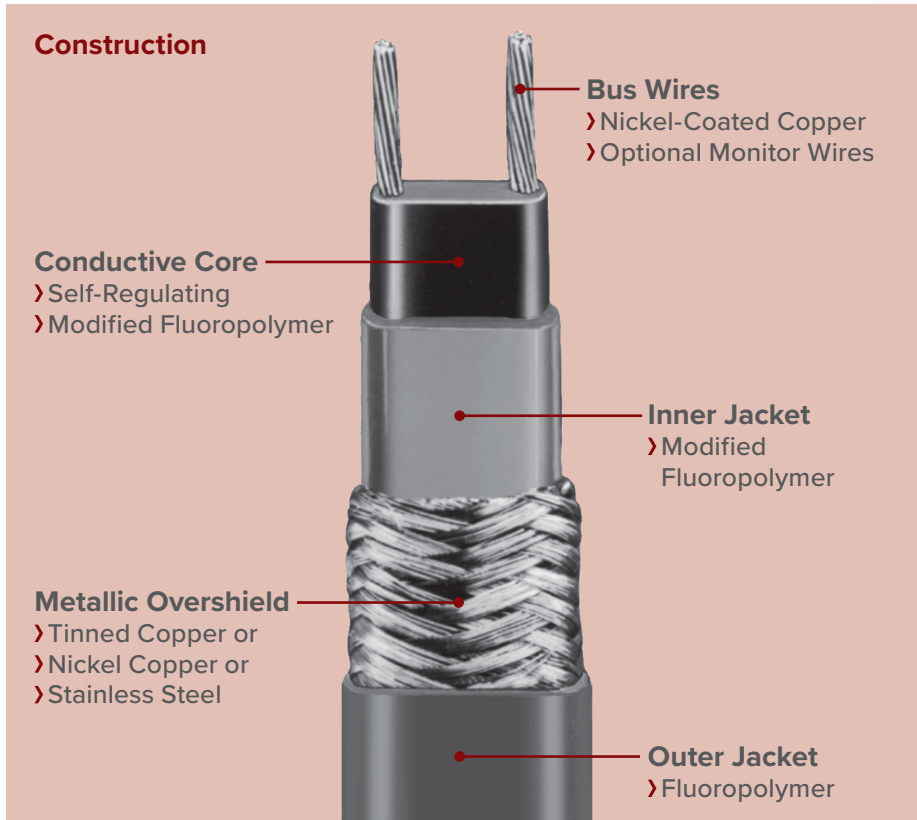


DTSH Series

Self-Regulating Heating Cable



Description

The DTSH series of self-regulating heating cables are designed to supply a specified amount of heat at any point along their length in direct response to local temperature variations. These cables can maintain temperatures up to 375°F (190°C) and will withstand 190 psig saturated steam purging and intermittent temperature excursions to 450°F (232°C) with power applied.

DTSH series cables can be cut to length and terminated in the field, and will not overheat or burn out when overlapped.

Applications

The industrial-grade DTSH series cables provide freeze protection and process temperature maintenance for fluid transport and storage systems requiring very high levels of heat output or exposure to elevated temperatures. The bus wires, jackets and metallic braids can be configured for both ordinary (non-classified) locations and hazardous (classified), including areas where exposure to corrosive or organic materials is possible.

Performance Ratings

Output wattage:

5 through 30 W/ft at 50°F (other wattages also available)

Supply voltages:

110-120 or 208-277VAC

Continuous maintenance temperature:

375°F (190°C) max

Intermittent exposure temperature:

450°F (232°C) max

T Rating*:

T-2C

Braid resistance:

Tinned copper: 0.003 Ω/ft

Stainless steel: 0.125 Ω/ft

*T-Rating per the 1999 NEC, Tables 500-5(d) and verified by FM and CSA.

Approvals/Certifications

Factory Mutual:

