

Finned tubular air heating elements are like basic tubular elements with the addition of continuous spiral fins brazed to the sheath or rectangular fins crimped to the sheath. The finned tubular heater is designed to improve heat transfer to the air and permits putting more power in tighter spaces like forced air ducts, dryers, ovens and load bank resistors. They can be provided with rectangular fins of various thickness. Duct heaters use fin tubular elements within its design to help reduce the watt density. It also allows for more consistent air flow streams within the duct and increases the life longevity of the elements. In applications where tubular heaters are exposed to forced convection, placing fins around tubular heaters increases their surface area and thus improves their heat transferring capacity. Finned tubular heaters, compared to regular tubular heaters, run at lower surface temperatures for the same watt densities when placed in identical air streams.

Air Finned Heater use high quality magnesium oxide to allow efficient heat transfer from resistive coil to the heating medium whether it is air, liquid or solid. These heater elements have a strong outer sheath to help protect against physical stress and uses high quality alloys to allow efficient heat transfer from resistance coil to the heating medium. Depending on their rating, sheath and shape, electric tubular elements are used in a variety of heat applications that require process temperatures of up to 750°C (1382°F) to heat liquids, gases and solids. A variety of diameters are available to help adjust watt densities in your application to design these electric heaters for best performance and long life. Standard and custom-made terminal pins allow for easy installation and maintenance. Bending radii are designed with careful expertise to allow for optimal performance when meeting “form fit and function” within your application.

Application

Used for warming of air and gases to low and a medium temperature.

- Shrink Tunnels
- Incubators
- Ink drying
- Industrial convertor heaters,
- Hazardous Area Warmers
- Flameproof fan heaters.
- Dehumidifiers
- Industrial washing machines
- Air heating for dryer
- Air heating for ovens
- Heat treating,
- Annealing
- Localized uniform heating of areas
- Air-conditioning
- Electric Ovens
- Gases
- Hot Air Chambers

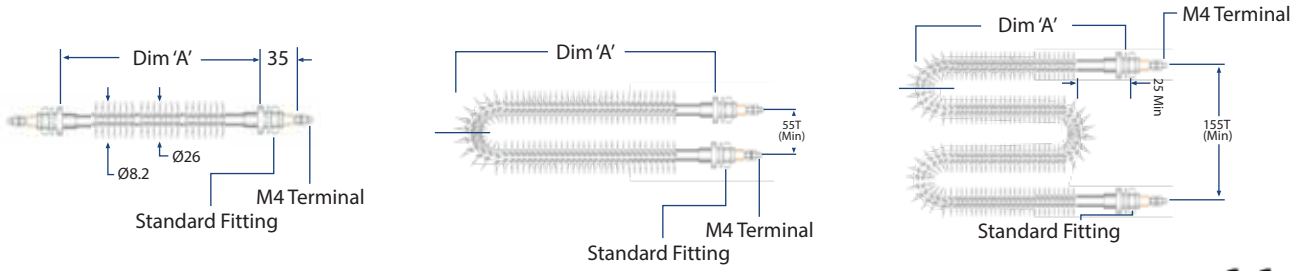
Material Sheath Selection

- Stainless Steel 304
- Stainless Steel 316 L
- Incoloy 840

Finned Air Heaters Air Heating Elements



MALTEC Finned Air Elements come complete with Standard stake-on bushes. Mounting bushes are fixed to each end of U, W, or Triple U form elements, While Straight elements have one fixed and one floating bush.



4.65 w/cm² Series

Min recommended Air Velocity 1.0 m/s
Max. Sheath Temp. 400°C at 20°C Ambient.



Nominal Sheath Diameter 8.2 mm, Nominal Fin Diameter 26 mm

Straight Length			"U" Form T=55(Min)			"W" Form T=155(Min)		
Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"
MT 10-FSB	600	590	MT 10-FUB	600	275	MT 12-FWB	1000	155
MT 11-FSB	750	715	MT 11-FUB	750	335	MT 13-FWB	1250	285
MT 12-FSB	1000	925	MT 12-FUB	1000	440	MT 14-FWB	1500	335
MT 13-FSB	1250	1135	MT 13-FUB	1250	550	MT 15-FWB	1750	395
MT 14-FSB	1500	1340	MT 14-FUB	1500	650	MT 16-FWB	2000	440
MT 15-FSB	1750	1550	MT 15-FUB	1750	755			
MT 16-FSB	2000	1760	MT 16-FUB	2000	860			

7.7 w/cm² Series

Min recommended Air Velocity 2.0 m/s
Max. Sheath Temp. 400°C at 20°C Ambient.

