

Self-Regulating Heating Cable CTE

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

Due to its self-regulating characteristics it will not overheat even when the cable is overlapped. This guarantees maximum safety and reliability.

Installation of CTE heating cable is quick and simple and requires no special skills or tools.

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

- 80 W/m
- Self-regulating, automatically adjusts power output in response to ambient temperature
- Thermoplastic outer jacket
- Easy to install
- 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 Areas

- Temperature maintenance or freeze protection of pipelines and vessels in non-hazardous and ex-hazardous areas



1. Nickel-plated copper conductors, 2.00 mm²
2. Semi-conductive self-regulating matrix
3. Matrix insulation
4. Tinned copper braid
5. Thermoplastic outer jacket

Versions

- CTE...BT Thermoplastic elastomer outer jacket with tinned copper braiding

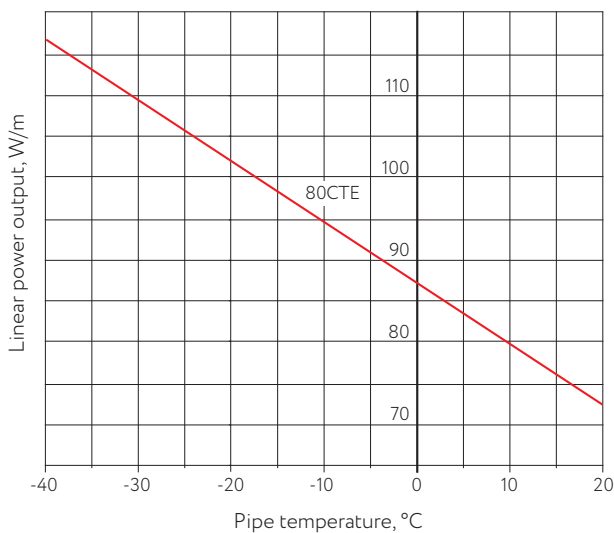
Self-Regulating Heating Cables

Technical Data

| | |
|--|----------------------|
| Rated voltage | 230 VAC |
| Maximum continuous operating temperature (energized) | +80 °C |
| Maximum continuous exposure temperature (de-energized) | +100 °C |
| Ambient temperature range | -60...+55 °C |
| Minimum installation temperature | -30 °C |
| Minimum bending radius | 25 mm |
| Maximum braiding resistance | 10 Ohm/km |
| Conductor cross-section | 2.00 mm ² |
| Dimension (CTE...BT) | 16.8×7.2 mm |
| Weight (CTE...BT) | 215 kg/km |

Power Output Curve

Nominal power output at rated voltage 230 VAC



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 | |
|-------|-------------------------|-------------------------------------|------|
| | | 25 A | 30 A |
| 80CTE | 10 | 78 | 83 |
| | 0 | 76 | 80 |
| | -10 | 74 | 76 |
| | -20 | 72 | 74 |
| | -30 | 69 | 72 |
| | -40 | 65 | 69 |

Approvals



CETS 23 ATEX 030X

II 2 GD



Ex 60079-30-1 IIC T3 Gb

Ex 60079-30-1 IIIC T200°C Db

Marking

Example: 80CTE2-BT

① ②③④⑤⑥

1. Linear power 80 W/m (to IEC 60079-1-30)
2. Type of self-regulating heating cable:
CT – mid-temperature
3. Cable version: E – for industrial applications
4. Rated voltage: 2 – 230 VAC (other voltages on request)
5. Braiding material: B – Copper tinned wire
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 | 3201005100 | Green | 80CTE2-BT | 80 |