

# Self-Regulating Heating Cable VTL

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VTL is an industrial-grade self-regulating heating cable that can be used for freeze protection of pipelines and vessels and also for snow and ice prevention on roofs and gutters.

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 VTL 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.

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

## Features

- 15, 20 or 30 W/m
- Self-regulating, automatically adjusts power output in response 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
- UV-resistant
- VDE certified

## Application Areas

- Freeze protection of pipelines and vessels (non-Ex)
- Snow and ice prevention on roof and gutters (non-Ex)



## Construction

1. 1.00 mm<sup>2</sup> nickel-plated copper conductors
2. Semi-conductive self-regulating matrix
3. Matrix insulation
4. Aluminum foil with drainage wire or tinned copper braid
5. Thermoplastic outer jacket

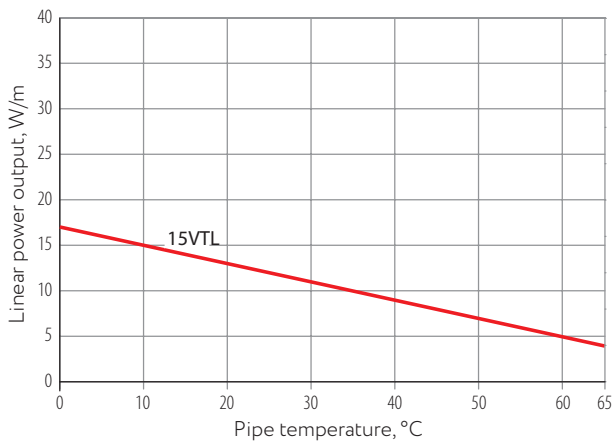
# Self-Regulating Heating Cables

## 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
Minimum bending radius	25 mm
Maximum screen resistance	18 Ohm/km
Maximum braiding resistance	10 Ohm/km
Conductor cross-section	1.00 mm <sup>2</sup>
Dimension:	
Thermoplastic elastomer outer jacket, aluminum foil	10.20 × 5.70 mm
Thermoplastic elastomer outer jacket, braiding	10.90 × 6.00 mm
Weight:	
Thermoplastic elastomer outer jacket, aluminum foil	86 kg/km
Thermoplastic elastomer outer jacket, braiding	113 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	
		10A	16 A
15VTL	10	98	128
	-20	55	73
20VTL	10	74	103
	-20	39	55
	In gutters	60	80
30VTL	10	42	66
	-20	19	38

## Approvals



## Marking

Example: 15VTL-BT



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

## Types

Outer jacket type	Order code	Outer jacket color	Name	Power output, W/m
Thermoplastic elastomer outer jacket, aluminum foil	2101001000		15VTL-AT	15
	2101001001	Black	20VTL-AT	20
	2101001003		30VTL-AT	30
Thermoplastic elastomer outer jacket, braiding	2101001004		15VTL-BT	15
	2101001005	Black	20VTL-BT	20
	2101001007		30VTL-BT	30