MTF 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 50W/m*
- *Can be cut to length at site*
- *High Corrosion Resistance*
- *Approved to IEEE Standards for use in non-hazardous areas and hazardous areas.*
- *Full range of controls and accessories*
- *Available for 110/120 and 220/240VAC*

FEATURES

MINITRACER type MTF is a parallel resistance, constant wattage, cut-to-length heating tape to BS6351 Grade 22 that can be used for freeze protection or process heating of pipework and vessels.

It can be cut to length at site if field fabricated heating cable is preferred.

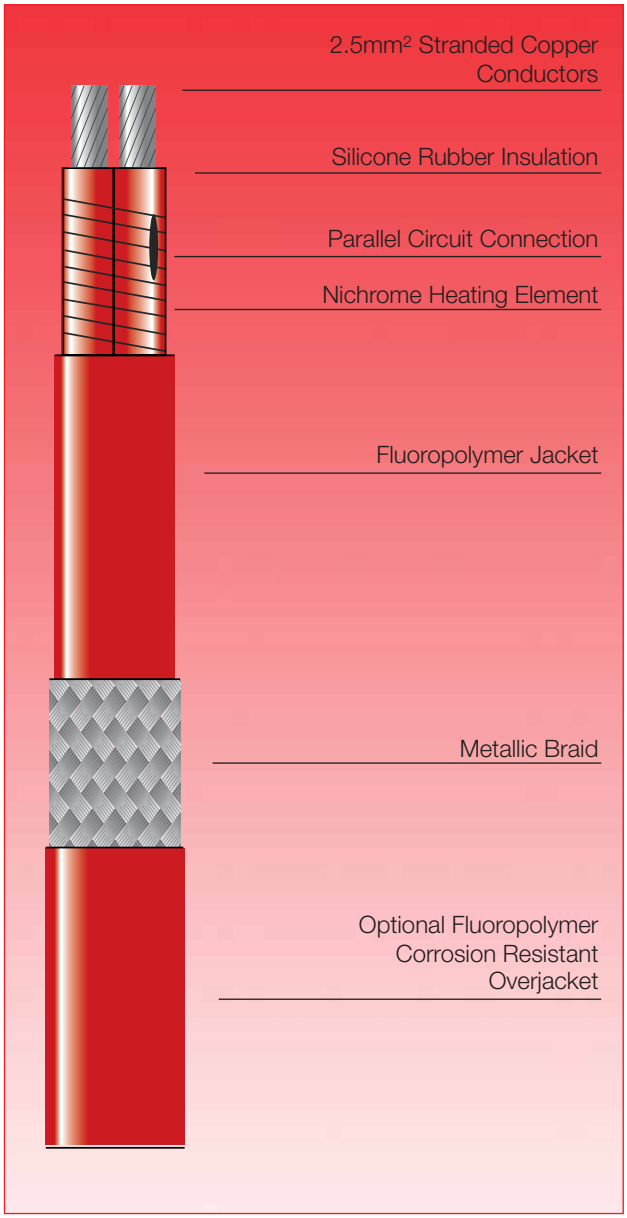
MTF is Factory Mutual (IEEE) Approved for use in non-hazardous and hazardous areas.

Minitracer has large 2.5mm^2 power busbars for long circuit lengths.

The installation of MTF 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

MTF..C	Tinned copper braid for non-hazardous areas, hazardous areas (Class 1, Div 2) or where traced equipment does not provide an effective earth path.
MTF..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		–40°C (–40°F)
TEMPERATURE CLASSIFICATION	200°C (T3) T4 (135°C) T5 (100°C) or T6 (85°C)	Devices are classified to rated output and conditions of use. ie. limited pipe temp.
POWER SUPPLY		220 - 240 VAC or 110 - 120 VAC

WEIGHTS & DIMENSIONS

Type Ref	Nom. Dims. (mm)	Weight kg/100m	Min. Bending radius (mm)	Gland Size
MTF	9.2 x 6.2	7	25	M20
MTF..C	10.0 x 7.0	11	30	M20
MTF..CF	11.2 x 8.2	15	35	M20

APPROVAL DETAILS

Factory Mutual Research

Certificate No.	3W9A9.AX
Standard	ANSI/IEEE Std 515-1989
Area Approval	Class I Div 2 Grps B, C and D Class II Div 2 Grps F and G Class III Div 1&2 Hazardous and ordinary locations.

CONSTRUCTION

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

ORDERING INFORMATION

Example 13MTF2-CF

- Output 13W/m
- Minitracer type MTF
- Supply Voltage 220 - 240 VAC
- Tinned Copper Braid
- Fluoropolymer overjacket

ACCESSORIES

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. Such items carry separate approvals from the heating tapes. When used in hazardous areas, only use approved components.

MAXIMUM PIPE / WORKPIECE TEMPERATURES

The surface of the heater must not exceed the maximum withstand temperature of its constructional materials or the Temperature Classification (if installed in a hazardous area). 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)

CAT REF	NOM. OUTPUT	AREA CLASSIFICATION						
		HAZARDOUS[1]						SAFE[2]
	(W/m)	T6	T5	T4	T3	T2	T1	
MTF	6.5	NOT APPROVED						190
	13							180
	23							150
	33							110
	50							70
MTF..C	6.5	60	75	120	190	190	190	190
	13	40	55	95	175	180	180	180
	23	-	30	65	155	155	155	155
	33	-	-	40	115	120	120	120
	50	-	-	-	70	80	80	80
MTF..CF	6.5	60	80	125	190	190	190	190
	13	35	50	100	185	185	185	185
	23	-	25	55	160	165	165	165
	33	-	-	35	115	120	120	120
	50	-	-	-	80	85	85	85

For conditions other than worst case, or pipes of other materials (eg. plastic, stainless steel, etc.), consult Heat Trace Ltd.
Tolerances: Voltage +10%; Resistance +10%; -0%

Notes

1 Surface temperature limits in accordance with EN50014.
2 Surface temperature limited by materials of construction (withstand temperature)

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.

MAXIMUM CIRCUIT LENGTH

OUTPUT (W/m)	MAX. CIRCUIT LENGTH* 115V	230V	ZONE LENGTH (NOM.) 115V	230V
6.5	106	212	950mm	1400mm
13	75	150	900mm	950mm
23	56	113	925mm	950mm
33	47	94	750mm	1000mm
50	38	76	905mm	1000mm

* For 10% volt drop variation

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SETTING THE STANDARDS LEADING THE WAY
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