

# Self-Regulating Heating Cable HTP

HTP is an industrial-grade self-regulating heating cable (self-limiting parallel trace heater) that can be used for temperature maintenance or freeze protection of pipelines and vessels. It can be used in non-hazardous and ex-hazardous 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.

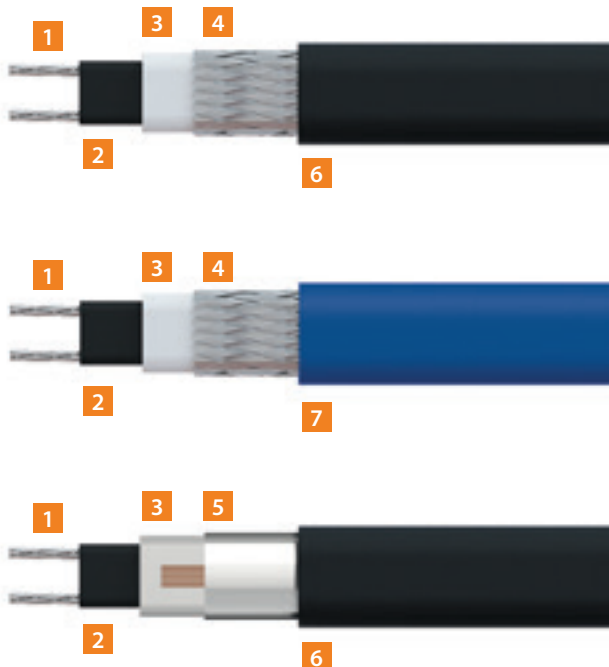
Installation of HTP heating cable is quick and simple and requires no special skills or tools. Thanks to its parallel construction the heating cable can be fitted on site to exact length without any complicated design calculations.

## Features

- 10, 15, 20, 25, 33 or 40 W/m
- Ex-approved solution
- Self-regulating, automatically adjusts power output in response to ambient temperature
- Thermoplastic elastomer or 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
- Can be used in explosive environments without temperature limiter
- Full range of accessories available
- UV- and chemical-resistant (fluoropolymer)

## Application

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



## Construction

1. 1.25 mm<sup>2</sup> nickel-plated copper conductors
2. Semi-conductive self-regulating heating matrix
3. Matrix insulation
4. Tinned copper braid
5. Al/PET tape with drain conductor
6. Thermoplastic elastomer outer jacket
7. Fluoropolymer outer jacket

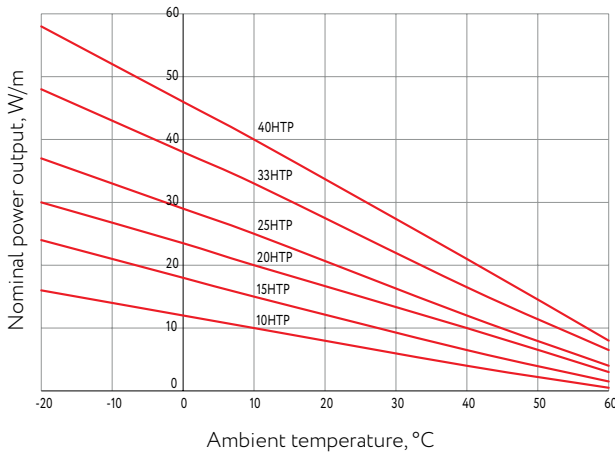
# Self-Regulating Heating Cables

## 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 elastomer outer jacket	-30 °C
Fluoropolymer outer jacket	-60 °C
Minimum bending radius	25 mm
Maximum resistance:	
- Braiding	10 Ohm/km
- Al/PET foil with drain conductor	18.2 Ohm/km
Conductor cross-section	1.25 mm <sup>2</sup>
Dimension:	
Thermoplastic elastomer outer jacket	
- Braiding	13.2×6.1 mm
- Al/PET tape with drain conductor	12.9×5.4 mm
Fluoropolymer outer jacket, braiding	12.8×5.7 mm
Weight:	
Thermoplastic elastomer outer jacket	
- Braiding	135 kg/km
- Al/PET tape with drain conductor	111 kg/km
Fluoropolymer outer jacket, braiding	148 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

Cable Type	Switch-on temperature, °C	Recommended maximum length depend on Type C circuit breaker, m				
		10A	16A	20 A	25 A	32A
10-HTP	10	130	205	206	208	210
	-20	90	160	170	185	205
15-HTP	10	120	170	175	180	190
	-20	85	140	145	155	165
20-HTP	10	90	150	160	175	190
	-20	65	105	110	125	135
25-HTP	10	65	105	120	140	155
	-20	40	70	85	105	130
33-HTP	10	45	85	95	105	120
	-20	35	60	70	80	100
40-HTP	10	35	70	80	90	100
	-20	30	45	55	75	75

## Marking

Example: 33-HTP2-BT

① ② ③ ④ ⑤

1. Nominal power output, W/m at +10 °C
2. Cable type
3. Rated voltage: 2 – 230 VAC
4. Screen type: B – Tinned copper wire, braiding, A – Al/PET tape with drain conductor
5. 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, Al/PET tape with drain conductor	3201102000	Black	10-HTP2-AT	10
	3201102001		15-HTP2-AT	15
	3201102002		20-HTP2-AT	20
	3201102003		25-HTP2-AT	25
	3201102004		33-HTP2-AT	33
	3201102005		40-HTP2-AT	40
Thermoplastic elastomer outer jacket, braiding	3201102006	Black	10-HTP2-BT	10
	3201102007		15-HTP2-BT	15
	3201102008		20-HTP2-BT	20
	3201102009		25-HTP2-BT	25
	3201102010		33-HTP2-BT	33
	3201102011		40-HTP2-BT	40
Fluoropolymer outer jacket, braiding	3201102012	Blue	10-HTP2-BP	10
	3201102013		15-HTP2-BP	15
	3201102014		20-HTP2-BP	20
	3201102015		25-HTP2-BP	25
	3201102016		33-HTP2-BP	33
	3201102017		40-HTP2-BP	40