

Self-Regulating Heating Cable BTXe

BTXe 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 cables comply with requirements of IEC/IEEF 60079-30-1-2017 and IEC 60079-0:2018.

BTXe series is an upgrade version of BTx heating cables but with a higher maximum continuous operation temperature - up to +250 °C.

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 BTXe 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, 30, 45, 60, 75 or 100 W/m
- For extra high temperatures
- 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

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



THERMAL RESISTANCE
UP TO 250 °C

Construction

1. 1.25 mm² (2.00 mm² for 75 W/m, 100 W/m) nickel-plated copper conductors
2. Semi-conductive self-regulating heating matrix
3. Matrix insulation
4. Tinned copper braid
5. Fluoropolymer outer jacket

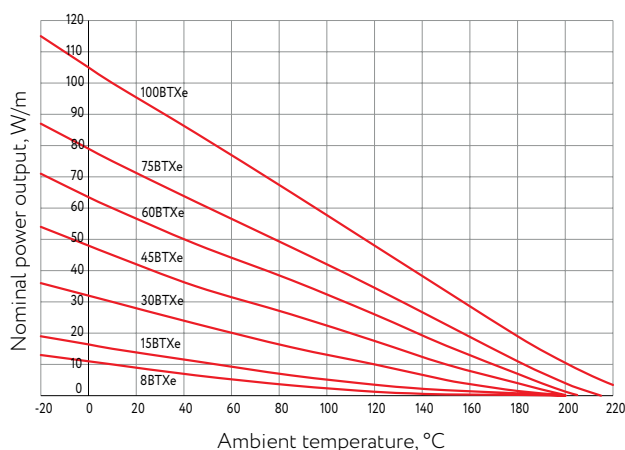
Self-Regulating Heating Cables

Technical Data

Rated voltage	230 VAC
Maximum continuous operating temperature (trace heater energized)	+250 °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
Maximum resistance – Braiding	10 Ohm/km
Conductor cross-section	1.25 or 2.00 mm ²
Dimension: 8BTXe – 60BTXe 75BTXe, 100BTXe	12.1×5.2 mm 14.5×5.9 mm
Weight: 8BTXe – 60BTXe 75BTXe, 100BTXe	153 kg/km 211 kg/km

Power Output Curve

Nominal power output at rated voltage 230 VAC



Approvals



CETS 23 ATEX 030X
II 2 GD



8BTXe – 60BTXe:
Ex 60079-30-1 IIC T3 Gb
Ex 60079-30-1 IIIC T200°C Db
75BTXe, 100BTXe:
Ex 60079-30-1 IIC 240°C (T2) Gb
Ex 60079-30-1 IIIC T300°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			
		16A	20A	32A	50A
8-BTXe	10	135	169	210	210
	-20	110	134	210	210
15-BTXe	10	125	154	205	205
	-20	110	122	205	205
30-BTXe	10	85	102	145	145
	-20	70	82	145	145
45-BTXe	10	65	76	105	105
	-20	50	62	100	100
60-BTXe	10	50	62	90	86
	-20	35	40	75	86
75-BTXe	10	45	50	85	76
	-20	36	40	70	60
100-BTXe	10	35	45	70	84
	-20	31	35	60	76

Marking

Example: 15-BTXe2-BP

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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
5. Outer jacket material: P – Fluoropolymer

Types

Outer jacket type	Order code	Outer jacket color	Name	Power output, W/m
Fluoropolymer outer jacket, braiding	–	Black	8-BTXe2-BP	8
	–		15-BTXe2-BP	15
	–		30-BTXe2-BP	30
	–		45-BTXe2-BP	45
	–		60-BTXe2-BP	60
	–		75-BTXe2-BP	75
	–		100-BTXe2-BP	100