

# MS-H380-Pro

## LCD Digital Magnetic Hotplate Stirrer

### Features

- Maximum heating temperature is 380°C
- High resolution LCD displays actual temperature and speed
- Brushless DC motor is maintenance free
- Aluminum ceramic coating work plate, allowing immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital speed control with maximum speed up to 1500rpm
- Maximum stirring quantity of H<sub>2</sub>O at 5L



# MS-H280-Pro

## LED Digital Magnetic Hotplate Stirrer

DLAB MS-H280-Pro is a perfect hotplate stirrer for handling small volume task and daily applications, with maximum temperature of 280°C

### Features

- Digital temperature control with maximum temperature up to 280°C
- Digital speed control with maximum speed up to 1500rpm
- Stainless steel with ceramic coating work plate provides high chemical resistant performance
- External temperature control is possible by connecting temperature sensor(PT1000) with an accuracy at  $\pm 0.2^{\circ}\text{C}$
- LED display shows temperature and stirring speed
- "HOT" warning flashes if work plate temperature is above 50°C

| Specifications                               | MS-H-Pro <sup>A</sup>               | MS-H-PRO <sup>B</sup>                      | MS-H-PRO <sup>T</sup>                      | MS-H-S                                     | MS-H380-Pro                         | MS-H280-Pro                                |
|--|-------------------------------------|--|--|--|-------------------------------------|--|
| Work plate Dimension [W x D]                 | Ø135mm (5 inch)                     | Ø135mm (5 inch)                            | Ø135mm (5 inch)                            | Ø135mm (5 inch)                            | 140x140mm                           | Ø135mm (5 inch)                            |
| Work plate material                          | Aluminum cover with ceramic coating | stainless steel cover with ceramic coating | stainless steel cover with ceramic coating | stainless steel cover with ceramic coating | Aluminum cover with ceramic coating | stainless steel cover with ceramic coating |
| Motor type                                   | Brushless DC motor                  | Brushless DC motor                         | Brushless DC motor                         | Brushless DC motor                         | Brushless DC motor                  | Brushless DC motor                         |
| Stirring positions                           | 1                                   | 1  | 1  | 1  | 1                                   | 1  |
| Max. stirring quantity, [H <sub>2</sub> O]   | 20L                                 | 20L  | 20L  | 20L  | 5L                                  | 3L   |
| Max. magnetic bar (length)                   | 80mm                                | 80mm                                       | 80mm                                       | 80mm                                       | 50mm                                | 50mm                                       |
| Speed range                                  | 100-1500rpm resolution ±1rpm        | 100-1500rpm resolution ±1rpm               | 100-1500rpm resolution ±1rpm               | 0-1500rpm                                  | 200-1500rpm                         | 200-1500rpm                                |
| Speed display                                | LCD                                 | LCD  | LCD  | Scale                                      | LCD                                 | LED  |
| Temperature display                          | LCD                                 | LCD  | LCD  | Scale                                      | LCD                                 | LED  |
| Heating temperature range                    | Room temp.-340°C, increment 1°C     | Room Temp.-340°C, increment 1°C            | Room Temp.-340°C, increment 1°C            | Room Temp.-340°C                           | Room Temp-380°C                     | Room Temp-280°C                            |
| Heating liquid temperature control accuracy  | ±1°C(<100°C)<br>±1%(>100°C)         | ±1°C(<100°C)<br>±1%(>100°C)                | ±1°C(<100°C)<br>±1%(>100°C)                | -  | ±1°C(<100°C)<br>±1%(>100°C)         | ±1°C (<100°C)<br>±1% (>100°C)              |
| Overheating temperature protection           | 420°C                               | 420°C                                      | 420°C                                      | 420°C                                      | 420°C                               | 320°C                                      |
| Temperature display accuracy                 | ±0.1°C                              | ±0.1°C                                     | ±0.1°C                                     | -  | ±0.1°C                              | ±1°C                                       |
| External temperature sensor                  | PT1000 (accuracy±0.2°C)             | PT1000 (accuracy±0.2°C)                    | PT1000 (accuracy±0.2°C)                    | -  | PT1000 (accuracy±0.2°C)             | PT1000 (accuracy±0.2°C)                    |
| "Hot" warning                                | 50°C                                | 50°C                                       | 50°C                                       | -  | -                                   | 50°C                                       |
| Data connector                               | RS232                               | RS232                                      | RS232                                      | -  | -                                   | -  |
| Protection class                             | IP21                                | IP21                                       | IP21                                       | IP21                                       | IP21                                | IP42                                       |
| Timer function                               | 1min to 99h59min                    | -  | 1min to 99h59min                           | -  | -                                   | -  |
| Motor rating output                          | 10W                                 | 10W  | 10W  | 10W  | 1.8W                                | 3W   |
| Power  | 720W                                | 550W                                       | 550W                                       | 530W                                       | 510W                                | 515W                                       |
| Heating output                               | 600W                                | 500W                                       | 500W                                       | 500W                                       | 500W                                | 500W                                       |
| Voltage,Frequency                            | 100-120/200-240V, 50/60Hz           | 100-120/200-240V, 50/60Hz                  | 100-120/200-240V, 50/60Hz                  | 100-120/200-240V, 50/60Hz                  | 100-120/200-240V, 50/60Hz           | 100-120/200-240V, 50/60Hz                  |
| Dimension [WxDxH]                            | 280x160x100mm                       | 160x280x100mm                              | 160x280x100mm                              | 160x280x100mm                              | 320x180x108mm                       | 150x260x100mm                              |
| Weight                                       | 2.8kg                               | 2.8kg                                      | 2.8kg                                      | 2.8kg                                      | 2.2kg                               | 1.8kg                                      |
| Permissible ambient temperature and humidity | 5-40°C,80%RH                        | 5-40°C,80%RH                               | 5-40°C,80%RH                               | 5-40°C,80%RH                               | 5-40°C,80%RH                        | 5-40°C,80%RH                               |

