

## Muffle Furnaces with Flap Door or Lift Door



Muffle furnace L 3/12



Muffle furnace L 5/11

The muffle furnaces L 1/12 - LT 40/12 are the right choice 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.



Observation hole in the door as additional 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 40/12)
- Ceramic heating plates with integral heating element which is safeguarded against fumes and splashing, and easy to replace
- Only fiber materials are used which are not classified as carcinogenic according to TRGS 905, class 1 or 2
- Housing made of sheets of textured stainless steel
- Dual shell housing for low external temperatures and high stability
- 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
- Solid state relays provide for low-noise operation
- Defined application within the constraints of the operating instructions
- NTLog Basic for Nabertherm controller: recording of process data with USB-flash drive
- Controls description see page 72

### Additional equipment

- Chimney, chimney with fan or catalytic converter (not for L 1)
- 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)
- Observation hole in the door
- Manual or automatic gas supply system
- Please see page 14 for more accessories
- Process control and documentation via VCD software package for monitoring, documentation and control see page 75



Over-temperature limiter



Muffle furnace LT 5/12



Muffle furnace L 3/11

| Model<br>Lift door | Tmax<br>°C | Inner dimensions in mm |     |     | Volume<br>in l | Outer dimensions <sup>3</sup> in mm |     |     | Connected<br>load kW | Electrical<br>connection* | Weight<br>in kg | Minutes<br>to Tmax <sup>2</sup> |
|--------------------|------------|------------------------|-----|-----|----------------|-------------------------------------|-----|-----|----------------------|---------------------------|-----------------|---------------------------------|
| w                  | d          | h                      | W   | D   | H              |                                     |     |     |                      |                           |                 |                                 |
| L 3/11             | 1100       | 160                    | 140 | 100 | 3              | 385                                 | 330 | 405 | 1.2                  | 1-phase                   | 20              | 60                              |
| L 5/11             | 1100       | 200                    | 170 | 130 | 5              | 385                                 | 390 | 460 | 2.4                  | 1-phase                   | 30              | 60                              |
| L 9/11             | 1100       | 230                    | 240 | 170 | 9              | 415                                 | 455 | 515 | 3.0                  | 1-phase                   | 35              | 75                              |
| L 15/11            | 1100       | 230                    | 340 | 170 | 15             | 415                                 | 555 | 515 | 3.5                  | 1-phase                   | 40              | 95                              |
| L 24/11            | 1100       | 280                    | 340 | 250 | 24             | 490                                 | 555 | 580 | 4.5                  | 3-phase                   | 55              | 95                              |
| L 40/11            | 1100       | 320                    | 490 | 250 | 40             | 530                                 | 705 | 580 | 6.0                  | 3-phase                   | 65              | 95                              |
| L 1/12             | 1200       | 90                     | 115 | 110 | 1              | 290                                 | 280 | 430 | 1.5                  | 1-phase                   | 10              | 25                              |
| L 3/12             | 1200       | 160                    | 140 | 100 | 3              | 385                                 | 330 | 405 | 1.2                  | 1-phase                   | 20              | 75                              |
| L 5/12             | 1200       | 200                    | 170 | 130 | 5              | 385                                 | 390 | 460 | 2.4                  | 1-phase                   | 30              | 75                              |
| L 9/12             | 1200       | 230                    | 240 | 170 | 9              | 415                                 | 455 | 515 | 3.0                  | 1-phase                   | 35              | 90                              |
| L 15/12            | 1200       | 230                    | 340 | 170 | 15             | 415                                 | 555 | 515 | 3.5                  | 1-phase                   | 40              | 110                             |
| L 24/12            | 1200       | 280                    | 340 | 250 | 24             | 490                                 | 555 | 580 | 4.5                  | 3-phase                   | 55              | 110                             |
| L 40/12            | 1200       | 320                    | 490 | 250 | 40             | 530                                 | 705 | 580 | 6.0                  | 3-phase                   | 65              | 110                             |



Gas supply system for non-flammable protective or reactive gas with shutoff valve and flow meter with regulator valve, optionally with magnetic valve

| Model<br>Lift door | Tmax<br>°C | Inner dimensions in mm |     |     | Volume<br>in l | Outer dimensions <sup>3</sup> in mm |     |         | Connected<br>load kW | Electrical<br>connection* | Weight<br>in kg | Minutes<br>to Tmax <sup>2</sup> |
|--------------------|------------|------------------------|-----|-----|----------------|-------------------------------------|-----|---------|----------------------|---------------------------|-----------------|---------------------------------|
| w                  | d          | h                      | W   | D   | H <sup>1</sup> |                                     |     |         |                      |                           |                 |                                 |
| LT 3/11            | 1100       | 160                    | 140 | 100 | 3              | 385                                 | 330 | 405+155 | 1.2                  | 1-phase                   | 20              | 60                              |
| LT 5/11            | 1100       | 200                    | 170 | 130 | 5              | 385                                 | 390 | 460+205 | 2.4                  | 1-phase                   | 30              | 60                              |
| LT 9/11            | 1100       | 230                    | 240 | 170 | 9              | 415                                 | 455 | 515+240 | 3.0                  | 1-phase                   | 35              | 75                              |
| LT 15/11           | 1100       | 230                    | 340 | 170 | 15             | 415                                 | 555 | 515+240 | 3.5                  | 1-phase                   | 40              | 95                              |
| LT 24/11           | 1100       | 280                    | 340 | 250 | 24             | 490                                 | 555 | 580+320 | 4.5                  | 3-phase                   | 55              | 95                              |
| LT 40/11           | 1100       | 320                    | 490 | 250 | 40             | 530                                 | 705 | 580+320 | 6.0                  | 3-phase                   | 65              | 95                              |
| LT 3/12            | 1200       | 160                    | 140 | 100 | 3              | 385                                 | 330 | 405+155 | 1.2                  | 1-phase                   | 20              | 75                              |
| LT 5/12            | 1200       | 200                    | 170 | 130 | 5              | 385                                 | 390 | 460+205 | 2.4                  | 1-phase                   | 30              | 75                              |
| LT 9/12            | 1200       | 230                    | 240 | 170 | 9              | 415                                 | 455 | 515+240 | 3.0                  | 1-phase                   | 35              | 90                              |
| LT 15/12           | 1200       | 230                    | 340 | 170 | 15             | 415                                 | 555 | 515+240 | 3.5                  | 1-phase                   | 40              | 110                             |
| LT 24/12           | 1200       | 280                    | 340 | 250 | 24             | 490                                 | 555 | 580+320 | 4.5                  | 3-phase                   | 55              | 110                             |
| LT 40/12           | 1200       | 320                    | 490 | 250 | 40             | 530                                 | 705 | 580+320 | 6.0                  | 3-phase                   | 65              | 110                             |

<sup>1</sup>Including opened lift door

\*Please see page 73 for more information about supply voltage

<sup>2</sup>If connected at 230 V 1/N/PE resp. 400 V 3/N/PE

<sup>3</sup>External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.



Adjustable air inlet integrated in the door