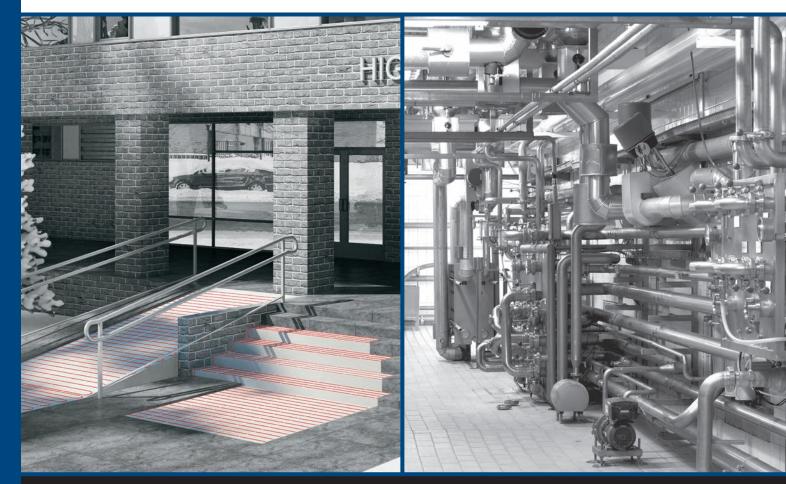


# BRITECH BY:



2023 PRODUCT CATALOG

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Prices, specifications and warranties may change without prior notice.

# **Pictogram Legend**



Indoor Floor Warming



Outdoor Snow Melting



Self-Regulating Heating Cable suitablefor use in potable water

Cable for Roof and Gutter De-icing



Cable for Pipe Tracing



Cable for Industrial Use



Cable for Pipe Freeze Protection



### **TECH-MAT Floor Heating Cable on Mat**

#### Features

#### Voltage

- 120V, 240/208V, 1-phase.

#### **Cold lead length**

- 10′ (3 m).

#### Construction

- Heating cable made of a twin conductor fastened to an adhesive fibreglass mat for a simpler and faster installation with negligible magnetic field.

#### Watt density

- 12W/sq. ft. (130W/sq. m), 3" (76 mm) spacing.

#### Dimension

- Mats of 18 in. (0.46 m) in width offered in several lengths.

#### Control

- Two types of control method possible (see instruction manual for details):
- Surface heating control with electronic thermostat in floor mode (F) and temperature sensor.
- Ambient heating control with electronic thermostat in ambient mode with floor limit (A or AF) and temperature sensor.

Note: A ground fault circuit interrupter (GFCI) must be used with this heating device unless exempted by the applicable national and/or local electrical code for the area of installation.

#### **Included materials**

- 15' (4.6 m) floor sensor.
- Measurements table label (to be placed in electrical panel).

#### Installation

- Never cut or shorten the heating cable.
- For indoor applications only.
- On concrete slab or plywood subfloor.

#### Warranty

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- 25-year warranty on the heating cable.

#### Application

- Kitchen, bathroom, entrance way, family room, living room.







#### 120V Models

Watts	Product # 120V	Price	Amp.	Resistance Ohms	Covered surface <sup>1</sup> sq. ft.	Length of mat ft.	Width of mat ft.
60	FHM120-60		0.5	240	5	3.3	1.5
120	FHM120-120		1.0	120	10	6.7	1.5
180	FHM120-180		1.5	80	15	10.0	1.5
240	FHM120-240		2.0	60	20	13.3	1.5
300	FHM120-300		2.5	48	25	16.7	1.5
360	FHM120-360		3.0	40	30	20.0	1.5
420	FHM120-420		3.5	34	35	23.3	1.5
480	FHM120-480		4.0	30	40	26.7	1.5
540	FHM120-540		4.5	27	45	30.0	1.5
600	FHM120-600		5.0	24	50	33.3	1.5
720	FHM120-720		6.0	20	60	40.0	1.5
840	FHM120-840		7.0	17	70	46.7	1.5
960	FHM120-960		8.0	15	80	53.3	1.5

#### 240/208V Models

Watts	Product # 240/208V	Price	Amp.	Resistance Ohms	Covered surface <sup>1</sup> sq. ft.	Length of mat ft.	Width of mat ft.
120	FHM240-120		0.5	480	10	6.7	1.5
240	FHM240-240		1.0	240	20	13.3	1.5
360	FHM240-360		1.5	160	30	20	1.5
480	FHM240-480		2.0	120	40	26.7	1.5
600	FHM240-600		2.5	96	50	33.3	1.5
720	FHM240-720		3.0	80	60	40	1.5
840	FHM240-840		3.5	69	70	46.7	1.5
960	FHM240-960		4.0	60	80	53.3	1.5
1080	FHM240-1080		4.5	53	90	60	1.5
1200	FHM240-1200		5.0	48	100	66.7	1.5
1440	FHM240-1440		6.0	40	120	80	1.5

<sup>1</sup> Does not represent the surface of the room but rather the surface covered by the floor heating system, excluding the fixtures and other spaces to consider.

208V = 75% of wattage at 240V.

15' (4.6 m) floor sensor and 10' (3 m) cold lead included.

The color of the mesh may be different.

### Options

Product # Kit	Price	Description
OTM-CC		CableCheck - Electrical fault indicator
OTM-SA		Adhesive spray to secure the mat on concrete slab, 16.75 oz (474 g)
KIT-SP1		Repair kit
KIT-CBL-SN		15 ft. (4.6 m) floor sensor



# **BRI-THIN Floor Heating Cable for Installation with Strapping**

#### Features

#### Voltage

- 120V, 240/208V, 1-phase.

#### **Cold lead length**

- 10′ (3 m).

#### Construction

- Heating cable made of a twin conductor for a simpler and faster installation, compatible with uncoupling membrane systems.

#### Watt density

- Up to 12 W/sq. ft. (130W/sq. m), 4" (102 mm) spacing.
- 4W/ft. linear output.

#### Cable diameter

- 1/8" (3.3 mm).

#### Control

- Two types of control method possible (see instruction manual for details):
   Surface heating control with electronic thermostat in floor mode (F)
- and temperature sensor.
  Ambient heating control with electronic thermostat in ambient mode
- Ambient heating control with electronic thermostat in ambient mode with floor limit (A or AF) and temperature sensor.

Note: A ground fault circuit interrupter (GFCI) must be used with this heating device unless exempted by the applicable national and/or local electrical code for the area of installation.

#### Included materials

- Plastic strapping.
- Measurements table label (to be placed in electrical panel).

#### Installation

- Never cut or shorten the heating cable.
- For indoor applications only.
- On concrete slab or plywood subfloor or existing sub-floor.

#### Warranty

- 20-year warranty on the heating cable.

#### Application

- Kitchen, bathroom, entrance way, family room, living room.







#### 120V Models

Watts	Product # 240V	Price	Amp.	Resistance Ohms	Covered surface <sup>1</sup> sq. ft.	Cable length ft.
67			0.6		•	17
	FHTC120-67		0.6	214.9	5 to 7	
120	FHTC120-120		1.0	120.0	8 to 12	30
192	FHTC120-192		1.6	75.0	13 to 20	51
312	FHTC120-312		2.6	46.2	21 to 30	87
396	FHTC120-396		3.3	36.4	31 to 40	107
480	FHTC120-480		4.0	30.0	41 to 50	128
612	FHTC120-612		5.1	23.5	51 to 60	156
756	FHTC120-756		6.3	19.0	61 to 75	194
900	FHTC120-900		7.5	16.0	76 to 90	225
1056	FHTC120-1056		8.8	13.6	91 to 105	287
1192	FHTC120-1192		9.9	12.1	106 to 120	298
1376	FHTC120-1376		11.5	10.5	121 to 140	344
1558	FHTC120-1558		13.0	9.2	141 to 155	390
1620	FHTC120-1620		13.5	8.9	156 to 170	405

#### 240/208V Models

Watts	Product # 240/208V	Price	Amp.	Resistance Ohms	Covered surface <sup>1</sup> sq. ft.	Cable length ft.
133	FHTC240-133		0.6	433.1	9 to 15	33
240	FHTC240-240		1.0	240.0	16 to 25	60
384	FHTC240-384		1.6	150.0	26 to 40	102
624	FHTC240-624		2.6	92.3	41 to 60	174
792	FHTC240-792		3.3	72.7	61 to 80	213
960	FHTC240-960		4.0	60.0	81 to 95	256
1224	FHTC240-1224		5.1	47.1	96 to 125	312
1512	FHTC240-1512		6.3	38.1	126 to 150	387
1800	FHTC240-1800		7.5	32.0	151 to 180	449
2016	FHTC240-2016		8.4	28.6	181 to 200	515
2400	FHTC240-2400		10.0	24.0	201 to 240	592
2590	FHTC240-2590		10.8	22.2	241 to 260	649
2750	FHTC240-2750		11.5	20.9	261 to 275	688
2990	FHTC240-2990		12.5	19.3	276 to 300	748
3240	FHTC240-3240		13.5	17.8	301 to 325	810

<sup>1</sup> Does not represent the surface of the room but rather the surface covered by the floor heating system, excluding the fixtures and other spaces to consider. 208V = 75% of wattage at 240V.

#### Options

Product # Kit	Price	Description
OTM-CC		CableCheck - Electrical fault indicator
KIT-SP1		Repair kit
KIT-CBL-SN		15 ft. (4.6 m) floor sensor

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# **BWC-M**

# Heating Cable for Concrete on Mat

#### Features

#### Voltage

- 240/208V, 347V, 1-phase.

#### Construction

- Twin conductor heating cable attached to a plastic mat with negligible magnetic field.

#### Watt density

- 11W/sq. ft. (120W/sq. m), factory installed on mat at 6" (15 cm) spacing.

#### Dimension

- 24" (0.6 m) wide mat available in several lengths.

#### **Cold lead length**

- 8' 2" (2.5 m) cold lead included.
- Optional 50' (15 m) cold lead available upon request.

#### Control

- Two types of control method possible (see instruction manual for details):
   Surface heating control with electronic thermostat in floor mode (F) and temperature sensor.
- Ambient heating control with electronic thermostat in ambient mode with floor limit (A or AF) and temperature sensor.

Note: A ground fault circuit interrupter (GFCI) must be used with this heating device unless exempted by the applicable national and/or local electrical code for the area of installation.

#### Included materials

- 15' (4.6 m) temperature sensor.
- Plastic floor fasteners (KIT-WC-CLP).
- Measurement table label (to be placed in for electrical panel).

#### Installation

- Never cut or shorten the heating cable.
- For indoor applications only, residential or commercial.
- Installs under a 4" to 6" (10 cm to 15 cm) concrete slab or under a  $1.5^{\prime\prime}$  to 4" concrete topping (4 cm to 10 cm).
- Note: It's highly recommended to insulate the concrete slab in order to avoid heat loss from below (see instruction manual for all installation details).
- Compatible with most floor coverings (check with the dealer or manufacturer).
- Installation with or without metallic structure for reinforced concrete.

#### Warranty

- 20-year warranty on the heating cable.

#### Application

 Basement, garage, bathroom, kitchen, family room, workshop, pool, shower, entrance way, hospital, hotel, factory, business, restaurant, sunroom, greenhouse, buildings used for housing animals.







