

FLEXELEC

November 2011



TEMPERATURE MAINTENANCE PRODUCTS



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Principals of Self Limiting (Regulating) Tapes

Characteristics

- Cut to length at site, no wastage
- Easy termination and installation
- No possible overheating

Principle

A semi conductive polymeric matrix is extruded between two parallel bus-conductors. A polymeric jacket is then extruded over this matrix for electrical insulation. When the current is passed through this matrix, its temperature increases and so does its resistance. As a result, the output is diminished when the temperature of the cable is increased.

Self-limiting tapes cannot overheat or burn out. They may be used without thermostats.

Standard Voltage 230 Volts

Typical Applications

FST

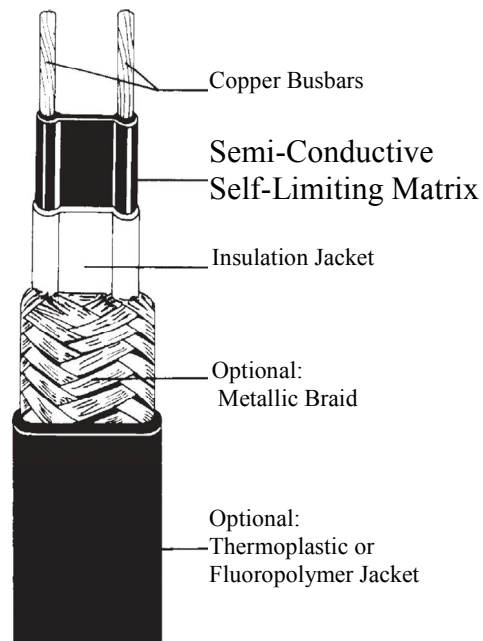
Freeze frost protection gutters, freezer doors & drainlines. Low temperature maintenance up to 65°C.

FSV

Low ~ Medium temperature maintenance up to 110°C. Examples of these are chocolate and tallow.

FSX

High temperature maintenance up to 120°C. Example of this is Bitumen.



Aluminium

Hamer Code	Description
JH840	FTAL Aluminium Foil Tape - 50mm wide x 50 metres long

Used to provide good mechanical and thermal contact between tape and application.

FST Self Limiting Tape

10, 15, 25, 30 and 40 W/m - Range of self-limiting tape for freeze protection and temperature maintenance up to 65°C.

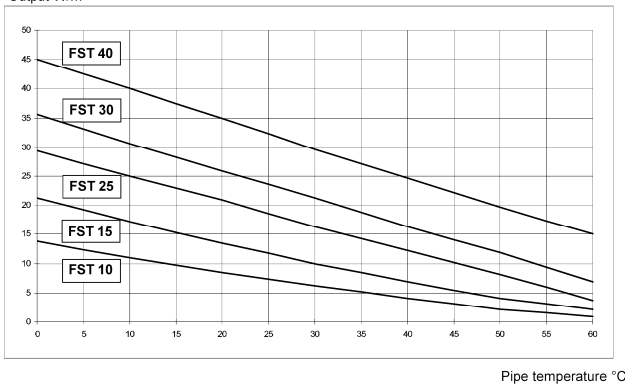
Hamer Code	Supplier Code	Description
JH384	FST-15	16W/m Self Regulating Tape
JH389	FST-20	25W/m Self Regulating Tape
JH397	FST-30	31W/m Self Regulating Tape
JH391	FST-30TF	31W/m Self Regulating Tape with copper braid and Jacket
JH392	FST-40	40W/m Self Regulating Tape

Description	FST-15	FST-25	FST-30	FST-30TF	FST-40
Output (10°)	16 W/m	25 W/m	31 W/m	31 W/m	40 W/m
Busbars	1.1mm ²				
Max. Tape Temperature	Power off : 85°C (1000) hours - Power on 65°C				
Dimensions	11.0 x 4.0mm (TF = 13.0 x 6.0mm)				
Area Approval	Zone 1 & 2				
Temp. Classification	T6 (85°C)				
Max. Circuit Length	154 m	124 m	110 m	110 m	88 m

To BS6351 Grade 22

Approved to CENELEC/IEEE standards for use in non-hazardous, hazardous* and corrosive environments.

Output W/m



FST/T, FST/I, FST/TP or FST/TF

*Suitable for hazardous areas

FST (was ESR)

Basic version protected against corrosive chemical agents through a Polyolefin outer jacket.

FST/T*

With tinned copper braid.

FST/I*

With Stainless Steel braid.

FST/TP*

With copper braid and thermoplastic outer jacket.

FST/TF*

With tinned copper braid and Fluoropolymer outer jacket.

Ideal for chemical industry, where thermotape may be exposed to corrosive solutions or vapours.

