Muffle Furnaces up to 1100 °C or 1200 °C

The muffle furnaces L 3/11 - LT 60/12 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

Standard Equipment

- 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 60/12) for an optimal temperature uniformity
- 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 with touch operation B510 (5 programs with each 4 segments) resp. controller R8 for L 1/12 (adjustable for one temperature), alternative controllers see page 84



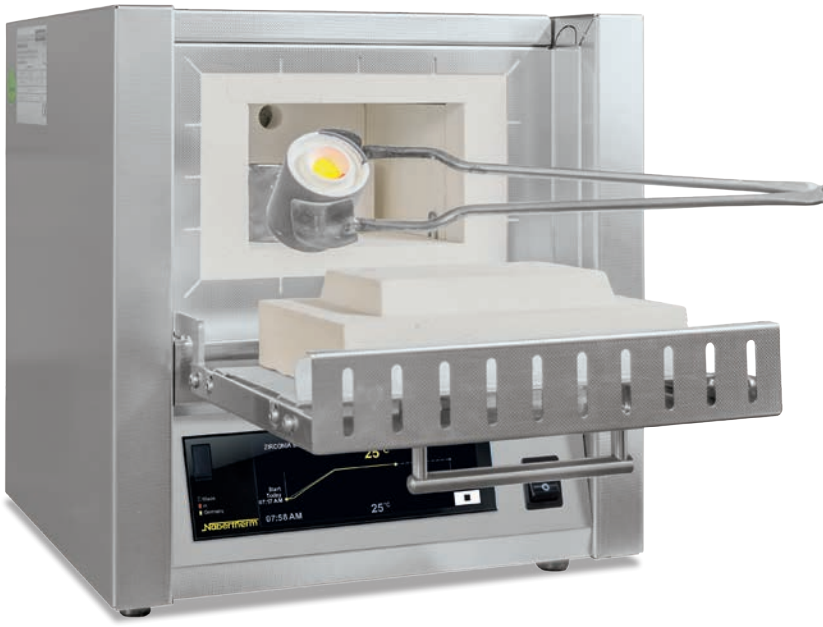
Muffle furnace L 3/11 with flap door

Additional Equipment

- Chimney, chimney with fan or catalytic converter (not for L 1) 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
- Charging rack with closed or perforated trays for loading the furnace in two levels incl. holder for inserting/removing the trays up to a max. temperature of 800 °C and a max. loading weight per layer of 2 kg for the L(T) 9/11 respectively 3 kg for the L(T) 15/11 respectively 3,5 kg for the L(T) 24/11 and L(T) 40/11 see page 17
- Please see page 17 for more accessories



Muffle furnace L 3/12



Muffle furnace L 3/11 with flap door

Model	Tmax	Inner dimensions in mm			Volume	Outer dimensions[2] in mm			Temperature uniformity of +/– 5K in the empty workspace[5]			Connected load[6]	Electrical	Weight	Heating time
	in °C[1]	w	d	h	in l	W	D	H[3]	w	d	h	in kW	connection*	in kg	in min[4]
L(T) 3/11	1100	160	140	100	3	385	330	405+155	110	50	50	1.3	1-phase	21	41
L(T) 5/11	1100	205	170	130	5	385	390	460+205	170	80	80	2.6	1-phase	27	47
L(T) 9/11	1100	235	240	170	9	415	455	515+240	180	150	120	3.3	1-phase	35	63
L(T) 15/11	1100	230	340	170	15	415	555	515+240	180	250	120	3.5	1-phase	43	74
L(T) 24/11	1100	280	340	250	24	490	555	580+320	230	250	200	4.9	3-phase	52	69
L(T) 40/11	1100	320	490	250	40	530	705	580+320	270	400	200	6.5	3-phase	70	80
LT 60/11	1100	380	490	330	60	610	705	660+385	290	360	240	9.8	3-phase	83	150
L 1/12	1200	90	115	110	1	290	280	410	40	45	60	1.6	1-phase	15	25
L(T) 3/12	1200	160	140	100	3	385	330	405+155	110	50	50	1.3	1-phase	21	48
L(T) 5/12	1200	205	170	130	5	385	390	460+205	170	80	80	2.6	1-phase	27	59
L(T) 9/12	1200	235	240	170	9	415	455	515+240	180	150	120	3.3	1-phase	35	78
L(T) 15/12	1200	230	340	170	15	415	555	515+240	180	250	120	3.5	1-phase	43	99
L(T) 24/12	1200	280	340	250	24	490	555	580+320	230	250	200	4.9	3-phase	52	82
L(T) 40/12	1200	320	490	250	40	530	705	580+320	270	400	200	6.5	3-phase	70	97
LT 60/12	1200	380	490	330	60	610	705	660+385	290	360	240	9.8	3-phase	83	160

[1]Recommended working temperature for processes with longer dwell times is 1000 °C (L../11) rsp. 1100 °C (L../12)

*Please see page 84 for more information about supply voltage

[2]External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.

[3]Including opened lift door (LT models)

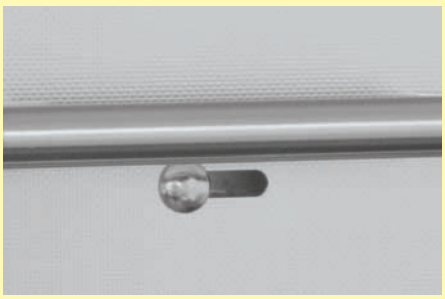
[4]Heating time of the empty and closed furnace up to Tmax –100 K (connected to 230 V 1/N/PE rsp. 400 V 3/N/PE)

[5]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

[6]The connected load refers to the standard furnace and may increase for a furnace with additional equipment. For furnaces with connection options for multi-range voltages, the connected load applies to the highest permissible connected voltage.



Chimney with fan



Adjustable air inlet integrated in the door



Gas supply system for non-flammable process gas