Nominal Sheath Diameter 8.2 mm, Nominal Fin Diameter 26 mm

Straight Length			"U" Form T=55(Min)			"W" Form T=155(Min)		
Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"
MT 41-FSB	600	390	MT 41-FUB	600	190	MT 43-FWB	1200	180
MT 42-FSB	900	540	MT 42-FUB	900	265	MT 44-FWB	1500	220
MT 43-FSB	1200	695	MT 43-FUB	1200	340	MT 45-FWB	1800	260
MT 44-FSB	1500	850	MT 44-FUB	1500	420	MT 46-FWB	2000	285
MT 45-FSB	1800	1005	MT 45-FUB	1800	500	MT 47-FWB	2400	335
MT 46-FSB	2000	1105	MT 46-FUB	2000	550	MT 48-FWB	3000	410
MT 47-FSB	2400	1300	MT 47-FUB	2400	645	MT 49-FWB	3600	485
MT 48-FSB	3000	1600	MT 48-FUB	3000	795	MT 50-FWB	4800	635
MT 49-FSB	3600	1900	MT 49-FUB	3600	945			
MT 50-FSB	4800	2500	MT 50-FUB	4800	1245			

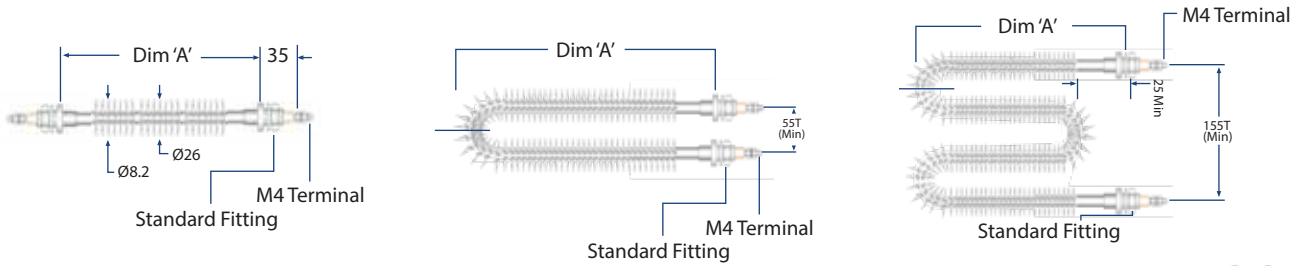
11 w/cm² Series

Min recommended Air Velocity 3.0 m/s
Max. Sheath Temp. 400°C at 20°C Ambient.

Nominal Sheath Diameter 8.2 mm, Nominal Fin Diameter 26 mm

Straight Length			"U" Form T=55(Min)			"W" Form T=155(Min)		
Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"
MT 21-FSB	600	305	MT 21-FUB	600	150	MT 25-FWB	1800	190
MT 22-FSB	1000	440	MT 22-FUB	1000	215	MT 26-FWB	2000	210
MT 23-FSB	1200	520	MT 23-FUB	1200	255	MT 27-FWB	2500	225
MT 24-FSB	1500	620	MT 24-FUB	1500	305	MT 28-FWB	3000	300
MT 25-FSB	1800	720	MT 25-FUB	1800	355	MT 29-FWB	3500	345
MT 26-FSB	2000	800	MT 26-FUB	2000	395	MT 30-FWB	4000	385
MT 27-FSB	2500	980	MT 27-FUB	2500	485	MT 31-FWB	4500	430
MT 28-FSB	3000	1160	MT 28-FUB	3000	575	MT 32-FWB	5000	475
MT 29-FSB	3500	1330	MT 29-FUB	3500	660			
MT 30-FSB	4000	1550	MT 30-FUB	4000	745			
MT 31-FSB	4500	1680	MT 31-FUB	4500	835			

MALTEC Finned Air Elements come complete with Standard stake-on bushes. Mounting bushes are fixed to each end of U, W, or Triple U form elements, While Straight elements have one fixed and one floating bush.



4.65 w/cm² Series

Min recommended Air Velocity 1.0 m/s
Max. Sheath Temp. 400°C at 20°C Ambient.



