

A high temperature self-regulating heating cable.

FailSafe +

Inherently Temperature-Safe Heating Cable

- 225°C exposure temperature withstand, (energised or switched off).
- *Inherently temperature-safe. (ITS)*
- Power outputs to 60W/m at 10°C
- External temperature controls not necessary.

DESCRIPTION

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

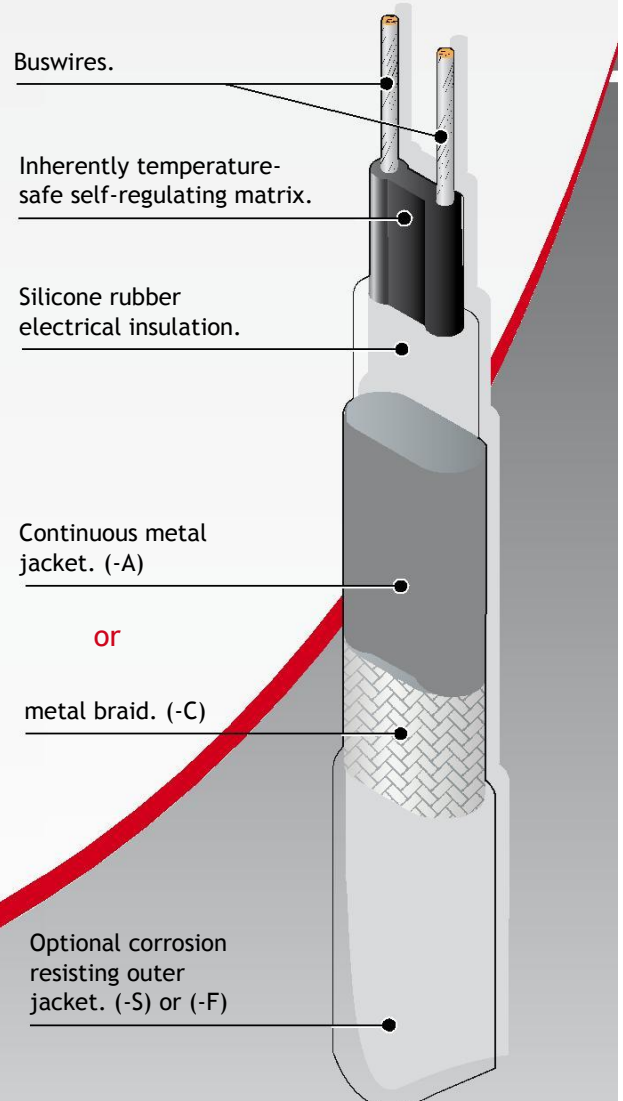
It may be provided with a continuous extruded metal jacket for applications where high mechanical strength is required or a metal braid where flexibility is preferred.

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 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: 1 - 277V AC

WEIGHTS & DIMENSIONS:

Type Ref	Dimensions (mm) +/-0.5	Weight kg/100m	Min Bending radius	Gland Size
FS+A	10.35 x 6.75	14.3	20mm	M20
FS+AS	13.25 x 7.85	14.7	25mm	M20
FS+AF	12.05 x 6.65	14.6	30mm	M20
FS+C	10.45 x 5.05	12.2	20mm	M20
FS+CS	12.45 x 7.05	12.5	25mm	M20
FS+CF	11.35 x 5.95	12.5	30mm	M20

APPROVAL DETAILS:

- ATEX - Sira 12ATEX3136
- IECEX - SIR 12.0054
- DNV-GL - E12834
- EAC* - TC RU C-GB.ГБ05.B.00186

ORDERING INFORMATION:

Example; 45 FS+ 2 - A or C S or F

Output 45W/m at 10°C _____

FS+ Heating Cable _____

Supply Voltage 220 - 277V AC _____

Continuous Metal Jacket _____

Metal Braid _____

Outer Sheath, Silicone Rubber _____

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:

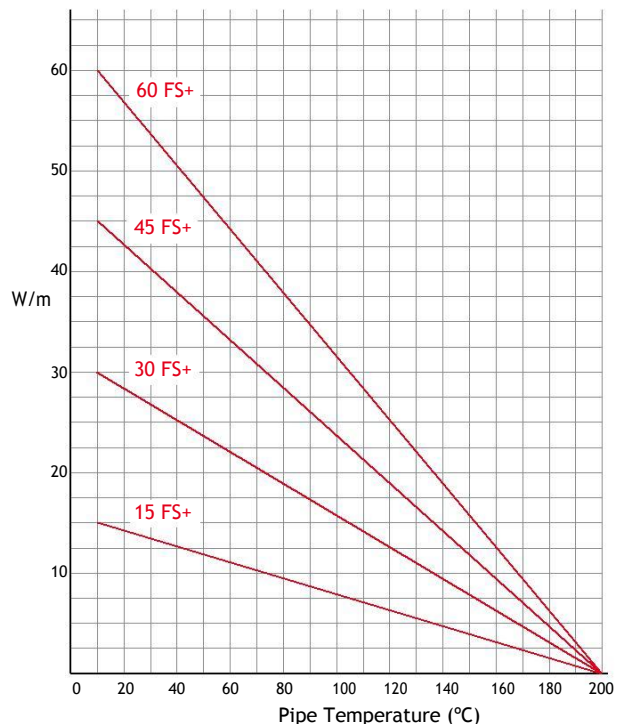
The following circuit details relate specifically for the trace heating of pipework and equipment. For any other application consult Heat Trace.

Cat Reference	Start-up Temperature	230V			
		10A	16A	20A	32A
15FS+	10°C	76	122	154	154
	0°C	70	112	140	146
	-20°C	62	98	122	138
	-40°C	52	82	102	126
30FS+	10°C	52	82	102	108
	0°C	46	74	92	104
	-20°C	40	66	82	98
	-40°C	30	50	62	88
45FS+	10°C	38	62	76	88
	0°C	32	52	66	84
	-20°C	24	38	46	76
	-40°C	14	24	28	46
60FS+	10°C	24	38	46	76
	0°C	18	30	36	58
	-20°C	12	20	26	42
	-40°C	8	12	16	24

For use with Type C circuit breakers to IEC60898

THERMAL RATINGS:

Nominal output at 230V when FS+ is installed on thermally insulated carbon steel pipes, being fixed with aluminium fixing tape.



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