

Wire Wound Single Zone Tube Furnace - MTF

General Information

The MTF wire wound tube furnaces, like the larger diameter CTF range use a wire element that is wound directly onto a fixed integral ceramic work tube.

This simple and economical design provides a furnace which can be used without the need to purchase an accessory work tube.

However, should vacuum or a modified atmosphere be required, it is necessary to use a separate slide-in work tube in order to provide the required length needed to fit end seals. Similarly, in some circumstances a work tube that has different physical or chemical properties to the fixed work tube may be required.

The use of an additional slide-in work tube protects the integral work tube and heating element.



Standard features

- 1000°C or 1200°C maximum operating temperature
- 15 mm, 25 mm or 38 mm inner diameters
- 130 mm, 250 mm, 400 mm or 850 mm heated length
- Integral wirewound work tube
- Carbolite Gero 301 controller, with single ramp to set-point & process timer
- Delayed start / process timer function as standard
- Horizontal configuration mounted on control module

Options (specify these at time of order)

- Over-temperature protection (recommended to protect valuable contents & for unattended operation)
- A range of additional work tubes, end seals and work tube packages is available for use with modified atmosphere
- Insulation plugs & radiation shields to prevent heat loss & improve uniformity
- Alternative mounting options are available
- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications

Technical Specifications

Wire Wound Single Zone Tube Furnace - MTF

MTF 10/15/130

Max temp (°C)	1000
Max continuous operating temp (°C)	900
Dimensions: Fixed tube inner diameter (mm)	15
Dimensions: Heated tube length (mm)	130
Heat-up time (mins)	5
Dimensions: External H x W x D (mm)	360 x 200 x 240
Dimensions: Furnace body length (mm)	150
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	30
Max power (W)	400
Holding power (W)	100
Thermocouple type	K
Weight (kg)	3

MTF 10/25/130

Max temp (°C)	1000
Max continuous operating temp (°C)	900
Dimensions: Fixed tube inner diameter (mm)	25
Dimensions: Heated tube length (mm)	130
Heat-up time (mins)	10
Dimensions: External H x W x D (mm)	360 x 200 x 240
Dimensions: Furnace body length (mm)	150
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	45
Max power (W)	400
Holding power (W)	100
Thermocouple type	K
Weight (kg)	3

Wire Wound Single Zone Tube Furnace - MTF

MTF 12/25/250

Max temp (°C)	1200
Max continuous operating temp (°C)	1100
Dimensions: Fixed tube inner diameter (mm)	25
Dimensions: Heated tube length (mm)	250
Heat-up time (mins)	15
Dimensions: External H x W x D (mm)	375 x 370 x 375
Dimensions: Furnace body length (mm)	300
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	60
Max power (W)	700
Holding power (W)	200
Thermocouple type	N
Weight (kg)	10

MTF 12/38/250

Max temp (°C)	1200
Max continuous operating temp (°C)	1100
Dimensions: Fixed tube inner diameter (mm)	38
Dimensions: Heated tube length (mm)	250
Heat-up time (mins)	25
Dimensions: External H x W x D (mm)	430 x 370 x 375
Dimensions: Furnace body length (mm)	300
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	90
Max power (W)	1000
Holding power (W)	300
Thermocouple type	N
Weight (kg)	15

Wire Wound Single Zone Tube Furnace - MTF

MTF 12/25/400

Max temp (°C)	1200
Max continuous operating temp (°C)	1100
Dimensions: Fixed tube inner diameter (mm)	25
Dimensions: Heated tube length (mm)	400
Heat-up time (mins)	25
Dimensions: External H x W x D (mm)	375 x 450 x 375
Dimensions: Furnace body length (mm)	450
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	100
Max power (W)	1000
Holding power (W)	200
Thermocouple type	N
Weight (kg)	15

MTF 12/38/400

Max temp (°C)	1200
Max continuous operating temp (°C)	1100
Dimensions: Fixed tube inner diameter (mm)	38
Dimensions: Heated tube length (mm)	400
Heat-up time (mins)	25
Dimensions: External H x W x D (mm)	430 x 450 x 375
Dimensions: Furnace body length (mm)	450
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	130
Max power (W)	1500
Holding power (W)	300
Thermocouple type	N
Weight (kg)	17

Wire Wound Single Zone Tube Furnace - MTF

MTF 12/38/850

Max temp (°C)	1200
Max continuous operating temp (°C)	1100
Dimensions: Fixed tube inner diameter (mm)	38
Dimensions: Heated tube length (mm)	850
Heat-up time (mins)	--
Dimensions: External H x W x D (mm)	430 x 900 x 375
Dimensions: Furnace body length (mm)	900
Uniform length $\pm 5^{\circ}\text{C}$ (mm)	500
Max power (W)	2800
Holding power (W)	
Thermocouple type	N
Weight (kg)	24

Please note:

- Heat up rate when using an optional ceramic work tube must be limited to 5 °C/min
- Heat up rate is measured to 100 °C below max, using an empty tube & insulation plugs
- Holding power is measured at continuous operating temperature
- Uniform length $\pm 5^{\circ}\text{C}$ (mm): Uniform temperature lengths are measured with insulation plugs fitted
- Maximum power and heat up times based on a 240V supply