



MUFFLE FURNACE

LMF-K Series

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Muffle Furnace LMF-K series

LMF-K series models of muffle furnace are microprocessor controlled furnaces that are uniquely designed with optimum heat insulation properties and are ideal for ashing of food, plastic and other organic materials. With heating elements MoSi_2 vertically aligned next to the side walls, S and B type thermocouple, dual sheet housing for low outer surface temperature, they are perfect for continuous and maximum working temperature of 1750°C . Having user friendly menu in 4 line display for easy operation and current limit control for safe operation, they are designed for minimal space requirement in the laboratory and are equipped with instantaneous energy consumption indicator, total working hour counter, control unit overheating sensor etc.

Features

- PID controller
- LCD display that shows current and target temperature
- Optimum insulation properties
- 4, 8, 16 step heating program available
- MoSi_2 heating elements vertically aligned next to the side walls
- Accurate temperature measurement and control using S and B type thermocouple
- Unique electronic design and software
- Durable inside lining made of high quality light insulating bricks and ceramic fibre board
- Dual shell housing for low outer surface temperature
- Current limit control for safe operation
- Provision of sound warning as the step changes and at the end of the program
- Equipped with step indicator
- Instantaneous energy consumption indicator
- Step indicator
- Total working hour counter
- Descriptive error indicator
- Control unit over heating sensor
- Open door sensor
- Provision of automatic power cutoff to the heating element if the control unit/ control card is over heated.
- User friendly operating menu

Applications

They are used for applications such as: Fusing glass, Creating enamel coatings, Ceramics, Soldering, Brazing, Rubbers & Polymers. They are also used for metallurgical applications, for ash content determination and in research centers and medical laboratories to determine the volatile & non-combustible proportion of the sample.

Specifications

| Model No. | LMF-K10 | LMF-K11 | LMF-K12 |
|--------------------------------------|---|---------|---------|
| Max. Temperature | 1750°C | | |
| Capacity | 3 L | | |
| Heating Program | 4 step | 8 step | 16 step |
| Thermal Rate | 3-20°C | | |
| Heating element | MoSi ₂ (Molybdenum disilicide) | | |
| Program Memories | 4 | 6 | 5 |
| Thermocouple Type | B Type | | |
| Display | 4 x 20" LCD | | |
| Heating Element Placement | Vertically aligned next to the side walls | | |
| Inner Insulation Material | Ceramic Fibre Board | | |
| Front Face Insulation Material | Insulating Fire Brick | | |
| Door Insulation Material | Ceramic Fibre Board | | |
| Housing Material | Steel Sheet | | |
| Housing Coating | Epoxy powder coating | | |
| Chimney | Standard without fan | | |
| Lockable Door Handle | Sideways | | |
| Temperature Control Accuracy | ±1°C (can vary at low temperatures) | | |
| Measurement Accuracy | ±1°C | | |
| Inner Volume Temperature Homogeneity | ±10°C | | |
| Auto Start at Certain Date | Yes | Yes | Yes |
| Show Remaining Waiting Time | Yes | Yes | Yes |

| | | | |
|-------------------------------------|--------------------|-----|-----|
| Skip the Waiting Step | Yes | Yes | Yes |
| Burst Heating Mode | Yes | Yes | Yes |
| Max. Current | 2 x 14 A | | |
| Power | 6.200 W | | |
| Inner Chamber Dimension (W x H x D) | 115 x 150 x 175 mm | | |
| Product Outer Dimension (W x H x D) | 467 x 920 x 634 mm | | |
| Gross Dimension (W x H x D) | 527 x 980 x 794 mm | | |
| Net Weight | 96 kg | | |
| Gross weight | 116 kg | | |

