

## LOW FLOW REGULATOR APB-B FOR AFC-123 PERSONAL SAMPLERS

### *Description:*

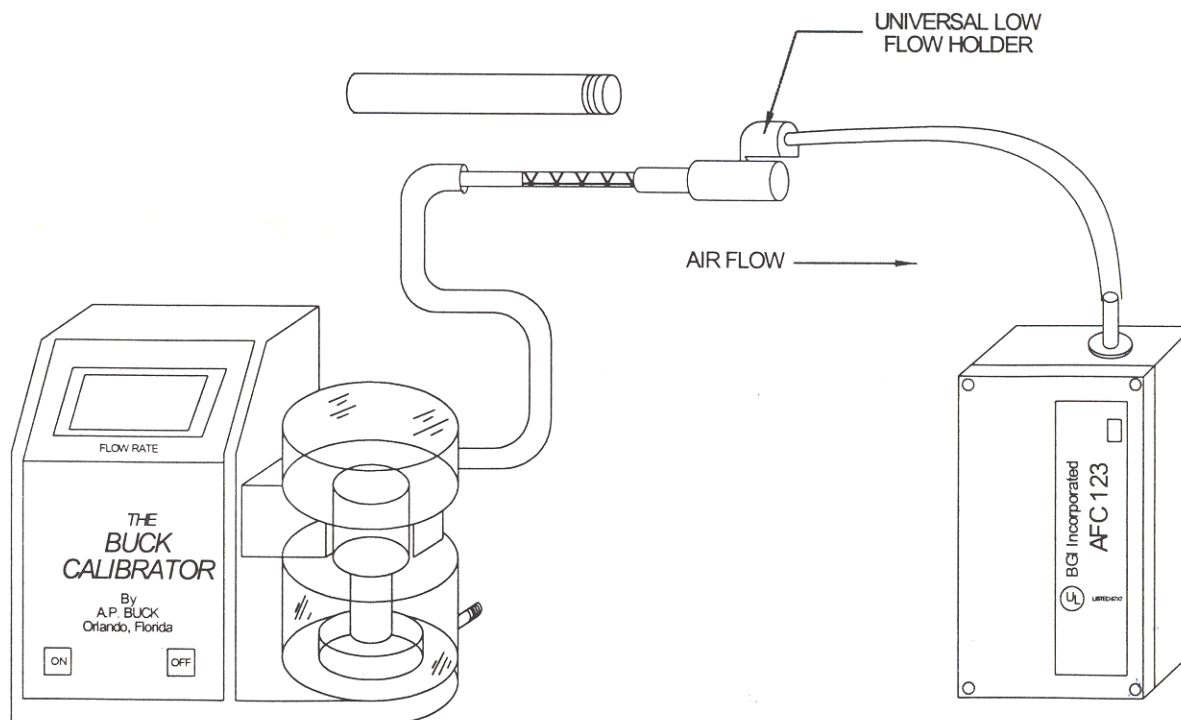
The flow regulator is designed to serve as an adsorbent tube holder. Due to its unique design, the regulator is capable of being used for tube sampling on personal air sampling pumps which have a flow range of 1 to 5 lpm.

### *Sampling Mode:*

Calibrations and sampling are performed from the SAMPLING MODE.

To calibrate the flow rate through the pump: Connect the air flow calibrator (such as a bubble meter) to the inlet end of the adsorbent tube (an arrow on the tube indicates the direction of air flow during sampling). Connect the outlet end of the adsorbent tube to the hose barb on the end of the low flow holder. Use the clear plastic tubing provided with the pump to connect the hose barb on the low flow holder to the inlet of the pump (see drawing). The arrow on the adsorbent tube should be pointing toward the low flow holder.

The low flow holder is capable of operating from 5cc/min to 800 cc/min for low flow sampling by adjusting the needle valve screw head located in the center of the holder. A bypass orifice is built into the holder hose barb elbow, and a metal mesh screen protects this fixed bypass orifice. By adjusting the power scale (pump speed), back pressures up to 25 inches of water pressure can be created across an adsorbent tube. The universal tube holder will provide constant tube flow within a maximum of 5% error of the desired flow rate.



**BGI INCORPORATED**

58 Guinan Street, Waltham, MA 02154 Tel: 781.891.9380 Fax: 781.891.8151  
Vist our Web Page at [www.bgiusa.com](http://www.bgiusa.com)