MTSS CE

Electrical heating tape for
frost protection or process heating
of pipework and vessels.

MINITRACER

Constant Wattage Heating Tape

- *Withstand temperatures up to 200°C*
- *Available in outputs up to 66W/m*
- *Can be cut to length at site*
- *Highly flexible*
- *Full range of controls and accessories*
- *Available for 110/120 and 220/240VAC*
- *Large power conductors for long circuit lengths*

FEATURES

Minitracer type MTSS is a medium temperature parallel resistance, constant wattage, cut-to-length heating tape that can be used for freeze protection or process heating of pipework and vessels.

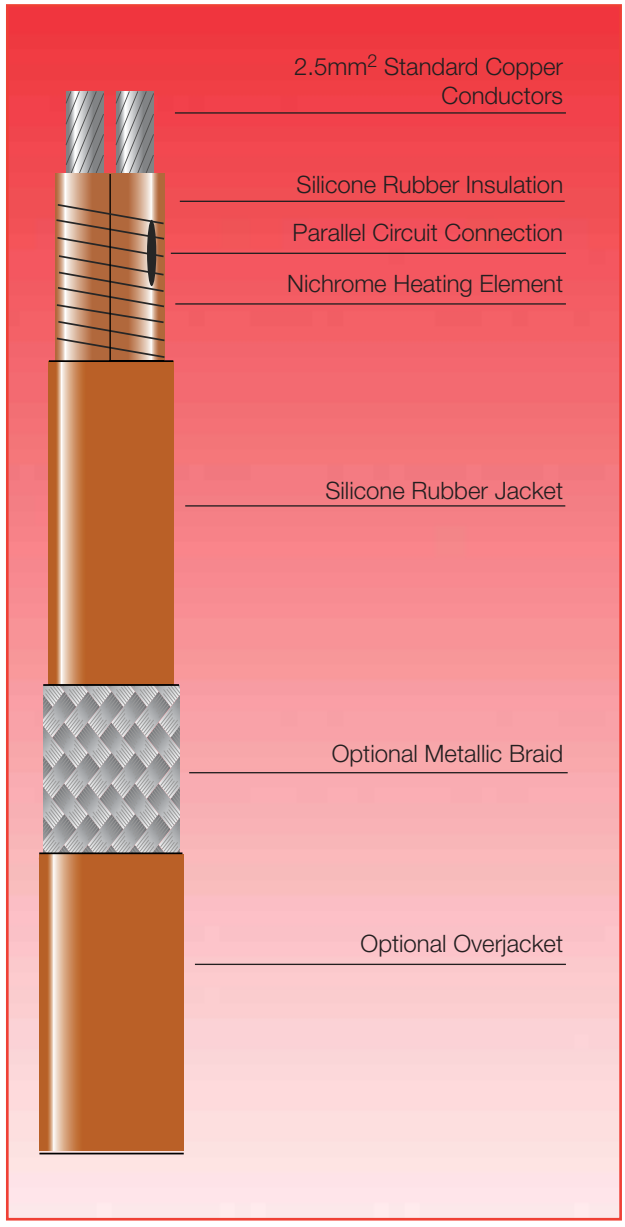
Having large 2.5mm^2 power bus bars, Minitracer type MTSS is chosen when longer circuit lengths are required (select Microtracer if short circuit lengths are required).

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

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

OPTIONS

MTSS	Silicone rubber base heater.
MTSS .. C	Tinned copper braid provides extra mechanical protection for base heater and may be used when traced equipment does not provide an effective earth path.
MTSS .. CS	Silicone rubber overjacket over tinned copper braid provides additional protection.
MTSS .. 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)
MINIMUM INSTALLATION TEMPERATURE		–80°C (–112°F) –20°C (–4°F)†
POWER SUPPLY		220 – 240 VAC or 110 – 120 VAC

WEIGHTS & DIMENSIONS

Type Ref	Nom. Dims (mm)	Weight kg/100m	Min. Bending radius (mm)
MTSS	10.0 x 7.0	11	15
MTSS .. C	11.0 x 8.0	14	17
MTSS .. CS	13.0 x 10.0	18	20
MTSS .. CF	11.8 x 8.8	17	30

CONSTRUCTION

Heating Element	Nickel Chromium
Power Conductors	Tin Plated Copper 2.5mm^2
Conductor Insulation	Silicone Rubber
Jacket	Silicone Rubber
Braid (optional)	Tinned Copper
Overjacket (optional)	Silicone Rubber or Fluoropolymer (FEP)

ORDERING INFORMATION

Example 33MTSS2-CS

- Output 33W/m at 230V
- Minitracer type MTSS
- Supply Voltage 220 – 240 VAC
- 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 MTSS products.

†Fluoropolymer (FEP) overjacket

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 temperature 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:–

MAXIMUM PIPE / WORKPIECE TEMPERATURES (°C)

HEATER NOMINAL OUTPUT (W/m)	MAXIMUM PERMISSIBLE PIPE TEMP (°C)			
	MTSS	MTSS-C	MTSS-CS	MTSS-CF
6.5	190	190	190	190
13	180	185	185	185
23	155	165	165	165
33	120	125	130	125
50	85	85	95	90
66	40	45	55	50

For conditions other than worst case, or pipes of other materials (eg. plastic, stainless steel, etc.), consult Heat Trace Ltd.

Pipe temperatures much higher than those given above may be accommodated by using Heat Trace Ltd voltage compensating devices eg. POWERMATCH™ – call for further details.

Tolerances : Voltage +10%; Resistance +10%; –0%

MAXIMUM CIRCUIT LENGTH

CAT REF	OUTPUT (W/m)	MAX.CIRCUIT LENGTH * 115V	230V
6.5MTSS	6.5	99	198
13MTSS	13	70	140
23MTSS	23	53	105
33MTSS	33	44	88
50MTSS	50	36	71
66MTSS	66	31	62

* For ±10% end-to-end power output variation

POWER CONVERSION FACTORS

115V HEATING TAPE	230V HEATING TAPE
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

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