

- Withstand temperatures up to 200°C
- Outputs available to 33W/m
- Can be cut to length without waste
- CENELEC approved for use in hazardous areas
- Full range of controls and accessories
- Available for 110/120 and 220/240VAC

### FEATURES

Minitracer type MTFJ is a constant wattage heating tape that can be used for freeze protection or maintenance of process temperatures in pipe and vessels.

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

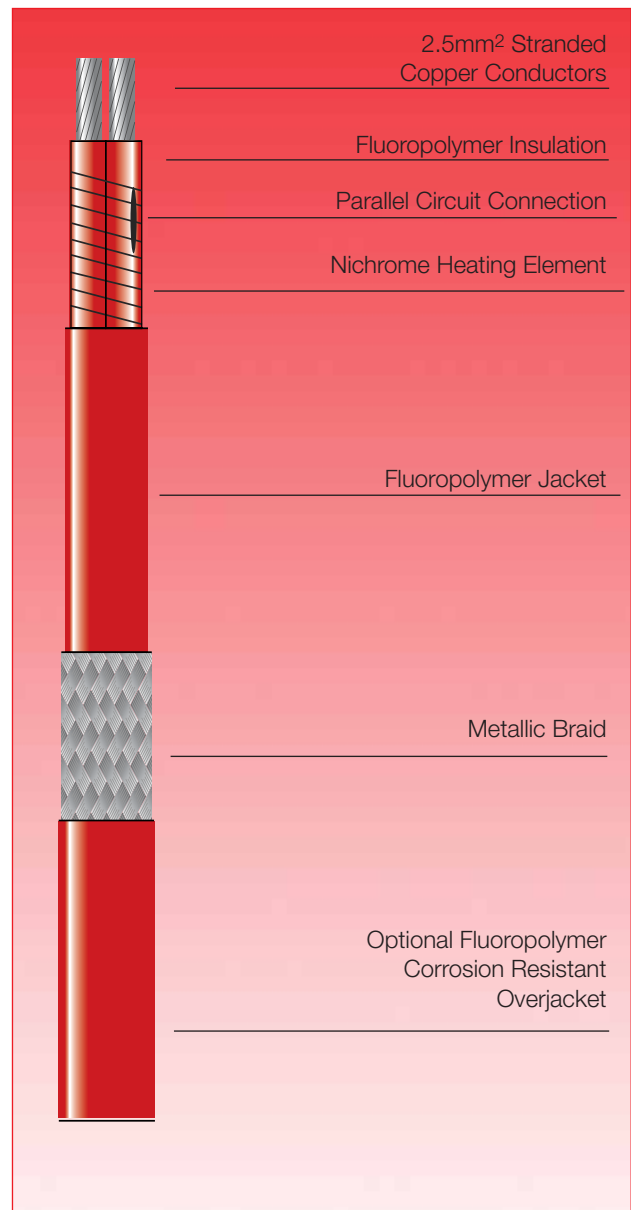
MTFJ is CENELEC approved for use in hazardous areas.

The installation of MTFJ heating tape is quick and simple and requires few special skills or tools. Termination and power connection components are all provided in convenient kits.

### OPTIONS

**MTFJ .. C** Tinned Copper braid for non-hazardous areas, hazardous areas (Zone 1 or 2) or where traced equipment does not provide an effective earth path.

**MTFJ .. CF** Fluoropolymer over jacket over tinned copper braid provides corrosion protection for braid where 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 according to rated output and the conditions of use. ie. limited pipe temp

**POWER SUPPLY** 220 - 240 VAC  
or 110 - 120 VAC

### WEIGHTS AND DIMENSIONS

Type Ref	Nom. Dims. (mm)	Weight kg/100m	Min. Bending radius (mm)	Gland Size
MTFJ	7.5 x 4.8	6	20	M16
MTFJ..C	9.0 x 6.0	9	25	M16
MTFJ..CF	9.8 x 6.8	11	30	M20

### APPROVAL DETAILS

ATEX  Certificate No: Sira 02ATEX3077  
CENELEC  Certificate No. SCS Ex 94D3114  
Standard  EN50014:1992 & EN50019:1994  
Area Approval Zone 1 and 2

### CONSTRUCTION

Heating Element Nickel Chromium  
Power Conductors Tinned Plated Copper 2.5mm<sup>2</sup>  
Conductor Insulation Fluoropolymer (FEP) and Silicone Rubber  
Jacket Fluoropolymer (FEP)  
Braid Tinned Copper  
Over Jacket (optional) Fluoropolymer (FEP)

### ORDERING INFORMATION

Example 23MTFJ2-CF  
Output 23W/m \_\_\_\_\_  
Minitracer type MTFJ \_\_\_\_\_  
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 (W/m)	AREA CLASSIFICATION						
		HAZARDOUS <sup>1</sup>			SAFE <sup>2</sup>			
		T6	T5	T4	T3	T2	T1	
MTFJ	6.5							190
	13							176
	23	NOT APPROVED						139
	33	NOT APPROVED						97
MTFJ..C	6.5	54	72	115	187	190	190	190
	13	30	45	87	173	179	179	179
	23	-	-	47	144	149	149	149
	33	-	-	-	102	107	107	107
MTFJ..CF	6.5	54	74	121	190	190	190	190
	13	21	41	90	180	187	185	185
	23	-	-	39	152	159	159	159
	33	-	-	-	103	108	108	108

Pipe temperatures 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%

### Notes

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

### MAXIMUM CIRCUIT LENGTH

OUTPUT (W/m)	MAX. CIRCUIT LENGTH*		ZONE LENGTH (NOM.)	
	115V	230V	115V	230V
6.5	111m	212m	1000mm	1500mm
13	78m	150m	741mm	1100mm
23	59m	113m	900mm	1000mm
33	49m	94m	1000mm	950mm

\*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



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