#### **BWC-M** Heating Cable for Concrete on Mat



#### Models

Product #		Duico	Product #		Covered	surface <sup>1</sup>	Len	gth	Wei	ght
Watts	240/208V	Price	347V	Price	sq. ft.	sq. m	ft. in.	m	lb	kg
150	BWC-M0150		-		14.0	1.3	6′5"	1.9	3.0	1.4
200	BWC-M0200		-		19.0	1.7	8' 4"	2.5	3.7	1.7
300	BWC-M0300		-		28.0	2.6	12′6"	3.8	4.0	1.8
400	BWC-M0400		-		38.0	3.5	16′8"	5.1	4.5	2.0
500	BWC-M0500		-		46.5	4.3	20'10"	6.4	5.0	2.3
600	BWC-M0600		-		56.0	5.2	25'	7.6	6.0	2.7
700	BWC-M0700		-		65.5	6.1	29′2"	8.9	7.0	3.1
850	BWC-M0850		-		80.0	7.4	35′5"	10.8	8.0	3.6
950	BWC-M0950		-		89.0	8.3	39′7"	12.1	9.0	4.0
1100	BWC-M1100		-		103.0	9.6	45'10"	14.0	10.0	4.5
1200	BWC-M1200		-		113.0	10.5	50'	15.2	11.0	5.0
1300	BWC-M1300		-		121.5	11.3	54′2"	16.5	12.0	5.4
1400	BWC-M1400		-		130.5	12.1	58' 4"	17.8	13.0	6.0
1500	BWC-M1500		-		140.5	13.1	62′6"	19.1	14.0	6.4
1600	BWC-M1600		-		149.5	13.9	66' 8"	20.3	15.0	6.8
1700	BWC-M1700		-		159.0	14.8	70'10"	21.6	16.0	7.2
1850	BWC-M1850		-		172.5	16.0	77' 1"	23.5	17.0	7.8
2000	BWC-M2000		BWC-M2007		187.5	17.4	83′4"	25.4	18.0	8.1
2200	BWC-M2200		-		206.0	19.1	91′6"	27.9	21.0	9.5
2400	BWC-M2400		BWC-M2407		225.0	20.9	100′	30.5	23.0	10.4
2550	BWC-M2550		-		239.0	22.2	106′6"	32.5	25.0	11.3
2700	BWC-M2700		BWC-M2707		253.0	23.5	112′6"	34.3	28.0	12.7
2850	BWC-M2850		-		267.0	24.8	119′	36.3	30.0	13.6
3000	BWC-M3000		BWC-M3007		281.0	26.1	125′	38.1	32.0	14.5
3200	BWC-M3200		-		300.0	27.9	133′6"	40.7	34.0	15.4
3400	BWC-M3400		BWC-M3407		318.5	29.6	141'8"	43.2	36.0	16.3
3600	BWC-M3600		-		336.0	31.2	150'	45.7	38.0	17.2
3700	-		BWC-M3707		346.5	32.2	154′ 2"	47.0	39.0	17.7
4000	-		BWC-M4007		375.0	34.8	166′8"	50.8	42.0	19.0

<sup>1</sup> Does not represent the room surface but rather the area covered by the cable mat including 3" (7.5 cm) spacing between the mat strips but excluding fixed elements to be bypassed and any other required clearances. 208V = 75% of wattage at 240V.

#### Options

Product # Kit	Product # Factory installed*	Price	Description
OTM-CC <sup>1</sup>	-		CableCheck – Electrical indicator
KIT-WC-CLP	-		Bag of 50 plastic floor fasteners for heating cable on mat
KIT-SP2	-		Repair kit
KIT-CBL-SN	-		15 ft. (4.6 m) floor sensor
-	50 <sup>2</sup>		Optional 50' (15 m) cold lead

\* For factory installed options, add the option number to the product number. ! With any BWC order, the accessory OTM-CC can be added free of charge upon customer request.

 $^{\rm 2}$  Made to order only. Allow additional 9 to 12 weeks lead time.

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# Heating Cable for Concrete in Reel

#### Features

#### Voltage

- 240/208V 1-phase.

#### Construction

- Twin conductor heating cable with negligible magnetic field.

#### Watt density

- 11W/sq. ft. (120W/sq. m), recommended installation 6" (15 cm) spacing.

#### **Cold lead length**

- 8'2" (2.5 m) cold lead included.
- Optional 50' (15 m) cold lead available upon request.

#### Control

- Two types of control method possible (see instruction manual for details):
- Surface heating control with electronic thermostat in floor mode (F) and temperature sensor.
- Ambient heating control with electronic thermostat in ambient mode with floor limit (A or AF) and temperature sensor.

Note: A ground fault circuit interrupter (GFCI) must be used with this heating device unless exempted by the applicable national and/or local electrical code for the area of installation.

#### **Included** materials

- 15' (4.6 m) temperature sensor.
- Plastic tie-wraps.
- Measurement table label (to be placed in for electrical panel).

#### Installation

- Never cut or shorten the heating cable.
- For indoor applications only, residential or commercial.
- Installs under a 4" to 6" (10 cm to 15 cm) concrete slab or under a 1 1/2" to 4" concrete topping (4 cm to 10 cm).

Note: It's highly recommended to insulate the concrete slab in order to avoid heat loss from below (see instruction manual for all installation details).

- Requires a metallic structure or wire mesh for reinforced concrete with spacing of 6" (15 cm) for the installation.
- Compatible with most floor coverings (check with the dealer or manufacturer).

#### Warranty

- 20-year warranty on the heating cable.

#### Application

- Basement, garage, bathroom, kitchen, family room, workshop, pool, shower, entrance way, hospital, hotel, factory, business, restaurant, sunroom, greenhouse, buildings used for housing animals.







Watts	Product #	Product # 240/208V	Price	Covered sur Price Spacing 6" (1		Cable	Cable length		ight
	240/2004		sq. ft.	sq. m	ft.	m	lb	kg	
300	BWC-R0300		28.0	2.6	56	17.07	4.0	1.8	
500	BWC-R0500		46.5	4.3	93	28.35	5.0	2.3	
700	BWC-R0700		62.5	5.8	125	38.10	7.0	3.1	
950	BWC-R0950		88.0	8.2	176	53.64	9.0	4.0	
1300	BWC-R1300		125.0	11.6	250	76.20	12.0	5.4	
1700	BWC-R1700		156.0	14.5	312	95.10	16.0	7.2	
2000	BWC-R2000		187.0	17.4	374	114.00	18.0	8.1	
2400	BWC-R2400		218.5	20.3	437	133.20	23.0	10.4	
3000	BWC-R3000		279.5	26.0	559	170.38	32.0	14.5	
3400	BWC-R3400		312.5	29.03	625	190.50	36.0	16.3	
3700	BWC-R3700 <sup>2</sup>		341.0	31.7	682	207.87	39.0	17.7	
4000	BWC-R4000 <sup>2</sup>		372.5	34.6	745	227.08	42.0	19.0	

<sup>1</sup> Does not represent the room surface but rather the area covered by the cable while leaving a 6" (15 cm) spacing between cables and excluding fixed elements to be bypassed and any other clearance required. <sup>2</sup> Not compatible with a floor heating thermostat rated for 15A and less. Requires relay with low voltage thermostat. 208V = 75% of wattage at 240V.

#### Options

Product # Kit	Product # Factory installed*	Price	Description
OTM-CC <sup>1</sup>	-		CableCheck – Electrical indicator
KIT-SP2	-		Repair kit
KIT-CBL-SN	-		15 ft. (4.6 m) floor sensor
-	50 <sup>2</sup>		Optional 50' (15 m) cold lead

\* For factory installed options, add the option number to the product number.

<sup>1</sup> With any BWC order, the accessory OTM-CC can be added free of charge upon customer request.

<sup>2</sup> Made to order only. Allow additional 9 to 12 weeks lead time.



# Heating Cable for Snow Melting in Reel

#### Features

#### Voltage

- 208V, 240V and 600V, 1-phase.

#### Construction

- Series heating cable set, twin conductor type.
- Heating cable held as a mat at regular 3" (76 mm) spacing with flexible strips.
- Fluoropolymer/XLPE resistance wire insulation 0.019" (0.5 mm) thick.
- Copper shielding (0.823 sq. mm) serves as ground.
- Polyolefin (EPR) outer sheath insulation 0.08" (2 mm) thick.

#### Watt density

- 11W/ft. linear (538W/sq. m) at 208, 240V and 600V

#### Cold lead

- 16' (5 m) long.
- 12 AWG or 14 AWG (according to maximum allowable load).
- PVC outer sheath insulation 0.03" (0.76 mm) thick.
- 3/8" (9.5 mm) outer diameter.

#### **Included materials**

- Measurements table label (to be placed in electrical panel).

#### Installation

- Never cut or shorten the heating cable.
- For outdoor applications only.
- The heating cable must be completely embedded in concrete, asphalt
- or stone dust under paving.
- Minimum installation temperature -5 °C (23 °F).
- Maximum long-term exposure temperature 105 °C (221 °F).
- Maximum exposure temperature for 10 minutes 220 °C (428 °F).

#### Warranty

- 20-year warranty on heating cable.

#### Application

- Residential, commercial driveway, sidewalk, access ramp, underground parking ramp, boarding platforms for animals.







#### 240V Models

Watts	Product #	Price	Duizo Ama	Resistance	Covered surface <sup>1</sup>			Cable length
watts	240V	Flice	Amp.	Ohms	@45W/sq. ft.		@32W/sq. ft.	ft.
970	SMCT-240-970		4.0	59.4	21	to	30	88.6
1440	SMCT-240-1440		6.0	40.0	32	to	45	131.2
1950	SMCT-240-1950		8.1	29.5	43	to	61	177.2
2160	SMCT-240-2160		9.0	26.7	48	to	67	196.9
2890	SMCT-240-2890		12.0	19.9	64	to	90	262.5
3900	SMCT-240-3900		16.3	14.8	87	to	122	354.3
4330	SMCT-240-4330		18.0	13.3	96	to	135	393.6
4870	SMCT-240-4870		20.3	11.8	108	to	152	442.7

#### 208V Models

Watts	Product #	Price	A	Resistance	Cover	ed su	ırface <sup>1</sup>	Cable length
walls	208V	Price	Amp.	Ohms	@45W/sq. ft.		@32W/sq. ft.	ft.
960	SMCT-208-960		4.6	45.1	21	to	30	88.6
1440	SMCT-208-1440		6.9	30.0	32	to	45	131.2
1920	SMCT-208-1920		9.2	22.5	43	to	61	177.2
2160	SMCT-208-2160		10.4	20.0	48	to	67	196.9
2880	SMCT-208-2880		13.8	15.0	64	to	90	262.5
3900	SMCT-208-3900		18.8	11.1	87	to	122	354.3
4320	SMCT-208-4320		20.8	10.0	96	to	135	393.7
4920	SMCT-208-4920		23.7	8.8	108	to	152	442.9

#### 600V Models

Watts	Product #	Price	0.000	Resistance	Cover	ed su	Irface <sup>1</sup>	Cable length
Walls	600V	Price	Amp.	Ohms	@45W/sq. ft.		@32W/sq. ft.	ft.
960	SMCT-600-960		1.6	375	21	to	30	88.6
1440	SMCT-600-1440		2.4	250	32	to	45	131.2
1920	SMCT-600-1920		3.2	187.5	43	to	61	177.2
2160	SMCT-600-2160		3.6	166.7	48	to	67	196.9
2880	SMCT-600-2880		4.8	125	64	to	90	262.5
3900	SMCT-600-3900		6.5	92.3	87	to	122	354.3
4320	SMCT-600-4320		7.2	83.3	96	to	135	393.7
4920	SMCT-600-4920		8.2	73.2	108	to	152	442.9
6000	SMCT-600-6000		10	60	133	to	187	548.0

<sup>1</sup> Represents the area covered by the heating system excluding fixed elements to be bypassed and any other clearance required.

The covered surface will vary according to the spacing between the cables. Refer to the installation manual to determine the proper spacing.

#### Options

Product # Kit	Product # Factory installed*	Price	Description
OTM-CC1	-		CableCheck – Electrical indicator
BRIPPS-75	-		75 ft. (23 m) galvanized steel cable clip strip for installation
KIT-SP2	-		Repair kit
-	100 <sup>2</sup>		Optional 100' (30 m) cold lead

\* For factory installed options, add the option number to the product number.

<sup>1</sup> With any SMCT order, the accessory OTM-CC can be added free of charge upon costumer request.

<sup>2</sup> Made to order only. Allow additional 9 to 12 weeks lead time.



### Single Conductor Series Resistance Custom Cable Assembly for Snow Melting and De-icing Applications

#### Features

#### Voltage

- 120V to 600V (max).

#### Cold lead

- Standard length 15 ft. (4.57 m).
- Longer lengths available (See Options table).

#### **Cable diameter**

- 6 mm to 6.5 mm (See Models table for details).

#### Bending radius, minimum

- 5x cable diameter.
- Maximum operating temperature
- 65 °C (149 °F).

#### Construction

- Stranded resistance heating wire with XLPE insulation, tinned copper grounding conductor, aluminum sheath, and PVC outer jacket.

#### Warranty

- 10-year limited warranty on the resistance cable.

#### Controls

- The slab temperature must be monitored and controlled. Requires a ground fault circuit-interrupter (GFCI).

Made to order product, to obtain a quote please contact factory.







