Flexible Heating Tape — Duo-Tape®

Design Features:
- 1400°F (760°C) temperature rating
- 2 ft. (610 mm) long high temperature lead wires on one end
- Highly flexible & rugged, knitted design
- High, medium and low watt density designs
- Constant wattage (min. ohm change cold to hot)

Typical Applications:
- Laboratory, general application
- Research and Development
- Pilot plant research heaters
- High temperature hose heating
- Industrial applications, anywhere high temperature and flexibility are required (non-hazardous and dry locations only)

Tempco Heating Tapes
We provide high temperature, flexible electric heating elements. They were developed to offer the unique convenience of wrap-on heat for tubing, laboratory apparatus or any dry environment application where flexible surface spot heat is required.

Heating tapes are offered in many standard sizes, having watt densities from 3.25 to 13 watts per square inch, and temperature ratings to 1400°F (760°C).

CONSTRUCTION
The construction begins with bundled, fine strand resistance wire, 37 to 40 gauge, covered with a minimum of 2 layers of high temperature braided AMOX yarn. The insulated resistance wire is then knitted into a serpentine configuration, forming a flat tape. Once the lead wires are attached, most tapes have an additional braided, dielectric protection layer of AMOX yarn for use on conductive (metal) surfaces.

DURABILITY FEATURE
Unlike other straight element heating wires and tapes, knitting allows for cushioning during heating and cooling. The element expands in all directions rather than one, virtually eliminating “thermal growth.” In addition, knitting prevents the tape from tensile stress when stretched (a typical problem of elements applied to flexible hoses).

LOW WATT DENSITY, WELL DISTRIBUTED HEAT FEATURE
Knitting allows dense distribution of wire per unit length of tape. This feature provides longer life resulting from lower watts per inch of wire. (A typical 1 inch wide tape may contain 10 inches (25.4 cm) of wire element.)

DUO-TAPE
Duo-Tape is a breakthrough design innovation that allows two wires to be knitted side by side. The advantage is that the lead wires may be attached on the same end rather than opposite ends. The balance of the tape is constructed the same as the other single wire tapes.

OPTIONS

1. **Plug**
   A 120V plug can be ordered on indicated heaters only as a custom assembly.
   Since the leads of the Duo-Tape are on one end, the plug is a single molded unit.

2. **Lead Wire**
   Standard lead wire length is 2 ft. (61 cm)
   **Note:** When a plug is requested, lead wire length may be 2 ft. or shorter.
   Optional lengths may be ordered to 8 ft.
   For special length, width, watts or volts—contact Tempco.