



Peristaltic Liquid Pump with Silicone Tubing – 5V to 6V DC Power

Move fluid safely from here to there with this very nice Peristaltic Pump that works with 5V or 6V power. 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.

Also works with our Crickit for Circuit Playground Express! Use the crickit run motor blocks on Microsoft MakeCode, and you're off to a great start!

We've also got a version that works well with 12V DC power.

Please note: The pump comes with a bit of silicone tubing already installed with two half-meter tubes 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! We also have a meter of silicone tubing you can pick up right now!

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

TECHNICAL DETAILS

- Working Temperature: 0℃ 40℃
- Motor voltage: 5 to 6 VDC
- Motor current: 500mA
- Flow rate: up to 100 mL/min
- Weight: 104 grams
- Dimensions: 27.8mm diameter motor, 66.8mm total length
- Mounting holes: 3.7mm diameter, 50mm center-to-center distance
- Tube length: approx 530mm / 20.8"
- Tube diameters: inner diameter 3.5mm, outer diameter 5mm







https://www.adafruit.com/product/3859 10-2-18