

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.

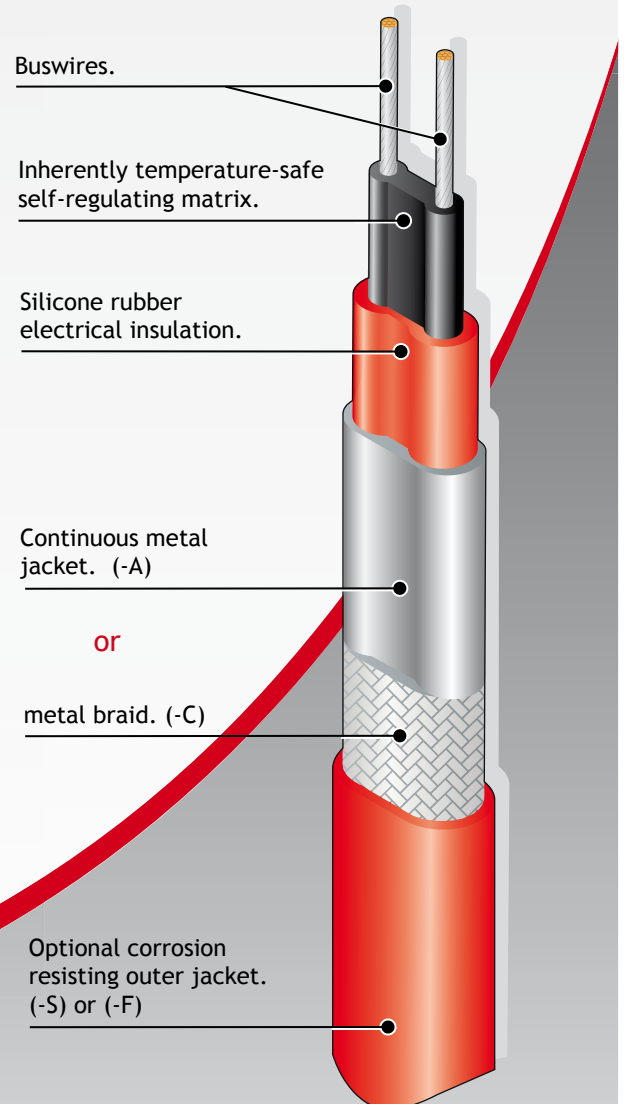
Safest ever self-regulating product range for high temperature exposure; will not overheat even when exposed to 225°C when energised or switched off as it is *inherently temperature-safe*.

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 INSTALLATION TEMPERATURE: -40°C (-40°F)

MINIMUM AMBIENT TEMPERATURE: -60°C (-76°F)

POWER SUPPLY: 208 - 277V AC
(other voltages available on request)

WEIGHTS & DIMENSIONS:

Type Ref	Nom. Dims. (mm)	Weight kg/100m	Min Bending radius	Gland Size
FS+A	11.05 x 5.65	14.3	20mm	M20
FS+AS	12.05 x 6.65	14.7	25mm	M20
FS+AF	11.85 x 6.45	14.6	30mm	M20
FS+C	10.25 x 4.85	12.2	20mm	M20
FS+CS	11.25 x 5.85	12.5	25mm	M20
FS+CF	11.05 x 5.65	12.5	30mm	M20

APPROVAL DETAILS:

ATEX - **Sira 12ATEX3136** - EN60079-0:2009, EN60079-7:2007, EN60079-30:2007, IEC 60079-31:2008

IECEX - **SIR 12.0054** - IEC 60079-0:2011, IEC 60079-30:2007-01, IEC 60079-31:2008

ORDERING INFORMATION:

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

Output 45W/m at 10°C ————
 FS+ Heating Cable ————
 Supply Voltage 208 - 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 (IMEHT010) for further details.

MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE:

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

Cat Reference	Start-up Temperature	230V	
		20A	32A
15FS+	10°C	154	-
30FS+	10°C	102	108
45FS+	10°C	76	88
60FS+	10°C	62	76

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.

