# Self-Regulating Heating Cable BTC

BTC is an industrial-grade self-regulating heating cable 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 BTC 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**

- 15, 30, 45 or 60 W/m
- Steam purging possible
- Ex-approved solution
- Self-regulating, automatically adjusts power output in response to ambient temperature
- 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

#### **Application Areas**

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



#### Construction

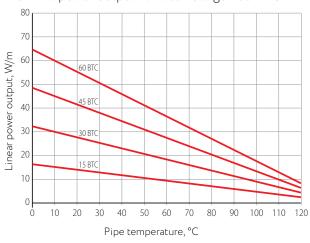
- 1. 1.25 mm<sup>2</sup> nickel-plated copper conductors
- 2. Semi-conductive self-regulating matrix
- 3. Matrix insulation
- 4. Tinned copper braid
- 5. Outer jacket (fluoropolymer)

#### **Technical Data**

Rated voltage	230 VAC	
Maximum continuous operating temperature (trace heater energized)	+120 °C	
Maximum continuous exposure temperature (trace heater de-energized)	+200 °C	
Ambient temperature range	-60 +55 °C	
Minimum installation temperature:		
Fluoropolymer outer jacket	-60 °C	
Minimum bending radius	25 mm	
Maximum braiding resistance	10 Ohm/km	
Conductor cross-section	1.25 mm <sup>2</sup>	
Dimension:		
Fluoropolymer outer jacket	12.80 × 5.70 mm	
Weight:		
Fluoropolymer outer jacket	152 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

Туре	Turn-on temperature, °C	Heating circ 16A	cuit length/m 20A	at 230 VAC 32A
15BTC	10	165	200	-
	-20	117	152	189
30BTC	10	90	120	-
	-20	73	97	120
45BTC	10	70	82	-
	-20	49	66	82
60BTC	10	51	66	-
	-20	39	53	66

### **Approvals**



II 2 GD Ex 60079-30-1 IIC T3 Gb Ex 60079-30-1 IIIC T200°C Db

Sira 17ATEX3335U Sira 18ATEX3038X





IECEx CCVE 17.0006U IECEx CCVE 17.0007X





## Marking

- 1. Linear power output, W/m at +10 °C
- 2. Cable type
- **3** Supply voltage: 2 230 VAC
- **4.** Screen type: B Tinned copper wire braiding
- **5.** Outer jacket material: P Fluoropolymer

## **Types**

Outer jacket type	Order code	Outer jacket color	Name	Power output, W/m
Fluoropoly- mer outer jacket, braid- ing	3201003000	- Red -	15BTC2-BP	15
	3201003002		30BTC2-BP	30
	3201003004		45BTC2-BP	45
	3201003005		60BTC2-BP	60