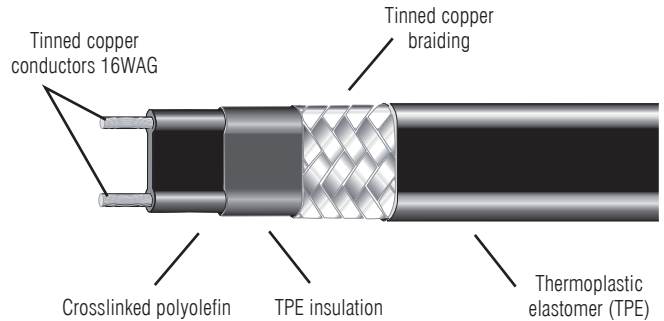


### DESCRIPTION

The Britech ST - SMART TRACE is a self-regulating heating cable to protect against freezing on roofs, in gutters and drains. It can also be used for protection against freezing in pipes. Self-regulating parallel circuit heating cables are the perfect solution for general freeze protection in residential, commercial and industrial applications. The ST - SMART TRACE system is easy to design and install utilizing the required connection kits.

Heating power increases or decreases depending on the ambient temperature. Self-regulation takes effect at every point along the heating cable. Insulation of thermoplastic elastomer (TPE) provides excellent resistance and in connection with the outer jacket offers exceptional moisture and abrasion resistance.

### CABLE CONSTRUCTION



### CABLE SELECTION & DESIGN

For product selection & design assistance please contact Britech at 1-877-335-7790.

### CONNECTION KITS

Britech connection kits must be used with FT heating cables.

- BRI-PEK-1 Power Connection & End Seal Kit
- BRI-TSP-1 T-Splice & End Seal Kit

### CONTROLS & ACCESSORIES

Please refer to Britech catalogue for production selection.

### APPROVALS

Certification

CAN/CSA-C22.2 No. 130-03

1862457; Class: 2878-01, 2878-81  
Class: 2872-01, 2872-81

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

Class II, Div. 2 Groups E, F, G

Class III



### FEATURES

- Protect against freezing on roofs, gutters and drains
- Use for protection against freezing in pipes
- Temperature maintenance up to 65 °C
- Can be cut to length on site
- Will not self-destruct by overheating
- Moisture and abrasion resistant

### TECHNICAL

VOLTAGE:	Available from 120 to 240 Volts
INSTALLATION TEMP:	Minimum installation temperature: -55 °C Minimum switched on temperature: -40 °C
OPERATING TEMP:	Max. operating temperature switched off max. 85 °C (1000 hours cumulative) Max. operating temperature switched on max. 65 °C
CABLE DIMENSION:	10.5 mm x 6 mm
MIN. BENDING RADIUS:	25 mm

### INSTALLATION

Refer to "FT/ST Roof, Gutter & Drain Deicing Manual" and "FT/ST Pipe Heat Tracing Manual" for complete installation instructions. Electrical connection of the heating system and thermostat should be done only by a qualified electrician.

### WARRANTY

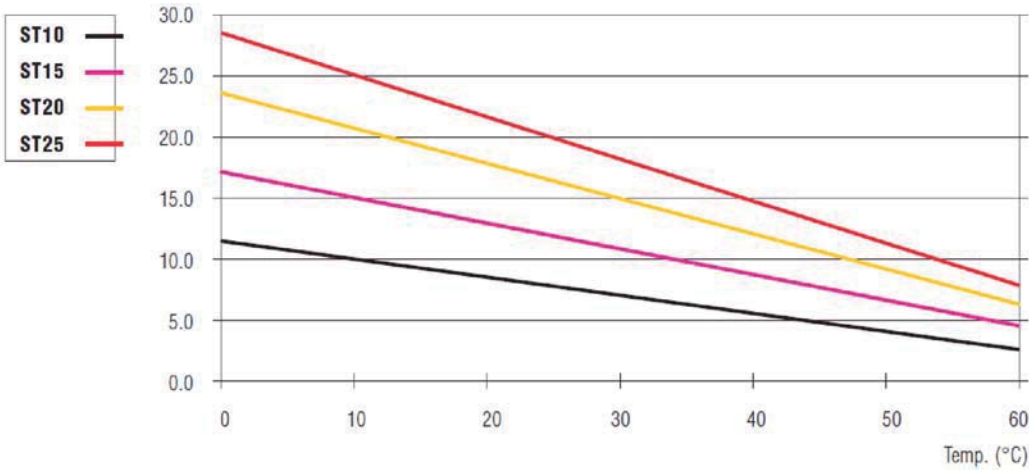
Warranted free from manufacturers defect for 2 years.  
Visit [www.britech.ca](http://www.britech.ca) for Limited Warranty details.