Nominal Sheath Diameter 11.2 mm, Nominal Fin Diameter 29 mm

Straight Length			"U" Form T=55(Min)			"W" Form T=155(Min)		
Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"
MT 10-FSC	600	460	MT 10-FUC	600	225	MT 10-FWC	1000	185
MT 11-FSC	750	550	MT 11-FUC	750	270	MT 11-FWC	1250	220
MT 12-FSC	1000	700	MT 12-FUC	1000	345	MT 12-FWC	1500	260
MT 13-FSC	1250	850	MT 13-FUC	1250	420	MT 13-FWC	1750	300
MT 14-FSC	1500	1010	MT 14-FUC	1500	500	MT 14-FWC	2000	335
MT 15-FSC	1750	1160	MT 15-FUC	1750	575	MT 15-FWC	2250	385
MT 16-FSC	2000	1310	MT 16-FUC	2000	650	MT 16-FWC	2500	430
MT 17-FSC	2250	1530	MT 17-FUC	2250	760	MT 17-FWC	2750	465
MT 18-FSC	2500	1680	MT 18-FUC	2500	835	MT 18-FWC	3000	505
MT 19-FSC	2750	1830	MT 19-FUC	2750	910	MT 19-FWC		
MT 20-FSC	3000	1980	MT 20-FUC	3000	985	MT 20-FWC		

7.7 w/cm² Series

Min recommended Air Velocity 2.0 m/s
Max. Sheath Temp. 400°C at 20°C Ambient.

Nominal Sheath Diameter 11.2 mm, Nominal Fin Diameter 29 mm

Straight Length			"U" Form T=55(Min)			"W" Form T=155(Min)		
Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"
MT 41-FSC	600	310	MT 42-FUC	900	205	MT 45-FWC	1800	195
MT 42-FSC	900	420	MT 43-FUC	1200	275	MT 46-FWC	2000	215
MT 43-FSC	1200	530	MT 44-FUC	1500	315	MT 47-FWC	2400	245
MT 44-FSC	1500	640	MT 45-FUC	1800	370	MT 48-FWC	3000	310
MT 45-FSC	1800	750	MT 46-FUC	2000	410	MT 49-FWC	3600	380
MT 46-FSC	2000	830	MT 47-FUC	2400	485	MT 50-FWC	4800	490
MT 47-FSC	2400	980	MT 48-FUC	3000	595			
MT 48-FSC	3000	1200	MT 49-FUC	3600	735			
MT 49-FSC	3600	1480	MT 50-FUC	4800	955			
MT 50-FSC	4800	1920						

9.0 w/cm² Series

Min recommended Air Velocity 2.8 m/s
Max. Sheath Temp. 400°C at 20°C Ambient.

Nominal Sheath Diameter 11.2 mm, Nominal Fin Diameter 29 mm

Straight Length			"U" Form T=55(Min)			"W" Form T=155(Min)		
Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"	Cat. No. 240 Volt	Watts	Dim "A"
MT 21-FSC	1000	410	MT 21-FUC	1000	200	MT 25-FWC	2500	230
MT 22-FSC	1200	470	MT 22-FUC	1200	230	MT 24-FWC	2000	190
MT 23-FSC	1500	560	MT 23-FUC	1500	275	MT 26-FWC	3000	275
MT 24-FSC	2000	720	MT 24-FUC	2000	355	MT 27-FWC	3500	305
MT 25-FSC	2500	880	MT 25-FUC	2500	435	MT 28-FWC	4000	345
MT 26-FSC	3000	1060	MT 26-FUC	3000	525	MT 29-FWC	5000	440
MT 27-FSC	3500	1190	MT 27-FUC	3500	590			
MT 28-FSC	4000	1340	MT 28-FUC	4000	665			
MT 29-FSC	5000	1720	MT 29-FUC	5000	855			

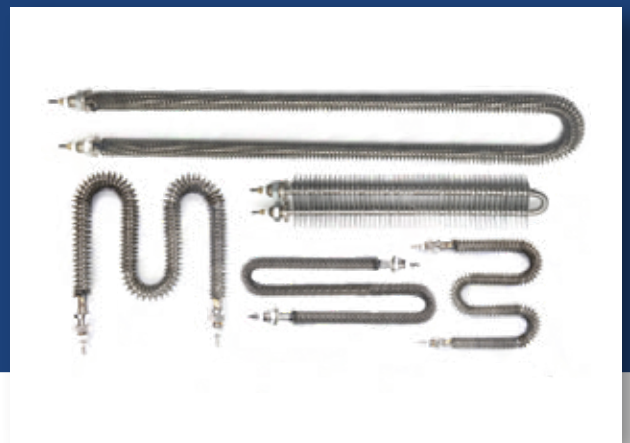


Air Finned Heater is the most versatile and the best suited solutions to a large number of applications. In applications where tubular heaters are exposed to forced convection, placing fins around tubular heaters increases their surface area and thus improves their heat transferring capacity.

Heater Element for Air, compared to regular tubular heaters, run at lower surface temperatures for the same watt densities when placed in identical air streams. These heating elements have a strong outer sheath to help protect the heater from physical stress and uses high quality alloys to allow efficient heat transfer from resistance coil to your heating medium.

Applications

- Drying
- HVAC Systems
- Heat Treating
- Load Bank



Our Clients

