

# Self-Regulating Heating Cable CTE

CTE is an industrial-grade self-regulating heating cable (self-limiting parallel trace heater) used to prevent formation of ice and accumulation of snow on outdoor industrial sites (open pump sites, ramps, helipads).

A high power output allows to use CTE for concrete heating. Due to its self-regulating characteristics it will not overheat even when the cable is overlapped. This guarantees maximum safety and reliability.

Thanks to its parallel construction the power output of the heating cable is everywhere the same.

Thus it can be fitted on site to exact piping length without any complicated design calculations.

CTE can be supplied as pre-fabricated connection-ready sections with cold leads.

## Features

- 90 W/m (at 0°C in concrete)
- Self-regulating, automatically adjusts power output in response to ambient temperature
- Thermoplastic elastomer outer jacket
- Can be cut to required length on site without any complicated design calculations
- Will not overheat even when overlapped
- Full range of accessories available

## Application

- Prevention of ice formation and snow accumulation on outdoor industrial sites (open pump sites, ramps, helipads)



## Construction

1. 2.00 mm<sup>2</sup> nickel-plated copper conductors
2. Semi-conductive self-regulating heating matrix
3. Matrix insulation
4. Tinned copper braid
5. Thermoplastic elastomer outer jacket

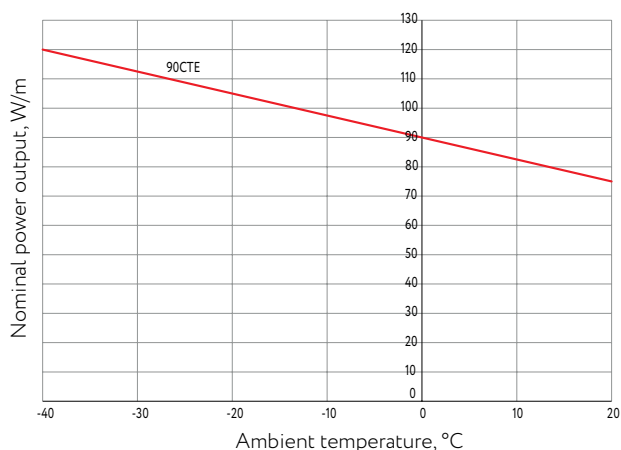
# Self-Regulating Heating Cables

## Technical Data

Rated voltage	230 VAC
Maximum continuous operating temperature (trace heater energized)	+80 °C
Maximum continuous exposure temperature (trace heater de-energized)	+100 °C
Ambient temperature range	-60...+55 °C
Minimum installation temperature: Thermoplastic elastomer outer jacket	-30 °C
Minimum bending radius	25 mm
Maximum resistance – Braiding	10 Ohm/km
Conductor cross-section	2.00 mm <sup>2</sup>
Dimension: Thermoplastic elastomer outer jacket, braiding	17.8 × 8.0 mm
Weight: Thermoplastic elastomer outer jacket, braiding	230 kg/km

## Power Output Curve

Nominal power output at rated voltage 230 VAC



## Approvals



CETS 23 ATEX 030X  
II 2 GD  
Ex 60079-30-1 IIC T6 Gb  
Ex 60079-30-1 IIIC T85°C Db



## Maximum Heating Circuit Length

For use with type C circuit breakers according to IEC 60898-1:2015

Type	Turn-on temperature, °C	Heating circuit length/m at 230 VAC	
		20 A	32 A
90-CTE	10	62	84
	0	47	80
	-10	44	76
	-20	42	74
	-30	41	72
	-40	40	69

## Marking

Example: 90-CTE2-BT

① ② ③ ④ ⑤ ⑥

1. Nominal power 90 W/m (at 0 °C in concrete)
2. Cable type: CT – mid-temperature
3. Cable version: E – for industrial applications
4. Rated voltage: 2 – 230 VAC (other voltages on request)
5. Screen type: B – Tinned copper wire braiding
6. Outer jacket material: T – Thermoplastic elastomer

## Types

Outer jacket type	Order code	Outer jacket color	Name	Power output, W/m
Thermoplastic elastomer outer jacket, braiding	3201105101	Green	90-CTE2-BT	90