HSB

High Temperature Self-Regulating Heating Cable HSB

BARTEC

Features

Outer jacket
- Fluoropolymer (CT).

Bus wire
- Nickel plated copper, 16 AWG.

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

Maximum operating temperature (continuous)
- 120 °C (248 °F).

Maximum continuous exposure temperature (power off)
- 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.

Models

Nominal output W/ft.	Product # 120V [1, 3]	Product # 240V [1, 2, 3]	Cable dimension 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

[1] *CT Protective braid and a fluoropolymer outer jacket.*
[2] *For operations at 208V, please consult Bartec correction factors/multipliers.*
[3] *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

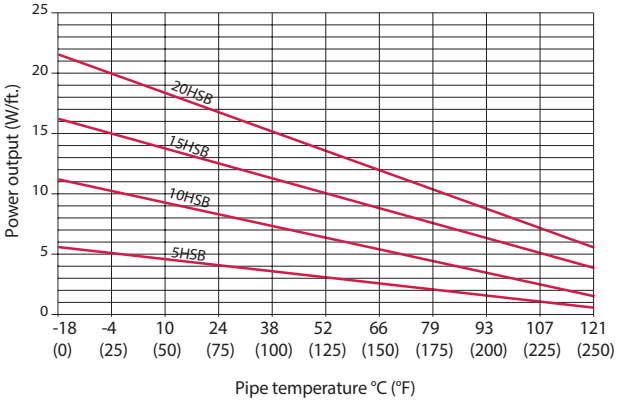
The following table shows the maximum circuit length in ft. for the different HSB trace heater types with standard circuit breaker amperages. Breaker sizes should be based on the National Electrical Code, Canadian Electrical Code or any other local or applicable code. Use only circuit breakers with type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

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

[1] *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.