VTR 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 VTR 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

- 10, 20, 30 or 40 W/m
- Self-regulating, automatically adjusts power output in response to ambient temperature
- Thermoplastic outer jacket
- Easy to install

# **Application Areas**

 Freeze protection of pipelines and vessels (non-Ex)

- Can be cut to required length on site without any complicated design calculations
- Will not overheat even when overlapped
- UV-resistant
- VDE certified
- Snow and ice prevention on roof and gutters (non-Ex)



### Construction

- 1. 1.25 mm<sup>2</sup> nickel-plated copper conductors
- 2. Semi-conductive self-regulating matrix
- 3. Matrix insulation
- 4. Tinned copper braid
- 5. Thermoplastic outer jacket



# **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 braiding resistance	10 Ohm/km	
Conductor cross-section	1.25 mm <sup>2</sup>	
Dimension: Thermoplastic elastomer outer jacket, braiding	13.20 × 6.10 mm	
Weight: Thermoplastic elastomer outer jacket, braiding	141 kg/km	

### Maximum Heating Circuit Length

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

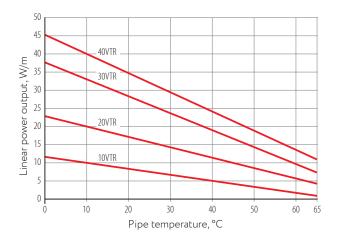
Turn-on temperature, °C	Heating circuit length/m at 230 VAC 16 A
10	193
-20	116
10	109
-20	56
in gutters	65
10	66
-20	42
10	53
-20	29
	temperature, °C 10 -20 10 -20 in gutters 10 -20 10

### Approvals



# Power Output Curve

Nominal power output at rated voltage 230 VAC



# Marking

Example: 10VTR-BT 1 2 3 4

1. Linear power output, W/m at +10 °C

2. Cable type

**3.** Screen type: B – Tinned copper wire braiding

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, braiding	2101002006	- Black	10VTR-BT	10
	2101002008		20VTR-BT	20
	2101002010		30VTR-BT	30
	2101002011		40VTR-BT	40