Termination Kits

Hamer Code	Supplier Code	Description
JH325	FST/Kit	1 x Kit for FSG & FST
JH335	FS/Kit-TP	1 x Kit for FST, TP & TF



FSX Self Limiting Tape **while stocks last**

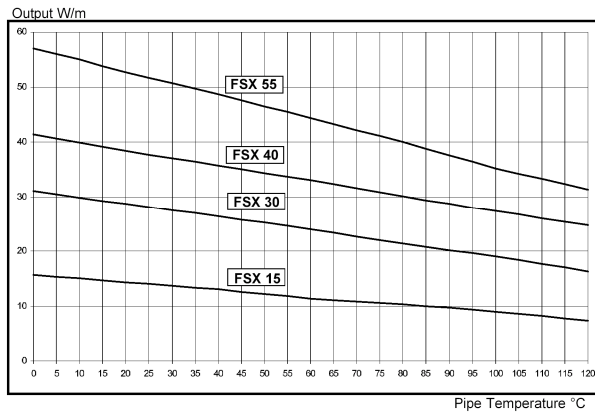
55 W/m - Range of self-limiting tape for freeze protection and temperature maintenance up to 120°C.

Hamer Code	Supplier Code	Description
JH350	FSX-55/TF*	55W/m Self Regulating Tape with tinned copper braid & jacket

Description	FSX-55/TF*
Output (10°)	55 W/m
Busbars	1.25mm ²
Max. Tape Temperature	Power off : 200°C (1000) hours - Power on 120°C
Dimensions	10.7 x 5.1mm
Area Approval	Zone 1 & 2
Temp. Classification	T2 (300°C) Braided & Outer Jacket T3 (200°C)
Max. Circuit Length	80 m

To BS6351 Grade 22

Approved to CENELEC/IEEE standards for use in non-hazardous, hazardous* and corrosive environments.



FSX/TF*

With tinned copper braid and Fluoropolymer outer jacket. *Suitable for hazardous areas.

Ideal for chemical industry, where thermotape may be exposed to corrosive solutions or vapours.

Termination Kits

Hamer Code	Supplier Code	Description
JH360	FSX/Kit-SF	1 x Kit for FSX/TF



CSC2 Drainline Heaters

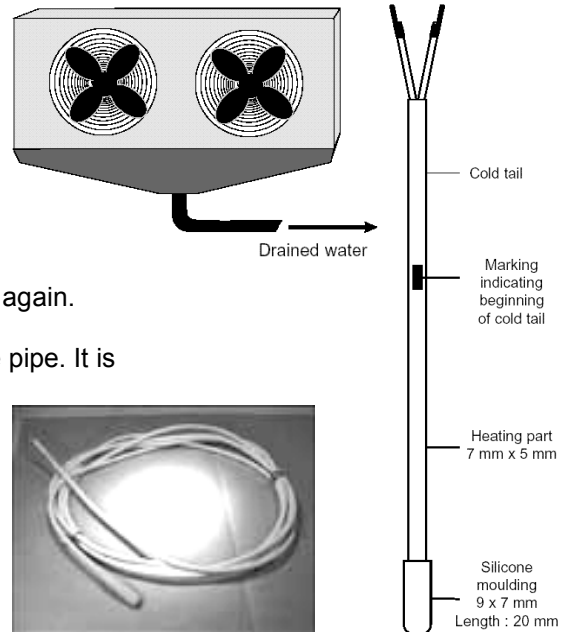
Hamer Code	Supplier Code	Description
JH445	1.0 plus 1m cold tail	40 W
JH450	1.3 plus 1m cold tail	52 W
JH455	1.5 plus 1m cold tail	60 W
JH460	2.0 plus 1m cold tail	80 W
JH465	3.0 plus 1m cold tail	80 W
JH470	4.0 plus 1m cold tail	120 W
JH475	5.0 plus 1m cold tail	160 W
JH480	6.0 plus 1m cold tail	240 W

Application

In cold stores, after a certain time of operation, there is build up of ice on the cooler fins and a defrosting cycle must take place.

Electrical resistances are inserted between the fins to melt the ice, and the water is collected and passed through drainpipes for disposal. Some metres of the drainpipes are inside the cold store, so consequently the water may freeze again.

To avoid this problem, a drain line heater is inserted into the pipe. It is switched on only during the defrosting cycle.



Characteristics

- Totally waterproof
- Double insulation
- Moulded terminations
- Extremely flexible
- Silicone insulation - 70°C to 200°C

Caution

These cables cannot be cut to reduce cold tail

Heating Element	Nickel-Chromium or Copper-Nickel alloy wire
Insulation	Silicone rubber
Shape	Flat 5 x 733
End of Cable	Waterproof silicone moulding
Cold Tail	1m
Output	40W/m
Tolerance	+/- 10%
Max Surface Temperature	200°C
Min Surface Temperature	-70°C
Voltage	230V



