



## Tubular Bands

### Tubular Construction Barrel & Nozzle Band Heaters



#### Design Features

- \* Contamination-Proof
- \* Higher Watt Densities
- \* Temperatures Up to 1000°F (540°C)
- \* Rugged Durable Construction
- \* Greater Reliability
- \* Various Lead Terminations
- \* Optional Monel® Shroud

## Designed to Perform Under Adverse Conditions

**Tempco Tubular Band Heater** design stands apart from all other similar type band heaters. This band heater is capable of performing under the most adverse conditions. Highly recommended for heating applications where premature nozzle band heater burn-out on plastic injection molding machines is a constant problem due to contamination from plastic overflow or other contaminants. Proven to be very effective for processing Teflon® and high temperature engineering resins, providing long, trouble-free service.

#### Standard Specifications and Tolerances

of Tubular Band Heaters. If tighter tolerances are required consult Tempco.

#### PERFORMANCE RATINGS

**Maximum Temperature:** 1000°F (540°C)

**Maximum Watt Density:** 40 W/in<sup>2</sup> (7 W/cm<sup>2</sup>)

#### ELECTRICAL RATINGS

**Resistance Tolerance:** +10%, -5%

**Wattage Tolerance:** +5%, -10%

**Maximum Volts:** 277 Volts

**Maximum Watts:** Depends on diameter

**Maximum Amps:** 30 Amps

#### MECHANICAL

**Minimum Width:** 1-1/2" (38.1 mm)

**Minimum Inside Diameter:** 1-1/2" (38.1 mm)

**Standard Gap:** 3/8"

**Holes:** Can be accommodated. Consult Tempco with your requirements.

#### Construction Characteristics

Incoloy® sheath .315 diameter tubular heating elements are used as heat source. The tubular element is formed to the specified inside diameter to produce a snug slip-on fit.

A low thermal expansion alloy is used to make the strap that houses the tubular heating element. The strap edges are rolled over the element to prevent the strap from separating from the tubular heater. Specially designed mounting brackets are spot welded to the strap, providing the clamping force required to tightly draw the tubular heater against the cylinder.

#### Advantages and Variations

The straight section of the tubular heater is fully annealed, remaining ductile for field bending. Normally done to guide the leads away from machine obstructions.

If bending is required—

- Secure the tubular band heater to the cylinder in the position required.
- Draw the strap as tight as possible.
- Using a piece of 1/2" water pipe, insert the leads and tubular element into the pipe up to the point where you need the bend.

Proceed to bend with a generous radius.



**DON'T MAKE A SHARP BEND AS YOU WILL CRACK THE HEATING ELEMENT.**

#### Ordering Information

**Standard** — Select a Tubular Band heater from the table. All Tubular Band Heaters listed are supplied with Type W3 termination, 24" long.

**Custom Engineered/Manufactured** — An electric heater can be very application specific; for sizes and ratings not listed **TEMPCO** will design and manufacture a Tubular Band Heater to meet your requirements.

**Standard lead time is 3 weeks.**

**Please Specify** the following:

- |  |  |                                |
|--|--|--------------------------------|
| <input type="checkbox"/> Inside Diameter     | <input type="checkbox"/> Lead Cable/Braid Length | <input type="checkbox"/> Width |
| <input type="checkbox"/> Voltage and Wattage | <input type="checkbox"/> Termination             |                                |

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**View Product Inventory @ [www.tempco.com](http://www.tempco.com)**