		Resistance	Cable outer diameter	Weig	ht per
Cable family	Cable reference #	(Ohms) per metre	mm	100 m kg	300 ft. Ib
TXLP1	10156651	12.7	6.0	4.6	11.1
TXLP1	10156650	7.7	6.0	4.6	11.1
TXLP1	10156649	5.35	6.0	4.6	11.1
TXLP1	10156648	3.5	6.1	4.9	11.8
TXLP1	10156647	2.5	6.1	5.1	12.3
TXLP1	10156646	1.4	6.1	5.0	12.0
TXLP1	10156645	1.0	6.3	5.2	11.8
TXLP1	10156644	0.7	6.3	5.1	12.3
TXLP1	10156613	0.49	6.3	5.3	12.0
TXLP1	10156612	0.3	6.3	5.3	12.8
TXLP1	10156611	0.2	6.3	5.3	12.8
TXLP1	10156610	0.13	6.5	5.6	12.5
TXLP1	10156609	0.09	6.3	5.3	12.8
TXLP1	10156608	0.07	6.5	5.6	13.4
TXLP1	10156607	0.05	6.5	5.7	13.6
TXLP1	10156606	0.02	6.5	5.8	13.8
TXLP1	10156651	12.7	6.0	4.6	11.1
TXLP1	10156650	7.7	6.0	4.6	11.1
TXLP1	10156649	5.35	6.0	4.6	11.1
TXLP1	10156648	3.5	6.1	4.9	11.8
TXLP1	10156647	2.5	6.1	5.1	12.3
TXLP1	10156646	1.4	6.1	5.0	12.0

15 ft. (4.57 m) cold lead included. Longer lengths available in option.

#### Options

Product #	Price	Description
<b>Factory installed</b>	only	
25		25 ft. (2.3 m) cold lead
50		50 ft. (15 m) cold lead
75		75 ft. (23 m) cold lead
100		100 ft. (30.48 m) cold lead
Kit		
BRIPPS-75		75 ft. (23 m) galvanized steel cable clip strip for installation
KIT-SP3		Repair kit

#### Product description code (example)

Product #	TXLP1-1015	6651-42	69-24	10-34	11-1	5
Cable family						
Cable reference #						
Total output (Watts) ———			]			
Voltage						
Heated length					J	
Cold lead length Standard 15 ft. (4.57 m)						

Made to order product, to obtain a quote please contact factory.



### THERMA-PIPE 120V Preassembled Series Resistance Heating Cable for Pipes

#### Features

Nominal voltage

- 120V.

Linear density - 7 Watts per foot.

Cold lead length

- 30 in. (0.76 m). **Outer jacket** 

- PVC.

Bus wire - Nickel plated copper.

Minimum bend radius

- 5/16 in. (8 mm).

Rating

- Wet rated, for outdoor use (WS).

Included hardware

- Built-in bi-metal thermostat energizes the cable when temperature falls below 4  $^{\circ}\text{C}$  (40  $^{\circ}\text{F}\text{)}.$
- Grounded 3-pronged plug with indicator light to show when the cable is on.

#### Installation

- Never cut or shorten the heating cable.
- Installation under the insulation of the pipe.
- For indoor and outdoor applications.
- Minimum installation temperature: 0 °C (32 °F).

#### **Operating temperature**

- Max. continuous operating temperature : 25 °C (77 °F).

#### Warranty

- 2-year basic warranty on the heating cable.

#### Application

- Metallic and non-metallic pipes.
- Helps to prevent damage caused by frozen pipes.









	Product #	Price Amp.		Ler	Watts	
	Product #	Price	Amp.	ft.	m	Walls
3	BFPC1-1A003		0.18	3	0.9	21
6	BFPC1-1A006		0.35	6	1.8	42
9	BFPC1-1A009		0.51	9	2.7	63
(12)	BFPC1-1A012		0.70	12	3.7	84
(15)	BFPC1-1A015		0.88	15	4.6	105
(18)	BFPC1-1A018		1.05	18	5.5	126
24)	BFPC1-1A024		1.40	24	7.3	168
30	BFPC1-1A030		1.75	30	9.0	210
(40)	BFPC1-1A040		2.34	40	12.2	280
60	BFPC1-1A060		3.50	60	18.3	420
80	BFPC1-1A080		4.67	80	24.4	560

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pipe length			Pipe diameter		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1/2"	3/4"	1"	1.25"	1.5"
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	13	13	13	13	13
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	13	13	13	23	23
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	13	13	23	23	23
8         16         16         16         13+16         13+16           9         19         19         19         19         19         19           10         19         19         19         19         19         19           11         19         19         19         26         26           11         19         19         19         26         26           12         10         10         10         10         10         10           13         10         10         10         10         16+19         16+19           14         10         10         10         16+19         16+19           15         16         16         16         16         16         16           16         16         16         16         16         16         16         19           17         16         16         16         16         19         29         29           18         18         18         18         18         18         19         19           20         18         18         18         18         19 <t< td=""><td>6</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td></t<>	6	16	16	16	16	16
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	16	16	16	13+16	13+16
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	16	16	16	13+16	13+16
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	19	19	19	19	19
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	19	19	19	19	26
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	19	19	19	26	26
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12	112	112	112	112	112
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	112	112	112	112	16+19
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14	112	112	112	16+19	16+19
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	115	115	115	115	115
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	16	115	115	115	115	29
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	17	115	115	115	29	29
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	118	118	118	118	118
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20	118		118	118	19+11
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	22	212	212	212	212	212
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24	124	124	124	124	124
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	26	124	124	124	112+115	112+115
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	28	112+115	112+115	112+115		112+115
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	30	130		130	130	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	35	218	218	218	218	218
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	140	140	140	140	140
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	45	118+124	118+124	118+124	118+124	118+124
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	50	224	224	224	224	112+140
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	55	124+130	124+130	124+130	124+130	118+140
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	60	160	160	160	160	160
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	65	16+10	16+10	16+10	16+10	16+160
80         1@         1@         1@         1@           85         1@+1@         1@+1@         1@+1@         1@+1@           90         1@+1@         1@+1@         1@+1@         1@+1@	70	140+130	140+130	140+130	140+130	112+160
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	75	115+160	115+160		115+160	115+160
90 130+160 130+160 130+160 130+160 130+160	80	1 80	1 80	180	180	1 80
	85	124+160	124+160	124+160	124+160	16+180
95 1(18), 1(18), 1(18), 1(18), 1(18), 1(10),	90	130+160	130+160	130+160	130+160	130+160
	95	118+180	118+180	118+180	118+180	118+180
100 140+160 140+160 140+160 140+160 140+160	100	140+160	140+160	140+160	140+160	140+160

#### **Pipe insulation**

The pipe length chart is calculated based on 1/2" fiberglass insulation. Closed-cell flexible foam insulation may also be used.

#### **Temperature maintenance**

The pipe length chart is based on the generally accepted maintenance temperature 4 °C (40 °F) for freeze protection.

#### **Pipe sizes**

For pipe sizes not listed on the pipe length chart or for more information and assistance with cable selection contact Britech.

#### **Ordering information**

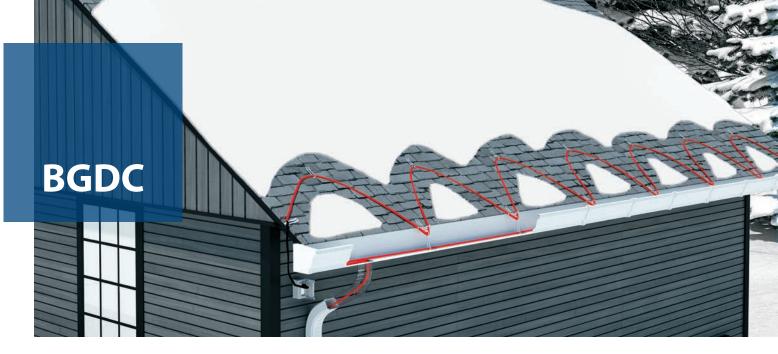
Product selection is based on length of pipe. Use the pipe length chart to select the proper cables by determining the pipe length and diameter.

#### Examples:

1<sup>60</sup> = One BFPC1-1A060 heating cable.

 $2^{3}$  = Two BFPC1-1A003 heating cable.

1<sup>(1)</sup>+1<sup>(1)</sup> = One BFPC1-1A012 + One BFPC1-1A015 heating cables.



### THERMA-ROOF 120V Preassembled Series Resistance Heating Cable for Roof and Gutter De-icing

#### Features

Nominal voltage

- 120V.

Linear density - 5 Watts per foot.

Cold lead length

- 30 in. (0.76 m).

Outer jacket - PVC.

Bus wire

- Nickel plated copper. Minimum bend radius

#### - 1/2 in. (12 mm).

Rating

- Wet rated, for outdoor use (WS).

Included hardware

- Roof clips for cable and spacers.
- Grounded 3-pronged plug with indicator light to show when the cable is on.

#### Installation

- Never cut or shorten the heating cable.
- For outdoor applications only.
- Minimum installation temperature: -18  $^\circ C$  (0  $^\circ F).$

#### **Operating temperature**

- Max. continuous operating temperature: 25 °C (77 °F).

#### Warranty

- 2-year basic warranty on the heating cable.

#### Application

- Roof and gutter de-icing.





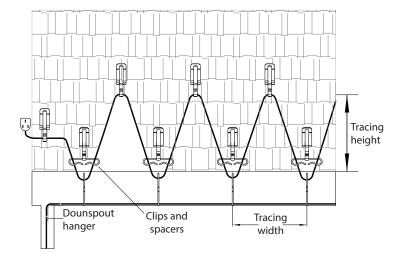




Product #	Price	Amp.	Ler	Watts	
Product #	Price	Amp.	ft.	m	watts
BGDC1-1A020		0.8	20	6.1	100
BGDC1-1A030		1.3	30	9.1	150
BGDC1-1A060		2.5	60	18.3	300
BGDC1-1A080		3.3	80	24.4	400
BGDC1-1A100		4.2	100	30.5	500
BGDC1-1A120		5.0	120	36.6	600
BGDC1-1A140		5.8	140	42.7	700
BGDC1-1A160		6.7	160	48.8	800
BGDC1-1A180		7.5	180	54.9	900
BGDC1-1A200		8.3	200	61.0	1000
BGDC1-1A240		10.0	240	73.2	1200

#### Options

Product #	Price	Description
KIT-RF-CLIP		Roof clips (25) and spacers (15) for series resistance heating cable
RCR-U		Roof and gutter sentry for automatic de-icing control with humidity probe



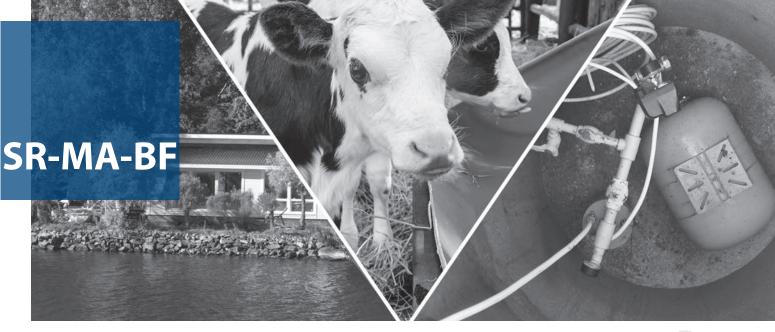
An accurate estimate of the cable length you need is very important because you cannot change the cable length by cutting, splicing or altering it in any way. When calculating cable length, there should be a minimum of 2 inches between the bottom of the drop loop and the bottom of the gutter.

The cable must extend above the overhang into the section of the roof above the heated section of the house. In addition, in order to make a continuous path for the melted water, extend the heating cable all the way down to the gutter.

#### Cable length required for roofline area:

- Determine total length of roof edge (B).
- Multiply (A) and (B) to determine the
- length of heating cable required for roofing.

Overhang	g distance	Tracing	ı width	Tracing	y height With gutter multiplier Without gutter		Without gutter multiplier
in.	cm	in.	cm	in.	cm	А	А
No ove	erhang	15	38	22	56	3.9	3.0
12	30	15	38	22	56	3.9	3.0
24	61	15	38	33	84	5.3	4.5
36	91	15	38	44	112	6.8	6.0
48	122	15	38	55	140	8.2	7.4
60	152	15	38	66	168	9.7	8.9
72	183	15	38	77	196	11.1	10.3



# Micro Self-Regulating Heating Cable SR-MA-BF suitable for use in potable water

#### Features

#### Outer jacket

- Fluoropolymer (BF).

Bus wire - Nickel plated copper.

Minimum start-up temperature - -30 °C (-22 °F).

Maximum operating temperature (power on) - 60 °C (140 °F).

**Maximum operating temperature (power off)** - 60 °C (140 °F).

Nominal voltage - 120V, 240/208V.

Bending radius, minimum - 25 mm (1 in.).

Installation temperature, minimum - -25 °C (-13 °F).

Standard

- IEEE 515, CSA 22.2 130.03

Certification

- FM CUS 3050047

Rating - Wet rated, for outdoor use (WS).

- PS (2000 kPa/290 psi) (BF).

#### Warranty

- 1-year basic warranty on the heating cable.

