



### Product Highlights

- Save money by only having to purchase one unit that has the functionality of both a high-performance centrifuge and magnetic stirrer
- Easy to use with a digital display, one button programming and tool free rotor exchange
- Stay focused in the lab with ultra-quiet operation
- Reduce down-time with a reliable unit you can trust with 3-year warranty

The Power Of  
**TWO UNITS  
IN ONE**

# A truly great product is ultimately defined by its functional design

The MagFuge® by Heathrow Scientific is the industry's first high-speed centrifuge and magnetic stirrer, combined into one unit. This design innovation enables a substantial cost savings for labs by not having to purchase two pieces of equipment, a stirrer and a centrifuge, because the MagFuge® does it all.

- Made from a durable chemically resistant ABS and polycarbonate making it easy to clean, maintenance free and helps lower the cost of ownership
- The modern low-profile design is compact and has a small footprint for labs with limited bench space and limited height that ultimately helps reduced clutter in the lab
- An easy to use back-lit digital control panel for time, speed and operations ensures effective outcomes and streamlines the work flow process by allowing for quick set up



## High-Speed Mini Centrifuge

Two Units  
in One!

## Magnetic Stirrer

The high-speed Centrifuge (12,500 RPM) is designed to give you maximum speed and flexibility while being comfortable and easy to use.

- Ideal for most protocols requiring fast spins (12,500rpm / 9,800 x g), and appropriate for PCR, microfilter cell separation, and HPLC protocols
- Adjustable time (30 seconds to 60 minutes) and speed (500 to 12,500 RPM)
- Variable speed can be set in RPM or RCF and has rapid acceleration and fast controlled breaking
- Two rotors included, 12 place for 1.5/2.0 mL tubes and 6 place for 5 mL tubes with adapters for additional tube sizes
- Manual lid override allows users to open lid in case of a power failure and prevents loss of samples
- Safety features help ensure it will not operate when the lid is open, a rotor is jammed, or the unit is out of balance

### Compatible Tubes:

- 0.2 mL
- 0.5 mL
- 1.5 mL
- 2.0 mL
- 5.0 mL



The high-performance Magnetic Stirrer (3L Plus) is designed to provide a powerful magnetic coupling that ensures consistent accurate alignment of the stir bar that significantly reduce the chance of spin-outs.

- Ideal for work with sensitive samples such as cell lines and protocols requiring more aggressive mixing to quickly achieve full dilution of samples in solution
- Multiple stirring modes, clockwise, c. clockwise and oscillate enable protocols to be controlled precisely for reproducible results
- Adjustable time (30 seconds to 60 minutes or continuous) and speed (50 to 2,500 RPM)
- After hours of continuous use, the unit remains cool ensuring sample integrity
- Sensor technology prevents the stirrer rotor from being used above 2,500 RPM helping to protect users and prevent unit damage
- A silicone mat is included to help prevent spills and to help keep vessels stable
- High-quality rare-earth magnets are used in the stirrer rotor to ensure the strongest magnetic coupling
- Two rare-earth stir bars (40 x 12 mm) included have PTFE coating for chemical resistance

# ? FAQ



## Precision, literally at the touch of one button!

The MagFuge® offers an easy to program digital display.

Multiple functions and options are available to achieve the best possible centrifugation and stirring results for a wide range of protocols.

Conveniently rotate the knob to choose the function desired (centrifuge or stirrer) and push to lock in the selection



After selecting a function, rotate through the performance options and select the program to meet your requirements.

- Speed Display or Stirrer Mode
- Speed: Centrifuge 500 to 12,500 RPM Stirrer 50 to 2,500 RPM, 5 sec. increments
- Time: 30 seconds to 60 minutes, 5 sec. increments (continuous option for stirrer)



Last run memory feature is available for repeat protocol requirements.

## How easy is it to change the rotors?

Very. No tools are required. Each rotor takes seconds to screw finger tight into place.

## What happens if the wrong rotor is used with the wrong mode?

An error message will be displayed and the MagFuge® will not operate. The MagFuge® can detect the rotor installed and it must be matched with the mode for it to work.

## What is the oscillating mode?

In the oscillating mode you can program the stirrer to automatically stir one direction, then stop and stir in the other direction. The number of cycles can be set up to 99 times.

## Why would I use the oscillating mode?

The oscillating mode is ideal for helping to dissolve solids and stirring of more viscous solutions. By constantly changing the direction of the stirring, it ensures the most thorough of mixing and can help reduce mixing time.

