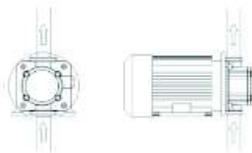
Mount horizontally



Mount pump body upwards



Mount Pump body to the side



WARNING

DO NOT install the pump vertically with the pump body downwards.



DO NOT install pump close to an flammable or steamy location.

Note: you may be required to install a foot valve and fill the suction tube with oil during the initial priming of the pump.

5. Firmly secure the pump to the desired location, using the correct size screws/bolts to match the holes on the pump plate.

HYDRAULIC CONNECTION

1. Make sure that all connections, fittings and hoses are tight and sealed correctly using a suitable oil resistant sealant.
2. Make sure that the hoses and the suction tank are free of dirt and filling residue that might damage the pump and accessories.
3. Always install a metal mesh filter in the suction hose.
4. Before connecting the delivery hose, partially fill the pump body with oil to avoid the pump running dry during the priming phase.

HOSE RECOMMENDATIONS

Suction hose - 1" I/D (2m maximum)

Delivery hose - 1" I/D

Note: Only use hoses that are compatible with oil and have the correct pressure ratings to suit pump pressure.

SUCTION & DELIVERY LINES

The combination of the oil viscosity (500-1000Cst) and the characteristics of the system could, in fact, create back pressure greater than the anticipated maximums (equal to P max), so as to cause the (partial) opening of the pump by-pass with a consequent noticeable reduction of the flow rate supplied.

In such a case, in order to permit the correct functioning of the pump equal to the viscosity of the oil being pumped, it will be necessary to reduce resistance in the system by employing shorter hoses and/or of larger diameter.

SUCTION

Gear-type oil pumps generally have excellent suction capacity. In fact, the flow rate/back pressure curve remains unchanged even at high pump suction pressure values. The maximum priming height is 2m.

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INITIAL START-UP

The gear-type oil pumps are self-priming type pumps and have a maximum priming height of 2 meters.

IMPORTANT: Before starting the pump, wet the inside of the pump body with oil through the inlet and outlet openings.

If the pump does not prime check the following

1. That the pump is not "dry" - (if dry wet pump)
2. That the suction hose is correctly immersed in the fluid
3. That any filters installed are not blocked
4. That the priming height is not greater than 2M
5. That the delivery hose allows for the easy evacuation of the air

Note: If the pump does not prime, remove delivery nozzle, allow the oil in the delivery hose to run back and wet the inside of the pump. Start pump to prime, when priming has occurred, re-attach the delivery gun.

EVERY DAY USE

Manual Operation

- 1) Before starting the pump, ensure the delivery nozzle or valve is closed
- 2) Turn the switch on
- 3) Ensure there is sufficient oil in the tank to fill requirements. (running dry could damage the pump)
- 4) Open the delivery nozzle or valve.
- 5) Close the delivery gun or valve to stop delivery. (The pump will immediately enter by-pass mode)
- Note:** Do not allow the pump to run in by pass mode for more than 2 to 3 minutes or pump damage may occur
- 6) Stop the pump

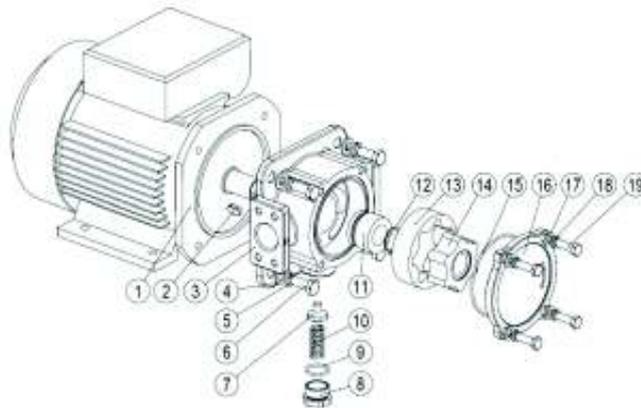
MAINTENANCE

On a weekly basis check that the hose joints have not loosened, to avoid any leakage

1. On a monthly basis check the pump body and clean it removing any impurities.
2. On a monthly basis check and clean the filters placed at the pump inlet.
3. On a monthly basis check that the electric power cables are in good condition.

Part	Description	Qty
1	Motor	1
2	Key	1
3	Pump head	1
4	Washer	4
5	Spring washer	4
6	Hex bolt	4
7	By-pass valve	1
8	By-pass plug	1
9	O-ring	1
10	Spring	1
11	Seal	1
12	Circlip	1
13	External rotor	1
14	Internal rotor	1
15	O-ring	1
16	Pump cover	1
17	Washer	4
18	Spring washer	4
19	Hex bolt M8 x 15	4

PARTS DIAGRAM



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TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
Motor does not run	1. Lack of power	1. Check electrical supply and connections
	2. Rotor blocked	2. Check rotor for damage or blockage
	3. Thermal overload triggered	3. Let motor cool, verify that the pump starts, and look for the cause for the pump overheating.
	4. PROBLEM WITH MOTOR	4. Replace pump
Motor turns slowly when starting	1. LOW VOLTAGE	1. Ensure correct voltage to pump
	2. Higher than recommended oil viscosity	2. Only pump oil less than 1000Cst
Little or no flow	1. Low oil level in tank	1. Fill tank
	2. Foot valve blocked	2. Clean or replace
	3. Filter blocked	3. Clean or replace filter
	4. Excessive suction pressure	4. Increase hose diameter or reduce length of suction hose/pipe.
	5. By-pass valve blocked	5. Clean or replace valve
	6. Air in system	6. Check suction connections
	7. Suction hose collapsing	7. Change to correct type of suction hose
	8. Pump turning slowly	8. Check voltage to the pump is correct. Increase cable size if required
	9. Higher than recommended oil viscosity	9. Only pump oil less than 2000Cst
Pump noise louder than normal	1. Cavitation	1. Reduce suction pressure
	2. By-pass valve open	2. check by-pass valve for correct operation
	3. Air present in the oil	3. Wait for the oil in the tank to settle
Oil leaking from pump body	1. Damaged seal	1. replace seal

For Warranty Terms and Conditions refer to www.lubmatebymacnaught.com.au