



Office of Surface Mining
Reclamation and Enforcement
Technical Innovation and Professional Services Team (TIPS)



Solinst Peristaltic Pump



Description: The 12 VDC Solinst peristaltic pump has an on/off switch with a separate speed control. Pumping action in either direction is achieved in a section of 5/8-inch OD medical-grade silicone tubing to produce flow rates up to 2.75 L/minute through attached 1/2-inch OD plastic tubing. Smaller diameter tubing may be used in the pump head. Adapters hold 3/8-inch OD medical-grade silicone tubing in place. With that size of tubing, water can be drawn through attached 1/4-inch OD plastic tubing at rates as low as 10 ml/minute. Since the pump uses vacuum to move water, the maximum practical lift through air is about 25 feet.

Uses: The device can produce water under low-flow sampling conditions.

Maintenance: Silicone tubing needs to be replaced when it appears worn or permanently deformed.

Depending on the field use, the entire length of tubing requires different levels of decontamination between sampling stations. Final decontamination at the end of the sampling event can be achieved by washing off the plastic tubing and then pumping a solution of Alconox detergent and warm water followed by thorough rinsing with distilled/deionized water.

Check-out & Contact Information:

The peristaltic pump is available from the Technical Services Branch of the Mid-Continent Region, Contact Brian Hicks at 202-513-0383 or bhicks@osmre.gov.

Equipment may be borrowed for a specific period. Equipment on loan will be temporarily transferred using a Department of the Interior Property Pass, Standard Form DI-1934, signed by the appropriate responsible individuals. OSMRE will generally pay for delivery to the requestor's office. The cost of return delivery will be borne by the requesting office. Some equipment is oversized or may need special handling.