

Vortex Magnetic Stirrers

Instructions for Use

General Description

The Vortex range of magnetic stirrers are designed for mixing liquids in a variety of laboratory glassware including beakers, volumetric and conical flasks. The case is marked as being suitable for stirring up to 2 litres, but we have successfully mixed 2.5 litres in a tall form beaker.

Vortex 1 Vortex 1 is a fixed speed unit, which operates as soon as it is plugged into the mains

Always ensure that the unit is switched off prior to moving the liquid container. Put the liquid to be stirred in a suitable glass container - a plastic container may be used providing the base is absolutely flat. Add the stirring bar to the container and place the container onto the unit, sliding it slightly to ensure that the stirring bar locks onto the internal magnets. After stirring, the stirring bar may be removed from the container by sliding it up the side of the container using a 'Magnadur' or other suitable magnet.

Vortex 2 Vortex 2 is a variable speed unit, the speed being controlled by the knob on the front face.

Set up the liquid to be stirred as detailed above. Turn the control knob to the 4-o'clock position and plug the unit in. Once the stirrer's speed has settled (about 2 seconds), turn the control knob to give the required mixing rate.

Vortex LV Vortex LV is designed to be operated from a standard laboratory power supply.

Set up the liquid to be stirred as detailed in the Vortex 1 instructions above. Connect the unit to a low voltage power supply and select 4 volts. Once the stirrer's speed has settled (about 2 seconds), adjust the power supply within the range 3-6 volts to give the required mixing rate.

N.B. With some unregulated power supplies, the output voltage may be significantly above that stated on the dial and some experimentation with different ac/dc settings may be required.

Electrical Safety

Conducting liquids and mains electricity form a potentially lethal combination. If liquid is spilled on the unit, unplug from the mains before handling/drying the stirrer unit.

The units are constructed to Class 2 (double insulated) insulation class. When performing electrical safety tests using a Portable Appliance Tester, the unit should give an insulation resistance of greater than 7M Ω . For further details on safety testing, please refer to Health and Safety Executive leaflet GS23 (ISBN 0 11 883567).

N.B. The bolts on the underside of the unit and the mains clamp screw are both internally double insulated. An earth bond test is not required.

Electrical Specification Vortex 1 and Vortex 2

Input voltage	220/240V ac 50/60Hz
Power consumption	<3VA
Mains plug fuse	3A

Electrical Specification Vortex LV

Input voltage	3-6V ac or dc
Input Current	<100mA

Electromagnetic Compatibility

The use of this apparatus outside the classroom, laboratory, study area or similar such place invalidates the conformity with the protection requirements of the Electromagnetic Compatibility Directive (89/336/EEC) and could lead to prosecution.