| Model No. | LMF-K20 | LMF-K21 | LMF-K22 |
|--------------------------------------|---|---------|---------|
| Max. Temperature | 1750°C | | |
| Capacity | 6 L | | |
| Heating Program | 4 step | 8 step | 16 step |
| Thermal Rate | 3-20°C | | |
| Heating element | MoSi ₂ (Molybdenum disilicide) | | |
| Program Memories | 4 | 6 | 5 |
| Thermocouple Type | B Type | | |
| Display | 4 x 20" LCD | | |
| Heating Element Placement | Vertically aligned next to the side walls | | |
| Inner Insulation Material | Ceramic Fibre Board | | |
| Front Face Insulation Material | Insulating Fire Brick | | |
| Door Insulation Material | Ceramic Fibre Board | | |
| Housing Material | Steel Sheet | | |
| Housing Coating | Epoxy powder coating | | |
| Chimney | Standard without fan | | |
| Lockable Door Handle | Sidewards | | |
| Temperature Control Accuracy | ±1°C (can vary at low temperatures) | | |
| Measurement Accuracy | ±1°C | | |
| Inner Volume Temperature Homogeneity | ±10°C | | |
| Auto Start at Certain Date | Yes | Yes | Yes |
| Show Remaining Waiting Time | Yes | Yes | Yes |
| Skip the Waiting Step | Yes | Yes | Yes |
| Burst Heating Mode | Yes | Yes | Yes |
| Max. Current | 2 x 22 A | | |
| Power | 10.000 W | | |
| Inner Chamber Dimension (W x H x D) | 150 x 185 x 220 mm | | |
| Product Outer Dimension (W x H x D) | 502 x 955 x 679 mm | | |
| Gross Dimension (W x H x D) | 562 x 1015 x 839 mm | | |
| Net Weight | 110 kg | | |
| Gross weight | 133 kg | | |

| Model No. | LMF-K30 | LMF-K31 | LMF-K32 |
|--------------------------------------|---|---------|---------|
| Max. Temperature | 1750°C | | |
| Capacity | 9 L | | |
| Heating Program | 4 step | 8 step | 16 step |
| Thermal Rate | 3-20°C | | |
| Heating element | MoSi ₂ (Molybdenum disilicide) | | |
| Program Memories | 4 | 6 | 5 |
| Thermocouple Type | B Type | | |
| Display | 4 x 20" LCD | | |
| Heating Element Placement | Vertically aligned next to the side walls | | |
| Inner Insulation Material | Ceramic Fibre Board | | |
| Front Face Insulation Material | Insulating Fire Brick | | |
| Door Insulation Material | Ceramic Fibre Board | | |
| Housing Material | Steel Sheet | | |
| Housing Coating | Epoxy powder coating | | |
| Chimney | Standard without fan | | |
| Lockable Door Handle | Sideways | | |
| Temperature Control Accuracy | ±1°C (can vary at low temperatures) | | |
| Measurement Accuracy | ±1°C | | |
| Inner Volume Temperature Homogeneity | ±10°C | | |
| Auto Start at Certain Date | Yes | Yes | Yes |
| Show Remaining Waiting Time | Yes | Yes | Yes |
| Skip the Waiting Step | Yes | Yes | Yes |
| Burst Heating Mode | Yes | Yes | Yes |
| Max. Current | 2 x 25 A | | |
| Power | 11.000 W | | |
| Inner Chamber Dimension (W x H x D) | 170 x 205 x 260 mm | | |
| Product Outer Dimension (W x H x D) | 522 x 975 x 869 mm | | |
| Gross Dimension (W x H x D) | 582 x 1035 x 1029 mm | | |
| Net Weight | 136 kg | | |
| Gross weight | 162 kg | | |

| Model No. | LMF-K40 | LMF-K41 | LMF-K42 |
|--------------------------------------|---|---------|---------|
| Max. Temperature | 1750°C | | |
| Capacity | 16 L | | |
| Heating Program | 4 step | 8 step | 16 step |
| Thermal Rate | 3-20°C | | |
| Heating element | MoSi ₂ (Molybdenum disilicide) | | |
| Program Memories | 4 | 6 | 5 |
| Thermocouple Type | B Type | | |
| Display | 4 x 20" LCD | | |
| Heating Element Placement | Vertically aligned next to the side walls | | |
| Inner Insulation Material | Ceramic Fibre Board | | |
| Front Face Insulation Material | Insulating Fire Brick | | |
| Door Insulation Material | Ceramic Fibre Board | | |
| Housing Material | Steel Sheet | | |
| Housing Coating | Epoxy powder coating | | |
| Chimney | Standard without fan | | |
| Lockable Door Handle | Sideways | | |
| Temperature Control Accuracy | ±1°C (can vary at low temperatures) | | |
| Measurement Accuracy | ±1°C | | |
| Inner Volume Temperature Homogeneity | ±10°C | | |
| Auto Start at Certain Date | Yes | Yes | Yes |
| Show Remaining Waiting Time | Yes | Yes | Yes |
| Skip the Waiting Step | Yes | Yes | Yes |
| Burst Heating Mode | Yes | Yes | Yes |
| Max. Current | 3 x 22 A | | |
| Power | 11.700 W | | |
| Inner Chamber Dimension (W x H x D) | 200 x 255 x 315 mm | | |
| Product Outer Dimension (W x H x D) | 522 x 1025 x 924 mm | | |
| Gross Dimension (W x H x D) | 612 x 1085 x 1084 mm | | |
| Net Weight | 165 kg | | |
| Gross weight | 195 kg | | |

