Peristaltic Liquid Pump with Silicone Tubing

PRODUCT ID: 1150



DESCRIPTION -

Move fluid safely from here to there with this very nice little pump. Unlike most liquid pumps, this is a peristaltic type – the pump squishes the silicone tubing that contains the liquid instead of impelling it directly. The upshot? The pump never touches the fluid which makes this an excellent choice for any food/drink/sterile based pumping such as for making drink-bots or gardening robots!

The pump is basically a geared down DC motor, so it has a lot of torque. Inside the pump is a 'clover' pattern of rollers. As the motor turns, the clover presses on the tube to press the fluid though. The pump does not need to be primed and in fact can self-prime itself with water a half meter with ease. You can PWM the motor to speed up or slow down the flow rate and if you connect the motor the other way it will move fluid the other direction. Works great with either a power transistor (basic on/off) or a motor driver chip such as the L293D.

Please note The pump comes with a bit of silicone tubing already installed and two 1/2 meter pieces attached on with barbed connectors. However, the silicone tubing is not sterile and might be dirty on its way to you. Before using, the tubing must be sterilized! The included tubing is also not rated FDA or USDA compliant and is only meant for basic testing of the pump. If you need to purchase FDA/USDA compliant tubing for use with your food-hacking project check out McMaster-Carr. They have many types of silicone tubing available by the foot!

Wikipedia has a great article on peristaltic pumps, please check it out for more details on how these devices work!

Technical Details



Uses approx 4mm outer diameter, 2mm inner silicone tubing, the pump tube size has changed on us, so please measure the tubing that comes with your pump to verify!

Working Temperature: 0°C - 40 °C

Motor voltage: 12VDC Motor current: 200-300mA Flow rate: up to 100 mL/min

Weight: 200 grams

Dimensions: 27mm diameter motor, 72mm total length

Mounting holes: 2.7mm diameter, 50mm center-to-center distance