



Operating Instructions



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1. Safety

The following symbols mean:-



Caution: Read these operating instructions fully before use and pay particular attention to sections containing this symbol

Always observe the following safety precautions

C Use only as specified by the operating instructions, or the intrinsic protection may be impaired.



After transport or storage in humid conditions, dry out the unit before connecting it to the supply voltage. During drying out the intrinsic protection may be impaired.

- Connect only to a power supply with a voltage corresponding to that on the serial number label.
- Ensure that the mains switch and isolating device (power supply connector) are easily accessible during use.
- Connect only to a power supply which provides a safety earth (ground) terminal.
- Before moving, disconnect at the power supply socket.
- If liquid is spilled inside the unit, disconnect it from the power supply and have it checked by a competent
- It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on or inside the equipment.
- Do not use tubes with a larger diameter than that of the vortexer cap (20mm);
- Do not start vortexing at maximum speed;
- Do not touch the vortexing cup during operation.
- Place unit on a solid work surface or laboratory bench.
- Clean the unit only with a damp cloth, do not use chemical cleaning agents.
- Before using any cleaning or decontamination method except those recommended by the manufacturer, user should check with the manufacturer that the proposed method will not damage the equipment.

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2. General Information

2.1 Introduction

The Hardy Diagnostics vortexR is designed for mixing substances in tubes using an eccentric mechanism. The vortexR can be used in a variety of applications including general test tube mixing, tissue samples mixing, cell suspensions vortexing, chemical reagents mixing, etc.

2.2 Description

This unit is equipped with 20 mm diameter single Polystyrol vortexing cup for using one tube at a time and is intended for two operations:

- Continuous Vortexing Intermittent Vortexing

The intermittent operation is activated by touching the mixing cup with a test tube and operates at variable speeds from gentle shaking to vigorous vortexing. To operate the continuous operation simply push the switch down to the continuous option.

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3. Operating Instructions

The vortexRis simple to operate.

3.1 Continuous vortexing mode.

Push switch (2) into position . Set a desired level of mixing using the speed control (3); Control the intensity of vortexing by varying the pressure of a tube in the Polystyrol cup (1).

3.2 Intermittent vortexing mode - Touch operation.

Push switch (2) into position. Vortexer will be activated when touching the vortexing cup with a test tube; Set a desired level of vortexing using the speed control (3); Control the intensity by varying the pressure of a tube in the Polystyrol cup (1).



4. Specifications

4. Standard Specifications

| Rotation speed | 250-6000 RPM. |
|--|----------------------------|
| Time of acceleration | |
| Maximum tube diameter | 20mm |
| Ambient temperature range | +4° to 45°C |
| Dimensions | 5 in. x 5.75 in. x 3.0 in. |
| • Power | 12V, 500mA |
| Weight (with power supply) | 2.0 lb |

5. Warranty and Service

5.1 Warranty

When used in laboratory conditions and according to these operating instructions Boekel warrants this product to be free of defective material and workmanship for a period of two years from the date of shipment. The liability of Boekel for any defective equipment during the warranty period shall be limited to the repair of such equipment or replacement thereof without charge for parts or labor.

5.2 Service

A Returned Material Authorization (RMA) number is required before any Boekel products are returned for any reason. Contact Boekel Customer Service at 1-800-336-6929 ext. 5. A Decontamination Certificate must be completed, signed by the user, and returned to Boekel Scientific prior to receiving the RMA number. Please be sure to mark the outside of the returned goods package with this RMA number to ensure prompt handling.

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