

PT Ultra High Temperature Series Constant Wattage Cable

DESCRIPTION

Delta-Therm's PowerTrace brand, zone-type constant watt heating cable produces a constant heat output. Designed for freeze protection and process heating applications, our PT Series cable has a maximum maintenance temperature of 400°F (204°C) and a maximum exposure temperature of 550°F (288°C). See next page for additional specifications.

PT Series constant watt cable consists of two parallel 12 AWG stranded, nickel-plated copper bus wires individually encased in sintered PTFE (TFE) Teflon™ jackets. A nichrome wire heating element is wrapped around the jacket and attached to alternating bus wires at 24-inch intervals with sintered TFE heat shrink. The jacket and the nichrome wire are encased in an insulating jacket also made of sintered TFE. A stainless steel or copper braided overjacket provides additional mechanical strength and meets NEC requirement as stated in Article 427-23. See next page for further details.

TFE Teflon has the highest softening temperature of any fluoropolymer on the market. PT cables can be overlapped at maximum maintenance temperatures without jacket softening. TFE is the most flexible fluoropolymer available, making PT cables the ideal solution for pipe, valve, pump, and flange tracing. Additionally, TFE jackets offer outstanding resistance to corrosive chemicals such as gasoline and oils. Sintered TFE insulation makes these cables more flexible and more reliable than any other constant watt cable on the market. Color coded and marked for easy identification, the cables can be cut to length in the field for quick installation. See next page to operate PT cables at alternate voltages.

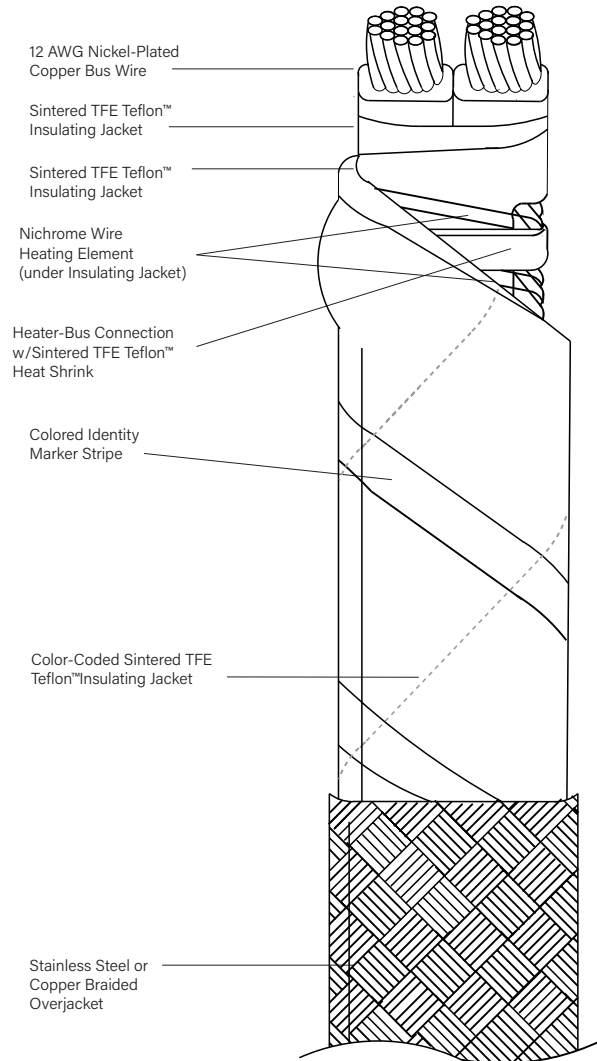
APPLICATIONS

PT Series cable can be used in freeze protection and process heating applications.

APPROVALS

Ordinary Locations: FM Approved For Pipe Tracing

Hazardous Locations: FM Approved for—Class I, Division 2, Groups B, C, and D



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* Voltage range depends upon cable model. See Watts Per Foot (M) tables on back page.



