

HEATING CABLES

1. SELF-REGULATING FLEXIBLE HEATING CABLES FOR TEMPERATURE up to +65°C

HC-221-1	CABLE SET: 1 m
HC-221-5	CABLE SET: 5 m
HC-221-10	CABLE SET: 10 m
HC-221-50	CABLE SET: 50 m

KIT-906	Joining kit
HCTK-239	Termination kit

APPLICATION

- This is a parallel circuit *SELF-REGULATING CABLE* mainly used for protection against ice formations in pipes and tanks.
- It can be used to maintain temperatures of up to **+65°C (+150°F)** and is suitable for the general following applications:
 - *AERA CLASSIFICATION*: Normal use.
 - *PIPE MATERIAL* or *SURFACE*: Carbon steel, stainless steel, plastic, painted metallic pipes or surfaces.
 - *ENVIRONMENT*: Dry or damp but not corrosive.

FEATURES

- The heating element consists of a special polymer with a carbon mixture which acts as a semi-conductor.
- When the temperature drops in the cable, conductivity is created in the polymer reducing its electrical resistance and therefore, the current travel through the polymer increasing the temperature which controls the temperature level. This allows to maintain constantly the temperature on and around the element to protect.
- Conversely, when the cable temperature rises, its conductivity reduces therefore increasing its electrical resistance and reducing its power requirements.

SPECIFICATIONS

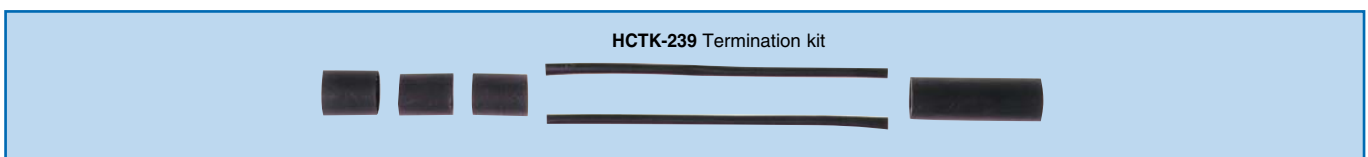
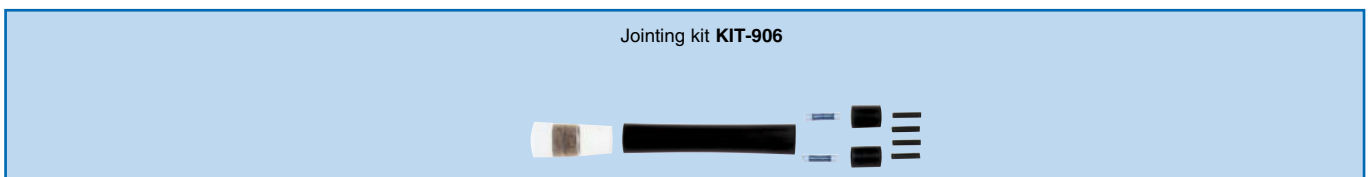
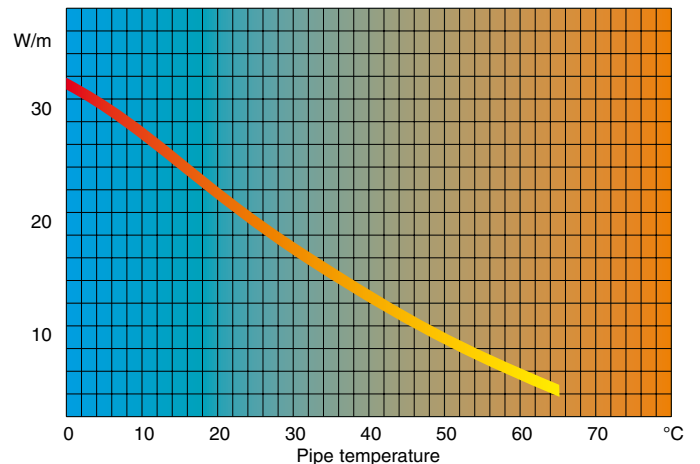
- Power output at 230 V and +10°C (+50°F): **25,3 W/m**.
- Power output depending on temperature: See graph.
- Continuous max. exposure temperature: **+65°C (+150°F)**.
- Intermittent maximum exposure temperature for a maximum cumulative exposure time: **+85°C (+185°F) for 1000 hours**.
- Electric strength voltage: **1500 V**.
- Nominal external dimensions: **5 mm x 12 mm**.
- Nominal weight: **100 g/m (1,2 oz/ft)**.
- Maximum cable length per circuit starting at +10°C (+50°F) and according to protection sizing:
16 A = 105 m (344'), **20 A & 25 A = 120 m (393')**.
- NOTE: The lengths indicated are only approx. for each circuit. For maximum safety a 30 mA differential must be maintained.*
- Minimum installation temperature: **-60°C (-76°F)**.
- Minimum bend radius at **-20°C**: 30 mm

ACCESSORIES

- The appropriate connection kit must be used to join and seal the end of the cable.