Application

- Heat tracing of metallic and non-metallic pipes, pumps, vessels and valves,

- Potable water line.









#### **SR-MA-BF** Micro Self-Regulating Heating Cable SR-MA-BF suitable for use in potable water



#### Models

Nominal output W/ft.	Product # 120V <sup>1, 3</sup>	Price/ft.	Product # 240V <sup>1, 2, 3</sup>	Price/ft.	Cable dimension approx. (mm)
3	ELSR-MA-3-1-BF		ELSR-MA-3-2-BF		7.7 x 6.4

<sup>1</sup> BF Protective braid, suitable for use in potable water (certified according to NSF/ANSI 61).

<sup>2</sup> For operations at 208V, please consult Eltherm<sup>®</sup> correction factors/multipliers.

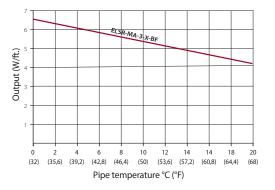
<sup>3</sup> When ordering, the quantity on the purchase order is equal to the length in feet of the cable required. E.g.: To order a 500 ft., cable, write 500 for quantity with product code.

#### **Heating circuit length**

	120	V		240	V
Start-up emperature	Circuit breaker capacity (A)	Maximum heating circuit (ft.) for ELSR-MA-3-1-BF	Start-up temperature	Circuit breaker capacity (A)	Maximum heating circuit (ft.) for ELSR-MA-3-2-BF
	10	139		10	241
10 °C	15	167	10 °C	15	302
(50 °F)	20	167	(50 °F)	20	302
	25	167		25	302
	10	112		10	202
0 °C	15	153	0 °C	15	282
(32 °F)	20	153	(32 °F)	20	282
	25	153		25	282

#### ELSR-MA-3-X-BF

(in a filled water pipeline)



#### Maximum heating circuit on the following conditions:

120/240 VoltageVoltage drop max. 10%

MCB type QO (100% utilization)
Single cable fed 1 end

# Eltherm<sup>®</sup> correction factors/multipliers for operation of heating cables in 208V

To calculate the corrected power output for operation in 208V, multiply the published output at 240V (in W/ft.) by the nominal output factor provided for the applicable heating cable type.

To calculate maximum heating circuit lengths for operation in 208V (tables provided in product data sheets), multiply the published max. heating circuit length at 240V provided for the applicable heating cable type.

Heating cable correction factors/	Nominal output	Heating circuit length
Multipliers	208V vs. 240V	208V vs. 240V
ELSR-MA-3-2-BF	0.82	1.00



### 120V Preassembled Self-Regulating Heating Cable for Pipe Tracing for Freeze Protection and Roof and Gutter De-icing







Outer jacket - 120V.

**Cold lead length** - 36" (0.9 m).

#### **Outer jacket** - Thermoplastic.

Bus wire

- Nickel plated copper.

**Maximum operating temperature (power on)** - 60 °C (140 °F).

Maximum operating temperature (power off) - 80 °C (176 °F).

Cable section

- 14.1 mm X 5.6 mm.

Bending radius, minimum - 25 mm (1 in.).

- 23 11111 (1 111.).

Included hardware - Grounded 3-pronged plug with indicator light to show when the cable is on.

#### Minimum installation and start-up temperature

- -25 °C (-13 °F).

#### Standards

- CSA C22.2.130.03; -WS
- CAN/CSA 60079-7:12, 60079-0-11
- ANSI/IEEE 515, 515

#### Certification

- CSA C US 2547790

#### Rating

- Wet rated, for outdoor use (WS).

#### Warranty

- 1-year basic warranty on the heating cable.

#### Application

- Freeze protection, roof and gutter, pipes.



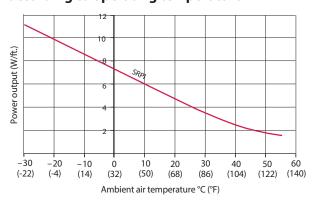


Product #1	Price	Len	gth	Nominal power output
Product #*	Price	ft.	m	in air condition at 5 °C (40 °F) <sup>2</sup>
ECK-7AO-006		6	1.8	42
ECK-7AO-012		12	3.6	84
ECK-7AO-018		18	5.5	126
ECK-7AO-025		25	7.6	175
ECK-7AO-050		50	15.2	350
ECK-7AO-075		75	22.9	525
ECK-7AO-100		100	30.5	700

 $^{\scriptscriptstyle 1}$  Must be plugged into a 120V outlet fitted with ground fault protection device (GFCI).

<sup>2</sup> Because of the cable's self-regulating properties, the power density can reach up to 11 Watts per foot when buried in snow or ice: "wet density". In this situation, use of a 15 Amp.

circuit breaker is valid for all models.



# Linear power output in air condition according to operating temperature

#### Cable heat output depending on the environment

#### In Snow and Ice (120V cable)

- 11W/ft. @ 50 °F (36W/m @ 10 °C )

#### In Dry Air

- 7W/ft. @ 50 °F (23W/m @ 10 °C )



## All Purpose Self-Regulating Heating Cable PSB

#### Features

Outer jacket

- Polyolefin (CR) / Fluoropolymer (CT).

Bus wire

- Nickel plated copper.

# Minimum start-up temperature - -55 °C (-67 °F).

Maximum operating temperature (power on)

- 65 °C (150 °F).

Maximum operating temperature (power off) - 85 °C (185 °F).

#### Nominal voltage

- 120V, 240/208V, 277V.

Bending radius, minimum

- 25 mm (1 in.).

## Installation temperature, minimum - -55 °C (-67 °F).

#### Classification

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 2, Groups E, F, G
- Class III

#### Certification

- CAN/CSA-C22.2 No. 130-03
- CSA C US 1862457;
- Class: 2878-01, 2878-81
- Class: 2872-01, 2872-81

#### Rating

- Wet rated, for outdoor use (WS).

#### Warranty

- 1-year basic warranty on the heating cable.

#### Application

- Freeze protection, heat tracing instrumentation, pipes, vessel and tanks, chemical and petrochemical industries, food processing, automotive, roof and gutter.

# **BARTEC**











Nominal output	Prod	uct #		Outer jacket/Me	ld	Cable dimension	
W/ft.	120V <sup>1, 3</sup>	240V <sup>1, 2, 3</sup>	CR	Price/ft.	СТ	Price/ft.	approx. (mm)
3	3PSB1-XX	3PSB2-XX					11.6 x 5.8
5	5PSB1-XX	5PSB2-XX					11.6 x 5.8
8	8PSB1-XX	8PSB2-XX					11.6 x 5.8
10	10PSB1-XX	10PSB2-XX					11.6 x 5.8

<sup>1</sup> XX = Outer jacket/Mechanical shield.

CR Protective braid and a polyolefin outer jacket.

CT Protective braid and a fluoropolymer outer jacket.

<sup>2</sup> For operations at 208V or 277V, please consult Bartec correction factors/multipliers.

When ordering, the quantity on the purchase order is equal to the length in feet of the cable required.

E.g.: To order a 500 ft., cable, write 500 for quantity with product code.

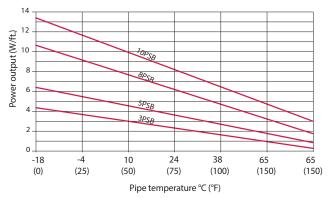
#### **Heating circuit length**

The following table shows the maximum circuit length in ft. for the different PSB trace heater types with standard circuit breaker amperages. Breaker sizes should be based on the National Electrical Code, Canadian Electrical Code or any other local or applicable code. Use only circuit breakers with type C tripping characteristics.

Start-up	Circuit breaker	maximum neuting circuit (ru) for					Circuit breaker	240V Maximum heating circuit (ft.) for			
temperature	capacity <sup>1</sup> (A)	3PSB1	5PSB1	8PSB1	10PSB1	temperature	ature (A)	3PSB2	5PSB2	8PSB2	10PSB2
10.05	20	344	279	190	154	- 10 °C	20	676	538	315	200
10 °C (50 °F)	30	344	282	217	164	10 °C (50 °F)	30	676	558	433	299
(30 F)	40	344	282	217 164 (30 F)	40	676	558	433	328		
10.05	20	285	200	141	115	-18 °C (0°F)	20	545	387	233	148
-18 °C (0°F)	30	344	282	213	164		30	676	558	351	223
(U F)	40	344	282	217	164	(U F)	40	676	558	433	295
20.00	20	256	180	128	105	20.90	20	492	348	213	135
-29 °C (-20 °F)	30	344	272	194	154	-29 °C (-20 °F)	30	676	522	318	200
(-20 F)	40	344	282	217	164	(-20 F)	40	676	558	423	269
10.00	20	233	164	118	95	10.90	20	446	315	194	121
-40 °C (-40 °F)	30	344	246	177	141	-40 °C	30	676	476	292	184
(-40 F)	40	344	282	217	164	(-40 °F)	40	676	558	387	246

<sup>1</sup> Breaker sizing should be based on the National Electrical Code, Canadian Electrical Code or any other applicable code. The NEC and CEC require ground-fault protection of equipment for each branch circuit supplying electric heating equipment. Check local codes for ground-fault protection requirements.

#### Power output 120V/240V under nominal conditions (on insulated steel pipes)



#### Maximum heating circuit on the following conditions:

- 120/240 Voltage
- Voltage drop max. 10%
- Single cable fed 1 end

### Cable heat output depending on the environment

In Snow and Ice

- 13W/ft. @ 32 °F (42W/m @ 0 °C )

In Dry Air - 8W/ft. @ 32 °F (26W/m @ 0 °C )

#### **Bartec correction factors/multipliers for** operation of heating cables in 208V and 277V

To calculate the corrected power output for operation in 208V or 277V, multiply the published output at 240V (in W/ft.) by the nominal output factor provided for the applicable heating cable type.

To calculate maximum heating circuit lengths for operation in 208V or 277V (tables provided in product data sheets), multiply the published max. heating circuit length at 240V provided for the applicable heating cable type.

Due to the cable's self-regulating properties, the power density can reach up to 11W/ft. (120V) and 13W/ft. (240V) when buried in snow or ice: "wet density".

Adjustment factors	Heating cable correction factors/ Multipliers	Nominal output	Heating circuit length
	3PSB2	0.90	0.96
2001/	5PSB2	0.93	0.94
208V	8PSB2	0.95	0.92
	10PSB2	0.97	0.92
	3PSB2	1.23	1.09
2771/	5PSB2	1.19	1.10
277V	8PSB2	1.11	1.14
	10PSB2	1.06	1.16



### Medium Temperature Self-Regulating Heating Cable MSB

#### Features

- **Outer jacket**
- Fluoropolymer (CT).
- **Bus wire**
- Nickel plated copper.

#### Minimum start-up temperature - -60 °C (-76 °F).

Maximum operating temperature (power on)

- 110 °C (230 °F).

- Maximum operating temperature (power off)
- 110 °C (230 °F), continuous. - 130 °C (266 °F), power off for 1000 hr cumulative.

#### Nominal voltage

- 120V, 240/208V, 277V.
- Bending radius, minimum
- 25 mm (1 in.).
- Installation temperature, minimum - -60 °C (-76 °F).

#### Classification

- Ex 60079-30-1 IIC T3, T4 Gb
- Ex 60079-30-1 IIIC T170 °C, T130 °C Db
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 2, Groups E, F, G
- Class III, T4 3MSB, 5MSB
- Class III, T3 10MSB, 15MSB, 20MSB

#### Standards

- CSA C22.2.130.16; -WS
- Ex CAN/CSA 60079-30 IIC T3, T4b
- 60079-30 IIIC T170 °C, T 130 °C Db
- IEEE 515.1-2012, 515-2017

#### Certification

- IECEx DEK 17.0004U
- CSA C US 1862457

#### Rating

- Wet rated, for outdoor use (WS).

#### Warranty

- 1-year basic warranty on the heating cable.

#### Application

- Freeze protection, heat tracing instrumentation, pipes, vessel and tanks, chemical and petrochemical industries, food processing, automotive.









Nominal output	Prod	uct #	Price/ft.	Cable dimension
W/ft.	120V <sup>1, 3</sup>	240V <sup>1, 2, 3</sup>	Price/It.	approx. (mm)
3	3MSB1-CT	3MSB2-CT		10.2 x 4.8
5	5MSB1-CT	5MSB2-CT		10.2 x 4.8
10	10MSB1-CT	10MSB2-CT		10.2 x 4.8
15	15MSB1-CT	15MSB2-CT		10.2 x 4.8
20	20MSB1-CT	20MSB2-CT		10.2 x 4.8

 $^{\scriptscriptstyle 1}~$  CT Protective braid and a fluoropolymer outer jacket.

