

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

## MicroTracer

Constant Wattage Heating Cable

- 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.

### 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 particularly 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 particularly suited to applications where great flexibility is required.

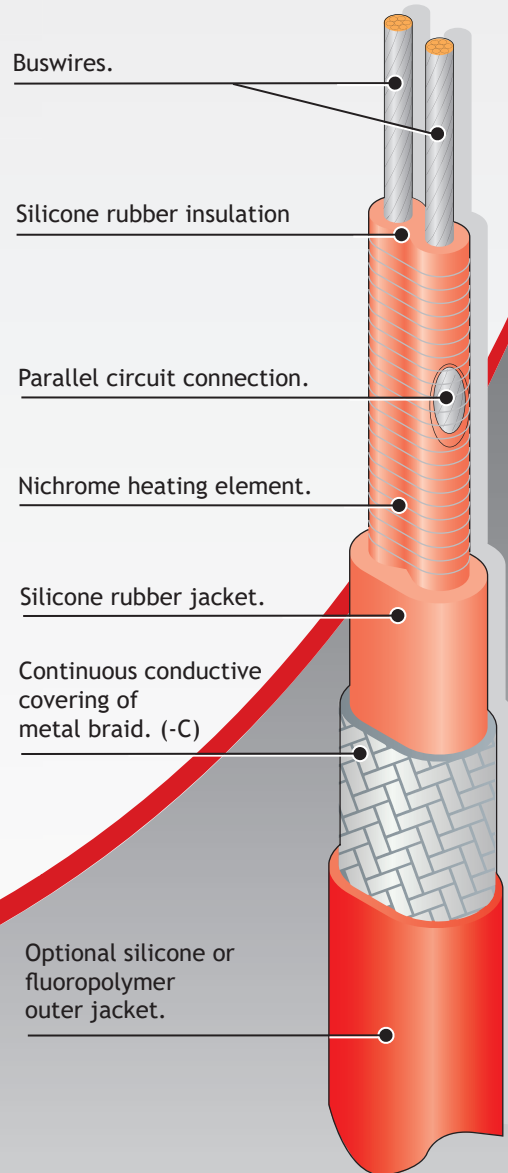
The installation of **EMTS** heating cable is quick and simple and requires no special skills or tools. Termination and power connection components are all provided in convenient kits.

### 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.



## SPECIFICATION

### MAXIMUM TEMPERATURE:

Un-energised	200°C (392°F)
Energised	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	Min Bending radius	Gland Size
EMTS..C	9.4 x 6.2	11.7	12mm	M16
EMTS..CS	11.4 x 8.2	14.3	15mm	M20
EMTS..CF	10.2 x 7.0	14.3	25mm	M20

### CONSTRUCTION:

Grade:	2.2 to BS6351: Part 1
Heating Element:	Nickel Chromium
Power Conductors:	Tin Plated Copper 1.5mm <sup>2</sup>
Conductor Insulation:	Silicone Rubber
Jacket:	Silicone Rubber
Braid:	Tinned Copper
Overjacket (Optional):	Silicone Rubber or Fluoropolymer

### ORDERING INFORMATION:

Example;	23 EMTS 2 - CS
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 following levels:-

HEATER NOMINAL OUTPUT (W/m)	MAXIMUM PERMISSIBLE PIPE TEMP (°C)		
	EMTS-C	EMTS-CS	EMTS-CF
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™ Call for further details.

### MAXIMUM CIRCUIT LENGTH:

OUTPUT (W/m)	MAX.CIRCUIT LENGTH*		ZONE LENGTH (NOM)	
	115V	230V	115V	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 CABLE	230 HEATING CABLE
277V Multiply output by 5.80	277V Multiply output by 1.45
230V Multiply output by 4.00	240V Multiply output by 1.09
208V Multiply output by 3.27	220V Multiply output by 0.91
120V Multiply output by 1.09	208V Multiply output by 0.82
110V Multiply output by 0.91	115V Multiply output by 0.25

# HEAT TRACE™

SETTING THE STANDARDS LEADING THE WAY

HANEL ul. Lagodna 11, Mala Nieszawka, 87-103 Torun 5

tel./fax +48 56 678 71 27, mobile: +48 601 92 55 96, www.kablegrzejne.eu

# HANEL

The information given herein, including drawings, illustrations and schematics (which are intended for illustration purposes only), is believed to be reliable. However, Heat Trace Ltd makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Users of Heat Trace Ltd products should make their own evaluation to determine the suitability of each such product for specific applications. In no way will Heat Trace Ltd be liable for any damages arising out of the misuse, resale or use of the product.