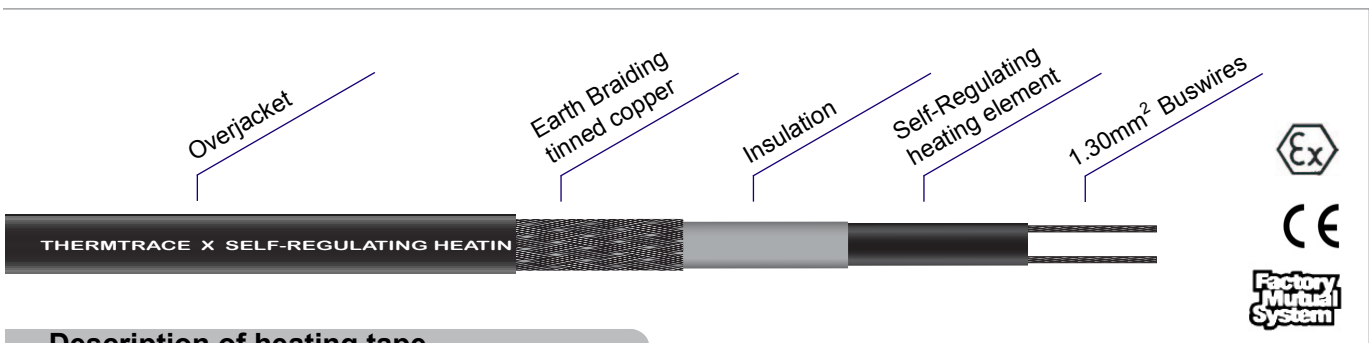


ThermTrace[®] X (TTX) Self-Regulating parallel heating tape

up to 240°C



Description of heating tape

- Self-regulating
- 6 Power Output Ranges
- Cut-to-length

Applications:

ThermTrace X is a construction / industrial grade self-regulating heating tape that may be used for freeze protection, or temperature maintenance of pipework and vessels.

Function:

Self-regulating heating tapes consist of two parallel buswires, embedded in a semi-conductive self-regulating matrix. This means that the heating cable automatically responds to changes in ambient conditions.

With increase in temperature, the synthetic material expands by molecular force, and the connections between the carbon particles diminish, reducing the load. Conversely, as the temperature decreases, the load increases as the connections between the carbon particles increases accordingly.

Thus, the heating power varies according to the temperature of the surface the heating tape is applied to.

Self-regulating heating tapes will not overheat or burnout - even when overlapped.

Performance Ratings

Output wattage:

16 through 98W/m @ 10°C

Supply voltages:

230V or 115V

Continuous maintenance temperature: 190°C max

Intermittent exposure temperature :

(max. 1000 hours exposure time) 240°C max

T Rating:

16 to 49W/m: T4

65 to 98W/m: T3

Braid resistance:

Tinned copper: 0.0098 Ohm/m

Nominal dimensions: 11.75 x 5.4mm

Approvals/Certifications

Factory Mutual:

