

Self-Regulating Heating Cable BTX

BTX 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 BTX 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, 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 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)

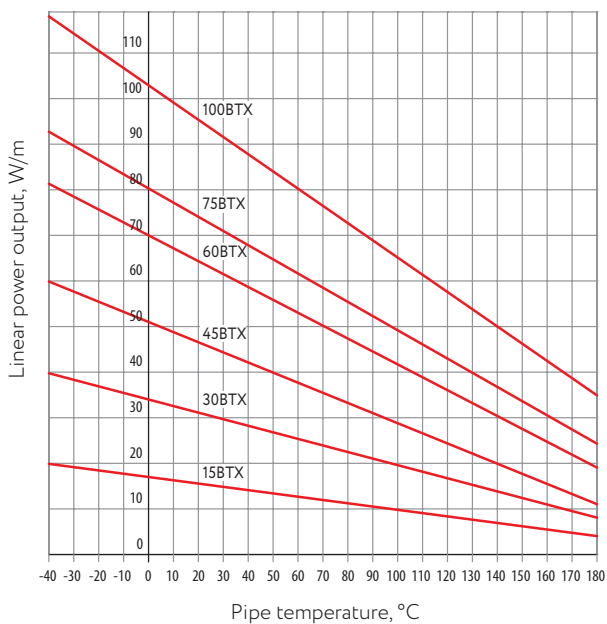
Self-Regulating Heating Cables

Technical Data

Rated voltage	230 VAC
Maximum continuous operating temperature (trace heater energized)	+250 °C
Maximum continuous exposure temperature (trace heater de-energized)	+250 °C
Ambient temperature range	-65 ... +55 °C
Minimum installation temperature: Fluoropolymer outer jacket	-40 °C
Minimum bending radius	35 mm
Maximum braiding resistance	10 Ohm/km
Conductor cross-section	1.25 mm ²
Dimension: 15BTX - 75BTX	12.10 × 5.40 mm
100BTX	14.40 × 5.60 mm
Weight: 15BTX - 75BTX	146 kg/km
100BTX	195 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

Type	Turn-on temperature, °C	Heating circuit length/m at 230 VAC			
		16A	20A	32A	50A
15BTX	10	122	154	172	172
	-20	98	122	172	172
30BTX	10	82	102	122	122
	-20	66	82	122	122
45BTX	10	62	76	100	100
	-20	50	62	98	100
60BTX	10	50	62	86	86
	-20	32	40	62	86
75BTX	10	34	44	70	76
	-20	18	24	38	60
100BTX	10	30	36	58	84
	-20	24	30	50	76

Approvals



Ex e IIC T3 Gb
Ex tb IIIC T200°C Db
IECEx SIR 19.0009 (15BTX - 75BTX)



Ex e IIC T2 Gb
Ex tb IIIC T300°C Db
IECEx SIR 19.0010 (100BTX)

Marking

Example: 15BTX2-BP

① ② ③ ④ ⑤

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
Fluoro-polymer outer jacket, braiding	3201004000	Black	15BTX2-BP	15
	3201004001		30BTX2-BP	30
	3201004002		45BTX2-BP	45
	3201004003		60BTX2-BP	60
	3201004004		75BTX2-BP	75
	3201004005		100BTX2-BP	100