<sup>2</sup> For operations at 208V, please consult Bartec correction factors/multipliers.

<sup>3</sup> When ordering, the quantity on the purchase order is equal to the length in feet of the cable required.

E.g.: To order a 500 ft., cable, write 500 for quantity with product code.

#### **Heating circuit length**

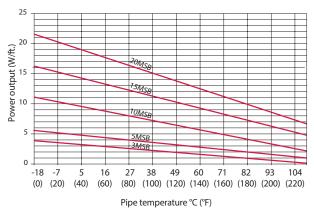
The following table shows the maximum circuit length in ft. for the different MSB trace heater types with standard circuit breaker amperages. Breaker sizes should be based on the National Electrical Code, Canadian Electrical Code or any other local or applicable code. Use only circuit breakers with type C tripping characteristics.

Start-up	Circuit breaker	Maximum nearing circuit (rt.) 101			Start-up	Circuit breaker		240V Maximum heating circuit (ft.) for					
temperature	capacity <sup>1</sup> (A)	3MSB1	5MSB1	10MSB1	15MSB1	20MSB1	temperature	capacity <sup>1</sup> (A)	3MSB1	5MSB1	10MSB1	15MSB1	20MSB1
10 °C	20	394	279	157	115	89	- 10 °C -	20	755	538	302	220	171
(50 °F)	30	394	322	226	138	128	(50 °F)	30	761	627	443	276	253
(50 F)	40	394	322	226	138	128	(50 F)	40	761	627	443	276	253
-18 °C	20	338	243	135	98	79		20	646	469	259	190	148
-18 C (0°F)	30	394	322	203	138	118		30	761	627	390	276	223
(U F)	40	394	322	226	138	128	(0 F)	40	761	627	443	276	253
-29 °C	20	322	233	128	95	75	-29 ℃	20	614	446	246	180	141
-29°C (-20 °F)	30	394	322	194	138	112	-29°C (-20°F)	30	761	627	371	272	210
(-20 F)	40	394	322	226	138	128	(-20 F)	40	761	627	443	276	253
-40 °C	20	305	322	121	92	72	-40 °C	20	584	427	236	174	135
-40 °C (-40 °F)	30	394	322	184	135	105		30	761	627	354	259	200
(-40 F)	40	394	322	226	138	128	(-40 °F)	40	761	627	443	276	253

<sup>1</sup> Breaker sizing should be based on the National Electrical Code, Canadian Electrical Code or any other applicable code. The NEC and CEC require ground-fault protection of equipment for each branch circuit supplying electric heating equipment. Check local codes for ground-fault protection requirements.

#### Power output 120V/240V under nominal conditions

(on insulated steel pipes)



# Maximum heating circuit on the following conditions:

#### - 120/240 Voltage

- Voltage drop max. 10%
- Single cable fed 1 end
- Single cubic rea r cha

# Bartec correction factors/multipliers for operation of heating cables in 208V and 277V

To calculate the corrected power output for operation in 208 or 277V, multiply the published output at 240V (in W/ft.) by the nominal output factor provided for the applicable heating cable type.

To calculate maximum heating circuit lengths for operation in 208V or 277 (tables provided in product data sheets), multiply the published max. heating circuit length at 240V provided for the applicable heating cable type.

Adjustment factors	Heating cable correction factors/ Multipliers	Nominal output	Heating circuit length
	3MSB2	0.83	0.99
	5MSB2	0.85	0.98
208V	10MSB2	0.92	0.94
	15MSB2	0.95	0.93
	20MSB2	0.97	0.91
	3MSB2	1.37	1.03
	5MSB2	1.31	1.05
277V	10MSB2	1.19	1.02
	15MSB2	1.15	1.12
	20MSB2	1.09	1.13



# High Temperature Self-Regulating Heating Cable HSB

#### Features

- Outer jacket
- Fluoropolymer (CT).
- Bus wire
- Nickel plated copper.

#### Minimum start-up temperature - -60 °C (-76 °F).

Maximum operating temperature (continuous)

- 120 °C (248 °F).

#### Maximum operating temperature (intermittent)

- 200 °C (392 °F), continuous.
   190 °C (374 °F), power off for 1000 hr cumulative.
- Nominal voltage
- 120V, 240/208V.

#### Bending radius, minimum

- 25 mm (1 in.).
- Installation temperature, minimum - -60 °C (-76 °F).
- Classification
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 2, Groups E, F, G
- Class III

#### Certification

- CAN/CSA-C22.2 No. 130-03
- CSA C US 1862457;
- Class: 2878-01, 2878-81
- Class: 2872-01, 2872-81

#### Rating

- Wet rated, for outdoor use (WS).

#### Warranty

- 1-year basic warranty on the heating cable.

#### Application

- Freeze protection, heat tracing instrumentation, pipes, vessel and tanks, chemical and petrochemical industries, food processing, automotive.











Nominal output	Prod	uct #	Price/ft.	Cable dimension
W/ft.	120V <sup>1, 3</sup>	240V <sup>1, 2, 3</sup>	File/It.	approx. (mm)
5	5HSB1-CT	5HSB2-CT		10.2 x 4.8
10	10HSB1-CT	10HSB2-CT		10.2 x 4.8
15	15HSB1-CT	15HSB2-CT		10.2 x 4.8
20	20HSB1-CT	20HSB2-CT		10.2 x 4.8

<sup>1</sup> CT Protective braid and a fluoropolymer outer jacket.

<sup>2</sup> For operations at 208V, please consult Bartec correction factors/multipliers

<sup>3</sup> When ordering, the quantity on the purchase order is equal to the length in feet of the cable required.

E.g.: To order a 500 ft., cable, write 500 for quantity with product code.

#### **Heating circuit length**

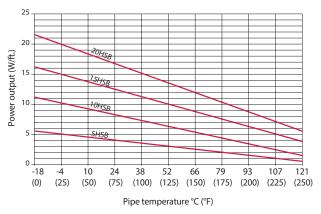
The following table shows the maximum circuit length in ft. for the different HSB trace heater types with standard circuit breaker amperages. Breaker sizes should be based on the National Electrical Code, Canadian Electrical Code or any other local or applicable code. Use only circuit breakers with type C tripping characteristics.

		120	v				240V					
Start-up temperature	Circuit breaker capacity <sup>1</sup> (A)	5HSB1	10HSB1	15HSB1	20HSB1	Start-up temperature	Circuit breaker capacity <sup>1</sup> (A)	5HSB1	10HSB1	15HSB1	20HSB1	
10.00	20	279	157	115	89	10.00	20	538	302	220	171	
10 °C (50 °F)	30	322	226	138	128	10 °C (50 °F)	30	627	443	276	253	
(30 F)	40	322	226	138	128	(JU F)	40	627	443	276	253	
10.90	20	243	135	98	79	10.05	20	469	259	190	148	
-18 °C (0°F)	30	322	203	138	118	-18 °C (0°F)	30	627	390	276	223	
(U F)	40	322	226	138	128	(0 F)	40	627	443	276	253	
22.05	20	233	128	95	75	20.05	20	446	246	180	141	
-29 °C (-20 °F)	30	322	194	138	112	-29 °C (-20 °F)	30	627	371	272	210	
(-20 F)	40	322	226	138	128	(-20 F)	40	627	443	276	253	
10.05	20 322	121	92	72	10.05	20	427	236	174	135		
-40 °C	30	322	184	135	105	-40 °C	30	627	354	259	200	
(-40 °F)	40	322	226	138	128	(-40 °F)	40	627	443	276	253	

<sup>1</sup> Breaker sizing should be based on the National Electrical Code, Canadian Electrical Code or any other applicable code. The NEC and CEC require ground-fault protection of equipment for each branch circuit supplying electric heating equipment. Check local codes for ground-fault protection requirements.

#### Power output 120V/240V under nominal conditions

(on insulated steel pipes)



# Bartec correction factors/multipliers for operation of heating cables in 208V

To calculate the corrected power output for operation in 208V, multiply the published output at 240V (in W/ft.) by the nominal output factor provided for the applicable heating cable type.

To calculate maximum heating circuit lengths for operation in 208V (tables provided in product data sheets), multiply the published max. heating circuit length at 240V provided for the applicable heating cable type.

Adjustment factors	Heating cable correction factors/ Multipliers	Nominal output	Heating circuit length
	5HSB2-CT	0.85	0.98
	10HSB2-CT	0.92	0.94
	15HSB2-CT	0.95	0.93
	20HSB2-CT	0.97	0.91

# Maximum heating circuit on the following conditions:

#### - 120/240 Voltage

- Voltage drop max. 10%
- Single cable fed 1 end

Accessories See Accessories section.



### High Temperature Constant Wattage Heating Cable BPL

#### Features

- Outer jacket
- Aluminum.

**Bus wire** 

- Nickel plated copper.

#### Minimum start-up temperature - -40 °C (-40 °F).

#### Maximum exposure temperature

- 350 °C (662 °F), continuous.
- 425 °C (797 °F), intermittent.

#### Nominal voltage

- 110 to 120V, 208 to 277V. - For 277V applications please contact factory.

#### Bending radius, minimum

- 25 mm (1 in.).

Installation temperature, minimum - -40 °C (-40°F).

#### Classification

- II 2G Ex e II T\* Gb
- II 2D Ex tb IIIC T\* Db

#### Standards

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 2, Groups E, F, G
- Class III.
- T1 to T3 (see table maximum pipe/work piece temperature)

#### Certification

- ATEX, IECEx, EAC\*
- CSA 1350782 / 1352981

#### Warranty

- 2-year basic warranty on the heating cable.

#### Application

- Installation in non-hazardous and hazardous areas (Class 1, Division 2).







#### Maximum circuit length

Start-up	Circuit breaker	120V r Maximum heating circuit length (ft.) for				Start-up	Circuit breaker	240V Maximum heating circuit length (ft.) for			
temperature	capacity <sup>1</sup> (A)	5BPL1-AL	10BPL1-AL	15BPL1-AL	20BPL1-AL	temperature	capacity <sup>1</sup> (A)	5BPL2-AL	10BPL2-AL	15BPL2-AL	20BPL2-AL
10.00	20	291	178	121	85	10.00	20	567	340	246	170
10 °C (50 °F)	30	291	210	162	97	10 °C (50 °F)	30	567	405	344	278
(30 F)	(30 F) 40 291 210 162 131 (30 F)	(30 F)	40	567	405	344	278				
10.05	20	275	162	108	78	-18 °C	20	550	324	229	164
-18 °C	30	275	194	152	87		30	550	388	328	262
(0°F)	40	275	194	152	124	(0°F)	40	550	388	328	262
10.05	20	259	146	114	72	10.05	20	518	307	213	147
-40 °C (-40 °F)	30	259	178	145	81	-40 °C (-40 °F)	30	518	372	311	255
(-40°F) —	40	259	178	145	118	(-40 F)	40	518	372	311	255
		208	3V					27	7V		

		200				2// 1					
Start-up	Circuit breaker	in a stand i sea the s					Circuit breaker	Maximum heating circuit length (ft.) for			
temperature	capacity <sup>1</sup> (A)	5BPL2-AL	10BPL2-AL	15BPL2-AL	20BPL2-AL	temperature	capacity <sup>1</sup> (A)	5BPL2-AL	10BPL2-AL	15BPL2-AL	20BPL2-AL
10 °C	20	518	324	194	146	10.00	20	639	328	203	147
(50 °F)	30	518	356	275	227	10 °C (50 °F)	30	639	442	321	229
(30 F)	40	518	356	275	227		40	639	442	344	301
10.%	20	502	308	185	136		20	623	311	193	144
-18 °C (0°F)	30	502	340	266	217	-18 °C (0°F)	30	623	426	308	223
(0 F)	40	502	340	266	217	(0 F)	40	623	426	328	288
10.90	20	470	292	178	130	10.05	20	606	314	190	138
-40 °C (-40 °F)	30	470	324	259	1 11	-40 °C (-40 °F)	30	606	410	301	216
(-40 F)	40	470	324	259	211	(-40 F)	40	606	410	311	282

<sup>1</sup> Breaker sizing should be based on the National Electrical Code, Canadian Electrical Code or any other applicable code. The NEC and CEC require ground-fault protection of equipment for each branch circuit supplying electric heating equipment. Check local codes for ground-fault protection requirements.