Ordinary locations

Hazardous locations

Class I, Div 1*, Groups B, C, D

Class I, Div 2, Groups A, B, C, D

Class II/III, Div 1*, Groups E, F, G

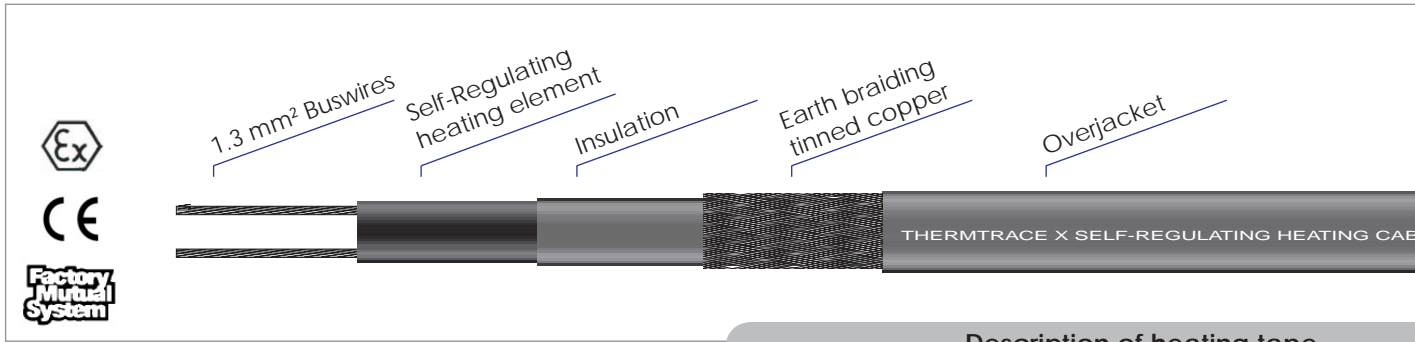
Class II/III, Div 2, Groups F, G

Class I, Zone 1*, Group IIB + H2,

Class I, Zone 2, Group IIC

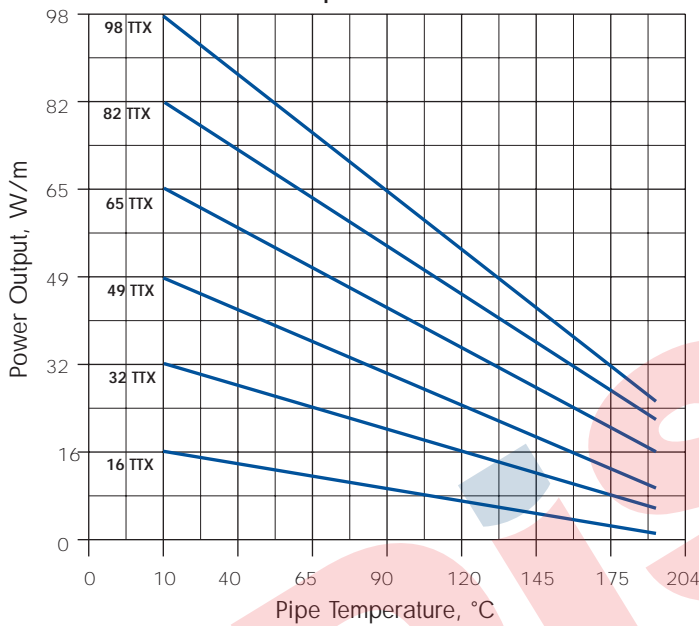
up to 240°C

ThermTrace[®]X (TTX) Self-Regulating parallel heating tape



Description of heating tape

Power Output Curves - TTX Series



Power Adjustment Factor

Part No.	208 Volts	277 Volts
32 TTX-2	.88	1.14
65 TTX-2	.94	1.08
98 TTX-2	.99	1.01

Product Ordering Information

Power output + TTX-Voltage-(Overjacket)

Example 65W/m @10°C with tinned copper braiding and fluoropolymer jacket (240V):

65 TTX-2-BOT

Example 65W/m @10°C with braiding only (115V):

65 TTX-1-B

B: tinned copper braiding

BOT: tinned copper braid and fluoropolymer overjacket

120 Volt Circuit Breaker Sizing vs. Max Circuit Length (m)

Series	Starting Temp.	15A	20A	30A
16 TTX-1	10°C	54	73	102
	-20°C	50	67	100
	-45°C	65	61	91
32 TTX-1	10°C	36	48	54
	-20°C	32	42	54
	-45°C	27	36	54
49 TTX-1	10°C	24	32	41
	-20°C	21	27	41
	-45°C	18	24	36
65 TTX-1	10°C	18	27	36
	-20°C	16	21	41
	-45°C	15	19	30
82 TTX-1	10°C	13	18	26
	-20°C	12	15	24
	-45°C	12	15	24
98 TTX-1	10°C	12	15	21
	-20°C	10	13	21
	-45°C	10	13	21

240 Volt Circuit Breaker Sizing vs. Max Circuit Length (m)

Series	Starting Temp.	15A	20A	30A
16 TTX-2	10°C	109	146	164
	-20°C	99	131	164
	-45°C	88	117	164
32 TTX-2	10°C	73	97	109
	-20°C	70	92	109
	-45°C	68	91	109
49 TTX-2	10°C	48	64	82
	-20°C	42	56	82
	-45°C	36	48	73
65 TTX-2	10°C	35	45	70
	-20°C	33	44	67
	-45°C	32	42	64
82 TTX-2	10°C	27	36	51
	-20°C	24	30	48
	-45°C	24	30	49
98 TTX-2	10°C	24	30	42
	-20°C	21	27	42
	-45°C	21	27	42

NOTE: Recommended circuit breakers to minimize the effect of transit start-up currents.
Westinghouse: Types BA, EB, EHB, FB, HFB. General Electric: E100 Type TEB, E150, Types TED, THED. **Square D:** Types EH, FAIF. The National Electric Code requires ground fault protection of equipment for each branch circuit supplying electrical heating cables or devices.

