

Roof and gutter protection from snow and ice build up.

G-TRACE Self-Regulating Heating Cable

- Ambient temperature range +40°C to -40°C
- Can be cut-to-length with no wastage.
- Will not overheat or burnout, even when overlapped.
- Inherently temperature-safe. (ITS)
- External temperature controls not necessary.

THE PROBLEM

Snow that has built up on a roof will start to melt as a result of either exposure to the sun or from heat rising from the building below.

As the melted snow runs from the roof into cold gutters and drain pipes, it can re-freeze forming layers of ice that can continue to build up until the flow is blocked. This can result in damaged drains and gutters.

In addition, water can get into the roof and walls of the building, leading to expensive structural damage such as broken roof tiles, damaged plaster and facades, etc.

THE SOLUTION

Heat Trace have the solution in the form of G-Trace a self-regulating heating cable the characteristics of which means that it can adjust its heat output in accordance with the ambient temperature.

In snow and icy water, the heating cable operates at full power. As the snow melts and the water drains away, G-Trace self-regulates to half power while it dries. As it gets warmer, so G-Trace gradually reduces its output.

The G-Trace system is safe and reliable as self-regulation prevents overheating, G-Trace can even be installed in plastic gutters and with the UV resistant outer jacket, the heating cable is protected from the sun's harmful rays - thus making it totally durable and reliable.

G-Trace provides a cost effective, preventive maintenance solution to damaged roof tops and gutters and the system consumes no more power than it takes to prevent ice formation.

Design and installation of a G-Trace system is simple as there are no fixed lengths. The heating cable can be cut to length during installation. G-Trace is cut off the reel and placed in the gutter. The heating cable is suspended within the downpipe without the need for spacers.

All systems - from the simplest to the most elaborate - use the same components, thereby providing maximum flexibility and ease of design.

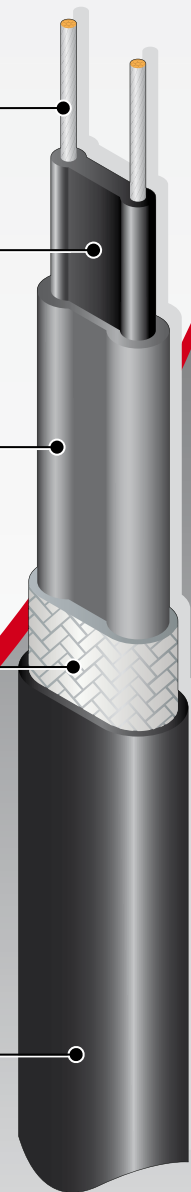
Buswires.

Inherently temperature-safe self-regulating matrix.

Thermoplastic electrical insulation.

Continuous conductive covering of metal braid. (-C)

Thermoplastic or optional fluoropolymer outer jacket.



SPECIFICATION

OPERATING ENVIRONMENTAL RANGE: +15°C to -15°C
(+59°F to +5°F)

AMBIENT TEMPERATURE RANGE: +40°C to -40°C
(+104°F to -40°F)

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

POWER SUPPLY: 1 - 277V AC

MAXIMUM RESISTANCE OF PROTECTIVE BRAIDING: 18.2 Ohm/km

WEIGHTS & DIMENSIONS:

Type Ref	Dimensions (mm) +/-0.5	Weight kg/100m	Min Bending radius	Gland Size
GT	12.95 x 5.95	11.8	35mm	M20
GT-F	12.95 x 5.95	12.6	35mm	M20

APPROVAL DETAILS:

ORDERING INFORMATION:

Example: **GT 2 - F**

G-TRACE _____

Supply Voltage 220 - 277V AC _____

Optional Fluoropolymer Outerjacket _____

POWER OUTPUT:

In ice at 0°C **36W/m**

In air at 0°C **18W/m**

COLD START DATA (300 Second Rating)

GT	
Start at °C in ice and water	Start Current (A/m) 230V
-15°C	0.295
0°C	0.259
+15°C	0.236

ACCESSORIES:

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. These items are recommended for the correct operation of G-Trace heaters.

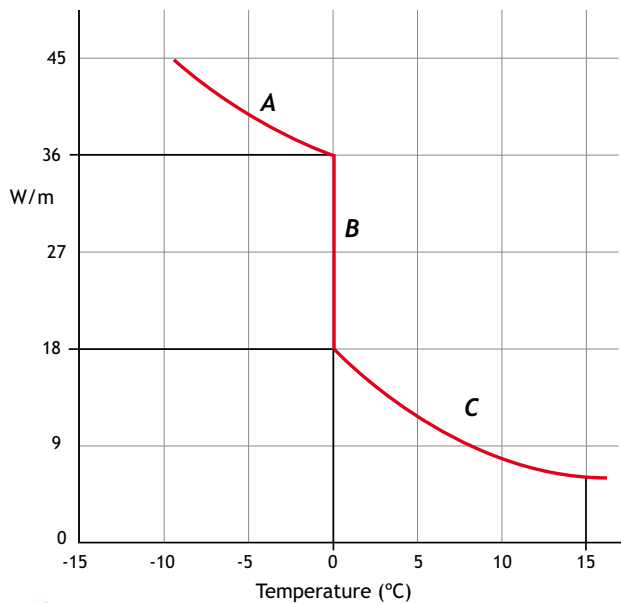
MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE:

Cat Reference	Start-up Temperature	230V				
		6A	10A	16A	20A	32A
GT	10°C	26	42	68	84	90
	0°C	24	38	62	78	86
	-15°C	20	34	54	68	80

Note: Cable shall not be energised below 0°C. For use with Type C circuit breakers to IEC 60898

THERMAL RATINGS:

Nominal output at rated voltage.



Notes:

- A In snow and ice water, the heating cable will operate at full power.
- B As the snow begins to melt and the water drains away, the heating cable self-regulates to half power while it dries.
- C As it gets warmer, the heating cable will reduce its power output.

FURTHER INFORMATION:

Please consult the appropriate termination instructions and the G-Trace Roof & Gutter Heating Design Guide (PDG020) for further details.

G-Trace systems are energised at +5°C and de-energised -10°C to -15°C when there is no possibility of melt water being present.