208V         0.75         10BPL1-AL         27.6         700         10BPL2-AL         35.4         9           277V         1.33         15BPL1-AL         24.6         625         15BPL2-AL         29.9         7	Power conversion factors	Power output	Zone length BPL1-AL	in.	mm	Zone length BPL2-AL	in.	mm
<b>277V</b> 1.33 <b>15BPL1-AL</b> 24.6 625 <b>15BPL2-AL</b> 29.9 7	110V	0.84	5BPL1-AL	31.5	800	5BPL2-AL	48.0	1220
	208V	0.75	10BPL1-AL	27.6	700	10BPL2-AL	35.4	900
<b>2000011 01 10 7 500 200012 01 256 6</b>	277V	1.33	15BPL1-AL	24.6	625	15BPL2-AL	29.9	760
ZUDELITAL 19.7 DUU ZUDELZTAL 20.0 0			20BPL1-AL	19.7	500	20BPL2-AL	25.6	650

#### Max. pipe/work piece temperatures (120V or 240V)<sup>1</sup>

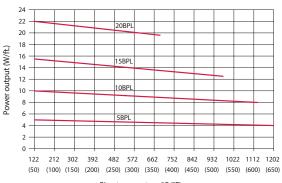
Area classification hazardous <sup>2</sup>									
Product #	W/m	T	3	T	2	T	1	Ja	ie.
		°C	°F	°C	°F	°C	°F	°C	°F
5BPL-AL	15	160	320	289	552	350	662	350	662
10BPL-AL	30	100	212	246	475	323	613	323	613
15BPL-AL	50	30	86	178	352	276	529	276	529
20BPL-AL	70	-	-	80	176	185	365	185	365

<sup>1</sup> For 277 V applications contact factory representative

<sup>2</sup> Surface temperature limits in accordance with EN60079

<sup>3</sup> Surface temperature limited by materials of construction (maximum exposure temperature, intermittent)

# Power temperature curves 120V and 240V



Pipe temperature °C (°F)

#### Models

Nominal output	Prod	uct #	Nominal output	Product #	Price/ft.	Cable dimension
W/ft.	120V	240V	W/ft.	208V	Price/ft.	approx. (mm)
5	5BPL1-AL	5BPL2-AL	4	5BPL2-AL		10.7 x 7.7
10	10BPL1-AL	10BPL2-AL	7.5	10BPL2-AL		10.7 x 7.7
17	15BPL1-AL	15BPL2-AL	12.5	15BPL2-AL		10.7 x 7.7
22	20BPL1-AL	20BPL2-AL	17.5	20BPL2-AL		10.7 x 7.7

When ordering, the quantity on the purchase order is equal to the length in feet of the cable required. E.g.: To order a 500 ft., cable, write 500 for quantity with product code.

#### Accessories

See Accessories section.



### Fluoropolymer Insulated Series Resistance Heating Cable



**Outer jacket** 

- Fluoropolymer.

**Bus wire** 

- Nickel plated copper.

Maximum operating temperature - 250 °C (482 °F).

Nominal voltage, maximum

- 0-750V, AC and DC voltages applicable.

Output, max.

- 30 W/m. Note: The output per unit length of the heating cable and the maximum possible operating temperatures depend on the respective application. Please contact the factory for application specific requirements and calculations.

#### Bending radius, minimum

- 10 mm (0.4 in.).

Installation temperature, minimum - -60 °C (-76 °F).

Classification

ELKM-AG-NA (non-hazardous area):

- Industrial and commercial applications, Canada USA NB Environment (hazardous area):

- Class I Division 2 Group A, B, C, D
- Class II Division 1 Group E, F, G
- Class III Division 1
- Class I Zone 1 AEx de IIC T6...T2 / Ex de IIC
- T6...T2 Gb
- NC Environment (hazardous area):
- Class I Division 1 Group A, B, C, D

#### Standards

- FM16NUS0004
- FM16US0124X
- FM16NC0003
- FM16CA0069X
- Certification
- IEC/IEEE 60070-30-1, IEEE 515

- CSA 22.2 130-16

#### Rating

- Wet rated, for outdoor use (WS).

#### Warranty

- 1-year basic warranty on the heating cable.

#### Application

- Product line heat tracing (crude oil, natural gas, caustic soda, waste water and product transfer lines), tank and vessel heat tracing, pipe, valve and pump heating, tank container heating, IBC's, storage facility heating, viscosity control and instrumentation heat tracing.

#### Made to order product, to obtain a quote please contact factory.



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#### **Cable Specifications**

Nominal resistance		iameter rox.	Weight approx.	Temperature coefficient	Nominal resistance		liameter prox.	Weight approx.	Temperature coefficient
(Ω/ft.)	in.	mm	lb/ft.	(x 10 <sup>-3</sup> / K)	(Ω/ft.)	in.	mm	lb/ft.	(x 10 <sup>-3</sup> / K)
0.0036	0.23	5.9	0.0511	4.30	0 1462	0.22	5.4	0.0412	0.18
(Cu 1.5 mm <sup>2</sup> )	0.23	5.9	0.0511	4.30	0.1463	0.22	5.4	0.0412	0.18
0.0152	0.21	5.4	0.0461	1.60	0.1829	0.21	5.3	0.0394	0.18
0.0198	0.22	5.5	0.0429	1.60	0.2438	0.20	5.2	0.0375	0.18
0.0244	0.23	5.9	0.0491	0.90	0.3048	0.21	5.3	0.0394	0.04
0.0305	0.22	5.7	0.0461	0.90	0.4481	0.20	5.2	0.0370	0.04
0.0479	0.22	5.7	0.0459	0.45	0.5334	0.20	5.2	0.0368	0.04
0.0549	0.21	5.4	0.0404	0.90	0.5791	0.22	5.4	0.0402	0.40
0.0610	0.22	5.5	0.0429	0.45	0.8839	0.20	5.2	0.0374	0.40
0.0792	0.21	5.4	0.0408	0.45	1.2192	0.20	5.1	0.0356	0.40
0.0853	0.21	5.3	0.0388	0.38	1.4326	0.20	5.0	0.0349	0.15
0.1036	0.21	5.3	0.0386	0.45	1.8288	0.20	5.0	0.0343	0.20
0.1097	0.20	5.2	0.0382	0.45	2.1336	0.19	5.0	0.0336	0.15
0.1311	0.23	5.5	0.0422	0.18	2.4384	0.19	4.9	0.0332	0.15

Weight tolerances are possible for manufacturing reasons.

Resistance tolerance: +/- 5 %.

For applications with fixed external diameter, please contact the factory.

Cables shall neither intersect nor contact.

Ground fault protection device 30 mA required for each circuit.

#### Options

Product #	Price	Environment	Description
EL-HAZELECT-AG		NC	Connection kit 1/2" NPT Class I Div 1 and 2 Group ABCD, Class II Div 1 and 2 Groups EFG, Class III ,
EL-HAZELEC I-AG		INC	Class I Zone 1 Group IIC
ELVB-AG-NA-NB-NC		NA/NB/NC	Splice kit for ELKM-AG-NA all environments (set of 2)
ELVB-NA-38		NA	Cable gland connection kit for ELKM-AG-NA NEC/CEC 3/8" NPT non-hazardous area
ELVB-NA-M12		NA	Cable gland connection kit for ELKM-AG-NA NEC/CEC M12 x 1.5 non-hazardous area
ELVB-NB-12		NB	Cable gland connection kit for ELKM-AG-NA NEC/CEC 1/2" NPT hazardous area
ELVB-NB-M16		NB	Cable gland connection kit for ELKM-AG-NA NEC/CEC M16 x 1.5 hazardous area

# Made to order, please contact factory for design assistance.

ELK-AG-NA may be supplied on spools and field terminated, provided the following conditions are met:

Heating circuit design to be carried out or approved by the factory.

Only Eltherm supplied and certified termination kits may be used.

Heating circuit installation and start-up to be performed by qualified personnel only.

Eltherm product and approval markings to be applied to product.

#### Product description code (example)

Product #

Product Family -

ELKM-AG-NA-00549

ELKM-AG-**NA**: Normal Environment

Nominal resistance (without the dot " . ")

For hazardous area

**ELKM-AG-NA cable** is approved for all environments.

For hazardous area applications please refer to the Options table to select the proper termination kit.

NB: Class 1 Division 2 NC: Class 1 Division 1

Made to order product, to obtain a quote please contact factory.

Accessories SR-MA-BF Cables

	Product #	Price	Description
	ELVB-SRAM-34-ST		Power connection with steel/zinc cable gland/fitting, 3/4" NPT non-hazardous location
And the second s	EL-ECMF		End termination
	KIT-OSR-ELSR-MA-BF		End and power termination kit with warning sticker
	KIT-OSR-ECA-MABF -PH-FIT		Brass gland cable fitting 3/4" NPT
	KIT-OSR-MABF- PH-112-CTSOD		Quick connect plumbing kit for 1 1/2" OD polyethylene CTS pipes
	KIT-OSR-MABF- PH-114-CTSOD		Quick connect plumbing kit for 1 1/4" OD polyethylene CTS pipes
	KIT-OSR-MABF- PH-1-CTSOD		Quick connect plumbing kit for 1"OD polyethylene CTS pipes
	KIT-OSR-MABF- PH- 112-ID		Quick connect plumbing kit for 1 1/2" ID polyethylene pipes
0 🔮	KIT-OSR-MABF- PH-114-ID		Quick connect plumbing kit for 1 1/4" ID polyethylene pipes
	KIT-OSR-MABF- PH-1-ID		Quick connect plumbing kit for 1"ID polyethylene pipes
	KIT-OSR-MABF- PH-34-ID		Quick connect plumbing kit for 3/4" ID polyethylene pipes

Accessories

Product #	Price	Description
TWISTO-N-B-PK		Power connection kit with 5' (1.5 m) power cable and end seal
TWISTO-N-B-S		Splice kit for connecting two heating cables
TWISTO-N-B-T		T-junction kit for 3 heating cables
TWISTO-N-B-PS		Heating cable powered splice kit with 5' (1.5 m) power cable
TWISTO-N-B-PT		T-junction powered kit for 3 heating cables with 5' (1.5 m) power cable
TWISTO-N-B-X		Splice kit X-Branch for 4 heating cables
TWISTO-N-B-P		Heating cable powered connection kit with 5' (1.5 m) power cable without end seal
TWISTO-N-B-5E		Heating cable end seal
IEB-P		Insulation entry bushing

Accessories

**BPL Cables** 

Product #	Price	Description
PB5-220-A		High profile single entry power connection kit with stand and junction box on pipe with 8 AWG terminals
ELL-220-A		High profile end seal kit on pipe with red light
САК-АН-А		Cold applied kit for off pipe M20
НАК-АН-А		Heat shrink kit for on pipe stand
BPL-BP		Thermo barrier pad
BPL-BRACKET		Mounting brackets, qty 220

Accessories PSB / MSB / HSB Cables

Product #	Price	Description
PBS-200-A		High profile single entry power connection kit for PSB/MSB/HSB cable with stand and junction box on pipe with 8 AWG terminals For complete kit contents and approvals please see data sheets available on our website
PBS-200-A10		High profile single entry power connection kit for PSB/MSB/HSB cable with stand and junction box on pipe with 6 AWG terminals For complete kit contents and approvals please see data sheets available on our website
PBS-300-A		High profile single entry power connection kit for PSB/MSB/HSB cable with stand and junction box off pipe with 8 AWG terminals For complete kit contents and approvals please see data sheets available on our website
PBM-200-A		High profile multiple entry power connection kit for PSB/MSB/HSB cable with stand and junction box on pipe with 8 AWG terminals For complete kit contents and approvals please see data sheets available on our website
PBM-300-A		High profile multiple entry power connection kit for PSB/MSB/HSB cable with stand and junction box off pipe with 8 AWG terminals For complete kit contents and approvals please see data sheets available on our website
CAK-SRP-PA		Connection kit for ordinary locations NPT 1/2 poly gland for PSB Cable
CAK-SRM-HA		Connection kit for ordinary locations NPT 1/2 metal gland for MSB/HSB cable
PBS-SPA		Small pipe adapter for power connection with PBS kits
PBM-SPA		Small pipe adapter for power connection with PBM kits

Accessories PSB / MSB / HSB Cables

	Product #	Price	Description
	ELL-200-A		High profile end seal kit for PSB/MSB/HSB cable on pipe with red light For complete kit contents and approvals please see data sheets available on our website
	ELL-300-A		High profile end seal kit for PSB/MSB/HSB cable off pipe with red light For complete kit contents and approvals please see data sheets available on our website
	ELS-200		High profile end seal kit for PSB/MSB/HSB cable on pipe with weather head For complete kit contents and approvals please see data sheets available on our website
	CAK-E5-A		Silicone end seal kits for PSB/MSB/HSB cable with 1x RTV (pkg of 5)
and to share	CAK-E10-A		Silicone end seal kits for PSB/MSB/HSB cable with 2x RTV (pkg of 10)
	CAK-D5-A		Cold applied kit on pipe stand for PSB/MSB/HSB cable For complete kit contents and approvals please see data sheets available on our website
	САК-РН-А		Cold applied kit off pipe M20 for PSB/MSB/HSB cable