WARNING: This cable is designed for commercial construction and process heating applications and must be installed by a qualified electrician. Improper installation can result in property damage, serious injury, and/or death due to electric shock.

PT Series Technical Information

PT SERIES CABLE DESCRIPTION

Part #	Color	Voltage	Watts/Ft. (m)	Amps/Ft. (m)	Zone Length* In. (cm)	Max. Circuit Length** Ft. (m)
PT-3	White w/Green Stripe	120	3 (10)	.025 (.08)	24" (61)	390' (119)
PT-6	Orange w/Green Stripe	120	6 (20)	.050 (.16)	24" (61)	280' (85)
PT-8	Yellow w/Green Stripe	240	8 (26)	.033 (.11)	24" (61)	480' (146)
PT-10	Brown w/Green Stripe	120	10 (33)	.083 (.27)	24" (61)	210' (64)

*One complete heating zone is the distance between two successive bus connections.

**Maximum circuit length is defined as the length of cable at which the heat output, due to voltage drop, decreases to 90 percent of the heat output at the power connection point.

WATTS/FT. (M) AT ALTERNATE VOLTAGES

Part #	120V	208V	240V	277V
PT-3	3 (10)	9 (30)	12 (39)	-
PT-6	6 (20)	-	-	-
PT-8	2 (7)	6 (20)	8 (26)	11 (35)
PT-10	10 (33)	-	-	-

ELECTRICAL SPECIFICATIONS

Max. Maintenance Temp. °F (°C)	400° (204°)
Max. Exposure Temp. °F (°C)	550° (288°) Intermittent exposure
Cable Insulation	Sintered TFE Teflon™
Cable Overjacket	Sintered TFE Teflon™
Cable Flexibility	Exceeds ASTM 180° Bend Test
Bus Wires	12 AWG

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THERMOSTATIC CONTROLS AND PANELS

Please refer to the heat trace controls chart in the introduction section.

ACCESSORIES FOR PT SERIES CABLE

PCK-PT/PF	Power Connection And End Termination Kit
SPK-PT/PF	In-Line Splice Connection Kit
PT-T3SL	Tee Splice Connection Kit
T-ALXXX	Aluminum Heat Distribution Tape
T-FXX	Fiberglass Banding Tape
CL-X	Caution Labels
PC1, PC2, PC3	Polycarbonate Junction Box

ZONE MARKER:

Zone Markers for PT series cable may be raised bumps on the edge of the cable. (Braid may have to be pulled away to locate.)

Use Of Ground Fault Protective Devices And Metallic Overshield

NEC CODE 2017, ARTICLE 427-22:

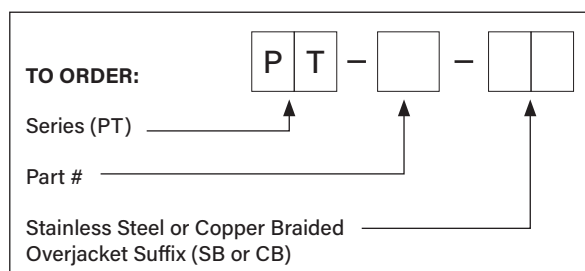
Equipment Protection. Ground-fault protection of equipment shall be provided for electric heat tracing and heating panels. This requirement shall not apply in industrial establishments where there is alarm indication of ground faults and the following conditions apply:

- (1) Conditions of maintenance and supervision ensure that only qualified persons service the installed systems.
- (2) Continued circuit operation is necessary for safe operation of equipment or processes.

NEC CODE 2017, ARTICLE 427-23:

Grounded Conductive Covering. Electric heating equipment shall be listed and have a grounded conductive covering in accordance with 427.23(A) or (B). The conductive covering shall provide an effective ground path for equipment protection.

(a) Heating Wires or Cables. Heating wires or cables shall have a grounded conductive covering that surrounds the heating element and bus wires, if any, and their electrical insulation.



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