

SPM Electric Single-point Lubricator

USER MANUAL



1. PRODUCT INTRODUCTION

SPM125mL and 250mL electric lubricators are high-torque lubrication devices controlled by integrated circuits and driven by geared motors. When working, the piston can be lowered to generate a pressure of up to 120psi, which makes it work in a longer lubrication pipeline. When using, simply set the DIP switch on the top of the product to determine its lubrication cycle. SPM has two specifications of 125mL and 250mL. The driving mode can choose 24V external power supply and 3V battery pack. Customers can choose flexibly according to their own needs. When the grease is exhausted, refill the grease and replace the battery pack to use it again.

NOTE: In a long-term low temperature state, there is a possibility that the battery capacity will not be enough to distribute all the lubricant under the influence of temperature. Under this condition, it is recommended to replace the battery pack when the lubricant is half distributed. When replacing the reservoir, the battery needs to be replaced at the same time.

1. Dip switch, integrated circuit board, LED indicator

2. Replaceable battery pack

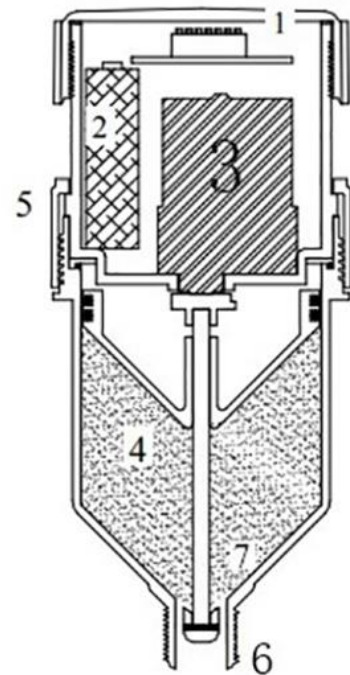
3. DC gear motor

4. Replaceable reservoir

5. Locking ring

6. G1/2 thread outlet

7. Threaded screw



2. PRODUCT USE

SPM is widely used in all kinds of mechanical equipment that require lubrication and grease, automatic assembly lines, large motors, pumps, screw guides and other equipment. This product has practical functions such as large thrust, long standby time, and alarm prompts.

WARNING: There is a danger of explosion. The battery can only be replaced in a known non-hazardous area.

NOTE: If the battery used in this device is improperly handled, it may cause fire or burns. Do not charge, disassemble, do not heat to 100°C or discard in fire.

3.START STEPS

Please select the appropriate lubrication cycle and lubricant according to the cycle setting comparison table. Then complete the setting through the DIP switch, and the activated device will start to work immediately.



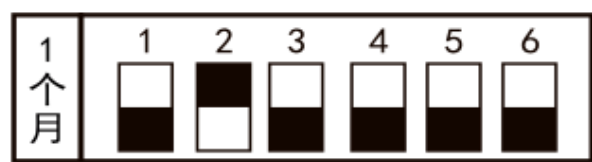
WARNING: External impact can cause the lubricator to fail to work normally, please make sure it is in good condition before installation!

Setting, activation and installation of the lubricator cycle:

1. Open the transparent observation cover.
2. Set the lubrication cycle.
3. Connect the battery pack plug.
4. Close the observation cover and screw it tightly.
5. The settable period is 0.5, 1, 3, 6, 9 and 12 months



0.5 MONTHS



1 MONTHS



3 MONTHS



6 MONTHS



9 MONTHS



12 MONTHS

Lubrication cycle setting reference table

For 125mL

Working Days	Minute Interval	Daily lubrication	DIP 1 (15 days)	DIP 2 (30 days)	DIP 3 (90 days)	DIP 4 (180 days)	DIP 5 (270 days)	DIP 6 (360 days)
15	90	8.33mL	ON	OFF	OFF	OFF	OFF	OFF
30	180	4.16mL	OFF	ON	OFF	OFF	OFF	OFF
90	540	1.38 mL	OFF	OFF	ON	OFF	OFF	OFF
180	1080	0.70 mL	OFF	OFF	OFF	ON	OFF	OFF
270	1620	0.46 mL	OFF	OFF	OFF	OFF	ON	OFF
360	2160	0.35 mL	OFF	OFF	OFF	OFF	OFF	ON

For 250mL

Working Days	Minute Interval	Daily lubrication	DIP 1 (15 days)	DIP 2 (30 days)	DIP 3 (90 days)	DIP 4 (180 days)	DIP 5 (270 days)	DIP 6 (360 days)
15	42	16.67 mL	ON	OFF	OFF	OFF	OFF	OFF
30	85	8.33 mL	OFF	ON	OFF	OFF	OFF	OFF
90	255	2.77 mL	OFF	OFF	ON	OFF	OFF	OFF
180	510	1.38 mL	OFF	OFF	OFF	ON	OFF	OFF
270	765	0.92 mL	OFF	OFF	OFF	OFF	ON	OFF
360	1020	0.69 mL	OFF	OFF	OFF	OFF	OFF	ON

Note when mounting for the first time: first clean the area around the grease nipple. Use a grease gun to clean the pre-lubricated oil circuit to ensure that the pipeline is filled with the same grease as in the lubricator and to ensure that the grease can flow freely. If accessories such as adapters, extension hoses or check valves are mounted, fill these accessories with grease first.

