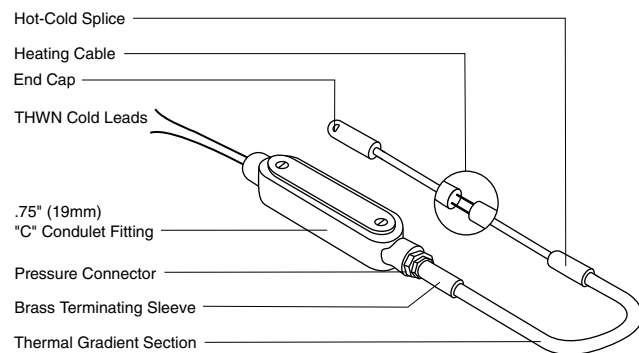
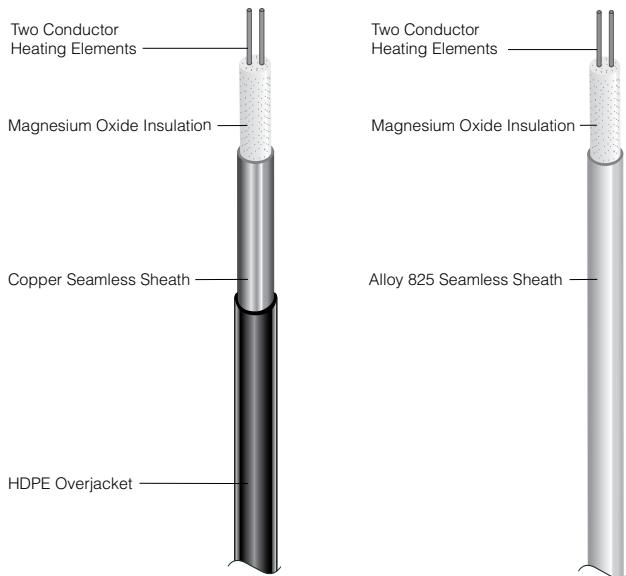


## Mineral Insulated (M.I.) Pipe/Tank Trace Cable Assembly

Two Conductor Only



**Detail 1.** Two Conductor Cable Assembly.

### DESCRIPTION

Mineral insulated (M.I.) cable consists of two conductor heating elements embedded in highly compressed magnesium oxide covered by a copper or an Alloy 825 stainless steel sheath. Application requirements determine resistance size and sheath material.

### TERMINATION CONSTRUCTION

Each Delta-Therm M.I. cable assembly is fully terminated and moisture proof. The end termination consists of a 5' (252cm) thermal gradient section connected to 20' (6m) THWN cold leads. The cold leads are crimped and soldered to the thermal gradient section, insulated with a high-dielectric, high-temperature tape, and epoxy potted in a rigid brass sleeve. The thermal gradient section is silver soldered to the heating element and protected by a rigid brass sleeve packed with magnesium oxide.

### COLD LEADS

The 19-strand THWN wire connects to an electrical circuit. Standard cold lead length is 20' (6m). Leads can be ordered at any length allowing junction boxes to be placed in remote, dry locations.

### NUMEROUS VOLTAGES

Delta-Therm can design M.I. pipe trace cable assemblies for any voltage up to 600 volts.

### FLEXIBLE

M.I. cable is annealed (annealing tempers metal and removes brittleness) and easy to form and install. Irregular areas and obstacles are easily accommodated.

### HDPE JACKETING

Extruded, high-density polyethylene jacketing adds physical strength and protects against corrosives and abrasions.

### FIRE RESISTANT

M.I. cable construction will not contribute to or cause an electrical fire.

### NO DEGRADATION

Delta-Therm M.I. cable is made of inorganic materials. Degradation of M.I. cable is negligible when compared to cables made of organic materials such as plastic.



**COMPREHENSIVE FACTORY TESTING**

Each cable undergoes hi-pot, megger, and resistance tests both before and after overnight immersion in water.

**LOW INSTALLATION COSTS**

M.I. cable arrives ready to install. Since terminations are done at the factory, electricians can expedite the installation, helping to reduce overall installation costs.

**Recommended Watts Per Lineal Foot And Cable Spacing**

Area	Watts	Centers
Two Conductor	See Design Guide	Straight Length Of Piping (No Branches); Do Not Spiral

**Material Temperature Limits**

HDPE Overjacket °F (°C)	194** (90°)
Copper °F (°C)	392° (200°)
Stainless Steel °F (°C)	1100° (593°)

**Cold Lead Size**

Amps	Wire Size
0-16	12 AWG
16-24	10 AWG
24-45	8 AWG
45-65	6 AWG

**INVENTORY AND SHIPPING**

Delta-Therm maintains an inventory of both bare and jacketed mineral insulated cable. Orders of material in stock can usually be shipped within two weeks.

**BASE KIT** (supplied with each M.I. cable assembly)

- Five Foot Thermal Gradient Section
- Cold Leads
- Pressure Connectors
- "T" Or "C" Condulet With Gasket And Cover
- Delta Dry (Water Repellent Powder)
- Duct Seal
- Installation Instructions

**Base Kit Accessories**

Heater Assembly Only
Additional 19-Strand Cold Lead
Base Kit
Splice Kit
Unilet Kit
Additional Thermal Gradient

**Thermostatic Controls and Panels**

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

**Panels**

DT-XXPXXX	Enclosed Contactor
GFPE-X-X	Power Control Panel w/GFPE
LNR-X	Low Noise Relay Panel
Custom Control/Monitor/Alarm Panels	

**Accessories**

T-ALXXX	Aluminum Heat Distribution Tape
T-FXXX	Fiberglass Banding Tape
CL-X	Caution Labels
PC1, PC2	Polycarbonate Junction Box

**TO ORDER:**

Prefix (P - Pipe Tracing)	_____
Number Of Conductors	_____
Ohms/Ft. (m)	_____
Length Per Hot Section (measurement in feet)	_____
Volts	_____
Amps	_____
kW	_____
Watts Per Lineal Foot (refer to design guide)	_____
Suffix H, B, Or SS (if desired)	_____
AWG (refer to chart)	_____
Cold Length (length needed to reach junction box NOTE: voltage drop not to exceed 3%)	_____