



# 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  $\text{MoSi}_2$  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  $1750^\circ\text{C}$ . 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.

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### Features

- PID controller
- LCD display that shows current and target temperature
- Optimum insulation properties
- 4, 8, 16 step heating program available
- $\text{MoSi}_2$  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 <sub>2</sub> (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 <sub>2</sub> (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 <sub>2</sub> (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 <sub>2</sub> (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 <sub>2</sub> (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 <sub>2</sub> (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		