4. TROUBLESHOOTING AND PRECAUTIONS

If you want to change the distribution rate of lubricant, just turn off the DIP switch (OFF), and then reset it. Put all the switches on the "OFF" key to turn off the operation. When the equipment is working normally, the LED indicator flashes green once every 20 seconds.

Green light: The lubricator is operating normally

Blue light: The lubricator is still working, but the pressure in the lubrication line is too high

Red light: The power of the lubricator is too low and it stops running

1. If the pipeline of the lubricator is blocked during use, the blue light will be on, indicating that the lubrication point has no grease injected, and it is necessary to check whether the lubrication point or pipeline is unblocked.
2. Because it takes time for the lubricator to be activated until the grease flows out from the outlet, when mounting the lubricator for the first time, it needs to be activated in advance and placed aside until the grease flows out. This step is especially suitable for lubricators that are set to be used for a long time.
3. SPM has always pursued high standards of accuracy and consistency. However, different equipment has different requirements for lubrication, and this requirement is extensive and complex. Therefore, we are not responsible for equipment damage caused by the user's incorrect estimation of the amount of lubrication. If the SPM is mounted at a lubrication point that requires more precise and strict lubrication volume, the user needs to observe the window to determine whether the lubrication point is normally lubricated.
4. The distribution speed is not affected by temperature. The maximum lubrication pressure during the whole distribution period is 8 bar. Various distribution speeds can be set. The transparent liquid reservoir can be used for visual inspection.
5. It is suitable for direct mounting and long-distance mounting. The maximum distribution length depends on the ambient temperature, the type of grease and the pressure at the application location.

If the LED indicator flashes red or blue every 20 seconds, the following problems may have occurred.

LED	Signal indication	Signal interval	Operating status
GREEN	Flash 1 time	Every 20S	The equipment is running well
RED	Flash 1 time	Every 20S	The battery is exhausted and needs to be replaced
BLUE	Flash 1 time	Every 20S	Lubrication point pressure is too high, motor is blocked

5. REPLACE THE RESERVOIR

The lubricator containing liquid lubricant should be equipped with a one-way plug or a one-way valve before installation.

Battery replacement

The battery life is affected by temperature, pressure and lubrication cycle, and the life expectancy is based on standard mounting. When replacing the battery, remove the top ring with a tool, pull out the old battery, and then insert the new battery pack.

Reservoir replacement

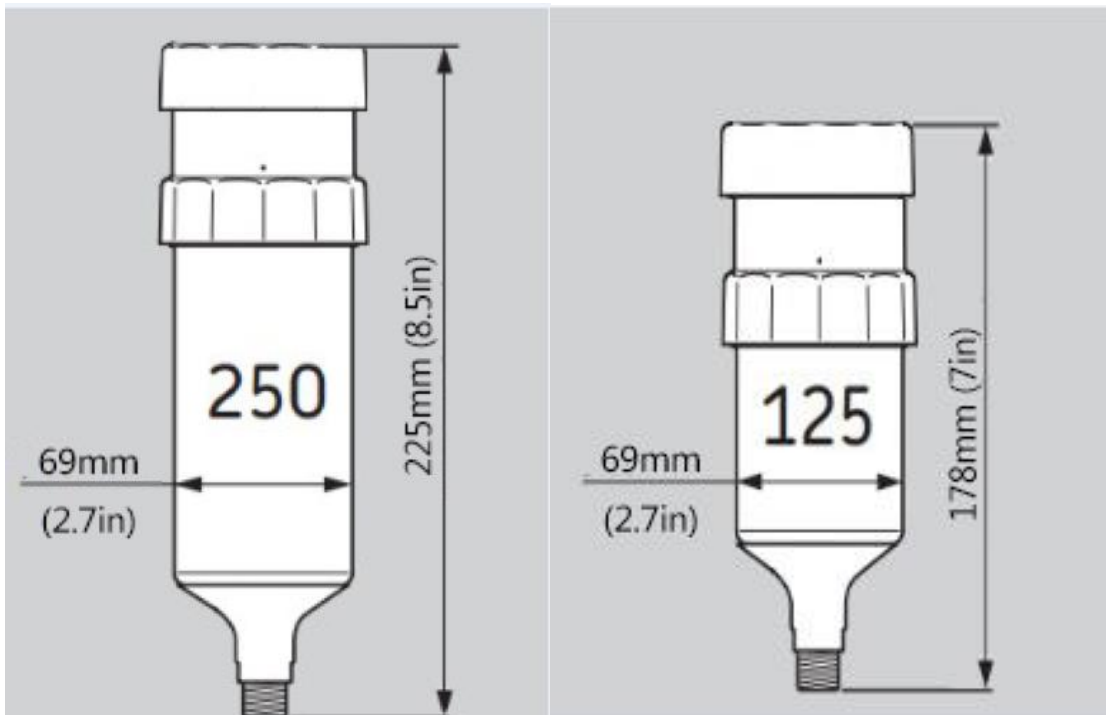
1. Remove the SPM lubricator from the lubrication point.
2. Remove the quick lock ring.

3. Remove the used reservoir.
4. Replace with a new reservoir and make sure it is stuck in the positioning notch.
5. Tighten the quick lock ring.
6. Remove the top cover and replace the battery pack.
7. Set the lubrication cycle set by the switch, and then close the top cover.

6. REFILLING

<https://www.iglan.net/wp-content/uploads/2021/06/fill-grease.mp4>

7. PRODUCT DIMENSIONS



Reservoir dimensions

