

# **BenchMate**®

Magnetic & Hotplate Stirrers



Designed by Scientists, Feared by Competitors



# Oxford Lab Products

BenchMate® Digital Magnetic and Hotplate Stirrers

Features and Benefits

## **Space Saving Design**

Maximize the use of precious bench-top space, the 10-place (MHS-10) unit is less than 8 inches wide

# **Pulse Function for Vigorous Mixing**

Alternates between clockwise and counterclockwise motion every 30 seconds

#### **Designed with Documentation in Mind**

Digital display indicates speed and time

#### **Maintenance Free**

Motorless stirrers with no moveable parts

# **Easy to Clean**

Digital display without knobs

Easy-to-read LED Display
Digital display specifies speed,
time, and temperature



Designed for User Safety
Dedicated "HOT" LED indicator light and
waterproof heater with built-in safety cutoff

| Product Specifications                            | BenchMate <sup>®</sup> Magnetic Stirrers |   | BenchMate® Hotplate Stirrers                                  |   |
|---|--|---|---|---|
| Catalog Number                                    | MS1                                      | MS4                                     | MHS-5   | MHS-10  |
| Number of Stirring                                | 1  | 4                                       | 5   | 10  |
| Max. Volume per Position                          | 800 mL                                   | 400 mL                                  | 400 mL  | 400 mL  |
| Total Max. Volume                                 | 800 mL                                   | 1600 mL                                 | 2000 mL   | 4000 mL   |
| Variable Speed                                    | 15 to 1500 rpm,<br>in 50 rpm Increments  | 15 to 1200 rpm,<br>in 50 rpm Increments | 300 to 1500 rpm, in 10 rpm Increments                         | 300 to 1500 rpm, in 10 rpm Increments                         |
| Run Time  | 1 to 99 Minutes & Infinite Mode          | 1 to 99 Minutes & Infinite Mode         | 1 to 999 Minutes & Infinite Mode                              | 1 to 999 Minutes & Infinite Mode                              |
| Digital Display                                   | Yes                                      | Yes                                     | Yes   | Yes   |
| Pulse Mode  | Yes                                      | Yes                                     | Yes   | Yes   |
| No. PTFE Coated Stir Bars<br>Included (25 x 8 mm) | 1  | 4                                       | 5   | 10  |
| Motor Type  | BLDC                                     | BLDC                                    | BLDC  | BLDC  |
| Plate Material                                    | Corrosion Resistant<br>Stainless Steel   | Corrosion Resistant<br>Stainless Steel  | Corrosion Resistant<br>Stainless Steel<br>with Silicone Sheet | Corrosion Resistant<br>Stainless Steel<br>with Silicone Sheet |
| Dimensions (L x W x H)                            | 156x110x13.2 mm                          | 457x126x13.4 mm                         | 562x136x75 mm   | 565x196x75 mm   |
| Protection Class                                  | IP 65                                    | IP 65                                   | IP 65   | IP 65   |
| Heater Temperature Range                          | Ambient,<br>No Heating Element           | Ambient,<br>No Heating Element          | Ambient<br>to 120°C   | Ambient<br>to 120°C   |

#### Oxford Lab Products

# BenchMate® 10L Digital Hotplate Stirrer

Features and Benefits

# **Designed for Heating to Precise Temperatures**

With the included temperature sensor you are able to monitor the temperature of your solution

# **Small Footprint**

Stir and heat up to 10L in less than 1 square foot

## **User Friendly**

Large and clear digital display shows temperature, speed, and stir time. A dedicated "HOT" LED indicator is highly visible for user safety.

#### **Powerful**

Mix solutions up to 2200 rpm

#### **Save Time**

Last run memory feature saves time when preparing the same solutions



#### **Designed for Heating to Precise Temperatures**

With the included temperature sensor you are able to monitor the temperature of your solution

| Product Specifications for BenchMate® 10L Hotplate Stirrer |   |  |  |  |
|--|---|--|--|--|
| Catalog Number   | MHS-10L                                   |  |  |  |
| Maximum Volume   | 10 L                                      |  |  |  |
| Variable Speed   | 200 rpm to 2200 rpm, in 10 rpm Increments |  |  |  |
| Heater Temperature Range                                   | Ambient to 320°C, in 1°C Increments       |  |  |  |
| Temperature Sensor and Stand                               | Included                                  |  |  |  |
| Temperature Selection                                      | °C or °F                                  |  |  |  |
| Digital Display  | Yes                                       |  |  |  |
| Pulse Mode   | No  |  |  |  |
| No. PTFE Coated Stir Bars Included (25 x 8 mm)             | 1   |  |  |  |
| Hotplate Material  | Ceramic Coated Stainless Steel            |  |  |  |
| Hotplate Dimensions  | 140 mm Diameter                           |  |  |  |
| Weight of Instrument                                       | 2.2 kg                                    |  |  |  |
| Dimension (L x W x H)                                      | 248 x 156 x 104 mm                        |  |  |  |
| Protection Class   | IP 21                                     |  |  |  |

#### Oxford Lab Products

# BenchMate® 20L Digital Hotplate Stirrer

Features and Benefits

## **High Capacity Hotplate Stirrer**

Heat and mix up to 20L with a maximum speed of 2200 rpm

# **Designed for Gentle to Vigorous Mixing**

A large variable speed range of 200 to 2200 rpm with optional pulse mode

# Features designed for GLP and GMP Labs

Large digital display simultaneously shows set temperature, actual temperature, speed, operation mode

# Multiple heating modes

- Slow heating with high accuracy
- Fast heating with high accuracy heats solutions quickly

 Rapid heating with overshoot Programmable to follow solution preparation SOP – Set and save up to 99 programs. Select speed, time, temperature and pulse feature.



No toggle display Critical parameters are displayed simultaneously

| Product Specifications for BenchMate® 20L Hotplate Stirrer |   |  |  |  |
|--|---|--|--|--|
| <u> </u>   |   |  |  |  |
| Catalog Number   | MHS-20L   |  |  |  |
| Optional Temperature Probe                                 | MHS-20L-PROBE   |  |  |  |
| Maximum Volume   | 20 L  |  |  |  |
| Variable Speed   | 200 rpm to 2200 rpm, in 10 rpm Increments                             |  |  |  |
| Heater Temperature Range                                   | Ambient to 550° C   |  |  |  |
| Run Time   | 1 to 999 Minutes and Infinite   |  |  |  |
| Programmable Mode  | Yes; User Can Set and Save Up to 99 User Defined Programs (Protocols) |  |  |  |
| Pulse Mode   | Programmable Pulse Mode - User Can Set Time from 30 to 99 Seconds     |  |  |  |
| Motor Type   | BLDC  |  |  |  |
| Hotplate Material  | Nano Crystalline Glass Ceramic  |  |  |  |
| Hotplate Dimensions  | 180 x 180 mm  |  |  |  |
| Weight   | 5.4 kg  |  |  |  |
| Dimension (L x W x H)                                      | 220 x 330 x 115 mm  |  |  |  |
| Protection Class   | IP 21   |  |  |  |