

Electrical heating cable for freeze protection, refrigeration duties or process heating of pipework and vessels.

- Can be cut-to-length.
- Available for 110-120VAC and 208-277VAC
- Power outputs up to 50W/m.
- Full range of controls and accessories available.

MicroTracer

Constant Wattage Heating Cable

# **DESCRIPTION**

Microtracer type **EMTS** is a medium temperature parallel resistance, constant wattage, cut-to-length heating tape that can be used for freeze protection or process heating.

It is particulary suited to refrigeration applications or for small bore instrument lines or process pipework located in non-hazardous areas.

Microtracer type **EMTS** is chosen when short or moderate circuit lengths are required (select Minitracer if longer circuits are required)

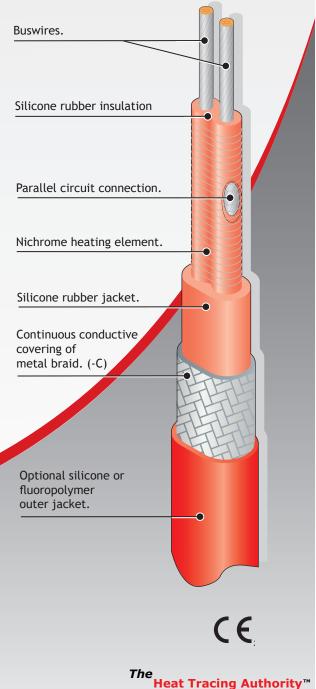
The silicone rubber insulation is particulary suited to applications where great flexibility is required.

The installation of **EMTS** heating cable is quick and simple and requires no special skills or tools. Termination and power connection components are all provided in convenient kits.

# **OPTIONS**

- **EMTS..C** Tinned copper braid provides mechanical protection for base heater and may be used when traced equipment does not provide an effective earth path.
- **EMTS..CS** Silicone rubber overjacket over tinned copper braid provides additional protection.
- **EMTS..CF** Fluoropolymer overjacket over tinned copper braid provides protection where corrosive chemical solutions or vapours may be present.





# CWDS0200 (17072019) Issue 0

# **SPECIFICATION**

MAXIMU Un-ener Energise	•	200°C (392°F) See table			
MINIMUM INSTALLATION TEMPERATURE:			-40°C (-40°F)		
POWER SUPPLY:			208 - 277V AC or 110 - 120V AC		
MAXIMUM RESISTANCE OF PROTECTIVE BRAIDING:			18.2 Ohm/km		
WEIGHTS & DIMENSIONS:					
Type Ref	Dimensions (mm)+/-0.5	Weight kg/100m		Gland Size	
EMTSC	9.4 x 6.2	11.7	12mm	M16	
EMTSC	S 11.4 x 8.2	14.3	15mm	M20	
EMTSC	F 10.2 x 7.0	14.3	25mm	M20	
CONSTR	UCTION:				
Grade: Heating Element: Power Conductors:		Tin P	2.2 to BS6351: Part 1 Nickel Chromium Tin Plated Copper 1.5mm <sup>2</sup>		

Heating Element:Nickel ChromiumPower Conductors:Tin Plated Copper 1.5mm²Conductor Insulation:Silicone RubberJacket:Silicone RubberBraid:Tinned CopperOverjacket (Optional):Silicone Rubber orFluoropolymer

### **ORDERING INFORMATION:**

Example;	<u>23 EMTS 2 - CS</u>
Output 23W/m ——— Microtracer type EMTS ————	
Supply Voltage 220 - 240V AC	
Tinned copper braid Silicone rubber overjacket	

### **ACCESSORIES:**

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. These items are recommended for the correct operation of EMTS products.

### FURTHER INFORMATION:

Please consult the appropriate termination instructions and the Heat Trace Installation, Maintenance and Testing Manual (HTDIMM 010) for further details.

## MAXIMUM PIPE / WORKPIECE TEMPERATURES:

The surface of the heater must not exceed the maximum withstand temperature of its constructional materials. This is ensured by limiting the pipe or workpiece temperatures to a safe level either by design calculation (a stabilised design) or by means of temperature controls.

For worst case conditions, the temperature of steel pipes should be limited to the followig levels:-

HEATER	MAXIMUM PERMISSIBLE PIPE TEMP (°C)				
NOMINAL OUTPUT	EMTS-C	EMTS-CS	S EMTS-CF		
(W/m)					
6.5	190	190	190		
13	180	185	185		
23	150	160	160		
33	110	115	115		
50	75	80	75		

For conditions other than worst case, or pipes of other materials (eg. Plastic, Stainless Steel, etc.) consult Heat Trace.

Pipe temperatures higher than those given above may be accommodated by using Heat Trace Ltd voltage compensating devices e.g. POWERMATCH<sup>™</sup> Call for further details.

### MAXIMUM CIRCUIT LENGTH:

OUTPUT (W/m)	MAX.CIRCU 115V	IT LENGTH* 230V	ZONE LENG 115V	GTH (NOM) 230V
6.5	82m	164m	1000mm	1500mm
13	58m	116m	800mm	1100mm
23	44m	87m	900mm	1000mm
33	36m	73m	750mm	1000mm
50	30m	59m	1000mm	1000mm

### **POWER CONVERSION FACTORS:**

115V HEATING CABLE230 HEATING CABLE277V Multiply output by 5.80277V Multiply output by 1.45230V Multiply output by 4.00240V Multiply output by 1.09208V Multiply output by 3.27220V Multiply output by 0.91120V Multiply output by 1.09208V Multiply output by 0.82110V Multiply output by 0.91115V Multiply output by 0.25



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