

Self-Regulating Heating Cables BTCe

BTCe 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 BTCe 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)

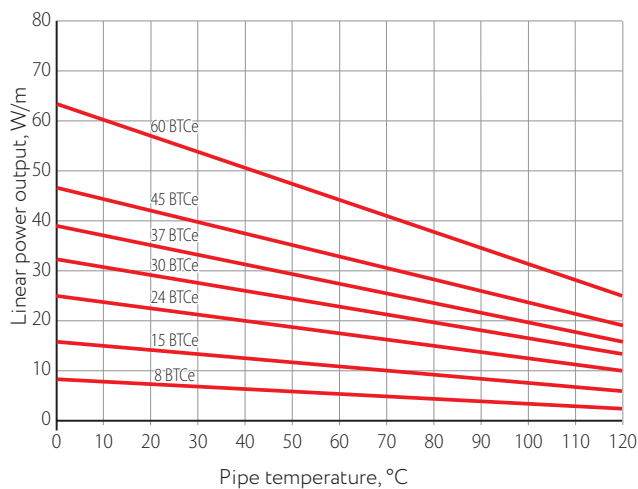
Self-Regulating Heating Cables

Technical Data

Rated voltage	230 VAC
Maximum continuous operating temperature (trace heater energized)	+150 °C
Maximum continuous exposure temperature (trace heater de-energized)	+250 °C
Ambient temperature range	-60 ... +55 °C
Minimum installation temperature: Fluoropolymer outer jacket	-60 °C
Minimum bending radius	25 mm
Ex-marking	Ex 60079-30-1 IIC T3 Gb Ex 60079-30-1 IIIC T200°C Db
Maximum resistance – Braiding	10 Ohm/km
Conductor cross-section	1.25 mm ²
Dimension: Fluoropolymer outer jacket, braiding	10.8×5.3 mm
Weight: Fluoropolymer outer jacket, braiding	14 kg/100 m

Power Output Curve

Nominal power output at rated voltage 230 VAC



Approvals



CETS 23 ATEX 030X

II 2 GD



Ex 60079-30-1 IIC T3 Gb

Ex 60079-30-1 IIIC T200°C Db

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	16A	20A	32A
8BTCe	10	205	280	290	320
	-25	132	180	190	215
15BTCe	10	120	165	175	220
	-25	97	140	147	194
24BTCe	10	95	130	140	170
	-25	79	111	117	167
30BTCe	10	80	115	120	135
	-25	68	97	102	120
37BTCe	10	68	95	100	115
	-25	64	92	92	103
45BTCe	10	55	80	85	100
	-25	44	72	74	92
60BTCe	10	45	70	73	85
	-25	38	61	63	76

Marking

Example: 15BTCe2-BP

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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	Outer jacket color	Name	Power output, W/m
Fluoropolymer outer jacket, braiding	Red	8-BTCe2-BP	8
		15-BTCe2-BP	15
		24-BTCe2-BP	24
		30-BTCe2-BP	30
		37-BTCe2-BP	37
		45-BTCe2-BP	45
		60-BTCe2-BP	60