Accessories PSB / MSB / HSB Cables

Product #	Price	Description
IEB-H		Insulation entry bushing for HSB/MSB cable
IEB-PT		Insulation entry bushing for Pt100 Ex sensor (M25)
EHT-CKT-TAG		Heat tracing phenolic circuit tags for PSB/MSB/HSB cable
EHT-TAG		Heat tracing stainless steel circuit tags for PSB/MSB/HSB cable
TW-05		Stainless steel tie wire 1100' for PSB/MSB/HSB cable

Accessories Roof / Gutter Cables

	Product #	Price	Description
	ELB-RCLIP		Roof clips for cable, qty 25
i i i i i i i i i i i i i i i i i i i	BT-50		Matte black roof clips (10 per pack)
	ELB-20		Stainless steel downspout 90° mounting plate with nylon ties
	ELB-21		Stainless steel gutter mounting plate with nylon ties
	KIT-BSR-DRD		BSR series kit, roof drain de-icing bracket kit
	10068944		Plastic spacers for gutters and drains (10 per pack)
	10191134		Stainless steel suspension hanger for downspout
	BRIPPS-75		75' (23 m) galvanized steel cable clip strip for installation
WARNING / ATTENTION     W	HT-2-SIGN		Lamacoid snow melting warning sign English/French

Accessories Pipe Tracing Cables

	Product #	Price	Description
	BT-50		Matte black roof clips (10 per pack)
	CGSTAPE-6558		Glass cloth tape with silicone backing 260 $^\circ C$ 1/2" X 108'
	CGSTAPE-6758		Glass filament tape 130 °C 3/4" X 180'
0	FR50F48 FR50F50		Self-adhesive aluminum tape -30 °C to 120 °C 2" X 150'
0	GT108-TAPE		Self-adhesive fiber glass tape maximum temperature 200 °C 1/2" x 108'
Image: Contract of the second secon	HT-1-LABEL		Electric heat tracing warning label English/French
	PC-1		Stainless steel pipe strap, up to 3" diameter
	PC-2		Stainless steel pipe strap, up to 10" diameter

**Controls** Floor Warming

	Product #	Price	Description
78	TH115-AF-GA/U		Programmable electronic thermostat with built-in GFCI for floor heating system 15 Amp., 120/208/240V, GFCI mA <sup>1</sup>
<b>12</b> 15 216	OTH3600-GA <sup>23</sup>		Non programmable electronic thermostat for floor heating system 15 Amp., 120/208/240V, Class A, GFCI mA <sup>1</sup> Compliance with standard CAN/CSA-C828-13
.2 15 .2 15 	OTH3600P-GA <sup>2,3</sup>		Programmable electronic thermostat for floor heating system 15 Amp., 120/208/240V, Class A, GFCl mA <sup>1</sup> Compliance with standard CAN/CSA-C828-13
5 n32 351 -65	OTH3600-GA-ZB <sup>23</sup>		Smart thermostat - Zigbee for floor heating system 15 Amp., 120/208/240V, Class A, GFCI mA <sup>1</sup> Zigbee CSA-C828-13 Performance Standard
8-35 	TH1310WF <sup>2,3</sup>		Smart thermostat – Wi-Fi for floor heating system 15 Amp., 120/208/240V, Class A, GFCI mA <sup>1</sup> WIFE LINE CSA-C828-13 Performance Standard Works With Works With Works With Works With Performance Standard Works With Market Market Market SmartThings
- 1 mark	TR1310-120-240GA3		Slave unit for floor heating system 15 Amp., 120/208/240V, Class A, GFCl mA¹
	GT1304		Smart gateway that provides remote access to the OTH3600-GA-ZB <b>Zigbee</b>

<sup>1</sup> GFCI: Ground fault circuit interrupter.

<sup>2</sup> 15' (4.6 m) floor sensor included.

<sup>3</sup> Standard color is white.

<sup>4</sup> Standard color is black.

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	Product #	Price	Description
	ETO2		Fully automatic and economical dual-zone electronic controller, suitable for controlling electric heating cables in one or two zones, 1-zone: 3 x 16A, 2-zone: 2 x 16A, 120V to 240V Suitable for use with GFEP panels
	ETO2-BOX		Mounting box dual-zone electronic controller ETO2
	ETOG		Ground sensor to detect humidity and temperature with 33' (10 m) side entry cable
	ETOG-56		Ground sensor to detect humidity and temperature with 80' (25 m) bottom entry cable
	ETOK-1		Mounting tube for ground sensor ETOG-56
	ETOR-55		Gutter sensor to detect humidity with 33' (10 m) cable
OUTDOOM SENSON UTE GIVARE UGE FOLGE TYPE ETF 7	ETF-744-99		24V outdoor sensor for measuring temperature

# **Controls** Snow Melting / Roof De-icing



	Product #	Price	Description
	DS-2C		Aerial mounted controller with sensor to detect humidity and temperature, 30A: 100V to 277V, 20A: 28VDC
	DS-5C		Aerial mounted controller with sensor to detect humidity and temperature, 2X 30A, 100V to 277V
	DS-8C		Aerial mounted controller with sensor to detect temperature and a sensor to detect humidity with 10' (3 m) cable, 30A, 100V to 277V
	DS-9C		Aerial mounted controller with sensor to detect temperature and a sensor to detect humidity with 10' (3 m) cable, 2 X 30A, 100V to 277V
	EX-50		50' (15 m) extension kit, with connection fittings for humidity sensor
ADD DIEL ADD DI	CDP-2		Interior controller and display for DS controllers



Product #	Price	Description
APS-3C-120V		Automatic snow and ice melting control system 120V, 24A
AP5-3C-208-240V		Automatic snow and ice melting control system 208-240V, 24A
APS-4C-208-240V		Automatic snow and ice melting control system 208-240V, 50A c/w built-in adjustable 30 mA GFEP
EUR-5A		24V controller for snow and ice melting system c/w RCU-3 remote control unit
GF-PRO		NEMA 4X dual sensor capability controller for snow and ice melting system 100-277V, 30A c/w built-in 30 mA GFEP

# **Controls** Snow Melting / Roof De-icing



	Product #	Price	Description
	LCD-8-100-240V		Configurable aerial mounted snow and ice melting system controller
	PD-PRO		NEMA 3R dual sensor capability controller for snow and ice melting system 100-277V, 30A
	RCU-3		Remote control unit for APS-3C, PD-PRO and EUR-5A
Source and the second s	RCU-4		Remote control unit for APS-4C, SC-40C and GF-PRO
	SC-40C-208-240V		Satellite contactor for modular snow and ice melting control system 208-240V, 50A c/w built-in adjustable 30 mA GFEP
	SC-40C-600V		Satellite contactor for modular snow melt with GFEP 50A @ 600V 3-phase
Handler Handler Handler	SNOW-OWL		Aerial mounted snow sensor 24V

**Controls** Snow Melting / Roof De-icing



Product #	Price	Description
CIT-1		Aerial snow sensor
GIT-1		Gutter and downspout de-icing sensor to detect humidity and temperature compatible with GF-PRO and PD-PRO controllers
HSC-24		Ground sensor to detect humidity and temperature (requires 23832-HOUSING)
SIT-6E		Ground sensor to detect humidity and temperature for APS control panel (requires 23832-HOUSING)
23832-HOUSING		Ground sensor housing for HSC-24 and SIT-6E
25076-THERMISTOR		High temperature sensor 100k Ohms c/w 20' (6 m) cable (No disc.)

Controls Heat Tracing



	Product #	Price	Description
	A19QSC-1C		Freeze protection NEMA 4X ambient or line sensing thermostat temperature control 120-277V, 22A, SPST c/w with 10' (3 m) capillary Fixed set point at 4 °C (40 °F)
	A19QSC-2C		NEMA 4X electro-mechanical thermostat with 10' (3 m) capillary 22 Amp., 120/240V
	A19QSC-4C		NEMA 4X electro-mechanical thermostat with 20' (6 m) capillary 22 Amp., 120/240V
	A421ABC-02C		NEMA 1 electronic thermostat in thermoplastic 1P20 housing with 6' (1.8 m) capillary 10 Amp., 120/240V
	A421ABC-06C		NEMA 1 electronic thermostat with 19.5' (6 m) capillary 10 Amp., 120/240V
	A421AEC-02C		NEMA 4X electronic thermostat with 6' (2 m) capillary 10 Amp., 120/240V
	A99BB-600C		Silicone PTC tempareture sensor c/w 19.7' (6 m) PVC cable -40 °C to 105 °C for A421 series thermostat
	A99BC-1500C		Silicone PTC tempareture sensor c/w 49' (15 m) PVC cable -40 °C to 105 °C for A421 series thermostat

**Controls** Heat Tracing



Product #	Price	Description
ELTC-14-RTD		Digital temperature control 20A at 90-260V, including 3-wire RTD (Pt-100) sensing element is 5 x 50 mm with 5 m of fluoropolymer lead wires, range 0 °C to 250 °C (32 °F to 482 °F) Suitable for used with GFEP panels

Controls Heat Tracing



Product #	Price	Description
FPT-130		NEMA 4X IP66 mechanical single point line sensing heat trace controller 100-277V, 30A c/w built-in 30 mA GFEP and 20' (6 m) lead, 100k Ohms at 25 °C (77 °F) thermistor Range -40 °C to 110 °C (-40 °F to 230 °F)
GPT-130		NEMA 4X IP66 electronic single point line sensing heat trace controller 100-277V, 30A c/w built-in 30 mA GFEP and 20' (6 m) lead, 100k Ohms at 25 °C (77 °F) thermistor Range -40 °C to 110 °C (-40 °F to 230 °F)
GPT-230		NEMA 4X IP66 electronic dual point line sensing heat trace controller 100-277V, 2X 30A c/w built-in 30 mA GFEP and 2X 20' (6 m) lead, 100k Ohms at 25 °C (77 °F) thermistor Range -40 °F to 110 °C (-40 °C to 230 °F)

Controls

**Heat Tracing** 

	Product #	Price	Description	
	E100-13545		Nema 4X epoxy painted die cast aluminum line sensing thermostat 120-480V, 22A, SPDT c/w 10' (3 m) stainless steel capillary Range -3.8 °C to 162.7 °C (25 °F to 325 °F)	
<b>P</b>	B100-13546		Nema 4X epoxy painted die cast aluminum ambient sensing thermostat 120-480V, 22A, SPDT c/w stainless steel stem sensor Range -40 °C to 71 °C (-40 °F to 160 °F)	
	E121-13273		Explosion-proof NEMA 4X 7, 9 and IP66 epoxy painted die cast aluminum line sensing thermostat temperature control 120-480 22A, SPDT c/w 10' (3 m) stainless steel capillary Range -3.8 °C to 162.7 °C (25 °F to 325 °F) UL CSA / FM Class I, Division 1 & 2 Class I, Division 1 & 2 Grps. B, C & D Grps. B, C & D Class II, Division 1 & 2 Class II, Division 1 & 2 Grps. #, F & G Grps. E, F & G Class III, Division 1 & 2	
	B121-13272		Explosion -proof NEMA 4X 7, 9 and IP66 epoxy painted die cast aluminum ambient sensing thermostat temperature control 120-480V, 22A, SPDT c/w stainless steel stem Range -9 °C to -60 °C (15 °F to 140 °F) UL CSA / FM Class I, Division 1 & 2 Class I, Div. 1 & 2 Grps. B, C & D Grps. B, C & D Class II, Division 1 & 2 Class II, Div. 1 & 2 Grps. #, F & G Grps. E, F & G Class III, Div. 1 & 2	
	ECA-E55-R25HT		SPDT, NEMA 4X thermostat in molded aluminum housing, 22A at 120/250/480V, with 10' (3 m) stainless steel bulb and capillary Requires a ground fault circuit interrupter (GFCI) in the electrical panel	

# Controls Heat Tracing



#### TraceMate™

Advanced NEMA 4X steel, powder coat painted electronic controller. Designed for indoor or outdoor use in non-hazardous and hazardous areas c/w built-in GFEP.

