

Very high temperature self-regulating heating cable.

## FailSafe Super Inherently Temperature-Safe Heating Cable

- 225°C exposure temperature withstand, (energised or switched off).
- *Inherently temperature-safe. (ITS)*
- High power outputs to 75W/m at 10°C
- External temperature controls not necessary.

### DESCRIPTION

FSS is a very high temperature self-regulating heating cable, having an exposure limit of 225°C, energised or not.

It may be provided with a continuous extruded metal jacket for applications where high mechanical strength is required or a metal braid where flexibility is preferred.

The continuous metal outer jacket is ductile, yet withstands high mechanical loads, thus averting damage when being installed in arduous environments.

Easy terminations, cut-to-length.

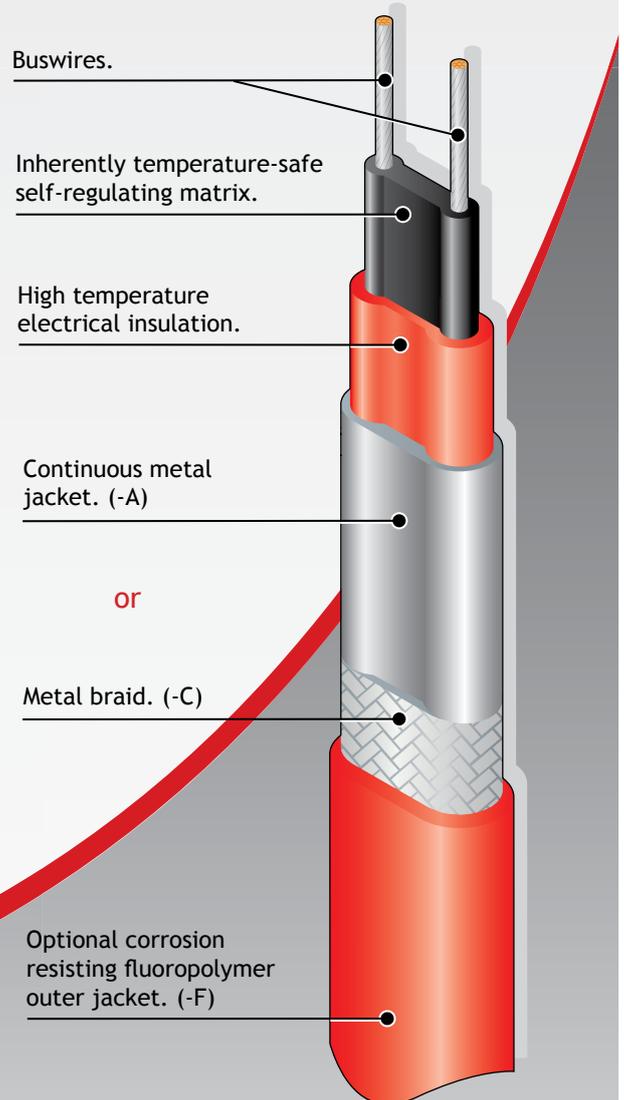
Safest ever self-regulating product range for very high temperature exposure; will not overheat even when exposed to 225°C when energised or switched off as it is *inherently temperature-safe*.

ATEX/ IECEx Approved

### INHERENTLY TEMPERATURE-SAFE

“The inherent ability to self-regulate at a temperature level below the maximum product rating and withstand temperature of the insulating materials, without the need for temperature control.”

Similar competitor self-regulating products are typically limited to a maximum energised temperature, typically 120°C at which point, their retained power output prevent the cable from self-regulating at its own limiting temperatures. All such products require temperature control to ensure their own temperature safety.



## SPECIFICATION

### MAXIMUM CONTINUOUS EXPOSURE

**TEMPERATURE:** 225°C (437°F)  
(ENERGISED OR SWITCHED OFF)

### MINIMUM OPERATING

**TEMPERATURE:** -65°C\* (-85°F)

### MINIMUM INSTALLATION

**TEMPERATURE:** -40°C (-40°F)

### POWER SUPPLY:

12 - 277V AC  
(other voltages available on request)

### TEMPERATURE CLASSIFICATION:

15FSS, 30FSS, 45FSS & 60FSS @ nom 230V - T3 (200°C)  
75FSS @ nom 230V - T2 (300°C)

**Note:** for any other voltages contact Heat Trace Ltd

### INGRESS PROTECTION

IP67

### WEIGHTS & DIMENSIONS:

Type Ref	Dimensions (mm) +/-0.5	Weight kg/100m	Min Bending radius	Gland size
FSS-A	12.25 x 6.05	13.7	50mm	M20
FSS-AF	13.15 x 6.95	17.4	50mm	M20
FSS-C	10.55 x 4.35	10.4	30mm	M20
FSS-CF	11.45 x 5.25	13.4	35mm	M20

### APPROVAL DETAILS:

ATEX - Sira 02ATEX3072

IECEX - SIR 11.0120

EAC\* - TC RU C-GB.AA87.B.00610

FM - 3009080

### ORDERING INFORMATION:

Example; 30 FSS 2 - A or C option F

Output 30w/m at 10°C

FSS Heating Cable

Supply Voltage 220 - 240V AC

Continuous Outer jacket

Metal Braid

Outer Sheath, Fluoropolymer

### 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 cables. Use only approved components, as per system certification.

### FURTHER INFORMATION:

Please consult the appropriate termination instructions and the Heat Trace Installation, Maintenance and Testing Manual (HTDIMM 010) for further details.

### MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE:

The following circuit details relate specifically for the trace heating of pipework and equipment. For any other application consult Heat Trace.

Cat Reference	Environmental Start-up Temp.	230V				
		10A	16A	20A	32A	50A
15FSS	10°C	76	122	154	172	172
	0°C	70	112	140	172	172
	-20°C	62	98	122	172	172
	-40°C	52	82	102	164	172
30FSS	10°C	52	82	102	122	122
	0°C	46	74	92	122	122
	-20°C	40	66	82	122	122
	-40°C	34	54	68	110	122
45FSS	10°C	38	62	76	100	100
	0°C	34	56	70	100	100
	-20°C	30	50	62	98	100
	-40°C	22	34	44	70	100
60FSS	10°C	30	50	62	86	86
	0°C	28	44	56	86	86
	-20°C	20	32	40	62	86
	-40°C	12	18	24	38	60
75FSS	10°C	24	40	50	76	76
	0°C	18	30	38	60	76
	-20°C	14	22	26	42	66
	-40°C	8	12	16	26	40

For use with Type C circuit breakers to IEC 60898.

These circuit lengths may be exceeded dependant on specific design parameters.

### THERMAL RATINGS:

Nominal output at 230V when FSS is installed on thermally insulated carbon steel pipes. For 75W/m and above, the use of aluminium overfoiling is strongly recommended to optimise the thermal transmission to the pipe and achieve the stated thermal ratings.