## HEATING POWER

## ST POWER OUTPUT CHARACTERISTICS

Heating cable installed and measured on a pipe in accordance with VDE 0254, EN 62395-1 accept for IEC / EN 62086-1 and IEC 60079-30-1



## MAXIMUM CIRCUIT LENGTH

### Maximum Circuit Length ft (m) based on Circuit Breaker Size (Equipment Protection Type C)

Cable	Start-up Temp		120 V		208 V		240 V		
	Type	[°F]	[°C]	10 A	15 A	10 A	15 A	10 A	15 A
STX10		50	10	161 ft (49 m)	253 ft (77 m)	328 ft (100 m)	427 ft (130 m)	387 ft (118 m)	505 ft (154 m)
		32	0	151 ft (46 m)	236 ft (72 m)	279 ft (85 m)	394 ft (120 m)	328 ft (100 m)	466 ft (142 m)
		5	-15	148 ft (45 m)	223 ft (68 m)	246 ft (75 m)	377 ft (115 m)	295 ft (90 m)	446 ft (136 m)
		-22	-30	128 ft (39 m)	194 ft (59 m)	217 ft (66 m)	328 ft (100 m)	253 ft (77 m)	387 ft (118 m)
STX15		50	10	141 ft (43 m)	190 ft (58 m)	292 ft (89 m)	377 ft (115 m)	341 ft (104 m)	456 ft (139 m)
		32	0	131 ft (40 m)	171 ft (52 m)	236 ft (72 m)	289 ft (88 m)	269 ft (82 m)	377 ft (115 m)
		5	-15	115 ft (35 m)	148 ft (45 m)	194 ft (59 m)	246 ft (75 m)	226 ft (69 m)	292 ft (89 m)
		-22	-30	92 ft (28 m)	128 ft (39 m)	157 ft (48 m)	213 ft (65 m)	184 ft (56 m)	256 ft (78 m)
STX20		50	10	108 ft (33 m)	151 ft (46 m)	230 ft (70 m)	312 ft (95 m)	259 ft (79 m)	361 ft (110 m)
		32	0	95 ft (29 m)	131 ft (40 m)	171 ft (52 m)	246 ft (75 m)	197 ft (60 m)	295 ft (90 m)
		5	-15	82 ft (25 m)	118 ft (36 m)	144 ft (44 m)	207 ft (63 m)	161 ft (49 m)	233 ft (71 m)
		-22	-30	66 ft (20 m)	95 ft (29 m)	118 ft (36 m)	164 ft (50 m)	131 ft (40 m)	190 ft (58 m)
STX25		50	10	82 ft (25 m)	115 ft (35 m)	174 ft (53 m)	236 ft (72 m)	197 ft (60 m)	272 ft (83 m)
		32	0	72 ft (22 m)	105 ft (32 m)	138 ft (42 m)	180 ft (55 m)	157 ft (48 m)	223 ft (68 m)
		5	-15	66 ft (20 m)	92 ft (28 m)	115 ft (35 m)	157 ft (48 m)	128 ft (39 m)	184 ft (56 m)
		-22	-30	49 ft (15 m)	79 ft (24 m)	89 ft (27 m)	135 ft (41 m)	98 ft (30 m)	154 ft (47 m)
STX30		50	10	62 ft (19 m)	-	131 ft (40 m)	-	148 ft (45 m)	-
		32	0	49 ft (15 m)	-	98 ft (30 m)	-	112 ft (34 m)	-
		5	-15	39 ft (12 m)	-	69 ft (21 m)	-	79 ft (24 m)	-
		-22	-30	26 ft (8 m)	-	46 ft (14 m)	-	52 ft (16 m)	-

## SELECTION CHART

### 120V

- ST110-1410P-120V (3W/ft)
- ST115-1410P-120V (4.5W/ft)
- ST120-1410P-120V (6W/ft)
- ST125-1410P-120V (7.6W/ft)
- ST130-1410P-120V (9W/ft)

### 208V (Adjusted from 240V)

- ST210-1410P-208V (2.7W/ft)
- ST215-1410P-208V (4.1W/ft)
- ST220-1410P-208V (5.4W/ft)
- ST225-1410P-208V (6.8W/ft)
- ST230-1410P-208V (8.1W/ft)

### 240V

- ST210-1410P-240V (3W/ft)
- ST215-1410P-240V (4.5W/ft)
- ST220-1410P-240V (6W/ft)
- ST225-1410P-240V (7.6W/ft)
- ST230-1410P-240V (9W/ft)

Catalogue number: ST X XX - 1410P

- ① Supply voltage: 1-120V, 2-208--240V
- ② Heat output at 10°C, watts/m