



# LABORATORY FURNACES

## Muffle Furnaces with Brick Insulation up to 1300 °C

Heating elements on support tubes radiating freely into the furnace chamber provide for particularly short heating times for these muffle furnaces. Thanks to their robust lightweight refractory brick insulation, they can reach a maximum working temperature of 1300 °C. These muffle furnaces thus represent an interesting alternative to the familiar L(T) .. /12 models, when you need a higher application temperature.



Muffle furnace L 9/13 with flap door

### Standard Equipment

- Tmax 1300 °C
- Heating from two sides
- Heating elements on support tubes ensure free heat radiation and a long service life
- Multi-layer insulation with robust lightweight refractory bricks in the furnace chamber
- Optional flap door (L) which can be used as work platform or lift door (LT) with hot surface facing away from the operator
- Adjustable air inlet in the furnace door
- Exhaust air outlet in rear wall of furnace
- Controller with touch operation B510 (5 programs with each 4 segments), alternative controllers see page 84

### Additional Equipment

- Chimney, chimney with fan or catalytic converter see page 16
- Over-temperature limiter with adjustable cutout temperature as temperature limiter to protect the furnace and load
- Protective gas connection to purge with non-flammable process gases (not available in combination with chimney, chimney with fan or catalytic converter) not gas tight
- Manual or automatic gas supply system
- Port for thermocouple in the rear wall or in the furnace door
- Please see page 17 for more accessories

Model	Tmax in °C <sup>1</sup>	Inner dimensions in mm			Volume in l	Outer dimensions <sup>2</sup> in mm			Temperature uniformity of +/- 5K in the empty workspace <sup>5</sup>			Max. connected load in kW	Electrical connection*	Weight in kg	Heating time in min <sup>4</sup>
		w	d	h		W	D	H <sup>3</sup>	w	d	h				
L, LT 5/13	1300	225	170	130	5	490	450	580+320	170	100	80	2.6	1-phase	46	55
L, LT 9/13	1300	250	240	170	9	530	525	630+350	180	170	120	3.3	1-phase	58	60
L, LT 15/13	1300	250	340	170	15	530	625	630+350	180	270	120	3.5	1-phase	71	80

<sup>1</sup>Recommended working temperature for processes with longer dwell times is 1200 °C

\*Please see page 84 for more information about supply voltage

<sup>2</sup>External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.

<sup>3</sup>Including opened lift door (LT models)

<sup>4</sup>Heating time of the empty and closed furnace up to Tmax - 100 K (connected to 230 V 1/N/PE)

<sup>5</sup>Temperature uniformity of +/- 5 K with closed fresh-air inlet in empty work space according to DIN 17052-1 at working temperatures above 800 °C see page 77



Muffle furnace LT 5/13 with lift door



Furnace lining with high-quality lightweight refractory brick insulation



Example of an over-temperature limiter