

### Self-Limiting Heat Trace Cable

**Tempco's Self-Limiting Heating Cables** are all parallel resistance, low watt density electrical heaters designed to be cut to the desired lengths in the field, eliminating the need for prefabrications and reducing or eliminating many design and installation costs. No special training is required.

Self-limiting heating cables are designed and built to regulate their output. As the process temperature drops, the cable's output increases; conversely, as the temperature rises, the cable's output decreases.

The self-limiting core is in essence an infinite number of parallel resistors that permit the cable to be cut to any length without creating cold sections. Because it is self-regulating and infinitely paral-

lel, the output varies along the length of the cable, depending upon local process temperature.

Metal overbraid is provided on all heat trace cabling to meet NEC code for grounding. The braid provides mechanical protection, as well as a low resistance grounding path.

On SL self-limiting cable, in addition to the standard metal overbraid, an optional thermoplastic elastomer or fluoropolymer outer jacket is recommended when exposure to organic chemicals or corrosives is expected.

Self-limiting heating cable provides safe, reliable heat tracing for process temperature maintenance and freeze protection of pipes, valves and similar applications.



#### Design Features

- \* *Efficient, Safe, Easy to Install*
- \* *Maintenance Temperatures up to 150°F (65°C)*
- \* *Can Be Overlapped*
- \* *Cut to Length at the Job Site*

#### Typical Applications

- ↪ *Pipelines*
- ↪ *Drains*
- ↪ *Water Lines*
- ↪ *Safety Showers*
- ↪ *Sprinkler Systems*

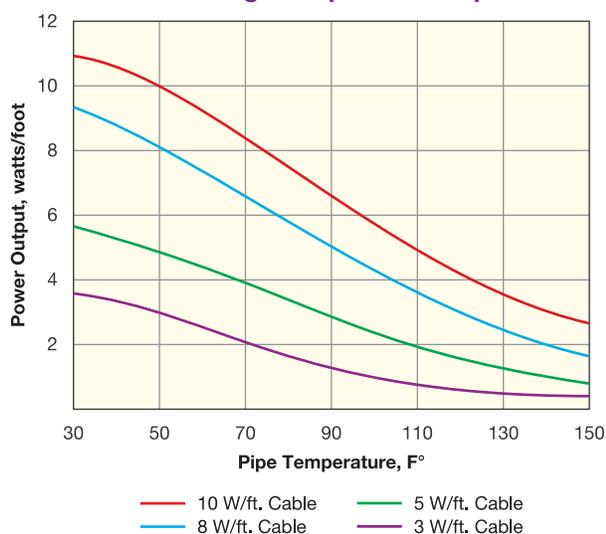
#### Specifications

- Voltages Available:** 120, 240
- Wattages:** 3, 5, 8, 10 (W/ft.) @ 50°F ambient
- Outside Dimensions:** Nom. .450" x .130"
- Exposure Rating:** 150°F (65°C)
- De-Energized:** 185°F (85°C)
- Standard Metal Overbraid:** Tinned Copper or optional Stainless Steel
- Moisture Resistance:** Excellent
- Chemical Resistance:** Good
- Flame Resistance:** Good
- Radiation Resistance:** Fair

#### Agency Approvals

- \* CSA
- \* IEEE Std 515 RU
- \* **Factory Mutual**
  - Ordinary Locations
  - Hazardous Locations:
    - Class I, Division 2, Groups B, C & D
    - Class II, Division 2, Groups F & D
    - Class III, Division 1 and Division 2

**Actual Wattage Output vs. Temperature**



#### SL Style Heating Cable

The SL Style cable heating element is a low watt density parallel circuit electrical heater. The multi-stranded bus wires are extruded in an irradiated self-regulating conductive polyolefin that increases and decreases its heat output with changes in the ambient temperature. A flame retardant thermoplastic elastomer jacket is added for abrasion and impact resistance.

A metal braided shield is then applied to meet NEC code for grounding. Metal overbraid heaters are FM approved for use in hazardous areas.

An optional fluoropolymer outer jacket is also available. This outer jacket should be specified when the metal braided cable is installed in corrosive environments.