## What happens if there is a spill on the MagFuge®?

The shape of the stirrer housing guides any spillages away from the electrical components, which are also protected by the seamless top shell.

## How can you clean the MagFuge®?

You can use any standard detergents or disinfectants that are compatible with Acrylonitrile Butadiene Styrene, more commonly known as ABS and polycarbonate.





## Did you know?

Heathrow Scientific has strict standards that include 3<sup>rd</sup> party plant reviews and 100% multi-level product inspections. These actions result in a 99.7% reliability on our equipment and 99.99% reliability on our laboratory supplies.

## Patent information

Community Design No. 003515337-0001-0002

Euro. Pat. App. 3 246 088

US Design Patent No. D814,045

Utility Patent Pending

## Safety certified and approved

Meets international standards.

### Specifications

|                               |                                                                                         |
|-------------------------------|-----------------------------------------------------------------------------------------|
| <b>Weight</b>                 | 1.85 kg (4.08 lb)                                                                       |
| <b>Operating Temp.</b>        | Range 2°C to 40°C                                                                       |
| <b>Max. Relative Humidity</b> | Non-condensing, 80% for temperatures up to 31°C decreasing linearly to 50% R.H. at 40°C |

### Electrical

|                      |                                   |
|----------------------|-----------------------------------|
| Power Adapter Rating | Level VI                          |
| Input                | 100-240 VAC 50/60 Hz<br>2.0-1.0 A |
| Output               | 12 VDC 8.33 A                     |
| MagFuge® Rating      |                                   |
| Input                | 12 VDC                            |
| Current (Under load) | Approx. 6.5 A                     |
| Power                | Approx. 78W                       |

**Warranty** 3 years

**Certifications** CE, SGS, RoHS<sub>2</sub>, WEEE



### Package Includes

|                   |                                 |                         |
|-------------------|---------------------------------|-------------------------|
| MagFuge®          | Stirrer Rotor                   | 12 Tube Adapters 0.2 mL |
| 5 mL Tube Rotor   | 2 Stir Bars                     | 12 Tube Adapters 0.5 mL |
| 1.5 mL Tube Rotor | 2 Silicone Mats for Stirrer Lid |                         |

1 low voltage, double insulated power adapter with 4 interchangeable plugs



## MagFuge®

| Item No. | Color       | L x W x H<br>in | cm               | UOM          |
|----------|-------------|-----------------|------------------|--------------|
| 120581   | Gray/Purple | 9.2 x 7.3 x 4.7 | 23.5 x 18.5 x 12 | 1/ea, 2ea/cs |
| 120582   | Gray/Blue   |                 |                  |              |

## Base Color Options



### Specifications: MagFuge® Centrifuge

|                        |                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Speed Range</b>     | 500 – 999 rpm (increments of 1); 1,000 – 5,000 rpm (increments of 5);<br>5,000 – 12,500 rpm (increments of 25)                  |
| <b>RCF</b>             | 16 – 9,783 x g (max RCF calculated)                                                                                             |
| <b>Capacity</b>        | 12 place 1.5/2.0 mL tube rotor: 24 mL total maximum liquid volume<br>6 place 5 mL tube rotor: 30 mL total maximum liquid volume |
| <b>Run Time Ranges</b> | 30 seconds – 60 minutes (5 second increments)                                                                                   |

### Specifications: MagFuge® Magnetic Stirrer

|                         |                                                                              |
|-------------------------|------------------------------------------------------------------------------|
| <b>Speed Range</b>      | 50 – 999 rpm (increments of 1); 1,000 – 2,500 rpm (increments of 5)          |
| <b>Run Time Ranges</b>  | Stirrer Mode 30 seconds to 60 minutes or continuous<br>(5 second increments) |
|                         | Oscillating Stirrer Mode 1 second – 60 minutes or continuous                 |
|                         | Oscillating Period 30 seconds – 15 minutes                                   |
| <b>Capacity</b>         | 3 liters plus. Diameter of vessel not to exceed 130 mm (6.70")               |
| <b>Plate Dimensions</b> | Approx. 130 mm diameter                                                      |



1.5/2.0 mL Tube Rotor

5 mL Tube Rotor

Stirrer Rotor



**Two stir bars included**  
Rare-Earth PTFE coated stir bars