POWER OUTPUT (230V) ON INSULATED STEEL PIPES



2. CONSTANT 30W/m WATTAGE HEATING CABLES (230V)

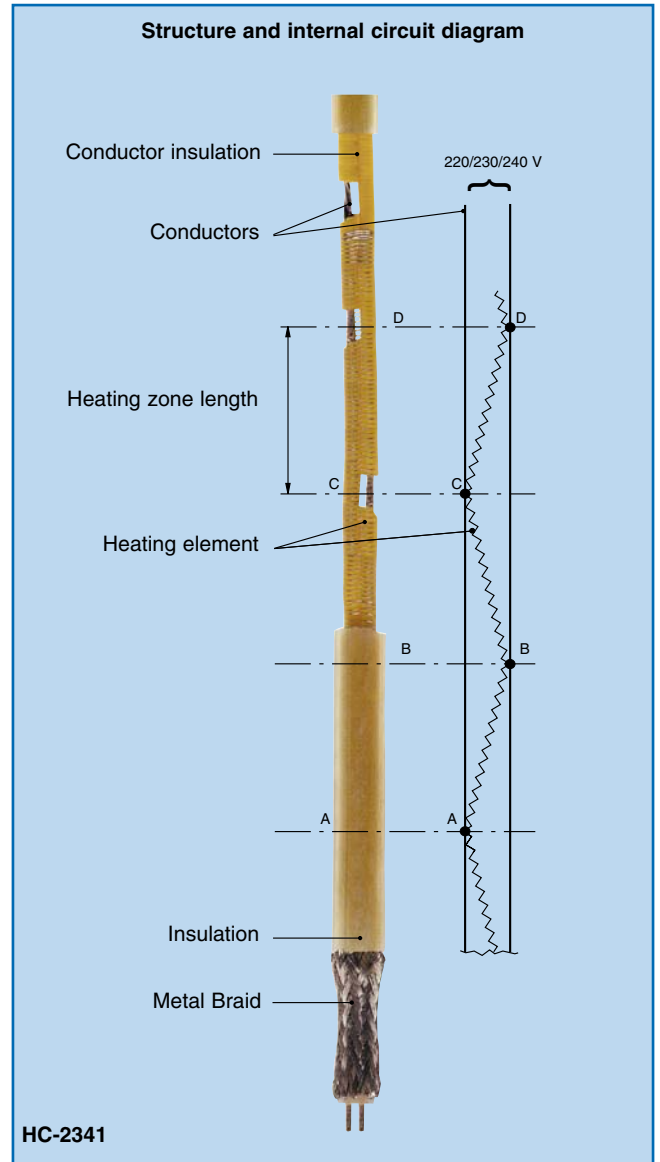
HC-234-1	CABLE WITHOUT BRAIDING PROTECTION length 1 m
HC-234-50	CABLE WITHOUT BRAIDING PROTECTION length 50 m
HC-234-150	CABLE WITHOUT BRAIDING PROTECTION length 150 m
HC-2341-1	CABLE WITH BRAIDING PROTECTION length 1 m
HC-2341-50	CABLE WITH BRAIDING PROTECTION length 50 m
HC-2341-150	CABLE WITH BRAIDING PROTECTION length 150 m

FEATURES

- These cables offer a permanent *CONSTANT WATTAGE* power output per *LINEAR METRE* (At any length).
- Use as frost protection of any metal surface (up to **+55°C**) as well as in drainage pipes (Commercial and industrial).
- A continuous heating element wire is coiled around the two main insulated conductors (touching them at regular interval points). This forms many identical parallel resistors and makes it possible to cut the cable at any required length on refrigeration site.
- The power output is constant between **A-B**, **B-C**, **C-D**, etc... (See picture explanation).

SPECIFICATIONS

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|----------------------------------|----------------------------------|
| • Power output at 230 V: | 30 W/m |
| • Max. exposure temp. power on: | +55°C |
| • Max. exposure temp. power off: | +180°C |
| • Maximum circuit length: | 60 m |
| • Heating zone length: | 595 mm |
| • Tinned copper conductors: | 0,75 mm² (two) |
| • Heating conductor element: | Nickel-chrome |
| • Insulation material: | Silicone rubber |
| • Braided tinned copper sheath: | 1 mm² (HC-234) |
| • Test voltage and "CE" marking: | 1500 V |
| • Loading tolerance: | ± 7 % |
| • Outer dimensions: | 8 mm x 5 mm (HC-234) |
| • Minimum bend radius at -40°C: | 10 mm |
| • Standard reel length: | 150 m |



HCTK-383 CABLE TERMINATION KIT
 For both ends as shown on bottom picture

CONTENTS

- **20 mm HEAT-SHRINK SLEEVE, Ø 6 mm**
To be used with both **HC-234** and **HC-2341** HEATING CABLES.
- **75 mm HEAT-SHRINK SLEEVE, Ø 6 mm**
To be used with both **HC-234** and **HC-2341** HEATING CABLES.
- **TWO 20 mm HEAT-SHRINK SLEEVES, Ø 12 mm**
Used for **HC-2341** HEATING CABLE (only).

The **HCTK-383 CABLE TERMINATION KIT** is used to protect and insulate the connection cold lead and the end seal for each length of any **HC-234** and **HC-2341 HEATING CABLES** cut of the reel.
 To use the **TERMINATION KIT**, check the corresponding general instructions of safety for any constant wattage parallel **HEATING CABLES**.

HCSS-404 Heat-shrink sleeve, Ø 6 mm, length 75 mm
 Used for HC-234 and HC-2341 heating cables.