CSA C US Class I, Division 2, Groups A, B, C, D Class I, Zone II, Groups IIC

Temperature range -50 °C to 500 °C (-58 °F to 932 °F) Operating range -40 °C to 50 °C (-40 °F to 122 °F) LCD Display operating range -20 °C to 50 °C (-4 °F to 122 °F)

Product #	Price	Description
TM-1SIH1-E5-RTD-A1		TraceMate <sup>™</sup> I GFCI electronic thermostat for single circuit at 120V, 30A
TM-1DIH2-E5-RTD-A1		TraceMate <sup>™</sup> I GFCI electronic thermostat for single circuit at 240/208V, 30A
TM-2SIH1-E5-RTD		TraceMate <sup>™</sup> II GFCI electronic thermostat for dual circuit at 120V, 2 x 30A
TM-2DIH2-E5-RTD-208-240		TraceMate <sup>™</sup> II GFCI electronic thermostat for dual circuit at 240/208V, 2 x 30A

#### **MasterTrace**<sup>1</sup>



Advanced NEMA 4X steel, powder coat painted electronic controller. Designed for use in non-hazardous and hazardous areas

c/w built-in GFEP, RS485 type with Modbus © RTU protocol, comes with a 9 tactile keys, polyester faceplate and LCD display.

CSA C US Class I, Division 2, Groups A, B, C, D Class I, Zone II, Groups IIC Class II, Division 2, Groups F & G Class III

Temperature range -50 °C to 500 °C (-58 °F to 932 °F) Operating range -40 °C to 50 °C (-40 °F to 122 °F)

Product #	Price	Description
MS-2101		MasterTrace single circuit electronic GFCI controller with double pole, 85V to 300V, 30A, with user interface
MS-2101-E3		MasterTrace single circuit electronic GFCI controller with double pole, 85V to 300V, 30A, with user interface, stainless steel housing
MS-2102		MasterTrace double circuit electronic GFCI controller with single pole, 120V or 277V, 2 x 30A, with user interface
MS-2102-E3		MasterTrace double circuit electronic GFCI controller with single pole, 120V or 277V, 2 x 30A, with user interface, stainless steel housing
RTD-7		RTD probe for MasterTrace controller

<sup>1</sup> Multi-circuit custom MasterTrace control panels are available upon request.

# Controls Control Panels

# **BRITECH**



#### Control panels for snow melting / roof de-icing / pipe tracing

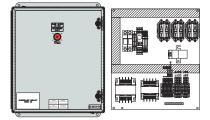
GFEP control panel with contactors

Product #	Price	Description	H x W x D (in.)
BRI-GFI-75		120/600V 75A	16x12x6
BRI-GFI-100		120/600V 100A	16x12x6

#### Control panels for self-regulating heating cable

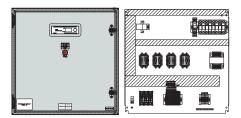
GFEP control panel with contactors and 240-120V control transformer

Product #	Price	Description	H x W x D (in.)
SR-4CIR-240		4 circuits 240V 30A	20x16x8
SR-6CIR-240		6 circuits 240V 30A	20x16x8
SR-8CIR-240		8 circuits 240V 30A	24x20x8
SR-12CIR-240		12 circuits 240V 30A	24x24x8



### Control panels for concrete heating cable

GFCI control panel with contactors and 24V control transformer



#### Control panels for snow melting heating cable

GFCI control panel with contactors built-in ETO2 and 120+24V control transformers

Product #	Price	Description	H x W x D (in.)
WC-2CIR-208		2 circuits 208V 30A	16x14x8
WC-4CIR-208		4 circuits 208V 30A	20x16x8
WC-6CIR-208		6 circuits 208V 30A	20x16x8
WC-8CIR-208		8 circuits 208V 30A	24x24x8
WC-10CIR-208		10 circuits 208V 30A	24x24x8
WC-12CIR-208		12 circuits 208V 30A	24x24x8
WC-2CIR-240		2 circuits 240V 30A	16x14x8
WC-4CIR-240		4 circuits 240V 30A	20x16x8
WC-6CIR-240		6 circuits 240V 30A	24x20x8
WC-8CIR-240		8 circuits 240V 30A	24x20x8
WC-10CIR-240		10 circuits 240V 30A	24x24x8
WC-12CIR-240		12 circuits 240V 30A	24x24x8
WC-3CIR-347-347		3 circuits 347V 30A	16x14x8
WC-6CIR-347-347		6 circuits 347V 30A	20x16x8
WC-9CIR-600-347		9 circuits 600V 30A	30x24x8
WC-12CIR-600-347		12 circuits 600V 30A	30x24x8

Product #	Price	Description	H x W x D (in.)
WS-4CIR-208		4 circuits 208V 30A	20x16x8
WS-6CIR-208		6 circuits 208V 30A	24x20x8
WS-8CIR-208		8 circuits 208V 30A	24x24x8
WS-12CIR-208		12 circuits 208V 30A	30x24x8
WS-4CIR-240		4 circuits 240V 30A	20x16x8
WS-6CIR-240		6 circuits 240V 30A	24x20x8
WS-8CIR-240		8 circuits 240V 30A	24x24x8
WS-12CIR-240		12 circuits 240V 30A	30x24x8
WS-3CIR-600-600		3 circuits 600V 30A	24x24x8
WS-6CIR-600-600		6 circuits 600V 30A	30x24x8
WS-9CIR-600-600		9 circuits 600V 30A	30x24x8
WS-12CIR-600-600		12 circuits 600V 30A	30x30x8
WS-15CIR-600-600		15 circuits 600V 30A	36x30x10

# **OUR GUARANTEE**

All products sold in Canada by Britech Corp. carry the original manufacturers warranties and are guaranteed against all defects for a minimum of one year following the date of purchase or as extended warranties specified below or in writing. Full product warranties can be obtained from the manufacturer online and/or by request. Britech will administer and promptly process all warranties in accordance with the manufacturer's specific warranty policies and procedures. Britech will provide technical assistance to assist the end user or installer in the best method of operation, application and installation.

Britech's policy is to exchange any non-performing product with a similar product or product of equal value during its warranty period as outlined. The company's responsibility is limited to the replacement of defective parts. This warranty shall be limited to the actual equipment involved and does not cover installation or removal costs, travel time, or freight-related expenses. Defects must be reported to Britech to obtain an authorization of repair or replacement. Repairs may be performed at the factory or any authorized repair location. This warranty does not apply to damages, failure, or the results of an accident, alteration, misuse, abuse, incorrect installation, or operation from an incorrect power source.

Note: Custom TXLP1 heating cables carry a (20) twenty year warranty which is provided by Nexans (refer to Nexans full product warranty).

For more information regarding warranty terms or for assistance with your heating cable product contact Britech at 1-877-335-7790

# **TERMS & POLICIES**

# 1. General

Britech Corp. is herein referred to as the "Seller" and the customer or person or entity purchasing products ("Products") from Seller is referred to as the "Buyer." These Terms and Conditions, any price list or schedule, quotation, acknowledgment or invoice from Seller relevant to the sale constitute the complete and exclusive statement of the terms of the agreement governing the sale of Products by Seller to Buyer. Buyer's acceptance of the Products will manifest Buyer's assent to these terms and conditions. Seller reserves the right in its sole discretion to refuse orders.

# 2. Excuse of Performance

Seller shall not be responsible for non-performance or delays in performance due to acts of God; acts of Buyer; war; fire; flood; weather; sabotage; strikes or labour disputes; civil disturbances or riots; governmental requests, restrictions, allocations, laws, regulations, orders or actions; unavailability of or delays in transportation; default of suppliers; or unforeseen circumstances or any events or causes beyond Seller's reasonable control. Deliveries or other performance may be suspended for an appropriate period of time or canceled by Seller upon notice to Buyer in the event of any of the foregoing, but the balance of the agreement shall otherwise remain unaffected as a result of the foregoing. If Seller determines that its ability to supply the total demand for the Products, or to obtain material used directly or indirectly in the manufacture of the Products, is hindered, limited or made impracticable due to causes set forth in the preceding paragraph, Seller may allocate its available supply of the Products or such material (without obligation to acquire other supplies of any such Products or material) among itself and its purchasers on such basis as Seller determines to be equitable without liability for any failure of performance which may result therefrom.

# **3. LIMITED Warranty**

THIS IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY SELLER WITH RESPECT TO THE PRODUCTS AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHETHER OR NOT THE PURPOSE OR USE HAS BEEN DISCLOSED TO SELLER IN SPECIFICATIONS, DRAWINGS OR OTHERWISE, AND WHETHER OR NOT SELLER'S PRODUCTS ARE SPECIFICALLY DESIGNED AND/OR MANUFACTURED BY SELLER FOR BUYER'S USE OR PURPOSE.

Subject to the limitations of Section 5, Seller warrants that the Products manufactured by Seller will be free from defects in material and workmanship under normal use and regular service and maintenance for a period of one (1) year from the date of shipment of the Products by Seller, unless otherwise specified by Seller in writing. Products purchased by Seller from a third party for resale to Buyer shall carry only the warranty extended by the original manufacturer.

This warranty does not extend to any losses or damages due to misuse, accident, abuse, normal wear and tear, Buyer's negligence, unauthorized modification or alteration, use beyond rated capacity, or improper installation, maintenance or application. To the extent that Buyer or its agents has supplied specifications, information, representation of operating conditions or other data to Seller in the selection or design of the Products and the preparation of Seller's quotation, and in the event that actual operating conditions or other conditions differ from those represented by Buyer, any warranties or other provisions contained herein which are affected by such conditions shall be null and void.

If within thirty (30) days after Buyer's discovery of any warranty defects within the warranty period or within ten (10) days for quantity discrepancies, Buyer notifies Seller thereof in writing, Seller shall, at its option, repair, correct or replace F.O.B. point of manufacture, or refund the purchase price for that portion of the Products found by Seller to be defective or missing. Failure by Buyer to give such written notice within the applicable time period shall be deemed an absolute and unconditional waiver of Buyer's claim for such defects or shortages.

Products repaired or replaced during the warranty period shall be covered by the foregoing warranty for the remainder of the warranty period or ninety (90) days from the date of shipment, whichever is longer. Buyer assumes all other responsibility for any loss, damage, or injury to persons or property arising out of, connected with, or resulting from the use of Products, either alone or in combination with other products/components.

# 4. Limitations

LIMITATION OF REMEDY AND LIABILITY - THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF ANY WARRANTY HE-REUNDER (OTHER THAN THE WARRANTY PROVIDED UNDER SECTION 6) SHALL BE LIMITED TO REPAIR, CORRECTION OR REPLACEMENT, OR REFUND OF THE PURCHASE PRICE UNDER SECTION 6.

SELLER SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY DELAY IN PERFORMANCE AND IN NO EVENT, REGARDLESS OF THE FORM OF THE CLAIM OR CAUSE OF ACTION (WHETHER BASED ON CONTRACT, INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE), SHALL SELLER'S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXCEED THE PRICE PAID BY BUYER FOR THE SPECIFIC PRODUCTS PROVIDED BY SELLER GIVING RISE TO THE CLAIM OR CAUSE OF ACTION.

BUYER AGREES THAT IN NO EVENT SHALL SELLER'S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXTEND TO INCLUDE INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES.

The term "consequential damages" shall include, but not be limited to loss of anticipated profit, business interruption, loss of use or revenue, cost of capital or loss or damage to property or equipment.

# 5. Shipment and Delivery

Shipments are made F.O.B. Seller's shipping point. Risk of loss of damage and responsibility shall pass from Seller to Buyer upon delivery to and receipt by carrier. Any claim for shortages or damages suffered in transit are the responsibility of Buyer and shall be submitted by Buyer directly to the carrier. Shortages or damages must be acknowledged and signed for at the time of delivery. While Seller will use all reasonable commercial efforts to maintain the delivery date(s) acknowledged or quoted by Seller, all shipping dates are approximate and not guaranteed. Seller reserves the right to make partial shipments. Seller, at its option, shall not be bound to tender delivery of any Products for which Buyer has not provided shipping instructions. If the shipment of the Products is postponed or delayed by Buyer for any reason, Buyer agrees to reimburse Seller for any and all storage costs and other additional expenses resulting therefrom.

# 6. Returns and Cancellations

In the event Buyer desires to return Products, prior written approval of an authorized representative of Seller at Seller's head office located at Toronto, Ontario is required. In the event of approval of a return request, (i) any allowed outgoing prepaid freight costs will apply, (ii) all returns must be shipped freight prepaid at Buyer's expense, and (iii) Buyer must pay Seller's return and restocking charge. Buyer may cancel orders only upon reasonable advance written notice and upon Seller's approval and payment to Seller of Seller's cancellation charges which include, among other things, all costs and expenses incurred, and, to cover commitments made, by the Seller and a reasonable profit thereon. Seller's determination of such cancellation charges shall be conclusive.

# 7. Disclaimer of Liability

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