MOUNTING

1 This is a manifold mountable pump for use with two M3 fixing screws and two ID 6 x 1 mm O-rings; all supplied with the pump (1). Mounting face/flange should be smooth and flat to enable a good seal. We can supply an optional fitting flange with barb hose fittings for 3.2 mm tubing (2).

2 The pump is **NOT** for submersed use! Not even with the optional flange (2) attached.

OPERATION NOTES

3 Connect the pump to a switch box powered by a DC power supply, or directly to the DC power supply (3), and adjust the plastic knob to the 12 V setting.

4 The pump must be fully purged of air before pump operation. Any air in the system will cause inconsistent pump performance and a risk of overheating. To prime the pump with water, the pump intake must be submersed at all times.

5 Connect the power cord for the DC supply to a wall outlet. This will start the pump after a delay of 1 second. Input voltages between 6-9 V DC will change the flow. Do not exceed 12 V DC as this will cause permanent damage to the pump driver.

6 Let the pump run for 10 seconds to empty it for any air trapped inside the pump housing. Then stop the pump and repeat this step to make sure that the pump is fully purged of air. Air is less likely to get trapped inside the pump if it is placed with the ports pointing straight upwards.

7 Now proceed by connecting the tubing required for your application.

FLOW

8 The flow rate can be adjusted by lowering the voltage down to 6 V or change the friction against flow by changing the head pressure or tube dimensions, i.e., inner diameter and length. See performance graph for further information (4).

MAINTENANCE

9 Between use the pump should be stored clean and dry. Clean the pump by detaching the tubing and let the pump run with tap water or a soap/bleach solution for a few minutes. Then place the pump upside down in order to drain the pump housing completely, and then allow it to dry before storage.

1

2

3

4

Miniature impeller pump flow test

— 1.14 mm tubing   — 3.2 mm tubing

Flow (ml/min) vs Voltage (V)