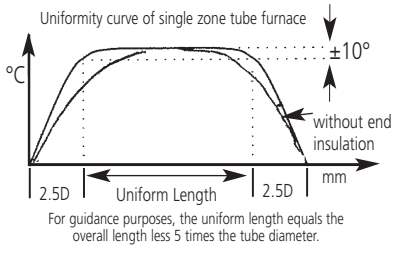
Three Zone Tube Furnace

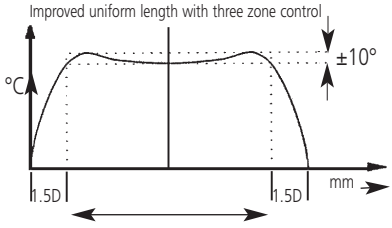
Similar in construction to the CTF and MTF models, the TZF offers excellent temperature uniformity as the heated length is divided into three zones, each with its own temperature controller and thermocouple. The power supplied to the end zones is automatically adjusted to compensate for the heat loss at the ends of the tube irrespective of whether the ends are left open or have insulation plugs fitted. This system provides a longer uniform zone temperature than that achieved by using a single zone furnace of the same length. The three temperature controller thermocouples are linked "back to back" so that they act to keep all three zones at the same temperature.

TZF 12/75/700/3216P1

Uniformity profiles

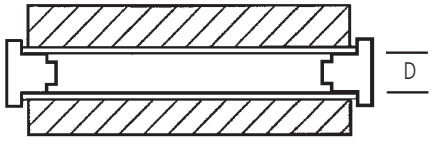


For guidance purposes, the uniform length equals the overall length less 5 times the tube diameter.



For guidance purposes, the uniform length equals the overall length less 3 times the tube diameter.

Tube furnace cross section



Wire wound tube furnaces ~ three zone	TZF12/38/400	TZF12/65/550	TZF12/75/700	TZF12/100/900
Max. Temperature (°C)	1200	1200	1200	1200
Continuous Temperature (°C)	1100	1100	1100	1100
Heat up Time (mins)	25	45	45	120
Inside Diameter of fixed element tube (mm)	38	65	75	100
Heated length (mm)	400	550	700	900
Overall Furnace Length (mm)	450	600	750	950
Horizontal Mounting on control box	✓	✓	✓	✓
Option of Mounting:				
L stand / Wall bracket / Blank base / Separated base	✓	✓	✓	✓
Uniform Length +/-5 (°C)	305	390	540	745
Thermocouple Type	N	N	N	N
Max. Power (W)	1175	1817	2755	4150
Holding Power (W)	700	600	800	1000
External Dimensions:				
H (mm)	430	525	525	525
W (mm)	450	625	775	975
D (mm)	375	360	360	360
Weight (kg)	18	30	32	4

1) Holding power is measured at 100°C below max. temperature, based on 240V supply, with an empty chamber
2) Uniformity graphs are available on request, for most models.
3) Heat up time is measured at 100°C below max. temperature with an empty tube.