

# Self-Regulating Heating Cable LTM

LTM is an industrial-grade self-regulating heating cable that can be used for freeze protection of pipelines and vessels in non-Ex areas.

The power output adjusts automatically in response to the ambient temperature.

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

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

Thanks to its parallel construction the heating cable can be fitted on site to exact length without any complicated design calculations.

The LTM cable with fluoropolymer outer jacket is characterized by high resistance to high temperatures, chemicals and UV radiation.

Termination, splicing and power connection components are available in convenient kits.

## Features

- 10 or 15 W/m
- Self-regulating, automatically adjusts power output in response to ambient temperature
- Thermoplastic and fluoropolymer 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
- UV and high chemical resistance (fluoropolymer)

## Application Areas

- Freeze protection of pipelines and vessels (non-Ex)



## Construction

1. 0.56 mm<sup>2</sup> nickel-plated copper conductors
2. Semi-conductive self-regulating matrix
3. Matrix insulation
4. Aluminum foil with drainage wires or tinned copper braid
5. Thermoplastic or fluoropolymer outer jacket

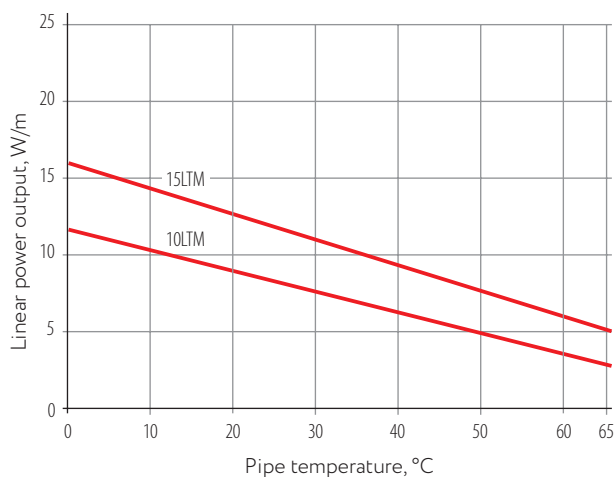
# Self-Regulating Heating Cables

## Technical Data

|                                                                     |                      |
|---------------------------------------------------------------------|----------------------|
| Rated voltage                                                       | 230 VAC              |
| Maximum continuous operating temperature (trace heater energized)   | +65 °C               |
| Maximum continuous exposure temperature (trace heater de-energized) | +85 °C               |
| Ambient temperature range                                           | -60 ... +55 °C       |
| Minimum installation temperature:                                   |                      |
| Thermoplastic outer jacket                                          | -30 °C               |
| Fluoropolymer outer jacket                                          | -60 °C               |
| Minimum bending radius                                              | 25 mm                |
| Maximum screen resistance                                           | 18 Ohm/km            |
| Maximum braiding resistance                                         | 10 Ohm/km            |
| Conductor cross-section                                             | 0.56 mm <sup>2</sup> |
| Dimension:                                                          |                      |
| Thermoplastic elastomer outer jacket, aluminum foil                 | 8.30×5.50 mm         |
| Fluoropolymer outer jacket, braiding                                | 8.60×5.40 mm         |
| Weight:                                                             |                      |
| Thermoplastic elastomer outer jacket, aluminum foil                 | 66 kg/km             |
| Fluoropolymer outer jacket, braiding                                | 98 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 10 A |
|-------|-------------------------|------------------------------------------|
| 10LTM | 10                      | 88                                       |
|       | -20                     | 68                                       |
|       | Inside pipe             | 60                                       |
| 15LTM | 10                      | 63                                       |
|       | -20                     | 46                                       |

## Approvals



## Marking

Example: 15LTM-AT



1. Linear power output, W/m at +10 °C
2. Cable type
3. Screen type: B – tinned copper wire braiding, A – aluminum foil screen
4. Outer jacket material: T – Thermoplastic elastomer, P – Fluoropolymer

## Types

| Outer jacket type                                   | Order code | Outer jacket color | Name     | Power output, W/m |
|-----------------------------------------------------|------------|--------------------|----------|-------------------|
| Thermoplastic elastomer outer jacket, aluminum foil | 1101000000 | Black              | 10LTM-AT | 10                |
|                                                     | 1101000001 |                    | 15LTM-AT | 15                |
| Fluoropolymer outer jacket, braiding                | 1101000004 | Blue               | 10LTM-BP | 10                |
|                                                     | 1101000005 |                    | 15LTM-BP | 15                |