| Model No. | LMF-K50 | LMF-K51 | LMF-K52 |
|--------------------------------------|---|---------|---------|
| Max. Temperature | 1750°C | | |
| Capacity | 30 L | | |
| Heating Program | 4 step | 8 step | 16 step |
| Thermal Rate | 3-20°C | | |
| Heating element | MoSi ₂ (Molybdenum disilicide) | | |
| Program Memories | 4 | 6 | 5 |
| Thermocouple Type | B Type | | |
| Display | 4 x 20" LCD | | |
| Heating Element Placement | Vertically aligned next to the side walls | | |
| Inner Insulation Material | Ceramic Fibre Board | | |
| Front Face Insulation Material | Insulating Fire Brick | | |
| Door Insulation Material | Ceramic Fibre Board | | |
| Housing Material | Steel Sheet | | |
| Housing Coating | Epoxy powder coating | | |
| Chimney | Standard without fan | | |
| Lockable Door Handle | Sideways | | |
| Temperature Control Accuracy | ±1°C (can vary at low temperatures) | | |
| Measurement Accuracy | ±1°C | | |
| Inner Volume Temperature Homogeneity | ±10°C | | |
| Auto Start at Certain Date | Yes | Yes | Yes |
| Show Remaining Waiting Time | Yes | Yes | Yes |
| Skip the Waiting Step | Yes | Yes | Yes |
| Burst Heating Mode | Yes | Yes | Yes |
| Max. Current | 3 x 27 A | | |
| Power | 14.500 W | | |
| Inner Chamber Dimension (W x H x D) | 250 x 310 x 390 mm | | |
| Product Outer Dimension (W x H x D) | 602 x 1080 x 999 mm | | |
| Gross Dimension (W x H x D) | 662 x 1140 x 1159 mm | | |
| Net Weight | 185 kg | | |
| Gross weight | 219 kg | | |

| Model No. | LMF-K60 | LMF-K61 | LMF-K62 |
|--------------------------------------|---|---------|---------|
| Max. Temperature | 1750°C | | |
| Capacity | 60 L | | |
| Heating Program | 4 step | 8 step | 16 step |
| Thermal Rate | 3-20°C | | |
| Heating element | MoSi ₂ (Molybdenum disilicide) | | |
| Program Memories | 4 | 6 | 5 |
| Thermocouple Type | B Type | | |
| Display | 4 x 20" LCD | | |
| Heating Element Placement | Vertically aligned next to the side walls | | |
| Inner Insulation Material | Ceramic Fibre Board | | |
| Front Face Insulation Material | Insulating Fire Brick | | |
| Door Insulation Material | Ceramic Fibre Board | | |
| Housing Material | Steel Sheet | | |
| Housing Coating | Epoxy powder coating | | |
| Chimney | Standard without fan | | |
| Lockable Door Handle | Sideways | | |
| Temperature Control Accuracy | ±1°C (can vary at low temperatures) | | |
| Measurement Accuracy | ±1°C | | |
| Inner Volume Temperature Homogeneity | ±10°C | | |
| Auto Start at Certain Date | Yes | Yes | Yes |
| Show Remaining Waiting Time | Yes | Yes | Yes |
| Skip the Waiting Step | Yes | Yes | Yes |
| Burst Heating Mode | Yes | Yes | Yes |
| Max. Current | 3 x 37 A | | |
| Power | 19.900 W | | |
| Inner Chamber Dimension (W x H x D) | 320 x 420 x 450 mm | | |
| Product Outer Dimension (W x H x D) | 672 x 1190 x 1059 mm | | |
| Gross Dimension (W x H x D) | 732 x 1250 x 1219 mm | | |
| Net Weight | 195 kg | | |
| Gross weight | 234 kg | | |