

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

- 8, 15, 24, 30, 37, 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 mm² nickel-plated copper conductors
2. Semi-conductive self-regulating matrix
3. Matrix insulation
4. Tinned copper braid
5. Outer jacket (fluoropolymer)

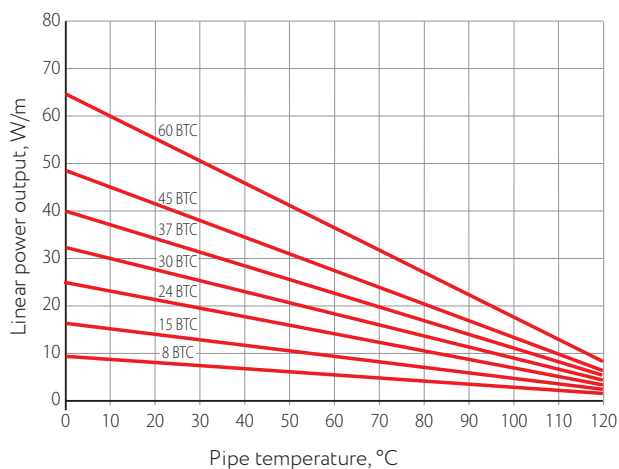
Self-Regulating Heating Cables

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 ²
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



Types

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

Maximum Heating Circuit Length

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

Type	"Cold start" temperature, °C	Recommended maximum lengths			
		10A	16A	20A	32A
8BTC2	10	205	280	290	320
	0	180	245	255	270
	-10	160	218	228	248
15BTC2	10	120	165	200	220
	0	115	155	179	210
	-10	108	150	169	205
24BTC2	10	95	130	147	170
	0	90	125	139	165
	-10	85	120	134	163
30BTC2	10	85	115	120	135
	0	80	110	120	130
	-10	75	105	113	128
37BTC2	10	68	95	106	115
	0	67	98	103	110
	-10	66	97	102	108
45BTC2	10	55	80	85	100
	0	50	80	82	98
	-10	48	78	80	97
60BTC2	10	45	70	73	85
	0	43	68	70	80
	-10	41	66	68	79

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

Example: 15BTC2-BP



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