Flinn Digital Hot Plates

Introduction

Flinn ceramic-top digital hot plates are specifically developed by Flinn for the education market. With proper care and maintenance, these units will provide years of service.

Digital Hot Plates

Flinn digital hot plates are general purpose heating devices intended to heat borosilicate (e.g., Pyrex®) glass vessels for laboratory procedures. The temperature range of the hot plates is 80 °C to 580 °C.

The ceramic top is very durable and an efficient heat conductor. Unfortunately, if mishandled, it can also be very fragile. Never heat aluminum or non-borosilicate glass vessels, foil, metal containers, or pans on the hot plate. Always keep a borosilicate glass vessel filled with a liquid on the hot plate when heating up or cooling down the unit. Follow all safety precautions when using the hot plate.

Safety Precautions

To avoid electrical shock, always use a properly grounded electrical outlet of correct voltage and current-handling capacity. Always unplug the hot plate before servicing the unit.

To avoid personal injury, always follow these guidelines:

- Remember that the hot plate will remain hot without visual indication for some time after the unit has been turned off. Place a “Caution—Hot” sign in front of the hot plate to warn laboratory personnel whenever the hot plate is being used.
- Do not use the hot plate in the presence of flammable or combustible materials; fire or explosion may result. This device contains components which may ignite such materials.
- Never evaporate anything to dryness. Thermal transfer may damage the ceramic top and may result in broken glassware.
- Use caution when heating volatile materials; the top surface and element can reach the “Flash Point Temperature” of many chemicals. These hot plates are not explosion-proof. Fire or explosion may result. Unit contains components which may ignite such materials.
- Replace the ceramic top immediately if it becomes damaged by etching, scratching or chipping. A damaged top can break in use.
- Do not use metal foil on the hot plate. Do not use metal containers or other insulating materials on the hot plate—the top plate can be damaged and shock hazard can exist.
- Do not remove or modify grounded power plug. Use only properly grounded outlets to avoid shock hazard.
- Use appropriate hand protection when handling hot glassware.
- Wear chemical splash goggles whenever heat, chemicals, or glassware are used.
- Not recommended for use in highly corrosive environments. Corrosive fumes and spills may damage the case and internal components.

Operation

Turn the knob until the digital display reads the desired temperature. The digital hot plate will steadily increase in temperature until the set point is reached. An internal control maintains a set temperature of the hot plate by turning the power on and off over short time intervals. For fast heat-up, turn the knob to a high temperature set point. When the desired temperature is reached, reduce the setting to the point where the temperature will be maintained. The pilot light is always on when the power is on.

When turning the control off, be sure the knob is in the "off' position and the indicator light is out. The hot plate will remain hot without visual indication for some time after you have turned the power off.

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Gross weight of items placed on top of the hot plates should not exceed 25 lbs. on the 7″ × 7″ model and 10 lbs. on the 4″ × 4″ model. Do not use in the presence of flammable or combustible materials; fire or explosion may result. This device contains components which may ignite such materials. This unit contains materials which may emit a slight odor or smoke during initial operation. This will dissipate within a few minutes and will not affect the operation or performance of the hot plate.

Keep the top surface clean. Always use a non-abrasive cleaner to clean the ceramic top. Cleaning up spills and keeping the ceramic top clean will extend the life of the hot plate. Unplug the unit and remove spills promptly. Do not immerse unit for cleaning. Alkali, hydrofluoric acid or phosphoric acid spills may damage the ceramic top.

Warranty

Flinn Scientific warrants that the hot plate or magnetic stirrer be free of defects in materials and workmanship for one (1) year from sale. Please contact Flinn Scientific at 1-800-452-1261 for authorization to return unit. This warranty is null and void if the unit has been misused, mishandled, overheated, or used in a manner inconsistent with the written operating instructions for the product. If the ceramic top cracks due to misuse or overheating, it can easily be replaced.

The following digital hot plates are available from Flinn Scientific, Inc.

Catalog No.	Description	Replacement Top
AP8187	Digital Hot Plate, 4″ × 4″	AP8213
AP8188	Digital Hot Plate, 7″ × 7″	AP8215

Consult your *Flinn Scientific Catalog/Reference Manual* for current prices.