

## Muffle Furnaces up to 1100 °C or 1200 °C

The muffle furnaces L 1/12 - LT 40/12 have been proven for daily laboratory use. These models stand out for their excellent workmanship, advanced and attractive design, and high level of reliability. The muffle furnaces come equipped with either a flap door or lift door at no extra charge.



Muffle furnace LT 5/12 with lift door



- Tmax 1100 °C or 1200 °C
- Heating from two sides by ceramic heating plates (heating from three sides for muffle furnaces L 24/11 - LT 40/12) for an optimal temperature uniformity
- 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 71
- Thermocouple type N (1100 °C) or type S (1200 °C)
- Ceramic heating plates with integral heating element which is safeguarded and easy to replace
- 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 integrated in door (see illustration)
- Exhaust air outlet in rear wall of furnace
- Controller B410 resp. R7 for L 1/12 (5 programs with each 4 segments), alternative controllers see page 75



Muffle furnace L 3/11 with flap door

## **Additional Equipment**

- Chimney, chimney with fan or catalytic converter (not for L 1 and L 15) see page 24
- Over-temperature limiter with adjustable cutout temperature for thermal protection class 2 in accordance with EN 60519-2 as temperature limiter to protect the furnace and load
- Protective gas connection to purge with non-flammable protective or reaction 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 25 for more accessories







Muffle furnace L 3/12

Muffle furnace L 3/11 with flap door

Mode	Model	Tmax in °C1	Inner dimensions in mm			Volume	Outer dimensions <sup>2</sup> in mm			Temperature uniformity of +/- 5K in the empty workspace			Connected load	Electrical	Weight	Heating time
			w	d	h	in I	W	D	H <sup>3</sup>	w	d	h	in kW	connection*	in kg	in min <sup>4</sup>
L(T)	3/11	1100	160	140	100	3	385	330	405+155	110	50	50	1.2	1-phase	20	40
L(T)	5/11	1100	200	170	130	5	385	390	460+205	150	80	80	2.4	1-phase	30	50
L(T)	9/11	1100	230	240	170	9	415	455	515+240	180	150	120	3.0	1-phase	35	65
L(T)	15/11	1100	230	340	170	15	415	555	515+240	180	250	120	3.5	1-phase	40	75
L(T)	24/11	1100	280	340	250	24	490	555	580+320	230	250	200	4.5	3-phase	55	70
L(T)	40/11	1100	320	490	250	40	530	705	580+320	270	400	200	6.0	3-phase	65	75
L	1/12	1200	90	115	110	1	290	280	430	40	45	60	1.5	1-phase	10	25
L(T)	3/12	1200	160	140	100	3	385	330	405+155	110	50	50	1.2	1-phase	20	45
L(T)	5/12	1200	200	170	130	5	385	390	460+205	150	80	90	2.4	1-phase	30	60
L(T)	9/12	1200	230	240	170	9	415	455	515+240	180	150	120	3.0	1-phase	35	75
L(T)	15/12	1200	230	340	170	15	415	555	515+240	180	250	120	3.5	1-phase	40	85
L(T)	24/12	1200	280	340	250	24	490	555	580+320	230	250	200	4.5	3-phase	55	80
L(T)	40/12	1200	320	490	250	40	530	705	580+320	270	400	200	6.0	3-phase	65	85

Recommended working temperature for processes with longer dwell times is 1000 °C (L../11) rsp. 1100 °C (L../12) <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 rsp. 400 V 3/N/PE)



Chimney with fan



Adjustable air inlet integrated in the door



Gas supply system for non-flammable protective or reactive gas

\*Please see page 75 for more information about supply voltage