Ordinary locations

Hazardous locations

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

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

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

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

Class I, Zone 1*, Group IIB + H2

Class I, Zone 2, Group IIC

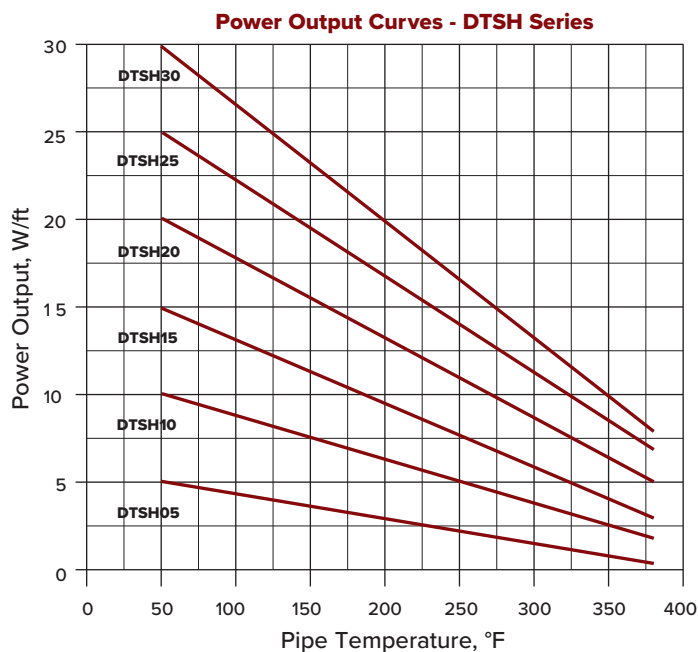
*Contact a Diamond Thermal Systems representative for information on Division 1 hazardous location systems.

Accessories

Diamond Thermal Systems carries a full line of approved accessories, including power connection kits, terminations, splices, end seals, and controls.

DTSH Series

Self-Regulating Heating Cable



120-Volt Circuit Breaker Sizing vs. Max Circuit Length (FT)

Series	Starting Temp.	15A	20A	30A
DTSH05-1	50°F (10°C)	180	240	335
	0°F (-20°C)	165	220	330
	-50°F (-45°C)	150	200	300
DTSH10-1	50°F (10°C)	120	160	180
	0°F (-20°C)	105	140	180
	-50°F (-45°C)	90	120	180
DTSH15-1	50°F (10°C)	80	105	135
	0°F (-20°C)	70	90	135
	-50°F (-45°C)	60	80	120
DTSH20-1	50°F (10°C)	60	90	120
	0°F (-20°C)	55	70	110
	-50°F (-45°C)	50	65	100
DTSH25-1	50°F (10°C)	45	60	85
	0°F (-20°C)	40	50	80
	-50°F (-45°C)	40	50	80
DTSH30-1	50°F (10°C)	40	50	70
	0°F (-20°C)	35	45	70
	-50°F (-45°C)	35	45	70

Power Adjustment Factor

Part No.	208 Volts	277 Volts
DTSH10-2	.88	1.14
DTSH20-2	.94	1.08
DTSH30-2	.99	1.01

240-Volt Circuit Breaker Sizing vs. Max Circuit Length (FT)

Series	Starting Temp.	15A	20A	30A
DTSH05-2	50°F (10°C)	360	480	540
	0°F (-20°C)	325	430	540
	-50°F (-45°C)	290	385	540
DTSH10-2	50°F (10°C)	240	320	360
	0°F (-20°C)	230	305	360
	-50°F (-45°C)	225	300	360
DTSH15-2	50°F (10°C)	160	210	270
	0°F (-20°C)	140	185	270
	-50°F (-45°C)	120	160	240
DTSH20-2	50°F (10°C)	115	150	230
	0°F (-20°C)	110	145	220
	-50°F (-45°C)	105	140	210
DTSH25-2	50°F (10°C)	90	120	170
	0°F (-20°C)	80	100	160
	-50°F (-45°C)	80	100	160
DTSH30-2	50°F (10°C)	80	100	140
	0°F (-20°C)	70	90	140
	-50°F (-45°C)	70	90	140

Product Ordering Information

(Example Shown: 5-watt, 120-volt, tinned copper braid)

DTSH 05 - 1 1 C 00

Series _____ DTSH

Output _____
 05 = 05W 10 = 10W
 15 = 15W 20 = 20W
 25 = 25W 30 = 30W

Voltage _____
 1 = 120V
 2 = 240V

Class _____
 1 = Ord./Div. 2
 3 = Ord./Div. 2 w/ Monitor Wires
 4 = Class 1, Div. 1

Braid Option _____
 C = Tinned Copper T = Tinned Copper w/ Fluoropolymer Jacket
 S = Stainless Steel F = Stainless Steel w/ Fluoropolymer Jacket
 K = Nickel Copper M = Nickel Copper w/ Fluoropolymer Jacket

Reserved _____

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

ISO 9001 REGISTERED

BrandSafway Global Service Center
 600 Galleria Pkwy SE Suite 1100
 Atlanta, GA 30339
 Toll free: 800 558 4772

©2024 All rights reserved. BSL DT 107

BRAND SAFWAY
 www.brandsafway.com

Diamond
 THERMAL SYSTEMS™
 BY BRAND SAFWAY
 diamondthermalsystems.com